# 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:	24-Oct-18
TCIF # (Segment)	Other Project Identifier (EA, Project #,	PPNO, etc.):	
Project Title	Track Realignment at Ocean Boulevard		
Delivery Report:	Final- Due within six months of project becoming operable.  Supplemental - Due at the conclusion of all project activities.		
Location: County:	Los Angeles		_
Project Description:	The Project will create improved lead tracks to the Metropolitan Steve to the Pier F On-dock Railyard. The project will also involve relocating		
B. Contact Information			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Implementing Agency:	Port of Long Beach Caltrans	District Numb	7
Contact Person:	Theresa Dau-Ngo, AICP Phone: §	562-283-7182	
Email Address:	theresa.dau-ngo@polb.com		

C. Cost				
	Adopted Program Amount (\$)	Current Approved Amount (\$)	Actual Expended Amount (\$)*	Net Difference (Dollars)
<b>Environmental</b>				
Total Amount	\$1,020,000	\$4,270,000	\$88,616	\$4,181,384
<u>Design</u>				
Total Amount	\$8,250,000	\$2,850,000	\$7,537,260	-\$4,687,260
Right of Way				
Total Amount			\$16,498,918	-\$16,498,918
Construction				
TCIF	\$27,000,000	\$16,216,000	\$16,216,000	\$0
Local	\$29,570,000	\$28,004,000	\$14,079,422	\$13,924,578
Federal		\$4,200,000	\$4,200,000	\$0
Other				\$0
Totals	\$65,840,000	\$55,540,000	\$58,620,216	-\$3,080,216

\*Environmental, Design and Right of Way costs were previously reported as cumulative. However, this report reflects individual project charges. Updated with actual environmental, design and ROW costs as of September 30, 2016.

D. Schedule		Current Approved	Actual Begin/End	Net Difference
	Adopted Program Date	Date	Date	(Months)
<b>Environmental Phase</b>				
Begin	Oct, 2005	Oct, 2005	Dec, 2005	2 months
End	Mar, 2009	Mar, 2009	Apr, 2009	1 month
Design (PS&E) Phase				
Begin	Apr, 2009	Apr, 2009	May, 2007	(23 months)
End	Sep, 2010	May, 2012	Nov, 2011	(6 months)
Right of Way Phase			n Sant de	
Begin	N/A	N/A	N/A	N/A
End	N/A	N/A	N/A	N/A
Construction Phase				
Begin	Oct, 2010	Nov, 2012	Nov, 2012	No change
End	Mar, 2012	May, 2014	Mar, 2015	10 months
Closeout Date				Ha 121 8041
Begin	Apr, 2012	May, 2014	Mar, 2015	10 months
End	Jun, 2012	July, 2014	Sep, 2016	26 months

# E. Amendments List approved amendments Amendment # CTC Meeting Summary of Changes (Scope, Cost, Schedule) 1 n/a extended contract 1-year to October 26, 2015

F. Project Benefits Describe and compare	project benefits with those inc	luded in the approved Basel	ine Agreement.
Outcomes	Adopted Program	Current Approved*	Actual*
Safety	Reduction in train-related accidents	N/A	Reduction in train-related accidents. Eliminated conflict associated with operation of the Metro switch engines on the mainline tracks, improving access to three marine terminals.
Velocity	Change in average weekday speed	N/A	
Throughput	Change in highway volume Change in rail volume	N/A	The addition of a third mainline track has increased throughput capacity by 50%.
Reliability	Reduction in variability of travel time, typical origin/destination plan Person minutes saved during peak hour	N/A	
Congestion Reduction	2,300 reduction in daily vehicle hours of delay. 7,830,000 reduction in annual truck trips (due to mode shift), 64,500 reduction in annual truck miles traveled (due to mode shift)	2,300 reduction in daily vehicle hours of delay. 7,830,000 reduction in annual truck trips (due to mode shift), 64,500 reduction in annual truck miles traveled (due to mode shift)	Post-construction conditions (2017/18) compared with the 2011 baseline (preconstruction), reflect an increase in containers carried by on-dock rail by 279,759 (31%), an increase in average on-dock rail use from 18.6% to 24.8%, and an overall average reduction of 322 truck trips per 1000 containers moved.
Emissions Reductions	64 tons per year (TPY) of particulate matter (PM 2.5 & 10), 793 TPY of carbon dioxide, 2,060 TPY of nitrogen oxide.	64 tons per year (TPY) of particulate matter (PM 2.5 & 10), 793 TPY of carbon dioxide, 2,060 TPY of nitrogen oxide.	An overall average reduction of 322 truck trips per 1,000 containers moved indicates positive progress towards emission reduction goals under overal rail program.

