

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: 8/16/2018

TCIF # (Segment): 17 Other Project Identifier (EA, Project #, PPNO, etc): 07-932837L

Project Title: ACE: Gateway- Valley View Grade Separation

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

Location: County: Los Angeles City: Santa Fe Springs

Project Description: Removing existing at-grade crossing at Valley View to increase efficiency of BNSF main east west corridor to accommodate existing trains using the corridor and to future capacity, speed and volume of freight.

B. Contact Information

Implementing Agency: City of Santa Fe Springs Caltrans District Number: 07-93283L

Contact Person: Noe Negrete, Public Works Director Phone: (562) 868-0511

Email Address: noenegrete@santafesprings.org

C. Cost				
	Adopted Program Amount (\$)	Current Approved Amount (\$)	Actual Expended Amount (\$)	Net Difference (Dollars)
Environmental				
Total Amount	\$0	\$0	\$0	\$0
Design				
Total Amount	\$2,996,000	\$4,000,000	\$4,000,000	\$0
Right of Way				
Total Amount	\$10,640,000	\$15,281,000	\$17,367,339	-\$2,086,339
Construction				
TCIF	\$25,570,000	\$18,012,000	\$18,012,000	\$0
Local	\$1,909,000	\$2,054,000	\$2,222,161	-\$168,161
Federal	\$8,360,000	\$9,509,000	\$9,377,385	\$131,615
Other	\$25,702,000	\$15,141,000	\$12,993,429	\$2,147,571
Totals	\$75,177,000	\$63,997,000	\$63,972,314	\$24,686

D. Schedule				
	Adopted Program Date	Current Approved Date	Actual Begin/End Date	Net Difference (Months)
Environmental Phase				
Begin	09/12/05	09/12/05	09/12/05	0
End	09/12/05	09/12/05	03/15/10	1645
Design (PS&E) Phase				
Begin	06/01/06	09/01/05	09/01/05	0
End	03/01/08	12/31/10	12/31/10	0
Right of Way Phase				
Begin	07/01/06	07/01/06	07/01/06	0
End	10/01/08	12/31/10	11/11/11	10.5
Construction Phase				
Begin	02/01/09	05/31/12	05/24/12	-0.2
End	04/01/11	08/31/14	10/21/14	1.7
Closeout Date				
Begin	04/01/11	09/01/14	11/03/14	2.1
End	07/01/11	11/30/14	02/12/15	2.5

* Approved reimbursement ratio is 0.4575, total expended amount is within approved ratio.

E. Amendments**List approved amendments**

Amendment #	CTC Meeting	Summary of Changes (Scope, cost, Schedule)
1	1/19/2011 (TCIF-P-1011-14)	Amend TCIF baseline agreement [PPNO TC 17] to revise the project schedule for design, ROW, and construction and to revise the project funding plan.
2	5/23/2012 (TCIF-P-1112-42)	Amend TCIF baseline agreement [PPNO TC 17] to update the project delivery schedule, funding plan for design, ROW, and construction.
3	10/23/2014 (TCIF-AA-1213-05)	De-allocate \$6,478,000 to decrease original funding of \$25,570,000 to \$19,092,000
4	10/21/2015	De-allocate \$851,000 to decrease funding of \$19,092,000 to \$18,241,000
5	12/9/2015	De-allocate \$229,000 to decrease funding of \$18,241,000 to \$18,012,000

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

Outcomes	Adopted Program	Current Approved	Actual
Safety	<p>Elimination of this at-grade crossing will improve public safety because it will eliminate the potential for train versus automobile/truck/pedestrian accidents. One train/truck accident, and one train/pedestrian accident have occurred at the crossing during the last two years. The potential for pedestrian/truck versus train accidents will increase as vehicular traffic and train volumes increase by 20% by 2020 with the truck volume percentage expected to exceed 13% by 2020. The project will also eliminate the need for pedestrians to walk across the tracks and will enhance public safety by reducing the response time for emergency vehicles. Currently, emergency vehicles responding to calls that encounter a train experience a delay of around 3 minutes on the average and have experienced delays exceeding 8 minutes or more.</p>	<p>Elimination of this at-grade crossing will improve public safety because it will eliminate the potential for train versus automobile/truck/pedestrian accidents. One train/truck accident, and one train/pedestrian accident have occurred at the crossing during the last two years. The potential for pedestrian/truck versus train accidents will increase as vehicular traffic and train volumes increase by 20% by 2020 with the truck volume percentage expected to exceed 13% by 2020. The project will also eliminate the need for pedestrians to walk across the tracks and will enhance public safety by reducing the response time for emergency vehicles. Currently, emergency vehicles responding to calls that encounter a train experience a delay of around 3 minutes on the average and have experienced delays exceeding 8 minutes or more.</p>	<p>This project eliminated the at-grade crossing and improved public safety as it eliminated the train, automobile and pedestrian conflict. The elimination of a 3 min average delay in emergency vehicle response time due to the train crossing has been 100% eliminated, resulting in faster responses since grade separation was constructed.</p>

