

Memorandum

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: June 29-30, 2016

Reference No.: 2.1a.(2a)
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 nine 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 | 1 | | \$1,210 | | |
| Collision Reduction | 8 | | \$3,741 | \$761 | \$34,373 |
| Total Amendments | 9 | | \$4,951 | \$761 | \$34,373 |

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 soldier 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 <hr/> Total | \$79 \$459 \$10 \$390 <hr/> \$938 | 201.131 Assembly: 54 Senate: 28 Congress:36 1 Location |
| 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 <hr/> Total | \$390 \$670 \$210 \$670 <hr/> \$1,940 | 201.010 Assembly: 3 Senate: 4 Congress: 1 20 Collisions reduced |
| 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 <hr/> Total | \$2,500 \$3,750 \$1,800 \$4,200 <hr/> \$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 <hr/> Total | \$0 \$269 \$19 \$125 <hr/> \$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 <hr/> Total | \$350 \$490 \$10 \$400 <hr/> \$1,250 | 201.010 Assembly: 32, 34 Senate: 14,16 Congress:21 38 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.) | | | | | | |
| 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 <hr/> Total \$0 \$618 \$20 \$341 <hr/> \$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 <hr/> Total \$40 \$165 \$0 \$145 <hr/> \$350 | 201.010 Assembly:36, 38 Senate: 21 Congress:25 37 Collisions reduced |
| 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 <hr/> Total \$175 \$406 \$4 \$221 <hr/> \$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 <hr/> Total \$227 \$576 \$13 \$413 <hr/> \$1,229 | 201.010 Assembly: 73 Senate: 33 Congress:45 55 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. (G-13 Contingency Project) | 43640 | 0100V | 0100000193 | 201.110 | 2016/17 2018/19 | 1500 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 costal 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. R/W 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, for a net reduction of \$56,318,000 to the cost of the project. | | | | | | | | | | | | | | |
| 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 | 4,020 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 engineering, 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. | | | | | | | | | | | | | | |
| 04 | Mendocino | 4 | 75.7/76.2 | Near Westport, from 0.5 to 1.0 mile north of Blue-Slide Gulch Bridge. Reconstruct roadway | 0B480 | 4548 | 0114000034 | 201.134 | 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. | | | | | | | | | | | | | | |

| 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 | 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 | 9,900 10,700 | PA&ED PS&E RW Const | 450 550 490 750 | 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. | | | | | | | | | | | | | | |
| 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 | 9,900 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 | PA&ED PS&E RW Const | 200 1,200 500 0 | 200 1,500 210 0 |
| Comments: 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 | 347 146 | 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 CHP 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. | | | | | | | | | | | | | | |

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|--|-----------|-------|------------|---|-------|------|------------|-----------|---------|-------------------|------------------------|------------------------------|--------------------------------|--|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 550 640 150 630 | 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 | 4,608 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 lead to an increase. These changes reduced \$59,000 from the total cost of the project. | | | | | | | | | | | | | | |
| 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 1,600 480 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 | 1,443 1,043 | PA&ED PS&E RW Const | 490 260 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. | | | | | | | | | | | | | | |

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|---|---------|-------|-----------------------------------|--|-------|-------|------------|-------------------------------|---------|-----------|------------------|---------|-------|-------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 0 | 0 |
| | | | | | | | | | | | | PS&E | 1,500 | 1,500 |
| | | | | | | | | | | | | RW | 15 | 15 |
| | | | | | | | | | | | | Const | 3,000 | 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 mater experts in various disciplines including materials quality control/assurance during construction administration. This change adds \$1,000,000 to the cost of the project. | | | | | | | | | | | | | | |
| 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 | 40 160 | 16,500 17,600 | PA&ED | 0 | 0 |
| | | | | | | | | | | | | PS&E | 2,470 | 2,470 |
| | | | | | | | | | | | | RW | 80 | 80 |
| | | | | | | | | | | | | Const | 3,300 | 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 | 883 | 883 |
| | | | | | | | | | | | | PS&E | 2,830 | 2,830 |
| | | | | | | | | | | | | RW | 170 | 170 |
| | | | | | | | | | | | | Const | 2,830 | 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 Separation and Overhead . Rehabilitate pavement. (G13 Contingency Project) | 4H580 | 0483W | 0413000162 | 201.121 | 2016/17 | 40 | 0 | PA&ED | 654 | 654 |
| | | | | | | | | | | | | PS&E | 2,700 | 2,700 |
| | | | | | | | | | | | | RW | 166 | 166 |
| | | | | | | | | | | | | Const | 0 | 0 |
| Comments: 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. | | | | | | | | | | | | | | |

