

PROJECT CHANGE REQUEST

PROJECT ID. 11-1300-0002

DISTRICT/EA 11-41550 PPNO 1089 PGM Doc. SHOPP PGM Del FY 16/17 PROG CODE 20.XX.201.315

Cty Rte PM Description

PROJECT (SCOPE) DESCRIPTION: SD VAR Var/Var In San Diego and Imperial counties, on various routes at various locations. Replace and upgrade Traffic Management System (TMS) field elements including traffic controllers, detection stations, CCTV systems, and other aging data collection equipment.

DOES THIS PROJECT INVOLVE PROPOSITION 1B FUND(S)? NO YES , TYPE(S) (CMIA, Route 99, STIP, SHOPP, etc.) _____

SCOPE, COST & SCHEDULE CHANGES

TYPE OF REQUEST: PGM COST PGM YEAR SCOPE SPLIT / COMBINE OTHER:

COMPONENT Change (\$'s in 1,000's)

	EXISTING (PROGRAMMED)		PROPOSED		COST EXPENDED to Date % COMPLETE			COST CHANGE			
	Value	FY	Value	FY	Expended	% Expended	% Complete	Value	Value%	Yrs	Type
PA&ED	\$160	16/17	\$235	15/16	\$212	132.1%	89%	\$75	46.9%	- 1	C
PS&E	\$573	16/17	\$699	15/16	\$12	2.1%	19%	\$126	22.0%	- 1	A
R/W SUP	\$2	16/17	\$2	15/16	\$0	0%	0%	\$0	0%	- 1	NA
CON SUP	\$703	16/17	\$923	15/16	\$0	0%	0%	\$220	31.3%	- 1	A
R/W CAP	\$0	16/17	\$0	15/16	\$0	0%	0%	\$0	0%	- 1	NA
CON CAP	\$4,362	16/17	\$4,362	15/16	\$0	0%	0%	\$0	0%	- 1	NA
Total	\$5,800		\$6,221		\$224			\$421	7.3%		

WHAT PHASE IS THE PROJECT IN? PRE-PGM DELIVERY YR PGM DELIVERY YR & PRE VOTE POST VOTE

Cost Change Type	Description	Data Systems Changed	
	Cost Change Request Types	Programmed Budget	Approved Cost
A	Programming Cost Change	CTIPS	AMS Advantage
B	Headquarters Cost Approval		AMS Advantage
C	District Cost Documentation		
NA	No Change Proposed		
Supplemental Funds Requests			
SFR	Supplemental Funds Request		AMS Advantage If Expenditures < 100%

Cty - Rte - PM - Description

New Project Description: _____
(Only if Revised)

“010” Safety Project? Yes No

Project
Performance

EXISTING (PROGRAMMED)		PROPOSED		PERFORMANCE CHANGE		
TMS-315	353	TMS-315	204	TMS-315	149	-42%
<u>Value</u>	<u>Units</u>	<u>Value</u>	<u>Units</u>	<u>Value</u>	<u>Units</u>	

(SHOPP PRIMARY PERFORMANCE
OUTPUT BY PROGRAM CODE)

1.) WHAT IS THE PROPOSED CHANGE?

Program Year

The proposed change is to move programmed funding from FY 16/17 to FY 15/16 for PA&ED Support, PS&E Support, R/W Support, Construction Support, R/W Capital, and Construction Capital.

Project Cost

The proposed changes are increases to PS&E Support and Construction Support.

Project Scope

The proposed change is a reduction in the number of Transportation Management Systems (TMS) field elements that get replaced.

2.) COMPLETE THE FOLLOWING REGARDING THE LATEST TWO COST ESTIMATES.

(\$'s in 1,000's.)

- | | | |
|-----------------------------------|-----------------------------|------------------------|
| 1. ESTIMATE DATE: <u>08/2014,</u> | Con Capital <u>\$3,828,</u> | RW Capital <u>\$0.</u> |
| 2. ESTIMATE DATE: <u>04/2013,</u> | Con Capital <u>\$4,362,</u> | RW Capital <u>\$0.</u> |

3.) WHAT WAS THE REASON FOR THE CHANGE?