<sup>\*</sup>Refer to Excel Performance Measurement Table, which shows baseline and current conditions (Attachment 1).

#### G. Differences/Variances

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

-Cost: The main factor that contributed to the 14.5 percent increase is the unsuitable soil encountered. Despite an extensive soil investigation conducted prior to bidding this project, testing performed during construction of the project determined most of the soil to be unsuitable for re-use within the Harbor District.

-Schedule: The Project was delayed due to federal funding received and needing to build federal requirements into the contractual documents, and additional NEPA analysis needed. The Project also encountered numerous subsurface and site conditions that required re-design.

-The second performance measure differs from what is listed in the executed fund transfer agreement due to the availability of terminal data. Percentage of on-dock lifts has been substituted with the percentage of containers carried by on-dock rail, containers carried by truck, and the percentage of containers carried by truck.

### H. Lessons-Learned/Best Practices

Describe lessons-learned and best practices for future projects.

-Consider coordination of multiple grants on a project. Do proper expenditure forecasting and assign adequate staffing resources to the project.

- -Better coordination with adjacent projects is recommended to minimize impacts of concurrent construction activities.
- -Better utility and soll investigations are recommended for future projects. There were several instances where pipeline ownership could not be determined which delayed the progress of the project.

-Perform contractor prequalification before allowing bid process to start. Minimize restrictions on project construction phasing (optimize the phasing). Include pre-construction phase requirements to the contractor, and require them to submit an action plan for review and concurrence. Require photographs as a component part of the dally report.

## **Certification Signature**

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. Mark Erickson, P.E. (Print name), Project Manager 10/24/2018 Date (Signature) Project Manager 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. MARLOS RUIZ (Print Name) TCIF Division Program Coordinator/Project Manager 10/26/18 (Signature)TCIF Division Program Coordinator/Project Manager 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

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

Implementating Agency

Attachment 1 - PERFORMANCE MEASUREMENT TABLE - TCIF Projects 24 Pier F Support Yard and 25 Track Realignment at Ocean Boulevard - PORT OF LONG BEACH

