

Memorandum

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: May 17-18, 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-012**

ISSUE:

Should the California Transportation Commission (Commission) approve California Department of Transportation's (Department's) request to amend the State Highway Operation and Protection Program (SHOPP) under SHOPP Amendment 16H-012?

RECOMMENDATION:

The Department recommends that the Commission approve SHOPP Amendment 16H-012 that will amend the SHOPP Program, in accordance with Senate Bill 486, which requires the Commission to approve any changes or new projects amended into the SHOPP.

Since the March 2017 report to the Commission, the Department recommends 132 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, Mobility, Roadside 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	122	\$265,633	\$49,199	\$11,946	\$21,579
Collision Reduction	7		\$3,946	\$8,002	\$23,843
Mobility	2			\$5,215	\$16,870
Roadside Preservation	1				\$3,550
Total Amendments	132	\$265,633	\$53,145	\$25,163	\$65,842

The Department also recommends that the capital projects, as summarized in Attachment 2, Long Lead project, as summarized in Attachment 3 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 1122	01-DN-101 21.2 0G210 01 1600 0137	Near Crescent City, at 0.2 mile north of Cushing Creek Viaduct. Restore roadway to pre-slide condition. PA&ED: 12/01/2018 R/W: 02/15/2020 RTL: 03/01/2020 BC: 11/05/2020	\$18 (R/W) \$10,148 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$1,488 \$2,276 \$116 \$3,974 \$7,854	201.131 Assembly: 2 Senate: 2 Congress: 2 1 Location(s)
2 2470	01-Hum-36 19.0/44.0 0G920 01 1700 0074	Near Bridgeville, from 0.3 mile west of Jaymar Lane to 1.7 miles west of Trinity County line. Remove slide debris and hazardous trees, stabilize slope, support geotechnical investigations, and repair roadway.	\$15 (R/W) \$1,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$350 \$360	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
3 2468	01-Hum-36 29.0/30.0 0G850 01 1700 0067	Near Bridgeville, 1.3 miles west of McClellan Mountain Road to 0.3 mile west of McClellan Mountain Road. Repair slipout, strengthen embankment armament, and repair roadway.	\$25 (R/W) \$900 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$15 \$225 \$240	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
4 2465	01-Hum-101 24.0/26.5 0G810 01 1700 0063	Near Miranda, from 1.0 mile south of Salmon Creek Road to 1.5 miles north of Salmon Creek Road. Remove slide debris, repair slipout, strengthen embankment armament, and repair sinkhole in roadway.	\$75 (R/W) \$4,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$25 \$700 \$725	201.130 Assembly: 1 Senate: 2 Congress: 1 3 Location(s)
5 2464	01-Hum-101 28.4/32.0 0G820 01 1700 0064	Near Weott, from 0.5 mile north of Route 254 to 0.4 mile north of Pesula Road. Remove slide debris, repair sinkhole and cracking in asphalt roadway, construct soldier pile retaining wall, and construct debris barrier catchment.	\$35 (R/W) \$3,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$30 \$700 \$730	201.130 Assembly: 1 Senate: 2 Congress: 1 3 Location(s)

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Major Damage Restoration (Cont.)						
6 2463	01-Hum-101 R40.5/R42.0 0G830 01 1700 0065	Near Redcrest, from 0.8 mile north of Sorenson Road to 2.3 miles north of Sorenson Road. Remove slide debris and hazardous trees, stabilize slope, construct soldier pile retaining walls, repair failed culverts, and support Geotechnical investigations (drilling).	\$35 (R/W) \$5,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$20 \$750 \$770	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
7 2474	01-Hum-101 R50.5 0G960 01 1170 0080	Near Scotia, at 0.1 mile south of South Scotia Road. Stabilize failed slope, repair sinkhole adjacent to shoulder, repair roadway crossing culvert, improve drainage system, and repair roadway.	\$10 (R/W) \$600 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$10 \$150 \$160	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
8 2467	01-Hum-101 R6.0 0G860 01 1700 0068	Near Benbow, at 0.1 mile north of South Fork Eel River Bridge. Replace failed culvert and repair sinkhole in roadway.	\$10 (R/W) \$750 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$10 \$200 \$210	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
9 2477	01-Hum-169 15.0/30.0 0H020 01 1700 0086	Near Pecwan, from 0.5 mile south of Pecwan Creek Bridge to Martins Ferry School Creek Bridge. Repair embankment slipout, install slope drainage, replace damaged culverts, support geotechnical investigations, and repair roadway.	\$5 (R/W) \$700 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$10 \$175 \$185	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
10 2471	01-Hum-169 28.0/32.0 0G930 01 1700 0076	Near Martins Ferry, from 1.7 miles north of Mitchell Road to 1.4 miles north of Weitchpec School Road. Remove slide debris, repair slipout, strengthen embankment armament, repair drainage system, and repair roadway.	\$10 (R/W) \$950 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$10 \$320 \$330	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
11 2475	01-Hum-254 42.4 0G980 01 1700 0082	Near Holmes, at 1.3 miles north of Holmes Flat Road. Remove slide debris and hazardous trees, stabilize slope, repair drainage, and repair roadway.	\$10 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$10 \$175 \$185	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)

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Major Damage Restoration (Cont.)							
12 2473	01-Hum-299 30.6 0G950 01 1700 0079	Near Willow Creek, at 0.1 mile north of Cedar Creek Road. Remove slide debris, stabilize slope, install rock slope protection (RSP), and repair roadway.	\$10 (R/W) \$1,750 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$350 \$360	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
13 2469	01-Hum-299 19.2/19.4 0G910 01 1700 0073	Near Blue Lake, from 0.1 mile to 0.3 mile east of Bair Road. Remove slide debris, stabilize saturated slope and repair distressed roadway.	\$10 (R/W) \$650 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$180 \$190	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
14 3115	01-Lak-20 5.0/21.0 0H040 01 1700 0088	Near Upper Lake, from 0.2 mile east of Saratoga Springs Road to Bruner Drive. Remove slide debris, reconstruct embankment slipout, repair drainage, and repair roadway.	\$5 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$5 \$150 \$155	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
15 4664	01-Men-1 38.5/40.5 0G890 01 1700 0071	Near Albion, from 0.4 mile south of Navarro Bluff Road to 0.2 mile north of Route 128. Remove debris from bridge pier and repair drainage systems.	\$5 (R/W) \$400 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$5 \$125 \$130	201.130 Assembly: 1 Senate: 2 Congress: 1 3 Location(s)
16 4662	01-Men-101 R43.2 0G790 01 1700 0060	Near Willits, at 0.8 mile south of Route 20. Remove slide debris, stabilize and reconstruct slope.	\$10 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$15 \$400 \$415	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
17 4668	01-Men-101 R87.5 0G970 01 1700 0081	Near Cummings, at 0.2 mile south of Route 271. Remove slide debris, stabilize slope, dewater saturated soils, repair and improve drainage system, and reconstruct shoulder.	\$25 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$15 \$600 \$615	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
18 4665	01-Men-162 R0.0/16.2 0G900 01 1700 0072	Near Laytonville, from Route 101 to 1.0 mile east of Middle Fork Eel River Bridge. Remove slide debris, stabilize slope, repair drainage systems, and repair roadway.	\$30 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$20 \$450 \$470	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)

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Major Damage Restoration (Cont.)							
19 3681	02-Las-395 15.1/R16.0 1H490 02 1700 0094	Near Doyle, from 0.8 mile north of Red Rock Road to Scott Road. Stabilize scoured embankment and bridge with rock slope protection (RSP) and repair roadway.	\$0 (R/W) \$1,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$450 \$450	201.130 Assembly: 3 Senate: 1 Congress: 4 2 Location(s)
20 3682	02-Plu-70 0.0/11.0 1H530 02 1700 0095	In and near Tobin, from Butte County line to 1.1 miles east of Rogers Flat PG&E Maintenance Street. Embankment stabilization and roadway repair.	\$10 (R/W) \$3,400 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$500 \$500	201.130 Assembly: 3 Senate: 4 Congress: 2 1 Location(s)
21 3646	02-Plu-70 11.0/26.0 1H760 02 1700 0087	Near Tobin, from 0.9 mile east of Rogers Flat PG&E Maintenance Street to 0.4 mile west of Oldmill Drive. Remove multiple slide debris including rock blasting and hazardous tree removal, install rock slope protection (RSP), and repair roadway.	\$10 (R/W) \$1,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$500 \$510	201.130 Assembly: 3 Senate: 4 Congress: 4 1 Location(s)
22 3645	02-Plu-70 R61.8/R63.5 1H750 02 1700 0086	In Two Rivers, at 0.3 mile east of Camp Layman Road to 0.5 mile east of Parkers Road. Replace failed culvert, reconstruct embankment, and repair roadway.	\$10 (R/W) \$750 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$200 \$210	201.130 Assembly: 3 Senate: 4 Congress: 4 2 Location(s)
23 3686	02-Plu-Var Var 3H330 02 1700 0099	In Plumas County on various routes at various locations, Route 49 (PM 0.0 to PM 7.5), Route 70 (PM 26.0 to PM 95.7), and Route 89 (PM 0.0 to 8.7); also in Lassen County, on Route 70 (PM 0.0 to PM 3.9). Reconstruct multiple embankment slipouts, reconstruct shoulder, re-grade drainage ditches, install rock slope protection (RSP) at bridge abutments, repair drainage systems, and reconstruct roadway.	\$0 (R/W) \$2,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$700 \$700	201.130 Assembly: 3 Senate: 4 Congress: 2 1 Location(s)

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Major Damage Restoration (Cont.)							
24 3683	02-Sha-89 21.7/43.3 1H830 02 1700 0092	In Shasta County (PM 21.7/43.3) and Siskiyou County (PM 0.0/R34.6), at various locations. Remove washout debris, replace failed culverts, regrade drainage ditches, and repair eroded shoulder and roadway.	\$10 (R/W) \$1,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$400 \$410	201.130 Assembly: 2 Senate: 4 Congress: 2 5 Location(s)
25 3678	02-Sis-96 0.0/75.0 3H260 02 1700 0075	Near Somes Bar, at various locations from Humboldt County line to 0.8 mile west of Bar Road. Remove slide debris, repair slipouts, and replace culverts.	\$20 (R/W) \$1,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$400 \$400	201.130 Assembly: 2 Senate: 4 Congress: 2 1 Location(s)
26 3648	02-Teh-32 Var 1H800 02 1700 0089	Near Butte Meadows at various locations; also in Butte County on Route 32 at various locations; also in Plumas County on Route 36 at various locations. Repair water saturated asphalt pavement with asphalt overlay and digout repairs.	\$0 (R/W) \$1,600 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$300 \$300	201.130 Assembly: 2 Senate: 4 Congress: 2 1 Location(s)
27 3679	02-Tri-3 15.4 3H300 02 1700 0082	Near Hayfork, at 1.4 miles north of Carr Creek Bridge. Remove slide debris, stabilize slope, and strengthen embankment armament.	\$10 (R/W) \$750 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$200 \$210	201.130 Assembly: 1 Senate: 4 Congress: 2 1 Location(s)
28 3687	02-Tri-36 14.1/14.6 3H350 02 1700 0100	Near Forest Glen, from 0.3 mile west of Klondike Mine Road to 0.2 mile east of Klondike Mine Road. Reconstruct roadway shoulder slipout, replace failed culverts and drainage inlets, and repair roadway.	\$0 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$350 \$350	201.130 Assembly: 1 Senate: 2 Congress: 2 1 Location(s)

