2.1a.(2a)

SHOPP AMENDMENT TO ADD PROJECTS TO THE 2016 SHOPP AND REVISE PROJECTS CURRENTLY PROGRAMMED IN THE 2016 SHOPP

THIS ITEM IS BEING REVISED.

The Book Item attached is the most current version available at the time of posting; however, this version will be replaced when the Revised Book Item becomes available.

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

M e m o r a n d u m

TAB 66

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: June 29-30, 2016

Reference No.: 2.1a.(2a) – ***REPLACEMENT ITEM***
Action Item

From: NORMA ORTEGA
Chief Financial Officer

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

Subject: **SHOPP AMENDMENT 16H-002**

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-002; in accordance with Senate Bill 486 which requires the Commission to approve any changes or new projects amended into the SHOPP.

ISSUE:

Since the May 2016 report to the Commission, the Department recommends 12 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, Safety Improvement, 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	3		$1,210		$17,312
Collision Reduction	9		$3,741	$3,471	$34,373
Total Amendments	12		$4,951	$3,471	$51,685

The Department also recommends that the 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

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.
Major Damage Restoration							
5036	7-LA-47 0.8 32610 07 1600 0112	In San Pedro, at the Park and Ride lot, near the eastbound Harbor Boulevard off-ramp. Construct solder pile wall to stabilize the existing eroding slope and repair drainage system. PAED: 01/15/17 R/W: 07/01/17 RTL: 07/31/17 BC: 01/2/18	$ 10 (R/W) $ 1,200 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total	$79 $459 $10 $390 $938	201.131 Assembly: 54 Senate: 28 Congress:36 1 Location
3002U	8-RIV-95 14.0/36.2 1G000 08 1500 0107	Near Blythe, from north of Palo Verde Dam Road to the San Bernardino County line. Restore storm eroded embankments with rock slope protection and replace culverts. A previous Emergency Opening EA 08-1F800 repaired roadway. PAED: 08/01/18 R/W: 12/02/19 RTL: 03/02/20 BC: 12/01/20	$ 600 (R/W) $ 8,170 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total	$926 $901 $63 $2,462 $4,352	201.131 Assembly: 56 Senate: 28 Congress:36 20 Locations
3005P	8-SBd-62 124.0/142.0 1G010 08 1500 0106	Near Vidal Junction, from west of Route 95 to west of Parker Dam Road. Restore storm eroded embankments with rock slope protection. A previous Emergency Opening EA 08-1F660 repaired roadway. PAED: 08/01/18 R/W: 12/02/19 RTL: 03/02/20 BC: 12/01/20	$ 107 (R/W) $ 8,435 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total	$1,279 $902 $76 $1,940 $4,197	201.131 Assembly: 33 Senate: 16 Congress:8 10 Locations
Collision Reduction							
3640	2-Teh-36 12.6/13.1 1H970 02 1600 0051	Near Red Bluff, from 2.3 miles east to 2.8 miles east of Dry Creek Bridge. Curve improvement. PAED: 05/16/2018 R/W: 08/16/2019 RTL: 08/27/2019 CCA: 11/15/2021	$109 (R/W) $3,000 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total	$390 $670 $210 $670 $1,940	201.010 Assembly: 3 Senate: 4 Congress: 1 20 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.
Collision Reduction (Cont.)							
0738	4-Son-121 3.4/6.5 0G680 04 0002 0007	Near Schellville, from north of Tolay Creek Bridge to south of Yellow Creek Bridge. Widen for standard shoulders, upgrade curves to standard, and install rumble strips. PAED: 06/30/2018 R/W: 06/01/2020 RTL: 06/30/2020 CCA: 12/31/2021	$6,264 (R/W) $25,000 (C)	19/20	PA & ED PS & E RW Sup Con Sup Total	$2,500 $3,750 $1,800 $4,200 $12,250	201.010 Assembly: 2 Senate: 2 Congress: 2 13 Collisions reduced
2652	5-SLO-41 43.8/50.4 1H300 05 1600 0059	Near Cholame, from East Junction Route 46 to the Kern County line. Construct centerline rumble strip and replace striping and pavement markers. PAED: 07/01/16 R/W: 05/01/17 RTL: 07/10/17 BC: 11/21/17	$ 416 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total	$0 $269 $19 $125 $413	201.010 Assembly: 35 Senate: 17 Congress:24 7 Collisions reduced
6780	6-KER-65 1.6/25.2 0U990 06 1600 0084	Near Bakersfield, from Imperial Street to County Line Road. Construct center line and shoulder rumble strips. PAED: 08/01/17 R/W: 01/15/18 RTL: 04/16/18 BC: 08/01/18	$ 20 (R/W) $ 850 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total	$350 $490 $10 $400 $1,250	201.010 Assembly: 32, 34 Senate: 14,16 Congress:21 38 Collisions reduced
6790	6-MAD-41 VAR 0U710 06 1600 0025	In Madera County, on Route 41 at various locations; also on Routes 49 and 145 at various locations. Construct center line and shoulder rumble strips. PAED: 05/01/16 R/W: 07/01/17 RTL: 08/01/17 BC: 01/02/18	$ 10 (R/W) $ 650 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total	$0 $618 $20 $341 $979	201.010 Assembly: 5 Senate: 14 Congress:16 41 Collisions reduced
4904	7-LA-14 R30.6 31700 07 1500 0234	Near Santa Clarita, on the Sierra Highway southbound on-ramp; also in Palmdale on the Palmdale Boulevard northbound off-ramp (PM R59.55). Apply High Friction Surface Treatment (HFST) on ramps. PAED: 02/03/17 R/W: 09/01/17 RTL: 10/05/17 BC: 05/02/18	$ 695 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total	$40 $165 $0 $145 $350	201.010 Assembly:36, 38 Senate: 21 Congress:25 37 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.
Collision Reduction (Cont.)							
3005M	8-SBD-15 174.0/175.0 1G460 08 1600 0005	Near Baker, from 2.5 miles north of Bailey Road to 1.5 miles south of Nipton Road. Cold plane and overlay with Open Graded Friction Course (OGFC). PAED: 04/17/17 R/W: 04/16/18 RTL: 07/16/18 BC: 03/15/19	$ 10 (R/W) $ 751 (C)	18/19	PA & ED PS & E RW Sup Con Sup Total	$175 $406 $4 $221 $806	201.010 Assembly: 33 Senate: 16 Congress:8 40 Collisions reduced
5492E	12-ORA-241 18.3/18.7 0N300 12 1300 0194	In Santa Margarita, at the Santa Margarita Parkway northbound off/on ramps. Improve corner sight distance on the off ramp and improve the vertical curve, cross slope, drainage and overlay open grade asphalt concrete on the on ramp. PAED: 03/01/17 R/W: 05/01/18 RTL: 06/01/18 BC: 11/16/18	$ 1,100 (C)	17/18	PA & ED PS & E RW Sup Con Sup Total	$227 $576 $13 $413 $1,229	201.010 Assembly: 73 Senate: 33 Congress:45 55 Collisions reduced
4995A	12-ORA-405 6.9/10.3 0P220 12 1500 0053	In Irvine and Costa Mesa, from Jamboree Road to Route 73. Replace existing temporary railing with permanent concrete barrier. PAED: 06/01//17 R/W: 09/01/18 RTL: 10/01/18 BC: 04/01/19	$ 2,710 (C)	18/19	PA & ED PS & E RW Sup Con Sup Total	$200 $1,300 $0 $1,000 $2,500	201.010 Assembly: 74 Senate: 37 Congress:46, 48 8 Collisions reduced

2016 SHOPP Amendment 16H-002
Cost, Scope, Schedule and Technical Changes
Includes Federal Emergency Relief Funds
($ Thousands)

Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
01	Del Norte	101	36.1	Near Crescent City from 0.2 mile north of the Smith River Overflow Bridge. Replace bridge. **(G13 Contingency Project)**	43640	0100V	0100000193	201.110	~~2016/17~~ **2018/19**	~~1,500~~ **3,900**	~~50,448~~ **0**	PA&ED PS&E RW Const	7,000 3,700 ~~520~~ ~~8,400~~	7,000 3,700 **650** **0**
Comments: Completion of environmental studies and consultations with resource and regulatory agencies will take longer than previously anticipated due to the complexities in staging and constructing the new bridge in this sensitive environmental setting in both a coastal zone and over a classified wild and scenic river. Regulatory agencies are asking unexpected questions that require additional efforts to resolve. These items were previously identified in the project risk management plan, but now result in a delay to the project. Right of Way capital and support increases are due to permitting requirements and additional land acquisition for mitigation of wetlands impacts. This will be made a contingency project. These changes add $2,530,000 to the cost of the project and remove $58,848,000 due to contingency conversion, resulting in a net reduction of $56,318,000 to the cost of the program.														
01	Humboldt	36	36.1/40.5	In and near Dinsmore, on Route 36 (Forest Highway 4). Roadway improvements.	43730	2272	0112000180	201.310	2016/17	~~1,020~~ **2,550**	6,090	PA&ED PS&E RW Const	200 ~~30~~ ~~600~~ ~~40~~	200 **60** **1,400** **52**
Comments: Increases to support are due to unanticipated increased land surveys, Right of Way capital, Right of Way support, and environmental mitigation staff work to complete the project and coordinate with the Federal Lands partnership to construct the project. Right of Way capital increases are caused by increased utility relocations. These changes add $2,372,000 to the cost of the project. Project EA 01-43730 and EA 01-0E930 will be combined for construction under EA 01-4373U.														
01	Humboldt	36	36.6/39.9	Near Dinsmore, from west of Burr Valley Road to west of Buck Mountain Road. Widen to make lane and shoulder widths standard, realign curves, and improve roadway cross-slope.	0E930	2409	0115000047	201.010	2016/17	231	7,441	PA&ED PS&E RW Const	90 75 ~~150~~ 40	90 75 **660** 40
Comments: Right of Way support cost has increased due to unplanned additional survey work to monument the new state right of way and to record maps in accordance with State law. Previously this work was assumed to be addressed by Federal Lands participation on project. This change in responsibility adds $510,000 to the cost of the project. Project EA 01-43730 and EA 01-0E930 will be combined for construction under EA 01-4373U.														
01	Lake	29	R41.4	Near Lakeport, at Lakeport Overcrossing. Upgrade pedestrian facilities.	0B690	3097	0112000184	201.378	2016/17	7	~~478~~ **645**	PA&ED PS&E RW Const	~~206~~ ~~228~~ ~~63~~ 265	**160** **350** **16** 265
Comments: Increase to Construction capital due to the addition of a light pole to improve pedestrian accessibility and the refinement of earthwork quantities after final survey data became available. Support increases are due to labor cost adjustments. Also, there is a decrease in Right of Way support that has occurred because the project was determined to not require property acquisitions. These changes add $196,000 to the cost of the project.														
~~01~~	~~Mendocino~~	~~1~~	~~75.7/76.2~~	~~Near Westport, from 0.5 to 1.0 mile north of Blue Slide Gulch Bridge. Reconstruct roadway.~~	~~0B480~~	~~4548~~	~~0114000034~~	~~201.131~~	~~2017/18~~	~~767~~	~~14,706~~	~~PA&ED~~ ~~PS&E~~ ~~RW~~ ~~Const~~	~~923~~ ~~1,319~~ ~~69~~ ~~1,620~~	
Comments: Delete project. This project was to permanently restore roadway storm damage from a 2011 landslide. Initial project scope was to move the roadway away from ocean and to construct a deep underdrain. It has now been determined this scope of work is not feasible. The Department is working with the Federal Highway Administration (FHWA) to scope this work with more recent area storm damage and is currently reviewing the site. This change removes the $19,404,000 total cost of the project.														
02	Lassen	36	22.4/R29.4	In and near Susanville, from east of Eagle Lake Road to Route 395. Rehabilitate pavement.	4F990	3529	0213000057	201.121	2016/17	165	~~9,000~~ **10,700**	PA&ED PS&E RW Const	450 ~~550~~ ~~190~~ ~~750~~	450 **1,430** **840** **1,205**
Comments: Project is on Main Street in historic downtown and is required to upgrade adjacent pedestrian ADA facilities. Some existing ramps were assumed to be ADA compliant, but are not. Complications upgrading ADA ramps and impacts to historic buildings has increased the design effort. In working with local city staff, Complete Streets has been implemented to evaluate solutions for pedestrian and bicycle movement. These issues have increased the support cost for design, as well as Construction capital. Right of Way support and capital cost have increased for expanded construction easements and encroachment permits and for utility work. There is an additional increase for Construction capital cost escalation. These changes add $3,685,000 to the cost of the project.														

2016 SHOPP Amendment 16H-002
Cost, Scope, Schedule and Technical Changes
Includes Federal Emergency Relief Funds
($ Thousands)

Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
02	Plumas	89	29.5/30.5	Near Canyon Dam, at Lake Almanor Spillway. Replace bridge.	0E180	3349	0200000022	201.113	2016/17	~~60~~ **465**	~~9,000~~ **9,810**	PA&ED PS&E RW Const	1,100 ~~1,300~~ ~~300~~ ~~1,600~~	1,100 **2,155** **70** **2,400**
Comments: In January 2016, the Project team learned that federal regulations require approvals from the Federal Energy Regulatory Commission (FERC) and the State Division of Safety of Dams (DSOD). As such, FERC and DSOD coordination and approval increases design support and Right of Way capital. Construction support increases are due to reduced construction window and accelerated schedule required by FERC. Construction capital increase will pay for dam owner's construction monitoring. In addition, a longer traffic detour is necessary at greater cost, detour onto a county road requires project compensation for traffic impacts. In addition, the increase in Construction capital is due to revise the barrier rail and bridge foundation designs. These changes add $2,640,000 to the cost of the project.														
02	Shasta	44	R4.6/R6.4	Near Palo Cedro, from Clough Creek Bridge to 0.6 mile west of Deschutes Road Overcrossing. Traffic operational improvements. ~~(G13 Contingency Project)~~	36841	3595	0215000066	201.310	2016/17	500	~~0~~ **3,550**	PA&ED PS&E RW Const	200 ~~1,200~~ ~~500~~ ~~0~~	200 **1,500** **210** **2,000**
Comments: Change G13 Contingency project to a fully funded project. Increase to design support is due to design modifications that shortened the bridge and relocated an off-ramp. Right of Way support is decreased because the land acquisition is reduced. This change adds $10,000 to the cost of the project.														
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	~~317~~ **146**	1,683	PA&ED PS&E RW Const	205 ~~295~~ ~~250~~ ~~250~~	205 **505** **522** **517**
Comments: Support increases are due to unanticipated design complexity of sidewalks and ramps and for local agency coordination. Coordination effort included local desire for sidewalk design to allow future City lighting. Right of Way support increase is due to added utility relocation coordination. Construction support increase is due to reevaluation of scope considering the added complexity to oversight ADA projects and the necessary coordination of all project experts to ensure strict ADA standards. Right of Way capital decreased after survey and design refinements determined fewer parcels needed. These changes add $578,000 to the cost of the project.														
02	Siskiyou	5	2.7/R11.4	In and near Dunsmuir, from Sacramento River Bridge to 0.6 mile south of North Mount Shasta Underpass. Rehabilitate roadway.	4G550	3560	0214000036	201.122	2016/17	464	53,600	PA&ED PS&E RW Const	~~4,590~~ ~~4,300~~ 270 ~~4,870~~	**850** **5,300** 270 **7,610**
Comments: A decrease in PA&ED support as a result of project efficiencies offsets an increase to the design and construction support efforts. Development of complicated staging plans to minimize impacts to local traffic and the adjacent California Highway Patrol truck enforcement facility has increased the design support cost. Construction support increase is due to reevaluation of project working days that have increased by the addition of a third construction season. These changes are a net zero cost for the project.														
02	Siskiyou	89	20.9/21.2	Near McCloud, at Mud Creek Bridge No. 02-0046. Replace bridge.	4F550	3519	0213000005	201.110	2017/18	81	~~2,600~~ **3,700**	PA&ED PS&E RW Const	550 ~~510~~ 150 ~~630~~	550 **860** 150 **1,200**
Comments: Hydraulic studies revealed a need to raise the bridge to increase the flow that can pass under it. This results in lengthening the roadway work and a greater Construction capital cost. Furthermore, geotechnical studies resulted in a revised foundation design at a greater cost. PS&E support cost has increased due the additional design effort caused by these changes. Construction support cost has increased due to the changes and the additional need for environmental mitigation and monitoring during construction. These changes add $2,020,000 to the cost of the project.														
02	Siskiyou	96	23.2/56.0	In and near Happy Camp, from west of Swillup Creek Bridge to 3.6 miles east of Thompson Creek Bridge. Drainage system restoration.	4C150	3314	0213000132	201.151	2017/18	200	~~1,608~~ **1,250**	PA&ED PS&E RW Const	500 ~~532~~ 92 ~~469~~	500 **600** 92 **700**
Comments: A refined design scope resulted in reduced Construction capital. The number of locations were able to be increased. However, PS&E support costs increased due to the additional locations, and a reevaluation of Construction support has led to an increase. These changes result in a net reduction of $59,000 to the cost of the project.														

2016 SHOPP Amendment 16H-002
Cost, Scope, Schedule and Technical Changes
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($ Thousands)

Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
02	Siskiyou	263	57.1	Near Yreka, at Klamath River Bridge No. 02-0015. Replace bridge.	2E480	3424	0200000586	201.110	2017/18	~~330~~ **440**	~~8,500~~ **15,300**	PA&ED PS&E RW Const	~~1,800~~ 1,600 ~~180~~ ~~1,900~~	**2,700** 1,600 **280** **2,620**
Comments: Early work to prepare information for the environmental documents lead to revising project scope from a box culvert to an arch culvert to reduce impacts and facilitate construction. This change caused an increase in PA&ED support. Right of Way support and capital costs increased due to an added parcel, additional utility impacts, and new relocation assistance. Increased mitigation and permit fees and demolition costs also increased Right of Way capital. Construction capital increases are due to the change in structure type and foundations, and revised roadway quantity assumptions. The change in structure type resulted in reevaluation of Construction support costs and additional on-site and off-site mitigation and post-construction monitoring support expenses. These changes add $8,630,000 to the cost of the project.														
03	El Dorado	50	67.3	Near South Lake Tahoe, west of South Lake Tahoe at Echo Summit Sidehill Viaduct Bridge No. 25-0044. Rehabilitate or replace bridge.	3F530	3304	0313000135	201.110	2017/18	27	6,000	PA&ED PS&E RW Const	~~624~~ ~~1,317~~ 16 1,502	**1,000** **1,100** 16 1,502
Comments: A PA&ED support cost increase, and a corresponding PS&E support decrease, has occurred because foundation drilling investigations have been moved earlier in the project development process to refine assumptions. In addition, PA&ED support costs increased due to the project team needing early studies for potential detour and traffic impacts that can be considered in the environmental document. These changes add $159,000 to the cost of the project.														
03	Placer	80	28.5/31.5	In and near Colfax, from 0.3 mile south of Weimar Overhead to 0.3 mile south of Illinoistown Overcrossing. Rehabilitate culvert.	3E050	5096	0300020597	201.151	2017/18	82	~~1,143~~ **1,043**	PA&ED PS&E RW Const	~~190~~ 260 60 380	**290** 260 60 380
Comments: A PA&ED support cost increase is needed for detailed field survey of the culverts and to study alternatives for work site access. The Construction capital amount has been reduced as a result of the removal of two culverts from the project scope. One culvert being removed is to be done as a separate project due its deteriorating condition and urgency for repair. The second culvert is being removed from the project since it was already repaired. These changes are a net zero cost for the project.														
03	Sacramento	5	9.7/22.7	In Sacramento, from 1.1 miles south of Elk Grove Boulevard to Route 50. Install fiber optic cable. ~~(G13 Contingency Project)~~	4F450	5846	0314000164	201.315	2016/17	600	~~0~~ **6,600**	PA&ED PS&E RW Const	540 900 440 ~~0~~	540 900 440 **1,500**
Comments: Change G13 Contingency project to a fully funded project.														
03	Sacramento	99	15.7/23.8	In Sacramento and Placer Counties, on Routes 51, 65 and 99 at various locations. Install ramp meters. ~~(G13 Contingency Project)~~	0F350	6913	0313000031	201.315	2016/17	30	~~0~~ **19,100**	PA&ED PS&E RW Const	1,000 2,100 1,000 ~~0~~	1,000 2,100 1,000 **5,300**
Comments: Change G13 Contingency project to a fully funded project.														
04	Alameda	80		Near Oakland, at the San Francisco Oakland Bay Bridge Toll Plaza Building. Reconstruct maintenance facilities.	01411	0064Q	0414000436	201.352	2016/17	20	12,450	PA&ED PS&E RW Const	0 1,500 15 ~~3,000~~	0 1,500 15 **4,000**
Comments: An increase to Construction support due to the use of LEED certification on the project. LEED building projects have specialty design and construction administration considerations. There is a need to review multiple and complex Requests for Information (RFI's) and submittals by subject matter experts in various disciplines including materials quality control/assurance during construction administration. This change adds $1,000,000 to the cost of the project.														