Caltrans Contract Numbers 75A0352 & 75A0353

Project Substantial Completion March 13, 2015

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Pier J (PCT)	Pier G (ITS)	Pier F (LBCT) Middle Harbor	Truck Trips per 1000 Containers Moved <sup>5</sup>	Pier J (PCT)	Pier G (ITS)	Pier F (LBCT) Middle Harbor	Estimated Truck Trips <sup>4</sup>	Pier J (PCT)	Pier G (ITS)	Pier F (LBCT) Middle Harbor	% Containers Carrled by Truck	Pier J (PCT)	Pier G (ITS)	Pier F (LBCT) Middle Harbor	Containers Carried by Truck <sup>3</sup>	Pier J (PCT)	Pier G (ITS)	Pier F (LBCT) Middle Harbor	% Containers Carrled by On-Dock Rail <sup>2</sup>	Pier J (PCT)	Pier G(ITS)	Pier F (LBCT) Middle Harbor	Containers Carried by On-Dock Rail <sup>2</sup>	Pier J (PCT)	Pier G (ITS)	Pier F (LBCT) Middle Harbor	Total Containers	Measure <sup>1</sup>		
1,552	1,786	1,849		1,392,784	764,241	674,879		80.9%	80.1%	84.2%		726,388	342,625	307,251		19%	20%	15.8%		171,015	85,336	57,792		897,403	427,961	365,043		1	Conditions	Baseline or Pre-
1,597	1,324	1,622		450,226	198,781	162,199		73.5%	66.2%	73.7%		207,269	99,321	73,708		26.5%	33.8%	26.3%		74,662	50,792	26,308		281,931	150,113	100,016		6/30/15)	Q2 2015	Project F
1,353	1,280	1,753		405,067	247,749	180,874		75.7%	72.2%	75.0%		226,505	139,843	77,375		24.4%	27.8%	25.0%		72,892	53,754	25,828		299,397	193,597	103,203		9/30/15	Q3 2015	Post-Constructi
1,495	1,495	1,790		383,219	226,227	180,031		77.9%	73.7%	64.4%		199,572	111,472	64,744		22.1%	26.3%	35.6%	r)	56,688	39,815	35,818		256,260	151,287	100,562		12/31/15)	Q4 2015	Project Post-Construction (Year of 2015/2016) Conditions  Does not include Middle Harbor (Pier E)
1,429	1,407	1,775		354,176	196,945	163,490		80.7%	70.5%	75.1%		199,880	98,658	69,110		19.3%	29.5%	24.9%			41,277			247,808	139,935	92,084		3/31/16)	Q1 2016	15/2016) Cond or (Pier E)
1,467	1,370	1,734		1,592,688	869,702	686,594		76.8%	70.8%	72.0%		833,226	449,294	284,937		23.2%	29.2%	28.0%		252,170	185,638	110,928		1,085,396	634,932	395,865		Cia	1	itions
1,431	1,478	1,737		339,010	212,404	200,670		83.2%	70.5%	70.4%		197,116	101,375	81,332		16.8%	29.5%	29.6%		39,871	42,380	34,196		236,987	143,755	115,528		6/30/16)	Q2 2016	Project
1,438	1,451	1,725		339,034	259,864	278,371		80.4%	73.9%	70.2%		189,468	132,410	113,267		19.6%	26.1%	29.8%		46,335	46,720	48,108		235,803	179,130	161,375		9/30/16)	Q3 2016	Post-Construct Includes I
1,407	1,373	1,707		339,176	232,536	280,386		82.2%	75.3%	68.2%		198,321	127,582	112,134		17.8%	24.7%	31.8%		42,816	41,745	52,167		241,137	169,327	164,301		12/31/16)	Q4 2016	Project Post-Construction (Year of 2016/2017) Conditions Includes Middle Harbor (Pier E) 6
1,245	1,483	1,686		244,104	278,399	291,396		79.0%	74.7%	68.7%		154,907	140,160	118,794		21.0%	25.3%	31.3%			47,578	54,049		196,046	187,738	172,843		3/31/17)	Q1 2017	16/2017) Cond
1,386	1,446	1,711		1,261,324	983,203	1,050,823		81.3%	73.8%	69.3%		739,812	501,527			18.7%	26.2%	30.7%		П		188,520		909,973	679,950	614,047		IOG	1	itions
.1,316	1,489	1,638		342,054	211,205	298,381		79.7%	69.6%	66.7%		207,206	98,701	121,580		20.3%	30.4%	33.3%		52,623	43,132	60,574		259,829	141,833	182,154		6/30/17)	Q2 2017	Project
1,308	1,510	1,380		371,455	208,127	295,967		78.3%	69.7%	75.4%		222,362	96,101	161,596		21.7%	30.3%	24.6%		61,681	41,720	52,820		284,043	137,821	214,416		9/30/17)	Q3 2017	t Post-Construc
1,288	1,761	1,427		314,551	254,791	274,798		80.8%	74.7%	76.3%		197,385	108,129	146,951		19.2%	25.3%	23.7%		46,909	36,589	45,603		244,294	144,718	192,554		12/31/17)	Q4 2017	Construction (Year of 2017/20: Includes Middle Harbor (Pier E)
1,136	1,482	1,152				229,519				71.0%		Ī		141,479			28.9%					57,701				199,180		3/31/18)	Q1 2018	Project Post-Construction (Year of 2017/2018) Conditions Includes Middle Harbor (Pier $E$ ) $^7$
1,261	1,565	1,394		1		1,098,665				72.5%		П		571,606		20.8%		27.5%				216,698		1,058,401		788,304		LOTAL		ditions

The performance measures for the three major container terminals benefitting from the project have been reported. The terminals are long Beach Container Terminal, International Transportation Services Terminal, and the Pacific Container Terminal.

UPDATED: Thursday, October 25, 2018

<sup>&</sup>lt;sup>2</sup> Based on the data reported by the marine terminal operator.

<sup>&</sup>lt;sup>3</sup> Containers moved by truck = Total Containers - Containers by on-dock rail.

Annual trucks for the baseline conditions have been estimated based on daily truck trips using the following assumptions:

Weekend traffic is 15% of the weekly traffic.

Annual trips assume that the terminals will be closed for 5 holidays annually.

Quarterly truck trips were derived based on actual gate moves data and the Port's trip generation model.

<sup>&</sup>lt;sup>5</sup> The change shown in truck trips per/1000 containers moved compared to baseline conditions is an indicator of reduction in truck trips.

<sup>&</sup>lt;sup>6</sup> The Middle Harbor Phase I (Pier E) on-dock rail operations started May 2016.

<sup>7</sup> The Middle Harbor Phase II (Pier E) on-dock railyard operations opened October 30, 2017. In November 2017, Pier F operations moved to Pier E to allow for the construction of Middle Harbor Phase III. Consequently, the truck entrance/exit gates at Pier F were closed.
Beginning in November 2017, the information for "Pier F (LBCT) Middle Harbor" reflect LBCT operations at Pier E only.