

Memorandum

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: March 15-16, 2017

Reference No.: 2.1a.(1)
Action Item

From: NORMA ORTEGA
Chief Financial Officer

Prepared by: Bruce De Terra, Chief
Division of
Transportation Programming

Subject: **SHOPP AMENDMENT 16H-011**

RECOMMENDATION:

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) approve the requested State Highway Operation and Protection Program (SHOPP) Amendment 16H-011; in accordance with Senate Bill 486 which requires the Commission to approve any changes or new projects amended into the SHOPP.

ISSUE:

Since the January 2017 report to the Commission, the Department recommends 63 new capital projects to be amended into the 2016 SHOPP, as summarized in Attachment 1. The amendments noted below would be funded from the Major Damage Restoration, Collision Reduction, Mandates, Bridge Preservation, Roadway Preservation and 2016 SHOPP programming capacity.

2016 SHOPP Summary of New Projects by Category	No.	FY 2016/17 (\$1,000)	FY 2017/18 (\$1,000)	FY 2018/19 (\$1,000)	FY 2019/20 (\$1,000)
Major Damage Restoration	51	\$92,223	\$11,590		\$5,617
Collision Reduction	8		\$1,538	\$5,089	\$55,991
Mandates	2	\$8,000			
Bridge Preservation	1			\$4,938	
Roadway Preservation	1	\$149,353			
Total Amendments	63	\$249,576	\$13,128	\$10,027	\$61,608

The Department also recommends that the capital projects, as summarized in Attachment 2, Long Lead project, as summarized in Attachment 3, and updated Performance Measures, as summarized in Attachment 4, be amended into the 2016 SHOPP.

BACKGROUND:

In each even numbered year, the Department prepares a four-year SHOPP which defines major capital improvements necessary to preserve and protect the State Highway System. Periodically, the Department proposes amendments to the SHOPP to address newly identified needs prior to the next programming cycle. Between programming cycles, the Department updates scope, schedule and cost to effectively deliver projects.

Resolution G-00-13, established in June 2000, provides the Department with means to develop SHOPP projects which require periods longer than the four-year SHOPP cycle. The Commission authorized the Department to program projects for development only when appropriate. Long Lead projects must identify challenges that require additional time beyond the typical four years to complete.

Senate Bill 486, approved by Governor September 30, 2014, requires Commission approval of projects amended into the SHOPP.

Attachments

List of New 2016 SHOPP Capital Project Amendments

No. PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.
Major Damage Restoration						
1 2466	1-Hum-96 7.8/8.0 0G840 01 1700 0066	Near Willow Creek, from 0.3 mile west of Tish Tang Campground to Tish Tang Campground. Remove slide debris and stabilize slope.	\$5 (R/W) \$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$5 \$100 \$105	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
2 3113	1-Lak-175 17.4/23.6 0G750 01 1700 0056	Near Middletown, from 0.2 mile east of Grouse Springs Road to 0.1 mile east of Socrates Mine Road. Remove slide debris, repair drainage systems, reconstruct roadway, and conduct further geotechnical investigations of slope and roadway settlement.	\$25 (R/W) \$2,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$25 \$400 \$425	201.130 Assembly: 1 Senate: 2 Congress: 1 4 Location(s)
3 4661	1-Men-1 78.0/83.5 0G800 01 1700 0061	Near Westport, from 0.3 mile south of Wages Creek Bridge to Soldier Point Sidehill Viaduct. Remove slide debris, repair drainage systems, stabilize slope, reconstruct roadway, and conduct further geotechnical investigations to develop final scope of repairs.	\$30 (R/W) \$3,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$20 \$500 \$520	201.130 Assembly: 1 Senate: 2 Congress: 1 5 Location(s)
4 4658	1-Men-1 104.4 0G730 01 1700 0054	Near Leggett, at 1.2 miles south of Route 101. Remove slide debris, stabilize slope, and conduct further geotechnical investigations to develop final scope of repairs.	\$50 (R/W) \$2,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$30 \$500 \$530	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
5 4659	1-Men-20 20.8 0G760 01 1700 0057	Near Willits, at 0.8 mile east of James Creek Bridge. Remove slide debris and stabilize slope.	\$15 (R/W) \$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$15 \$175 \$190	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
6 4657	1-Men-101 R104.7/R105.3 0G650 01 1700 0043	Near Piercy, from 0.9 mile north of Route 101/271 Separation (Piercy) to 1.3 miles south of South Fork Eel River Bridge. Remove slide debris and stabilize slope.	\$30 (R/W) \$1,200 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$30 \$450 \$480	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
7 4660	1-Men-175 1.6 0G780 01 1700 0059	Near Hopland, at 0.4 mile east of Harrison Street. Reconstruct embankment washout, install rock slope protection (RSP), replace culvert, and repair roadway.	\$10 (R/W) \$550 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$10 \$175 \$185	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)

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No. PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.
Major Damage Restoration (Cont.)						
8 3677	2-Plu-70 7.3/14.2 3H100 02 1700 0056	Near Tobin, at various locations from 0.2 mile east of Tobin Underpass to 0.7 mile west of Yellow Creek Bridge. Remove slide debris and clear drainage obstructions.	\$10 (R/W) \$950 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$50 \$400 \$450	201.130 Assembly: 3 Senate: 1 Congress: 4 3 Location(s)
9 3676	2-Plu-89 11.6/11.9 3H090 02 1700 0055	Near Greenville, from 0.1 mile north of Indian Falls Road to 0.5 mile north of Indian Falls Road (PM 11.6/11.9); also at 0.3 mile north of Greenville Wolf Creek Road (PM 24.5). Reconstruct slope washout, reconstruct roadway, and repair drainage systems.	\$1,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$0 \$550 \$550	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
10 3675	2-Sha-299 47.7 3H010 02 1700 0052	Near Ingot, at 1.0 mile east of Oak Run Road. Remove slide debris and stabilize slope.	\$50 (R/W) \$1,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$50 \$400 \$450	201.130 Assembly: 2 Senate: 4 Congress: 2 1 Location(s)
11 2290	3-But-70 41.5 2H750 03 1700 0180	Near Pulga, at 0.5 mile east of North Fork Feather River Bridge. Remove debris, reconstruct embankment slipout, construct soldier pile retaining wall, install barrier rail, and repair roadway.	\$40 (R/W) \$3,460 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$140 \$0 \$20 \$590 \$750	201.130 Assembly: 3 Senate: 4 Congress: 2 1 Location(s)
12 3132	3-ED-49 37.3/37.8 2H530 03 1700 0148	Near Auburn, from 0.4 mile to 0.9 mile south of North Fork American River Bridge. Repair slipout and construct soldier pile retaining wall.	\$3,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$0 \$600 \$600	201.130 Assembly: 4 Senate: 6 Congress: 4 3 Location(s)
13 4131	3-Nev-49 17.5/R32.6 2H820 03 1700 0187	Near Nevada City, from Newtown Road to Yuba County Line; also in Yuba County, from Nevada County Line to 0.1 mile south of Marysville Road (PM R0.0/3.5). Remove mudslide debris, take out hazardous trees and loose rocks on failed slope, and repair drainage system.	\$1,250 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$20 \$0 \$0 \$80 \$100	201.130 Assembly: 3 Senate: 4 Congress: 2, 4 5 Location(s)
14 4129	3-Nev-49 20.8/21.0 2H730 03 1700 0176	Near Nevada City, from 1.1 miles south of South Yuba River Bridge to 0.9 mile south of South Yuba River Bridge. Repair and/or replace multiple failed culverts, install rock slope protection (RSP), install a detention basin, and repair eroded embankments.	\$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$10 \$0 \$0 \$60 \$70	201.130 Assembly: 3 Senate: 4 Congress: 4 3 Location(s)