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|---|--------------|-------|------------|--|-------|-------|------------|-----------|---------|-----------|----------------|------------------------------|-----------------------------|-----------------------------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 360 700 400 355 | 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 | 4,244 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. | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | |

| 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 | | |
| 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 | 29 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, that 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 Malpas 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. | | | | | | | | | | | | | | |

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|---|---------------|-------|--------------------|---|-------|------|------------|-----------|--------------------|------------|----------------|---------|-------|-------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 44 30 | 5,349 | PA&ED | 575 | 675 |
| | | | | | | | | | | | | PS&E | 983 | 983 |
| | | | | | | | | | | | | RW | 44 | 35 |
| | | | | | | | | | | | | Const | 1,154 | 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. | | | | | | | | | | | | | | |
| 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 | 280 | 280 |
| | | | | | | | | | | | | PS&E | 650 | 770 |
| | | | | | | | | | | | | RW | 12 | 12 |
| | | | | | | | | | | | | Const | 550 | 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 | 4,050 | 1,938 |
| | | | | | | | | | | | | PS&E | 1,842 | 1,842 |
| | | | | | | | | | | | | RW | 40 | 44 |
| | | | | | | | | | | | | Const | 1,350 | 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 | 543 | 587 |
| | | | | | | | | | | | | PS&E | 674 | 1,132 |
| | | | | | | | | | | | | RW | 309 | 401 |
| | | | | | | | | | | | | Const | 508 | 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 | 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 | 0 | 0 |
| | | | | | | | | | | | | PS&E | 0 | 0 |
| | | | | | | | | | | | | RW | 0 | 0 |
| | | | | | | | | | | | | Const | 400 | 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 | 348 | 348 |
| | | | | | | | | | | | | PS&E | 545 | 775 |
| | | | | | | | | | | | | RW | 345 | 345 |
| | | | | | | | | | | | | Const | 400 | 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. | | | | | | | | | | | | | | |

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|---|-------------|-------|-------------|--|-------|------|------------|-----------|--------------------|----------------|------------------|---------|-------|-------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | PA&ED | 545 | 545 |
| | | | | | | | | | | | | PS&E | 1,040 | 1,525 |
| | | | | | | | | | | | | RW | 55 | 55 |
| | | | | | | | | | | | | Const | 0 | 0 |
| Comments: 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. (G13 Contingency Project) | | | | | | | | | | | | | | |
| 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 | 0 | 0 |
| | | | | | | | | | | | | PS&E | 2,450 | 2,977 |
| | | | | | | | | | | | | RW | 300 | 300 |
| | | | | | | | | | | | | Const | 2,600 | 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 reduced \$6,973,000 from 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 | 89 | 89 |
| | | | | | | | | | | | | PS&E | 356 | 1,028 |
| | | | | | | | | | | | | RW | 5 | 20 |
| | | | | | | | | | | | | Const | 445 | 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 | 744 | 744 |
| | | | | | | | | | | | | PS&E | 1,089 | 1,546 |
| | | | | | | | | | | | | RW | 485 | 485 |
| | | | | | | | | | | | | Const | 1,095 | 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 | 400 | 650 |
| | | | | | | | | | | | | PS&E | 700 | 800 |
| | | | | | | | | | | | | RW | 80 | 80 |
| | | | | | | | | | | | | Const | 800 | 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. | | | | | | | | | | | | | | |

