

PROJECT DELIVERY REPORT

Trade Corridors Improvement Fund

The submitting agency will be responsible for maintaining documentation of the information entered on this report.
(Please type your response, handwritten reports will not be accepted)

*Rec'd
4/16/14*

A. Project Information

Date: 3/30/2015

TCIF # (Segment): 9

Other Project Identifier (EA, Project #, PPNO, etc.): PPNO TC09;
ESPLCM-5002 (142); HPLUL-5002 (154); EA 03-929165

Project Title: Sacramento Intermodal Track Relocation

Delivery Report:

Final- Due within six months of project becoming operable.

☒ Supplemental - Due at the conclusion of all project activities.

Location: County: Sacramento City: Sacramento

Project Description: Track Relocation and Separation of Passenger and Freight Tracks

B. Contact Information

Implementing Agency: City of Sacramento

Caltrans District Number: 3

Contact Person: Hinda Chandler

Phone: (916) 808-8422

Email Address: hchandler@cityofsacramento.org

C. Cost - Phase I - Sacramento Intermodal Track Relocation Phase I - Initial Project

	Adopted Program Amount (\$)	Current Approved Amount (\$)	Actual Expended Amount (\$)	Net Difference (Dollars)
Environmental				
Total Amount	\$2,000,000	\$3,255,000	\$3,142,604	\$112,396
Design				
Total Amount	\$4,984,000	\$6,865,000	\$8,349,018	-\$1,484,018
Right of Way				
Total Amount				
Construction				
TCIF	\$20,000,000	\$25,266,000	\$25,266,000	\$0
Local	\$5,000,000	\$7,800,000	\$9,054,948	-\$1,254,948
Federal	\$19,600,000	\$34,623,000	\$34,823,897	-\$200,897
Other				\$0
Totals	\$51,584,000	\$77,809,000	\$80,636,467	-\$2,827,467

C. Cost - Phase II - West Pedestrian/Bicycle Tunnel Ramps

	Adopted Program Amount (\$)	Current Approved Amount (\$)	Actual Expended Amount (\$)	Net Difference (Dollars)
Environmental				
Total Amount				\$0
Design				
Total Amount				\$0
Right of Way				
Total Amount				\$0
Construction				
TCIF	\$0			\$0
Local	\$0	\$700,000	\$963,744	-\$263,744
Federal	\$0	\$2,783,000	\$2,783,330	-\$330
Other				\$0
Totals	\$0	\$3,483,000	\$3,747,074	-\$264,074

D. Schedule - Phase I - Sacramento Track Relocation - Initial Project				
	Adopted Program Date	Current Approved Date	Actual Begin/End Date	Net Difference (Months)
Environmental Phase				
Begin	01/23/08	01/23/08	01/23/08	0
End	04/30/09	08/31/09	08/31/09	0
Design (PS&E) Phase				
Begin	05/01/09	05/01/09	05/01/09	0
End	08/31/09	12/01/10	11/30/10	0
Right of Way Phase				
Begin	05/01/09	05/01/09	05/01/09	0
End	08/31/09	11/30/09	11/30/09	0
Construction Phase				
Begin	01/02/10	03/31/11	03/22/11	0
End	12/31/11	01/31/13	08/14/13	7
Closeout Date				
Begin	01/01/12	01/31/13	08/15/13	7
End	06/30/12	10/31/13	05/31/14	7

D. Schedule - Phase II - West Pedestrian/Bicycle Tunnel Ramps				
	Adopted Program Date	Current Approved Date	Actual Begin/End Date	Net Difference (Months)
Environmental Phase				
Begin	01/23/08	01/23/08	01/23/08	0
End	04/30/09	08/31/09	08/31/09	0
Design (PS&E) Phase				
Begin	05/01/09	05/01/09	05/01/09	0
End	08/31/09	01/31/12	01/18/11	-2
Right of Way Phase				
Begin	05/01/09	05/01/09	05/01/09	0
End	08/31/09	08/31/11	11/30/09	0
Construction Phase				
Begin	01/02/10	05/01/12	09/11/12	4
End	12/31/11	01/31/13	09/16/13	8
Closeout Date				
Begin	01/01/12	01/31/13	09/17/13	8
End	06/30/12	10/31/13	05/30/14	7

E. Amendments		
List approved amendments		
Amendment #	CTC Meeting	Summary of Changes (Scope, Cost, Schedule)
TCIF-P-0708-01B	August 28, 2008	Original Project Baseline Agreement
TCIF-P-0809-09	March 12, 2009	Program add'l \$5,226,000 to add scope - pedestrian tunnel/ramps
TCIF-P-1011-06	Sept 22, 2010	Revise schedule for design and construction milestones
TCIF-P-1112-21	Feb 22, 2012	Update schedule, cost, funding, and split project into two phases (West Pedestrian/Bicycle Tunnel Ramps to be constructed under separate contract)

F. Project Benefits			
Describe and compare project benefits with those included in the approved Baseline Agreement.			
Outcomes	Adopted Program	Current Approved	Actual
Safety	Estimated 100% reduction in number of passenger crossings of live freight tracks.	Estimated 100% reduction in number of passenger crossings of live freight tracks.	Construction of passenger tunnels and walkways and movement of freight tracks eliminated passenger crossings of live freight tracks.
Velocity	Estimated 50% increase in permitted freight train speed through station segment	Estimated 50% increase in permitted freight train speed through station segment	Elimination of curves and conflicts has increased freight train speed over 50%.
Throughput	N/A		