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Major Damage Restoration (Cont.)							
29 3684	02-Tri-36 Var 1H850 02 1700 0093	Near Mad River, at 0.5 mile west of Mad River Bridge (PM R2.2); also at 0.5 mile east of Feldmiller Road (PM R4.4 to PM R4.5); also in Shasta County, at 2.4 miles west of Harrison Gulch Road. Remove slide debris, reconstruct scoured embankment and redirect stream channel, replace damaged culverts, excavate slope for bench and material catchment grading, and repair roadway.	\$10 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$400 \$400	201.130 Assembly: 1 Senate: 4 Congress: 2 3 Location(s)
30 2291	03-But-70 35.7/48.0 3H000 03 1700 0216	Near Pulga, from 0.3 mile east of Deadwood Road to 0.8 mile east of Arch Rock Tunnel. Remove multiple slide debris and hazardous trees, repair roadway, replace damaged guardrail with Midwest Guardrailing System (steel post), and repair roadway.	\$10 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$0 \$10 \$150 \$170	201.130 Assembly: 3 Senate: 4 Congress: 2 1 Location(s)
31 3320	03-ED-50 37.6 3H100 03 1700 0230	Near Pollock Pines, at 2.2 miles west of Ice House Road. Reconstruct embankment slipout, construct soldier pile retaining wall, install drainage, and repair roadway.	\$20 (R/W) \$7,890 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$280 \$0 \$20 \$800 \$1,100	201.130 Assembly: 4 Senate: 1 Congress: 4 1 Location(s)
32 3321	03-ED-50 37.6 3H110 03 1700 0231	Near Pollock Pines, at 2.2 miles west of Ice House Road. Stabilize slipout, install temporary shoring of embankment, and provide traffic control measure to re-establish both directions of travel.	\$10 (R/W) \$1,530 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$30 \$0 \$10 \$130 \$170	201.130 Assembly: 4 Senate: 1 Congress: 4 1 Location(s)
33 3319	03-ED-50 36.6/38.5 3H020 03 1700 0218	Near Pollock Pines, from 1.4 miles east of Peavine Ridge Road to 1.2 miles west of Ice House Road. Remove slide debris and hazardous trees, construct Midwest Guardrailing System (steel post), repair sinkhole, and install slope drainage.	\$10 (R/W) \$780 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$0 \$10 \$130 \$150	201.130 Assembly: 4 Senate: 1 Congress: 4 2 Location(s)

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Major Damage Restoration (Cont.)						
34 3465	03-ED-89 Var 2H940 03 1700 0208	Near South Lake Tahoe, at various locations from Alpine County line to Placer County line (PM 0.0 to PM 27.4); also in Placer County at various locations (PM 0.0 to PM 21.6). Remove and dispose of hazardous trees 100 feet from centerline on each side of roadway.	\$0 (R/W) \$450 (C)	16-17	PA&ED \$5 PS&E \$0 RW Sup \$10 Con Sup \$90 Total \$105	201.130 Assembly: 4 Senate: 1 Congress: 4 1 Location(s)
35 3632	03-ED-193 23.3 2H890 03 1700 0197	Near Placerville, at 0.6 mile north of Rock Creek Road. Stabilize embankment and armor slope with rock slope protection (RSP).	\$20 (R/W) \$970 (C)	16-17	PA&ED \$10 PS&E \$0 RW Sup \$20 Con Sup \$115 Total \$145	201.130 Assembly: 4 Senate: 1 Congress: 4 1 Location(s)
36 3635	03-ED-193 26.4 3H130 03 1700 0233	Near Placerville, at 0.5 mile north of Route 49. Reconstruct embankment slipout, construct soldier pile retaining wall, install drainage, and repair roadway.	\$40 (R/W) \$2,960 (C)	16-17	PA&ED \$95 PS&E \$0 RW Sup \$20 Con Sup \$605 Total \$720	201.130 Assembly: 4 Senate: 1 Congress: 4 1 Location(s)
37 3633	03-ED-193 24.4/26.4 3H060 03 1700 0223	Near Placerville, from 0.3 mile north of South Fork American River Bridge to 0.5 mile north of Route 49. Reconstruct embankment slipout, stabilize slope, remove debris and hazardous trees, install temporary barriers (K-rail), and provide traffic control.	\$20 (R/W) \$520 (C)	16-17	PA&ED \$15 PS&E \$0 RW Sup \$10 Con Sup \$105 Total \$130	201.130 Assembly: 4 Senate: 1 Congress: 4 1 Location(s)
38 3631	03-ED-193 Var 1H600 03 1600 0188	Near Placerville, at 1.1 miles north of the South Fork American River Bridge (PM 22.8/22.9); also at 2.5 miles north of the South Fork American River Bridge (PM 24.2/24.3). Restore embankment slope slip-outs. PA&ED: 05/01/2018 R/W: 02/01/2019 RTL: 02/28/2019 BC: 09/15/2019	\$13 (R/W) \$6,042 (C)	18-19	PA&ED \$1,039 PS&E \$1,201 RW Sup \$106 Con Sup \$1,144 Total \$3,490	201.131 Assembly: 5 Senate: 4 Congress: 1 2 Location(s)

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Major Damage Restoration (Cont.)						
39 3133	03-ED-Var Var 2H680 03 1700 0171	In El Dorado County on Routes 49 and 193 at various locations. Remove dead or dying trees. PA&ED: 08/15/2017 R/W: 11/01/2017 RTL: 11/20/2017 BC: 04/20/2018	\$16 (R/W) \$3,794 (C)	17-18	PA&ED \$407 PS&E \$266 RW Sup \$806 Con Sup \$593 Total \$2,072	201.131 Assembly: 5 Senate: 1 Congress: 4 1,042 Location(s)
40 4132	03-Nev-49 22.5 2H880 03 1700 0196	Near Nevada City, at 0.6 mile north of South Yuba River Bridge. Reconstruct embankment slipout, replace damaged metal beam guardrail, construct soldier pile retaining wall, and reconstruct roadway.	\$20 (R/W) \$2,100 (C)	16-17	PA&ED \$130 PS&E \$0 RW Sup \$20 Con Sup \$540 Total \$690	201.130 Assembly: 3 Senate: 4 Congress: 4 1 Location(s)
41 4134	03-Nev-49 22.7 2H960 03 1700 0211	Near Nevada City, at 0.8 mile north of South Yuba River Bridge. Reconstruct embankment slipout, replace damaged metal beam guardrail, construct soldier pile retaining wall, and reconstruct roadway.	\$5 (R/W) \$2,920 (C)	16-17	PA&ED \$80 PS&E \$0 RW Sup \$10 Con Sup \$530 Total \$620	201.130 Assembly: 3 Senate: 4 Congress: 4 1 Location(s)
42 4133	03-Nev-49 R14.0 2H920 03 1700 0203	In Grass Valley, at 0.4 mile north of E. McKnight Way. Repair storm damaged culvert, replace headwall, and repair roadway.	\$10 (R/W) \$700 (C)	16-17	PA&ED \$15 PS&E \$0 RW Sup \$10 Con Sup \$135 Total \$160	201.130 Assembly: 3 Senate: 4 Congress: 4 1 Location(s)
43 4301	03-Nev-80 24.7/24.9 2H980 03 1700 0214	Near Floriston, from 2.4 miles east of Hirschdale Road to 2.4 miles west of Floriston Way. Remove slide debris, stabilize slope, install slope drainage system, and re-grade drainage ditches.	\$30 (R/W) \$1,930 (C)	16-17	PA&ED \$20 PS&E \$0 RW Sup \$10 Con Sup \$470 Total \$500	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)

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Major Damage Restoration (Cont.)							
44 4302	03-Nev-80 24.9/31.8 3H040 03 1700 0220	Near Floriston, from 1.3 miles east of Hinton Road to Sierra County line; also in Sierra County from Nevada County line to Nevada State line (PM 0.0/1.6). Remove multiple slide debris, stabilize slope, repair and unclog drainage systems, repair roadway shoulder, and re-grade roadside drainage ditches.	\$0 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup <hr/> Total	\$10 \$0 \$0 \$65 <hr/> \$75	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
45 4303	03-Nev-80 R12.5L/21.2 3H050 03 1700 0221	Near Truckee, from 0.7 mile west of Donner Pass Road to 0.1 mile east of Truckee River Bridge. Restore roadway drainage and remove water saturated delamination in roadway, construct rumble strips, and replace joint seals.	\$0 (R/W) \$5,370 (C)	16-17	PA&ED PS&E RW Sup Con Sup <hr/> Total	\$5 \$0 \$0 \$425 <hr/> \$430	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
46 5287	03-Nev-89 Var 2H650 03 1700 0168	In Nevada, Placer and El Dorado Counties on Routes 28, 89 and 267 at various locations. Remove dead or dying trees. PA&ED: 08/15/2017 R/W: 11/01/2017 RTL: 11/20/2017 BC: 04/20/2018	\$16 (R/W) \$2,287 (C)	17-18	PA&ED PS&E RW Sup Con Sup <hr/> Total	\$308 \$321 \$1,500 \$346 <hr/> \$2,475	201.131 Assembly: 1, 5 Senate: 1 Congress: 1, 4 356 Location(s)
47 4452	03-Nev-174 Var 2H910 03 1700 0200	Near Colfax, from 0.3 mile east of Redberry Road to Bertino Road; also in Placer County, from 0.2 mile east of Hill Drive to Rollins Lake Road. Remove slide debris, stabilize slopes, and repair sinkhole in roadway.	\$20 (R/W) \$1,430 (C)	16-17	PA&ED PS&E RW Sup Con Sup <hr/> Total	\$10 \$0 \$10 \$150 <hr/> \$170	201.130 Assembly: 3 Senate: 1, 4 Congress: 4 4 Location(s)

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Major Damage Restoration (Cont.)						
48 4128	03-Nev-Var Var 2H660 03 1700 0169	In Nevada, Placer, and Yuba Counties on Routes 49 and 174 at various locations. Remove dead or dying trees. PA&ED: 08/15/2017 R/W: 11/01/2017 RTL: 11/01/2017 BC: 04/20/2018	\$16 (R/W) \$2,464 (C)	17-18	PA&ED \$305 PS&E \$246 RW Sup \$806 Con Sup \$395 Total \$1,752	201.131 Assembly: 1, 3, 5 Senate: 1, 4 Congress: 1, 3, 4 534 Location(s)
49 5130	03-Pla-80 47.3 3H010 03 1700 0217	Near Baxter, at 0.4 mile east of Baxter Overcrossing. Remove slide debris and hazardous trees, stabilize slope, and install underdrain system.	\$10 (R/W) \$1,200 (C)	16-17	PA&ED \$20 PS&E \$0 RW Sup \$10 Con Sup \$300 Total \$330	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
50 5582	03-Pla-193 9.8 2H970 03 1700 0212	Near Newcastle, at 0.1 mile south of Taylor Road. Repair sinkhole, replace failed culvert and drainage inlet, and repair roadway.	\$5 (R/W) \$340 (C)	16-17	PA&ED \$15 PS&E \$0 RW Sup \$8 Con Sup \$88 Total \$111	201.130 Assembly: 4 Senate: 4 Congress: 4 1 Location(s)
51 5866	03-Sac-Var Var 2H850 03 1700 0190	In Sacramento County on Route 5 and Route 50 at various locations; also in Yolo County on Route 50 and Route 80 at various locations. Remove and replace numerous water saturated concrete pavement slabs.	\$0 (R/W) \$2,000 (C)	16-17	PA&ED \$5 PS&E \$0 RW Sup \$0 Con Sup \$220 Total \$225	201.130 Assembly: 5, 9, 10, 15 Senate: 1, 6 Congress: 3, 5 65 Location(s)
52 7802	03-Sie-49 2.5 2H790 03 1700 0184	Near Camptonville, at 0.2 mile south of Lager Beer Sidehill Viaduct. Remove slide debris and replace guardrail.	\$0 (R/W) \$1,500 (C)	16-17	PA&ED \$5 PS&E \$0 RW Sup \$0 Con Sup \$115 Total \$120	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
53 7801	03-Sie-49 18.1 2H710 03 1700 0174	Near Downieville, at 1.3 miles north of Pearl Street. Remove rock slide debris and stabilize slope.	\$0 (R/W) \$500 (C)	16-17	PA&ED \$10 PS&E \$0 RW Sup \$0 Con Sup \$100 Total \$110	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)

