

Memorandum

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: March 5, 2013

Reference No.: 4.13
Action

From: NORMA ORTEGA
Chief Financial Officer

Prepared by: William D. Bronte
Division Chief
Rail

Subject: **SUBMITTAL OF DEFINITIVE AGREEMENTS AND SUMMARIES FOR A
PROPOSITION 1B TRADE CORRIDOR IMPROVEMENT FUND RAIL PROJECT IN
ACCORDANCE WITH ASSEMBLY BILL 105**

RECOMMENDATION:

The California Department of Transportation (Department) recommends that the California Transportation Commission (Commission) accept this summary of the Proposition 1B Trade Corridor Improvement Fund (TCIF) Project 6 - Tehachapi Trade Corridor project (Project) Definitive Agreement between the BNSF Railway Company (BNSF) and the Department. A copy of the Definitive Agreement is attached in accordance with Assembly Bill (AB) 105.

ISSUE:

In September 2008, AB 268 added Section 8879.52 to the Government Code, requiring the Department to make a one-time report on or before February 18, 2009, to certain committees of the Legislature summarizing “any memorandum of understanding or any other agreement executed between a railroad company and any state or local transportation agency” for any project that receives TCIF. The Memorandum of Understanding (MOU) for the Project was executed September 12, 2008. Pursuant to the requirements of AB 268, the Department submitted the required report, which included the Project, to the Legislature on February 18, 2009.

In March 2011, AB105 amended Section 8879.52 of the Government Code. The amendment calls on the Commission to submit a report to certain legislative committees summarizing “any memorandum of understanding, along with a copy of the memorandum, or any agreement executed between a railroad company and any state or local transportation agency” for any project that receives TCIF. BNSF signed the Definitive Agreements and was approved as to Form and Procedure by the Department, January 10, 2013. This summary serves to assist the Commission with their AB 105 reporting duties.

BACKGROUND:

The MOU executed in September 2008 defined the general scope, schedule, costs and public benefits. The project contributes towards the goals of the TCIF program in the following ways:

- Ensure Port of Oakland is a key competitive global gateway;
- Improve throughput and velocity on the Tehachapi Trade Corridor (TTC);
- Increase capacity and efficiency for the Port of Oakland;
- Improve Port of Oakland and shipper access to major national markets;
- Improve reliability of Northern California’s critical link to major national markets;
- Utilize rail freight network capacity to relieve congestion on California freeways;
- Position the Port of Oakland and California to meet current and future growth.

The major benefits in the Project MOU are:

- Increases throughput by 80 percent with the TTC capacity improvements;
- Reduces congestion of both rail and highway traffic;
- Increases connectivity for improved east/west goods movement;
- Improves reliability by reducing train delay hours;
- Improves train velocity allowing a faster transit time;
- Reduces emissions of carbon dioxide, nitrogen-based oxides, and particulate matter.

The Project Baseline Agreement between the Commission, the Department, and BNSF was approved by the Commission at its May 2011 meeting and formalized. The Project schedule and funding plan are enumerated in the following tables.

| Project Schedule | Date | Actual |
|---|-------------|---------------|
| Begin Environmental Phase | 1/2008 | 1/2008 |
| Circulate Draft Environmental Document, Doc Type: EIR | 3/2010 | 5/2012 |
| End Environmental Phase | 6/2010 | 11/2013 |
| Begin Design Phase | 1/2008 | 1/2008 |
| End Design Phase | 12/2011 | 1/2013 |
| Begin Construction Phase | 3/2012 | 12/2013 |
| End Construction Phase | 10/2014 | 9/2018 |

| Project Funding Plan | | Funding Sources | | |
|-----------------------------|-----------------------|------------------------|--------------------|---------------------|
| Phase of Work | Estimated Cost | TCIF | Other State | BNSF |
| Environmental | \$3,700,000 | | \$1,500,000 | \$2,200,000 |
| Design | \$1,000,000 | | | \$1,000,000 |
| Construction | \$96,760,000 | \$48,380,000 | | \$48,380,000 |
| Totals | \$101,460,000 | \$48,380,000 | \$1,500,000 | \$51,580,000 |

In the MOU, the Parties agreed to formalize details of funding, construction, operations, maintenance, and implementation of public benefits through separate definitive agreements (Definitive Agreements). The Parties signed the Definitive Agreements on May 1, 2012. These agreements consist of an “Agreement Regarding Implementation of Public Benefits Related to the Tehachapi Trade Corridor Project” (Public Benefits Agreement), and a “Cooperative Agreement for the Construction and Maintenance of the Tehachapi Trade Corridor Project” (Construction and Maintenance Agreement).

Public Benefits Agreement

The Public Benefits Agreement defines the anticipated benefits of the completed Project. Detailed analyses of benefits were contained in the TCIF Project Application. This agreement formalizes the specific passenger rail benefits to be derived from the project. The performance measures used to assess those benefits are listed below:

- Reduced transportation costs from displacing heavy truck travel;
- Lower inventory costs from displacing heavy truck travel and reducing train delays;
- Savings from reduced highway congestion;
- Reduction in road maintenance and costs from displacing heavy truck travel;
- Environmental savings from displacing heavy truck travel and reducing train delay (idling);
- Reduced accident costs from displacing heavy truck travel.

Construction and Maintenance Agreement

The Construction and Maintenance Agreement defines the roles of the Department and BNSF during construction and after completion of the Project. Those roles and responsibilities are listed below:

- Project design and construction;
- Project funding;
- Record keeping and audits;
- Ownership of facilities;
- Maintenance of track and facilities for 20 years;
- Operations.

Attachments

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Introduction and Recitals

THIS CONTRACT (hereinafter referred to as "Contract" is entered into as of the Effective Date (defined below) between the State of California, acting by and through its Department of Transportation (hereinafter referred to as "State"), and BNSF Railway Company (BNSF) (hereinafter referred to as "BNSF") (collectively referred to as the "Parties") and expresses the mutual agreement of the Parties regarding the terms that will allow State and BNSF to begin the construction of capital improvements to the Tehachapi Trade Corridor Rail Improvement Project ("Project") in the State of California.

WHEREAS, on November 7, 2006 California voters approved "The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006" ("Act"), as Proposition 1B. The Act provided for \$2 billion to be transferred to the Trade Corridors Improvement Fund ("TCIF") for infrastructure improvements along corridors having a high volume of freight movement; and

WHEREAS, the California Transportation Commission ("Commission") thereafter, on November 27, 2007, established certain guidelines for the TCIF program, and on April 10, 2008 adopted Resolution TCIF-P-0708-01, "Adoption of Program of Projects for the Trade Corridors Improvement Fund (TCIF)," which included the Project; and

WHEREAS, on September 24, 2008 the Parties entered into a Memorandum of Understanding for the purpose of outlining the terms that would govern the proposed investment in the Project; and

WHEREAS, on September 24, 2008 in accordance with Resolution TCIF-P-0708-01, State executed the Project Baseline Agreement in order to document the Project cost, schedule, scope and benefits and on October 15, 2008 Commission approved the Project Baseline Agreement; and

WHEREAS, the Project is located on the Union Pacific Railroad Company ("UPRR") Mojave Subdivision main line track from Mile Post 313 (Kern Junction) to Mile Post 370 (Mojave); and BNSF has advised State that BNSF has the authority and right to cause changes, additions and betterments to be constructed on the Premises under various agreements between BNSF and UPRR (or their respective predecessors in interest), and that the improvements and other changes and modifications included in the Project qualify as such changes, additions/or and betterments that BNSF has the authority and right to cause to be constructed on the Premises under the terms of its agreements with UPRR; and

WHEREAS, State has published the Project's Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) and circulated the document for public review and the Parties expect the environmental review process to be completed prior to any state funding of the Project; and

WHEREAS, the Parties have been working collaboratively on other requirements that must be met prior to construction; and

WHEREAS, the Parties now desire to enter into this Contract in order to describe their rights and obligations with respect to construction, maintenance, and operation of the Project.

NOW THEREFORE, State and BNSF agree that:

The recitals set forth above are hereby incorporated into the terms of this Contract.

Article I – Project Description

1.1 Design. The construction plans and specifications for the Project are being developed. The final 100% plans and specifications, including construction phasing for the Project that are approved by both Parties (collectively the “Plans”) will become part of this Contract by amendment or supplement hereto executed by the Parties when such Plans have been approved in writing by both Parties. The general layout and profile of the Project elements are depicted in Exhibit A, “Preliminary Description of the Project.” Exhibit B, “Description of Premises,” describes specific project site elements.

