

# Memorandum

# TAB 56

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: December 7-8, 2016

Reference No.: 2.1a.(1) – **REPLACEMENT ITEM**  
Action Item

From: NORMA ORTEGA  
Chief Financial Officer

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Division of  
Transportation Programming

Subject: **SHOPP AMENDMENT 16H-009**

## **RECOMMENDATION:**

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) approve the requested State Highway Operation and Protection Program (SHOPP) Amendment 16H-009; in accordance with Senate Bill 486 which requires the Commission to approve any changes or new projects amended into the SHOPP.

## **ISSUE:**

Since the October 2016 report to the Commission, the Department recommends 21 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, Roadway Preservation, Mobility 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	9	\$18,626			\$549
Collision Reduction	9		\$8,767	\$3,000	\$20,063
Roadside Preservation	2		\$9,360	\$2,474	
Mobility	1			\$13,281	
Total Amendments	21	\$18,626	\$18,127	\$18,755	\$20,612

The Department also recommends the revisions to capital projects, as summarized in Attachment 2 will 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 amends 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

**REPLACEMENT ITEM****List of New 2016 SHOPP Capital Project Amendments**

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						
4653	1-Men-101 R24.5  0G560 01 1700 0020	In Ukiah, at East Perkins Street Overcrossing No. 10-0193. Repair bridge from high load hit, four of six concrete girders have been struck.	\$10 (R/W) \$1,100 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total	\$0 \$0 \$10 \$75 \$85 201.130 Assembly: 1 Senate: 2 Congress: 1  1 Location
9057	3-Yol-84 13.3/15.7  2H260 03 1700 0087	Near the city of West Sacramento, from Levee Road (South) to End of Route 84. Reconstruct failed roadway section and install geotextile fabric for soil stabilization.	\$1,230 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total	\$10 \$0 \$0 \$100 \$110 201.130 Assembly: 8 Senate: 5 Congress: 1  1 Location
1499D	4-SCI-17 3.1  4J020 04 1500 0244	Near Los Gatos, approximately 0.3 mile south of Alma College Road. Modify drainage system and repair slope washout.  PAED: 10/09/2018 R/W: 02/11/2020 RTL: 03/10/2020 BC: 07/14/2020	\$20 (R/W) \$529 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total	\$500 \$375 \$24 \$322 \$1,221 201.131 Assembly: 28 Senate: 15 Congress: 18  1 Location
1498E	4-SCI-280 Var  1K520 04 1600 0257	In San Jose at various locations, the Southwest Expressway pump station (PM 2.9), Bird Avenue pump station (PM 3.8) and Menker Avenue pump station (PM 4.4); also in San Mateo County, at Ravenswood pump station (PM 28.0). Replace and/or repair failed pump station components.	\$2,220 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total	\$0 \$0 \$0 \$560 \$560 201.130 Assembly: 19, 21, 23, 24 Senate: 11, 13 Congress: 14, 15, 16  4 Locations
1453M	4-SM-101 11.9  3K130 04 1700 0093	In the city of San Mateo, at Route 92/101 Separation No. 35-0252R. Replace failed bridge joint seal.	\$500 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total	\$0 \$0 \$0 \$225 \$225 201.130 Assembly: 19 Senate: 8 Congress: 12  1 Location
6817	6-Ker-155 45.9/R57.6  0V690 06 1700 0064	Near Lake Isabella, in Sequoia National Forest boundaries, 13.4 miles west of Route 155/178 Junction. Remove and dispose of hazardous trees and fire fuel.	\$50 (R/W) \$4,000 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total	\$0 \$200 \$75 \$900 \$1,175 201.130 Assembly: 32 Senate: 18 Congress: 22  1 Location
3006E	8-SBd-15 14.8/32.5  1H371 08 1700 0029	Near San Bernardino, from Glen Helen Parkway to Route 15/395 Junction. Replace fire damaged guard rail with steel posts, clear drainage basin debris, and install erosion control.	\$2,400 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total	\$0 \$100 \$0 \$350 \$450 201.130 Assembly: 65 Senate: 31, 32 Congress: 26, 43  1 Location