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. Dist. Perf. Meas.
Major Damage Restoration (Cont.)						
54 7804	03-Sie-49 45.2 2H990 03 1700 0215	Near Sattley, at 4.0 miles north of Yuba Pass Road. Repair embankment slipout, remove hazardous trees, install soldier pile retaining wall, install drainage facilities, and repair roadway.	\$10 (R/W) \$3,040 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$30 \$0 \$10 \$630 \$670	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
55 7805	03-Sie-49 2.4/2.6 3H030 03 1700 0219	Near Oak Valley, from 0.2 mile south of Lager Beer Sidehill Viaduct to Lager Beer Sidehill Viaduct. Remove slide debris, stabilize slope, install guardrail, and construct three soldier pile retaining walls.	\$20 (R/W) \$4,980 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$150 \$0 \$10 \$600 \$760	201.130 Assembly: 3 Senate: 1 Congress: 4 1 Location(s)
56 4130	03-Sie-49 20.5/27.1 2H800 03 1700 0185	Near Downieville, at 1.0 miles north of Jim Crow Canyon Creek Road to 0.6 mile south of Loganville Lane. Repair failed culverts, repair eroded slope, and install rock slope protection (RSP).	\$0 (R/W) \$550 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$3 \$0 \$0 \$58 \$61	201.130 Assembly: 3 Senate: 1 Congress: 4 2 Location(s)
57 7800	03-Sie-Var Var 2H670 03 1700 0170	In Sierra County on Routes 49 and 89 at various locations. Remove dead or dying trees. PA&ED: 08/15/2017 R/W: 11/01/2017 RTL: 11/20/2017 BC: 04/20/2018	\$16 (R/W) \$3,520 (C)	17-18	PA&ED PS&E RW Sup Con Sup Total \$356 \$267 \$392 \$558 \$1,573	201.131 Assembly: 1 Senate: 1 Congress: 1 936 Location(s)
58 9682	03-Yub-49 6.1/6.7 2H950 03 1700 0210	Near Camptonville, from 0.7 mile north of Camptonville Road to 0.6 mile south of Coloma Way. Repair embankment slipout, stabilize slope, remove hazardous trees, construct soldier pile wall, and reconstruct roadway.	\$30 (R/W) \$3,590 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$40 \$0 \$20 \$600 \$660	201.130 Assembly: 3 Senate: 4 Congress: 2 2 Location(s)
59 1457K	04-Ala-13 4.4 4K470 04 1700 0313	In Oakland, at Calaveras Avenue. Reconstruct embankment slipout, stabilize slope, and construct soldier pile retaining wall.	\$150 (R/W) \$6,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$900 \$80 \$2,000 \$2,980	201.130 Assembly: 8, 16 Senate: 9 Congress: 9 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.)						
60 1456D	04-Ala-580 R1.5/R3.9R 4K260 04 1700 0289	Near Livermore, from 1.5 miles west of the San Joaquin County line to 1.9 miles east of North Flynn Road. Repair water saturated asphalt pavement with asphalt overlay and digout repairs.	\$0 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$0 \$900 \$900	201.130 Assembly: 15 Senate: 9 Congress: 10, 11 1 Location(s)
61 1458B	04-Mrn-1 33.4 4K500 04 1700 0316	Near Point Reyes Station, at Millerton Gulch Bridge No. 27-0114. Reconstruct embankment washout, strengthen bio-armoring of slope, repair drainage system, and construct sheet pile retaining wall.	\$30 (R/W) \$2,600 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$75 \$1,000 \$1,075	201.130 Assembly: 6 Senate: 3 Congress: 6 1 Location(s)
62 1458A	04-Mrn-1 1.6/2.5 4K490 04 1700 0315	Near Muir Beach, from 0.1 mile north of Shasta Way to W. California Avenue. Reconstruct embankment slipout, construct sheet pile wall shoring, construct timber retaining wall, and install rock slope protection (RSP) to temporarily stabilize roadway.	\$30 (R/W) \$2,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$40 \$900 \$940	201.130 Assembly: 6 Senate: 3 Congress: 6 3 Location(s)
63 1456J	04-Mrn-37 R11.7/12.0 4K330 04 1700 0297	In and near Novato, from Route 101 to Novato Creek Bridge. Stabilize embankment slipout, install drainage system, construct concrete barrier, and repair flooded and saturated roadway.	\$20 (R/W) \$8,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$1,000 \$0 \$2,400 \$3,400	201.130 Assembly: 6 Senate: 3 Congress: 6 1 Location(s)
64 1492J	04-Mrn-101 0.2 4J420 04 1500 0344	Near Sausalito, at 0.1 mile south of Alexander Avenue. Restore damaged drainage systems. PA&ED: 01/01/2019 R/W: 02/01/2020 RTL: 04/01/2020 BC: 07/08/2020	\$13 (R/W) \$909 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total \$837 \$850 \$100 \$850 \$2,637	201.131 Assembly: 10 Senate: 3 Congress: 2 2 Location(s)
65 1456M	04-Nap-128 17.8 4K340 04 1700 0299	Near Rutherford, at 1.2 miles west of Berryessa Knoxville Road. Remove slide debris and stabilize slope.	\$10 (R/W) \$400 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$0 \$200 \$200	201.130 Assembly: 7 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.)						
66 1456A	04-SCI-17 5.8 4K230 04 1700 0283	Near Los Gatos, at 0.7 mile south of East Main Street. Remove slide debris, stabilize slope, and construct soil nail retaining wall.	\$60 (R/W) \$2,600 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$300 \$50 \$1,040 \$1,390	201.130 Assembly: 21 Senate: 15 Congress: 15 1 Location(s)
67 1457D	04-SCI-17 3.0/3.1 4K410 04 1700 0307	Near Los Gatos, at 0.5 mile north of Idylwild Road. Reconstruct embankment sinkhole, reconstruct slope, inject grout in voids, and repair culverts.	\$10 (R/W) \$2,100 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$0 \$900 \$900	201.130 Assembly: 21 Senate: 15 Congress: 15 2 Location(s)
68 1459A	04-SCI-35 9.5 4K710 04 1700 0340	Near Los Gatos, at 0.3 mile north of Las Cumbres Road. Repair embankment slipout, construct tie-back retaining wall, and repair roadway.	\$200 (R/W) \$3,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$300 \$50 \$1,200 \$1,550	201.130 Assembly: 21 Senate: 11 Congress: 14 1 Location(s)
69 1458S	04-SCI-35 9.5/10.5 4K640 04 1700 0330	Near Los Gatos, from 0.3 mile north of Las Cumbres Road to 1.2 miles north of Las Cumbres Road. Stabilize slipout, construct detour, and provide traffic control to escort local traffic.	\$10 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$0 \$500 \$500	201.130 Assembly: 21 Senate: 11 Congress: 14 2 Location(s)
70 1458V	04-SCI-130 9.3 4K680 04 1700 0335	Near San Jose, at 2.0 miles west of Quimby Road. Repair washout conditions of roadway with constructing tie-back retaining wall and sheet pile retaining wall.	\$150 (R/W) \$3,770 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$500 \$75 \$1,500 \$2,075	201.130 Assembly: 23 Senate: 13 Congress: 16 1 Location(s)
71 1457A	04-SCI-152 1.5 4K380 04 1700 0304	Near Gilroy, at 1.5 miles east of Pole Line Road. Remove slide debris, stabilize slope, and construct debris barrier.	\$10 (R/W) \$2,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$0 \$950 \$950	201.130 Assembly: 27, 28 Senate: 15 Congress: 17 1 Location(s)
72 1457E	04-SCI-152 R17.0 4K420 04 1700 0308	Near Gilroy, at 0.8 mile east of Lake Road. Repair washout, construct sheet pile retaining wall, and repair roadway.	\$5 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total \$0 \$0 \$0 \$900 \$900	201.130 Assembly: 28 Senate: 12, 13 Congress: 17 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.)							
73 1457J	04-SM-1 17.0/17.5 4K460 04 1700 0312	Near San Gregorio, from 1.2 miles south of Route 84 to 0.7 mile south of Route 84. Repair slipout, construct soldier pile tie-back retaining wall, and install rock slope protection (RSP).	\$210 (R/W) \$3,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$500 \$75 \$1,250 \$1,825	201.130 Assembly: 19 Senate: 14 Congress: 11 1 Location(s)
74 1457M	04-SM-35 9.8 4K480 04 1700 0314	Near Sky Londa, at 0.1 mile north of Chapman Road. Repair slipout with constructing soldier pile tie-back retaining wall.	\$210 (R/W) \$3,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$500 \$75 \$1,250 \$1,825	201.130 Assembly: 19 Senate: 8 Congress: 14 1 Location(s)
75 1458G	04-SM-35 11.5 4K550 04 1700 0321	Near Sky Londa, at 0.6 mile north of Morse Lane. Stabilize slide, construct sheet pile retaining wall, and construct two tie-back retaining walls.	\$200 (R/W) \$6,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$600 \$150 \$1,800 \$2,550	201.130 Assembly: 19, 21 Senate: 8, 11 Congress: 14 1 Location(s)
76 1456F	04-SM-35 13.1 4K210 04 1700 0279	Near Sky Londa, at 0.1 mile north of Bear Gulch Road. Repair slipout and construct soldier pile retaining wall.	\$150 (R/W) \$1,800 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$350 \$40 \$750 \$1,140	201.130 Assembly: 19 Senate: 8 Congress: 14 1 Location(s)
77 1456K	04-SM-101 3.5/12.6 4K320 04 1700 0296	In and near Redwood City, from Marsh Road to Route 92. Repair water saturated asphalt pavement with asphalt overlay and digout repairs.	\$0 (R/W) \$700 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$350 \$350	201.130 Assembly: 19 Senate: 8 Congress: 12 1 Location(s)
78 1458U	04-Son-1 31.9 4K660 04 1700 0333	Near Fort Ross State Park, at 1.1 miles south of Fort Ross Road. Stabilize slide, construct retaining wall, and repair asphalt roadway.	\$10 (R/W) \$600 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$300 \$300	201.130 Assembly: 1 Senate: 2 Congress: 6 1 Location(s)
79 1457B	04-Son-1 25.1/25.2 4K390 04 1700 0305	Near Jenner, from 0.6 mile north of Russian Gulch State Beach to 1.2 miles south of Meyers Grade Road. Repair slipout, construct soldier pile tie-back retaining wall, and repair roadway.	\$210 (R/W) \$5,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$900 \$100 \$1,500 \$2,500	201.130 Assembly: 1 Senate: 2 Congress: 6 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.)							
80 1457H	04-Son-101 37.1/37.2 4K450 04 1700 0311	In Healdsburg, at 0.9 mile north of Dry Creek Road. Remove slide debris and construct soldier pile tie-back retaining wall.	\$210 (R/W) \$3,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$800 \$75 \$1,350 \$2,225	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
81 1456H	04-Son-116 43.3 4K290 04 1700 0292	Near Temelec, at 0.1 mile east of County Dump Road. Reconstruct slipout embankment and replace storm damaged culvert.	\$10 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$450 \$450	201.130 Assembly: 6 Senate: 3 Congress: 6 1 Location(s)
82 1457F	04-Son-128 1.3 4K430 04 1700 0309	Near Cloverdale, at 3.5 miles west of North Cloverdale Boulevard. Repair slipout and construct soldier pile tie-back retaining wall.	\$210 (R/W) \$2,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$600 \$50 \$1,250 \$1,900	201.130 Assembly: 1 Senate: 2 Congress: 1 1 Location(s)
83 2713	05-Mon-1 45.5 1J130 05 1700 0064	Near Posts, at Pfeiffer Canyon Bridge No. 44-0060. Investigate landslide damaged bridge, construct temporary access, and support geotechnical investigations.	\$20 (R/W) \$3,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$50 \$500 \$50 \$400 \$1,000	201.130 Assembly: 27 Senate: 15 Congress: 17 1 Location(s)
84 2711	05-Mon-1 28.2/28.4 1J110 05 1700 0062	Near Lucia, from 0.1 mile south of Cow Cliffs Sidehill Viaduct to 0.1 mile north of Cow Cliffs Sidehill Viaduct. Remove slide debris, repair rock fall barrier, replace guard railing and repair roadway.	\$10 (R/W) \$600 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$10 \$5 \$180 \$205	201.130 Assembly: 27 Senate: 15 Congress: 17 1 Location(s)
85 2717	05-Mon-1 47.0/58.0 1J320 05 1700 0087	Near Big Sur, from 0.2 mile north of Pfeiffer Big Sur Road to 0.8 mile south of Coast Road. Remove slide debris, reconstruct embankment washouts, repair drainage systems, and reconstruct roadway.	\$20 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$40 \$5 \$350 \$405	201.130 Assembly: 27 Senate: 15 Congress: 17 4 Location(s)
86 2714	05-Mon-68 11.9 1J140 05 1700 0065	Near Salinas, at 0.7 mile east of Laureles Grade. Excavate and repair sinkhole, replace culvert, and restore embankment and roadway.	\$10 (R/W) \$400 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$25 \$15 \$100 \$150	201.130 Assembly: 68 Senate: 15 Congress: 17 1 Location(s)

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Major Damage Restoration (Cont.)							
87 2710	05-SB-Var Var 1J100 05 1700 0061	In Santa Barbara County, on Route 101 and Route 154 at various locations. Remove slide debris, stabilize slope, reconstruct rock nets, repair rock fall barriers, and repair roadway.	\$10 (R/W) \$1,200 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$20 \$5 \$200 \$235	201.130 Assembly: 35, 37 Senate: 15, 19 Congress: 23, 24 7 Location(s)
88 2712	05-SCr-17 9.8/10.8 1J120 05 1700 0063	Near Scotts Valley, from 0.4 mile north of Laurel Drive to 0.2 mile north of Glenwood Drive. Reconstruct slipout embankment, stabilize roadway shoulder with 8-inch micro piles and repair drainage.	\$10 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$25 \$50 \$25 \$150 \$250	201.130 Assembly: 27 Senate: 15 Congress: 14 1 Location(s)
89 2709	05-SCr-152 4.1/8.3 1J090 05 1700 0060	Near Watsonville, 0.4 mile east of Carlton Road to Santa Clara County line. Remove slide debris, stabilize slope, and repair drainage system.	\$10 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$10 \$10 \$5 \$120 \$145	201.130 Assembly: 28 Senate: 15 Congress: 14 3 Location(s)
90 6864	06-Fre-5 24.0/30.0 0W300 06 1700 0206	Near Coalinga, from 9.1 miles north of Route 198 to 8.4 miles south of W. Kamm Avenue. Remove and replace water saturated failed concrete pavement slabs with full-depth asphalt concrete.	\$0 (R/W) \$750 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$275 \$275	201.130 Assembly: 30 Senate: 16 Congress: 20 1 Location(s)
91 6862	06-Fre-180 127.9/128.1 0W280 06 1700 0192	Near Cedar Grove, from 19.8 miles east of Route 245 to 2 miles west of South Fork Kings River Bridge. Remove rockslide debris, stabilize slope, and repair roadway.	\$0 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$350 \$350	201.130 Assembly: 29 Senate: 14 Congress: 21 1 Location(s)
92 6861	06-Ker-5 4.5/9.5R 0W270 06 1700 0188	Near Lebec (PM 4.5/9.5R), from 4.5 miles north of Los Angeles County to 6.4 miles south of Route 99. Remove slide debris, stabilize slope, and repair drainage system.	\$0 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$250 \$250	201.130 Assembly: 32 Senate: 18 Congress: 22 1 Location(s)
93 6863	06-Ker-5 8.9R 0W290 06 1700 0194	Near Grapevine (PM 8.9R), at 1.3 miles south of Grapevine Road East. Reconstruct embankment washout, remove channel debris, repair double box culvert, and install slope drainage.	\$0 (R/W) \$400 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$200 \$200	201.130 Assembly: 32 Senate: 18 Congress: 22 1 Location(s)

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Major Damage Restoration (Cont.)							
94 6859	06-Kin-5 6.5/9.0 0W120 06 1700 0163	Near Kettleman City, from 6.5 miles north of Kern County line to 3.4 miles south of Utica Avenue. Remove and replace water saturated failed pavement.	\$0 (R/W) \$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)
95 6870	06-Mad-Var Var 0U950 06 1600 0134	In Tulare, Fresno and Madera Counties, at various locations. Remove dead trees to eliminate potential fall hazards. PA&ED: 09/01/2017 R/W: 12/15/2017 RTL: 01/16/2018 BC: 07/09/2018	\$10 (R/W) \$23,000 (C)	17-18	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$928 \$1,350 \$39 \$3,871 \$6,188	201.131 Assembly: 5, 23, 26 Senate: 8, 16 Congress: 4, 23 15,650 Location(s)
96 6860	06-Mpa-41 4.2/4.4 0W130 06 1700 0172	Near Fish Camp, from 0.6 mile north of White Chief Mountain Road to 0.8 mile north of White Chief Mountain Road. Repair slipout, stabilize slope, and repair roadway.	\$0 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$450 \$450	201.130 Assembly: 25 Senate: 14 Congress: 19 1 Location(s)
97 5172	07-LA-1 41.8/42.8 1XC20 07 1700 0216	In Malibu, from 0.4 mile north of Tuna Canyon Road to 0.3 mile south of Big Rock Drive. Remove rock slide debris, stabilize slope, and repair drainage system.	\$50 (R/W) \$1,310 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$50 \$300 \$350	201.130 Assembly: 41 Senate: 23 Congress: 30 1 Location(s)
98 5260	07-LA-5 26.6/31.3 1XE00 07 1700 0254	In Burbank, from 0.2 mile north of North Zoo Drive to Winona Avenue. Repair water saturated failed pavement concrete slabs, repair drainage system, and repair asphalt roadway with asphalt overlay and asphalt digout repairs.	\$0 (R/W) \$650 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$120 \$120	201.130 Assembly: 43 Senate: 21 Congress: 29 1 Location(s)
99 5170	07-LA-27 0.0/11.0 1XC00 07 1700 0210	Near Malibu, from Route 1 to 0.1 mile south of Mulholland Drive. Remove slide debris and hazardous trees, stabilize slope, and clear debris from drainage system.	\$250 (R/W) \$2,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$250 \$800 \$1,050	201.130 Assembly: 41 Senate: 23 Congress: 30 1 Location(s)

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Major Damage Restoration (Cont.)							
100 5178	07-LA-57 R8.0/R8.4 1XC80 07 1700 0235	In San Dimas, from 0.3 mile north of Route 10 to 0.3 mile south of Via Verde. Repair slope washout and remove debris, repair and improve drainage system, and construct debris flow barriers.	\$0 (R/W) \$304 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$50 \$50	201.130 Assembly: 60, 61 Senate: 29, 32 Congress: 38, 42 1 Location(s)
101 5062	07-LA-107 4.2/4.8 2X010 07 1700 0253	In Redondo Beach, from 182 nd Street to Redondo Beach Boulevard. Repair multiple water saturated failed asphalt pavement areas with a variety of remedies including full-depth replacement, asphalt overlay and asphalt digout repairs.	\$0 (R/W) \$1,760 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$350 \$350	201.130 Assembly: 53 Senate: 25 Congress: 36 1 Location(s)
102 5173	07-LA-210 R20.6 1XC30 07 1700 0223	In La Cañada Flintridge, at Gould Avenue. Repair storm damaged culverts and slope stabilization.	\$0 (R/W) \$465 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$90 \$90	201.130 Assembly: 44 Senate: 21 Congress: 26 1 Location(s)
103 5177	07-LA-405 48.0/48.5 1XC70 07 1700 0234	In Mission Hills, from 0.2 mile north of Rinaldi Street to Route 5. Repair slope washout and remove debris, repair and improve drainage system, and install Rolled Erosion Control Product (netting) on stabilized slopes.	\$50 (R/W) \$536 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$10 \$100 \$110	201.130 Assembly: 38, 39 Senate: 20 Congress: 27 1 Location(s)
104 5174	07-LA-Var Var 1XC40 07 1700 0225	Near Long Beach, on Route 47, 110, and 405 at various locations. Repair embankment washouts and repair sinkhole.	\$0 (R/W) \$311 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$30 \$30	201.130 Assembly: 36-39, 41, 42, 44-61, 67-71 Senate: 17, 19, 20, 21, 23-30 Congress: 22, 24-39 8 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.)							
105 5176	07-LA-Var Var 1XC60 07 1700 0233	In and near the city of Los Angeles, at various locations on Route 2 (PM 12.9 to PM 13.6), Route 5 (PM 23.6 to PM 30.8), Route 134 (PM 2.1 to PM 2.3), and Route 710 (PM 21.9 to PM 22.1), (PM 26.3 to PM 26.5), (PM T31.7 to T32.1). Repair water saturated failed asphalt pavement with asphalt overlay and asphalt digout repairs.	\$0 (R/W) \$830 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$0 \$160 \$160	201.130 Assembly: 36-39, 41, 42, 44-61, 67-71 Senate: 17, 19, 20, 21, 23-30 Congress: 22, 24-39 6 Location(s)
106 5175	07-Ven-34 10.4/12.1 1XC50 07 1700 0224	In Camarillo, from Los Posas Road to 0.4 mile west of Pleasant Valley Road. Remove and replace damaged drainage systems, remove debris from channel, and repair roadway.	\$40 (R/W) \$535 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$20 \$50 \$70	201.130 Assembly: 41 Senate: 19 Congress: 24 1 Location(s)
107 5261	07-Ven-150 1.6/8.5 1XE10 07 1700 0255	Near Mira Monte, from 1.0 mile east of Mission Ranch Road to 2.8 miles west of Santa Ana Road. Remove rock slide debris, stabilize slope including removing loose boulders, and install a cable netting drapery system on slope.	\$25 (R/W) \$655 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$20 \$120 \$140	201.130 Assembly: 35, 37 Senate: 19 Congress: 23, 24 2 Location(s)
108 3007A	08-Riv-91 R2.2 1H780 08 1700 0134	Near Corona, at 0.1 mile north of Route 71. Reconstruct embankment washout, replace damaged fence and metal beam guardrail, and repair damaged culvert.	\$20 (R/W) \$480 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$75 \$100 \$0 \$150 \$325	201.130 Assembly: 71 Senate: 37 Congress: 44 1 Location(s)
109 3006Q	08-Riv-Var Var 1H730 08 1700 0112	In Jurupa Valley and Ontario, on Route 15 at Philadelphia Street Uncrossing Bridge No. 56-0696; also in San Bernardino County on Route 15 in Rancho Cucamonga, at Fourth Street Undercrossing Bridge No.54-0912 (PM 0.0 to PM 3.1) and on Route 210 in the City of San Bernardino at Cajon Boulevard Overhead Bridge No. 54-0946R (PM R21.7). Reconstruct eroded structural backfill of bridge embankments, repair eroded slopes, and repair drainage system.	\$50 (R/W) \$500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$10 \$20 \$150 \$180	201.130 Assembly: 61, 63, 68, 71 Senate: 31, 32, 36, 37 Congress: 26, 43, 44, 45, 49 3 Location(s)

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 (Cont.)							
110 3006T	08-SBd-15 40.3/40.7 1H271 08 1700 0024	In Victorville, near Palmdale Road (Route 18) and Route 15. Restore vegetation and irrigation system due to fire damage. PA&ED: 04/16/2018 R/W: 11/15/2018 RTL: 12/15/2018 BC: 06/18/2019	\$10 (R/W) \$1,061 (C)	18-19	PA&ED PS&E RW Sup Con Sup Total	\$206 \$493 \$54 \$577 \$1,330	201.131 Assembly: 33 Senate: 21 Congress: 8 1 Location(s)
111 3006S	08-SBd-15 R18.5/R21.4 1H760 08 1700 0129	Near Cajon Junction, from 1.5 miles south of Cleghorn Road to Route 138; also on Route 138 from Pine Lodge East Overhead to Route 15 (PM R14.8/R15.2). Reconstruct embankment slipout, clean drainage system, and repair collapsed roadway.	\$100 (R/W) \$2,900 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$150 \$40 \$300 \$490	201.130 Assembly: 59 Senate: 17, 31 Congress: 41 2 Location(s)
112 3006R	08-SBd-18 18.5 1H740 08 1700 0113	Near Crestline, at 0.7 mile east of Route 138. Reconstruct storm damaged cable netting and rock fence barrier.	\$10 (R/W) \$590 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$75 \$20 \$150 \$245	201.130 Assembly: 59 Senate: 31 Congress: 41 1 Location(s)
113 3006Y	08-SBd-215 7.6 1H790 08 1700 0133	In the city of San Bernardino, at 0.5 mile north of W. 5th Street. Reconstruct embankment sinkhole, remove culvert debris, and replace failed culvert.	\$50 (R/W) \$400 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$20 \$50 \$20 \$100 \$190	201.130 Assembly: 62 Senate: 32 Congress: 43 1 Location(s)
114 3224	10-Cal-26 37.3 1H240 10 1700 0105	Near West Point, at 0.7 mile west of Iris Way; also in Amador County, at 1.7 miles west of Iris Way (PM 0.2). Remove rock slide debris and hazardous trees, stabilize slope, reconstruct embankment slipout, install rock slope protection (RSP), repair drainage system, and repair roadway.	\$0 (R/W) \$5,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$50 \$400 \$50 \$1,500 \$2,000	201.130 Assembly: 25 Senate: 1 Congress: 3 2 Location(s)
115 1266	11-SD-5 R23.0/R24.0 43002 11 1700 0123	In the city of San Diego, from 0.5 mile south of Balboa Avenue to 0.5 mile north of Balboa Avenue. Repair sinkhole in roadway shoulder and replace failed culvert.	\$0 (R/W) \$800 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$0 \$0 \$5 \$300 \$305	201.130 Assembly: 76 Senate: 39 Congress: 50, 53 1 Location(s)

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 (Cont.)							
116 1271	11-SD-8 10.3/10.5 43007 11 1700 0139	In La Mesa, from 0.7 mile east of Lake Murray Boulevard to 0.1 mile west of Fletcher Parkway. Reconstruct embankment washout, replace rock slope protection (RSP), and repair failed culverts.	\$0 (R/W) \$700 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$280 \$280	201.130 Assembly: 77 Senate: 36 Congress: 52 1 Location(s)
117 1270	11-SD-54 T12.3 43006 11 1700 0136	In Rancho San Diego, at Brabham Street. Replace failed culvert, repair sinkhole in roadway and replace damaged sidewalk.	\$0 (R/W) \$600 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$240 \$240	201.130 Assembly: 77 Senate: 36 Congress: 52 1 Location(s)
118 1268	11-SD-78 32.4 43005 11 1700 0132	Near Ramona, at 0.6 mile west of Weekend Villa Road. Repair eroded embankment by constructing a retaining wall.	\$0 (R/W) \$1,550 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$540 \$540	201.130 Assembly: 75, 77 Senate: 36 Congress: 49, 52 1 Location(s)
119 1273	11-SD-163 5.7 43009 11 1700 0144	In the city of San Diego, at 0.1 mile south of Genessee Avenue. Reconstruct embankment sinkhole, repair and replace sections of failed drainage culvert.	\$0 (R/W) \$1,000 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$350 \$350	201.130 Assembly: 76 Senate: 39 Congress: 52, 53 1 Location(s)
120 1272	11-SD-805 7.0 43008 11 1700 0141	In Chula Vista, at 0.2 mile south of East H Street. Reconstruct embankment washout, reconstruct metal beam guardrail, and repair roadway.	\$0 (R/W) \$600 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$150 \$150	201.130 Assembly: 78, 79 Senate: 40 Congress: 51 1 Location(s)
121 1274	11-SD-Var Var 43010 11 1700 0145	In San Diego County, on Route 78, Route 76, and Route 79 at various locations. Remove multiple rock slide debris, remove loose boulders, stabilize slopes, repair guardrail, and replace damaged roadway.	\$0 (R/W) \$800 (C)	16-17	PA&ED PS&E RW Sup Con Sup <u>Total</u>	\$0 \$0 \$0 \$320 \$320	201.130 Assembly: 66, 73, 74, 75, 76, 77, 78, 79 Senate: 36, 38, 39, 40 Congress: 49, 50, 51, 52, 53 11 Location(s)

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 (Cont.)							
122 4150A	12-Ora-74 3.1/5.6 0Q570 12 1700 0067	Near San Juan Capistrano, from 0.5 mile east of La Plata Avenue to 0.5 mile east of Cristianitos Road. Replace failed culvert, reconstruct eroded embankment, and repair roadway.	\$100 (R/W) \$1,500 (C)	16-17	PA&ED PS&E RW Sup Con Sup Total	\$150 \$100 \$150 \$300 \$700	201.130 Assembly: 73 Senate: 33 Congress: 44 3 Location(s)
Collision Reduction							
123 2415	01-Hum-36 10.5/10.8 0F160 01 1500 0076	Near Carlotta, from 0.1 mile east of Riverside Park Road to 0.4 mile east of Riverside Park Road. Curve correction. PA&ED: 01/15/2019 R/W: 01/01/2020 RTL: 01/15/2020 BC: 07/01/2020	\$309 (R/W) \$2,240 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$910 \$904 \$174 \$537 \$2,525	201.010 Assembly: 2 Senate: 2 Congress: 2 20 Collisions Reduced
124 2427	01-Hum-299 20.5/30.2 0F460 01 1600 0010	Near Willow Creek, from 1.5 mile east of East Bair Road to 0.4 mile west of Cedar Creek Road, at various locations. Widen shoulders. PA&ED: 08/01/2018 R/W: 08/01/2019 RTL: 08/01/2019 BC: 12/01/2019	\$127 (R/W) \$6,886 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$986 \$864 \$21 \$921 \$2,792	201.010 Assembly: 1 Senate: 2 Congress: 1 40 Collisions Reduced
125 2114	03-But-32 7.6/7.9 2H240 03 1700 0084	In Chico, from West Sacramento Avenue (East) to West Sacramento Avenue (West). Construct two roundabouts. PA&ED: 06/01/2018 R/W: 02/01/2020 RTL: 03/01/2020 BC: 07/30/2020	\$1,789 (R/W) \$2,332 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$650 \$663 \$756 \$565 \$2,634	201.010 Assembly: 3 Senate: 1 Congress: 4 58 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.)							
126 1488N	04-SCI-280 11.3 3J710 04 1500 0184	In Cupertino, at northbound off-ramp to Foothill Expressway. Upgrade traffic signal system for right-turn movement. PA&ED: 12/01/2018 R/W: 03/01/2020 RTL: 04/01/2020 BC: 10/01/2020	\$180 (R/W) \$982 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$432 \$285 \$45 \$285 \$1,047	201.010 Assembly: 24 Senate: 13 Congress: 17 20 Collisions Reduced
127 6816	06-Kin-41 8.1/R48.3 0V860 06 1700 0039	In and near Kettleman City and Lemoore, from Route 33 to the Fresno County line at various locations. Construct shoulder and centerline rumble strips. PA&ED: 02/07/2017 R/W: 12/15/2017 RTL: 01/17/2018 BC: 07/09/2018	\$5 (R/W) \$2,681 (C)	17-18	PA&ED PS&E RW Sup Con Sup Total	\$0 \$690 \$20 \$550 \$1,260	201.010 Assembly: 32 Senate: 16 Congress: 21 62 Collisions Reduced
128 3006X	08-Riv-60 16.6 1H140 08 1600 0162	In Moreno Valley, at the Sunnymead Boulevard eastbound on-ramp. Install traffic signal. PA&ED: 01/02/2018 R/W: 01/02/2019 RTL: 02/04/2019 BC: 09/02/2019	\$90 (R/W) \$646 (C)	18-19	PA&ED PS&E RW Sup Con Sup Total	\$397 \$546 \$99 \$566 \$1,608	201.010 Assembly: 61 Senate: 31 Congress: 41 14 Collisions Reduced
129 3231	10-SJ-205 Var 1E590 10 1700 0014	In San Joaquin, Stanislaus, and Tuolumne Counties, on Routes 4, 5, 99, 120, and 205 at various locations. Improve wet roadway surface conditions at 12 locations. PA&ED: 10/16/2017 R/W: 07/17/2018 RTL: 10/23/2018 BC: 05/03/2019	\$0 (R/W) \$4,150 (C)	18-19	PA&ED PS&E RW Sup Con Sup Total	\$288 \$642 \$31 \$547 \$1,508	201.010 Assembly: 11, 13 Senate: 5, 12, 14 Congress: 4, 9, 10 264 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.
Mobility							
130 1263	11-SD-15 11.5/31.2 42980 11 1700 0103	In San Diego County, at various locations. Update Microwave Vehicle Detections Systems (MVDS) elements for traffic flow monitoring and data collections. PA&ED: 04/18/2018 R/W: 03/08/2019 RTL: 05/08/2019 BC: 12/13/2019	\$0 (R/W) \$3,324 (C)	18-19	PA&ED PS&E RW Sup Con Sup Total	\$372 \$865 \$0 \$654 \$1,891	201.315 Assembly: 75, 77 Senate: 38, 39 Congress: 52, 53 62 Field Elements
131 1262	11-SD-Var Var 42970 11 1700 0102	In San Diego County, at various locations. Repair and install Vehicle Detection Stations (VDS) elements including Microwave Vehicle Detections Systems (MVDS) and loop detectors. PA&ED: 08/22/2018 R/W: 11/15/2019 RTL: 12/13/2019 BC: 05/01/2020	\$0 (R/W) \$11,535 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$911 \$2,160 \$0 \$2,264 \$5,335	201.315 Assembly: 75, 76, 77 Senate: 36, 38, 39, 40 Congress: 49, 50, 51, 52, 53 239 Field Elements
Roadside Preservation							
132 2621	09-Mno-395 Var 36670 09 1600 0009	In Mono County, at various locations. Advance mitigation banking credits. PA&ED: 02/15/2019 R/W: 05/15/2020 RTL: 06/26/2020 BC: 01/15/2021	\$600 (R/W) \$2,300 (C)	19-20	PA&ED PS&E RW Sup Con Sup Total	\$200 \$200 \$100 \$150 \$650	201.240 Assembly: 5 Senate: 8 Congress: 8 11 Location(s)

2016 SHOPP Amendment 16H-012 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	
	01	Humboldt	101	27.7/153.9 27.7	Near Fortuna Myers Flat , at South Fork Eel River Bridge No. 04-0123 and Eel River Bridge No. 04-0016R. Seismic retrofit.	0A110	2301	0112000211	201.113	2017-18 2019-20	44	5,565 6,078	PA&ED PS&E RW Const	1,625 1,145 204 1,171	4,641 2,072 215 1,855	2.0 Bridge(s) 1.0 Bridge(s)
1	Comments: The scope of Eel River Bridge No. 04-0016R has been reevaluated and the Department has determined that this structure requires partial replacement. This change requires a new long-lead schedule and removal of this location from the project scope. The scope remaining on South Fork Eel River Bridge No. 04-0123 has also changed due to its classification as 'scour critical' in addition to currently planned seismic retrofit scope. The time required to deliver the remaining bridge has increased to accommodate revised consultations with resource agencies, which are an iterative process that requires more time when scope elements are added or changed. Increases to the support and construction costs for the remaining bridge are due to the added scope. The original scoping of this project involved inadequate PID phase structure evaluation support, leading to these changes. These changes add \$5,151,000 to the cost of the project.															
	01	Humboldt	101	110.6	Near Trinidad at 1.9 miles south of Kane Road; also at 1.3 miles north of Kane Road (PM T113.8). Reconstruct roadway and de-water.	0B420	2340	0112000126	201.131	2016-17	760	5,000 4,500	PA&ED PS&E RW Const	270 1,500 90 1,129	270 1,500 90 820	2.0 Location(s)
2	Comments: Split child EA 0B421 from parent EA 0B420 for environmental off-site mitigation and required long-term plant establishment work at both the project site and off-site location. Environmental mitigation work is required by resource agencies. The split will transfer construction capital and support costs to the child EA. There is no increase to the cost of the combined projects.															
	01	Humboldt	101	110.6	Near Trinidad at 1.9 miles south of Kane Road; also at 1.3 miles north of Kane Road (PM T113.8). Environmental mitigation for EA 0B420.	0B421	2472	0117000078	201.131	2016-17	0	500	PA&ED PS&E RW Const	0 0 0 300	0 0 0 300	0.0 Location(s)
3	Comments: Split child EA 0B421 from parent EA 0B420 for environmental off-site mitigation and required long-term plant establishment work at both the project site and off-site location. Environmental mitigation work is required by resource agencies as part of the environmental document approval and permitting process. The split will transfer construction capital and support costs to the child EA. There is no increase to the cost of the combined projects.															
	01	Mendocino	1	43.3/44.2	Near Albion, from 3.0 miles north of Route 128 Junction to 0.2 mile north of Albion River Bridge No. 10-0136. Bridge Replacement. (G13 Contingency Project)	40110	4490	0100000154	201.110	2019-20	5,104 7,748	0	PA&ED PS&E RW Const	5,500 5,220 828 0	5,500 5,220 828 0	1.0 Bridge(s)
									201.XXX (G13)	2019-20	0	37,400 53,699	PA&ED PS&E RW Const	0 0 0 5,597	0 0 0 5,950	
4	Comments: Increase to Right of Way capital and G-13 Contingency amounts due to a two-year FY delay that was approved at the December 2016 CTC meeting. Approved additional time was required due to delays to the environmental studies and completion of the PA&ED milestone. The Right of Way capital cost increase is a result of project delay escalation and an increase in mitigation costs for the project. Increases to construction capital is due to updated unit pricing estimates for contract items and considering the two-year delay. An increase to construction support is due to two-year escalation. These changes add \$2,647,000 to the programmed portion of the project and \$16,652,000 to the contingent portion of the project.															