Reliability	Major bottleneck on Central Rail Corridor is eliminated with track reconfiguration. Conflicts between freight and passenger service are reduced 80-90% approx. Curves in segment are eliminated	Major bottleneck on Central Rail Corridor is eliminated with track reconfiguration. Conflicts between freight and passenger service are reduced 80-90% approx. Curves in segment are eliminated	Track reconfiguration, elimination of curves, and double tracking greatly reduced conflicts between freight/passenger rail at railyard, improving train reliability.
Congestion Reduction	N/A		
Emissions Reductions	Estimated reductions from reduced idling and speed improvements; per year reductions approximately: ROG-16 pounds, NOx - 191 pounds, CO-43 pounds and PM10/PM2.5 - 119 pounds	Estimated reductions from reduced idling and speed improvements; per year reductions approximately: ROG-16 pounds, NOx - 191 pounds, CO-43 pounds and PM10/PM2.5 - 119 pounds	Train idling reduced through installation of wayside power cabinets, improved speed, and other improvements, meeting or exceeding emissions reductions.
Other - Noise Reduction	Not included in Baseline Agreement	The noise of trains operating through the station and on the new track has been greatly reduced. This is due to the new welded track and concrete ties and better track bed. It is very evident at the station platforms where trains come in very quietly and people are standing or sitting close to the tracks. In 2012 before and after the track cutover, the City had ICFI place a noise monitor along the ROW fence east of the station by a noise sensitive receptor to take readings. It was found that prior to the cutover the daily Ldn values were in the range of 67.3 to 71.2 dB and that after the cutover, they were in the range of 67.5 to 69.5dB. Also, the measurements showed that weekday train noise levels were down approximately 4 dB after the cutover.	
Other - Aesthetics/Open Views	Not included in Baseline Agreement	With the realignment of the tracks, the new passenger platforms and Midway Plaza are situated to the north of the CBD. When an individual on them now looks towards the city, they can see the Sacramento skyline and city views like they never before could. Similarly, there are new views across the site to the north and to the west and one can see the Central Shops Historic District, the riverfront, the dynamic freeway and scenic sunsets. The platforms are within 50 feet of the historic Central Shops and give a close hand view of these interesting and historic brick industrial buildings that Sacramentans could never get close to before. These views add greatly to the aesthetics of the site and to an appreciation of the setting.	

G. Differences/Variations

Describe differences/variances (if any) and reason for, between approved scope, cost, schedule, and actual.

The total project (Phases I and II) cost approximately \$3 million more than anticipated - about 4% over total budget. Nearly half the cost were attributable to design costs needed for rescoping and separating plans to rebid, and to field design changes due to changes in train operator equipment/operating standards. Construction cost increases were largely the result of changes orders related to train operations increased standards and costs. The overage was funded through local funds and an increase in federal funds. In addition, construction phase completion was delayed by 7 months due to numerous minor items that needed to be finalized before closure. Due to the size and complexity of the project, the punch list of minor items that needed to be addressed required extensive coordination and completion. As a result, the close out period was also extended by 7 months. The West Tunnel Ramps project had to be rebid as a result of bids coming in higher than approved budget, delaying construction award by 4 months. Due to extended schedule for completion of the larger Track Relocation and the interconnection between the projects, the West Tunnel Ramps project (Phase 2) could not be completed until the initial project was complete, and it experienced concomitant delays.

H. Lessons-Learned/Best Practices

Describe lessons-learned and best practices for future projects.

*Used same Construction Management firm for all projects related to or the Intermodal or in the Railyards - several that were occurring concurrently or in sequence. This created cohesiveness and fostered coordination among the contracts which had different construction contractors.

*Rail operators had updated their requirements/standards between approval of original plans and specifications and construction, resulting in need for a number of change orders. A pre-agreement on how to handle/pay for changed standards would have been helpful.

*Due to funding shortfalls, the project had to be value engineered, rebid and phased, requiring new plans and specifications and resulting in delays and adding expense. Identifying phasable segments of the project as bid alternates would have eased this process. The unique and varied nature of this work made accurate estimating difficult.

Certification Signature

Implementing Agency

I hereby certify to the best of my knowledge and belief, the information in this report is a true and accurate record. The work was performed in accordance with the CTC approved scope, cost, schedules, and benefit information in the Baseline Agreement.

Lucinda Willcox

(Print name) Project Manager



(Signature) Project Manager

3/30/2015

Date

Caltrans

The TCIF Division Program Coordinator and/or the Project Manager from the California Department of Transportation has reviewed the information contained in this report and has verified the information presented is correct.

Karen Hunter

(Print Name) TCIF Division Program Coordinator/Project Manager



(Signature) TCIF Division Program Coordinator/Project Manager

4-16-15

Date

The TCIF Program Lead from the California Department of Transportation has reviewed the information contained in the report and concurs with the approval.

Dawn Choe

(Print Name) TCIF Program Lead



(Signature) TCIF Program Lead

4/16/15

Date

Distribution: 1) Local Agency, 2) Division Program Coordinator/Project Manager, 3) TCIF Program Lead, 4) CTC