

PROJECT CHANGE REQUEST

PROJECT ID. 11-1300-0046

DISTRICT/EA 11-41600 PPNO 1090 PGM Doc. SHOPP PGM Del FY 17/18 PROG CODE 20.XX.201.315

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 communication HUBs, Highway Advisory Radio (HAR) 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	\$169	17/18	\$212	15/16	\$187	110.7%	92%	\$43	25.4%	-2	C
PS&E	\$570	17/18	\$688	15/16	\$0	0%	0%	\$118	20.7%	-2	A
R/W SUP	\$2	17/18	\$2	15/16	\$0	0%	0%	\$0	0%	-2	NA
CON SUP	\$792	17/18	\$891	15/16	\$0	0%	0%	\$99	12.5%	-2	A
R/W CAP	\$0	17/18	\$0	15/16	\$0	0%	0%	\$0	0%	-2	NA
CON CAP	\$4,266	17/18	\$4,266	15/16	\$0	0%	0%	\$0	0%	-2	NA
Total	\$5,799		\$6,059		\$187			\$260	4.5%		

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	221	TMS-315	74	TMS-315	147	- 67%
Value	Units	Value	Units	Value	Units	

(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 17/18 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 change is a programming increase 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's in 1,000's.)**

- | | | |
|------------------------------------|------------------------------|-------------------------|
| 1. ESTIMATE DATE: <u>08/2014</u> , | Con Capital <u>\$3,749</u> , | RW Capital <u>\$0</u> . |
| 2. ESTIMATE DATE: <u>05/2013</u> , | Con Capital <u>\$4,266</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 09/11/14.

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

9/19/14 (858) 518 - 3912
 Date Phone Number

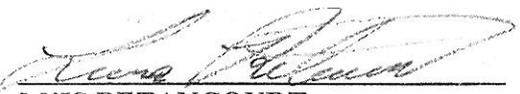

ROSS T. CATHER
 Deputy District Director
 Program/Project Management

10/2/14
 Date

APPROVAL - COMMENTS - CONCERNS

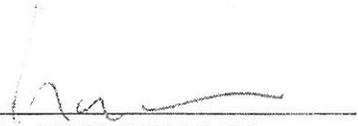
- PD Concurrence
- PD Objections (detail concerns):

15.) Comments - Concerns:


LUIS BETANCOURT
 HQ Project Delivery Coordinator

9/18/14
 Date

APPROVAL

		<u>Approve</u>	<u>Deny</u>	<u>No HQ Action</u>
<u></u>	<u>10-6-14</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LAURIE BERMAN	Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DISTRICT DIRECTOR		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 10/23/14  10/29/14
JAMES E. DAVIS Date **RACHEL FALSETTI** Date
 HQ DIVISION CHIEF *for* HQ DIVISION CHIEF
 PROJECT MANAGEMENT TRANSPORTATION PROGRAMMING

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/combines).
- (d) For STIP Projects, please attach the latest Project Programming Request (PPR).
- (e) Summary Cost Estimates, if/when needed.

PROJECT ID 11-1300-0046
 DISTRICT/EA 11-41600

Project Manager: SEPASSI, SHAHIN PM Assistant: DYE, ELAINE L Project Nickname: REPLACE AND UPGRADE TMS FIELD ELEMENTS
 Project Description - Long IN SAN DIEGO AND IMPERIAL COUNTIES, ON VARIOUS ROUTES AT VARIOUS LOCATIONS.
 Subproject Transportation Management Systems PID Type: Replace and Upgrade Traffic Management System (TMS) Field Elements Including Communication Hubs, Highway Advisory Radio (HAR) Systems, and Other Aging Data Collection Equipment
 Fund Source (\$Amt): 20 XX 201 315(\$5,799) PPNO: 1080 Open for Time: Yes CT Status: APL Working Days: ADD: Yes

Open Phases: 0, 1
 RW PARCELS: 0
 Env Doc: Permit: Req Dte: Rwd Date

Phase	BAC \$	Prog \$	EXP \$	ETC \$	50% - 80%	80% - 100%	100%	EAC \$	Prog %	EAC %	S/C %
0	165	169	169	0	25	25	25	165	125.2%	100.0%	5.0%
1	515	570	570	0	685	685	685	515	121.9%	16.3%	16.3%
2	2	2	0	0	2	2	2	2	99.1%	0.0%	0.0%
3	791	792	0	0	885	885	885	791	111.7%	20.7%	20.7%
4	1,474	1,533	197	1,595	1,763	1,763	1,533	117.0%	42.0%	42.0%	
9	0	0	0	0	5	5	5	0	0.0%	0.0%	0.0%
4	0	4,266	0	0	5	5	5	4,266	0.1%	0.1%	0.1%
Total	1,474	5,799	197	1,602	1,799	1,799	1,474				

Capital Cost Estimates	Amount \$k	EST Date
Roadway	4,266	03/26/14
Structures	0	
Const Total	4,266	
ROW	0	
Total	4,266	

HQ Categorization SHOPP MAJOR AUTHORIZED SHOPP
 District Category A2 - PROGRAMMED SF
 2 - FY14/15 CFD
 28 - Remaining FY14/15

WBS ID	MS Description	MS Date	TM	WBS DESCRIPTION	START	FINISH	% COMP	OTE	BAC HRS	ETC HRS	EXP HRS	EAC \$	EXP \$
K-100.05	PROJ MGMT PID CMPNT	10/15/12	S.SEPASSI	PROJ MGMT PID CMPNT	6/23/13	10/01/13	N		320	0	34	1,733	1,733
K-150.25	APVD PID (PSR PSSR ETC)	6/16/13	S.SEPASSI	APVD PID (PSR PSSR ETC)	6/16/13	10/01/13	N		242	0	4	266	266
K-P	PID BUCKET	10/28/12	S.SEPASSI	PID BUCKET	6/23/13	5/8/13	Y		547	0	547	45,372	45,372
K Phase Total													
0.100.10	PROJ MGMT PASED CMPNT	4/20/14	S.SEPASSI	PROJ MGMT PASED CMPNT	9/9/14	8/01/14	N		1,108	0	584	1,803	1,803
0.160.15	DRAFT PR	4/1/14	S.SEPASSI	DRAFT PR	9/9/14	9/01/14	Y		1,134	22	79	4,710	4,710
0.165.10	GENL ENV STUDIES	8/10/14	D.NAGY JR	GENL ENV STUDIES	9/9/14	9/01/14	N		107	35	1,800	3,964	102,962
0.165.15	BIOL STUDIES	4/4/14	S.SEPASSI	BIOL STUDIES	9/9/14	9/01/14	N		0	14	0	3,546	4,658
0.165.20	CLTRL RSRC STUDIES	4/4/14	S.SEPASSI	CLTRL RSRC STUDIES	9/9/14	9/01/14	N		0	0	14	1,309	0
0.165.25	DED	7/11/14	S.SEPASSI	DED	12/12/14	9/01/14	N		0	10	2	712	90
0.170.10	PLACS	5/1/14	S.SEPASSI	PLACS	9/9/14	8/01/14	N		0	16	16	1,313	0
0.175.05	DED CIRCN	4/1/14	S.SEPASSI	DED CIRCN	9/9/14	8/01/14	N		40	4	4	328	0
0.180.05	FPR	4/1/14	S.SEPASSI	FPR	9/9/14	8/01/14	N		243	16	16	1,828	0
0-E	ENV BUCKET	4/18/14	S.SEPASSI	ENV BUCKET	8/31/14	9/8/14	Y		0	0	237	9,761	21,049
0-Phase Total									1,645	217	1,567	24,567	53,498
1.100.15	PROJ MGMT PSSE CMPNT	9/10/14	S.SEPASSI	PROJ MGMT PSSE CMPNT	8/18/15	0/1/15	N		152	701	701	82,257	0
1.165.05	UPDD PROJ INFO	8/31/14	S.SEPASSI	UPDD PROJ INFO	10/31/14	5/3/15	Y		467	320	18	338	0
1.185.10	SRVYS & PHOTR MFG FOR I	8/29/14	M.PHELAN	SRVYS & PHOTR MFG FOR I	10/13/14	10/1/14	Y		40	40	40	35,492	1,424
1.185.15	PREL DSN	8/29/14	S.SEPASSI	PREL DSN	10/8/14	10/1/14	Y		311	623	0	4,125	0
1.185.20.05	MEATON	8/29/14	M.EATON	UPDD TRAF DATA ANALY &	10/8/14	10/1/14	Y		80	80	0	71,851	0
1.185.20.35	F.KHADEM	8/29/14	F.KHADEM	UPDD TRAF FOR DSN PHASE	10/8/14	10/1/14	Y		60	60	0	8,930	0
1.185.25.30	S.SEPASSI	8/29/14	S.SEPASSI	UTIL CONFLICT MAPS	10/8/14	10/1/14	Y		100	44	44	6,123	0
1.205.10	K.SMITH	8/29/14	K.SMITH	PLACS	10/6/14	10/1/14	Y		40	40	0	5,335	0
1.230.05	S.SEPASSI	8/18/14	S.SEPASSI	DRAFT RDWY PLANS	11/3/14	10/1/14	Y		159	195	0	4,647	0
1.230.10	S.ALVAAREZ	11/3/14	S.ALVAAREZ	DRAFT HPPS	12/30/14	0/1/15	Y		32	26	0	22,657	0
1.230.15.05	C.ABOU-FADE	11/3/14	C.ABOU-FADE	SNG & PVANT DELN PLANS	12/30/14	0/1/15	Y		32	32	0	2,639	0
1.230.15.10	C.ABOU-FADE	11/3/14	C.ABOU-FADE	CONST AREA SIGNS PLANS	12/30/14	0/1/15	Y		80	80	0	3,303	0
1.230.15.15	B.PEGUS	8/17/14	B.PEGUS	TRAF LRCL PLANS	11/3/14	10/1/14	Y		374	332	64	8,322	0
1.230.20	F.KHADEM	11/3/14	F.KHADEM	TMP	12/31/14	0/1/15	Y		40	20	0	39,243	5,384
1.230.25	A.AL-JAFRI	11/3/14	A.AL-JAFRI	DRAFT UTIL PLANS	12/31/14	0/1/15	Y		72	132	0	2,041	0
1.230.30	S.SEPASSI	11/3/14	S.SEPASSI	DRAFT DRNG PLANS	12/31/14	0/1/15	Y		24	24	0	15,165	0
1.230.35.05	L.EDMONDS	11/3/14	L.EDMONDS	RDWY SPECS	12/31/14	0/1/15	Y		515	263	0	2,253	0
1.230.35.10	F.KHADEM	11/3/14	F.KHADEM	HP SPECS	12/31/14	0/1/15	Y		20	4	0	28,024	0
1.230.35.15	F.KHADEM	11/3/14	F.KHADEM	TRAF SPECS	12/30/14	0/1/15	Y		16	20	0	456	0
1.230.35.20	L.EDMONDS	11/3/14	L.EDMONDS	ELRCL SPECS	11/3/14	5/8/14	Y		95	90	0	2,041	0
1.230.35.30	L.EDMONDS	11/3/14	L.EDMONDS	HYDRC SPECS	12/31/14	0/1/15	Y		16	2	0	9,630	0
1.230.35.35	C.KONTAXIS	11/3/14	C.KONTAXIS	WFC SPECS	11/3/14	11/5/14	N		16	2	0	228	0
1.230.35.40	C.KONTAXIS	11/3/14	C.KONTAXIS	ERN CTNRL SPECS	12/31/14	0/1/15	Y		16	2	0	229	0
1.230.40	S.SEPASSI	11/3/14	S.SEPASSI	DRAFT PS&E O&E	12/31/14	0/1/15	Y		165	178	0	21,184	0