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|--|-------------|-------|-------------|---|-------|------|------------|-----------|---------|--------|----------------|---------|-------|-------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 738 | 2,342 |
| | | | | | | | | | | | | PS&E | 1,428 | 2,123 |
| | | | | | | | | | | | | RW | 474 | 740 |
| | | | | | | | | | | | | Const | 1,251 | 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 | 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 LA River Bridge to reduce truck off-tracking. | 29230 | 4505 | 0712000109 | 201.015 | 2016/17 | 25 | 3,300 3,784 | PA&ED | 140 | 140 |
| | | | | | | | | | | | | PS&E | 440 | 1,753 |
| | | | | | | | | | | | | RW | 15 | 37 |
| | | | | | | | | | | | | Const | 435 | 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 | 443 | 250 |
| | | | | | | | | | | | | PS&E | 333 | 883 |
| | | | | | | | | | | | | RW | 0 | 5 |
| | | | | | | | | | | | | Const | 466 | 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 | 110 | 110 |
| | | | | | | | | | | | | PS&E | 438 | 985 |
| | | | | | | | | | | | | RW | 5 | 5 |
| | | | | | | | | | | | | Const | 531 | 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. | | | | | | | | | | | | | | |

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|--|-------------|-------|-----------------------------|---|-------|------|------------|-----------|---------|---------------------|-------|------------------------------|--------------------------|---|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | PA&ED PS&E RW Const | 0 3,024 30 0 | 0 3,024 30 0 |
| Comments: 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. | | | | | | | | | | | | | | |
| 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 1,100 | 1,490 | 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 Americans with Disabilities Act (ADA) curb ramp improvements. | 29120 | 4494 | 0712000008 | 201.361 | 2016/17 | 252 2,515 | 2,257 | 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. | | | | | | | | | | | | | | |

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|---|-------------|-------|------------|--|-------|------|------------|-----------|---------|-----------------|-----------------------|------------------------------|------------------------|---|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 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. | | | | | | | | | | | | | | |
| 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 | 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 | 84 360 0 378 | 220 850 5 700 |
| 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. 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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|--|-------------|-------|-------------|--|-------|------|------------|-----------|-------------------------------|----------|------------|------------------------------|----------------------------|------------------------------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 49 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 | 79 406 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 | 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 Americans with Disabilities Act (ADA) standards. | 29040 | 4490 | 0712000034 | 201.378 | 2016/17 | 44 31 | 498 568 | PA&ED PS&E RW Const | 102 495 15 470 | 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 | 445 500 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. | | | | | | | | | | | | | | |

| 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 | | |
| 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 | 49 170 | 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. | | | | | | | | | | | | | | |
| 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 1,297 464 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 | 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 | 1802 1,906 | PA&ED PS&E RW Const | 210 652 44 452 | 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 YD 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 | 49 117 | 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. | | | | | | | | | | | | | | |

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|--|----------------|-------|------------------------|---|-------|-------|------------|-----------|--------------------|-----------|----------------|------------------------------|--------------------------|--------------------------|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 reduced \$61,000 from the total 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 | 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 | 454 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 reduced \$345,000 from the total cost of the project. | | | | | | | | | | | | | | |
| 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 can not 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. | | | | | | | | | | | | | | |

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|---|-----------|-------|------------|---|-------|------|------------|-----------|--------------------------------------|----------------|--------|------------------------------|-----------------------------|--|
| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 49.0 | Near Pine Valley, at Buckman Springs Safety Roadside Rest Area (SRRRA). Rehabilitate SRRRA 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 (SRRRA). 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 | 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 | 4 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 | 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 | 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 1,064 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 | 45 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 reduced \$36,000 from the total 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 Americans with Disabilities Act (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. | | | | | | | | | | | | | | |

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| Dist | County | Route | Post Miles | Description/Location | EA | PPNO | EFIS | Prog Code | FY | RW | Const | Support | | |
| 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 | 40,674 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 reduced \$505,000 from the total 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 | 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 | 94 | 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 2,040 600 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 reduced \$5,541,000 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 | | |
| 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: Combine Project EA 12-0P420, EA 12-0P410 and EA 12-0N900 into Project EA 04-0P42U. 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. | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | |