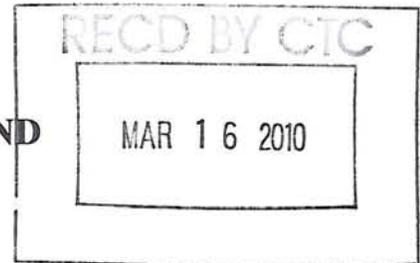


**TRADE CORRIDORS IMPROVEMENT FUND
PROJECT BASELINE AGREEMENT**



1. PARTIES AND DATE

1.1 This Project Baseline Agreement (Agreement) for the Colton Crossing Rail Grade Separation Project, effective March 15, 2010, is made by and between the California Transportation Commission (Commission) and the California Department of Transportation (Caltrans) as the project sponsor, sometimes collectively referred to as the "Parties."

2. RECITAL

2.1 Whereas at its April 10, 2008 Meeting the California Transportation Commission programmed the Trade Corridors Improvement Fund (TCIF) and included in this program of projects the Colton Crossing Rail Grade Separation Project, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits. These items are detailed in the attached Project Programming Request Form (attached hereto as Attachment A), the Colton Crossing Rail Grade Separation Project Study Report (Attachment B), and in the Memorandum of Understanding (MOU) for the Colton Crossing Rail Grade Separation, executed March 15, 2010 between the California Department of Transportation, the Union Pacific Railroad Company (Union Pacific), and the BNSF Railway Company (Attachment C). This MOU includes a project benefits discussion, identified as MOU Exhibit F as "Description of Projected Public Benefits." These will serve as the baseline for project monitoring by the California Transportation Commission and its Project Delivery Council. The undersigned Project Sponsor certifies, based on the MOU with Union Pacific and BNSF Railway Company (BNSF), that the funding sources cited are expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

3. GENERAL PROVISIONS

Caltrans, as the Project Sponsor, and by extension the Union Pacific and BNSF (as detailed in the attached MOU), agree to abide by the following provisions:

- 3.1** To meet the requirements of Government Code Section 8879.23(c)(1), as added by Proposition 1B, and of Government Code Section 8879.50, as enacted through implementing legislation in 2007 (Senate Bill 88 and Assembly Bill 193) and 2008 (Assembly Bill 268).
- 3.2** To adhere to the provisions of the California Transportation Commission Resolution TCIF-P-0708-01, "Adoption of Program of Projects for the Trade Corridors Improvement Fund (TCIF)," dated April 10, 2008.

- 3.3 To adhere to the California Transportation Commission's Trade Corridors Improvement Fund Guidelines.
- 3.4 To adhere to the California Transportation Commission's Accountability Implementation Plan and policies, and program and baseline amendment processes.
- 3.5 The Sponsoring Agencies, pursuant to provisions of the attached MOU between Caltrans and the Union Pacific and BNSF, agree to pursue funding for any additional costs of the project. Any change to the funding commitments and/or project scope outlined in this agreement requires an amendment.
- 3.6 To report to the California Transportation Commission on a quarterly basis on the progress made toward the implementation of the project, including scope, cost, and schedule.
- 3.7 To report to the California Transportation Commission on the progress, on a quarterly basis, and outcomes, at the end of the environmental phase, regarding the air quality impacts due to diesel emissions of particulates and other pollutants, and related mitigation strategies. Whereas the Bond Act mandates that the Commission shall allocate TCIF for trade infrastructure improvements in a manner that places emphasis on projects that improve trade corridor mobility while reducing emissions of diesel particulates and other pollutant emissions, the Department of Transportation, the Sponsoring Agencies, and the Corridor Coalitions understand and agree that the California Transportation Commission will only allocate TCIF to projects that can demonstrate compliance with applicable environmental requirements. If environmental clearance is conditioned to the implementation of mitigation measures as a condition of the project moving forward, in accordance with the MOU the Union Pacific and BNSF must jointly commit, in writing, to the implementation of those mitigation measures.
- 3.8 To maintain and make available to the California Transportation Commission and/or its designated representative, all work-related documents, including engineering and financial data, during the course of the project and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 3.9 The California Transportation Commission, and/or its designated representative, has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Union Pacific, the BNSF, and any subconsultants at any time during the course of the project and for four years from the date of the final closeout of the project. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

4. SPECIFIC PROVISIONS AND CONDITIONS

4.1 Project Schedule and Cost

See the Project Programming Request Form (included as Attachment A), and the Estimated Project Schedule and Proposed Funding Plan Summary (included as Exhibit C in the attached MOU).

4.2 Project Scope

See the Colton Crossing Rail Grade Separation Project Study Report (Attachment B) and the Preliminary Description of the Project (MOU Exhibit B).

4.3 Project Benefits

See attached MOU Exhibit F, Description of Projected Public Benefits.

4.4 Other Project-Specific Provisions and Conditions

Several provisions are identified in the attached Colton Crossing Rail Grade Separation Project Memorandum of Understanding (Attachment C). This includes as MOU exhibits not otherwise mentioned above the Description of Premises (Exhibit A), Certain Key Terms and Concepts for Construction and Operation Agreement (MOU Exhibit E), and Description of Supplemental Funding Plan (MOU Exhibit G).

ATTACHMENT A

**Colton Crossing Rail Grade Separation Project
Project Programming Request Form**



2008 Project Programming Request (Project Information)

General Instructions

<input checked="" type="checkbox"/> New Project		<input type="checkbox"/> Amendment (Existing Project)		Date: 03/15/10	
Caltrans District	EA	PPNO	MPO ID	TCRP No.	
08	47700		SCAG		
County	Route/Corridor	Project Sponsor/Lead Agency		MPO	Element
SBD	I-10	Caltrans		SCAG	RAIL
Project Title					
Colton Crossing Grade Separation					
PM Bk	PM Ahd	Project Mgr/Contact	Phone	E-mail Address	
538.5	539.7	Tom Kim	(714) 504-8860	tom.kim@hdrinc.com	
Location, Project Limits, Description, Scope of Work, Legislative Description					
Construct grade separation structure to elevate two UPRR mainline tracks which currently cross two BNSF mainline tracks at grade in Colton, California to eliminate east-west train delay caused by north-south train traffic or vice versa.					
Component	Implementing Agency		AB 3090	Letter of No Prejudice	
PA&ED	SANBAG		<input type="checkbox"/>	<input type="checkbox"/>	
PS&E	Union Pacific/ BNSF Railroads		<input type="checkbox"/>	<input type="checkbox"/>	
Right of Way	Union Pacific/ BNSF Railroads		<input type="checkbox"/>	<input type="checkbox"/>	
Construction	Union Pacific/ BNSF Railroads		<input type="checkbox"/>	<input type="checkbox"/>	
Legislative Districts					
Assembly: 61		Senate: 32			
Congressional: 43					
Purpose and Need					
Eliminate a bottleneck in the regional rail network that exists where BNSF mainlines cross the UPRR mainlines in the City of Colton, otherwise known as the Colton Crossing. The specific project objectives include improving regional rail mobility and efficiency by eliminating the conflicting train movements at the Crossing, discouraging a shift in goods movement from rail to truck because of conflicting train movements that cause delays and inefficiencies in rail traffic through the Colton Crossing, thus reducing the congestions impact that truck traffic has on the region's roads and freeways, and facilitating regional passenger rail service by minimizing delays at the Crossing, thus improving the operation and efficiency of passenger rail service.					
Project Benefits					
The project will provide capacity for future freight rail traffic increases; minimize air and noise impacts created by train delays and waiting; improve safety; reduce travel time; and improve access of NAFTA rail freight traffic to and from Mexico, Southern California and the Ports of Los Angeles and Long Beach.					
Project Milestone					Date
Project Study Report Approved					12/31/05
Begin Environmental (PA&ED) Phase					01/01/07
Circulate Draft Environmental Document			Document Type	EIR/EIS	81/2010
Draft Project Report					03/03/10
End Environmental Phase (PA&ED Milestone)					12/01/10
Begin Design (PS&E) Phase					06/01/10
End Design Phase (Ready to List for Advertisement Milestone)					06/21/11
Begin Right of Way Phase					01/01/11
End Right of Way Phase (Right of Way Certification Milestone)					09/01/11
Begin Construction Phase (Contract Award Milestone)					09/27/11
End Construction Phase (Construction Contract Acceptance Milestone)					03/31/14
Begin Closeout Phase					03/31/14
End Closeout Phase (Closeout Report)					12/31/14