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($ Thousands)

Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
04	Alameda	680	M0.0/M4.0	In Fremont, from south of Scott Creek Road to Auto Mall Parkway. Rehabilitate roadway.	3G602	0587J	0414000484	~~201.120~~ **201.122**	2016/17	~~10~~ **160**	~~16,500~~ **17,600**	PA&ED PS&E RW Const	0 2,470 80 3,300	0 2,470 80 3,300
Comments: Hydraulic analysis of the roadway determined a need to increase the roadway cross slope to standard; at an increased Construction capital cost. Environmental consultation with the resource agency determined environmental mitigation is required. This results in increased Right of Way capital to purchase mitigation bank "credits". A traffic safety screening analysis determined there are no safety concerns and this project should be classified more appropriately as a 201.122 programmed project. These changes add $1,250,000 to the cost of the project.														
04	Alameda	680	M4.0/R12.4	In and near Fremont, from Auto Mall Parkway to Koopman Road. Rehabilitate roadway.	3G601	0587E	0414000483	201.12	2016/17	10	~~18,860~~ **25,360**	PA&ED PS&E RW Const	883 2,830 170 ~~2,830~~	883 2,830 170 **4,200**
Comments: This project is being combined for construction with the Northbound Express Lane Project (EA 04-4G053) sponsored by the Alameda County Transportation Commission (ACTC). The original programed amount assumed that the express lane project would widen the inside and outside shoulders and therefore limit the SHOPP rehab work to just the existing travel way. Subsequent design exceptions will allow the express lane to be constructed without widening the shoulders for a portion of the project length. The SHOPP project rehab scope therefore increases to include rehab work on the shoulders for this area. The scope change results in an increase to Construction capital and support. This change adds $7,870 to the cost of the project.														
04	Alameda	880	~~11.9/27.5~~ **11.8/27.5**	~~Near~~ **In and near** Union City, **Hayward, San Leandro, and Oakland,** from 0.4 mile north of Fremont Boulevard Overcrossing to ~~A Street Undercrossing; also from 0.1 mile south of Washington Avenue Overcrossing to south of~~ High Street ~~undercrossing s~~**eparation and overhead**. Rehabilitate pavement. ~~(G13 Contingency Project)~~	4H580	0483W	0413000162	201.121	2016/17	40	~~0~~ **44,446**	PA&ED PS&E RW Const	654 2,700 166 ~~0~~	654 2,700 166 **6,600**
Comments: Change G13 Contingency project to a fully funded project. Change project limits to reduce overlapping work with other projects. Add ramp paving work at 4 locations within the project limits. These changes are a net zero cost for the project.														
04	Contra Costa	80	0.0/10.1	In Richmond, El Cerrito, San Pablo, Pinole and Hercules, from Alameda County line to Route 4. Pavement rehabilitation. ~~(G13 Contingency Project)~~	4J340	1490E	0415000331	201.121	2016/17	85	~~0~~ **37,770**	PA&ED PS&E RW Const	0 1,254 33 ~~0~~	0 1,254 33 **5,500**
Comments: Change G13 Contingency project to a fully funded project.														
04	Contra Costa	242	R1.6	In Concord, at Buchanan Field Viaduct No. 28-0186. Rehabilitate bridge.	4G810	0250B	0413000055	201.110	2016/17	~~80~~ **495**	~~1,520~~ **1,824**	PA&ED PS&E RW Const	360 ~~700~~ ~~100~~ ~~355~~	360 **840** **265** **426**
Comments: Increase to design support, Construction support and Construction capital to accommodate for a newly identified upgrade to the bridge rail and guardrail standards and to address bridge deck drainage issue. Also, an increase in Right of Way support and Right of Way capital is needed to address easement parcel that impacts storage facilities below the bridge. These changes add $1,095,000 to the cost of the project.														
04	Marin	1	0.3	Near Mill Valley, at Tennessee Valley Road. Repair roadway slip-out.	2J560	1485J	0414000529	201.131	2017/18	~~5~~ **50**	~~1,211~~ **1,515**	PA&ED PS&E RW Const	~~420~~ 525 18 ~~357~~	**750** 525 18 **525**
Comments: Numerous utility conflicts have resulted in increased PA&ED support and Right of Way capital to positively identify locations in the field using potholing methods, and to develop a detailed mapping and advance preliminary design for relocation or workarounds. Early coordination with local partners has increased costs as well. The project scope has changed to include a roadside gutter to minimize sheetflow across the road and reduce slope erosion which increased Construction capital. Construction support has increased due to need for extensive public outreach for traffic management, biological monitoring of the environmentally sensitive areas of the project, and to manage the restrictive work windows that will increase the construction duration. These changes add $847,000 to the cost of the project.														

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Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
04	Marin	1	6.6	Near Muir Beach, 0.3 mile north of Seacape Drive. Construct tie-back wall. ~~(G13 Contingency Project)~~	3S900	0713F	0400001043	201.131	2016/17	285	~~0~~ **5,860**	PA&ED PS&E RW Const	0 3,500 434 ~~0~~	0 3,500 434 **1,000**
Comments: Change G13 Contingency project to a fully funded project.														
04	Marin	1	7.7/7.8	Near Muir Beach, 0.2 mile north of Cold Stream Fire Road. Construct tie-back wall. ~~(G13 Contingency Project)~~	3S910	0713G	0400001044	201.131	2016/17	157	~~0~~ **6,174**	PA&ED PS&E RW Const	168 2,700 284 ~~0~~	168 2,700 284 **1,000**
Comments: Change G13 Contingency project to a fully funded project.														
04	Marin	1	8.1	Near Muir Beach, at Cold Stream Road. Construct retaining wall. ~~(G13 Contingency Project)~~	4S660	0308J	0400001256	201.131	2016/17	100	~~0~~ **2,200**	PA&ED PS&E RW Const	1,311 600 128 ~~0~~	1,311 600 128 **830**
Comments: Change G13 Contingency project to a fully funded project. Increase to Construction support is due to the scope change which requires more working days, more inspection, and environmental monitoring than previously anticipated. The scope change is to bury the planned retaining wall and rock slope protection under a vegetated slope to blend into the surroundings per the National Park Service requirement. This change converts construction support from previous $515,000 to $830,000, adding $315,000 to the cost of the project.														
04	Marin	101	10.6/10.9	In San Rafael, from Route 101 northbound off-ramp to 2nd Street at San Rafael Harbor Bridge No. 27-0033. Replace bridge.	4G820	0350H	0413000049	201.110	2017/18	570	7,264	PA&ED PS&E RW Const	~~630~~ 600 300 900	**900** 600 300 900
Comments: The project team is analyzing several design alternatives that require more effort than a typical bridge project. The studies being conducted require detailed mapping, advance preliminary design, extensive public outreach and early regulatory agency coordination, all at an increase in support cost. This change adds $270,000 to the cost of the project.														
04	Napa	29	13.5/25.5	In and near Napa and Yountville, from north of Trancas Street/Redwood Road to Mee Lane. Rehabilitate pavement.	4H200	0378E	0413000258	201.121	2016/17	~~95~~ **153**	17,100	PA&ED PS&E RW Const	510 1,900 35 2,100	510 1,900 35 2,100
Comments: Increase to Right of Way capital due to the addition of a temporary construction easement and a permanent drainage easement that are required for curb ramps and drainage work. Also, additional utility positive verification potholing is required due to the guardrail and drainage system work. This change adds $58,000 to the cost of the project.														
04	**Napa**	**29**	**37.0**	**In Calistoga, at Napa River Bridge No. 21-0018. Environmental mitigation and plant establishment for bridge replacement project.**	**3G64A**	**0587M**	**0416000349**	**201.111**	**2019/20**	**85**	**500**	**PA&ED** **PS&E** **RW** **Const**	**0** **200** **400** **150**	
Comments: Split of this mitigation project from parent EA 04-3G640 to create a separate project for on-site riparian plantings with three to five year plant establishment requirements, habitat creation for freshwater shrimp with ten year monitoring and reporting requirements, and water treatment of reworked impervious surface area off-site mitigation.														
04	**Napa**	**121**	**9.2/9.4**	**Near Napa, at Sarco Creek Bridge No. 21-0008. Plant establishment for bridge replacement project.**	**2A32A**	**0380N**	**0416000347**	**201.111**	**2017/18**	**100**	**100**	**PA&ED** **PS&E** **RW** **Const**	**0** **50** **30** **70**	
Comments: Split of this mitigation project from parent EA 04-2A320 to create a separate project for plant establishment and monitoring period. Increased cost for PS&E design for the mitigation project. These changes add $50,000 to the cost of the project.														