**List of New 2016 SHOPP Capital Project Amendments**

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.)						
3212	10-SJ-99 0.0/38.7  1F270 10 1600 0059	On Route 99 in San Joaquin, Stanislaus and Merced Counties, at various locations. Remove and trim dead or drought damaged trees. PAED: 03/03/2017 R/W: 04/07/2017 RTL: 05/05/2017 BC: 08/18/2017	\$10 (R/W) \$6,006 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$141 \$363 \$14 \$1,809 \$2,327	201.131 Assembly: 10 Senate: 5 Congress:11  5165 Location(s)
1249	11-SD-15 R8.7  42910 11 1700 0047	In the city of San Diego, at 0.3 mile north of Aero Drive. Repair corroded 60-inch culvert, repair pavement section, and install erosion control measures.	\$1,100 (C)	16/17	PA & ED PS & E RW Sup Con Sup Total \$0 \$150 \$0 \$250 \$400	201.130 Assembly: 76 Senate: 36, 39 Congress: 52  1 Location
Collision Reduction						
3653	2-Tri-36 R34.7/R35.3  2H050 02 1600 0093	Near Platina, from 3.7 miles to 3.0 miles west of Hayfork Creek Bridge. Curve improvement. PAED: 02/11/2019 R/W: 01/24/2020 RTL: 02/26/2020 BC: 09/15/2020	\$52 (R/W) \$5,280 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$760 \$1,130 \$130 \$1,680 \$3,700	201.010 Assembly: 2 Senate: 2 Congress:2  12 Collisions reduced
1491G	4-Ala-880 20.9  4J730 04 1600 0001	In San Leandro, at the southbound Route 880/238 connector off-ramp to Washington Avenue. Reconstruct and signalize off-ramp. PAED: 07/01/2018 R/W: 04/01/2020 RTL: 06/01/2020 BC: 11/02/2020	\$150 (R/W) \$3,445 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$1,200 \$1,250 \$125 \$1,250 \$3,825	201.010 Assembly: 18 Senate: 9 Congress:13  74 Collisions reduced
2673	5-Mon-101 PM R41.6/47.7  1H620 05 1600 0104	Near King City, from 0.3 mile south of Jolon Undercrossing to Teague Avenue. Install median barrier, widen inside shoulders and include rumble strip. PAED: 10/06/2016 R/W: 01/02/2018 RTL: 06/27/2018 BC: 02/22/2019	\$5 (R/W) \$6,510 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total \$0 \$1,415 \$51 \$1,834 \$3,300	201.010 Assembly: 30 Senate: 12 Congress: 17  41 Collisions reduced
2625	5-SCr-129 PM 1.4  1G990 05 1600 0010	Near Watsonville, at Lakeview Road. Construct roundabout and improve street lighting. PAED: 11/01/2017 R/W: 04/01/2020 RTL: 06/01/2020 BC: 12/01/2020	\$684 (R/W) \$4,481 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$782 \$1,341 \$441 \$1,335 \$3,899	201.010 Assembly: 30 Senate: 17 Congress: 20  46 Collisions reduced