2008 Project Programming Request (Funding Information)

(dollars in thousands and escalated to the programmed year)

Date: 03/15/10

County	CT District	PPNO	TCRP Project No.	EA
SBD	8	0150D		47700K
Project Title: Colton Crossing RR-Grade Separation				

Existing Total Project Cost									Implementing Agency
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	
E&P (PA&ED)	3,689							3,689	Caltrans
PS&E			4,709	4,708				9,417	
R/W SUP (CT)		200						200	
CON SUP (CT)				10,077				10,077	
R/W		600						600	
CON				75,000	75,000			150,000	
TOTAL	3,689	800	4,709	89,785	75,000			173,983	
Proposed Total Project Cost									
E&P (PA&ED)	3,689		6,000	6,000	4,100			19,789	
PS&E				11,600				11,600	
R/W SUP (CT)									
CON SUP (CT)									
R/W				10,600	3,600			10,600	
CON					40,000	80,000	40,000	160,000	
TOTAL	3,689		6,000	28,200	47,700	80,000	40,000	201,989	

Fund No. 1:	IIP - Public Transportation Account (PTA)								Program Code
	Existing Funding								30.20.020.721
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)	3,689							3,689	Caltrans \$2189 PAED voted 10/12/06 \$1500 PAED voted 09/05/07
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	3,689							3,689	
Proposed Funding									Notes
E&P (PA&ED)	3,689							3,689	
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	3,689							3,689	

Fund No. 2:	TCIF								Program Code
	Existing Funding								FUTURE
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									FUTURE
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)									Notes
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON							97,305	97,305	
TOTAL							97,305	97,305	



2008 Project Programming Request (Funding Information)

(dollars in thousands and escalated to the programmed year)

Date: 03/15/10

County	CT District	PPNO	TCRP Project No.	EA
SBD	8	0150D		47700K
Project Title: Colton Crossing RR-Grade Separation				

Fund No. 3: BNSF/UP Railroads									Program Code
Existing Funding									
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)				6,700	6,600			13,300	
PS&E				9,500				9,500	
R/W SUP (CT)									
CON SUP (CT)									
R/W				7,000	3,600			10,600	
CON					6,000	12,000	15,795	33,795	
TOTAL				23,200	16,200	12,000	15,795	67,195	

Fund No. 4: ARRA TIGER									Program Code
Existing Funding									
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)				2,900					
PS&E				2,100					
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON					28,900				
TOTAL				5,000	28,900			33,800	

Fund No. 5: SANBAG, RCTC									Program Code
Existing Funding									
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)									No funding required or provided
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

ATTACHMENT B

Colton Crossing Rail Grade Separation Project Study Report

RECD BY CTC
MAR 16 2010

Colton Crossing Rail Improvement Project

Project Study Report



March 15, 2010

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Section 1 Introduction

Colton Crossing is an at-grade junction of two BNSF Railway (BNSF) San Bernardino Subdivision mainline tracks running in a north-south direction and Union Pacific Railroad (UPRR) Alhambra / Yuma Subdivision mainline tracks running in an east-west direction. Conflicting train movements result in trains being delayed which compromises the operational and economic effectiveness of these critical freight corridors. The proposed improvement will result in the two UPRR tracks being elevated to cross over the two BNSF tracks, eliminating a significant majority of the delay at Colton Crossing. The proposed project will reduce emissions and improve mobility for local vehicle traffic and freight rail traffic. If this bottleneck is not addressed, delay for both vehicles and rail traffic will only continue to increase.

Section 2 Background

BNSF owns, dispatches, and maintains the north / south tracks. UPRR owns, dispatches, and maintains the east / west tracks. The junction (i.e. diamond) itself is dispatched by BNSF. Union Pacific utilizes trackage rights on BNSF's San Bernardino Subdivision (north / south) dating back to 1915. In fourth quarter 2006, approximately 129 trains, on average, occupied this crossing on a daily basis. BNSF operated approximately 60% of the trains and UPRR operated approximately 40% of the trains.

Section 3 Purpose and Need

The Purpose of the proposed project is to eliminate a bottleneck in the regional rail network that exists where BNSF mainlines cross the UPRR mainlines in the City of Colton, otherwise known as the Colton Crossing. The specific project objectives include:

- Improve regional rail mobility and efficiency by eliminating the conflicting train movements at the Crossing.
- Discourage a shift in goods movement from rail to truck because of conflicting train movements that cause delays and inefficiencies in rail traffic through the Colton Crossing, thus reducing the congestions impact that truck traffic has on the region's roads and freeways.

- Facilitate regional passenger rail service by minimizing delays at the Crossing, thus improving the operation and efficiency of passenger rail service.

The Colton Crossing project has been discussed for decades, and received increasing attention with the rapid growth of rail intermodal traffic (starting in the 1990s) that in turn resulted in larger delays to area highway traffic at rail-highway crossings. The need for improvements at Colton Crossing has been documented in the following studies:

- California Goods Movement Action Plan, January 2007;
- California State Rail Plan 2007–08 to 2017-18;
- Inland Empire Railroad Main Line Study, June 2005;
- Multi-County Goods Movement Action Plan, April 2008; and
- National Rail Freight Infrastructure Capacity and Investment Study, September 2007.

These reports include an extensive amount of data that has been thoroughly analyzed in determining the need for improvements at Colton Crossing. Each report concluded:

1. Improvements are required at Colton Crossing to eliminate an existing bottleneck whose delay is currently estimated at 74,900 train hours annually;¹
2. Improvements to the rail system, including Colton Crossing, will discourage a shift to truck traffic, which could have significant positive effects on air quality and congestion; and
3. Improvements are necessary to accommodate rail traffic demands.

¹ Public Benefit Study for Colton Crossing Grade Separation, Final Report, HDR | HLB Decision Economics Inc., February 2008

Section 4 Corridor and System Coordination

As noted by AASHTO, these two rail lines handle more than 70% of the potential intermodal rail traffic, both containers and trailers-on-flat cars, flowing between Southern California and the Midwest and East Coast.² Approximately 40% of all containerized traffic entering or leaving the U.S. passes through the Ports of LA/Long Beach, more than 60% of the port volume is moved inland through the L.A. Basin, and the vast majority of that traffic moves via rail over Colton Crossing. The crossing's importance is not limited to the ports, however, as 40% of its traffic serves other businesses in the State of California and is not related to the ports. For example, the crossing plays an important role in moving high-value consumer packages, and more than 90% of the automobiles manufactured in the United States and sold in Southern California utilize the crossing. Furthermore, consumer products, forest products, processed foods, and construction materials move via rail to and from various parts of the United States to Southern California. Each year the railroads originate or terminate over 1.6 million units of traffic, excluding international intermodal, which supports local industry in the Los Angeles basin.

Colton Crossing is a major chokepoint of the Southern California rail network, with an average of 129 train operations (including three Amtrak intercity passenger trains and eight Metrolink commuter trains) per day at its peak in 2006. Although demand has moderated due to the economic retraction since 2006, congestion is expected to grow increasingly worse as passenger train counts increase and when the economic demand for additional freight shipments returns. For example in 2007, freight trains experienced delays up to several hours (with an average of one hour delay at the crossing) as they waited for other trains to pass through the crossing. These delays cascade through the nation's rail network, requiring both UP and BNSF to hold trains as far as 20-50 miles from Colton in order to fit them into operating "gaps" at the crossing. These systemic delays not only have a direct time impact on how long it takes to move goods across the country, but the range of delays also severely affects the reliability of shipping goods via rail. Shippers have higher inventory costs, as they need to hold larger stockpiles of materials to avoid shortages if/when shipments arrive late. The impacts of delays at

² "Freight-Rail Bottom Line Report," AASHTO, 2008.

Colton Crossing limit the viability of rail in certain markets (particularly for high value goods), resulting in additional truck trips taken on already congested Interstate highways.

The crossing's congestion causes negative impacts in the city of Colton, California, and the surrounding area. Diesel locomotives sometimes idle for long periods as they wait for a crossing window, and more than 24 rail-highway crossings can be blocked by trains that are moving slowly (due to railway congestion) as they approach Colton Crossing. The road delays at these affected rail-highway grade crossings are significant (it is estimated that an average of nearly 3 million person hours per year will be saved at affected rail-highway grade crossings when the Colton Crossing grade separation project is implemented), and these road delays contribute additional emissions. Once the trains move through the crossing, which happens an average of once every 10 minutes (24 hours per day), the trains generate noise impacts when the slack in the coupling between cars is removed and again when each rail wheel eventually travels over the four gaps at the "diamond" crossing.

Section 5 Alternatives

A number of alternatives were analyzed to identify the preferred alternative for this project. The alternatives analyzed include:

- Do not construct any grade separation;
- Elevate UPRR Alhambra / Yuma Subdivision tracks over the BNSF San Bernardino Subdivision tracks;
- Elevate BNSF San Bernardino Subdivision tracks over the UPRR Alhambra / Yuma Subdivisions tracks;
- Depress BNSF San Bernardino Subdivision tracks under the UPRR Alhambra / Yuma Subdivision tracks;
- Depress UPRR Alhambra / Yuma Subdivision tracks under the BNSF San Bernardino Subdivision tracks; and
- Elevate UPRR Los Angeles Subdivision tracks over the BNSF San Bernardino Subdivision tracks.

The no build alternative was not acceptable given the existing delays and projected growth for this critical railroad junction, hindering and restricting goods movement through the rail corridor, resulting in more trucks on already congested highways.

The preferred alternative was modeled and it was determined that the grade separation would virtually eliminate all delays for the north / south BNSF line, and would also eliminate approximately 80% of the delay on the east / west UPRR line.

Section 6 Environmental Status

The state's Environmental Impact Review (EIR) is currently underway, and the draft EIR is expected to be complete and circulated for review by the third quarter 2010. No private property would be taken for the construction of the project and the only right-of-way acquisition needed for the project is an approximately 40-foot wide strip of state-owned land that is part of the Interstate-10 right-of-way (Caltrans has agreed to convey the right-of-way to the project). There is a remote potential that an endangered species could inhabit the area (the Delhi Sands fly is found in parts of San Bernardino and Riverside Counties), however, field surveys underway (beginning in the summer of 2009) have thus far indicated that this species is not expected to be found in the project area. No additional environmentally related actions are anticipated to be needed.

With the award of the USDOT American Recovery and Reinvestment Act (ARRA) Transportation Investment Generating Economic Recovery (TIGER) grant, a federal NEPA evaluation will also be required. An Environmental Assessment (EA) may be needed, which could take up to six months. The project schedule anticipates that the NEPA process will begin (with scoping) in April 2010 and conclude by December 2010, drawing heavily on work already done under the state environmental process. It is anticipated that the project will receive a Finding of No Significant Impact (FONSI), although there may be a path under which a Categorical Exclusion is possible.

Section 7 Cost Estimates/Funding

Project Element Cost Estimates

The project scope includes:

- Construct a structure, approximately 7,250 feet long, between Rancho Avenue (MP 538.5) and Mount Vernon Avenue (MP 539.7) with a 0.65% grade at the west approach and a 1.17% grade at the east approach;
- Two mainline tracks and a maintenance road will be constructed on the structure;
- Opening under the grade separation structure for the BNSF tracks would accommodate a potential third BNSF mainline track with 20 ft track centers;

- The existing UPRR mainline 2 track would be converted to a switching lead track between West Colton yard and Old Cotton yard with an at grade crossing diamond at the junction with the BNSF;
- Modify existing northwest quadrant connection between UPRR and BNSF tracks to connect to UPRR’s existing mainline 2 track; and
- Design provides for future connection between UPRR and BNSF tracks in the southwest quadrant.

The project costs (in millions) are summarized as follows.³

	<u>Total</u>	<u>Percentage</u>
Project Approval and Environmental	\$19.8	9.8%
Plans, Specifications and Estimates	\$11.6	5.7%
Right-of-Way	\$10.6	5.3%
Construction (Capital and Support)	\$160.0	79.2%
TOTAL	202.0	100.0%

Funding (in millions)

The following funding allocation has been identified.

<u>Source</u>	<u>Amount</u>	<u>Percentage</u>
UPRR	\$49.7	24.6%
BNSF	\$7.5	3.7%
Supplemental Funding – (responsibility of UPRR)	\$10.0	5.0%
USDOT – ARRA TIGER GRANT	\$33.8	16.7%
CALIFORNIA TCIF	\$97.3	48.2%
CTC STIP (for PA&ED)	3.7	1.8%
TOTAL	\$202.0	100.0%

³ Due to rounding, the total amount may deviate slightly from the actual total.

UPRR and BNSF are committed to providing the funding identified above subject to mutually agreeable funding terms and conditions. The final project concept, design, and scope may be modified prior to construction as the result of final engineering, an environmental assessment, and/or an updated economic analysis.

In addition to the private match, the future maintenance of the new infrastructure as a result of the rail improvement project would be privately funded by the railroads.

Section 8 Schedule

The preliminary project schedule is outlined below.

Project Schedule

Begin Permitting / NEPA	Underway
Complete Preliminary Engineering, Technical Studies	June 2010
Begin Design – Track & Structures	June 2010
Begin Design – Signal	August 2010
Circulate Draft EIR/EA	August 2010
Complete PAED/Final EIR and EA	December 2010
Begin ROW Acquisition	January 2011
Begin Utility Relocation	March 2011
Complete Construction & Maintenance Agreement	March 2011
Complete Definitive Agreement	March 2011
End Permitting / NEPA	June 2011
End Design – Track & Structures and Signal	June 2011
Begin Project Bid Process	July 2011
End ROW Acquisition	September 2011
End Utility Relocation	September 2011
End Project Bid Process	September 2011

Begin Construction

September 2011

End Construction

March 2014

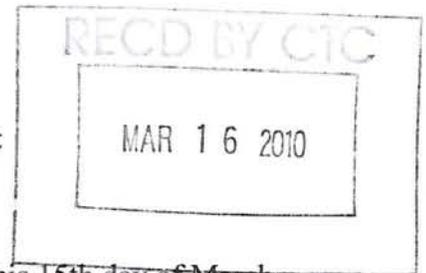
Section 9 Project Reviews

The proposed project is subject to Project approval and environmental clearance processes necessary to comply with the California Environmental Quality Act (“CEQA”) and the National Environmental Policy Act (NEPA). Final review will also be required before the allocation of TCIF funds by the California Transportation Commission, and by the Federal Railroad Administration (FRA), in their administration of the ARRA TIGER funds. Any change in the Project budget, funding plan or schedule identified will be reviewed by the State, FRA and Railroads.

ATTACHMENT C

Colton Crossing Rail Grade Separation Project

Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING**Colton Crossing Rail Grade-Separation Project**

This Memorandum of Understanding (“**Memorandum**”), dated this 15th day of March 2010, is by and between the State of California, acting through its Department of Transportation (the “**State**”), Union Pacific Railroad Company (“**Union Pacific**”), and BNSF Railway Company (“**BNSF**”). For purposes of this Memorandum, the State, BNSF, and Union Pacific are sometimes collectively referred to as “parties” and individually as a “party.” Likewise, BNSF and Union Pacific are sometimes collectively referred to as the “railroads.”

This Memorandum is made with reference to the following recitals:

A. The parties agree that an efficient and capable freight rail system is critical to assuring the growth of the State’s economy. As stated in the California State Rail Plan 2007-08 to 2017-18, an ongoing partnership with freight railroads and others is required to maximize benefits, including freight mobility, safety, energy, and environmental objectives. Working together to eliminate rail infrastructure chokepoints and improve rail-system efficiency is essential to achieving these goals.

B. The Colton Crossing consists of two BNSF San Bernardino Subdivision mainline tracks that run north/south and cross two Union Pacific Yuma Subdivision mainline tracks that run east/west. The BNSF and Union Pacific tracks cross at grade and perpendicular to one another. The railroads own or have the right to use and operate over the real property and rail facilities at and near the Colton Crossing, as more particularly described in Exhibit A (the “**Premises**”). The Colton Crossing causes delays and congestion because trains must stop and wait for other trains on conflicting tracks to pass through the crossing.

C. The majority of passenger and freight rail movements between Los Angeles, the Inland Empire, and points east must pass through the Colton Crossing. Elsewhere on these corridors, BNSF and Union Pacific have both made capacity improvements whose long-term capacity value may not be fully realized because of the constraints created by the Colton Crossing.

D. The parties propose a project to grade-separate the Colton Crossing (the “**Project**”). As described in Exhibit B, the Project would consist of a flyover to elevate the Union Pacific mainline tracks and permit trains traveling on the BNSF tracks to pass beneath the Union Pacific tracks without conflict of movement. As set forth in greater detail in Exhibit F, the parties expect that the Project will:

- a. Improve freight train corridor mobility through the region;
- b. Reduce train delays caused by conflicting movements at the Colton Crossing, thus improving reliability of both passenger and freight trains;

- c. Improve local and regional air quality by reducing the time that locomotives spend idling and by reducing truck volumes on local roads and freeways;
- d. Minimize noise associated with train staging operations and idling locomotives;
- e. Reduce long-term congestion and improve safety on the regional freeway network by shifting loads from trucks to trains and reducing the number of interstate trucks traveling on the freeways;
- f. Increase the efficiency of rail movement in the region, thereby enhancing the competitiveness of the Port of Los Angeles and Port of Long Beach;
- g. Create employment opportunities related to the construction of a major rail improvement project.

E. On November 7, 2006, California voters approved The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 as Proposition 1B (the “Act”). The Act provided for \$2 billion to be transferred to the Trade Corridors Improvement Fund (the “TCIF”) for infrastructure improvements along corridors having a high volume of freight movement. The California Transportation Commission (the “Commission”) thereafter, on November 27, 2007, established certain guidelines by which the TCIF program will be implemented and, on April 10, 2008, adopted certain clarifying resolutions (collectively, the “TCIF Guidelines”). The parties agree that the Project satisfies the TCIF Guidelines and qualifies as the type of project for which TCIF funds should be used.

F. On February 17, 2009, President Obama signed the American Recovery and Reinvestment Act (“ARRA”). Among other things, the ARRA created the Transportation Investment Generating Economic Recovery (“TIGER”) program. The TIGER program authorizes the Secretary of Transportation to issue up to \$1.5 billion in grants on a competitive basis for capital investments in surface transportation infrastructure projects that will have a significant impact on the nation, a metropolitan area, or a region. Passenger and freight rail projects are among those eligible for TIGER grants. The ARRA authorizes funding for TIGER grants through September 30, 2011. The parties applied for TIGER funding for the Project, as reflected in Exhibit G. On February 17, 2010, the Secretary of Transportation granted \$33.8 million in TIGER funds for the Project.

G. The parties have submitted the construction of the Colton Crossing Grade Separation Project for adoption into the TCIF program. As of April 10, 2008, the Commission has already programmed ninety-seven million, three hundred and five thousand dollars (\$97,305,000) in TCIF funds for the Project, subject to the Commission’s review of the Project’s requirements and delivery schedule contained in the Project’s baseline agreement. (*See*, Cal. Gov. Code §8879.52(d).)

H. The State and railroads now desire to enter into this Memorandum in order to outline some of the main terms that would govern the proposed investment in the Project of funds allocated by the Commission pursuant to the TCIF Guidelines (the “State Contribution”), the supplemental funds to be provided for the Project, the design and construction of the Project,

the achievement of public benefits to be realized as a result of the Project, and the process for negotiating and preparing binding Definitive Agreements (as defined below) to cover all such matters.

I. The parties acknowledge that the allocation of the State Contribution for construction of the Project is contingent upon, among other things, its adoption by the Commission pursuant to applicable law and the TCIF Guidelines, the appropriation of funds by the California state Legislature (the “**Legislature**”), the execution of a project baseline agreement (the “**Project Baseline Agreement**”) between the State and the Commission, commitment of sufficient supplemental funds to complete the Project, and continued adherence to the accountability implementation plan adopted by the Commission, including the provision of financial and performance audits and quarterly progress reports.

NOW, THEREFORE, the parties agree as follows:

1. **Project.** The Project will consist of the construction and operation of various upgrades and improvements to the existing grade, tracks, signal, and related infrastructure located on the Premises. The current Project scope includes, without limitation, construction of an elevated flyover of the Union Pacific tracks over the BNSF tracks, as more specifically described in Exhibit B. Final Project concept, design, and scope may be reduced or expanded by mutual written agreement of the parties prior to commencement of construction of the Project as the result of final engineering, an environmental assessment, or an updated economic analysis. The parties agree that funding for the Project is subject to Project approval and environmental clearance processes necessary to comply with the California Environmental Quality Act (“**CEQA**”). The State will be the responsible CEQA lead agency. The Federal Railroad Administration will be the lead agency under the National Environmental Policy Act (“**NEPA**”). The Project is expected to generate significant public benefits as described in Exhibit F.

2. **Project Baseline Budget.** The railroads advise that as of the date hereof, (i) the Project baseline budget and schedule attached hereto as Exhibit C represent the estimated Project costs and the current Project funding plan and schedule, and (ii) the non-State Contribution funding described in Exhibit E and Exhibit G is expected to be available to fund part of the development of the Project in accordance with the contemplated Project scope, budget, and schedule, and is expected to be fully committed, consistent with the amounts and allocations set forth in Exhibit C and Exhibit E, at or prior to execution of the Definitive Agreements. Any change in the Project budget, funding plan, scope, or schedule described in the attached Exhibits B, C, E and G will require prior written approval of the parties, and may require an amendment to the Project Baseline Agreement or one or more Definitive Agreements, with any amendment to the Project Baseline Agreement requiring approval by the Commission.

3. **Overall Schedule.** The parties contemplate that, subject to obtaining all necessary approvals, the parties will enter into one or more agreements covering the construction, operation, maintenance, and funding of the Project, and implementation of public benefits generated by the Project (the “**Definitive Agreements**”), on a date no sooner than six months prior to the beginning of construction, which is currently projected to commence in September 2011. The parties contemplate that the railroads will complete construction of the Project and commence operations over the new improvements by dates to be established in the Definitive

Agreements. The parties further contemplate that negotiation of the Definitive Agreements for the Project, environmental review, and permitting will be conducted in accordance with the schedule attached hereto as Exhibit C. The parties agree to use reasonable efforts, including dedication of sufficient staff time as they respectively deem necessary, to meet the milestones set forth in Exhibit C.

4. Definitive Agreements. This Memorandum is intended by the parties as a summary of some, but not all, of the basic terms associated with the Project. Except for the confidentiality provisions, this Memorandum is non-binding. The parties contemplate that, subject to obtaining all necessary approvals from their respective governing bodies, they would enter into certain Definitive Agreements, including, but not limited to, the following:

(a) An Agreement for Construction, Funding, and Operation of the Colton Crossing Grade Separation Project that will cover the scope, construction, operation, maintenance, and funding of the Project (the “**Construction and Operation Agreement**”). The Construction and Operation Agreement will establish dates for the construction term, which dates shall be subject to adjustment for permitting, force majeure, and other approved delays as defined therein; provided that the parties acknowledge that, pursuant to the TCIF Guidelines, construction on the Project must commence by December 31, 2013 or the funding as contemplated herein may terminate. Similar terms will likewise be included to the extent they are necessary to reflect TIGER requirements. A brief summary of certain key terms in the Construction and Operation Agreement is attached hereto as Exhibit E. The parties may also enter into one or more ancillary agreements that they mutually agree are necessary or helpful in connection with the development, environmental review, permitting, or construction of the Project.

(b) An Agreement Regarding Implementation of Public Benefits that will detail the public benefits to be realized as a result of the Project (the “**Public Benefits Agreement**”) and the plan to implement the same (to the extent it is not governed in the Construction and Operation Agreement). A brief summary of the contemplated public benefits that will accrue as a result of the Project and by when those benefits will be realized is attached hereto as Exhibit F. The parties may also enter into one or more ancillary agreements that they mutually agree are necessary or helpful in connection with the realization of public benefits from the Project.

5. Negotiations and Due Diligence. From the date of this Memorandum until such time that negotiations may be terminated as provided in Section 12 of this Memorandum, the parties contemplate that (i) each of the parties will use reasonable, good-faith efforts to negotiate and document each Definitive Agreement, including devoting sufficient staff and time as they deem appropriate to complete such negotiations; (ii) the railroads will grant permission to the State to inspect the Premises, provided that the State enters into each railroad’s standard right-of-entry agreement, subject to review of forms and agreed-upon changes to such forms, for such inspections; and (iii) to the extent permitted by applicable law, the railroads will provide to the State information that is not proprietary, privileged, or subject to a confidentiality obligation and that is reasonably requested by the State concerning the Project or the subdivisions impacted by the Project that will assist the State in evaluating the costs and impacts of the Project and in identifying and evaluating the proposed public benefits of the Project. Prior to a railroad’s

delivery of any such non-public information under this Section (“**Confidential Information**”), the parties will enter into confidentiality agreements that will govern the protection of such Confidential Information, which agreements, however, will be subject to the requirements of the California Public Records Act. Such confidentiality agreements will also include provisions for the State to notify the railroads of any requests the State receives to disclose Confidential Information.

6. Disbursement of Funds.

(a) Pursuant to the TCIF Guidelines, funding for projects adopted into the TCIF program will be allocated by the Commission from funds appropriated by the Legislature or from other state or federal funds appropriated to fund the TCIF program. The funds allocated to the Project will be disbursed by the State pursuant to a procedure to be set forth in the Construction and Operation Agreement.

(b) The parties acknowledge that all projects adopted into the TCIF program are statutorily mandated to have supplemental funding equal to or greater than the State Contribution (the “**Supplemental Funding Requirement**”). Local, federal, or private funds expended after the adoption of the Project into the TCIF program may be used to meet the Supplemental Funding Requirement; provided, however, that while the funding plan may include state funds in addition to the State Contribution, those additional state funds may not be used to satisfy the Supplemental Funding Requirement. Each railroad’s supplemental funding obligation is described in Exhibit C and Exhibit E. The parties agree that any TIGER funding received for the Project will be applied to satisfy the Supplemental Funding Requirement.

(c) The parties acknowledge and agree that the approved State Contribution may be used only for the payment or reimbursement of construction costs, which shall be defined in the Construction and Operation Agreement.

7. Conditions Precedent. Conditions precedent to entering into the Definitive Agreements include:

(a) Demonstration of Public Benefits. The public benefits resulting from the Project must be commensurate with the anticipated investment of the State Contribution to the Project. The parties will cooperate in identifying and quantifying public benefits expected to result from the Project, drafting and executing the Public Benefits Agreement providing for the implementation and achievement of such public benefits, and in developing metrics for the measurement of public benefits realized over the economic life of the Project.

(b) Project Scope and Budget. The railroads acknowledge that the scope and layout of the Project is subject to the State’s review and approval. The parties further acknowledge and agree that, pursuant to the TCIF Guidelines, the Project must satisfy the statutorily-required useful life for capital assets set forth in the California General Obligation Bond Law (Section 16727(a) of the California Government Code). In order to meet these requirements, the railroads would need to prepare and submit the scope, specifications, schedule, and budget for the Project to the State for review and approval in accordance with the schedule

set forth in Exhibit C. The railroads agree to respond within a reasonable time to any comments that the State may have.

(c) Commission Approval of Project. The Commission must adopt the Project pursuant to applicable law and the TCIF Guidelines.

(d) Dedication of TIGER Funding. The Secretary of Transportation must grant TIGER funds in an amount sufficient to satisfy that portion of the supplemental funding for the Project that the railroads have not committed to pay, as set forth in Exhibit C.

8. Ownership of Project Site and Improvements. The railroads either hold all property rights that will be necessary for the construction of the Project, or prior to commencement of construction, they shall acquire or cause to be acquired any such necessary rights.

9. Allocation of Environmental Benefits. The Definitive Agreements will contain provisions governing allocation of all environmental benefits and/or credits, including such credits as may be generically identified as marketable emissions credits under the Federal Implementation Plan or the California Implementation Plan or a similar program administered by any federal or California state agency or instrumentality, which may accrue, result, or become available as a result of the construction of the Project. As part of the Definitive Agreements, the Parties will evaluate how and which benefits will be allocated between the State and the railroads based upon each party's relative contribution toward such benefits.

10. Press Releases/Communications. The parties will cooperate in good faith during the term of this Memorandum to coordinate any press releases or other communications or statements to the press concerning the negotiations contemplated hereby or the proposed State funding for the Project.

11. Disclaimer of Liabilities. Except for the breach of any confidentiality provisions contained herein, no party shall have any liability to any other party for any liabilities; losses; damages, whether special, incidental or consequential; costs; or expenses incurred by such other party in the event the negotiations contemplated hereunder are terminated for any reason. Each party agrees that there are no representations or warranties concerning the Project, including but not limited to any implied warranties such as fitness for a particular use or merchantability. Except to the extent otherwise provided in any Definitive Agreement, each party shall be solely responsible for its own expenses, legal fees, and consultant fees related to the negotiations described in this Memorandum, regardless of whether any of the transactions contemplated herein are consummated. Notwithstanding any other provision herein, the terms of the Definitive Agreements shall govern questions regarding issues of liability, indemnity, and insurance with respect to the construction, maintenance, and operation of the Project.

12. Termination. The parties agree that any party to this Memorandum may unilaterally withdraw from negotiation or dealing with respect to the Project or the Definitive Agreements contemplated herein at any time, with or without cause, at the withdrawing party's sole discretion upon thirty days prior written notification to the other parties. Notwithstanding this Section, the terms of an executed Definitive Agreement shall govern the obligations of the

parties with respect to the grounds and manner of termination of the executed Definitive Agreement.

13. Preparation of Project Baseline Agreement. The parties agree to work together in good faith to negotiate and prepare the Project Baseline Agreement. The railroads further agree to work in good faith to provide the State with such information as it may need to prepare timely reports to the Commission in relation to the Project Baseline Agreement. The Parties acknowledge that this Memorandum shall be referred to in the Project Baseline Agreement and included as an attachment thereto.

14. Continuation of Existing Rail Service.

Amtrak operates passenger service on the Union Pacific and BNSF tracks located at the Colton Crossing. The Southern California Regional Railroad Authority (“**SCRRA**” or “**Metrolink**”) operates by agreement on the BNSF tracks at this location. Plans for the Project will include provisions that coordinate passenger train operations through the Project limits on both lines during and after construction. As noted in Exhibit E, passenger lines are expected to enjoy the benefits of fewer delays after the Project is completed. Any effects to the on-time performance of passenger trains operating through the Colton Crossing during and after construction of the Project will be subject to and resolved on terms consistent with the operating agreements between the passenger and freight railroads and any agreements that the freight and passenger railroads may negotiate for purposes of operations during the construction period.

15. Miscellaneous.

(a) Governing Law. Except on subjects preempted by Federal law, this Memorandum shall be governed by and construed in accordance with the laws of the State of California.

(b) Headings. The Section headings in this Memorandum are for convenience only and shall not be used for any purpose in the interpretation of this Memorandum.

(c) Severability. If any clause or provision of this Memorandum is illegal, invalid, or unenforceable under applicable present or future laws, then it is the intention of the parties that the remainder of this Memorandum shall not be affected but shall remain in full force and effect.

(d) Exhibits. All of the exhibits attached to this Memorandum are hereby incorporated by this reference.

(e) Relationship of the Parties. Each party is and shall at all times be and remain independent from the other parties hereto and, except to the extent otherwise expressly set forth in the Definitive Agreements, shall not be deemed an agent of any other party. Nothing contained herein shall have the effect of creating a joint venture or partnership between or among any of the parties hereto. No party shall have any right or power to obligate or bind any other party in any manner whatsoever. This Memorandum is not intended and shall not be construed to create any beneficiary rights in any individual or entity not a party hereto. None of the parties hereto is a fiduciary of any other party.

except as specifically set forth herein. All prior discussions and negotiations have been and are merged and integrated into, and superseded by, this Memorandum.

(j) Waivers. Any waiver, modification, consent, or acquiescence with respect to any provision of this Memorandum shall be set forth in writing and duly executed by or on behalf of the party to be bound thereby. No waiver by any party of any breach hereunder will be deemed a waiver of any other or subsequent breach.

(k) No Presumption Against Drafting Party. This Memorandum and the provisions contained therein shall not be construed or interpreted for or against any party because that party drafted or caused its legal representative to draft any of the Memorandum's provisions.

(l) Authority. Each individual executing this Memorandum hereby represents and warrants that he or she has the capacity set forth on the signature pages with full power and authority to bind the party on whose behalf he or she is executing the Memorandum.

(m) Assignment. This Memorandum shall be binding upon and inure to the benefit of each of the parties hereto and to their respective transferees, successors, and assigns. No party may assign its rights or obligations under this Memorandum to a third party without the written consent of the other parties, except where assignment occurs as a result of a sale or transfer of all or substantially all of a party's assets pursuant to merger, sale, consolidation, combination, or order or decree of governmental authority.

[SIGNATURE PAGE TO FOLLOW]

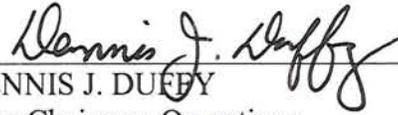
IN WITNESS WHEREOF, this Memorandum has been duly executed by the parties as of the date first written above.

**CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

By: 

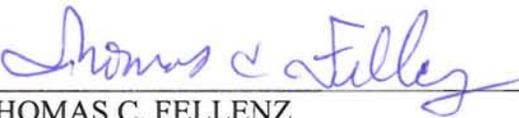
RANDELL H. IWASAKI
Director
Department of Transportation

UNION PACIFIC RAILROAD COMPANY

By: 

DENNIS J. DUFFY
Vice Chairman Operations
Union Pacific Railroad

Approved as to Form:

By: 

THOMAS C. FELLEENZ
Deputy Chief Counsel
Department of Transportation

Approved as to Form:

By: 

DAVID M. PICKETT
General Attorney
Union Pacific Railroad

BNSF RAILWAY COMPANY

By: _____
Peter J. Rickershauser
Vice President
BNSF Railway Company

Approved as to Form:

By: _____
David Rankin
Senior General Attorney
BNSF Railway Company

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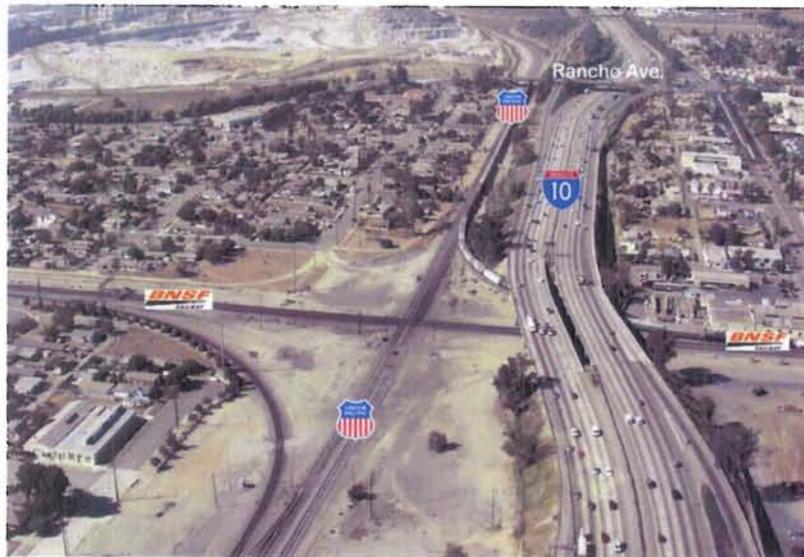
EXHIBIT A

Description of Premises

The Project is located in Colton, California where Union Pacific Railroad's Alhambra and Yuma Subdivisions (MP 538.7) intersect with BNSF's San Bernardino Subdivision.

EXHIBIT B

Preliminary Description of the Project



The Project would elevate Union Pacific's east / west tracks over the BNSF's north / south tracks. The planned project scope includes:

- Construct a structure, approximately 7,250 feet long, between Rancho Avenue (MP 538.5) and Mount Vernon Avenue (MP 539.7) with a 0.65% grade at the west approach and a 1.17% grade at the east approach
- Two mainline tracks and a maintenance road will be constructed on the structure
- Opening under the grade separation structure for the BNSF tracks would accommodate a potential third BNSF mainline track with 20 ft track centers
- One of the existing UPRR mainline tracks would be converted to become the Colton Yard lead / Yuma connector track with an at-grade crossing diamond at the junction with the BNSF
- Modify existing northwest quadrant connection between UPRR and BNSF tracks to connect to UPRR's existing mainline 2 track
- Design provides for future connection between UPRR and BNSF tracks in the southwest quadrant

EXHIBIT C

Estimated Project Schedule and Proposed Funding Plan Summary

Project Schedule

Begin Permitting / NEPA	Underway
Complete Preliminary Engineering / Technical Studies	June 2010
Begin Design – Track & Structures	June 2010
Begin Design – Signal	August 2010
Circulate Draft EIR/EA	August 2010
Complete PAED/Final EIR and EA	December 2010
Begin ROW Acquisition	January 2011
Begin Utility Relocation	March 2011
Execute Public Benefits Agreement	March 2011
Execute Construction & Maintenance Agreement	March 2011
End Permitting / NEPA	June 2011
End Design – Track & Structures and Signal	June 2011
Begin Project Bid Process	July 2011
End ROW Acquisition	September 2011
End Utility Relocation	September 2011
End Project Bid Process	September 2011
Begin Construction	September 2011
End Construction	March 2014

Funding Plan (costs in millions of dollars)

	TIGER Funds	State STIP	State TCIF	Union Pacific	BNSF	Supp Funds	Local Funds	TOTAL	
Project Approval / Environmental Documentation	\$2.8	\$3.7	-	\$11.9	\$0.5	\$0.9	\$0	\$19.8	9.8%
Plans, Specifications and Estimates	\$2.1	-	-	\$8.5	\$0.4	\$0.6	\$0	\$11.6	5.7%
Right-of-Way (Capital and Support)	-	-	-	\$9.0	\$1.6	-	\$0	\$10.6	5.3%
Construction (Capital and Support)	\$28.9	-	\$97.3	\$20.3	\$5.0	\$8.5	\$0	\$160.0	79.2%
TOTAL	\$33.8	\$3.7	\$97.3	\$49.7	\$7.5	\$10.0	\$0	\$202.0	
	16.7%	1.8%	48.2%	24.6%	3.7%	5.0%	0%		100.0%

Due to rounding, the total amount may deviate slightly from the actual total.

Notes:

- Estimated construction costs are in 2012 dollars
- TCIF funds and Railroad funding subject to receipt of TIGER funding and terms of this memorandum
- Union Pacific will be responsible to secure supplemental Funds of up to ten million dollars (\$10,000,000)
- All BNSF funding assumes that prior to project construction, SCRRA and its member agencies, will provide an acknowledgment in writing that if SCRRA wishes to commence the operation of additional passenger trains on BNSF's San Bernardino Subdivision, SCRRA or its member agencies shall provide BNSF reimbursement of eighty-four and six hundred percent (84.06%) of all BNSF funding for this Project, in addition to other requirements in the applicable agreements between BNSF and such agencies.

EXHIBIT D

Intentionally Omitted

EXHIBIT E

Certain Key Terms and Concepts for Construction and Operation Agreement

Note: The descriptions below are intended to summarize certain terms and concepts to be included in the Construction and Operation Agreement, subject to negotiation of the Definitive Agreements. The terms and concepts would be set forth in full in the Construction and Operation Agreement, which agreement also would contain other terms and provisions to be specified and agreed upon by the parties.

A. Project Scope, Schedule and Budget.

1. The Construction and Operation Agreement will include a detailed and complete description of the Project scope and specifications and identification of the party responsible to complete the various elements of the Project, which shall be agreed upon by the parties at or prior to the execution of the Construction and Operation Agreement.
2. The Construction and Operation Agreement will include a detailed and complete budget and construction schedule for the Project based upon the agreed Project scope and specifications. The budget and construction schedule will be agreed upon by the parties at or prior to execution of the Construction and Operation Agreement.
3. Any changes to the Project's final approved scope, specifications, schedule, or budget from that attached to the Construction and Operation Agreement shall require the State's and railroads' prior approval and may require an amendment to the Project Baseline Agreement amendment by the Commission. All parties agree to consider such proposals in good faith and to review and respond to any such proposed changes within a reasonable time.
4. Any cost increases resulting from any changes to the Project's approved scope, specifications, schedule or construction budget shall be the responsibility of parties other than the State, unless such cost increases result from a change in the Project scope, as set forth in Exhibit B, requested by the State (but only in its capacity as a party to the Definitive Agreements); provided that in no event shall the State Contribution be required to exceed fifty percent (50%) of the Project's eligible construction costs or the amount allocated by the Commission. In addition, reductions to the Project's approved scope, benefits, specifications, schedule or budget may result in a reduction in the State Contribution, as will be set forth in the Construction and Operations Agreement.
5. The railroads will use reasonable efforts to reduce or minimize Project costs, including, but not limited to, providing to the Project the benefit of reduced materials prices resulting from the railroads' bulk purchase of materials. The benefits of any cost

reductions will be credited equally toward the State Contribution and Supplemental Funding Requirement.

6. In the event the Commission allocates an amount lower than fifty percent (50%) of the Project's final approved budget for eligible construction costs, the State and railroads may jointly agree to adjust the Project's scope and schedule to reflect the new Project budget (it being acknowledged that the State or either railroad may elect to terminate the Project following review of any such proposed adjustments).

B. Funding Sources.

1. The "State Contribution" currently scheduled for the Project is ninety-seven million three hundred and five thousand dollars (\$97,305,000), based on the information available at this time, including information regarding the Project's scope, budget, schedule, and anticipated public benefits as submitted to the Commission. The final State Contribution will be specified in the Construction and Operation Agreement, and will be subject to reduction (i) as provided in Section A.3 above, or (ii) if the Commission allocates a lower amount for the Project, in which case such lower amount shall be the State Contribution (it being acknowledged that the State or railroads may elect to terminate the Project following review of any such proposed reductions).
2. The Construction and Operation Agreement will include a commitment for BNSF and Union Pacific to provide their respective funding contributions as set forth in Exhibit C. Any cost overruns will be the responsibility of Union Pacific.

C. Conditions to all Disbursements. The Definitive Agreement will contain specific conditions to all disbursements of the State Contribution, including:

1. Appropriation of funds for the Project by the Legislature, and allocation of funds to the Project by the Commission in an amount sufficient to cover requested disbursements. If the Legislature or Commission fails to so appropriate and allocate such funds then railroads shall have no further obligation regarding the Project.
2. Establishment and maintenance by railroads and their subcontractors of an accounting system that properly accumulates and segregates incurred Project costs by line item. The accounting system shall conform to Generally Accepted Accounting Principles ("GAAP"). In addition, the accounting system shall enable the determination of incurred costs at interim points of completion, and provide support for the railroads expenditures to be counted as matching or reimbursable payments.

D. Conditions to Specific Disbursements. The Definitive Agreements will contain specific conditions to all disbursements of the State Contribution, including submittal by the railroads of evidence the railroads or other third parties have paid a sufficient amount of Project

construction costs to date, excluding amounts reimbursed or requested to be reimbursed from the State Contribution, so that the one to one (1:1) ratio between the State Contribution and the supplemental funding payments of construction costs is not exceeded.

E. Description of Costs Eligible for Reimbursement from the State Contribution and Costs that Qualify Toward Supplemental Funding Requirement.

1. The State Contribution may only be used to reimburse already paid eligible construction costs. Eligible construction costs, including the costs of acquiring materials to be incorporated into the improvements to be constructed as part of the Project, shall be determined in accordance with the provisions of 23 C.F.R. Part 646.
2. Expenditures that do not qualify toward the Supplemental Funding Requirement are (i) amounts incurred or paid prior to adoption of the Project into the TCIF program, and (ii) any payments or contributions by the State of California to the cost of the Project, or to reimburse railroads for any such cost, other than the State Contribution.
3. Amounts received for the salvage, reuse or recycling of any materials in connection with the Project shall be applied to reduce the overall cost of the Project.

F. General Post Construction Operating Covenants.

1. Railroads will maintain in service the track and other improvements built as part of the Project (the "Project Facilities") for a minimum of twenty (20) years after completion of construction (the "Operating Term").
2. Railroads will maintain the Project Facilities in good repair on the Premises throughout the Operating Term.
3. Should any of the Project Facilities be damaged or destroyed during the Operating Term, Railroads will restore and repair such damage or destruction.
4. Railroads acknowledge that all post-construction activities, including maintenance, repair, restoration and replacement, shall be at no cost to the State.

G. Miscellaneous.

1. The Construction and Operation Agreement would be binding upon any assignees or other transferees of Railroads right to operate freight service on the Premises.
2. The Construction and Operation Agreement will contain provisions giving the State the right to audit the Project records maintained by railroads or their contractors, including technical and financial data, at any time during the course of the Project and for four (4) years after the date of the final completion of the Project. Any such audits will be conducted in accordance with GAAP.

EXHIBIT F
Description of Projected Public Benefits

- A. **Project Category:** Rail
- B. **Project Type:** Rail-Rail At-Grade crossing eliminated
- C. **Project Outputs and Metrics (Five years after Project completion) ***

Project Output Elements		Metric	Quantity Projected
1.	New Structures	Number of Structures Constructed	1
2.	Rail-Rail At-Grade Crossing	Number of At-Grade crossings eliminated	1

D. **Project Benefit Outcomes and Metrics (at Project completion) ***

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

- * Decrease highway accidents from occurring by more than 800 accidents over the life of the project
- 4. Safety
 - * 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
- 5. Congestion Reduction
 - * 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
- 6. Emissions Reduction
 - Average annual reduction from vehicles
 - * 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
 - * HC = 42.8 tons
 - * CO = 146.1 tons
 - * NOx = 67.4 tons
 - * PM = 5.8 tons
 - * CO2 = 23,371 tons
 - Average annual gallons saved
 - * Gasoline = 907,590
 - * Diesel = 79,060
 - * Oil = 101,583
- 7. Other Outcomes

Note:

* Project estimates based on information developed for the BNSF and Union Pacific Public Benefit Study for Colton Grade Separation dated February 5, 2008. The Project scope as more specifically described in Exhibit B, may be modified as set forth 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.

E. Summary of Long-Term Expected Benefits

The following table presents the total discounted value of net public benefits presently expected to accrue to California through 2035 with the full implementation of the Project. As the table demonstrates, the total value of these benefits to the State of California would most likely be about \$503 million, but could range anywhere from \$390 million to \$624 million.

Discounted Value of Net Benefits Through 2035 (USD in millions of 2007 dollars)

Net Benefit Name	Net Benefit Category	Range	Average (Likely Value)
Travel time savings for Vehicles from reduced delay at rail / highway crossings	Transportation System Savings	\$160 - \$288	\$220
Inventory travel time savings for Trains from reduced delay at Colton crossing		\$150 - \$340	\$242
Vehicle operating cost savings from reduced time-in-queue at rail / highway crossings		\$15 - \$28	\$22
Environmental savings from reduced time-in-queue for Vehicles at rail / highway crossings	Environmental Improvements	\$2 - \$4	\$3
Environmental savings from reduced Train delay at Colton crossing		\$11 - \$23	\$17
Total Discounted Value of Benefits Accruing in California <i>(Note: Separate calculations, may not add)</i>		\$390 - \$624	\$503
Total Discounted Value of Benefits Accruing Outside California <i>(Note: Separate calculations, may not add)</i>		\$203.7	\$203.7
Total Discounted Value of Benefits <i>(Note: Separate calculations, may not add)</i>		\$594 - \$828	\$706.7

Source: HDR Inc., Public Benefit Study for Colton Crossing Grade Separation, February 5, 2008
Parsons Brinckerhoff, Colton Crossing Grade Separation Project TIGER Application, September 2009

F. Passenger Rail Benefits

The following passenger rail benefits will accrue from the completion of the Colton project:

1. **Improved Operational Reliability and Travel Times**

Due to the volume of passenger and freight trains that pass through Colton Crossing, the variable nature of train arrivals, the different types of trains, and movement conflicts associated with an existing at-grade rail crossing, delays to trains of all types can occur. Grade separating the crossing would provide for more fluid operations of both freight and passenger train traffic. With the completion of the Project, operational efficiency and reliability benefits would accrue to the following passenger services:

- Amtrak Intercity Passenger Trains:
 - Southwest Chief (daily service on BNSF trackage)
 - Sunset Limited (tri-weekly service on UP trackage)
- SCRRA Commuter Trains:
 - Metrolink Service (daily service on BNSF trackage)

2. Enhanced Capacity for Potential Future Services

The completion of this project may provide opportunities for potential future services along the Union Pacific network trackage (subject to other capacity improvements). Such future services are subject to requirements in any applicable agreements or future negotiations between Union Pacific and the interested service parties.

G. Project Benefits Estimate Conditional Statement

The parties agree that all Project outcomes, estimates and benefits can be affected by the behavior of several external variables over time. Such variables include, but are not limited to, population growth and disposable income; global, national, and State economic conditions and development patterns; global trade trends; governmental policies; environmental conditions and regulation; changes in customer supply and demand (including for merchandized products, agricultural products); fuel prices; and acts of God. As Union Pacific operates pursuant to trackage rights on the BNSF Railroad between Daggett and Riverside and BNSF will continue to control the interlocker for the remaining at-grade crossing of Union Pacific's track over the BNSF track between Old Colton Yard and New Colton Yard, BNSF's business and operational decisions may also have a direct affect on Union Pacific's operations. Rates and services offered by the railroads, competing railroads, truck lines, and maritime shipping lines (including direct operators and brokers) may affect ultimate corridor volumes and benefits. It is understood by all parties that such variability shall be taken into account when comparing and evaluating Project outcomes, estimates, and benefits.

H. Project Reporting Requirements (Subject to Negotiation of Definitive Agreements):

1. Project Scope, Specifications, Schedule, and Costs Amendments

As part of the Project Baseline Agreement, the railroads will identify any issues, impacts, or changes to Project scope, specifications, schedule, or costs.

2. Quarterly Reporting

Thirty (30) calendar days after each calendar quarter, a very brief status report should be filed with the State, to report progress made toward the implementation of the Project, in accordance with the Project scope, schedule, and costs identified in the

baseline agreement. This includes, until its completion, the environmental phase of the Project. Its report shall include the identification and discussion of any significant issues that may impact implementation of the Project, including financial constraints and commitments, and any material deviations to Project scope or schedule. Reporting shall also include budgets, actual expenditures, and forecasted cost for each funding source and for each phase as identified in the baseline agreement, including those to be considered for match consideration and State payment. The parties acknowledge these reports will form the basis of reporting to the Commission.

3. Completion of the Environmental Process

Upon completion of the environmental phase of the Project, the outcomes of this process shall be reported to State, for acceptance and delivery to the Commission. Such reporting shall include final findings, including those pertaining to the air quality impacts of diesel emissions and particulate matter, and any mitigation measures adopted to address such impacts. Both the State and the railroads acknowledge Commission policy is to allocate TCIF funding only to projects that can demonstrate compliance with applicable environmental requirements. If environmental clearance is conditioned on the implementation of mitigation measures, as a condition of the Project moving forward, the railroads must commit, in writing, to the implementation of those mitigation measures (it being acknowledged that the railroads or State may elect to terminate the Project following review of the mitigation requirements).

4. Final Delivery Report and Final Audit

The railroads will cooperate with the State and will furnish all information necessary to produce the Final Delivery Report and Final Audit as required by the Commission's Accountability Implementation Plan. The Final Delivery Report shall report on the scope of the completed Project, its final cost, duration, and performance outcomes as compared to those included in the executed Project Baseline Agreements. The Final Audit shall provide a finding on whether Project costs incurred and reimbursed are in compliance with the executed Project Baseline Agreements or approved amendments thereof, state and federal laws and regulations, contract provisions, and Commission guidelines, and whether Project deliverables (outputs) and outcomes are consistent with the Project scope, schedule and benefits described in the executed Project Baseline Agreements or approved amendments thereof.

The current version of the adopted Accountability Implementation Plan can be found at the Commission's website at:

http://www.catc.ca.gov/1baccount/Accountability_Implementation_Plan.pdf

The Parties acknowledge that the Commission may from time to time amend or supplement its Accountability Implementation Plan.

5. Five Years After Completion of Project (final report)

Five (5) years after completion of the Project, the railroads shall provide the State with a final report on the achieved outcomes of the Project, at a minimum in response to the outcome identifiers and indices as identified above. Deviations from expected outcomes should be discussed.

EXHIBIT G

Description of Supplemental Funding Plan

- **The railroads' current estimated total Project construction cost, as described in Exhibit C - \$202.0 million (2012 dollars)**
- **TCIF funding** – Up to 50% of the Project's eligible construction costs (not to exceed the amount programmed by the Commission), subject to the conditions precedent. For purposes of this Exhibit, references to "TCIF funding" include any and all funds from any source allocated by the Commission to the Project as part of the State Contribution.
- **Supplemental Funding** – Except as otherwise provided in this Memorandum, the railroads would match the TCIF funding provided for the Project, i.e., provide an amount equal to at least the TCIF funding for the Project's eligible construction costs. In addition, provided the State contributes the TCIF funding, the railroads will be responsible for providing or obtaining the funding for all other Project costs. All railroad funding will be apportioned between the railroads as described in Exhibits C and E. The railroads may seek reimbursement from sources other than TCIF or other funding for all or part of the Project costs required to be paid by railroads. Such reimbursement or other funding could include, without limitation, contractual contribution from the owner / joint freight operator of the corridor, a tenant passenger or commuter operator, or state or federal non-TCIF grants. In this case, the railroads have applied for TIGER funding to pay for a portion of the costs not to be paid by TCIF funding. No amounts received for the Project from TCIF funding and / or any other additional State sources will be deemed to be railroad funding for purposes of determining whether the railroads have satisfied the Supplemental Fund Requirement, but all other payments toward, or reimbursements of, Project costs expended after the adoption of the Project into the TCIF program from any other source will be deemed to be railroad funding for purposes of determining whether the railroads have satisfied the Supplemental Funding Requirement. Expenditures for engineering, environmental permitting, and right-of-way acquisition may be counted towards the railroads' Supplemental Funding Requirement but are not eligible for TCIF reimbursement.