Program Year

The project schedule is being accelerated because this project is one of 22 highway projects eligible to receive one-time funding that is available due to an early General Fund loan repayment proposed in the Governor's Budget.

Project Cost

In general, this is a Transportation Management System (TMS) field replacement project. The main purpose of the project is to be proactive and address the lifecycle issues of obsolete and old field elements before they fail and upgrade them to newer technology. There is no precedence in the Department to deliver this kind of project, and as such, the design team, including the Project Manager, has been very cautious in estimating the support cost. Also, the nature of this project is Information Technology/Electrical, putting this project outside the norm of a typical Caltrans project. These issues have resulted in additional support costs.

PS&E Support Increase

The additional PS&E Support is required due to the facts as mentioned above. Additionally, the Project Study Report (PSR) was written a year ago and the technology and conditions have changed. As the final Project Report (PR) neared completion, the scope became clearer for the various branches involved to support this project, and they adjusted their hours accordingly.

Construction Support Increase

The additional Construction Support is required due to the facts as mentioned above. Additionally, the PSR was written a year ago. As the final Project Report neared completion, the scope became clearer for the various branches involved, and they adjusted their hours accordingly. Specifically the fact that this is a purely Electrical/Information Technology project, makes it very difficult for District 11's construction inspectors due to lack of expertise. Therefore, they adjusted their hours accordingly.

Project Scope

The Project Study Report identified TMS elements to be replaced or upgraded by consulting various groups in District 11's Division of Traffic Operations. During the Project Report phase, the same groups were contacted again to validate the elements. It was at this time that these groups eliminated some elements and added other elements based on need and priorities.

The support cost and scope changes are required because at the time the PSR was being developed, the project team was projecting a replacement plan that was five years into the future, because this project was scheduled to deliver in later SHOPP years.

However, due to acceleration of the project, the schedule was pulled in, and the equipment list had to be modified to allow for early replacement schedule. Therefore, priority was assigned to the elements that required early replacement. The revision in TMS field elements will in no way result in deviating from the original purpose and need listed in the Project Study Report.

4.) WHEN WAS THE CHANGE DISCOVERED?

Program Year

The change was proposed by Headquarters on May 29, 2014.

Project Cost

The change was discovered on June 16, 2014, during the input of additional resources in PRSM for each phase of the project.

Project Scope

The change was discovered in July 2014.

5.) WHAT HAS BEEN DONE TO MINIMIZE ANY CHANGE?

Program Year

Constrained.

Project Cost

To minimize changes, periodic meetings between the Project Manager and District 11's Project Management Control Unit were conducted to monitor the support cost trends.

Project Scope

To minimize changes, meetings were held with Traffic Operations to prioritize the replacement of the field elements and stay within the programmed construction capital cost.

6.) WHAT CAN BE CONSTRUCTED WITH THE PROGRAMMED FUNDS?

The project can be constructed with the currently programmed funds; however, additional capital outlay support is necessary for PS&E Support and Construction Support.

7.) IF THE SCOPE IS REDUCED OR SPLIT, WOULD THE REMOVED WORK NEED TO BE REPROGRAMMED OR ADDED TO ANOTHER PROJECT?

The field elements that were deleted will be added to another project.

8.) IS A SUPPLEMENTAL SCOPING DOCUMENT NEEDED? IF YES, STATUS?

A Project Report will be approved in September 2014 documenting the proposed changes.

9.) WAS A VALUE ANALYSIS STUDY CONDUCTED? EXPLAIN THE RESULTS OF THE STUDY OR WHY A STUDY WAS NOT CONDUCTED?

A Value Analysis study was not conducted because, per statewide policy, the total project cost is less than \$50 million.

10.) COST - WHERE WILL THE REQUIRED FUNDS COME FROM?

If this PCR is approved, it is anticipated that the required funds will come from the SHOPP.

11.) PRIOR PCRs – LIST OTHER PCRs PREVIOUSLY APPROVED.

No prior PCRs have been approved.

PROJECT CONCURRENCE

12.) (A) (STIP-RIP) WHEN DID THE DISTRICT DISCUSS THIS WITH HEADQUARTERS STIP PROGRAM MANAGER AND THE RTPA OR COUNTY TRANSPORTATION COMMISSIONS STAFF? EXPLAIN THEIR REACTION. N/A

(B) (STIP-IIP) WHEN DID THE DISTRICT DISCUSS THIS WITH HEADQUARTERS STIP PROGRAM MANAGER? EXPLAIN THEIR REACTION. N/A

(C) (SHOPP) WHEN DID THE DISTRICT DISCUSS THIS WITH THE HEADQUARTERS PROGRAM MANAGER? EXPLAIN THEIR REACTION.

The Project Manager spoke with HQ SHOPP Program Manager Kien Le, who gave his approval to proceed with this PCR and concurred with the findings on 09/10/14.

13.) LESSONS LEARNED, NEW STRATEGIES (What new information pertaining to this project could be beneficial to others?)

Because this is the very first of its kind, the project team is still learning how to deliver this type of project. The project calls for replacing and updating old and obsolete TMS field element technology with new technology. Expertise in the field of electrical and systems engineering is required. In addition, the cost estimate for field elements and support costs needs to be more accurate when the PSR is being developed.

This is one of the projects identified by District 11 for accelerated delivery. It qualified for a one-time funding opportunity, wherein funds from early loan repayments have been allocated to projects that are scheduled for delivery in later fiscal years. Being able to readily identify which projects can be accelerated for delivery is beneficial to District 11. In this way, when additional funding becomes available, the District can immediately recommend which projects to accelerate.

14.) District Project Manager Signature



SHAHIN SEPASSI
 District Project Manager

7/19/14
 Date

(858) 518 - 3912
 Phone Number



ROSS T. CATHER
 Deputy District Director
 Program/Project Management

10/2/14
 Date

APPROVAL - COMMENTS - CONCERNS

- PD Concurrence
- PD Objections (detail concerns):

15.) Comments - Concerns:



LUIS BETANCOURT
 HQ Project Delivery Coordinator

9/18/14
 Date

APPROVAL



LAURIE BERMAN
 DISTRICT DIRECTOR

10-6-14
 Date

	Approve	Deny	No HQ Action
Cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Split / Combine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Revise & Resubmit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



JAMES E. DAVIS
 HQ DIVISION CHIEF
 PROJECT MANAGEMENT

10/23/14
 Date



RACHEL FALSETTI
 HQ DIVISION CHIEF
 TRANSPORTATION PROGRAMMING

10/29/14
 Date

REQUIRED ATTACHMENTS

- (a) Attach 1 page copy (screenprint) of project workplan/status schedule.
- (b) Attach the current CTIPS project information.
- (c) PCR Data Worksheet, if applicable (for splits/combinations).
- (d) For STIP Projects, please attach the latest Project Programming Request (PPR).
- (e) Summary Cost Estimates, if/when needed.

PROJECT ID. 11-1300-0002
 DISTRICT/EA 11-41550

Project Manager: SEPASSI, SHAHIN
 Project Description - Long: IN SAN DIEGO AND IMPERIAL COUNTIES, ON VARIOUS ROUTES AT VARIOUS LOCATIONS
 Work Description - Long: REPLACE AND UPGRADE TRAFFIC MANAGEMENT SYSTEM (TMS) FIELD ELEMENTS INCLUDING TRAFFIC CONTROLLERS, CCTV SYSTEMS, AND OTHER AGING DATA COLLECTION EQUIPMENT
 Subprogram: Transportation Management Systems
 Fund Source (S&M): 20 XX 201 315(\$5,800)
 Open Phases: 0, 1

PM Assistant: DYE, ELAINE L
 Project Nickname: REPLACE AND UPGRADE TMS FIELD ELEMENTS
 PFNO: 1089 Open for Time: Yes
 CT Status: APL
 PROGRAM YR: 2016 Working Days
 AADD: Yes

PDT MEMBERS

Env Doc	Req Dte	Rev Date
0		

RWP PARCELS

Phase	BACS	Prog\$	EXP \$	ETC \$	50% - 80%	80% - 100%	100%	Prod %	EAC \$	EAC %	S/C %
0	139	160	23	23	23	23	23	146.5%	23	146.5%	5.4%
1	500	573	25	674	674	674	674	122.0%	674	122.0%	16.0%
2	2	2	0	2	2	2	2	98.6%	2	98.6%	0.0%
3	703	703	0	922	922	922	922	131.2%	922	131.2%	21.1%
4	1,344	1,438	236	1,621	1,621	1,621	1,621	129.2%	1,621	129.2%	42.6%
9	0	0	0	0	0	0	0	0.0%	0	0.0%	0.0%
4	0	0	0	0	0	0	0	0.0%	0	0.0%	0.0%
Total	1,344	5,800	236	1,621	1,621	1,621	1,621	32.0%			

Project Phase Summary (k\$)

Phase	BACS	Prog\$	EXP \$	ETC \$	50% - 80%	80% - 100%	100%	Prod %	EAC \$	EAC %	S/C %
0	139	160	23	23	23	23	23	146.5%	23	146.5%	5.4%
1	500	573	25	674	674	674	674	122.0%	674	122.0%	16.0%
2	2	2	0	2	2	2	2	98.6%	2	98.6%	0.0%
3	703	703	0	922	922	922	922	131.2%	922	131.2%	21.1%
4	1,344	1,438	236	1,621	1,621	1,621	1,621	129.2%	1,621	129.2%	42.6%
9	0	0	0	0	0	0	0	0.0%	0	0.0%	0.0%
4	0	0	0	0	0	0	0	0.0%	0	0.0%	0.0%
Total	1,344	5,800	236	1,621	1,621	1,621	1,621	32.0%			

