

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)

A. Project Information

Date: 2/21/2017

TCIF # (Segment): 83 Other Project Identifier (EA, Project #, PPNO, etc): EA: F006BA
PPNO: 150D

Project Title: Colton Crossing Rail to Rail Grade Separation

Delivery Report: ☒ Final- Due within six months of project becoming operable.
☒ Supplemental - Due at the conclusion of all project activities.

Location: County: San Bernardino City: Colton

Project Description: In Colton, construct railroad grade separation south of Interstate 10 from 0.2 mi west of Rancho Ave. to 0.9 mi east of La Cadena Dr.

B. Contact Information

Implementing Agency: San Bernardino County Transportation Authority Caltrans District: HQ75

Contact Person: Paula Beauchamp Phone: 909-884-8276

Email Address: pbeauchamp@sanbag.ca.gov

C. Cost		Adopted Program Amount (\$)	Current Approved Amount (\$)	Actual Expended Amount (\$)	Net Difference (Dollars)
Environmental					
Total Amount		\$3,689,000	\$3,689,000	\$3,689,000	\$0
Design					
Total Amount		\$11,600,000	\$5,570,000	\$5,570,000	\$0
Right of Way					
Total Amount		\$26,700,000	\$433,000	\$433,000	\$0
Construction					
TCIF		\$91,305,000	\$27,847,000	\$27,846,147	\$853
Local		\$0	\$0	\$0	\$0
Federal		\$28,900,000	\$33,800,000	\$33,800,000	\$0
Other	UP/BNSF	\$39,800,000	\$12,138,182	\$12,138,182	\$0
Totals		\$201,994,000	\$83,477,182	\$83,476,329	\$853

D. Schedule		Adopted Program Date	Current Approved Date	Actual Begin/End Date	Net Difference (Months)
Environmental Phase					
Begin		01/01/07	01/01/07	01/01/07	0
End		11/30/10	11/30/10	05/06/11	+2 Months
Design (PS&E) Phase					
Begin		06/01/10	06/30/10	06/31/10	-2 Months
End		06/21/11	06/21/11	06/30/11	0
Right of Way Phase					
Begin		02/28/11	02/28/11	02/01/11	+1 Month
End		06/30/11	06/30/11	06/01/11	0
Construction Phase					
Begin		09/27/11	09/30/11	09/30/11	-1 Month
End		03/31/14	03/31/14	03/31/14	0
Closeout Date					
Begin		04/01/14	04/01/14	04/01/14	+1 Month
End		05/01/14	05/01/14	06/18/14	-4 Months

E. Amendments**List approved amendments**

Amendment #	CTC Meeting	Summary of Changes (Scope, Cost, Schedule)
0	03/15/2010	Original request
2	08/01/2014	Reduce Cost Estimate

F. Project Benefits**Describe and compare project benefits with those included in the approved Baseline Agreement.****Adopted Benefits from the MOU Baseline**

Project Outcome	Metric	Determination Approach	2019 Build Case	2006 Baseline
1. Throughput	Rail Freight Volume (Trains feet per day) (No Commuters)	Actual	966,154	663,811
2. Velocity	Transit time through Corridor (MPH)	BNSF Mainline Actual	30.00	10.75
		UP Mainline Actual	42.50	10.75
3. Reliability	Variability in Transit time (Avg Annual Delay Hours)	Actual	(74,852)	N/A

4. Safety
- Decrease highway accidents from occurring by more than 800 accidents over the life of the project
 - Avoid three fatal accidents and 100 injury accidents over the life of the project
 - Reduce the number of heavy truck accidents by an average of 38 incidents per year
 - Source: Accident rates from Caltrans "Cal-BC" model
 - Average annual reduction in delay for vehicles equals 2.9 MM passenger hours
 - Average annual reduction in time-in-queue for delay equals 2.4 MM hours