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No. PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.	
Major Damage Restoration (Cont.)							
15 4300	3-Nev-80 R9.2/R9.6 2H720 03 1700 0175	In Truckee, from 0.1 mile west of Donner Lake Road to 0.5 mile west of Donner Lake Road. Remove mudslide debris from roadway, remove loose rocks on failed slope, and reconstruct eroded slope.	\$410 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$10 \$0 \$0 \$40 <hr/> \$50	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
16 5500	3-Pla-174 2.3 2H760 03 1700 0181	Near Colfax, at 0.5 mile east of Bear River Bridge. Repair slope washout, install drainage, and reconstruct roadway.	\$10 (R/W) \$400 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$10 \$0 \$5 \$80 <hr/> \$95	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
17 6718	3-Sac-80 M0.4 2H740 03 1700 0178	Near the city of Sacramento, at the Sacramento River Bridge Overhead. Reconstruct eroded embankment and install erosion control measures.	\$360 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$6 \$0 \$0 \$80 <hr/> \$86	201.130 Assembly: 5 Senate: 6 Congress: 5 1 Location(s)
18 7290	3-Sac-160 L4.5/L9.4 2H860 03 1700 0191	Near Rio Vista, from 0.3 mile east of W Sherman Island Road to 1.5 miles west of Route 12. Repair failed slope, reconstruct roadway, and reset guardrail. A pavement rehabilitation project currently in winter suspension will address extending the service life of the pavement.	\$1,640 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$10 \$0 \$0 \$215 <hr/> \$225	201.130 Assembly: 15 Senate: 5 Congress: 10 1 Location(s)
19 7803	3-Sie-49 0.0/23.3 2H830 03 1700 0188	Near Camptonville, from Oak Valley Road to 0.7 mile west of Ladies Canyon Creek Bridge. Remove slide debris, take out hazardous trees and loose rocks on failed slope, and repair damaged roadway.	\$2,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$40 \$0 \$0 \$160 <hr/> \$200	201.130 Assembly: 3 Senate: 1 Congress: 4 10 Location(s)
20 7799	3-Sie-49 3.1 2H560 03 1700 0156	Near Camptonville, at 0.6 mile south of North Yuba River Bridge. Reconstruct failed slope and install new drainage system.	\$380 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$0 \$0 \$0 \$35 <hr/> \$35	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
21 8665	3-Yol-16 20.8 2H770 03 1700 0182	Near Esparto, at 0.1 mile west of County Road 79. Repair scour damaged embankment, remove and reinstall culvert, and reconstruct roadway.	\$310 (C)	16/17	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$3 \$0 \$0 \$48 <hr/> \$51	201.130 Assembly: 2 Senate: 5 Congress: 2 1 Location(s)

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Major Damage Restoration (Cont.)							
22 9304	3-Yol-128 3.7 2H780 03 1700 0183	Near Winters, at 1.1 miles east of Pleasants Valley Road (County Road 86). Repair slipout and reconstruct roadway.	\$300 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$5 \$0 \$0 \$60 \$65	201.130 Assembly: 2 Senate: 5 Congress: 1 1 Location(s)
23 1456C	4-Ala-13 R9.2 4K250 04 1700 0285	In Oakland, at 0.1 mile north of Broadway Terrace. Backfill sinkhole, replace damaged culvert, and reconstruct roadway.	\$2,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$900 \$900	201.130 Assembly: 14 Senate: 9 Congress: 9 1 Location(s)
24 1455E	4-Mrn-1 4.0/5.0 4K150 04 1700 0271	Near Muir Beach, from 0.7 mile to 1.7 miles north of Panoramic Highway South. Repair slope failure by constructing soldier pile retaining wall and replace culvert.	\$200 (R/W) \$7,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$1,000 \$100 \$2,100 \$3,200	201.130 Assembly: 6 Senate: 3 Congress: 6 2 Location(s)
25 1456B	4-Mrn-1 10.9 4K240 04 1700 0284	Near Stinson Beach, at 1.3 miles south of Panoramic Highway north. Repair slope slipout by constructing soldier pile retaining wall.	\$200 (R/W) \$3,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$800 \$100 \$1,500 \$2,400	201.130 Assembly: 6 Senate: 3 Congress: 6 1 Location(s)
26 1455F	4-SM-84 15.4/15.5 4K160 04 1700 0272	Near Sky Londa, at Grandview Drive. Repair slope failure by constructing soldier pile tie-back retaining wall and repair pavement.	\$200 (R/W) \$3,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$500 \$100 \$1,500 \$2,100	201.130 Assembly: 21 Senate: 8 Congress: 14 1 Location(s)
27 1456E	4-SCI-9 0.0/4.8 4K270 04 1700 0290	Near Saratoga, from Santa Cruz County line to Sanborn Road. Remove slide debris, repair roadway, and establish safe working conditions of failed slope to initiate geotechnical investigations.	\$10 (R/W) \$1,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$450 \$450	201.130 Assembly: 19 Senate: 11, 15 Congress: 14 1 Location(s)
28 1455G	4-Sol-113 5.5 4K170 04 1700 0273	Near Dixon, at 1.5 miles north of Creed Road. Stabilize slope washout, reconstruct culvert and repair pavement.	\$10 (R/W) \$1,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$600 \$600	201.130 Assembly: 8 Senate: 5 Congress: 3, 7 1 Location(s)

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Major Damage Restoration (Cont.)						
29 1455H	4-Sol-128 0.4/0.5 4K180 04 1700 0274	Near Winters, from 0.2 mile west of Yolo County line to 0.3 mile west of the Yolo County line. Remove slide debris requiring rock blasting and pavement repair.	\$10 (R/W) \$800 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$0 \$300 \$300	201.130 Assembly: 2, 7 Senate: 2, 5 Congress: 1, 3 1 Location(s)
30 1455K	4-Son-128 16.2 4K200 04 1700 0278	Near Kellogg, at Maacama Creek. Install temporary rock slope protection (RSP) until water levels recede, then construct permanent bio-armament to strengthen eroded embankment.	\$10 (R/W) \$1,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$0 \$0 \$0 \$700 \$700	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
31 2688	5-Mon-1 8.0/23.0 1H780 05 1600 0151	Near Gorda, 0.9 mile north of Villa Creek Bridge to 1.7 miles north of Rain Rocks Sidehill Viaduct. Remove slide debris, reconstruct roadway, and repair drainage systems.	\$20 (R/W) \$2,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$25 \$100 \$5 \$750 \$880	201.130 Assembly: 27 Senate: 15 Congress: 8 1 Location(s)
32 2687	5-Mon-1 49.0/51.2 1H770 05 1600 0150	Near Big Sur, from 0.2 mile north of Clear Ridge Road to Coast Road. Reconstruct slope washout and install rock slope protection (RSP) on adjacent river bank.	\$10 (R/W) \$800 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$20 \$35 \$2 \$160 \$217	201.130 Assembly: 27 Senate: 15 Congress: 17 1 Location(s)
33 2686	5-SLO-41 6.0 1H760 05 1600 0149	Near Atascadero, at 1.3 miles south of Cerro Alto Road. Remove slide debris and repair rock netting.	\$20 (R/W) \$1,500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$30 \$70 \$15 \$300 \$415	201.130 Assembly: 33 Senate: 15 Congress: 22, 23 1 Location(s)
34 2684	5-SB-101 12.3/12.4 1H740 05 1600 0147	In the city of Santa Barbara, from Sycamore Creek Bridge to 0.1 mile north of Sycamore Creek Bridge. Reconstruct fire damaged drainage system.	\$10 (R/W) \$1,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$20 \$40 \$5 \$200 \$265	201.130 Assembly: 35 Senate: 19 Congress: 23 1 Location(s)
35 2683	5-SCr-1 R3.7/R3.9 1H730 05 1600 0146	Near Watsonville, from 0.4 mile south of Buena Vista Avenue to 0.2 mile south of Buena Vista Drive. Reconstruct embankment and failed drainage systems.	\$20 (R/W) \$2,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u> \$20 \$40 \$20 \$300 \$380	201.130 Assembly: 27 Senate: 15 Congress: 17 1 Location(s)

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Major Damage Restoration (Cont.)							
36 2708	5-SCr-17 5.9/12.6 1J080 05 1700 0059	In and near Scotts Valley, from 0.4 mile east of Granite Creek Road to Santa Clara County line. Remove slide debris, stabilize slope, repair rock net/debris barrier, and repair roadway.	\$20 (R/W) \$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$5 \$5 \$2 \$90 \$102	201.130 Assembly: 27 Senate: 15 Congress: 14 1 Location(s)
37 2707	5-SCr-129 8.2 1J070 05 1700 0058	Near Watsonville, at 1.0 mile east of Rogge Lane. Remove slide debris, reconstruct embankment washout, repair damaged drainage system, replace damaged guardrail, and reconstruct roadway.	\$10 (R/W) \$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$10 \$10 \$2 \$75 \$97	201.130 Assembly: 28 Senate: 15 Congress: 17 1 Location(s)
38 2689	5-SCr-Var Var 1H790 05 1600 0152	In Santa Cruz County, at various locations on Route 1, 9, 35, and 236. Remove slide debris, reconstruct embankment washouts, repair guardrails and drainage systems, and reconstruct roadway.	\$40 (R/W) \$2,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$30 \$100 \$10 \$750 \$890	201.130 Assembly: 27 Senate: 11, 15 Congress: 14, 17 14 Location(s)
39 6858	6-Fre-5 5.5/8.8 0W100 06 1700 0159	Near Avenal, from Jayne Avenue to Phelps Equipment Undercrossing. Replace water-saturated failed concrete pavement slabs. A separate overlay project will address long term needs.	\$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$225 \$225	201.130 Assembly: 30 Senate: 16 Congress: 20 1 Location(s)
40 6856	6-Kin-41 33.0/39.0 0W060 06 1700 0146	In and near Stratford, from Laurel Avenue to 1.0 mile south of Route 198. Remove and replace unstable pavement.	\$450 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$180 \$180	201.130 Assembly: 30 Senate: 16 Congress: 20 1 Location(s)
41 5168	7-LA-23 0.9/1.3 1XA80 07 1700 0205	In Malibu, from 0.4 mile south of Decker Edison Road to Decker Edison Road. Remove unstable slide material and debris, install rock netting, repair roadway, and stabilize slope.	\$30 (R/W) \$863 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$30 \$172 \$202	201.130 Assembly: 41 Senate: 23 Congress: 30 1 Location(s)
42 5167	7-Ven-118 12.0/13.2 1XA70 07 1700 0195	Near Camarillo, from Sand Canyon Road to Balcom Canyon Road. Repair slope washout and drainage systems.	\$20 (R/W) \$530 (C)	16/17	PA & ED PS & E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$10 \$190 \$200	201.130 Assembly: 37 Senate: 19 Congress: 24 1 Location(s)

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Major Damage Restoration (Cont.)						
43 3006L	8-SBd-15 41.9/43.5 1H680 08 1700 0105	In Victorville, from Mojave Drive Overcrossing to Victorville Separation and Overhead. Remove and replace damaged bridge deck.	\$50 (R/W) \$1,450 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$0 \$150 \$20 \$300 \$470	201.130 Assembly: 36, 59 Senate: 17 Congress: 25, 41 1 Location(s)
44 3006J	8-SBd-173 18.7 1H290 08 1700 0006	Near Cedar Glen, at 0.1 mile south of Hospital Road. Widen shoulder and replace guard rail with concrete barrier mounted on soldier pile wall. PAED: 11/15/2018 R/W: 03/15/2020 RTL: 04/15/2020 BC: 12/15/2020	\$10 (R/W) \$2,345 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$713 \$1,080 \$93 \$1,376 \$3,262	201.131 Assembly: 33 Senate: 22 Congress: 8 1 Location(s)
45 3222	10-Alp-Var Var 1F640 10 1600 0133	In Alpine, Amador, Calaveras, Tuolumne, Mariposa, Merced, San Joaquin, and Stanislaus Counties on Routes 4, 5, 26, 49, 88, 89, 108, 120, 140, and 207. Remove dead or dying drought damaged trees or trim. PAED: 06/09/2017 R/W: 08/18/2017 RTL: 08/31/2017 BC: 12/12/2017	\$18 (R/W) \$7,125 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total \$248 \$1,183 \$64 \$2,952 \$4,447	201.131 Assembly: 4 Senate: 1 Congress: 3 3306 Trees removed
46 3223	10-Cal-26 15.2 1H180 10 1700 0095	Near Mokelumne Hill, at 0.9 mile east of Paloma Road. Repair slope slipout, remove tall tree, install rock slope protection (RSP) and new culvert, and reconstruct roadway.	\$600 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$10 \$110 \$0 \$300 \$420	201.130 Assembly: 25 Senate: 6 Congress: 3 1 Location(s)
47 3218	10-SJ-4 2.3/3.0 1H050 10 1700 0073	Near Discovery Bay, from 2.3 miles east of Old River Bridge to 1.4 miles west of Middle River Bridge. Repair slope slipout and install rock slope protection (RSP).	\$40 (R/W) \$1,700 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$15 \$100 \$0 \$640 \$755	201.130 Assembly: 15 Senate: 5 Congress: 11 8 Location(s)
48 3221	10-Tuo-120 46.4 1H140 10 1700 0093	Near Buck Meadows, at 0.4 mile west of South Fork Tuolumne River Bridge. Reconstruct embankment slipout, repair failed slope, abandon damaged drainage culvert, and install new drainage culvert.	\$700 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$20 \$100 \$0 \$400 \$520	201.130 Assembly: 25 Senate: 14 Congress: 19 1 Location(s)