2016 SHOPP Amendment 16H-012 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	
5	01	Mendocino	1	42.4/43.3	Near Albion, from 2.2 miles north of Route 128 Junction to 0.2 mile north of Salmon Creek Bridge No. 10-0134. Bridge replacement. (G13 Contingency Project)	40140	4491	0100000155	201.110	2019-20	4,638	0	PA&ED	5,800	5,800	1.0 Bridge(s)
											6,324		PS&E	5,593	5,593	
													RW	810	810	
													Const	0	0	
									201.XXX (G13)	2019-20	0	33,900	PA&ED	0	0	
													PS&E	0	0	
													RW	0	0	
													Const	6,290	6,290	
Comments: Increase to Right of Way capital and G-13 Contingency construction capital amount due to a two-year FY delay that was approved at the December 2016 CTC meeting. Approved additional time was required due to delays to the environmental studies and completion of the PA&ED milestone. The Right of Way capital cost increase is a result of project delay escalation and an increase in mitigation costs for the project. Increase to construction capital is due to project cost escalation for the two-year delay. These changes add \$1,686,000 to the programmed portion of the project and \$2,875,000 to the contingent portion of the project.																
6	02	Shasta	151	5.5/R5.8	In Shasta Lake City, from west of Coram Underpass to Locust Avenue. Upgrade curbs, sidewalks and crosswalks.	4F790	3524	0213000033	201.378	2017-18	146	1,683	PA&ED	205	205	21.0 Structure(s)
													PS&E	505	505	
													RW	522	522	
													Const	547	450	
Comments: This project will be combined with minor pavement preservation project EA 2H640 for construction under EA 4F79U. These projects have overlapping construction limits, and combining them will reduce impacts to the traveling public, reduce construction worker exposure, and reduce contract administration cost. This change results in \$67,000 in construction support savings to the project.																
7	03	Nevada	174	2.7/4.6	Near Rollins Lake, from Maple Way to You Bet Road. Realign roadway curves.	4F370	4451	0314000152	201.010	2017-18	2,156	17,000	PA&ED	1,700	1,700	72.0 Collisions Reduced
										2018-19	2,503		PS&E	2,100	2,100	
													RW	2,300	2,300	
													Const	3,200	3,200	
Comments: An October 2015 amendment increased the project limits to capture an adjacent area of collisions in response to new data. Increased costs and limits were captured, but the schedule was not changed at that time. It is now known that additional time is required due to the increased surveying and Right of Way data requirements. In addition, Right of Way capital costs have increased due to the larger number of parcels that are part of the new scope. Right of Way capital costs were underestimated in the previous amendment. These changes add \$347,000 to the cost of the project.																
8	03	Placer	49	3.1/7.5	In Auburn, from 0.1 mile south of Routes 49/80 Separation to 0.1 mile north of Dry Creek Road. Rehabilitate pavement. (G13 Contingency Project)	2F340	4781	0300020616	201.120	2017-18	50	0	PA&ED	2,400	2,400	22.0 Lane Miles
											555		PS&E	1,300	1,300	
													RW	4,400	1,250	
													Const	0	0	
									201.XXX (G13)	2017-18	0	21,350	PA&ED	0	0	
													PS&E	0	0	
													RW	0	0	
													Const	3,200	4,300	
Comments: Increase to Right of Way capital, Right of Way support, and G-13 Contingency amounts. Increases include complete street elements that are a result of an increased statewide emphasis between the time of the initial scoping of the project and the beginning of the environmental phase. Comments by advocacy groups were received on the 2016 SHOPP document, discussions occurred with local city and county leaders and staff, and input was received from local maintenance staff. As a result, the project team identified infrastructure gaps within the corridor for pedestrians and bicycles, including heavily used routes for school children. The project scope modification includes the addition of 5.5 lane miles of bike lane, and 5,070 feet of sidewalk. Other increases in project cost include new signalized intersections and interconnects for improved corridor management, upgrade to guard rails, and miscellaneous drainage and storm-water changes to improve flooding. Increased Right of Way capital and support are a result of the need for temporary construction easements and for utility relocations. These changes add \$655,000 to the programmed portion of the project and \$8,750,000 to the contingent portion of the project.																

2016 SHOPP Amendment 16H-012 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	
9	03	Sacramento	51	Var	In the city of Sacramento, on various routes at various locations. Seismic retrofit four-structures two structures.	4F100	6707	0314000024	201.113	2019-20	60 0	3,900 1,900	PA&ED PS&E RW Const	480 1,070 80 1,400	321 759 18 691	4.0 Bridge(s) 2.0 Bridge(s)
Comments: Removal of the Elvas Underpass Bridge No. 24-0031 structure and the Route 51/160 Separation Bridge No. 24-0130R structure from the project scope. These structures will be included in a future STIP widening project planned for 2023 delivery that will require one to be replaced with a longer structure, and the other to be extensively modified for widening. These two structures were screened and are ranked as low priority for seismic retrofit. The reduction of project scope will be from four bridges to two and will result in project savings to construction, right of way, and support. These changes result in \$3,001,000 in savings to the project.																
10	04	Alameda	123	2.8	In Berkeley, at Bancroft Way. Install traffic signal.	1J700	0481X	0414000329	201.010	2017-18	20	673 850	PA&ED PS&E RW Const	309 447 25 164	309 632 25 362	12.0 Collisions Reduced
Comments: Increase to construction capital, design support, and construction support is due to additional work required to extend the left-turn lane, install loop detectors, and resurface the pavement. Support costs were underestimated during project initiation phase and now have increased using "bottoms up" resource estimate approach. These changes add \$560,000 to the cost of this project.																
11	04	Alameda	680	M4.0/R21.8 R6.8/R21.8	In and near Fremont, Pleasanton, and Dublin, from south of Auto Mall Parkway Vargas Road to north of Alcosta Boulevard. Ramp metering.	4G115	0521K	0417000130	201.315	2017-18	523	14,000	PA&ED PS&E RW Const	0 0 50 2,800	0 0 50 2,800	14.0 Field Elements
Comments: Ramp metering work from post mile M4.0 to R6.8 was completed in 2013 as part of a previous project. The postmile limits were included within this project for work elements without adding associated cost for those elements. During the design phase, it was confirmed that no work is necessary within these limits. This modification results in no cost change to the project.																
12	04	Marin	1	0.3	Near Mill Valley, at Tennessee Valley Road. Repair roadway slip-out.	2J560	1485J	0414000529	201.131	2017-18	50 150	1,515	PA&ED PS&E RW Const	750 525 18 525	750 1,200 18 1,200	1.0 Location(s)
Comments: Recent utility markings and potholing investigations in the field have discovered conflicts that increased the complexity of the project design, thereby increasing PS&E support costs. Conflicts with a large natural gas line and gas valves will require utility relocation and increased Right of Way capital costs. Conflicts with other utilities will require that they be protected in place during new retaining wall construction. Furthermore, the environmentally sensitive project location will require unplanned extensive coordination with external stakeholders. Increased stakeholder and public outreach and utility coordination has increased construction support costs. These changes add \$1,450,000 to the cost of the project.																

2016 SHOPP Amendment 16H-012 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	04	Marin	101	4.7/5.6	Near Mill Valley, from Redwood Highway Frontage Road to Route 131 (Tiburon Boulevard). Install concrete barrier.	4H980	0820K	0413000351	201.010	2017-18	39 200	5,514	PA&ED	1,198	1,198	8.5 Collisions Reduced
	PS&E	1,392	1,392	RW	155	155	Const	1,120	1,120							
Comments: During the PA&ED phase it was learned that overhead and underground utilities will be in conflict, require relocation, and subsequently require additional Right of Way capital cost. Utility relocation was not anticipated during the PID phase. This changes adds \$170,000 to the cost of the project.																
14	04	Sonoma	12	25.8/33.3	In and near Sonoma, at Sonoma Creek Bridge No. 20-0027, Stuart Creek Bridge No. 20-0025 and Hooker Creek Bridge No. 20-0030. Scour mitigation.	4H050	0269M	0413000080	201.111	2017-18 2019-20	150	6,800 9,000	PA&ED	1,519	1,519	3.0 Bridge(s) 2.0 Bridge(s)
	PS&E	650	2,650	RW	500	500	Const	600	2,000							
Comments: The Stuart Creek Bridge location was reassessed and has been downgraded to "not scour critical". The work at this location is no longer required and is to be removed from the project scope. The Sonoma Creek Bridge location scope has changed from placing rock slope protection (RSP) to full bridge replacement at higher support and construction costs. The resource agencies do not support the RSP strategy due to permanent impacts to steelhead critical habitat. In addition, bridge replacement will remediate fish passage barrier to comply with SB 857 law, avoid extensive mitigation costs, and lessen environmental impacts. The change to bridge replacement results in project delay to complete additional environmental studies, assessments, and design work. These changes add \$5,600,000 to the cost of the project.																
15	04	Sonoma	116	26.6/26.9	In Sebastopol, from Keating Avenue to Willow Street; also from McKinley Street to Joe Rodora Trail. Upgrade curb ramps, driveways and sidewalks.	1G840	0730E	0400020616	201.378	2017-18	140	2,790	PA&ED	240	240	42.0 Structure(s)
	PS&E	750	750	RW	590	590	Const	300	850							
Comments: Increase construction support to account for field adjustment work that will provide continuous and safe pedestrian access and minimize impacts to local businesses. Impacts to pedestrians and businesses will require additional construction staging activities, increased working days, field modifications typical for ADA projects, and unforeseen utility conflict resolution. Local commerce chamber has requested additional public outreach with City, community and business owners during construction. These changes add \$550,000 to the cost of the project.																
16	05	Monterey	101	R41.5/49.8	In and near King City, from 0.1 mile south of Broadway Street to 0.1 mile north of Broadway Street and from Jolon Road to 0.2 mile north of Jolon Road. Landscape mitigation.	0T991	2312Y	0516000125	201.015	2017-18 2019-20	0	700 816	PA&ED	0	0	2.0 Location(s)
	PS&E	300	344	RW	0	0	Const	422	483							
Comments: The project is being delayed until the completion of a seismic bridge project EA 05-1C960 within the project limits. The two year delay results in escalation of support and capital costs. The change adds \$221,000 to the cost of the project.																