Velocity	Elimination of this at-grade crossing will improve velocity on BNSF by eliminating the potential for train versus automobile/ truck/ pedestrian accidents and associated delays. A recent incident resulted in a fatality and the crossing had to be closed for several hours so the authorities could investigate and clear the tracks.	Elimination of this at-grade crossing will improve velocity on BNSF by eliminating the potential for train versus automobile/ truck/ pedestrian accidents and associated delays. A recent incident resulted in a fatality and the crossing had to be closed for several hours so the authorities could investigate and clear the tracks.	Elimination of this at-grade crossing has improved the velocity on BNSF by eliminating the potential for train versus automobile/truck/pedestrian accidents and associated delays.
Throughput	Project is located on the LA-San Diego Corridor. Elimination of this at-grade crossing will improve throughput on BNSF by eliminating the potential for train versus automobile/ truck/ pedestrian accidents and associated delays to investigate and clear tracks. The Project has been designed to accommodate an expansion of the BNSF to include a third main-line track, thereby facilitating increased train throughput.	Project is located on the LA-San Diego Corridor. Elimination of this at-grade crossing will improve throughput on BNSF by eliminating the potential for train versus automobile /truck / pedestrian accidents and associated delays to investigate and clear tracks. The Project has been designed to accommodate an expansion of the BNSF to include a third main-line track, thereby facilitating increased train throughput.	Project eliminated the at-grade crossing and improved throughput on BNSF by eliminating the need to slow down, potentially be included in accidents due to conflicts, resulting in greater throughput along the track lines.
Reliability	Elimination of this at-grade crossing will improve reliability on the BNSF in two ways. First, it eliminates the potential for train versus automobile/ truck/ pedestrian accidents and associated delays to investigate and clear tracks. Secondly, the project will facilitate the movement of persons and goods.	Elimination of this at-grade crossing will improve reliability on the BNSF in two ways. First, it eliminates the potential for train versus automobile/ truck/ pedestrian accidents and associated delays to investigate and clear tracks. Secondly, the project will facilitate the movement of persons and goods.	The project eliminated the at-grade crossing and improved reliability on the BNSF by, eliminating the conflict between trains and automobiles /pedestrians. The amount of delay to investigate accidents and clear tracks is null and void. The project facilitated the movement of persons and goods.
Congestion Reduction	12.2 hrs reduction in ave. daily vehicle hrs, 13.04 miles reduction in vehicle queue length (2030)	12.2 hrs reduction in ave. daily vehicle hrs, 13.04 miles reduction in vehicle queue length (2030)	The delay documented in the 2030 condition is 100% alleviated, resulting in 0.0 hours of daily vehicle delay, and 0.0 miles of daily vehicle queue length, since there is no longer an intersection causing conflict thus vehicles do not stop and are in a "Free Flow" condition.

Emissions Reductions	<p>Eliminate 17 tons per yr greenhouse gas emissions.</p> <p>Eliminate 8.3 gms/day of Particulate matter.</p>	<p>Eliminate 17 tons per yr greenhouse gas emissions.</p> <p>Eliminate 8.3 gms/day of Particulate matter.</p>	<p>With the elimination of 12.2 hours of daily vehicle delay, or 732 total daily minutes of vehicle delay, and the elimination of 130 daily train crossings that generated 13.04 miles of daily, on a four lane facility, the resulting ADT impacted by the project idling can be calculated. Queue length of the crossing, when stopped by the train, can be calculated as 5280 feet/mile (13.04 miles)/130 crossings per day = 530 feet of queue each time the crossing gates lower for a train crossing. Per the ITE White Paper on "Evaluation of Average Effective Vehicle Length In Queue", an estimate of 19 feet for every vehicle is a conservative estimate for an intersection, and would likely be shorter in length for a railroad crossing, as the delay increases, the vehicles get closer and closer. Using 19 feet per vehicle, and the 13.04 miles of daily delay for 12.2 hours of daily vehicle delay results in 3,626 vehicles of the total 39,400 ADT are idling for 5.63 minutes each day. The elimination of 5.63 minutes of delay for 3,626 vehicles results in more than 82.6 metric tons of CO2 per year assumed at a 5 minute idling reduction. This exceeds the the benefit adopted/approved.</p>
----------------------	---	---	--

G. Differences/Variances

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

- 1) **Scope:** No change from approved scope to actual scope. All baseline objectives have been achieved.
- 2) **Cost:** The Project was allocated \$25,570,000 of TCIF funding approved by CTC on 4/10/2008. After bids opening and award of the construction contract, the construction cost was decreased from \$59.877 MM to \$55.596 MM as a result of changes in the market conditions as the bids came in lower than estimated. Request to de-allocate TCIF funding \$6.478 MM to decrease original allocation of \$ 25,570,000 to \$ 19,091,722. De-allocation was approved by CTC on 10/23/12. This closeout Project Delivery Report provides a final actual expended amount of \$17,620,000.
- 3) **Schedule:** Two Amendments were submitted for schedule changes due to ROW and construction start date delays. Amendment No. 1 approved by CTC on 1/19/2011 extend design and ROW schedule due to unforeseen design and ROW acquisition changes. Amendment No. 2 approved by CTC on 5/23/2012 extend construction start date from 5/1/2011 to 5/31/2012 because more time was required to obligate federal funding than originally anticipated. The construction contract was eventually awarded by the City on 5/24/2012.

H. Lessons-Learned/Best Practices

Describe lessons-learned and best practices for future projects .

Lesson- Learned: 1) Utility Agreements should start early to keep project on schedule 2) Selection of project designer should be more stringent to get a better product

Best Practices: 1) Formal Partnering with Railroad and Contractor 2) Review and work with contractor for phasing changes to reduce construction duration.

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.

Noe Negrete
(Print name) Project Manager



(Signature) Project Manager

8/16/18
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.

Mary Hartegan
(Print Name) TCIF Division Program Coordinator/Project Manager


(Signature) TCIF Division Program Coordinator/Project Manager

8/20/18
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

8/20/18
Date

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