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Major Damage Restoration (Cont.)						
49 1267	11-SD-8 10.5/10.8 43003 11 1700 0128	In La Mesa, at concrete lined drainage channel adjacent to Route 8 near Fletcher Parkway. Repair washout conditions and broken sections of channel side slopes.	\$600 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$0 \$0 \$5 \$240 \$245	201.130 Assembly: 77 Senate: 36 Congress: 52 1 Location(s)
50 1261	11-SD-15 M12.7 3A040 11 1700 0100	In the city of San Diego, at 0.6 mile south of Miramar Way. Repair fire damaged pavement and overhead sign.	\$350 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$0 \$0 \$0 \$150 \$150	201.130 Assembly: 77 Senate: 36, 39 Congress: 50, 52 1 Location(s)
51 2728	12-Ora-5 19.7 0Q550 12 1700 0063	In Laguna Hills, at southbound Lake Forest Drive on-ramp. Repair slope washout and replace damaged culvert.	\$350 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$10 \$10 \$0 \$120 \$140	201.130 Assembly: 70, 73 Senate: 33 Congress: 48 1 Location(s)
Collision Reduction						
52 3663	2-Teh-36 PM 26.6/27.6 2H630 02 1600 0156	Near Red Bluff, from west of Basler Road to east of Diamond Star Road. Curve improvement. PAED: 01/18/2019 R/W: 03/12/2020 RTL: 03/26/2020 BC: 07/21/2020	\$476 (R/W) \$3,200 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$695 \$885 \$685 \$1,200 \$3,465	201.010 Assembly: 3 Senate: 4 Congress: 1 16 Collisions reduced
53 3316	3-ED-50 6.5 1H440 03 1600 0153	In Cameron Park, at Cameron Park Drive. Improve sight distance and upgrade curb ramps. PAED: 10/02/2017 R/W: 10/01/2018 RTL: 10/01/2018 BC: 04/01/2019	\$83 (R/W) \$1,200 (C)	18/19	PA & ED PS & E RW Sup Con Sup Total \$150 \$530 \$9 \$450 \$1,139	201.010 Assembly: 6 Senate: 1 Congress: 4 16 Collisions reduced
54 1490F	4-SF-101 0.0/4.2 4J390 04 1500 0340	In the city and county of San Francisco, from San Mateo County Line to Route 101/80 junction. Overlay existing pavement with open graded asphalt, groove concrete pavement, and upgrade drainage system. PAED: 10/01/2018 R/W: 05/01/2020 RTL: 06/01/2020 BC: 10/01/2020	\$ 20 (R/W) \$ 21,970 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$1,500 \$1,700 \$30 \$3,000 \$6,230	201.010 Assembly: 17 Senate: 11 Congress: 12 261 Collisions reduced

List of New 2016 SHOPP Capital Project Amendments

No. PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.	
Collision Reduction (Cont.)							
55 2698	5-Mon-198 R0.1/25.8 1H820 05 1600 0165	Near San Lucas, from Route 101 to the Fresno County line. Construct ground-in centerline and edge line rumble strips. PAED: 12/30/2016 R/W: 06/01/2017 RTL: 07/03/2017 BC: 10/31/2017	\$ 805 (C)	17/18	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$0 \$449 \$33 \$251 <hr/> \$733	201.010 Assembly: 30 Senate: 16, 17 Congress: 20 25 Collisions reduced
56 3006H	8-SBd-95 9.6/56.5 1F780 08 1500 0047	Near Needles, from Route 62 to 0.8 mile south of Route 40. Construct ground-in shoulder and centerline rumble strips. PAED: 05/15/2018 R/W: 10/15/2019 RTL: 11/15/2019 BC: 05/15/2020	\$10 (R/W) \$1,390 (C)	19/20	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$650 \$700 \$30 \$450 <hr/> \$1,830	201.010 Assembly: 33 Senate: 16 Congress: 8 57 Collisions reduced
57 3006K	8-SBd-247 20.3/76.8 1F770 08 1500 0051	In and near Barstow, from 0.1 mile north of Boone Road to 0.7 mile south of Rimrock Road. Construct ground-in shoulder and centerline rumble strips. PAED: 05/15/2018 R/W: 04/15/2019 RTL: 08/01/2019 BC: 01/05/2020	\$10 (R/W) \$1,953 (C)	19/20	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$600 \$720 \$60 \$550 <hr/> \$1,930	201.010 Assembly: 33 Senate: 16 Congress: 8 65 Collisions reduced
58 3177	10-SJ-4 PM 4.1/4.9 1F460 10 1600 0139	Near Holt, from 0.3 mile west to 0.5 mile east of Middle River Bridge. Realign curve, widen shoulders, upgrade guard rail, and install flashing beacons. PAED: 12/03/2018 R/W: 06/15/2020 RTL: 06/22/2020 BC: 10/21/2020	\$1,358 (R/W) \$7,335 (C)	19/20	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$1,081 \$1,453 \$274 \$2,006 <hr/> \$4,814	201.010 Assembly: 15, 17 Senate: 5 Congress: 11 50 Collisions reduced
59 1111	11-SD-94 8.3 41800 11 1400 0054	In Lemon Grove and La Mesa, at the Massachusetts Avenue Undercrossing and also on Route 125 at the Panorama Drive Undercrossing (PM 13.8). Construct outer barrier, apply friction enhancement treatment and upgrade guardrail and end treatments. PAED: 12/20/2016 R/W: 06/25/2018 RTL: 07/26/2018 BC: 01/04/2019	\$ 1,604 (C)	18/19	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$0 \$569 \$0 \$494 <hr/> \$1,063	201.010 Assembly: 79, 80 Senate: 38, 40 Congress: 53 39 Collisions reduced

List of New 2016 SHOPP Capital Project Amendments

No. PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.
Mandates						
60 3006M	8-Riv-74 17.3/19.6 1H171 08 1700 0022	In Lake Elsinore, from Dexter Avenue to Mauricio Avenue. Relinquish this portion of route to the City of Lake Elsinore. PAED: 12/27/16 R/W: N/A RTL: N/A BC: N/A	\$2,200 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$0 \$0 \$0 \$0 \$0	201.160 Assembly: 67 Senate: 28 Congress: 42 2.3 Lane miles
61 3006N	8-Riv-74 17.7/25.8 1H172 08 1700 0023	In Riverside County, from east of Cambern Avenue (PM 17.70) to west of Trellis Lane (PM 18.83) and from Maurico Avenue (PM 19.62) to 7 th Street (PM 25.75). Relinquish this portion of route to Riverside County. PAED: 12/27/16 R/W: N/A RTL: N/A BC: N/A	\$5,800 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$0 \$0 \$0 \$0 \$0	201.160 Assembly: 67 Senate: 28 Congress: 42 7.3 Lane miles
Bridge Preservation						
62 1221	11-SD-Var Var 42690 11 1600 0144	In San Diego County at various locations. Apply methacrylate to bridge decks, replace joint seals, repair unsound concrete and replace approach slabs. PAED: 12/15/2016 R/W: 02/01/2019 RTL: 02/15/2019 BC: 10/07/2019	\$ 3,542 (C)	18/19	PA & ED PS & E RW Sup Con Sup Total \$0 \$663 \$0 \$733 \$1,396	201.119 Assembly: 79, 80 Senate: 38, 39, 40 Congress: 53 35 Bridge(s)
Roadway Preservation						
63 4137A	7-LA-710 20.9/24.6 20212 07 0002 0870	In Bell, Vernon, Commerce and East Los Angeles, from 0.2 mile south of Slauson Avenue Overcrossing to 0.1 mile north of 3 rd Street Overcrossing. Rehabilitate roadway including widening median, lane and shoulder to meet current standard widths. PAED: 04/03/2017 R/W: 05/30/2017 RTL: 06/15/2017 BC: 02/28/2018	\$34,261 (R/W) \$94,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$100 \$2,000 \$1,200 \$17,792 \$21,092	201.120 Assembly: 51, 53, 58, 63 Senate: 24, 32, 33 Congress: 40 20.0 Lane miles