2016 SHOPP Amendment 16H-012 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	
17	05	Monterey	101	R41.4/R41.8	In and near King City, at the Salinas River Bridge No 44-32. Bridge seismic retrofit and bridge rail replacement. (G13 Contingency Project)	1C960	2454	0513000019	201.113	2017-18	2,552	0	PA&ED	2,203	2,203	2.0 Bridge(s)
											1,007		PS&E	4,079	4,875	
									201.XXX (G13)	2017-18	0	27,935	PA&ED	0	0	
												29,850	PS&E	0	0	
													RW	0	0	
													Const	5,669	6,840	
Comments: A Structures Maintenance Report in December 2016 identified the need for deck preservation repair work. The Department determined the benefits of the additional cost of performing this work on the bridge outweigh the alternative of programming a separate project at a higher cost that results in additional disruption to the traveling public. The Right of Way capital cost has been reduced because it was determined that an overhead electrical line will not need to be relocated. These changes add \$2,337,000 to the programmed and contingency cost of the project.																
18	5	Monterey	101	62.1/63.2	Near Soledad, from Route 146 to Front Street at the North Soledad Overhead No. 44-91R. Rehabilitate bridge.	0F970	9700	0513000017	201.110	2017-18	1,578	6,674	PA&ED	34	34	1.0 Bridge(s)
										2019-20		7,358	PS&E	2,006	2,006	
Comments: Statewide delays with Union Pacific Railroad coordination. This has delayed construction/maintenance agreements, approval of an easement and a right of entry to perform geotechnical analysis to complete design. The delays increase the cost due to added complexity and escalation. These changes add \$827,000 to the cost of the project.																
19	05	Monterey	156	R1.1/R2.1	Near Castroville, from Route 183 to Castroville Boulevard. Upgrade bridge railing and widen overhead.	0A090	0900A	0513000028	201.112	2017-18	467	4,500	PA&ED	70	70	392.0 Linear Feet
										2019-20		5,050	PS&E	1,800	1,800	
Comments: Statewide delays with Union Pacific Railroad coordination. The accumulated delays for review and comments can impact the scope of the project and has increased the cost due to added complexity and escalation. These changes add \$780,000 to the cost of the project.																
20	05	Santa Barbara	101	2.6/11.9	In the cities of Carpinteria and Santa Barbara, from Casitas Pass Road to north of Cabrillo Boulevard. Rehabilitate roadway. (G-13 Contingency Project)	1C820	2426	0512000236	201.120	2019-20	4,232	0	PA&ED	9,200	9,200	7.96 Lane Miles
													PS&E	13,800	13,800	RW
									201.XXX (G13)	2019-20	0	49,544	PA&ED	0	0	
												109,200	PS&E	0	0	
													RW	0	0	
													Const	5,604	37,900	
Comments: The amendment to revise the scope of work was approved at the October 2015 CTC meeting. However, this is a G-13 Contingency project and the practice of updating the construction costs, through the amendment process, was in a transitional period at that time. Therefore, the construction support and capital needs to reflect the increase in scope and the additional funding to support the updated scope of work. This update adds \$121,988,000 to the contingent portion of the project.																

2016 SHOPP Amendment 16H-012 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	
21	05	Santa Barbara	101	11.0	In the city of Santa Barbara, at Butterfly Lane Pedestrian Undercrossing. Construct pedestrian ramps and sidewalks to comply with ADA standards.	1E040	2468	0513000027	201.361	2019-20	970	2,904	PA&ED	70	70	2.0 Curb Ramps
													PS&E	1,875	1,875	
													RW	492	303	
													Const	1,136	1,136	
Comments: Additional right of way support is needed to complete coordination with Union Pacific Railroad and California Public Utilities Commission in order to obtain a General Order. This change adds \$111,000 to the cost of the project.																
22	05	Santa Barbara	192	15.4/15.6	Near Carpentaria, at Arroyo Parida Creek Bridge No. 51-113. Replace bridge (scour).	39610	0335	0500000514	201.111	2017-18 2019-20	905	6,845	PA&ED	960	960	1.0 Bridge(s)
													PS&E	4,266	4,266	
													RW	692	692	
													Const	1,310	1,310	
Comments: The project requires two Coastal Development Permits (CDP) one for the construction of the overall project and the other for locating a utility line in the creek bed during design. The project CDP was denied by Santa Barbara County and as a result the Department decided to conduct an external Value Analysis (VA) study which resulted in a slightly smaller project footprint. Now the Department needs to submit another CDP application for the project which will involve several iterations with the County. The utility CDP application is required because the exact location of the line is required to complete the design of the fish passage component which is required by resource agencies to replace the bridge. Due to the lengthy review periods with resource agencies involved in the permitting process it's anticipated to delay the project two years.																
23	05	Santa Cruz	1	10.2/17.5	Near the city of Santa Cruz, from North Aptos Underpass to Route 9. Rehabilitate pavement.	1C850	2432	0512000240	201.121	2017-18 2018-19	19	14,952	PA&ED	606	606	32.0 Lane Miles
													PS&E	1,030	1,030	
													RW	10	10	
													Const	1,082	1,082	
Comments: Additional right of way acquisition and utility relocation were discovered for some of the ADA curb ramps. Due to the acquisition and utility relocation process it's anticipated to delay the project one year.																
24	05	Santa Cruz	17	0.7/1.4	In Santa Cruz, from 0.7 mile north of Route 1/17 Separation to Beulah Park Undercrossing. Landscape mitigation for PPNO-1989 EA 0Q600 .	0Q601	1989Y	0514000145	201.335	2017-18 2018-19	0	507	PA&ED	0	0	10.0 Acres Treated/Pollutant
													PS&E	500	500	
													RW	18	18	
													Const	537	537	
Comments: The parent project EA 0Q600 was delayed due to winter suspension and has resulted in a one year delay to this child landscape mitigation project.																

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No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
25	05	San Luis Obispo	1	34.5/44.4	In and near Cayucos, from Old Creek Bridge to north of Harmony Valley Road. Rehabilitate pavement and construct shoulders on ramps.	1G140	2587	0514000111	201.121	2017-18	0 10	14,469	PA&ED PS&E RW Const	0 1,194 30 2,157	0 1,194 30 2,157	25.6 Lane Miles
	Comments: An underground 2 inch gas line was discovered during the preliminary utility verification. The line runs transverse near the reconstruction of guard railing to meet current standards and will require positive location. This change adds \$10,000 to the cost of the project.															
26	06	Fresno	33	69.3/70.9	In Firebaugh, from south of Morris Kyle Drive to Clyde Fannon Drive. Construct continuous accessible pedestrian path to comply with ADA standards.	0T250	6747	0615000043	201.361	2018-19	62 273	4,502 2,085	PA&ED PS&E RW Const	221 674 499 354	221 780 240 475	14.0 Curb Ramps 29.0 Curb Ramps
	Comments: Field review findings determined that an additional 15 ramps were not compliant with ADA standards. The modification of these additional curb ramps impact 15 utility poles. These changes add \$1,065,000 to the cost of the project.															
27	06	Fresno	168	R36.0/65.4	Near Shaver Lake, from west of Prather Pond Road to west of Rancheria Creek Bridge. Repair drainage culverts.	0H11U	6326	0616000132	201.151	2017-18	646 690	6,000	PA&ED PS&E RW Const	1,050 4,460 40 1,370	1,050 506 590 1,370	22.0 Drainage System(s)
	Comments: It was determined that several temporary construction easements are required to provide adequate area for construction equipment to repair the culverts. Furthermore, recent installation of fiber optic will require utility coordination. It's proposed to combine this project with EA 0U090 in the design phase for construction resulting in a savings in design. These changes are a net zero to the cost of the project.															
28	06	Kern	223	21.0/21.3	In and Near Arvin, at Derby Street. Install traffic signals.	0S510	6709	0614000162	201.010	2017-18	74	894 1,246	PA&ED PS&E RW Const	348 775 345 530	348 775 345 530	6.0 Collisions Reduced
	Comments: The condition of the pavement was evaluated early in the design phase and it was determined a portion of the pavement will need to be reconstructed to meet the design life of the project. This change adds \$355,000 to the cost of the project.															

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No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
29	06	Kings	198	R15.5	Near Hanford, at the Hanford-Armona Road Undercrossing. Improve intersection.	0Q320	6651	0613000034	201.010	2017-18	240	2,263	PA&ED	925	925	46.0 Collisions Reduced
												3,200	PS&E	1,475	1,475	
													RW	725	725	
													Const	806	806	
Comments: The construction cost estimate was updated based upon five recently awarded roundabout projects. The analysis shows the complexity of construction staging has resulted in higher unit prices for all roundabout projects. This change adds \$937,000 to the cost of the project.																
30	06	Kings	198	8.3/R19.4	In and near Lemoore and Hanford, from Route 41 to 10th Avenue Undercrossing. Pave areas beyond gore and bridge slopes.	0T290	6737	0615000053	201.235	2018-19	0	3,290	PA&ED	350	350	40.0 Location(s)
											13	4,700	PS&E	950	950	47.0 Location(s)
													RW	40	40	
													Const	500	600	
Comments: A through field review in the environmental phase resulted in additional locations that better meet the need and purpose of the project. In addition, recent unit prices for Minor Concrete has significantly increased which is a major portion of the total estimate. It was also determined that some potholes may be required to identify utilities following a permit search. These changes add \$1,613,000 to the cost of the project.																
31	06	Tulare	190	34.7/39.4 34.7/39.7	Between Springville and Camp Nelson, from east of Balch Park Road to west of Wishon Drive. Replace deteriorated culverts.	0H140	6286	0616000194	201.151	2018-19	246	2,228	PA&ED	800	800	7.0 Drainage System(s)
													PS&E	950	950	
													RW	210	210	
													Const	600	600	
Comments: The project limits need to be adjusted to allow enough area to complete the drainage work. This change does not result in a change of schedule or cost.																
32	07	Los Angeles	14	R25.5/R35.0	In and near Santa Clarita, from north of Sierra Highway to south of Soledad Canyon Road, at various locations. Install storm water mitigation devices.	31230	4833	0715000063	201.335	2017-18	60	44,459	PA&ED	1,310	1,310	55.6 Acres Treated/Pollutant
											702	9,226	PS&E	2,044	3,325	
													RW	42	240	
													Const	2,100	2,100	
Comments: Multiple conflicts with various AT&T cable lines were discovered along with challenging site conditions will require several BMP configuration iterations. There will be several unanticipated utility relocations. Eight Treatment BMP's will be modified to Design Pollution Prevention BMP's due to site conditions resulting in a reduction in construction capital. These changes overall reduce \$3,082,000 to the cost of the project.																

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No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
33	07	Los Angeles	14	35.0/R53.5	Near Santa Clarita and Palmdale at various locations, from south of Soledad Canyon Road to south of Mountain Spring Road. Install storm water mitigation devices.	31280	4838	0715000069	201.335	2017-18	34	8,740 5,628	PA&ED PS&E RW Const	1,310 4,264 20 1,360	1,310 2,351 75 1,360	38.3 Acres Treated/Pollutant 22.2 Acres Treated/Pollutant
	Comments: The scope was further evaluated during the environmental phase and it was determined that several of the proposed BMP's were not feasible due to site conditions, lack of irrigation facilities, soil conditions and hydrology. The reduced performance will be addressed by identifying new BMP locations, within the same watershed, in a future project. The scope of the remaining BMP's need to be changed due to soil conditions, lack of irrigation and limited right of way. In addition, unanticipated utility conflicts need to be resolved and additional surveying is required to complete the design. The overall changes reduces the cost of the project by \$1,940,000.															
34	07	Los Angeles	19	5.5/8.4	In Bellflower, Paramount and Downey, from Rose Avenue to end of route. Upgrade curb ramps and sidewalks to ADA standard. In Bellflower, from 0.04 mile south of Rose Street to Gardendale Street. Relinquish route.	28990	4485	0712000015	201.378 201.160	2016-17	1,500 0	2,910	PA&ED PS&E RW Const	836 1,050 765 1,050	836 1,050 0 0	86.0 Structure(s) 11.5 Lane Miles
	Comments: The Department intends to relinquish (Resolution R-3985; May 2017 CTC) this portion of Route 19 (Lakeview Boulevard) to the City of Bellflower. The program code will change from Americans with Disability Act Pedestrian Infrastructure 201.378 to Relinquishment 201.160.															
35	08	Riverside	10	8.2/R25.1	In and near Beaumont and Banning, from Pennsylvania Avenue to Route 111. Rehabilitate pavement. (G13 Contingency Project)	1C380	0007N	0812000303	201.122	2017-18	25	0	PA&ED PS&E RW Const	5,191 10,591 291 0	5,191 10,591 291 0	153.9 Lane Miles
	Comments: It was determined that a thicker inside shoulder from PM 19.4 to PM 25.1 would allow this segment of the highway to be used as a cross-over lane. The improved construction staging that includes a concrete barrier transition with the cross-over lane would significantly reduce disruption to the traveling public during construction. This change adds \$22,292,000 to the cost of the project.															
36	08	Riverside	60	R6.9/R12.2	In and near the city of Riverside, from west of Valley Way to Routes 60/91/215 Junction. Rehabilitate roadway. (G13 Contingency Project)	0Q753	0038K	0812000108	201.122	2017-18	40	-0	PA&ED PS&E RW Const	849 1,224 30 0	849 1,224 30 0	31.8 Lane Miles
	Comments: Delete project; combined with EA 0Q752 as EA 0Q75U.															