State Highway Operation and Protection Program

San Diego County

Document Year 2014, Version Number 1

PPNO: 1090

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.	TITLE (DESCRIPTION)	ELEMENT:	SHOPP Major Const.	MPO ID: 10
11	1090	41600	110-0000-0695		(In San Diego and Imperial counties, on various routes at various locations. Replace and upgrade Traffic Management System (TMS) field elements including communication HUBs, Highway Advisory Radio (HAR) systems, and other aging data collection equipment.)	SPONSOR:	Caltrans	
CT PROJECT ID:						MPO:	San Diego Association of Governments	
11-1300-0046						CORRIDOR:		
COUNTY:						PRJ MGR:	Shahin Sepassi	
San Diego County						PHONE:	(858) 518-3912	LAW: 12
ROUTE:						EMAIL:	snahin.sepassi@dot.ca.gov	
VAR:								

ASSEMBLY:	56, 71, 75, 76, 77, 78	IMPLEMENTING	PAED	RW
SENATE:	36, 38, 39, 40	AGENCIES:	PSE	CON
CONGRESS:	40, 50, 51, 52			

PROJECT VERSION HISTORY (Printed Version is Shaded) (Last 9 versions displayed)				Programmed Dollars in Thousands - Total For Project									
Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
1	Official	03/26/14	DBERRY	Approved - New Project				4,266		169	570	2	792
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)									169				169
Fund Type:									570				570
National Hwy System									2				2
									792				792
									4,266				4,266
									5,799				5,799

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