2016 SHOPP Amendment 16H-011 Cost, Scope, Schedule and Technical Changes Includes Federal Emergency Relief Funds (\$ Thousands)																
No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support			Performance
1	02	Lassen	36	6.1/14.3	Near Westwood, from east 1.2 miles west of Goodrich Creek Bridge to 1.3 miles west of Willard Creek Road. Rehabilitate roadway.	4E460	3468	0200020287	201.120	2017/18 2019/20	240 1,302	15,900 22,789	PA&ED PS&E RW Const	1,650 1,800 400 2,400	1,650 1,600 340 1,784	Measure = Lane Miles Value = 21.0 20.9
Comments: Projects EA 4E460 and EA 4F560 will be combined into EA 4E46U for construction to eliminate project overlap, avoid contractor conflicts, and allow earthwork sharing. The project scope changed to include the curve realignment in three localized areas where high collision concentrations have been identified with recent safety analysis. Due to an increased project footprint, additional time is now required to obtain environmental clearance, right-of-way certification and utility relocation, moving the delivery year to 2019/20. There is a decrease in support costs because of estimate refinements and some final design work was required and completed in the PA&ED phase. Capital costs were increased to include curve realignments, utility relocation, newly identified drainage rehabilitation needs, increased roadway excavation now that surveys are complete, and installation of new Intelligent Transportation Systems (ITS) conduit. Other minor corrections include, the performance measure value to correct rounding and the location description to correct east to west. These changes add \$7,705,000 to the cost of the project.																
2	02	Lassen	36	7.2/7.4	Near Westwood, at Goodrich Creek Bridge No. 07-0048. Replace bridge.	4F560	3512	0213000006	201.110	2017/18 2019/20	45	2,700 3,611	PA&ED PS&E RW Const	1,500 500 50 750	1,500 1,280 60 1,269	Measure = Bridge(s) Value = 1
Comments: Projects EA 4E460 and EA 4F560 will be combined into EA 4E46U for construction to eliminate project overlap, avoid contractor conflicts, and allow earthwork sharing. A recently completed hydraulics and flood plain study identified that the bridge needs to be raised to adequately pass flows. The higher bridge resulted in a longer bridge. Additional support and capital costs are needed for the expanded bridge design and construction. These changes add \$2,220,000 to the cost of the project.																
3	03	Glenn	162	76.3/78.6	At Butte City, from Route 45 to 0.1 mile east of McDougall Street. Replace Sacramento River Bridge No. 11-0017. (G13 Contingency Project)	3F060	2633	0312000052	201.113	2019/20	1,000	0	PA&ED PS&E RW Const	2,000 3,500 600 0	2,000 3,500 600 0	Measure = Bridge(s) Value = 4
Comments: Delete project. The Department, with input from the public and community leaders, reevaluated the project to reduce community impacts. At the same time, more detailed geotechnical investigation findings became available which identified that the former scope will not address the soil liquefaction and shear capacity deficiency for the viaduct section of the structure. An amendment to replace the bridge was approved by the Commission in December 2016; however, it has been determined that further design and environmental studies are necessary to clearly identify the project scope, schedule, and funding priorities. This project will be deleted and programmed as a long lead project to reassess the scope of the project. (Related item under Attachment 3.)																
4	04	Alameda	238	R14.6	Between Livermore and Hayward, at East Connector Separation Bridge No. 33-0524F, N238/S880 Connector Bridge No. 33-0540G and I-580 Arroyo Seco Bridge No. 33-0066. Bridge maintenance.	4H080	0448E	0413000097	201.119	2017/18	20	5,849 7,164	PA&ED PS&E RW Const	864 720 72 896	864 720 72 2,091	Measure = Bridge(s) Value = 3
Comments: The northbound Route 238 to southbound Route 880 connector requires additional construction support and construction capital to address design refinements to structures work related to falsework, multiple work shifts, and additional California Highway Patrol (CHP) enforcement during construction. The design refinement doubled the number of piles required for falsework that is acting as temporary support during bridge hinge construction. The construction support amount has been increased to account for multiple work shifts, as these design refinements not originally considered, and extended the construction duration for multiple required stages. These changes add \$2,510,000 to the cost of the project.																
5	04	Contra Costa	680	11.5/11.8 R11.0/R12.0	Near Alamo, on southbound of Route 680, between Rudgear Road and Livorna Road. Near Alamo, from south of Rudgear Road to 0.2 mile south of Livorna Road. Repair slide.	0J380	0482S	0413000462	201.131	2017/18	400 500	4,559 5,750	PA&ED PS&E RW Const	563 1,027 150 1,425	563 1,226 150 1,474	Measure = Location(s) Value = 4 2
Comments: Changes in project scope, description and post mile limits are due to the inclusion of a second land slide repair in close proximity to the first location. This will increase efficiencies in designing and constructing the project locations, and minimizing traffic impacts to the public by avoiding construction in the same area twice. Design support, construction support, right of way capital and construction capital costs have increased to address the additional scope at the second location and subsequent expansion of limits. The performance value has increased to account for second location being added to the scope. This changes add \$2,139,000 to the cost of the project.																
6	04	Sonoma	101	9.0	Near Petaluma, north of Pepper Road. Repair slide.	0J100	0481B	0413000408	201.131	2017/18 2018/19	400 850	694 800	PA&ED PS&E RW Const	423 402 150 207	423 850 150 850	Measure = Location(s) Value = 1
Comments: During the PA&ED phase it was learned the project limits include a California Red-Legged Frog, California Tiger Salamander and rare plant species habitat which requires a higher level environmental document type and subsequent permit requirements. The resulting consultation with resource agencies, mitigation effort, and biological surveys have resulted in project delivery delays. Support cost for design has increased to perform consultations, to prepare mitigation plans, and to obtain permits. Additional construction support is needed for monitoring and reporting permit compliance during and after construction. The increase in construction capital is due to the delayed delivery and added cost for on-site mitigation measures. Right of way capital has increased to account for permit fees and mitigation bank credits. These changes add \$2,247,000 to the cost of the project.																