MS ID	MS Description	MS Date	WBS ID	TM	WBS DESCRIPTION	START	FINISH	% COMP	OTE	BAC HRS	ETC HRS	EXP HRS	EAC HRS	ETC \$	EXP \$	EAC \$
M001	APPROVE PID	07/17/12 (A)	K100.05	S.SEPASSI	PROJ MGMT PS&E CMPNT	10/23/12	4/25/14	100(C)	N	347	0	29	29	0	1,400	1,400
M015	PRCG PROJ	07/17/12 (A)	K150.05.05	S.SEPASSI	RWD OR EXTG RPTS STUDIE	12/31/12	4/25/14	100(C)	N	246	0	2	2	0	105	105
M020	BEGIN ENVIRO	07/17/12 (A)	K150.25	S.SEPASSI	APVD PID [PSSR ETC.]	2/18/13	4/25/14	100(C)	N	306	0	3	3	0	228	228
M210	BEGIN DESIGN	07/17/12 (A)	K.P	S.SEPASSI	PID BUCKET	10/28/12	8/1/13	99(S)	N	578	0	578	578	0	46,250	46,250
M250	SKELETON LAYOUT	06/25/14 (T)	0.100.10	S.SEPASSI	PROJ MGMT PS&E CMPNT	4/6/14	9/9/14	80(S)	N	1,507	9	107	115	658	47,983	47,983
M259	DIST LOG-IN APRV	01/20/15 (T)	0.160.10	S.SEPASSI	ENGRG STUDIES	4/17/14	9/9/14	90(S)	N	16	37	20	57	4,071	5,950	6,608
M360	CHR2 PLANS IN DIST	02/03/15 (T)	0.160.15	S.SEPASSI	DRAFT PR	4/13/14	9/9/14	90(S)	Y	803	24	1,131	1,155	2,603	5,957	101,024
M377	PS&E TO DOE	01/20/15 (T)	0.165.10	D.NAGY JR	GENL ENV STUDIES	8/10/14	9/9/14	90(S)	Y	166	49	55	104	4,928	3,254	8,182
M380	PROJ PS&E	04/02/15 (T)	0.166.15	S.SEPASSI	BIOL STUDIES	4/18/14	9/9/14	90(S)	N	0	12	4	16	984	252	1,237
M410	RWD CERT	02/23/15 (T)	0.165.20	S.SEPASSI	CLTRL RSCR STUDIES	4/18/14	9/9/14	80(S)	N	0	2	2	4	142	88	230
M460	RFL	06/11/15 (T)	0.165.25	S.SEPASSI	DED	5/11/14	11/10/14	80(S)	N	0	16	0	16	1,313	0	1,313
M470	FUND ALLOCATION	07/23/15 (T)	0.170.10	S.SEPASSI	PLACS	4/21/14	9/9/14	80(S)	N	0	4	4	4	328	0	328
M471	ELEC TRANS TO HQ OE	06/06/15 (T)	0.175.05	S.SEPASSI	DED CIRCN	4/14/14	9/9/14	80(S)	N	40	16	1	17	1,829	103	1,931
M480	HQ ADVERT	08/06/15 (T)	0.175.05	S.SEPASSI	FPR	7/13/14	9/10/14	80(S)	N	120	59	487	526	6,374	39,881	46,255
M490	BIDS OPEN	08/04/15 (T)	0.180.05	S.SEPASSI	ENV BUCKET	7/11/13	9/4/15	59(S)	N	0	0	0	0	0	60,950	60,950
M495	AWARD	10/08/15 (T)	0.E	S.SEPASSI	ENV BUCKET	7/11/13	9/4/15	59(S)	N	1,451	228	1,787	2,014	23,230	211,225	284,455
M500	APPROVE CONTRACT	10/16/15 (T)	0 Phase Total	S.SEPASSI	PROJ MGMT PS&E CMPNT	9/9/14	8/10/15	0(N)	Y	125	687	667	667	79,035	79,035	79,035
M500	CONTRACT ACCEPT	11/18/16 (T)	1.100.15	S.SEPASSI	UPDD PROJ INFO	8/15/14	9/24/14	50(S)	Y	397	513	134	647	57,013	11,255	68,268
M550	PROJECT CLOSEOUT INF	12/19/16 (T)	1.185.05	S.SEPASSI	SRVYS & PHTGR MPG FOR I	8/15/14	9/25/14	10(S)	Y	36	40	0	40	4,333	0	4,333
M700	FINAL REPORT	02/14/17 (T)	1.185.10	M.PHELAN	PREL DSN	8/15/14	9/22/14	10(S)	Y	243	298	0	298	32,983	0	32,983
M800	END PROJ	08/13/17 (T)	1.185.15	S.SEPASSI	M.EATON	8/15/14	9/19/14	10(S)	Y	80	64	0	64	7,145	0	7,145
			1.185.20.05	F.KHADEM	UPDD TRAF DATA ANALY &	8/15/14	9/19/14	10(S)	Y	60	60	0	60	6,123	0	6,123
			1.185.25.30	S.SEPASSI	UTIL CONFLICT MAPS	8/15/14	9/24/14	10(S)	Y	72	132	0	132	16,021	0	16,021
			1.205.10	K.SMITH	PLACS	8/15/14	9/24/14	10(S)	Y	40	40	0	40	4,647	0	4,647
			1.230.05	S.SEPASSI	DRAFT RDWAY PLANS	8/18/14	12/26/14	10(S)	Y	158	239	0	239	27,163	0	27,163
			1.230.10	S.ALVAREZ	DRAFT HPVS	8/19/14	12/26/14	10(S)	Y	18	16	0	16	1,435	0	1,435
			1.230.15.05	C.ABU-FADE	SNG & PVNT DELN PLANS	8/18/14	12/26/14	10(S)	Y	35	35	0	35	3,183	0	3,183
			1.230.15.10	C.ABU-FADE	CONST AREA SIGNS PLANS	8/18/14	12/26/14	10(S)	Y	40	40	0	40	4,161	0	4,161
			1.230.15.15	B.PECUS	TRAF ERLCR PLANS	8/17/14	12/26/14	10(S)	Y	848	362	72	434	42,856	6,251	49,107
			1.230.20	F.KHADEM	TMP	9/23/14	2/6/15	0(N)	Y	40	40	0	40	4,082	0	4,082
			1.230.25	A.AL-JAFRI	DRAFT UTIL PLANS	8/18/14	12/26/14	10(S)	Y	28	108	0	108	12,645	0	12,645
			1.230.30	S.SEPASSI	DRAFT DRNG PLANS	8/18/14	11/26/14	10(S)	Y	96	96	0	96	9,964	0	9,964
			1.230.35	L.EDMONDS	DRAFT SPECS	8/18/14	11/26/14	10(S)	Y	571	361	0	361	41,439	0	41,439
			1.230.40	S.SEPASSI	DRAFT PS&E O&E	9/25/14	10/23/14	0(N)	N	147	136	0	136	16,032	0	16,032
			1.230.55	L.EDMONDS	STRUCS DRAFT PS&E INC	9/26/14	10/27/14	0(N)	N	16	6	0	6	697	0	697
			1.230.60	S.SEPASSI	UPDD PROJ INFO FOR PS&E	9/26/14	10/27/14	0(N)	N	230	366	0	366	40,032	0	40,032
			1.235.10	J.DOWDA-BAF	DSI FOR HW	9/26/14	10/24/14	0(N)	N	40	40	0	40	3,979	0	3,979
			1.255.05	S.SEPASSI	CIRCD & RWD DRAF F DIST	2/9/15	3/3/15	0(N)	N	541	731	0	731	60,814	0	60,814