**REPLACEMENT ITEM****List of New 2016 SHOPP Capital Project Amendments**

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.)						
6792	6-Ker-Var Var  0V300 06 1600 0129	Near Taft, on Routes 33 and 119 at various locations. Construct centerline rumble strips. PAED: 10/27/2016 R/W: 06/01/2017 RTL: 09/01/2017 BC: 02/01/2018	\$5 (R/W) \$1,100 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total \$0 \$680 \$5 \$380 \$1,065	201.010 Assembly: 34 Senate: 16 Congress: 23  25 Collisions reduced
6804	6-Kin-43 PM 3.7/18.0  0T950 06 1500 0119	In Kings County, from 1.4 miles south of Nevada Avenue to 0.2 mile south of Route 198 Junction; also on Route 43 (PM 22.3/27.3) and Route 33 (PM 0.0/7.8). Construct ground-in centerline and shoulder rumble strips. PAED: 09/22/2016 R/W: 08/01/2017 RTL: 09/18/2017 BC: 03/26/2018	\$2 (R/W) \$782 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total \$0 \$430 \$20 \$350 \$800	201.010 Assembly: 32 Senate: 16 Congress: 21  26 Collisions reduced
3005N	8-Riv-215 R12.7/R15.0  1G870 08 1600 0094	In Murrieta, from 0.2 mile north of Clinton Keith Road Overcrossing to 0.5 mile south of Scott Road Overcrossing. Install concrete barrier at edge of shoulder. PAED: 05/10/2017 R/W: 07/11/2018 RTL: 08/10/2018 BC: 02/15/2019	\$10 (R/W) \$2,990 (C)	18/19	PA & ED PS & E RW Sup Con Sup Total \$600 \$732 \$10 \$770 \$2,112	201.010 Assembly: 67 Senate: 23, 28 Congress: 42  23 Collisions reduced
3006F	8-SBd-18 97.0/99.5  1E060 08 1300 0140	In Victorville, from Amargosa Road to Cobalt Road. Construct raised curb median. PAED: 07/30/2018 R/W: 04/30/2020 RTL: 05/30/2020 BC: 09/30/2020	\$884 (R/W) \$5,087 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total \$920 \$1,150 \$480 \$1,050 \$3,600	201.010 Assembly: 33 Senate: 21 Congress: 8  25 Collisions reduced
3216	10-SJ-99 5.3/5.7  1F730 10 1600 0144	In Manteca, from 0.4 mile to 0.8 mile north of Austin Road. Install median barrier. PAED: 05/01/2017 R/W: 12/01/2017 RTL: 03/01/2018 BC: 06/15/2018	\$2 (R/W) \$361 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total \$129 \$307 \$2 \$206 \$644	201.010 Assembly: 10, 17 Senate: 5 Congress: 11  3 Collisions reduced

**List of New 2016 SHOPP Capital Project Amendments**

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.	
Roadway Preservation							
6286	6-Tul-190 34.7/39.4  0H140 06 1600 0194	Between Springville and Camp Nelson, from east of Balch Park Road to west of Wishon Drive. Replace deteriorated culverts.  PAED: 07/15/2018 R/W: 03/01/2019 RTL: 04/01/2019 BC: 12/01/2019	\$246 (R/W) \$2,228 (C)	18/19	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$800 \$950 \$210 \$600 <hr/> \$2,560	201.151 Assembly: 26 Senate: 16 Congress:23  7 Drainage systems
1192	11-SD-5 R37.7/R48.9  42260 11 1500 0183	In San Diego County, from 0.3 mile north of Lomas Santa Fe Drive Undercrossing to 0.2 mile north of Agua Hedionda Lagoon Bridge. Rehabilitate culverts. The project will be combined with I-5 NCC HOV Extension Phase 1 11-2T210, PPNO 0615C (STIP) for construction.  PAED: 06/29/2016 R/W: N/A RTL: N/A BC: 09/22/2017	\$ 9,360 (C)	17/18	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$0 \$0 \$0 \$2,675 <hr/> \$2,675	201.151 Assembly: 76 Senate: 36 Congress:49  30 Drainage systems
Mobility							
0012B	4-Ala-880 4.6/7.4  15148 04 000 0421	In Fremont, from Auto Mall Parkway to Mowry Avenue; also, in Newark on Route 84 from Thornton Avenue to Newark Boulevard (PM R3.8 to R4.9). Widen ramps and install ramp metering.  PAED: 06/05/2014 R/W: 06/30/2018 RTL: 08/01/2018 BC: 02/01/2019	\$13,281 (C)	18/19	PA & ED PS & E RW Sup Con Sup <hr/> Total	\$0 \$0 \$0 \$2,741 <hr/> \$1,221	201.315 Assembly: 25 Senate: 10 Congress:15,17  9 Field elements

2016 SHOPP Amendment 16H-009 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		Quantity	Perf Measure	
1	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	<del>2017/18</del> 2019/20	4,638	0	PA&ED PS&E RW Const	5,800 5,593 810 0	5,800 5,593 810 0	Bridge(s)	1.00
<b>Comments:</b> Additional time is required to complete the project due to delays to the environmental studies and completion of the PA&ED milestone. Delays are a result of difficulty acquiring access to adjacent private property to complete studies, regulatory agencies requiring further studies of an endangered butterfly related to drought conditions, lead contamination present at the site and in groundwater and the need to define the contamination limits, and delays to on-going consultations with regulatory agencies on environmental impacts. These changes will move the schedule to FY 19/20.																	
2	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	<del>2017/18</del> 2019/20	5,101	0	PA&ED PS&E RW Const	5,500 5,220 828 0	5,500 5,220 828 0	Bridge(s)	1.00
<b>Comments:</b> Additional time is required to complete the project due to delays to the environmental studies and completion of the PA&ED milestone. Delays are a result of difficulty acquiring access to adjacent private property to complete studies, regulatory agencies requiring further studies of an endangered butterfly related to drought conditions, arsenic contamination present at the site and the need to define the contamination limits, and delays to on-going consultations with regulatory agencies on environmental impacts. These changes will move the schedule to FY 19/20.																	
3	01	Mendocino	Var	Var	On Route 101, in Willits; on Route 128, 34.1 miles west of Ukiah; also on Route 20, 8.5 miles east of Route 101/20 Junction. Scour mitigation.	0C430	4572	0112000293	201.111	2016/17	239	518	PA&ED PS&E RW Const	299 569 146 446	550 462 146 446	Bridge(s)	3.00
<b>Comments:</b> Revision to Amendment 16H-003, previously approved PA&ED and PS&E components under Reference 4.8 (Resolution G-16-22) at the June 29-30, 2016 CTC meeting. The error was requesting the wrong component for the increase. This correction re-establishes the previously programmed amount for PS&E Support and revises the programmed amount for the correct component, PA&ED support, that was intended to be done in Resolution G-16-22.																	
4	02	Modoc	299	23.3	Near Canby, at Caldwell Creek Bridge No. 03-0028. Replace bridge.	4F570	3513	0213000008	201.111	2017/18	<del>50</del> 35	<del>4,770</del> 1,850	PA&ED PS&E RW Const	572 704 70 879	572 704 70 985	Bridge(s)	1.00
<b>Comments:</b> Combine Project EA 4F570 and EA 4F770 for construction under project EA 4F77U (EFIS ID 0217000022). Combining projects will improve worker safety and traveler impacts during construction. Cost increases to right of way and construction capital, and to construction support. Increases are due to new assumption in use of consultants for construction support, revised quantities now that surveying has been conducted, newly identified biological impacts to wetlands and badger habitat, and additional utility relocations. These changes add \$171,000 to the cost of the project.																	
5	02	Modoc	299	<del>24.5/33.5</del> 23.1/33.5	Near Alturas, <del>from 1.4 miles east from 0.3 mile west of</del> Caldwell Creek Bridge to 1.7 miles west of County Road 75. Rehabilitate roadway.	4F770	3522	0213000031	201.120	2017/18	<del>28</del> 340	<del>4,097</del> 14,100	PA&ED PS&E RW Const	750 760 50 4,669	750 760 50 2,295	Lane Miles	18.70
<b>Comments:</b> Combine Project EA 4F570 and EA 4F770 for construction under project EA 4F77U (EFIS ID 0217000022). Combining projects will improve worker safety and traveler impacts during construction. Cost increases to right of way and construction capital, and to construction support. Increases are due to new assumption in use of consultants for construction support, revised quantities now that surveying has been conducted, newly identified biological impacts to wetlands and badger habitat, and additional utility relocations. These changes add \$3,960,000 to the cost of the project.																	
6	02	Tehama	36	36.4/36.8	Near Red Bluff, from Nevis Road to 0.5 mile east of Nevis Road. Improve curve.	0H110	3590	0215000053	201.010	2017/18	<del>75</del> 259	<del>4,426</del> 2,150	PA&ED PS&E RW Const	579 574 150 604	579 574 150 604	Collisions Reduced	14.00
<b>Comments:</b> Increase to construction capital due to the need for wider shoulders than originally planned. Updated traffic census numbers have identified wider 8 foot shoulders are now appropriate. Also, the roadway section depth has increased due to results of recent materials report. Floodplain and hydraulics reports identify the need to raise the roadway and increase the culvert sizes. Wider shoulders result in additional parcels needed, and utility relocation costs have increased; both items increase right of way capital amount. The Right of Way Support cost will be addressed using the Commission delegated G-12 process. These changes add \$908,000 to the cost of the project.																	

2016 SHOPP Amendment 16H-009  
 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	Quantity	Perf Measure	
7	03	Glenn	162	76.7 76.3/78.6	Near Butte, at Sacramento Bridge No. 11-0017. Seismic retrofit. (G13 Contingency Project)  At Butte City, from Route 45 to 0.1 mile east of McDougall Street. Replace Sacramento River Bridge No. 11-0017. (G13 Contingency Project)	3F060	2633	0312000052	201.113	<del>2018/19</del> 2019/20	1,000	0	PA&ED 2,000 PS&E 3,500 RW 600 Const 0	2,000 3,500 600 0	Bridge(s)	1.00
<p><b>Comments:</b> The Department, with input from the public and community leaders, reevaluated the project with the emphasis on reducing community impacts. At the same time, a more detailed geotechnical investigation findings became available which identified the alternative to fully replace the bridge. Prior scope was to replace steel truss portion only on current alignment. Replacement on new alignment will allow route to remain open without need for 34 mile detour for emergency services, business and farming needs, schools and commuters. This contingency project will have a fiscal year change and cost increase to the contingent Construction Capital and Construction Support amount. The total contingent amount added to the project is \$53,000,000.</p>																
8	03	Sutter	20	5.0/11.3	Near Yuba City, from east end of Sutter Bypass to Lytle Road. Rehabilitate roadway, widen shoulders, and replace Wadsworth Canal Bridge No.18-0003. (G13 Contingency Project)	1A920	8132	0300020608	201.120	2017/18	650 1,248	0	PA&ED 2,000 PS&E 1,809 RW 254 Const 0	2,000 1,809 1,323 0	Lane Miles	11.40
<p><b>Comments:</b> During PA&amp;ED phase, scope refinement changed the number of parcels needed for right of way acquisition and mitigation from 8 to 28 parcels. This change is needed to maintain current standards for side slopes and accommodate the relocation of roadside ditches. Also, the replacement bridge will now be constructed on new alignment to avoid local road detours and make construction more efficient. Additional cost increases are needed to the right of way capital and support, and contingent Construction Capital amounts. This change adds \$1,670,000 to the programmed portion of the project and \$1,904,000 to the contingent portion of the project.</p>																
9	04	Alameda	680	M0.0/R21.8 M4.0/R21.8	In and near Fremont, Pleasanton, and Dublin, from south of Scott Creek Road Auto Mall Parkway to north of Alcosta Boulevard. Ramp metering.	4G412 4G115	0521K	0444000304 0417000130	201.315	2017/18	380 523	48,240 14,000	PA&ED 0 PS&E 0 RW 50 Const 2,600	0 0 50 2,800	Field Elements	16.00 14.00
<p><b>Comments:</b> This project was shelved for two years due to negotiations with Metropolitan Transportation Commission (MTC) to resolve cost increases to PA&amp;ED and PS&amp;E support costs. An agreement has now been reached. The parent Project EA 4G112 has an increase in construction capital due to item unit cost increases over the two year delay and cost increases associated with a longer construction duration. Construction support has increased due to salary increases during the two year delay, longer construction duration that increased from one season to two, and more extensive biological monitoring. The increase in right of way capital is due to higher environmental mitigation costs and permit fees. These changes add \$6,483,000 to the cost of the parent Project EA 4G112. The cost increases for each component are reflected in the combined totals of the two new child projects, EA 4G115 and EA 4G114.</p> <p>Split parent Project EA 4G112 into child Project EA 4G115 and child Project EA 4G114. This split is necessary for child Project EA 4G114 to be combined with another project in the current fiscal year (2016/17), which has overlapping project limits. Combining work under one construction contract will eliminate contractor conflicts, minimize rework at site, and reduce impacts to the travelling public.</p>																
10	04	Alameda	680	M0.0/M4.0	In Fremont, from south of Scott Creek Road to Auto Mall Parkway. Ramp metering.	4G114	0521M	0417000129	201.315	2016/17	180	8,500	PA&ED 0 PS&E 0 RW 0 Const 1,700	0 0 0 1,700	Field Elements	2.00
<p><b>Comments:</b> Project split from parent Project EA 4G112. This split is necessary for child Project EA 4G114 to be combined with another project in the current fiscal year (2016/17), which has overlapping project limits. Combining work under one construction contract will eliminate contractor conflicts, minimize rework at site, and reduce impacts to the travelling public.</p>																
11	04	Contra Costa	24	1.0/R2.5	In Orinda and Lafayette, from east of the Caldecott Tunnel to east of Camino Pablo and at Acalanes Road (PM R4.2/R4.99); also in Oakland on Route 13, at Redwood Road (PM 5.2/5.5). Install safety lighting.	1J990	1418C	0414000411	201.010	<del>2017/18</del> 2018/19	313	2,955	PA&ED 736 PS&E 420 RW 64 Const 480	736 420 64 480	Collisions Reduced	65.00
<p><b>Comments:</b> The project was erroneously programmed into FY 17/18, different than the schedule established in the Project Initiation Document (PID). As per the PID schedule, this project requires two seasons for the environmental studies to be completed. Therefore, this change will move the schedule to FY 18/19.</p>																



2016 SHOPP Amendment 16H-009  
 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	Quantity	Perf Measure		
12	04	Marin	1	28.5	Near Point Reyes Station, at Lagunitas Creek Bridge No. 27-0023. Replace bridge. (G13 Contingency Project)	0G642	0756K	0413000350	201.113	<del>2018/19</del> 2019/20	2,691	0	PA&ED PS&E RW Const	2,300 1,400 685 0	2,300 1,400 685 0	Bridge(s)	1.00
									201.XXX (G13)	<del>2018/19</del> 2019/20	0	11,552	PA&ED PS&E RW Const	0 0 0 1,756	0 0 0 1,756		
<p><b>Comments:</b> Additional time is required to complete the project due to delays to the environmental studies and the PA&amp;ED milestone. Delays are a result of community input for pedestrian and bicycle access resulting in wider shoulders for an adjacent 400 foot long roadway segment, and subsequent lengthening of an existing box culvert. Changes impact biological habitat and require further evaluations. Public input and impacts on right of way require further study of viability to retrofit bridge instead of replacement. Also, there is a concurrent COS supplemental request for a cost increase to PA&amp;ED support. These changes will move the schedule to FY 19/20.</p>																	
13	04	Napa	121	0.7	Near Napa, at Huichica Creek (PM 0.75). Roadway widening.	4G210	0775G	0412000310	201.010	<del>2017/18</del> 2018/19	220	8,700	PA&ED PS&E RW Const	1,750 1,530 90 900	1,750 1,530 90 900	Collisions Reduced	13.00
<p><b>Comments:</b> Additional time is required to complete the project due to delays to the environmental studies and completion of PA&amp;ED. Delays are caused by project modifications to provide fish passage, shrimp habitat and to protect archeological resources. Furthermore, time was necessary to devise the construction staging methods complicated by the proximity of private driveways, and to secure three necessary parcels. These changes will move the schedule to FY 18/19.</p>																	
14	04	Sonoma	116	31.0/31.3	Near Sebastopol, at the intersection of Route 116 and Llano Road. Construct left-turn and merge lanes.	4G380	0817Q	0412000463	201.010	2017/18	<del>76</del> 125	<del>4,646</del> 6,446	PA&ED PS&E RW Const	1,197 729 200 899	1,197 1,500 200 1,200	Collisions Reduced	54.00
<p><b>Comments:</b> The scope is changing from a reinforced concrete box to single-span bridge as required by resource agencies to enhance the creek flow and improve fish and shrimp habitat. Recent findings established that the creek could support shrimp year round. Additional design support, construction support, right-of-way capital, and construction capital is needed for the new bridge scope, hydraulic studies, biological assessment, revalidation of the environmental document, design of an added retaining wall, construction support over two seasons, and other associated costs and permit fees. These changes add \$3,031,000 to the cost of the project.</p>																	
15	05	Monterey	183	<del>R1.8/R8.6</del> R2.0/R8.6	In and near Salinas, from Davis Road to Blackie Road. Install centerline and shoulder rumble strips.	1G390	2597	0515000008	201.010	<del>2017/18</del> 2016/17	0	1,390	PA&ED PS&E RW Const	280 473 35 297	280 473 35 297	Collisions Reduced	23.00
<p><b>Comments:</b> The postmile limits will be changed from R1.8/R8.6 to R2.0/R8.6. The work within the removed limits is being performed under another project. Additional time estimated for railroad involvement is no longer required. Therefore the project will be accelerated by one year to FY 16/17. This change is a net zero cost change to the project.</p>																	
16	05	San Benito	25	<del>R25.9/R26.2</del> 25.9/26.3	Near Hollister, from 0.1 mile south of La Gloria Road to 0.2 mile north of La Gloria Road. Realign roadway.	1C260	2379	0512000108	201.015	2017/18	<del>489</del> 356	<del>4,589</del> 2,750	PA&ED PS&E RW Const	1,044 4,207 493 539	1,044 1,647 242 1,030	Collisions Reduced	3.00
<p><b>Comments:</b> Preliminary design has identified increases in earthwork, drainage scope, biological monitoring and landscape mitigation. There were also unanticipated permit fees and increases in purchasing environmental mitigation credits for the California Tiger Salamander. These changes add \$2,326,000 to the cost of the project.</p>																	
17	05	Santa Cruz	9	22.1/23.8	In Castle Rock State Park, from 5 miles south to 3.3 miles south of Route 35. <del>Widen shoulders, replace guardrail and construct centerline rumble strips.</del> Construct centerline rumble strips, widen shoulders, and replace guardrail and super elevation corrections.	1C650	2418	0512000185	201.015	2017/18	<del>49</del> 20	7,658	PA&ED PS&E RW Const	1,938 1,842 -44 1,687	1,938 1,842 63 1,687	Collisions Reduced	73.00
<p><b>Comments:</b> The scope was refined to include additional super elevation corrections as a result of more detailed analysis of collision history and roadway geometrics. This work will require positive location for a known fiber optic line. This change adds \$29,000 to the cost of the project.</p>																	

2016 SHOPP Amendment 16H-009  
 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	Quantity	Perf Measure		
18	05	San Luis Obispo	1	R67.2 R66.9/R67.2	Near San Simeon, north of the Arroyo De La Cruz Bridge. Off-site landscape mitigation for PPNO 4928A. Near San Simeon, from the Arroyo de la Cruz Bridge to 0.3 mile north of the Arroyo de la Cruz Bridge. Planting, wetland and California Red-legged Frog mitigation.	49284 49285	4928Y	0516000029 0517000046	201.160	2016/17 2019/20	0 11	7,796 7,464	PA&E PS&E RW Const	0 4,199 56 3,022	0 1,057 56 2,424	Location(s)	1.00
<b>Comments:</b> Parent project to be split into child projects EA 49283, EA 49284 and EA 49285. Environmental permits require native seed for erosion control and plant propagation and must be collected in southern Monterey, San Luis Obispo and Santa Barbara Counties below 1,000 foot elevation. The final mitigation project EA 49281 PPNO 4928Y requires two separate projects EA 49283 PPNO 4928W and EA 49284 PPNO 4928X because of the time required for seed collection, propagation and plant cuttings. The project split is a net zero cost change to the project.																	
19	05	San Luis Obispo	1	R66.9/R67.2	Near San Simeon, from the Arroyo de la Cruz Bridge to 0.3 mile north of the Arroyo de la Cruz Bridge. Native seed collection and propagation.	49283	4928W	0517000044	201.150	2016/17	0	180	PA&E PS&E RW Const	0 32 0 369		Location(s)	1.00
<b>Comments:</b> Project split from EA 49281 PPNO 4928Y for native seed collection and propagation.																	
20	05	San Luis Obispo	1	R66.9/R67.2	Near San Simeon, from the Arroyo de la Cruz Bridge to 0.3 mile north of the Arroyo de la Cruz Bridge. Plant propagation.	49284	4928X	0517000045	201.150	2018/19	0	140	PA&E PS&E RW Const	0 110 0 229		Location(s)	1.00
<b>Comments:</b> Project split from EA 49281 PPNO 4928Y for plant propagation.																	
21	07	Ventura	1	28.2	Near Sea Cliff, at Willow Creek Bridge No. 52-003; also in Ojai, on Route 33 at North Fork Matilija Bridges No. 52-0044 (PM 15.8) and No. 52-0173 (PM16.1). Upgrade bridge railings to meet current standards.	29650	4601	0713000099	201.112	2019/20	757	2,530	PA&E PS&E RW Const	442 1,360 7 1,420	958 1,360 61 1,420	Linear Feet	800.00 724.00
<b>Comments:</b> The project was programmed anticipating support to address consultation, permitting and approval from various environmental agencies. However, the environmental permit requirements have now been determined to be much more extensive than in the planning phase. This bridge also needs additional right of way support for unexpected temporary construction easements, utilities relocation and railroad permit. These changes add \$870,000 to the cost of the project.																	
22	07	Ventura	23	R3.3/R11.5	In and near cities of Thousand Oaks and Moorpark, from Route 101 to Route 118. Rehabilitate pavement.	30250	4688	0713000479	201.122	2019/20	860	77,032	PA&E PS&E RW Const	355 2,650 100 6,700	889 2,650 100 6,700	Lane Miles	57.00
<b>Comments:</b> The existing base mapping that was utilized in the project initiation phase has been determined to be obsolete. Therefore, additional support is required for survey work and preliminary design of curb ramps is required. This change adds \$534,000 to the cost of the project.																	
23	08	Riverside	10	27.7	Near Palm Springs, at Whitewater River Bridge No. 56-0004 L/R. Bridge rehabilitation and scour mitigation.	1E570	3002F	0814000051	201.110	2018/19	20	10,431	PA&E PS&E RW Const	290 1,645 8 2,076	953 1,645 8 2,076	Bridge(s)	2.00
<b>Comments:</b> It was determined the vertical clearance under the bridge is not sufficient for construction equipment access. Therefore, an access road is required on the south side of the freeway which enlarges the environmental study area. The Project Development Team also decided to advance the geotechnical studies in order to streamline the design. These changes add \$663,000 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		Quantity	Perf Measure	
24	08	Riverside	74	37.7/44.7	In Hemet, from West Acacia Avenue to Ramona Expressway. Construct raised median curb.	1E460	3001J	0814000026	201.010	2017/18	49 131	<del>5,297</del> 9,328	PA&ED PS&E RW Const	500 1,070 49 4,270	500 1,070 300 1,670	Collisions Reduced	70.00
<p><b>Comments:</b> The Project Report was completed and identified additional capital is needed to provide widening at six intersections to allow U-turns. This additional scope is a result of community coordination with the city and local businesses. Following the completion of the Project Report it was determined more support is required for the additional scope of work. This change adds \$4,932,000 to the cost of the project.</p>																	
25	08	San Bernardino	60	0.9/2.9	In Chino, at Pipeline Avenue Overcrossing (OC) No. 54-0744, Monte Vista Avenue OC No. 54-0746, and Benson Avenue OC No. 54-0748. Replace bridges. (G13 Contingency Project)	0F030	0033E	0800020358	201.110	2017/18	3,912	0	PA&ED PS&E RW Const	2,243 <del>2,246</del> 1,030 0	2,243 3,320 1,030 0	Bridge(s)	3.00
									201.XXX (G13)	2017/18	0	<del>19,560</del> 20,472	PA&ED PS&E RW Const	0 0 0 3,740	0 0 0 4,253		
<p><b>Comments:</b> Preliminary design has determined the vertical clearance of the proposed box girder structure over SR-60 is not sufficient. The structure also contains a 36 inch gas line. In order to provide standard vertical clearance and maintain the existing roadway alignment, the Project Development Team decided to use a Precast/Pre-stressed/Post-Tension wide flange girder. This change adds \$1,074,000 to the programmed portion of the project and \$1,425,000 to the contingent portion of the project.</p>																	