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04	Napa	128	R7.4	Near Rutherford, at Conn Creek Bridge No. 21-0021. Replace bridge.	1G430	0587H	0412000126	201.111	~~2016/17~~ **2017/18**	~~20~~ **3,800**	7,165	PA&ED PS&E RW Const	~~960~~ ~~1,050~~ ~~150~~ 1,000	**1,188** **1,500** **950** 1,000
Comments: Preliminary design work identified conflicts between a bridge wing wall and large waterline main that needs to be avoided. The wall design has been modified to eliminate the need for a utility relocation, increasing preliminary and design support costs. Other utility conflicts have contributed to an increase in design and Right of Way support. Right of Way capital and support have increased due to the addition of parcel to accommodate utility relocations, construction staging areas and access road, and creek diversion system. In addition, environmental impact mitigation has also increased these costs. Also, a fiscal year delay is due to utility relocation conflicts with necessary construction work and the addition of right of way property takes. These changes add $5,258,000 to the cost of the project.														
04	San Mateo	1	44.0	In Pacifica, at San Jose Avenue Pedestrian Overcrossing Bridge No. 35-0240. Replace bridge.	4G850	0681Q	0413000052	201.110	2016/17	5	~~3,662~~ **4,445**	PA&ED PS&E RW Const	500 ~~400~~ ~~100~~ ~~450~~	500 **1,750** **125** **1,400**
Comments: The Construction capital estimate has increased, during advance design due to an increase in the price index used to account for updated material costs, inflation, and escalation for the year of construction. Cost also increased due to a change in the bridge foundation design and a refinement of the bridge length. Support costs were underestimated during the project initiation phase and have now been increased using a "bottoms up" resource estimate approach. These changes add $3,108,000 to the cost of the project.														
04	San Mateo	82	13.7	Near Burlingame and Hillsborough city limits, at the intersection of Route 82 and Floribunda Avenue. Install left turn signal.	1G020	0686	0400002011	201.010	~~2016/17~~ **2017/18**	1,765	2,253	PA&ED PS&E RW Const	846 1,300 450 700	846 1,300 450 700
Comments: Delay to the Fiscal Year (FY) delivery date to allow time for the full evaluation of an interim improvement requested by the local community. As the result of significant public comments received regarding the removal of trees and visual changes to the corridor, an operations pilot study was put in place for a temporary left-turn prohibition study before finalizing the environmental approval phase. These changes are a net zero cost for the project.														
04	Solano	84	12.1/12.2	Near Rio Vista, at Miner Slough Bridge No. 23-0035. Replace bridge. (G13 Contingency Project)	0G660	0886	0400000343	201.110	2018/19	2,884	0	PA&ED PS&E RW Const	1,836 ~~2,754~~ 1,098 0	1,836 **3,500** 1,098 0
Comments: As a result of consultations with environmental agencies, the bridge replacement alignment was changed. The roadway realignment added permanent take, and modified construction staging and planned construction methods. In addition, a control tower to operate the bridge swing span has been added. Also, additional permits will be required from various agencies, which were not needed previously. These changes increase the design PS&E support costs for the project. This change adds $746,000 to the cost of the project.														
05	Monterey	1	2.5/67.3	South of Carmel, at seven (7) locations from north of the San Luis Obispo County line to south of Malpaso Creek Bridge. Rehabilitate and/or replace culverts.	1F080	2478	0513000052	201.151	2017/18	~~84~~ **300**	3,279	PA&ED PS&E RW Const	~~672~~ 1,154 ~~288~~ 783	**400** 1,154 **344** 783
Comments: PA&ED support cost reduction by leveraging environmental studies done previously by three separate Minor A projects that later were developed into this current project. During PA&ED phase, it was determined that the project will require environmental mitigation sites which increases the Right of Way support and capital costs. These changes are a net zero cost for the project.														
05	Monterey	1	58.3/59.8	North of Big Sur, from south of Bixby Creek Bridge to south of Rocky Creek Bridge. Widen shoulders and upgrade guardrails.	1A000	2313	0500020284	201.015	2017/18	~~14~~ **30**	5,349	PA&ED PS&E RW Const	~~575~~ 983 ~~11~~ 1,154	**675** 983 **35** 1,154
Comments: The project PA&ED support cost have increased to account for an environmentally sensitive location on the coast that requires more resources to obtain environmental clearances. Development of the draft Project Report has identified Right of Way capital and support increases for additional acquisitions, utility relocations and fees. These changes add $140,000 to the cost of the project.														

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05	Santa Barbara	101	17.2/45.9	In and near Goleta, at various locations from 0.6 mile north of Las Positas Road to 1.3 mile south of Gaviota Tunnel. Roadside safety improvements.	1C970	2456	0513000020	201.235	2016/17	10	1,890	PA&ED PS&E RW Const	280 ~~650~~ 12 ~~550~~	280 **770** 12 **800**
Comments: PS&E support cost increase was to investigate Maintenance Vehicle Pullout configurations that required additional surveys and design. Construction support increase is needed for additional workings days (from 120 to 180) and plant establishment days (from 0 to 125) as determined by the approved Project Report. These changes add $370,000 to the cost of the project.														
05	Santa Cruz	9	22.1/23.8	In Castle Rock State Park, from 5.0 miles south to 3.3 miles south of Route 35. Widen shoulders, replace guardrail and construct centerline rumble strips.	1C650	2418	0512000185	201.015	2017/18	~~0~~ **10**	7,658	PA&ED PS&E RW Const	~~1,050~~ 1,842 ~~40~~ ~~1,350~~	**1,938** 1,842 **44** **1,687**
Comments: During project design, consultations with the design reviewer identified the need for additional support to investigate additional curve corrections and super-elevation improvements. Also, additional Right of Way support and Right of Way capital is needed for potholing that was not previously identified in the PSR (Project Study Report). These support and capital cost changes add $1,239,000 to the cost of the project.														
05	Santa Cruz	129	~~3.2/3.5~~ **3.0/3.5**	~~Near Watsonville, at Carlton Road. Improve intersection.~~ **Near Watsonville, realign Carlton Road. Construct a new intersection and a left-turn channelization.**	1F350	2506	0513000103	201.010	2017/18	~~277~~ **135**	~~2,045~~ **2,700**	PA&ED PS&E RW Const	~~543~~ ~~674~~ ~~309~~ ~~508~~	**587** **1,132** **401** **757**
Comments: Design refinement has resulted in a new design speed for the realignment, a more defined roadway section, additional safety features, minimized right of way impact and an increase in the number of working days which require a decrease to Right of Way capital, an increase to PA&ED, PS&E, and Construction support, and an increase to Construction capital cost. These changes add $1,356,000 to the cost of the project.														
06	Fresno	99	22.7/28.1	In the city of Fresno, from Shaw Avenue to Belmont Avenue. Install ramp meters and construct auxiliary lanes. ~~(G13 Contingency Project)~~	0K290	6744	0600020018	201.315	2016/17	104	~~0~~ **5,893**	PA&ED PS&E RW Const	755 1,062 522 ~~0~~	755 1,062 522 **1,288**
Comments: Change G13 Contingency project to a fully funded project.														
06	Fresno	180	77.2	Near the city of Fresno, at Kings River Overflow Bridge No. 42-0074. Replace bridge.	0U120	6751	0615000207	201.110	~~2016/17~~ **2018/19**	0	1,200	PA&ED PS&E RW Const	0 0 0 400	0 0 0 400
Comments: This is a Financial Contribution Only (FCO) project to STIP Project EA 06-34253. Due to a funding shortfall, the STIP project has been moved to FY 18/19, therefore this SHOPP project needs to be moved to FY 18/19 as well.														
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	891	PA&ED PS&E RW Const	348 ~~545~~ 345 ~~400~~	348 **775** 345 **530**
Comments: Negotiating right of way from the railroad requires an increase cost to PS&E support and Construction support for the design requirements and coordination efforts needed, the increased cost includes escalation. These changes add $360,000 to the cost of the project.														
06	Tulare	198	R11.7/R19.8	In Visalia, from Lovers Lane to west of Route 245. Rehabilitate pavement. ~~(G13 Contingency Project)~~	0S340	3034	0614000114	201.122	2016/17	10	~~0~~ **23,850**	PA&ED PS&E RW Const	545 ~~1,040~~ 55 ~~0~~	545 **1,525** 55 **3,700**
Comments: Change G13 Contingency project to a fully funded project. During project development, collaborative efforts of Design, Maintenance and Materials teams have refined the scope to change the thickness and material used for asphalt digouts, identifying new median drainage issues, additional rumble strips and additional pavement shoulder construction. These design changes add $485,000 to the cost of the project.														

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07	Los Angeles	1	0.1/4.0	In Long Beach, Signal Hill and Lakewood on various routes at various locations. Mitigate for stormwater quality by installing bio-filtration swales, basins, media filters and gross solid removal devices, and other best management practices (BMP's).	28660	4390	0700020900	201.335	2016/17	10	~~17,500~~ **10,000**	PA&ED PS&E RW Const	0 ~~2,450~~ 300 2,600	0 **2,977** 300 2,600
Comments: The scope has been reduced due to geometric constraints and the inability to satisfy the BMP type selection criteria along Routes 1 and 19 resulting in Construction capital reductions of $7,500,000. The original PSSR identified five routes for the project, the supplemental PSSR in 2013 only proposed work on three routes. The scope was materially modified in the 2013 supplemental PSSR. Additional studies and field reviews were necessary to study the BMP's in the corridors and develop a supplemental PID resulting. These changes result in a net reduction of $6,973,000 to the total cost of the project.														
07	Los Angeles	1	3.5	In Long Beach, at Lakewood Boulevard (Route 19) and Los Alamitos Traffic Circle. Install pavement delineation, overhead guide signs and associated roadway improvements.	29910	4632	0713000302	201.015	~~2016/17~~ **2018/19**	11	2,326	PA&ED PS&E RW Const	89 ~~356~~ ~~5~~ ~~445~~	89 **1,028** **20** **607**
Comments: Preliminary research has identified the project location impacts a potential historic property. Additional environmental and archaeological studies and reports are required for compliance with Section 106 of the National Historic Preservation Act. The additional work will result in a two year delay and add $849,000 to the cost of the project.														
07	Los Angeles	1	38.3/38.7	In the city of Los Angeles (Pacific Palisades), from north of Temescal Canyon Road to Bay Club Drive. Construct shoulders and upgrade guardrail.	27510	4159	0700000519	201.015	~~2016/17~~ **2017/18**	~~1,825~~ **2,575**	6,100	PA&ED PS&E RW Const	744 ~~1,089~~ 485 1,095	744 **1,546** 485 1,095
Comments: Right of way acquisitions were delayed due to a lengthy process in obtaining permits to enter the site to investigate for hazardous waste. A State beach will be impacted that will require a California Coastal Commission hearing, as well as multi-user utility coordination. These changes will delay the project one year and add $1,207,000 to the cost of the project.														
07	Los Angeles	1	49.3/50.2	In Malibu, from Puerco Canyon Road to Corral Canyon Road. Reconstruct raised median island.	29930	4650	0713000310	201.010	2017/18	23	4,405	PA&ED PS&E RW Const	~~400~~ ~~700~~ 80 ~~800~~	**650** **800** 80 **1,000**
Comments: Due to the sensitive location of the project and the coordination required with the city and their adjacent bike lane project along the coast, additional design and environmental efforts are needed. Traffic chart now indicated a longer construction duration period than was planned. These changes add $550,000 to the cost of the project.														
07	Los Angeles	1	56.5/56.9	In Malibu, from Guernsey Avenue to Trancas Canyon Road/Broad Beach Road. Replace bridge.	29140	4498	0712000094	201.110	2017/18	2,021	5,488	PA&ED PS&E RW Const	~~738~~ ~~1,428~~ ~~174~~ 1,251	**2,342** **2,123** **740** 1,251
Comments: During PA&ED, an additional alternative was added to address some potential environmental issues. The additional alternative was in response to Coastal Commission concerns for fish passages and restoration of the lagoon which would require a longer structure that impacts a larger area. These changes add $2,865,000 to the cost of the project.														
07	Los Angeles	2	R18.6	Near Glendale; also in various cities, on various routes, at various locations. Upgrade the existing communication system to all fiber optic communications. ~~(G13 Contingency Project)~~	30460	4719	0714000073	201.315	2016/17	10	~~0~~ **6,714**	PA&ED PS&E RW Const	81 1,028 2 ~~0~~	81 1,028 2 **1,480**
Comments: Change G13 Contingency project to a fully funded project.														

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07	Los Angeles	5	25.7	~~In the city of Los Angeles, near Glendale, at northbound off-ramp to Colorado Freeway Extension. Widen off-ramp, replace MBGR with concrete barrier, and widen LA River Bridge to reduce truck off-tracking.~~ **In the city of Los Angeles, near Glendale, at the northbound and southbound off-ramps to Colorado Freeway Extension. Widen off-ramp, replace MBGR with concrete barrier and widen Los Angeles River Bridge to reduce truck off-tracking.**	29230	4505	0712000109	201.015	2016/17	25	~~3,300~~ **3,784**	PA&ED PS&E RW Const	140 ~~410~~ ~~15~~ ~~435~~	140 **1,753** **37** **1,040**
Comments: The project also required additional analysis for bike detours, traffic study for ramp closures during construction in addition to a storm water report, hazardous waste memo, pile foundations and a series of complex environmental permits. These changes add $2,454,000 to the cost of the project.														
07	Los Angeles	5	38.8/40.5	In the city of Los Angeles from Filmore Street to Rinaldi Street, also on Route 118 from Route 405 to west of San Fernando Road. Enhance highway worker safety by paving miscellaneous areas, install access gates and maintenance vehicle pullout areas.	29510	4586	0713000016	201.235	2017/18	~~0~~ **1**	2,053	PA&ED PS&E RW Const	~~113~~ ~~333~~ ~~0~~ ~~466~~	**250** **883** **5** **800**
Comments: The project was updated and additional resources were identified to address the extensive biological concerns of numerous threaten and endangered species, thus requiring a more complex environmental document. Also, DES resources were not included in the PID but are needed for the retaining walls and safety cable railings on the walls. These changes add $1,027,000 to the cost of the project.														
07	Los Angeles	10	R11.0/R14.0	In the city of Los Angeles, from West Boulevard to Hoover Street. Enhance highway worker safety by installing Maintenance Vehicle Pullouts, access gates and other measures.	29600	4597	0713000034	201.235	2017/18	0	1,749	PA&ED PS&E RW Const	110 ~~438~~ 5 531	110 **985** 5 531
Comments: During field review ten more locations were identified within the limits of the project, some of the locations required additional functional units that were not identified during the PID phase, such as hydraulics, and detailed surveys. It was determined that the metal beam guardrail systems had to be addressed and may need upgrading. The project will require more effort due to the implementing of the 2015 Specs and District 7 OMS which was not considered in the PID. These changes add $547,000 to the cost of the project.														
07	Los Angeles	10	R14.0/19.0	In the city of Los Angeles, at Santa Monica Viaduct Bridge No. 53-1301. Paint and rehabilitate bridge. ~~(G13 Contingency Project)~~	29660	4599	0713000057	201.110	2016/17	~~134~~ **2,400**	~~0~~ **65,640**	PA&ED PS&E RW Const	0 3,024 30 ~~0~~	0 3,024 30 **5,904**
Comments: Change G13 Contingency project to a fully funded project. The project involves several different railroad lines, which will require C&M agreements, temporary and permanent construction easements, and the acquisition of several parcels with the potential for condemnation. In addition, there is now a need for a staging area that impacts a parking facility. These right of way increases add $2,266,000 to the cost of the project.														
07	Los Angeles	19	~~4.0/8.4~~ **5.5/8.4**	~~In Lakewood, Bellflower, Paramount and Downey, from Del Amo Boulevard to Gardendale Street. Upgrade curb ramps and sidewalks to Americans with Disabilities Act (ADA) standards.~~ **In Bellflower, Paramount and Downey, from Rose Avenue to end of route. Upgrade curb ramps and sidewalks to ADA standard.**	28990	4485	0712000015	201.378	2016/17	~~507~~ **1,500**	2,910	PA&ED PS&E RW Const	300 ~~705~~ ~~45~~ ~~600~~	300 **1,050** **765** **1,050**
Comments: During PA&ED, the scope was refined identifying several utilities and drainage facilities needed relocating that were not originally in the PID. The updated scope requires additional support resources and Right of Way capital, for fire hydrants, electrical poles, guy wires, signal poles, catch basins and inlet relocation. These changes add $2,508,000 to the cost of the project.														

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07	Los Angeles	27	~~0.0/11.1~~ **7.9/10.1**	~~Near Topanga, from Route 1 to Mulholland Drive. Enhance highway worker safety by installing weed barrier, paving maintenance vehicle pull-outs, and other measures.~~ **Near Glenview, from Entrado Drive to Woodland Crest Drive. Enhance highway worker safety by installing weed control under existing guardrail.**	29960	4652	0713000314	201.235	2016/17	0	~~1,490~~ **1,100**	PA&ED PS&E RW Const	~~54~~ ~~284~~ ~~0~~ ~~338~~	**101** **700** **10** **389**
Comments: The project went through several iterations in order to coordinate with other CAPM projects in the areas, resulting in a supplemental Project Report that reduced the scope that was best included in adjacent projects. The increased support effort in design resulted in a reduction in Construction capital. These changes add $87,000 to the cost of the project.														
07	Los Angeles	57	R7.7/R12.2	In San Dimas and Glendora from Route 10 to Route 210, also on Route 60 in and near the Cities of Los Angeles, Monterey Park and Montebello. Construct ADA curb ramp improvements.	29120	4494	0712000008	201.361	2016/17	252	~~2,257~~ **2,515**	PA&ED PS&E RW Const	200 ~~400~~ 450 ~~400~~	200 **900** 450 **800**
Comments: During the environmental phase, an increase in the electrical work needed was identified. The number of pedestrian push button signals increased from 5 to 8, resulting in more electrical work. This change adds $1,158,000 to the cost of the project.														
07	Los Angeles	60	R3.7/R6.3	In and near Monterey Park and Montebello, from Mednick Avenue to Markland drive. Enhance highway worker safety by installing Maintenance Vehicle Pullouts, access gates and other measures.	29580	4595	0713000037	201.235	2016/17	0	~~2,028~~ **2,684**	PA&ED PS&E RW Const	113 ~~334~~ ~~0~~ ~~466~~	113 **1,222** **5** **600**
Comments: The PID did not account for retaining walls that are required for each maintenance vehicle pullout (MVP). It was during the Advance Planning Study, during the PA&ED phase, which identified the additional elements and cost. It was determined to defer 3 of the 5 locations so that two MVP's and retaining walls could be constructed. These changes add $1,683,000 to the cost of the project.														
07	Los Angeles	~~1~~ **91**	~~7.7/9.2~~ **R6.3/R8.4**	~~In the cities of Los Angeles, Long Beach, Signal Hill, Lakewood, Carson, and Hawthorn on various routes at various location. Mitigate for stormwater quality by using Best Management Practices (BMP's).~~ **In the cities of Los Angeles, Long Beach, Signal Hill, Lakewood, Carson and Hawthorn. Mitigate Stormwater quality by using Best Management Practices.**	28670	4387	0700020923	201.335	2016/17	~~35~~ **55**	~~43,200~~ **18,720**	PA&ED PS&E RW Const	0 ~~5,000~~ ~~700~~ 5,000	0 **5,670** **30** 5,000
Comments: The locations along Route 1 were removed because the constructability of the stormwater BMP devices were not feasible. The Construction support required to build the revised scope remains unchanged after evaluating site conditions and the specialized nature of the stormwater BMP devices on Route 91. In addition, aerially deposited lead was discovered that will require more design and construction resources. These changes result in a net reduction of $24,480,000 to the cost of the project.														
07	Los Angeles	91	R11.4	In Long Beach, at Butler-Artesia Undercrossing Bridge No. 53-2169. ~~Upgrade bridge rails and lower on-ramp to increase vertical clearance.~~ **Replace barrier and flashing beacons.**	29170	4500	0712000095	201.112	2016/17	0	1,446	PA&ED PS&E RW Const	73 252 12 295	73 252 12 295
Comments: The barrier scope was reevaluated which resulted in a cost increase. In addition, it was concluded that lowering the ramp profile creates unforeseen hydraulic and utility relocation. The Department is going to initiate another project EA 07-32810 to improve the interchange and address the ramp vertical clearance. The existing programmed amount of the project is sufficient for the increased cost of the concrete barrier, flashing beacon and associated work. These changes are a net zero cost for the project.														

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07	Los Angeles	101	S0.0/1.9	In the city of Los Angeles, from Route 5 to Route 110. Rehabilitate pavement.	30080	4680	0713000489	201.121	2016/17	~~0~~ **3,087**	12,840	PA&ED PS&E RW Const	88 ~~1,346~~ ~~71~~ 1,503	88 **1,726** **761** 1,503
Comments: Utility conflicts were discovered at 17 ADA ramp locations that will require unplanned investigation, coordination and relocation of utilities. These changes add $4,157,000 to the cost of the project.														
07	Los Angeles	101	1.8/8.4	In the city of Los Angeles, near Hollywood, from Route 110 to north of Pilgrimage Overcrossing. Pavement rehabilitation.	30790	4774	0714000223	201.121	2016/17	~~29~~ **37**	2,073	PA&ED PS&E RW Const	~~153~~ ~~280~~ ~~20~~ ~~330~~	**67** **941** **40** **637**
Comments: The project scope was further refined and requires ADA upgrades at 13 locations. Additional ground survey work, utility relocation and inspection is required as a result. This change adds $910,000 to the cost of the project.														
07	Los Angeles	101	20.0	Near Encino, at Encino Pedestrian Overcrossing. Replace pedestrian overcrossing.	31790	4915	0715000277	201.110	2018/19	110	6,685	PA&ED PS&E RW Const	~~404~~ ~~868~~ 133 1,000	**470** **1,850** 133 1,000
Comments: Recent field studies, that were not able to occur while programming the project, resulted in modifications in the design of the pedestrian overcrossing. These changes add $1,048,000 to the cost of the project.														
07	Los Angeles	101	30.9/38.1	In and near Calabasas, Agoura Hills and West Lake Village, from Las Virgenes Road to Lindero Canyon Road; also in and near the cities of Camarillo, Oxnard, and Ventura from Pleasant Valley Road to Padre Juan Canyon Road. Upgrade to ADA standards.	29110	4493	0712000068	201.378	2016/17	~~0~~ **205**	1,969	PA&ED PS&E RW Const	200 400 ~~0~~ ~~400~~	200 400 **241** **800**
Comments: The PID did not identify any right of way, and during the PA&ED phase, it was determined that right of way was needed. The project has 36 locations spread throughout Los Angeles and Ventura Counties requiring additional support for the numerous locations for surveys and the design for utilities and electrical work. These changes add $846,000 to the cost of the project.														
07	Los Angeles	110	8.0/9.0	In Carson from south of W Del Amo Boulevard to south of W 190th Street; also in Carson on route 405, from north of E Del Amo Boulevard to south of W 190th Street (PM 12.2/13.2). Through traffic re-configurations. ~~(G13 Contingency Project)~~	29370	4552	0713000239	201.310	2016/17	1,000	~~0~~ **32,970**	PA&ED PS&E RW Const	0 4,946 180 ~~0~~	0 4,946 180 **6,594**
Comments: Change G13 Contingency project to a fully funded project.														
07	Los Angeles	213	2.7/3.9	In Rancho Palos Verdes, from Caddington Drive to Peninsula Verde Drive. Replace two damaged drainage systems. (G13 Contingency Project)	25310	3734	0700000457	201.151	2018/19	260	0	PA&ED PS&E RW Const	~~30~~ 284 128 0	**234** 284 128 0
Comments: A supplemental PSSR was done in 2014 which revised the scope and split the project. Upon further investigation of the culverts the scope for this project required additional easements, utility relocation and permits to access a Naval Base with known hazardous waste issues, requiring additional environmental involvement, resulting in an increase of $204,000 to the project.														
07	Los Angeles	405	0.7/6.7	In Long Beach and Signal Hill, from Los Cerritos Channel to Pacific Avenue. Enhance highway worker safety by miscellaneous paving, relocating irrigation, and other measures.	29610	4598	0713000035	201.235	2017/18	~~0~~ **1**	2,165	PA&ED PS&E RW Const	~~81~~ ~~360~~ ~~0~~ ~~378~~	**220** **850** **5** **700**
Comments: The project required more filed visits than originally planned and there were numerous biological concerns that required a more complex document for the threatened and endangered species. There was added design/construction scope including relocation of light poles that may impact structures. These changes add $957,000 to the cost of the project.														

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07	Los Angeles	405	11.7/12.2	In Carson, from Avalon Boulevard to Main Street. Reconstruct commercial vehicle enforcement facility.	28910	4457	0700021123	201.321	2016/17	~~10~~ **20**	4,872	PA&ED PS&E RW Const	210 ~~1,100~~ 5 ~~600~~	210 **1,400** 5 **1,050**
Comments: The project requires potholing for existing utilities that was not estimated during the PID phase. Further investigation during the environmental phase, it was identified there was a need for additional support. These changes add $860,000 to the cost of the project.														
07	Los Angeles	405	R21.5/26.3	In and near the Cities of Inglewood, Los Angeles, and Culver City, from 105 to Port Road. Enhance highway worker safety by replacing crash cushions, miscellaneous paving, and other measures.	29630	4593	0713000030	201.235	2017/18	~~0~~ **1**	2,130	PA&ED PS&E RW Const	~~79~~ ~~405~~ ~~0~~ ~~475~~	**220** **900** **5** **750**
Comments: The project required more field visits than originally planned and there were numerous biological concerns that required a more complex document for the threatened and endangered species. The support for DES was underestimated. These changes add $917,000 to the cost of the project.														
07	Los Angeles	405	28.0/39.0	In the city of Los Angeles, near Westwood and Sherman Oaks, from Venice Boulevard to Route 101. Pavement rehabilitation.	30780	4773	0714000222	201.121	2016/17	~~25~~ **96**	1,687	PA&ED PS&E RW Const	124 ~~312~~ ~~25~~ ~~312~~	124 **953** **151** **773**
Comments: The project scope was further refined and requires ADA upgrades at 13 locations. In addition, several utility conflicts were identified and will require significant investigation, coordination and relocation of utilities. These changes add $1,299,000 to the cost of the project.														
07	Los Angeles	605	R17.0/R19.5	In and near Industry, from south of Route 60 to Valley Boulevard. Roadside safety improvements.	30400	4713	0714000056	201.235	2018/19	0	2,513	PA&ED PS&E RW Const	~~54~~ ~~324~~ 60 ~~385~~	**168** **655** 60 **599**
Comments: The project involves 60 locations, requiring a greater effort than originally planned. In addition, labor costs have increased since the PID was approved. These changes add $679,000 to the cost of the project.														
07	Ventura	33	7.6	Near Oak View, at San Antonio Creek Bridge No. 52-0065. Scour mitigation and bridge rail upgrade.	29130	4496	0712000083	201.111	~~2016/17~~ **2018/19**	1,300	1,800	PA&ED PS&E RW Const	250 ~~1,310~~ ~~240~~ ~~900~~	250 **1,112** **600** **1,065**
Comments: Additional time is needed for the environmental and right of way phases. Detail plans are being submitted to resource agencies to address and mitigate environmental issues and will require consultations for permits. The number of right of way parcels increased and are horse parcels that require additional time and resources for acquisition and negotiations. These changes result in a two year delay and add $1,527,000 to cost the project.														
07	Ventura	101	29.8	In the city of Ventura, at Ash Street Pedestrian Overcrossing. Upgrade pedestrian overcrossing to ADA standards.	29040	4490	0712000034	201.378	2016/17	~~11~~ **31**	~~408~~ **568**	PA&ED PS&E RW Const	102 ~~195~~ 15 ~~170~~	102 **850** 15 **500**
Comments: The scope was refined during the PA&ED phase, resulting in an increase in the number of locations from 8 to 14. In addition, detailed surveys are required, potholing was identified as needed and the estimate for structural items were underestimated in the PID. These changes add $1,165,000 to the cost of the project.														
07	Ventura	118	T18.8/R32.6	In Moorpark and Simi Valley, from east of Arroyo Simi Overhead to Los Angeles County line. Pavement rehabilitation.	30760	4771	0714000220	201.121	2016/17	~~0~~ **150**	2,292	PA&ED PS&E RW Const	~~115~~ ~~500~~ ~~35~~ ~~500~~	**200** **750** **50** **800**
Comments: The project work plan was updated to address utilities and right of way needs. Initially the PID did not identify the need for right of way. Also, upon further evaluation of the project, indicated the need for Right of Way capital and support costs were identified. These changes add $800,000 to the cost of the project.														

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07	Ventura	126	0.0/R13.6	In and near the cities of Ventura and Santa Paula, from Route 101 to Haun Creek Bridge. Rehabilitate pavement.	30220	4685	0713000481	201.121	2016/17	~~10~~ **170**	12,800	PA&ED PS&E RW Const	120 ~~940~~ ~~40~~ ~~1,400~~	120 **1,040** **50** **1,700**
Comments: A right of way data sheet was not prepared for the PID. Extensive surveys and potholing are now needed for the project to identify utilities that were not accounted for during the PID phase. These changes add $580,000 to the cost of the project.														
07	Ventura	126	R13.6/R34.6	In and near Fillmore, from Haun Creek Bridge to Los Angeles County line. Pavement rehabilitation.	30140	4703	0714000021	201.121	2016/17	~~65~~ **360**	20,445	PA&ED PS&E RW Const	220 ~~440~~ ~~30~~ ~~2,400~~	220 **1,450** **130** **2,700**
Comments: The project scope was further refined and requires extensive ground survey work to design the ADA improvements. In addition, several utility conflicts were identified and will require investigation, coordination and relocation of utilities. These changes add $1,705,000 to the cost of the project.														
08	Riverside	10		In Riverside and San Bernardino Counties, on Routes 10, 111, and 215 at various locations. Rehabilitate 9 structures.	0Q890	0010C	0800020582	201.119	2016/17	~~20~~ **55**	~~1,802~~ **1,906**	PA&ED PS&E RW Const	210 652 ~~11~~ ~~452~~	210 652 **40** **600**
Comments: Near the end of the PA&ED phase, it was realized that the extent of railroad involvement for one bridge location, Colton-Loma Linda Yard Overhead, was not fully developed. Right of Way support and capital cost increases were needed for railroad, environmental permits and agreements. Construction support and capital cost increases are also needed for increases in the number of repairs and working days and a new pay item for railroad flagging. These changes add $316,000 to the cost of the project.														
08	Riverside	74	52.1/92.0	In and near Palm Desert, from west of Strawberry Creek Bridge to west of Cahuilla Hills Road. Install metal beam guardrail.	0R780	0050L	0812000165	201.015	2016/17	~~10~~ **117**	4,976	PA&ED PS&E RW Const	800 705 80 1,250	800 705 80 1,250
Comments: Right of Way capital increase is needed for a contribution to the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHVP) as identified by environmental during the PA&ED phase. These changes add $107,000 to the cost of the project.														
08	Riverside	111	0.0/10.5	At Salton Sea, from the Riverside/Imperial County line to east of Cleveland Street. Sediment stabilization and erosion control.	1C620	0098F	0812000337	201.335	2016/17	20	1,442	PA&ED PS&E RW Const	223 ~~200~~ 20 285	223 **426** 20 285
Comments: PS&E support cost increase is needed for survey support to obtain information on right of way alignment, existing utility and drainage facilities. These changes add $226,000 to the cost of the project.														
08	Riverside	VAR		Between Banning and Blythe on Routes 10 and 111, at Bridges No. 56-0003, 56-0241R, and 56-0596. Seismic retrofit.	0R350	0107F	0812000071	201.113	2016/17	20	~~4,433~~ **5,031**	PA&ED PS&E RW Const	456 ~~1,008~~ 21 ~~943~~	456 **1,467** 21 **1,112**
Comments: PS&E support cost increased to account for additional bridge seismic restoration and bridge rail replacement design at two locations. Construction support and capital increase to enable inspection in three remote locations and the replacement of bridge railing in two locations. These changes add $1,226,000 to the cost of the project.														
08	San Bernardino	18	44.5/52.8	In and near Big Bear Lake, from Route 38 to Gildart Drive. Sediment stabilization and erosion control.	1C560	0186F	0812000331	201.335	2016/17	202	~~3,686~~ **3,186**	PA&ED PS&E RW Const	~~472~~ 590 59 845	**911** 590 59 845
Comments: PA&ED support cost increase for survey and geotechnical investigation to determine right of way alignment, existing utilities and drainage facilities and to identify sand trap locations. Construction capital decrease as determined from an updated cost estimate. These changes result in a net reduction of $61,000 to the cost of the project.														

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08	San Bernardino	18	99.4/100.9	In Victorville, from Cobalt Road to Route 395. Construct raised curb median.	0Q120	0191J	0800020125	201.010	2017/18	~~30~~ **1,653**	9,101	PA&ED PS&E RW Const	1,123 1,297 ~~164~~ 1,212	1,123 1,297 **893** 1,212
Comments: The Department identified additional right of way impacts that will occur in order to construct the curb raised median. These impacts include acquisition, utility investigation and relocation and condemnation. These impacts add $2,352,000 to the cost of the project.														
08	San Bernardino	38	~~50.4/59.4~~ **VAR**	~~At Big Bear Dam, from Eagle Mountain Drive to Route 18. Sediment control and stabilization.~~ **At various locations, from Eagle Mountain Drive to Route 38/18 Separation. Sediment control and stabilization.**	0R430	0206U	0812000075	201.335	2016/17	39	2,195	PA&ED PS&E RW Const	~~325~~ 220 5 480	**741** 220 5 480
Comments: PA&ED support cost increase is needed for survey and geotechnical investigation to determine right of way alignment, existing utilities and drainage facilities and to identify sand trap locations. The redefined scope will limit the locations to within US Forest Service Lands and fulfill the State's commitment to stormwater compliance. These changes add $416,000 to the cost of the project.														
08	San Bernardino	330	39.6/39.7	Near Running Springs, between Route 210 and Route 18. Replace culverts.	1F830	3001A	0815000055	201.131	~~2016/17~~ **2017/18**	10	2,345	PA&ED PS&E RW Const	~~400~~ 300 25 345	**700** 300 25 345
Comments: It was determined that an access road needs to be redesigned which changes the project footprint. This change delays the environmental studies and will require a programming delay from FY 16/17 to FY 17/18 as well as a PA&ED support cost increase. These changes add $300,000 to the cost of the project.														
10	Merced	99	R35.9/R37.3	In Merced and Stanislaus Counties near Turlock, from north of Bradbury Road to north of the Stanislaus County line. Rehabilitate pavement. ~~(G13 Contingency Project)~~	1C180	3091	1014000101	201.122	2016/17	10	~~0~~ **14,250**	PA&ED PS&E RW Const	281 954 4 ~~0~~	281 954 4 **2,100**
Comments: Change G13 Contingency project to a fully funded project.														
10	San Joaquin	12	~~14.9/18.1~~ **17.1/17.7**	In Lodi, ~~from Westgate Drive to Route 99~~ from South School Street to South Central Street. Upgrade pedestrian curb ramps to ADA standards.	0Y550	3079	1013000239	201.361	2016/17	~~451~~ **37**	~~672~~ **539**	PA&ED PS&E RW Const	225 150 ~~100~~ ~~250~~	225 150 **245** **307**
Comments: The project limits have been revised to keep the project within the programmed Construction capital amount and to address ADA grievance locations. A future project will be programmed to capture the remaining locations. However, Construction support costs have increased due to a resource review that determined the current programmed amount is not enough to provide adequate construction oversight. These changes result in a reduction of $345,000 to the cost of the project.														
10	San Joaquin	99	0.0/6.8	In Stanislaus and San Joaquin Counties, from south of Pelandale Avenue to north of Yosemite Avenue/Route 120 East Junction. Lengthen existing lane transitions and construct auxiliary lanes. ~~(G13 Contingency Project)~~	1C300	5002	1014000145	201.310	2016/17	800	~~0~~ **29,424**	PA&ED PS&E RW Const	2,061 2,650 122 ~~0~~	2,061 2,650 122 **3,825**
Comments: Change G13 Contingency project to a fully funded project.														

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Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
10	Stanislaus	5	27.0/27.5	Near Westley, at the Westley Safety Roadside Rest Area (SRRA). Upgrade water and wastewater systems.	0W630	3009	1012000021	201.235	~~2016/17~~ **2018/19**	~~0~~ **5**	~~2,387~~ **4,001**	PA&ED PS&E RW Const	~~124~~ ~~592~~ ~~0~~ ~~728~~	**260** **904** **6** **806**
Comments: During the design phase it was discovered that the proposed water and wastewater system cannot operate effectively with the existing facility electrical system. Therefore, an electrical upgrade is required at greater capital and support costs. Additional need for positive utility identification potholing increases Right of Way support and capital. A change to the delivery year is required due to the need for the electrical upgrade design. In addition, a separate project to upgrade the rest area buildings is scheduled to deliver in 2019; delay of this project will allow delivery on the same schedule so that projects can be combined to reduce the time this facility is closed. These changes add $2,151,000 to the cost of the project.														
11	San Diego	5	R0.3/5.4	~~In the city of San Diego, at various locations from Camino De La Plaza to Main Street. Improve maintenance worker safety by constructing Maintenance Vehicle Pullouts (MVP), paving miscellaneous areas and repairing damaged systems that require frequent maint.~~ **In San Diego and Chula Vista, at various locations from Camino De La Plaza Overcrossing to Main Street Overcrossing. Construct pullouts and pave beyond gore areas to improve safety for maintenance personnel.**	41090	1104	1112000138	201.235	2016/17	60	3,101	PA&ED PS&E RW Const	399 ~~733~~ ~~68~~ ~~1,226~~	399 **1,019** **25** **983**
Comments: During the Design Phase an aerially deposited lead study and an additional hydraulic design was determined to be needed. Upon further refinement, it was also determined that right of way acquisition is not required and the Construction support can be reduced. These changes are a net zero cost for the project.														
11	San Diego	8	~~R0.1/R2.0~~ **R0.1/2.0**	~~In the city of San Diego, from west of Morena Boulevard to east of Hotel Circle North interchange ramps. Enhance striping and signage in westbound direction.~~ **In the city of San Diego, from 0.2 mile west of Morena Boulevard to 0.1 mile east of Hotel Circle North interchange ramps. Restripe westbound I-8, add an additional westbound lane and improve signage.**	41480	1068	1112000193	201.010	2016/17	~~73~~ **173**	~~8,142~~ **13,077**	PA&ED PS&E RW Const	~~960~~ ~~1,323~~ ~~204~~ ~~2,063~~	**895** **2,405** **301** **2,940**
Comments: Underground utility conflicts and aerially deposited lead were discovered. Furthermore, high friction surface treatment, removal and replacement of a truss sign structure, additional grading/retaining wall and planting/irrigation are also needed for the project. These changes add $7,026,000 to the cost of the project.														
11	San Diego	8	9.0/15.3	In the cities of San Diego, La Mesa, and El Cajon, from west of Lake Murray Boulevard to Johnson Avenue. Pavement rehabilitation.	40870	1062	1112000017	201.121	2016/17	~~1~~ **90**	17,423	PA&ED PS&E RW Const	636 ~~1,142~~ ~~7~~ 2,988	636 **1,715** **52** 2,988
Comments: During the design process, a more refined scope and accurate estimate was established. As a result, support and capital cost increases due to an increased in required ADA curb ramps. Also, an extensive pavement evaluation revealed additional dig-outs are now required. The scope reduction is being made to account for work that was being done by other projects. The scope reduction savings are being used to offset additional cost. These changes add $707,000 to the cost of the project.														