State Highway Operation and Protection Program

San Diego County

Document Year 2014, Version Number 1

PPNO: 1089

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.:	TITLE (DESCRIPTION):	ELEMENT:	SHOPP Major Const.	MPO ID:	10
11	1089	41550	110-0000-0694		(In San Diego and Imperial counties, on various routes at various locations	SPONSOR:	Caltrans		
CT PROJECT ID:							San Diego Association of Governments		
11-1300-0002						MPO:			
COUNTY:		ROUTE		PM:		CORRIDOR:			
San Diego County		VAR				PRJ MGR:	Shahin Sepassi		
						PHONE:	(858) 518-3912	LAW:	12
						EMAIL:	shahin.sepassi@dot.ca.gov		

ASSEMBLY:	56, 71, 75, 77, 78, 79	IMPLEMENTING	PAED	RW
SENATE:	36, 38, 39, 40	AGENCIES:	PSE	CON
CONGRESS:	40, 50, 52			

PROJECT VERSION HISTORY (Printed Version is Shaded) (Last 9 versions displayed)

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Programmed Dollars in Thousands - Total For Project					Con Sup
								Prog Con	Prog RW	PA & ED	PS & E	RW Sup	
1	Official	03/26/14	DBERRY	Approved - New Project				4,362		160	573	2	703
Fund Source 1 of 1 SHOPP - Mobility					<u>PRIOR</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>	<u>19/20</u>	<u>FUTURE</u>	<u>TOTAL</u>
20.XX.201.315 - Transportation Management (TMC's & Field Equipment)					PA&ED			160					160
Fund Type:					PS&E			573					573
National Hwy System					RW SUP			2					2
					CON SUP			703					703
					RW								
					CON			4,362					4,362
					Total:			5,800					5,800

HQ Comments:
 ***** Version 1 - 03/26/2014 *****
 New 2014 SHOPP project