2016 SHOPP Amendment 16H-011 Cost, Scope, Schedule and Technical Changes Includes Federal Emergency Relief Funds (\$ Thousands)																
No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
7	05	San Luis Obispo	1	32.6	In Morro Bay, at Toro Creek Bridge No. 49-0068R. Replace bridge.	0L721	0072	0515000097	201.110	2017/18 2019/20	43 906	5,200	PA&ED PS&E RW Const	1,424 800 23 800	1,424 1,313 167 1,222	Measure = Linear-Foot Bridge(s) Value = 338.0 1
Comments: The scope of the project was changed from rail replacement/widening to a bridge replacement. Geotechnical studies determined that the existing structure could not support the widening and larger bridge railing due to seismic deficiencies. The bridge replacement will now require additional time to complete more extensive environmental analysis that includes endangered species and the State Historic Preservation Office (SHPO). The bridge is located in a coastal zone near the ocean and detailed consultation with resource agencies requires an iterative process to finalize the preferred alternative. Additional design and construction resources are required as a result of the revised scope. The original right of way estimates did not account for replacement of the bridge which impacts two large sewer mains attached to the existing bridge. These changes add \$1,942,000 to the cost of the project.																
8	05	San Luis Obispo	1	34.5	Near Morro Bay, at Old Creek Bridge No. 05-49-0070R. Widen bridge. Replace bridge.	0L722	0072A	0515000098	201.110	2017/18 2019/20	43 450	4,200	PA&ED PS&E RW Const	1,399 800 22 800	1,399 1,190 111 1,145	Measure = Linear-Foot Bridge(s) Value = 449.0 1
Comments: The scope of the project was changed from rail replacement/widening to a bridge replacement. Geotechnical studies determined that the existing structure could not support the widening and larger bridge railing due to seismic deficiencies. The bridge replacement will now require additional time to complete more extensive environmental analysis that includes ongoing coordination with the National Marine Fisheries and the State Historic Preservation Office (SHPO). The bridge is located in a coastal zone near the ocean and detailed consultation with resource agencies requires an iterative process to finalize the preferred alternative. Additional design and construction resources are required as a result of the revised scope. The original right of way estimates did not account for replacement of the bridge which impacts electrical, cable and a water main. These changes add \$1,231,000 to the cost of the project.																
9	05	San Luis Obispo	58	3.1	Near Santa Margarita, at Trout Creek Bridge No. 05-49-0091. Replace bridge.	0L723	0072B	0515000099	201.110	2017/18 2019/20	43 308	4,750	PA&ED PS&E RW Const	1,419 800 23 800	1,419 1,210 104 1,174	Measure = Linear-Foot Bridge(s) Value = 269.0 1
Comments: The scope of the project was changed from rail replacement/widening to a bridge replacement. Geotechnical studies determined that the existing structure could not support the widening and larger bridge railing due to seismic deficiencies. The bridge replacement will now require additional time to complete more extensive environmental studies that includes hydro-acoustic analysis. The bridge is located in an environmentally sensitive area and consultation with resource agencies requires additional time to finalize the preferred alternative. Additional design and construction resources are required as a result of the revised scope. The original right of way estimates did not account for the bridge replacement which impacts telephone and cable lines. These changes add \$1,130,000 to the cost of the project.																
10	06	Kern	178	1.7/6.9	In Bakersfield, from M Street to east of Fairfax Road at various locations. Roadside safety improvements.	0E320	3729	0613000037	201.235	2018/19	0	2,644	PA&ED PS&E RW Const	220 300 10 310	220 587 10 808	Measure = Location(s) Value = 53 61
Comments: The locations that require paving are larger and more complex than anticipated during the project initiation phase. As a result, additional survey, design and construction resources are required. Furthermore, field reviews with Maintenance staff identified additional locations that would reduce highway worker exposure to traffic. These changes add \$785,000 to the cost of the project.																
11	07	Los Angeles	2	13.1/14.3	In Los Angeles County in various cities on Routes 60, 66, 164 and 210 at various locations. Construct and install storm water treatment Best Management Practices.	28830	4420	0700021024	201.335	2019/20	36	6,790	PA&ED PS&E RW Const	343 547 50 1,100	995 547 50 1,100	Measure = Acres Treated/Pollutant Value = 48.4
Comments: It was discovered that the topography from "as-built" plans no longer represents the existing conditions. As a result, extensive surveying and topographic mapping are now required at 29 locations. The updated survey data will result in further evaluation of BMP selection types. These changes add \$652,000 to the cost of the project.																
12	07	Ventura	33	7.6	Near Oak View, at San Antonio Creek Bridge No. 52-0065. Scour mitigation and bridge rail upgrade.	29130	4496	0712000083	201.111	2018/19	1,300 2,500	1,800	PA&ED PS&E RW Const	1,640 1,112 600 1,065	1,640 1,112 600 1,065	Measure = Bridges Value = 1
Comments: Preliminary design determined that acquisition of an additional four parcels are required, as well as relocation of several utilities including a high pressure gas line and removal of two historical Oak trees. These changes add \$1,200,000 to the cost of the project.																

2016 SHOPP Amendment 16H-011 Cost, Scope, Schedule and Technical Changes Includes Federal Emergency Relief Funds (\$ Thousands)																
No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
13	08	Riverside	74	17.5/25.7	In and near Lake Elsinore, from Cambern Avenue to 7th Street. Construct raised median curb.	4E070	0054K	0813000144	201.010	2016/17	43	7,128	PA&ED	584	584	Measure = Collisions Reduced
													PS&E	650	650	Value = 80.0
													RW	35	35	
													Const	1,490	1,490	
Comments: Delete the project because this portion of Route 74 is being relinquished to the County of Riverside and City of Lake Elsinore. (Related Items under Attachment 1, Ref. 2.5b.(1) and 2.3c. on the March 2017 CTC Agenda.)																
14	08	Riverside	74	27.8/37.7 28.1/37.5	In and near Menifee and Hemet, from Route 215 to West Acacia Avenue. In and near Menifee and Hemet, from 0.6 mile east of Route 215 to 0.3 mile west of Acacia Avenue. Construct raised curb median.	0N670	0056H	0800000536	201.010	2017/18	2,549 5,545	26,298 24,896	PA&ED	2,450	2,450	Measure = Collisions Reduced
													PS&E	2,215	2,215	Value = 26.0
													RW	1,860	1,860	
													Const	3,950	3,950	
Comments: The construction scope was further refined during the environmental phase and as result the estimate is less than what was originally programmed. Based upon survey data received during the environmental phase, there is a greater need for right of way acquisitions for drainage, grading and construction of the curb medians. The project post miles and description have been reduced as a refinement of scope now that more is known about the project. These changes add \$1,594,000 to the cost of the project.																
15	08	San Bernardino	247	39.5/40.0	Near Lucerne Valley, from east of Joshua Avenue to west of Camp Rock Road. Construct shoulders and install ground-in rumble strips.	1E560	0253M	0814000050	201.010	2017/18	49 50	600 987	PA&ED	562	562	Measure = Collisions Reduced
													PS&E	714	714	Value = 26.0
													RW	56	133	
													Const	413	413	
Comments: Preliminary design discovered three partial right of way acquisition and temporary construction easements are required. Furthermore, a transition for shoulder widening on both sides of the highway now needs to be included to meet current standards. These changes add \$504,000 to the cost of the project.																

List of New Long Lead Project Amendments

Resolution G-00-13, established in June 2000, provides the Department with means to develop SHOPP projects which require periods longer than the four-year SHOPP cycle. The Commission authorized the Department to program projects for development only when appropriate. Long Lead projects must identify challenges that require additional time beyond the typical four years to complete.

No. PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.
Long Lead						
1 2633	3-Gle-162 76.3/78.6 3F060 03 1200 0052	At Butte City, from Route 45 to 0.1 mile east of McDougall Street. Replace Sacramento River Bridge No. 11-0017. PAED: 08/01/2018 R/W: 10/01/2020 RTL: 10/15/2020 BC: 02/01/2021	\$1,000 (R/W) \$65,000 (C)	20/21	*PA & ED \$5,500 PS & E \$5,500 RW Sup \$1,200 Con Sup \$10,000 Total \$22,200	201.113 Assembly: 2 Senate: 4 Congress:2 1 Bridge(s)

Note: *PA&ED is the only authorized phase. All other phases are preliminary estimates for information only.

Correcting Performance Measures from Past Cycles to Align with 2016 SHOPP

No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support	Performance Measure	Performance Value
1	01	Del Norte	101		In Del Norte and Humboldt Counties, on Routes 101, 169, 197 and 199 at various locations. Upgrade metal beam guard rail.	0C590	7011	0113000013	201.015	2016/17	145	2,880	PA&ED PS&E RW Const	504 670 39 295	Collisions Reduced 43.0 213.0
2	01	Humboldt	101	80.8/87.8	Near Eureka, from Post Mile 80.0 to 87.8. Upgrade metal beam guardrail.	0C970	2375	0113000094	201.015	2018/19	118	1,763	PA&ED PS&E RW Const	510 300 48 267	Collisions Reduced 7.0 39.0
3	01	Lake	1		In Lake and Mendocino Counties on various routes at various locations. Upgrade guardrail, end treatments, and transition railings to current standards and install vegetation control measures.	0E850	7018	0115000037	201.015	2018/19	12	3,800	PA&ED PS&E RW Const	742 812 81 1,266	Collisions Reduced 42.0 246.0
4	01	Lake	29	34.2/R34.5	Near Kelseyville, from 0.1 mile south to 0.1 mile north of Cruickshank Road. Widen for left- turn channelization safety improvements.	0E640	3101	0114000116	201.010	2017/18	7	1,050	PA&ED PS&E RW Const	410 375 30 390	Collisions Reduced 27.0 7.0
5	02	Shasta	44	R4.6/R6.4	Near Palo Cedro, from Clough Creek bridge to 0.6 mile west of Deschutes Road Overcrossing. Traffic operational improvements.	36841	3595	0215000066	201.310	2016/17	500	3,550	PA&ED PS&E RW Const	200 1,500 210 2,000	1000 Vehicle Hours/Yr 4.0 16.0
6	03	Sacramento	80	M0.1	In and near the cities of Sacramento and Citrus Heights, from east of the Yolo County line to the Placer County line; also in Placer County in the city of Roseville from the Sacramento County line to east of the Sacramento County line (PM 0.0/0.7). Install fiber optic communication line.	0H540	6713	0315000204	201.315	2019/20	50	12,200	PA&ED PS&E RW Const	1,200 1,200 300 1,800	Field Elements Miles of Cable 18.4
7	03	Sacramento	5	9.7/22.7	In Sacramento, from 1.1 miles south of Elk Grove Boulevard to Route 50. Install fiber optic cable.	4F450	5846	0314000164	201.315	2016/17	600	6,600	PA&ED PS&E RW Const	540 900 440 1,500	Miles of Cable 40.0 13.0
8	04	Alameda	880	20.9	In San Leandro at the southbound off-ramp to southbound Route 238. Improve safety visibility by installing lighting and improving signs.	1J010	0488J	0414000123	201.010	2017/18	10	765	PA&ED PS&E RW Const	220 440 22 286	Collisions Reduced 44.0 11.0
9	04	Contra Costa	4		In and near Concord, from Route 680 to east of Bailey Road at three locations. Install safety lighting, high reflective striping and markings.	2J000	1480F	0414000412	201.010	2017/18	217	3,933	PA&ED PS&E RW Const	830 830 125 747	Collisions Reduced 52.0 56.0
10	04	Napa	121	0.7	Near Napa, at Huichica Creek (PM 0.8). Roadway widening.	4G210	0775G	0412000310	201.010	2018/19	220	8,700	PA&ED PS&E RW Const	1,750 1,530 90 900	Collisions Reduced 43.0 0.0
11	04	Napa	29	11.9	In Napa, on southbound on-ramp from Solano Avenue to Route 29. Construct concrete barrier.	4G490	0116Q	0412000491	201.015	2016/17	10	1,242	PA&ED PS&E RW Const	306 486 18 90	Collisions Reduced 2.0 3.0
12	04	Santa Clara	152	0.0/6.2	Near Gilroy, at various locations from Pole Line Road to Burchell Road. Planting and environmental mitigation.	2A251	0483Q	0413000402	201.010	2017/18	1,000	1,100	PA&ED PS&E RW Const	0 750 300 195	Collisions Reduced 78.0 0.0
13	04	Santa Clara	152	0.0/5.2	In Santa Clara, from Hecker pass Pass to Uvas Creek. Environmental species mitigation.	2A252	0483R	0413000403	201.010	2016/17	2,000	1	PA&ED PS&E RW Const	0 350 150 0	Collisions Reduced 78.0 0.0

Correcting Performance Measures from Past Cycles to Align with 2016 SHOPP

No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support	Performance Measure	Performance Value
14	04	Santa Clara	152	16.2/19.5	Near Gilroy, from Old Lake Road to San Felipe Road. Environmental species mitigation.	2A442	0485Q	0412000582	201.010	2017/18	913	1	PA&ED PS&E RW Const	0 350 250 0	Collisions Reduced 0.0
15	04	Santa Clara	152	6.1/R35.2	In and near Gilroy, from 1.1 miles east of Watsonville Road to Merced County line. Install rumble strips.	4H860	0487N	0413000292	201.015	2016/17	6	1,632	PA&ED PS&E RW Const	457 234 72 306	Collisions Reduced 87.0
16	04	San Mateo	82	13.7	Near Burlingame and Hillsborough city limits, at the intersection of Route 82 and Floribunda Avenue. Install left turn signal.	1G020	0686	0400002011	201.010	2017/18	1,765	2,253	PA&ED PS&E RW Const	2,900 1,300 450 700	Collisions Reduced 120.0
17	04	Solano	12	19.2	Near Rio Vista, at the intersection of Route 12 and Route 113. Install roundabout.	4G560	8060A	0412000504	201.010	2017/18	71	4,671	PA&ED PS&E RW Const	1,174 684 54 468	Collisions Reduced 9.0
18	05	Monterey	1	58.3/59.8	North of Big Sur, from south of Bixby Creek Bridge to south of Rocky Creek Bridge. Widen shoulders and upgrade guardrails.	1A000	2313	0500020284	201.015	2017/18	30	5,349	PA&ED PS&E RW Const	675 983 35 1,154	Collisions Reduced 5.0
19	05	Monterey	VAR		In Monterey, Santa Cruz and San Benito Counties, on various routes at various locations. Replace and install advance curve warning signs.	1G310	2595	0514000140	201.015	2018/19	48	1,852	PA&ED PS&E RW Const	754 1,044 35 552	Collisions Reduced 1,107.0
20	05	Santa Barbara	154	R7.8/R8.3	Near Santa Ynez, at and near Route 246 intersection. Landscape mitigation.	0T001	2267Y	0513000169	201.010	2016/17	0	135	PA&ED PS&E RW Const	0 222 0 402	Collisions Reduced 0.0
21	05	Santa Barbara	VAR		In Santa Barbara and San Luis Obispo Counties, on various routes at various locations. Replace and install advance curve warning signs.	1G300	2594	0514000138	201.015	2018/19	48	2,084	PA&ED PS&E RW Const	780 1,125 41 629	Collisions Reduced 1,277.0
22	06	Fresno	99	22.7/28.1	In the City of Fresno, from Shaw Avenue to Belmont Avenue. Install ramp meters and construct auxiliary lanes.	0K290	6744	0600020018	201.315	2016/17	104	5,893	PA&ED PS&E RW Const	755 1,062 522 1,288	Miles of Cable Field Elements 5.0
23	07	Los Angeles	1	10.7	In the City of Los Angeles, at North Fries Avenue. Install new traffic signal and surveillance system, safety lighting, pedestrian crosswalks and upgrade ADA curb ramps.	33170	5085	0716000234	201.010	2017/18	185	515	PA&ED PS&E RW Const	0 382 178 270	Collisions Reduced 13.0
24	07	Los Angeles	101	7.7/27.7	In the City of Los Angeles, from Highland Avenue to south of Parkway Calabasas. Upgrade median concrete barrier to meet the current standards.	30370	4709	0714000035	201.015	2019/20	20	20,100	PA&ED PS&E RW Const	550 2,325 15 3,050	Collisions Reduced 60.0
25	07	Los Angeles	5	25.7	In the City of Los Angeles, near Glendale, at the northbound and southbound off-ramps to Colorado Freeway Extension. Widen off-ramp, replace MBGR with concrete barrier and widen Los Angeles River Bridge to reduce truck off-tracking.	29230	4505	0712000109	201.015	2016/17	25	3,784	PA&ED PS&E RW Const	1,100 1,753 37 1,040	Collisions Reduced 3.0
26	07	Los Angeles	5	18.0/19.0	In the City of Los Angeles, from State Street to north of Route 10; also on Route 10 from west of Route 5 to west of Soto Street (PM S0.4/19.0). Apply High Friction Surface Treatment (HFST) to connectors and ramp.	31840	4904	0715000297	201.010	2017/18	31	3,150	PA&ED PS&E RW Const	15 600 10 600	Collisions Reduced 43.0