Average annual reduction from vehicles

5. Congestion Reduction
- HC = 2.8 tons
 - CO = 18.6 tons
 - NOx = 4.9 tons
 - PM = 1.0 tons
 - CO2 = 10,982 tons

Average annual reduction from locomotives

6. Emissions Reduction
- HC = 42.8 tons
 - CO = 145.1 tons
 - NOx = 67.4 tons
 - PM = 5.8 tons
 - CO2 = 23,371 tons

Average annual gallons saved

7. Other Outcomes
- Gasoline = 907,590
 - Diesel = 79,060
 - Oil = 101,583

Note: Project estimates based on information developed for the BNSF and Union Pacific Public Benefit Study for Cotton Grade Separation dated February 5, 2008. The Project scope as more specifically described in Exhibit B may be modified as set for the in this Memorandum. The Parties contemplate that prior to project construction, estimates will be revised in accordance with the final Project scope of work and updated methodology as agreed upon between the parties in the Definitive Agreements. The Parties further contemplate these revised estimates will be the basis for comparing outcomes five (5) years after Project completion.

Actual Benefits			
Project Outcome	Metric	Determination Approach	Actual 2014
1. Throughput	Rail Freight Volume (Trains feet per day) (No Commuters)	Actual	926,445
2. Velocity	Transit time through Corridor (MPH)	BNSF Mainline Actual	20
		UP Mainline Actual	20
3. Reliability	Variability in Transit time (Avg Annual Delay Hours)	Actual	(26,710)

4. Safety • No accidents reported as of project completion

- Average annual reduction in delay for vehicles equals 905.8 passenger hours
- Average annual reduction in time-in queue for delay equals 756.8

5. Congestion Reduction

Average annual reduction from vehicles

- HC = .00087
- CO = .0058
- NOx = .0013
- PM = .0015
- CO2 = 3.41

Average annual reduction from locomotives

- HC = 4.0
- CO = 13.7
- NOx = 6.3
- PM = 0.54
- CO2 = 2194.6

6. Emission Reduction

Average annual gallons saved

7. Other Outcomes

- Gasoline = 282
- Diesel = 7,424
- Oil = 9,539

G. Differences/Variances

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

08/10/2011: Definitive agreements- SANBAG, UPRR, BNSF completed

The most significant change was the reduction in funding due to low bid price. State and railroad funds were proportionately reduced.

Higher construction savings were achieved due to increased efficiency from improved delivery of materials and availability of crews. This reduced flagging costs and project overhead costs.

H. Lessons-Learned/Best Practices

Describe lessons-learned and best practices for future projects.

Careful consideration must be paid when analyzing CCO's, particularly those that reduce work to be performed by a UDBE. Fortunately other CCO's increased UDBE efforts and the project goal was exceeded but this was not evaluated until after the project.

Congestion reduction explanation:

When the actual benefits realized during the first year after project implementation are compared to the expected benefits reported prior to project development, they are not as significant. The Baseline Agreement project benefits report anticipated 2019 conditions, or five years after project opening. Current reported values represent 2014 conditions. When the Baseline Agreement numbers were prepared, the effects of the recession were not yet envisioned. Due to the recession, train activity is dramatically lower than the pre-recession forecasts as the movement of freight is directly influenced by the global economy. The Baseline Agreement highlighted the vehicle and rail benefits associated with the anticipated continued significant growth in goods movement rail related activity that had been realized during the first several years of the early 2000's. While it is anticipated that some of the forecast growth may occur before 2019 and the 2019 values should be more in line with the Baseline Agreement forecast values, it is likely that the levels anticipated in 2006 will not yet be reached. As the rail and vehicle growth did not occur due to the regional and national recession, the full extent of the anticipated benefits have not yet been realized.

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.

Paula Beauchamp

(Print name) Project Manager



(Signature) Project Manager

2/7/17
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.

Sarah J. Smith, Branch Chief

(Print Name) TCIF Division Program Coordinator/Project Manager



(Signature) TCIF Division Program Coordinator/Project Manager

2/22/17
Date

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

Tony Cano

(Print Name) TCIF Program Lead



(Signature) TCIF Program Lead

3/30/17
Date

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