

IV. C. TPPC

January 18, 2024

TO: Transportation Planning Policy Committee

FROM: AHRON HAKIMI,

EXECUTIVE DIRECTOR

By: Rob Ball, Planning Director & Ed Flickinger, Regional Planner

SUBJECT: Transportation Planning Policy Committee Consent Agenda Item: IV. C.

FEDERAL SAFETY PERFORMANCE MEASUREMENT (PM1) "TOWARD

ZERO" 2024 TARGET UPDATE

DESCRIPTION:

Required federal process to annually monitor transportation safety performance measure progress and providing guidance to member agencies to improve safety on our streets with their transportation expenditures. This item was reviewed by the TTAC.

DISCUSSION:

Background - On February 15, 2018, the Kern COG Transportation Planning Policy Committee approved their first federal "Toward Zero" deaths and accidents annual safety targets method using the federal recommended methodology that employs a 5-year running average, as recommend by Caltrans Division of Traffic Operations staff at that time.

On July 20, 2022, Caltrans management presented a changed state methodology that uses a trend-based methodology, which extrapolates the existing changes in fatalities and serious injuries into the future. Please contact Kelly Mar at Caltrans at kelly.mar@dot.ca.gov for more information on this methodology.

Kern COG staff is recommending continued use of the 2018 "Toward Zero" target methodology adopted by Kern COG in 2018 which is consistent with the federal rule methodology but different than the current state methodology. Maintaining the same process allows for better comparability with prior targets.

Consequences of not meeting the targets – Consequences of roadway accidents can be catastrophic to those who are involved. Everyone agrees that all appropriate countermeasures to reduce accidents should be taken. In addition, minor regulatory and funding consequences exist if the federal targets are not achieved. However, consequences of not adopting, monitoring, and encouraging progress toward the target, in accordance with federal rules, can ultimately result in loss of all federal transportation funding to the region though de-certification of this agency.

Under the requirements of the recent federal transportation spending bills, states and metropolitan planning organizations (MPOs) like Kern COG are required to annually monitor safety performance measure progress through the statewide and metropolitan planning process. Failure to meet safety targets set by the state and/or MPO could result in the minor consequence of redistribution of Caltrans Active Transportation Program (ATP) funding at the state level into the federal Highway Safety Improvement Program (HSIP). Many of the projects in the ATP program improve safety for bike and pedestrians and would likely still be eligible under HSIP for those purposes.

The Federal Highways Administration (FHWA) will review how MPOs are working to achieve their targets, in accordance with the federal rules, as they conduct MPO Certification Reviews every 4 years. Failure to adequately address target performance measure requirements could eventually result in loss of the MPO's federal certification along with access to federal transportation funds. The latest Kern COG federal target compliance documentation is available here: http://www.kerncog.org/federal-performance-measures/, and was accepted at the federal certification review.

Rules and guidance for federal performance measure targets are still being established by FHWA. See https://safety.fhwa.dot.gov/hsip/spm/policy_and_guidance.cfm. Caltrans has submitted draft statewide safety targets to FHWA. See https://dot.ca.gov/programs/safety-programs/shsp. MPOs that do not submit a safety target update by February 27, 2024, will be required to adhere to the 2024 state target which is NOT consistent with the methodology proposed by Kern COG staff.

The "Toward Zero" methodology - The attached presentation demonstrates the Kern COG "Toward Zero" methodology which is consistent with the original 2018 state safety target methodology originally recommended by the Caltrans Division of Traffic Operations engineers. In addition, the Kern methodology was prepared under the supervision of a certified engineer. The methodology uses California Highway Patrol (CHP) historical accident data for Kern County. The data is extrapolated using a 5-year running average to forecast future accidents and fatalities. In addition, travel model data is used to tie the forecast to local assumed growth. Targets are essentially being set to show improvement over the previous 5-year accident data. As accidents improve, the targets will improve automatically with each annual update on a trajectory "Toward Zero."

Countywide monitoring results summary

2015-2022 7-Year Change in 5-Year Running Average Accident Rate

29% increase in vehicle related fatality rates from 1.5 to 1.93 per 100M miles traveled. 54% increase in vehicle related serious injury rates from 3.41 to 5.26 per 100M miles traveled.

56% increase in combined **bike and pedestrian related injury/fatality rates** from .000091 to .000142 per 1000 population.

2021-20221-Year Change in 5-Year Running Average Accident Rates

1% increase in vehicle related fatality rates from 1.92 to 1.93 per 100M miles traveled. 7% increase vehicle related serious injury rates from 4.92 to 5.26 per 100M miles traveled.

10% increase in combined **bike and pedestrian related injury/fatality rates** from .000129 to .000142 per 1000 population.

Source: 2010-2022 CHP SWITRS data which only contains accidents reported to the CHP.

The increased rates may be attributed to increased road construction. It may also be attributed to higher speeds during the pandemic due to less traffic congestion. With more prevalent use of cell phones, it is possible that distractive driving has increased.

What your agency can do to accelerate attainment of the federal safety targets - Kern COG's member agencies are encouraged to promote projects and policies that will help the region to perform better than the targets proposed for our region. The Caltrans Strategic Highway Safety Plan proposes four countermeasures to improve safety: engineering, education, enforcement and emergency services. Projects such as countdown pedestrian signals, buffered bike lanes, roundabouts, and establishing extra safety corridor patrols where spikes in accident activity occur, should be considered wherever appropriate. Since 2007 the Kern Region has seen over \$37M invested in the HSIP program alone (see HSIP Attachments 2a, 2b, and 2c). In addition, state and federal programs as well as Kern COG's project delivery policies give extra points for projects that improve safety, including:

Highway Safety and Improvement Program (HSIP) – local & state road safety projects State Highway Operation and Protection Program (SHOPP) – state highway safety projects Regional Surface Transportation Program (RSTP) – local road maintenance & safety projects Active Transportation Program (ATP) – (58%-78% pts. for safety & need depending on size) Regional Transportation Improvement Program (RTIP) – (50% of points safety/congestion) Congestion Mitigation and Air Quality (CMAQ) – (40% of points for safety/congestion) Kern Motorist Aid Authority (KMAA) – Travel info., safety roadside cleanup, safety corridors

Zero fatalities on our streets are everyone's goal and it is anticipated that emerging safety technology standards such as autonomous vehicles will eventually help drive down these safety targets "Toward Zero." This report will be updated annually.

<u>ACTION:</u> Approve the 2024 Kern "Toward Zero" safety targets consistent with federal methodology and direct staff to work with member agencies and stakeholders to develop projects that will accelerate attainment of the targets. ROLL CALL VOTE.

Attachments:

- 1) Presentation Towards Zero: Draft Safety Performance Target Update Kern Region
- 2) Kern HSIP Projects 2007-2023

DRAFT SAFETY PERFORMANCE TARGET UPDATE

Kern Region











1

FEDERAL Requirements: MPOs Evaluated During 4-Year Review

• Metropolitan Planning Organizations (MPOs) will be held accountable for safety progress through the statewide and metropolitan planning process. FHWA will review how MPOs are addressing and achieving their targets (or assisting the State in achieving targets) as they conduct Transportation Management Area (TMA) 4-year Certification Reviews (only for large MPOs with more than 200,000 population). The TMA Certification Review requires the Secretary to certify whether the metropolitan planning process of an MPO serving as a TMA meets requirements, including the requirements of 23 USC 134 and other applicable Federal law.

2

FEDERAL Requirements: State Failure = More HSIP Safety Funding

If a State DOT does not meet or make significant progress toward meeting its HSIP targets, the State shall use obligation authority equal to the HSIP apportionment for the fiscal year prior to the target year only for HSIP projects and submit an HSIP Implementation Plan to FHWA. For example, if a State DOT does not meet or make significant progress towards meeting its 2023 safety targets, in Fiscal Year (FY) 2025, the State DOT must use obligation authority equal to the FY 2023 HSIP apportionment only for HSIP projects and submit an HSIP Implementation Plan by June 30, 2024.

Five Performance Targets Under New Federal Regulations +1

Motorized Vehicles

Number of Fatalities (SWITRS)

Rate of Fatalities per 100 Million VMT (SWITRS & HPMS)

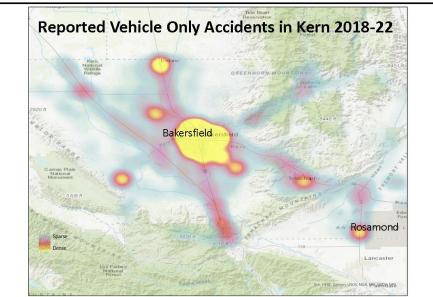
Number of Serious Injuries (SWITRS)

Rate of Serious Injuries per 100 Million VMT (SWITRS & HPMS)

Non-Motorized

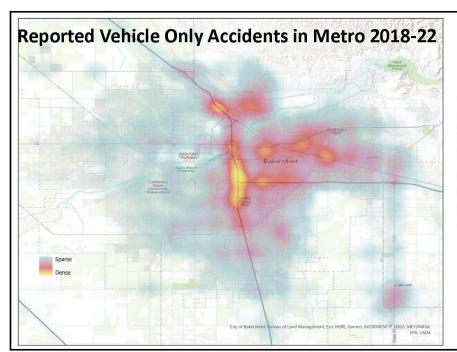
Number of Non-Motorized Fatalities and Serious Injuries (Bicycles and Pedestrians) (SWITRS)

> Rate of Non-Motorized Fatalities and Serious Injuries (SWITRS & Travel Model) (This is not required but provided for information)



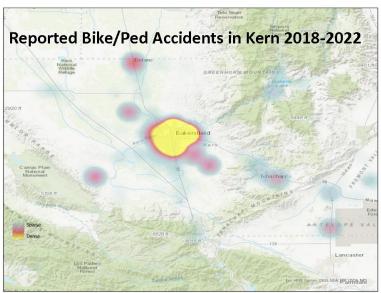
The maps above illustrate a portion of the CHP SWITRS data used in the analysis. The map combines all injury and fatality accidents for reported motor vehicle incidents.

7





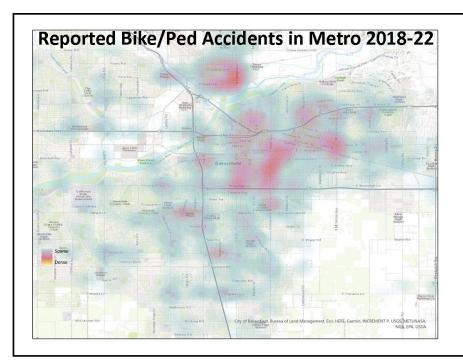
This map illustrates a portion of the CHP SWITRS data used in the analysis. The map combines all injury and fatality accidents reported motor vehicle incidents.





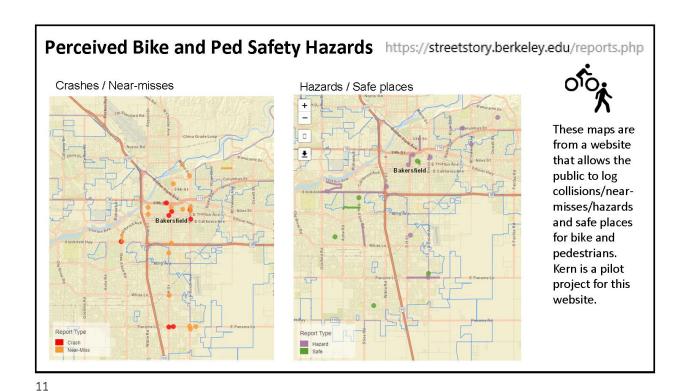
The maps above illustrate a portion of the CHP SWITRS data used in the analysis. The map combines all injury and fatality accidents for reported bike and pedestrian incidents.

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This map illustrates a portion of the CHP SWITRS data used in the analysis. The map combines all injury and fatality accidents for reported bike and pedestrian incidents.



Countywide Accident Rate Monitoring Results



traveled.

2015-2022 7-Year Change in 5-Year Running Average Accident Rates 29% increase in vehicle related fatality rates from 1.5 to 1.93 per 100M miles



54% increase in **vehicle related serious injury rates** from 3.41 to 5.26 per 100M miles traveled.



56% increase in combined bike and pedestrian related injury/fatality rates from .000091 to .000142 per 1000 population.



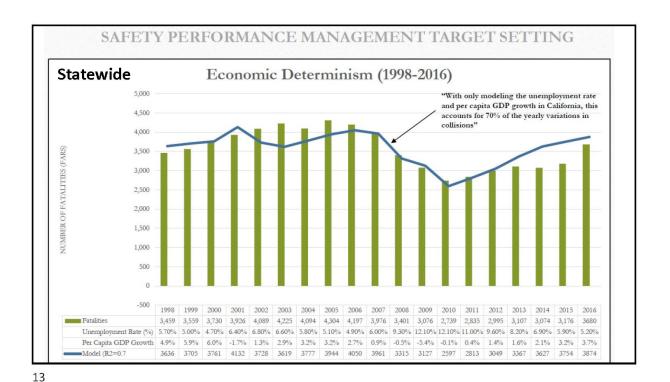
2021-2022 1-Year Change in 5-Year Running Average Accident Rates 1% increase in **vehicle related fatality rates** from 1.92 to 1.93 per 100M miles traveled.

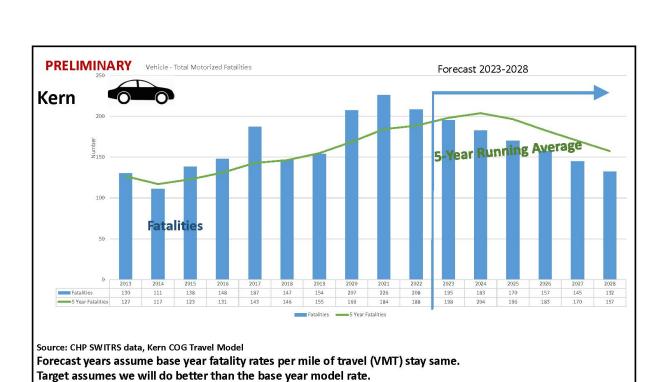


7% increase vehicle related serious injury rates from 4.92 to 5.26 per 100M miles traveled.

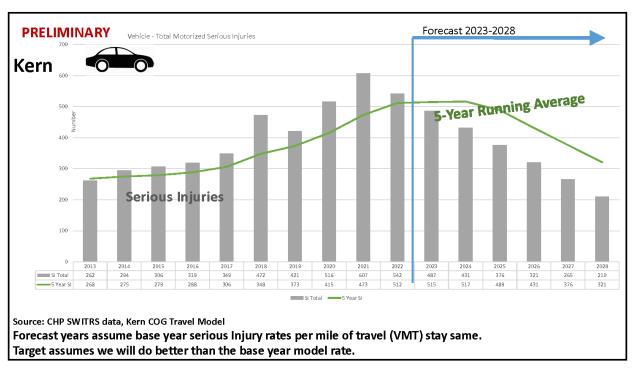


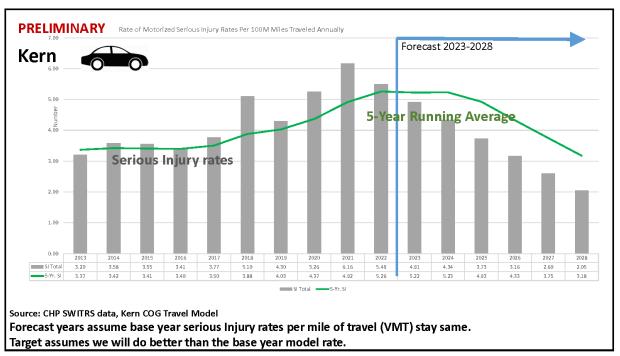
10 % increase in combined bike and pedestrian related injury/fatality rates from .000129 to .000142 per 1000 population.

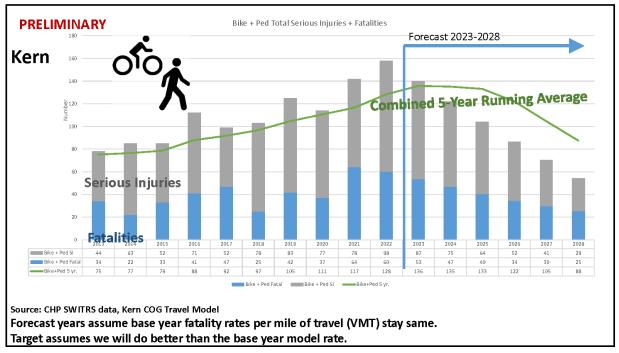


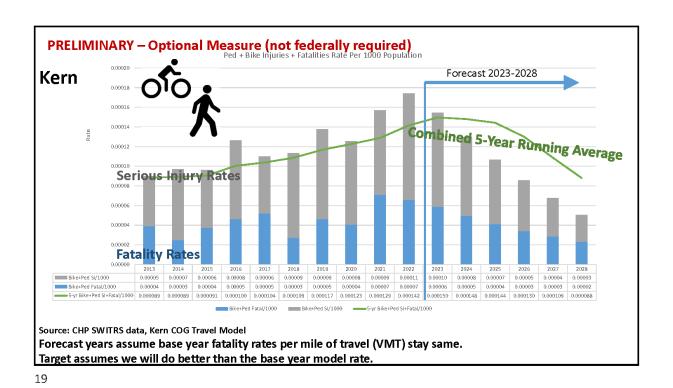












| PRELII | WINARY 2023 FEDERAL TARGETS UPD | DATE – Statewid | e & Kern |
|--|--|-------------------------------|-------------------------------|
| | | New <u>for 2024 (5-yr)</u> | Old <u>for 2023 (5-yr)</u> |
| € | Number of Fatalities = | <u>4081</u> | <u>3808</u> |
| Five Performance Targets Number of Fatalities = 4081 3808 Rate of Fatalities per 100 Million VMT = 1.300 1.216 Number of Serious Injuries = 16628 15156 Rate of Serious Injuries per 100 Million VMT = 4.918 4.904 Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries (Bicycles and Pedestrians) = 4381 4132 | | <u>1.216</u> | |
| ← | Number of Serious Injuries = | <u>16628</u> | <u>15156</u> |
| | Rate of Serious Injuries per 100 Million VMT | = 4.918 | <u>4.904</u> |
| 00% | Number of Non-Motorized Fatalities and Non | -Motorized Serious Ir | njuries |
| _ ^ | (Bicycles and Pedestrians) = | <u>4381</u> | <u>4132</u> |
| Kern | | | |
| <u>Fi</u> | ve Performance Targets | <u>for 2024 (5-yr</u>) | <u>for 2023 (5-yr)</u> |
| € | Number of Fatalities = | 198 (5% of the Stat | te*) <u>204</u> |
| ~ | Rate of Fatalities per 100 Million VMT = | <u>1.97</u> | <u>1.84</u> |
| ← | Number of Serious Injuries = | 515 (3.4% of the St | tate*) <u>517</u> |
| • | Rate of Serious Injuries per 100 Million VMT | = <u>5.22</u> | <u>5.23</u> |
| 00% | Number of Non-Motorized Fatalities and Non- | Motorized Serious Inj | uries |
| _ ^ | (Bicycles and Pedestrians) = | 136 (3% of the Sta | ate**) <u>135</u> |
| *Kern ac | counts for 3% of the state VMT in 2021. **Kern account | ts for 2.3% of the state po | pulation in Jan. 2023. |

Toward Zero – What your agency can do:

The Caltrans Strategic Highway Safety Plan proposes four countermeasures to improve safety: engineering, education, enforcement and emergency services. Projects such as: **countdown pedestrian signals, buffered bike lanes, roundabouts, and establishing extra safety corridor enforcement,** where spikes in accident activity occur, should be considered where appropriate. In addition, state and federal **funding programs** as well as Kern COG's project delivery policies give extra points for projects that improve safety, including:

- · Highway Safety and Improvement Program (HSIP) local & state road safety projects
- State Highway Operation and Protection Program (SHOPP) state highway safety projects
- Regional Surface Transportation Program (RSTP) local road maintenance & safety projects
- Active Transportation Program (ATP) (58%-78% pts. for safety & need depending on size)
- Regional Transportation Improvement Program (RTIP) (50% of points safety/congestion)
- Congestion Mitigation and Air Quality (CMAQ) (40% of points for safety/congestion)
- Kern Motorist Aid Authority (KMAA) Travel info., safety roadside cleanup, safety corridors

2007-2018 Highway Safety and Improvement Program (HSIP) – Kern Region

| Agency Name | Year | Unique Project ID | Location of Work | Description of Work | Project Cost | Fede | ral Funds |
|----------------------|------|----------------------|---|--|-----------------|------|-----------|
| Arvin | 2018 | H9-06-001 | Various existing intersection locations throughout the City of Arvin with an emphasis on locations adjacent to parks and schools. | Install new striped pedestrian crosswalks, stop bars, striping and a few curb ramps. | \$ 249,900 | \$ | 249,900 |
| Arvin | 2013 | HSIP6-06-001 | Bear Mountain Blvd (SR 223)/Derby St | Install traffic signals, railroad crossings, upgrade and install new pavement, striping and pavement markers | \$724,400 | | \$651,700 |
| Bakersfiel d | 2018 | H9-06-002 | Calloway Drive in front of Norris Middle School at existing crosswalk near Manhattan Drive; Monitor Street in front of Palla Elementary School at existing crosswalk near Kyner Avenue. | Install flashing yellow beacons near crosswalks. | \$ 246,100 | \$ | 246,100 |
| Bakersfiel d | 2016 | H8-06-001 | Fifty-seven (57) signalized intersections within the north west portion of the City of Bakersfield. | Remove existing pedestrian walk/don't walk signal heads and install new pedestrian countdown timer modules for all pedestrian crossings. | \$ 124,400 | \$ | 111,960 |
| Bakersfiel d | 2016 | H8-06-002 | Eighty-eight (88) signalized intersections within the south west portion of the City of Bakersfield. | Remove existing pedestrian walk/don't walk signal heads and install new pedestrian countdown timer modules for all pedestrian crossings. | \$ 211,200 | \$ | 190,080 |
| Bakersfiel d | 2015 | HSIP7-06-004 | Various Locations - 62 signalized intersections within the north east portion of the City of Bakersfield | Install pedestrian countdown head at each signalized intersection | \$ 194,000 | \$ | 174,600 |
| Bakersfiel d | 2015 | HSIP7-06-005 | Various Locations - 50 signalized intersections within the south east portion of the City of Bakersfield | Install pedestrian countdown head at each signalized intersection | \$ 168,000 | \$ | 151,200 |
| d d | 2013 | HSIP6-06-002 | 60 intersections throughout the City of Bakersfield | Install pedestrian countdown signal heads | \$190,000 | 1 | \$171,000 |
| Bakersner | 2012 | HSIP5-06-001 | Twenty (20) intersections within the city | Install pedestrian countdown heads | \$129,000 | 1 | \$116,000 |
| Bakersner | 2011 | HSIP4-06-007 | Various locations throughout the city | Install pedestrian countdown heads | \$126,000 | | \$113,400 |
| Dakersner | 2008 | 6340 | INSTALL FLASHING BEACONS AND CURB RAMPS. | BENTON STREET BETWEEN MING AVE. AND WILSON RD. | \$40,100 | | \$36,090 |
| Delano | 2018 | H9-06-004 | Twenty-two (22) uncontrolled pedestrian crossing locations throughout the City of Delano. | Install pedestrian crossings at uncontrolled locations; Install/upgrade larger intersections warning/regulatory signs. | \$ 249,300 | \$ | 249,300 |
| Delano | 2015 | HSIP7-06-006 | 32 non-signalized crosswalk locations throughout the City of Delano. | Install pedestrian actuated warning systems; Install Advanced Yield Markings, and Install Pedestrian Crossing Signs | \$ 437,900 | | 437,900 |
| Delano | 2013 | HSIP6-06-004 | Cecil Ave/Albany St | Upgrade traffic signals; Install protected left-turn phasing | \$320,600 | | \$288,500 |
| Delano | 2008 | 6375 | INSTALL TRAFFIC SIGNAL | CECIL AVE. AND HIETT AVE. INTERSECTION | \$350,000 | | \$315,000 |
| Kern County | 2018 | H9-06-010 | Eighty-two (82) crosswalk locations at 79 intersections throughout Kern County. | Install continental crosswalks, intersection warning signs, reflective signs, pedestrian crossing signs, ADA curb ramps, street lighting, cross drains, and AC tie-ins. | \$ 5,196,300 | \$ | 5,120,300 |
| Kern County | 2018 | H9-06-011 | The intersections of Roberts Lane at Sequoia Drive, Norris at Manor, and Manor at China Grade Loop. | Upgrade signals from pedestal to overhead mast arms. | \$ 787,600 | \$ | 787,600 |
| Kern County | 2018 | H9-06-012 | Various signalized intersections throughout the unincorporated Bakersfield, Oildale, Wheeler Ridge, Lake Isabella, and Rosamond communities of Kern County. | Construct intersection improvements, including replacing signal hardware at 30 intersections, installing raised pavement markers/striping at 22 intersections, and upgrading existing ADA-accessible curb ramps. | \$ 1,567,200 | \$ | 1,567,200 |
| Kern County | 2018 | H9-06-013 | San Diego Street between Hall Road and Burgundy Avenue, in the unincorporated community of Lamont, Kern County. | Install continental crosswalks and lighting at four existing uncontrolled pedestrian crossing areas. | \$ 250,000 | \$ | 227,700 |
| Kern County | 2016 | H8-06-007 | Intersection of Mount Vernon Ave at Quincy St | Convert signal to mast arm for east/west bound traffic on Quincy St and install pedestrian countdown signal heads | \$ 219,100 | \$ | 219,100 |
| Kern County | 2016 | H8-06-008 | Intersection of Airport Dr at Norris Rd | install additional signal heads at north, west and east bound directions on the near side of the intersection. | \$ 219,100 | \$ | 219,100 |
| Kern County | 2016 | H8-06-009 | Various locations in unincorporated Bakersfield and Rosamond areas. | Installation of pedestrian countdown signal heads. | \$ 272,000 | \$ | 250,000 |
| Kern County | 2016 | H8-06-010 | Various locations throughout the County of Kern. | Upgrade existing guardrails. | \$ 1,200,000 | \$ | 1,200,000 |
| Kern County | 2015 | HSIP7-06-007 | South Union Ave between Taft Highway and Ming Avenue. | Construct left turn channelization | \$ 1,134,300 | \$ | 1,020,870 |
| Kern County | 2012 | HSIP5-06-014 | Patton Way between Hageman Rd. and Snow Rd. | Modify traffic signals; install two-way left-turn lane | \$180,000 | | \$144,000 |
| Kern County | 2012 | HSIP5-06-015 | Roberts Ln./Oildale Dr. | Construct left-turn lanes; modify traffic signals; install pedestrian countdown heads | \$139,000 | | \$109,000 |
| | | | | | | | |

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2007-2018 Highway Safety and Improvement Program (HSIP) – Kern Region

| Agency Name | Year | Unique Project ID | Location of Work | Description of Work | Project Cost | Federal Funds |
|----------------|------|----------------------|--|--|-----------------|---------------|
| Kern County | 2011 | HSIP4-06-013 | Mount Vernon Ave. between Kentucky St. and Niles Pt. | Modify raised medians; relocate crosswalk; construct curb ramps | \$213,000 | \$191,000 |
| Kern County | 2008 | 6370 | UPGRADE TRAFFIC SIGNALS | SOUTH UNION AVENUE AND PACHECO RD | \$231,000 | \$207,900 |
| Kern County | 2008 | 6369 | UPGRADE TRAFFIC SIGNALS; CONSTRUCT CURB RAMPS | BERNARD ST. AND ALTA VISTA DR. INTERSECTION | \$165,000 | \$148,500 |
| Kern County | 2008 | 6371 | UPGRADE TRAFFIC SIGNALS; CONSTRUCT CURB RAMPS | SOUTH UNION AVE. AND FAIRVIEW RD. INTERSECTION | \$231,000 | \$207,900 |
| Kern County | 2007 | 5435 | UPGRADE TRAFFIC SIGNALS; REMOVE FIXED OBJECTS; CONSTRUCT CURB RAMPS. | INTERSECTION OF FLOWER ST. AND HALEY ST. | \$303,600 | \$273,240 |
| Mcfarland | 2016 | H8-06-012 | Various stop controlled intersections along Garzoli Avenue, and Perkins Ave and 5th Street. | Upgrade signing with new Solar flashing LED Stop signs, traffic striping and markings, solar Speed Limit warning flashing beacon signs with radar speed feedback, crosswalk with In Roadway warning lights and upgrade ADA curb ramps. | \$ 212,400 | \$ 212,400 |
| Shafter | 2015 | HSIP7-06-008 | Lerdo Highway between Cherry Ave. and Zerker Rd. | Install guardrail | \$ 1,081,800 | \$ 1,081,800 |
| Shafter | 2011 | HSIP4-06-006 | Lerdo Hwy. between Cherry Ave. and Driver Rd. | Install median guardrail, signs, striping, and pavement markings | \$1,260,800 | \$900,000 |
| Taft | 2016 | H8-06-013 | Kern Street between 1st Street and Hillard Street. | Remove existing roadway luminaries and install high performance cobra heads LED Roadway Luminaries, install Radar Speed Feed Back Signs, re-design pedestrians crosswalks, repaint and add markings. | \$ 432,000 | \$ 432,000 |
| Wasco | 2018 | H9-06-021 | Various locations on local roadways throughout Wasco. | Upgrade roadway signs and various intersections as recommended in 2017 City of Wasco Roadway Safety Signs Audit Project Report. | \$ 114,023 | \$ 114,023 |
| Wasco | 2016 | H8-06-015 | Various locations around Barker Park | Install Rectangular Rapid Flashing Beacons (RRFBs), high visibility crosswalks, infill sidewalk, and ADA curb ramps. | \$ 178,800 | \$ 160,920 |
| Wasco | 2015 | HSIP7-06-009 | Various locations within the Wasco city limits | Roadway Safety Sign Audit and sign upgrade/installation project | \$ 143,900 | \$ 143,900 |
| Wasco | 2010 | HSIP3-06-041 | Palm Ave. between SR 46 and 9th Place | Construct ADA compliant curb, gutter, sidewalk, and curb ramps | \$232,900 | |
| Wasco | 2008 | 6366 | BICYCLE/PEDESTRIAN IMPROVEMENTS | 7TH STREET BETWEEN BROADWAY AND PALM AVENUES | \$235,100 | \$211,590 |
| Wasco | 2007 | 5441 | INSTALL IN-PAVEMENT CROSSWALK LIGHTS. | MID-BLOCK CROSSWALK ON POSO DRIVE BETWEEN GRIFFITH AVE. AND POPLAR AVE. | \$55,000 | 2 |
| Wasco | 2007 | 5442 | INSTALL IN-PAVEMENT CROSSWALK LIGHTS. INTERSECTION OF PALM AVE. AND 9TH PLACE. | | \$189,700 | \$170,730 |
| | | | | HSIP - Kern Total 2007-2018 | \$20,205,523 | \$19,057,003 |