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No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
37	08	Riverside	74	0.0/5.8	Near Lake Elsinore, from the Orange County Line to Monte Vista Street. Widen for standard lane widths and shoulders and construct ground-in rumble strips.	1C850	0050P	0813000047	201.010	2017-18 2019-20	20	53,600	PA&ED	3,934	3,934	298.0 Collisions Reduced
	PS&E	2,590	2,590	RW	20	20	Const	4,985	4,985							
Comments: The project has been delayed for two years due to the Federal Land Transfer process with United States Forest Service (USFS). This would allow the land to belong to FHWA so the Department could be the NEPA lead. The other alternative was to allow USFS to be the NEPA lead which would result in a 4-5 year delay. This change is a two year delay for the project.																
38	08	San Bernardino	60	R4.6/R10.0	In Ontario, from Euclid Avenue to the Riverside County line; also in Riverside County, from the San Bernardino county line to Mission Boulevard (PM R0.0/R3.0). Rehabilitate roadway. (G13 Contingency Project)	0Q752 0Q75U	0224N	0842000106 0817000114	201.122	2017-18	40 48	0	PA&ED	4,549	0	73.2 Lane Miles 105.0 Lane Miles
	PS&E	4,816	6,037	RW	36	70	Const	0	0							
					In Ontario, from Euclid Avenue to Riverside County line; also in Riverside County from San Bernardino County line to Country Village Road (PM R0.0/R3.0) and 0.7 mile west of Valley Way to Junction 60/91/215 (PM R6.9/R12.2). Replacement of two outside lanes and random concrete slabs. (G-13 Contingency Project)				201.XXX (G13)	2017-18	0	86,505 133,242	PA&ED	0	0	
													PS&E	0	0	
													RW	0	0	
													Const	8,325	10,372	
Comments: The two pavement rehabilitation projects EA 0Q752 and EA 0Q753 are adjoined and being combined as EA 0Q75U to reduce overall construction duration, simplify construction coordination and reduce traffic control costs. The increase in construction capital is a result of replacing the existing asphalt concrete outside shoulder with concrete pavement to accommodate traffic during construction of the mainline pavement. The concrete pavement shoulders are also consistent with the existing corridor. The additional right of way costs are a result of further refinement of the ADA ramp scope which will require additional survey data and utility relocation. These changes add \$21,895,000 to the programmed and contingency cost of the project.																
39	08	San Bernardino	40	2.9/3.8	In the cities of Upland, from San Antonio Avenue to Sultana Avenue. Upgrade irrigation systems.	1F450	3002M	0814000227	201.210	2018-19	40	1,541	PA&ED	185	185	19.0 Acres Treated/Pollutant
	PS&E	349	349	RW	40	40	Const	392	392							
Comments: Delete project. By working with local partners the Express Lane project EA 0C250 funded by SBCTA has been accelerated and will include the majority of the irrigation facility upgrades. Any remaining irrigation work will be addressed through a new Minor or Major project.																
40	08	San Bernardino	40	5.9/6.3	In Ontario, from 0.2 mile west to 0.2 mile east of Vineyard Avenue. Upgrade irrigation systems.	1F430	3002N	0814000225	201.210	2018-19	40	1,563	PA&ED	172	172	11.5 Acres Treated/Pollutant
	PS&E	329	329	RW	40	40	Const	382	382							
Comments: Delete project. By working with local partners the Express Lane project EA 0C250 funded by SBCTA has been accelerated and will include the majority of the irrigation facility upgrades. Any remaining irrigation work will be addressed through a new Minor or Major project.																

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No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
41	08	San-Bernardino	40	3.2/3.9	In Upland, from west of Route 83 (Euclid Avenue) to east of Sultana Avenue. Roadside safety improvements.	1C240	3002X	0812000275	201.235	2018-19	7	1,492	PA&ED	290	290	79.0 Location(s)
													PS&E	338	338	
													RW	35	35	
													Const	394	394	
Comments: Delete project. By working with local partners the Express Lane project EA 0C250 funded by SBCTA has been accelerated and will include the roadside safety improvements. The Express Lane project limits fully encompass the roadside safety improvement project so all of the locations will be addressed.																
42	08	San-Bernardino	40	5.9/6.4	In Ontario, from 0.2 mile west to 0.3 mile east of Vineyard Avenue. Roadside safety improvements.	1C250	3002Y	0812000274	201.235	2018-19	7	1,316	PA&ED	256	256	56.0 Location(s)
													PS&E	298	298	
													RW	34	34	
													Const	259	259	
Comments: Delete project. By working with local partners the Express Lane project EA 0C250 funded by SBCTA has been accelerated and will include the majority of the roadside safety improvements. Any remaining locations will be addressed through a new Minor project.																
43	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	-44 585	5,455	PA&ED	270	270	28.0 Collisions Reduced
													PS&E	800	800	
													RW	190	190	
													Const	1,100	1,100	
Comments: The area of disturbance originally developed is not achievable to accommodate the final design of the project. Furthermore, the original estimate assumed joint mitigation among the regulatory agencies. Based upon further evaluation it was determined that exclusive mitigation is now required. The permit fees are considerably higher as a result. These changes add \$541,000 to the cost of the project.																
44	10	Stanislaus	99	R18.1/R20.9	In Modesto, from north of West Modesto Overhead to north of Beckwith Road/Standiford Avenue. Construct acceleration and deceleration lanes at 4 northbound ramps and 2 southbound ramps to reduce collisions.	0V110	3130	1014000158	201.015	2017-18	17	7,407 8,300	PA&ED	685	685	197.0 Collisions Reduced
													PS&E	1,044	1,280	
													RW	34	10	
													Const	1,378	2,400	
Comments: Further analysis during the PA&ED phase has determined that some planned acceleration/deceleration lanes need to be extended farther than originally scoped, also increasing drainage work. In addition, the recent project noise study identifies the need for a soundwall to mitigate noise impacts caused by project improvements. The increased scope requires additional design support costs. Right of Way support was reduced since utilities have been positively identified with no conflicts anticipated. Construction support has increased to accommodate an increase in the project working days due to the addition of the soundwall and greater traffic staging than originally anticipated. Construction capital has increased due to the added soundwall, and added traffic control. This changes adds \$2,133,000 to the cost of the project.																

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No.	Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		Performance	
45	11	San Diego	76	22.2/47.4 22.2/40.0	Near Palomar Mountain State Park, from Gomez Creek Bridge No. 57-0158 to San Luis Rey River Bridge No. 57-0174 at various locations. Bridge rail upgrade. Near Palomar Mountain State Park, from Gomez Creek Bridge No. 57-0158 to La Jolla Amago Creek Bridge No. 57-0169 at various locations. Bridge rail upgrade.	29910	1067	1100000421	201.112	2016-17	0	2,086	PA&ED	400	400	839.0 Linear Feet
													PS&E	1,344	1,344	304.0 Linear Feet
													RW	1	1	
													Const	1,015	1,015	
Comments: The strategy for bridge rail retrofits was recently updated in order to meet new vehicle impact bridge barrier resistance requirements. As a result, this will require bridge deck reconstruction and additional reinforcement to secure the bridge deck reinforcement to the new barriers. Two of the six bridges will be removed from the project because of the increased scope of work. The Pauma Creek Bridge rail upgrade will be completed under EA 42220 and the San Luis Rey River Bridge rail upgrade will be proposed as part of a future SHOPP project. This modification results in no change to the cost of the project.																
46	11	San Diego	79	31.3/49.9 34.2/36.5	In San Diego County, at various locations from Buena Vista Creek Bridge to Chihuahua Creek Bridge. Rehabilitate bridge railing on five bridges. Near Warner Springs, at Canada Verde Creek Bridge and at Agua Caliente Creek Bridge. Rehabilitate bridge railing.	41430	1123	1100000705	201.112	2016-17	0	2,587	PA&ED	330	330	4277.0 Linear Feet
													PS&E	1,326	1,326	507.0 Linear Feet
													RW	0	0	
													Const	892	892	
Comments: The strategy for bridge rail retrofits was recently updated in order to meet new vehicle impact bridge barrier resistance requirements. As a result, this will require bridge deck reconstruction and additional reinforcement to secure the bridge deck reinforcement to the new barriers. This impact to the bridge deck will require continuous single lane traffic control. Three of the five bridges will be removed from the project because of the increased scope of work. The Buena Vista Creek Bridge, Some Creek Bridge and Chihuahua Creek Bridge rail upgrade will be proposed as part of a future SHOPP project. This modification results in no change to the cost of the project.																
47	12	Orange	22	R3.9/R10.8	In the cities of Garden Grove, Orange and Santa Ana, from Route 39 (Beach Boulevard) to Route 5. Modify ramps and add auxiliary lane.	0M900	2941	1213000017	201.010	2017-18	20	10,522	PA&ED	1,641	1,641	1,125.0 Collisions Reduced
													PS&E	2,000	3,000	
													RW	200	200	
													Const	2,100	2,100	
Comments: The preliminary engineering analysis identified the potential bridge vertical clearance and problematic drainage issues. As a result, there is a greater need for more survey data. In addition, the traffic handling and stage construction is more complex and will require greater detail. These changes add \$1,000,000 to the cost of the project.																
48	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	220	220	2,216.0 1000 Vehicle Hours/Yr
										2019-20			PS&E	3,500	3,500	
													RW	2,700	2,700	
													Const	2,800	2,800	
Comments: The project is within the same project limits as OCTA's major widening project EA 0J340. It's proposed to accelerate EA 0J340 one year to FY 19-20 and delay EA 0G950 one year so the projects can be combined for construction under EA 0J34U to improve the efficiency within the corridor, minimize disturbance to the traveling public, reduce potential contractor cooperation risks and result in lower costs through economy of scale.																

**2016 SHOPP Amendment 16H-012
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		
49	12	Orange	133	3.1/3.6	In Laguna Beach, from 1,700 feet south to 1,300 feet north of El Toro Road. Extend lanes in both directions.	0N060	4793	1213000097	201.010	2017-18	1,230	3,870	PA&ED	1,215	1,215	65.0	Collisions Reduced
										2019-20			PS&E	1,820	1,820		
													RW	550	550		
													Const	1,306	1,306		
<p>Comments: This project is within the same project limits as a locally funded Orange County project EA 0P940 to add shoulders for bike lanes and underground utilities. It is proposed to combine with EA 0P940 and include SHOPP drainage improvement project EA 0Q360 to modify drainage systems within the same project limits for construction under EA 0P94U. The combined project EA 0P94U will result in a two year delay to EA 0N060 but will minimize construction impacts, eliminate redundant work, coordinate utility under-grounding with drainage systems and result in better bid prices because of economy of scale.</p>																	

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 1112	01-DN-101 12.0/15.5 0F280 01 1500 0099	Near Crescent City at Last Chance Grade, from Wilson Creek Bridge to 3.8 miles north of Wilson Creek Bridge. Permanent roadway restoration and realignment. PA&ED and R/W funds are requested for geotechnical evaluation of the current seven alternatives and for the environmental clearance needed to perform geotechnical work. PA&ED: 08/31/2018 R/W: TBD RTL: TBD BC: TBD	*\$75 (R/W) TBD (C)	30-31	*PA&ED PS&E RW Sup Con Sup <u>Total</u> \$5,000 TBD TBD TBD	201.131 Assembly: 2 Senate: 2 Congress:2 1 Location(s)
Note: * PA&ED and R/W are only authorized phases. Approximate project estimates: PA&ED \$52,600,000, R/W \$89,600,000, Const. \$1,610,000,000.						
2 2301B	01-Hum-101 M53.9 0A111 01 1600 0148	In Rio Dell, at Eel River Bridge No. 04-0016R. Seismic retrofit. PA&ED: 05/01/2021 R/W: 08/01/2022 RTL: 08/01/2022 BC: 01/01/2023	\$44 (R/W) \$26,813 (C)	22-23	*PA&ED PS&E RW Sup Con Sup <u>Total</u> \$5,433 \$5,113 \$216 \$4,632 \$15,394	201.113 Assembly: 1 Senate: 2 Congress:1 1 Bridge(s)
Note: * PA&ED and R/W are only authorized phases. All other phases are preliminary estimates for information only.						

TBD = To Be Determined