Correcting Performance Measures from Past Cycles to Align with 2016 SHOPP

No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support	Performance Measure	Performance Value
27	07	Los Angeles	605	23.4/23.6	In Irwindale, at the Route 605 northbound ramp to westbound Live Oak Avenue. Realign and widen ramp, construct retaining wall, install concrete barrier and replace guardrail.	31880	4963	0716000001	201.010	2019/20	1,077	3,520	PA&ED PS&E RW Const	0 1,232 276 1,340	Collisions Reduced 20.0 203.0
28	08	San Bernardino	395	35.5/39.1	Near Adelanto, from 1.0 mile south of Kramer Hills to 2.6 miles north of Kramer Hills. Widen median and shoulders; contract rumble strips.	0N972	0358P	0815000102	201.010	2017/18	1,567	13,570	PA&ED PS&E RW Const	1,987 2,278 2,026 3,467	Collisions Reduced 7.0 5.0
29	08	San Bernardino	40	R75.0/R100.0	Near Essex, from west of Kelbaker Road to Essex Road. Re-grade and flatten median cross slope.	0R150	3001R	0812000025	201.015	2019/20	5,010	21,178	PA&ED PS&E RW Const	3,000 2,500 200 3,200	Collisions Reduced 230.0 150.0
30	09	Inyo	190	69.2/69.8	In Death Valley National Park near Panamint Springs, east of Panamint Valley Road. Widen shoulders and realign roadway curves.	35320	0610	0912000007	201.015	2017/18	322	4,323	PA&ED PS&E RW Const	535 850 130 520	Collisions Reduced 40.0 26.0
31	09	Mono	395	93.4/95.7	Near Bridgeport, at and near Route 108. Widen shoulders and install rumble strips.	35780	0615	0913000007	201.015	2017/18	44	5,455	PA&ED PS&E RW Const	270 800 190 1,100	Lane Miles Collisions Reduced 4.6 28.0
32	11	San Diego	163	2.5/4.0	In the City city of San Diego, from Robinson Avenue to San Diego River. Safety enhancements that include lighting, rumble strips, striping, lighting, bridge rail end treatments and high friction surface treatment.	41530	1103	1113000018	201.015	2016/17	136	6,193	PA&ED PS&E RW Const	448 710 82 1,261	Collisions Reduced 45.0 48.0
33	11	San Diego	5	R28.6/R29.3	In the City city of San Diego, from north of La Jolla Village Drive to south of Genesee Avenue, on southbound. Construct a 0.5 mile auxiliary lane.	2T215	1136	1114000074	201.310	2016/17	0	5,000	PA&ED PS&E RW Const	0 1,000 0 750	1000 Vehicle Hours/Yr 0.14 464.0
34	11	San Diego	8	R0.5	In the City city of San Diego, from 0.2 mile west of Morena Boulevard to 0.1 mile east of Hotel Circle North interchange ramps. Restripe westbound I-8, add an additional westbound lane and improve signage.	41480	1068	1112000193	201.010	2016/17	173	13,077	PA&ED PS&E RW Const	895 2,405 301 2,940	Collisions Reduced 463.0 468.0
35	11	San Diego	94	29.6/29.8	Near Dulzura, from north of Marron Valley Road to south of Dutchman Canyon Road. Roadway realignment, curve improvement, and shoulder widening.	41660	1163	1113000090	201.010	2017/18	572	3,775	PA&ED PS&E RW Const	0 2,123 350 1,056	Collisions Reduced 44.0 48.0
36	11	San Diego	VAR		In various cities, at various locations. Upgrade existing guide signs to current standards.	41910	1129	1100000707	201.170	2016/17	0	11,571	PA&ED PS&E RW Const	640 1,334 0 986	Lighting Fixtures Signs 1062
37	11	San Diego	VAR		In various cities, at various locations. Upgrade existing guide signs to current standards.	41911	1130	1100000708	201.170	2016/17	0	10,593	PA&ED PS&E RW Const	640 1,224 0 986	Lighting Fixtures Signs 856 1027
38	12	Orange	39	5.1/8.1	In Huntington Beach, Westminster and Garden Grove, at the intersections of Heil Avenue (PM 5.1), MacDonald Street (PM 5.3) and Trask Avenue (PM 8.1); also on Route 90 in Brea at the intersection of Castlegate Lane/Placentia Avenue (PM 5.9). Modify existing signals and lighting and upgrade ADA facilities to current standards.	0P010	3167	1215000022	201.010	2019/20	400	1,570	PA&ED PS&E RW Const	500 750 420 720	Collisions Reduced 434.0 141.0

Correcting Performance Measures from Past Cycles to Align with 2016 SHOPP

No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support	Performance Measure	Performance Value
39	12	Orange	55	R8.0/R9.2	In the cities of Santa Ana and Tustin, from Dyer Road on ramp to Edinger Avenue off ramp. Construct northbound auxiliary lane.	0G950	3483	1215000045	201.310	2018/19	24,500	13,100	PA&ED 200 PS&E 3,500 RW 2,700 Const 2,800	1000 Vehicle Hours/Yr	740.0 2,216.0