HSIP Attachment 2b

Project List for Highway Safety Improvement Program (HSIP) Cycle 10 2021

(Sort by Caltrans District and Agency Name)

| Unique Project ID | Caltrans District | Agency Name | МРО | Location of Work | Description of Work | Project Cost | HSIP Funds (State) |
|----------------------|----------------------|-----------------|------|---|---|--------------|--------------------|
| H10-06-001 | 6 | Bakersfield | KCOG | Old Farm Road in front of existing Veterans Elementary School at existing crosswalk near Cherry Valley Avenue, and Mountain Vista Drive in front of existing Earl Warren Junior High School at existing crosswalk near Mount Snow Lane. | ng crosswalk near Cherry Valley Avenue, and Mountain Drive in front of existing Earl Warren Junior High School at enhance visibility and slow down vehicular traffic. \$ 246,100 | | \$ 246,100 |
| H10-06-002 | 6 | Bakersfield | KCOG | Intersection of Beale Avenue and Monterey Street and intersection of Beale Avenue and Niles Street. Install signal poles/controller equipment. | | \$ 586,000 | \$ 586,000 |
| H10-06-007 | 6 | Kern County | KCOG | 6 uncontrolled multi-lane pedestrian crossings on arterial and collector roads in unincorporated areas of east Bakersfield, Mojave, Rosamond, & Wofford Heights. | collector roads in unincorporated areas of east Bakersfield, Install lighting. | | \$ 290,168 |
| H10-06-008 | 6 | Kern County | KCOG | Intersection approaches of 5 multi-lane arterial and collector roads in unincorporated areas of Oildale, east Bakersfield, & Mojave. | Install raised medians on the approaches. | \$ 215,800 | \$ 183,430 |
| H10-06-009 | 6 | Kern County | KCOG | All Kern County-maintained multi-lane roads and Wheeler Ridge Road (single lane). | Upgrade striping of centerlines/edgelines, left or right turns, & lane drops. Improve safety of curve on Wheeler Ridge Rd with chevron signs. Add new raised pavement markers on all roads. 80 miles of roadway; 226 miles of striping. | \$ 1,394,700 | \$ 1,317,467 |
| H10-06-010 | 6 | Kern County | KCOG | Several Kern County-maintained multi-lane roads. | Improve the safety of several multi-lane roads county-wide by upgrading approximately 27 miles of bike lane striping over 22 miles of roadway. | \$ 375,200 | \$ 247,620 |
| H10-06-011 | 6 | Kern County | KCOG | Various locations throughout the County of Kern. | Upgrade guardrail. | \$ 653,700 | \$ 626,450 |
| H10-06-012 | 6 | Kern County | KCOG | Intersection of Wofford Boulevard & Panorama Drive in the community of Wofford Heights. | Install flashing beacons, radar speed Feedback signs, sidewalk, curb & gutter, ADA ramps, thermoplastic markings and signs at the uncontrolled multi-lane crosswalk. | \$ 221,700 | \$ 221,700 |
| H10-06-013 | 6 | Kern County | KCOG | Cuddy Valley Road between Ivins Road and Obrien Drive, near the community of Frazier Park. | Upgrade existing edgelines and install rumble stripes. Install recessed reflective pavement markers on the centerline. | \$ 158,800 | \$ 158,800 |
| H10-06-018 | 6 | Mcfarland | KCOG | Uncontrolled crosswalks at the intersections of W Perkins Avenue and 3rd Place, E Perkins Avenue and San Lucas Street, E Perkins Avenue and San Pedro Street, E Sherwood Avenue and Browning Road, and W Kern Avenue and 4th Street. | Install warning signs and upgrade markings to high-visibility, install curb ramps where missing, and add enhanced safety features. | \$ 249,900 | \$ 249,900 |
| H10-09-001 | 9 | California City | KCOG | California City Blvd. between Yerba Blvd and Neuralia Road. | Install speed radar, high visibility crosswalks markings, crosswalk flashing beacons, sidewalk repairs with ADA ramps, flashing LED Stop Sign, restriping and signage. | \$ 437,000 | \$ 437,000 |
| H10-09-007 | 9 | Ridgecrest | KCOG | Signalized Intersections on China Lake Blvd at California Av, Church Av, Upjohn Av, Rader Av, Bowman Rd and College Heights Blvd. | Update the controllers and signal timing for adaptive traffic signals with advanced dilemma zone detection and a leading pedestrian interval. | \$ 203,000 | \$ 203,000 |

1 of 2 February 10, 2021

Project List for Highway Safety Improvement Program (HSIP) Cycle 10 2021

(Sort by Caltrans District and Agency Name)

| Unique Project ID | Caltrans District | Agency Name | МРО | Location of Work | Description of Work | Project Cost | HSIP Funds (State) |
|----------------------|----------------------|-------------|------|---|--|--------------|--------------------|
| H10-09-008 | 9 | Ridgecrest | KCOG | 25 stop controlled arterial intersections in the City of Ridgecrest. | Upgrade arterial intersections with larger flashing stop signs with wind bracing and install advance "stop ahead" pavement markings. | \$ 491,100 | \$ 491,100 |
| H10-09-009 | 9 | Ridgecrest | KCOG | Three uncontrolled crosswalks at Ridgecrest Boulevard & Alvord Street, Ridgecrest Boulevard & Sanders Street, and midblock on Downs St between Church Ave & Upjohn Ave. | | \$ 250,000 | \$ 250,000 |
| H10-09-010 | 9 | Tehachapi | KCOG | Various locations in the City of Tehachapi. | Install edgelines and centerlines. | \$ 250,000 | \$ 250,000 |

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HSIP Attachment 2c

Project List for Highway Safety Improvement Program (HSIP) Cycle 11 2023

| Unique Project ID | Cycle | District | Agency | МРО | Project Location | Description of Work | Total Cost (\$) | HSIP Fund (\$) |
|----------------------|-------|----------|----------------|------|---|--|--------------------|-------------------|
| H11-06-001 | 11 | 6 | Bakersfield | KCOG | Various Locations at eight roads throughout the City of Bakersfield. | Install radar feedback speed signs at the entrances of each street in both directions. | \$ 320,500 | \$ 288,450 |
| H11-06-002 | 11 | 6 | Bakersfield | KCOG | Jewetta Ave between Hageman Rd and Olive Dr; Camino Media between Gosford Rd and the canal to the west; Hosking Ave between Akers Rd and Hughes Ln; and several sections on Panama Ln. | Install raised street medians. | \$ 896,700 | \$ 807,030 |
| H11-06-003 | 11 | 6 | Bakersfield | KCOG | At Norris Elementary School and at Stiern Middle School. | Install flashing yellow beacons near existing crosswalks to enhance visibility and slow down vehicular traffic. | \$ 209,300 | \$ 188,370 |
| H11-06-004 | 11 | 6 | Bakersfield | KCOG | Various intersections throughout the City. | Replace existing traffic signal backplates with high visibility reflective backplates. | \$ 220,600 | \$ 198,540 |
| H11-06-009 | 11 | 6 | Delano | KCOG | County Line Road from Browning Road to Veneto Street; Browning Road from Garces Highway to 6th Ave.; Norwalk Street from Weaver Ave. to 18th Ave. | Install centerline and edgeline rumble strips/stripes. | \$ 132,500 | \$ 119,250 |
| H11-06-019 | 11 | 6 | Kern County | KCOG | Various locations throughout the County of Kern. | Guardrail Upgrades. | \$ 1,067,900 | \$ 961,110 |
| H11-06-030 | 11 | 6 | Wasco | KCOG | The Intersection of Hwy 43 (known as F Street) and 8th Street. | Install Rectangular Rapid-Flashing Beacon (RRFB), bulb-outs, ADA ramps, Advance STOP or YIELD markings and traffic signs, crosswalk visibility enhancements, stripe and pavement markings at uncontrolled location with enhanced safety. | \$ 317,000 | \$ 249,990 |
| H11-06-031 | 11 | 6 | Wasco | KCOG | The Intersection of Hwy 46 and Poplar Avenue. | Install High Intensity Activated Crosswalk "HAWK" pedestrian hybrid beacon system, traffic signs, stripe and pavement markings at uncontrolled location with enhanced safety. | \$ 521,200 | \$ 469,080 |