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Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
11	San Diego	8	49.0	Near Pine Valley, at Buckman Springs Safety Roadside Rest Area (SRRA). Rehabilitate SRRA sewer and water systems.	40910	1085	1112000043	201.235	~~2016/17~~ **2017/18**	~~0~~ **20**	3,275	PA&ED PS&E RW Const	698 1,251 ~~20~~ 1,034	698 1,251 **0** 1,034
Comments: The Department is continuing to coordinate with United States Forest Service (USFS) on finalizing wastewater system project scope to obtain USFS approval for permit amendment to rehabilitate the Safety Roadside Rest Area (SRRA). However, due to the uncertainty in obtaining approval in a timely manner, a programming year change from FY 16/17 to FY 17/18 is necessary. A Right of Way support decrease and Right of Way capital increase is needed to reimburse the USFS for their design plan review and for permit fees to the Regional Water Quality Control Board (RWQCB) for water testing. These changes are a net zero cost for the project.														
11	San Diego	79	31.3/49.9	~~Near Warner Springs and Oak Grove, at various locations from Buena Vista Creek Bridge No. 57-0063 to Chihuahua Creek Bridge (No. 57-0014). Upgrade bridge rails.~~ **In San Diego County, at various locations from Buena Vista Creek Bridge to Chihuahua Creek Bridge. Rehabilitate bridge railing on five bridges.**	41430	1123	1114000024	201.112	2016/17	~~2~~ **0**	~~2,187~~ **2,587**	PA&ED PS&E RW Const	330 ~~1,061~~ ~~4~~ ~~830~~	330 **1,326** **0** **892**
Comments: There is a need for additional scope which includes earthwork to meet safety requirements for Midwest Guardrail, reconstruction of shoulders near bridges and drainage facilities. Increase support costs due to aerial deposited lead study, design change from Type 736 barrier to Type ST-10 barrier at two of the bridges. However, there is a decrease in Right of Way capital and support because environmental permits are no longer required. These changes add $721,000 to the cost of the project.														
11	San Diego	~~15~~ **VAR**		In various cities, on various routes at various locations. Repair bridge decks, rails, and replace approach slabs.	2M820	1173	1115000099	201.119	2016/17	0	~~2,361~~ **2,325**	PA&ED PS&E RW Const	0 651 0 679	0 651 0 679
Comments: Repair work at three locations will be addressed on other projects. The downsize in scope result in a net reduction of $36,000 to the cost of the project.														
11	San Diego	VAR		In and near the cities of Chula Vista, National City, Coronado and San Diego on routes 5, 8, 52, 75, 163 and 805 at various locations. Upgrade curb ramps to comply with ADA standards.	40580	1022	1100020271	201.361	2017/18	90	4,394	PA&ED PS&E RW Const	841 1,856 134 ~~1,120~~	841 1,856 134 **1,678**
Comments: The scope has changed to include more work locations, therefore the estimated number of working days has increased. This change adds $558,000 to the cost of the project.														
11	San Diego	VAR		In various cities, at various locations. Upgrade existing guide signs to current standards.	41910	1129	1114000125	201.170	2016/17	0	~~10,671~~ **11,571**	PA&ED PS&E RW Const	640 ~~1,224~~ ~~5~~ ~~1,486~~	640 **1,334** **0** **986**
Comments: The PS&E support cost and Construction capital cost have increased because the number of signs needing replacement have increased. However, Right of Way support and Construction support have decreased due to no right of way impacts and a decrease in the level of construction complexity. These changes add $505,000 to the cost of the project.														
11	San Diego	VAR		In various cities, at various locations. Upgrade existing guide signs to current standards.	41911	1130	1114000126	201.170	2016/17	0	10,593	PA&ED PS&E RW Const	640 1,224 ~~5~~ ~~1,486~~	640 1,224 **0** **986**
Comments: Right of Way and Construction support have decreased due to no right of way impacts and a decrease in the level of construction complexity. These changes result in a net reduction of $505,000 to the cost of the project.														

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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 PS&E RW Const	~~950~~ 2,000 200 2,100	**1,641** 2,000 200 2,100
Comments: The project required aerial topographic mapping and additional environmental and traffic studies are required to complete preliminary design and the environmental document. These changes add $691,000 to the cost of the project.														
12	Orange	39	1.8	In the city of Huntington Beach, at Utica Avenue. Intersection improvement.	0N990	3104	1215000017	201.010	2017/18	~~45~~ **56**	~~580~~ **569**	PA&ED PS&E RW Const	117 ~~293~~ ~~94~~ 293	117 **330** **210** 293
Comments: Additional work is needed for condemnation, increasing Right of Way capital and support costs, as well as an increase to design to support the condemnation process. An updated Construction capital estimate will decrease the offsets the right of way condemnation cost increases. These changes add $153,000 to the cost of the project.														
12	Orange	39	12.4/17.2	In Anaheim and Buena Park, at Lincoln Avenue (PM 12.4/12.9); at Route 91 (PM 14.3/14.5) and from Route 5 to Rosecrans Avenue (PM 15.1/17.4). Roadway rehabilitation. ~~(G13 Contingency Project)~~	0J400	3174	1200020177	201.121	2016/17	72	~~0~~ **7,322**	PA&ED PS&E RW Const	0 4,310 270 ~~0~~	0 4,310 270 **1,472**
Comments: Change G13 Contingency project to a fully funded project.														
~~12~~	~~Orange~~	~~57~~	~~10.7/16.6~~	~~In the cities of Orange, Anaheim and Placentia, from Route 5 to north of Orangethorpe Avenue. Upgrade Transportation Management System.~~	~~0N900~~	~~2530J~~	~~1215000007~~	~~201.315~~	~~2019/20~~	~~0~~	~~2,020~~	~~PA&ED~~ ~~PS&E~~ ~~RW~~ ~~Const~~	~~150~~ ~~400~~ ~~50~~ ~~380~~	~~150~~ ~~400~~ ~~50~~ ~~380~~
Comments: Combine Project EA 04-0P420, EA 04-0P410 and EA 04-0N900 into Project EA 04-0P42U.														
~~12~~	~~Orange~~	~~91~~	~~R2.6/7.2~~	~~In the cities of Buena Park, Anaheim and Fullerton, from Route 39 (Beach Boulevard) to North Kraemer Boulevard. Upgrade Transportation Management System.~~	~~0P410~~	~~4532~~	~~1215000099~~	~~201.315~~	~~2019/20~~	~~0~~	~~3,200~~	~~PA&ED~~ ~~PS&E~~ ~~RW~~ ~~Const~~	~~180~~ ~~590~~ ~~50~~ ~~580~~	~~180~~ ~~590~~ ~~50~~ ~~580~~
Comments: Combine Project EA 04-0P420, EA 04-0P410 and EA 04-0N900 into Project EA 04-0P42U.														
12	Orange	142	R0.8/2.9	In and near Brea, from Route 90 to east of Brea Hills Avenue. Pavement rehabilitation.	0N600	5364	1214000066	201.121	2016/17	~~6,826~~ **1,005**	5,750	PA&ED PS&E RW Const	0 2,040 ~~500~~ 2,490	0 2,040 **780** 2,490
Comments: The right of way capital scope was reduced, in order to coordinate with the local agency in transferring property rights; this will reduce the amount of right of way required. This change results in a net reduction of $5,541,000 to the cost of the project.														

2016 SHOPP Amendment 16H-002
Cost, Scope, Schedule and Technical Changes
Includes Federal Emergency Relief Funds
($ Thousands)

Dist	County	Route	Post Miles	Description/Location	EA	PPNO	EFIS	Prog Code	FY	RW	Const	Support		
12	Orange	~~5~~ **VAR**	~~33.0/43.2~~ **VAR**	~~In the cities of Orange, Anaheim, Santa Ana, Fullerton and Buena Park, from Main Street to Stanton Avenue. Install and modify Intelligent Transportation System elements.~~ **In the cities of Orange, Anaheim, Santa Ana, Fullerton and Buena Park, from PM 33.0 to PM 43.2, also on Route 57, from PM 10.7 to PM 16.6, also on Route 91, from PM R2.6 to PM R4.1 and PM 0.0 to PM 7.2. Install and modify Intelligent Transportation System (ITS) elements.**	~~0P420~~ **0P42U**	2859B	~~1215000098~~ **1215000097**	201.315	2019/20	0	~~3,600~~ **8,820**	PA&ED PS&E RW Const	~~170~~ ~~770~~ ~~80~~ ~~480~~	**1,323** **2,030** **180** **2,030**

Comments: There are cost increases to PA&ED, PS&E and Construction support due to procuring an A&E contract, developing a charter and a complex concept of operations (ConOps) and completing a MOU with local agencies. These changes add $1,683,000 to the cost of the project.
Combine Project EA 12-0P420, EA 12-0P410 and EA 12-0N900 into Project EA 04-0P42U.