



HM-4 SAFETY PILOT PROGRAM FACTS

DIVISION OF SAFETY PROGRAMS & DIVISION OF MAINTENANCE

FEBRUARY 2024

INTRODUCTION

The current Highway Maintenance Safety (HM-4 Safety) Program is an extension and expansion of the original HM-4 Safety Pilot Program (FY 21-22 & FY 22-23). It is a four-year, \$48,420,000 per year program to fund capital and support statewide safety projects delivered through the enhanced HM-4 Program. This is one of the first statewide Caltrans programs to fund quick turnaround systemic and proactive safety projects to quickly reduce roadway fatalities and serious injuries to zero by the year 2050.

BACKGROUND

Highway maintenance projects are generally short-lead, quick turnaround projects that can be initiated and completed within the same fiscal year with no or limited right of way or environmental permitting delays. This means that cost-effective, traffic safety enhancements can be quickly implemented and provide faster benefits.

The Highway Maintenance 4 (HM-4) Safety Pilot Program was a two-year, \$21,575,000 per year program to fund safety projects delivered through the enhanced Highway Maintenance (HM) Program. This pilot program only funded the capital costs. The district provided the support cost. The HM-4 Safety Pilot Program was implemented successfully providing the foundation for the current expanded HM-4 Safety Program.

The HM-4 Safety Program extension was approved in July 2023 for 4 years of funding, Fiscal Year (FY) 23/24 through 26/27, with a budget of \$48.420M per year. The Program funds capital costs, and support costs for installation of safety enhancements.

FOCUS AREAS INCLUDED IN THE HM-4 SAFETY PROGRAM

The current HM-4 Safety Program delivers safety enhancements for Wrong-Way Driver Prevention, Pedestrian & Bicyclist Safety, Curve Warnings Sign Packages, Cross Over Collision Prevention, and Run-off Road Collision Prevention.

The following basic safety enhancements are included in the HM-4 Safety Program:

1. Wrong-Way Driver Prevention Enhancements
 - Red Reflective Marker Pavement Markings for wrong-way details to exit ramps per Caltrans Standard Plans.
 - Do Not Enter - Wrong Way Sign Package to the current standard as needed.



2. Pedestrian and Bicyclist Safety Enhancements
 - Higher Visibility Crosswalk Treatment (such as an upgrade to continental or ladder style crosswalk shown in Caltrans Standard Plan A24F)
 - Bicycle Conflict Marking and Green Boxes at Intersections
3. Horizontal Alignment Curve Warning Enhancements
 - Curve warning sign packages on highway horizontal curves.
4. Run-off Road Collision Prevention Enhancements
 - Shoulder Rumble Strips
5. Cross-Over Collision Prevention Enhancements
 - Centerline Rumble Strips

In addition to these basic enhancements, the program provides flexibility for the districts to select other than basic countermeasures or safety enhancements within each focus area based on the district’s need and capability to deliver.

PROGRAM FOCUS AREA SUMMARY- FY 23/24 - FY 26/27

FOCUS AREA	Average Basic Unit Cost	Performance Target Each Fiscal Year	Countermeasures Strategy Effectiveness*
1. Wrong Way Driver Prevention	\$25,000 / Exit Ramp	350 Exit Ramps	40-60%
Department Cost		\$10,000,000	
2. Pedestrian and Bicyclist Safety Enhancements	\$7,500 / Location	500 Locations	20-40%
Department Cost		\$6,275,000	
3. Horizontal Alignment Curve Warning Sign Packages	\$10,000 / Location	325 Curve Locations	16-60%
Department Cost		\$4,000,000	
4. Run Off Road Collision Prevention	\$18 / Linear Foot	400,000 Linear Feet	13-51%
Department Cost		\$9,100,000	
5. Cross Over Collision Prevention	\$18 / Linear Foot	200,000 Linear Feet	44-64%
Department Cost		\$4,550,000	
TOTAL:		\$33,925,000	



ROLES AND RESPONSIBILITIES

The HQ Division of Safety Programs and the HQ Division of Maintenance are working closely with District Safety and Maintenance to develop and implement the HM-4 Safety Program. Headquarters safety and maintenance program coordinators approve projects and budgets, provide support to identify needs, coordinate with districts on workplan development, and track project status & completion.