1.2 The following exhibits are incorporated by reference and made a part of this Contract:

1.2.1 Exhibit A, “Preliminary Description of the Project;”

1.2.2 Exhibit B, “Description of Premises;”

1.2.3 Exhibit C, “Project Budget;”

1.2.4 Exhibit D, “Description of Work;”

1.2.5 Exhibit E, “Project Schedule;”

1.2.6 Exhibit F, “Public Benefits.”

1.3 It is understood by the Parties that the contents of the exhibits described in Paragraph 1.2, above, are subject to amendment based upon final Plans as approved by the Parties.

Article II – Funding, Construction, and Maintenance of Project

2.1 The estimated cost to construct the Project is \$101,460,000 (One Hundred One Million Four Hundred Sixty Thousand Dollars), as reflected in Exhibit C, “Project Budget.” State shall provide TCIF funds in an amount not to exceed the lesser of (i) \$50,730,000 (Fifty Million Seven Hundred Thirty Thousand Dollars), or (ii) fifty percent (50%) of eligible Project costs. BNSF shall provide matching funds and any additional funds required to pay for the Project (“Supplemental Funding.”)

2.2 TCIF funds may only be used to reimburse BNSF for eligible construction costs under state law incurred for improvements reflected in the Plans. Eligible construction costs, including the costs of acquiring materials to be incorporated into the improvements to be constructed as part of the Project, will be determined in accordance with the provisions of 23 C.F.R. Part 140.900 et seq. Such eligible costs include, without limitation, all actual costs BNSF and its contractors incur for administration, construction management, force account and contract labor and services, equipment, and materials used in relation to constructing the Project. Actual costs include applicable sales and use taxes and then-current federally approved additive rates,

which include overhead and indirect costs. For purposes of this Contract, actual costs for materials provided by BNSF or its contractors will be BNSF's or its contractors' then-current unit charge-out price at the time of installation, plus applicable additives.

2.3 All eligible costs under state law that are incurred by BNSF, including reimbursements by BNSF to UPRR for UPRR Work, that are not funded by State will apply as Supplemental Funding, including, without limitation, all actual costs that BNSF or any of its contractors incurs for administration, construction management, force account and contract labor and services, equipment, and materials used in relation to constructing the Project. Actual costs include applicable sales and use taxes and then-current federally approved additive rates, which include overhead and indirect costs. For purposes of this Contract, actual costs for materials provided by BNSF or UPRR will be BNSF or UPRR's (as applicable) then-current unit charge-out price at the time of installation plus applicable additives. Credit for Supplemental Funding is not limited to paying for the categories of eligible costs for TCIF reimbursements described above but may apply toward any costs incurred by BNSF on the Project.

2.4 BNSF is responsible for construction engineering or arranging same, including, but not limited to, construction management, inspection, construction surveying, laboratory and field testing, preparation and processing of field reports, records, estimates, and final reports. All work and submittals shall be completed in accordance with the applicable BNSF standards (or UPRR standards for work performed by or for UPRR) or AREMA guidelines, whichever may be higher. Work submittals must contain the information required to comply with a state audit.

2.5 BNSF shall contract with UPRR to perform the track and signal work as described in Exhibit D, "Description of Work," (the "UPRR Work"). BNSF or its designated contractors shall perform all work other than the UPRR Work.

2.6 BNSF will use commercially reasonable efforts to complete the Project, or cause the Project to be completed, in accordance with the schedule set forth in Exhibit E, "Project Schedule." The Parties acknowledge that pursuant to the TCIF Guidelines, construction on the Project must commence by December 31, 2013 or the TCIF funding for the Project may terminate.

2.7 BNSF and its contractors and UPRR with respect to UPRR Work may advertise for bids any time after the effective date of this Contract, but construction contracts may not be awarded until after the Commission allocates the TCIF funds and State issues a Notice to Proceed to BNSF.

2.8 BNSF and State shall work together in good faith in order to complete the Project as contemplated in this Contract and in accordance with Exhibit E, "Project Schedule." BNSF and State shall meet regularly, but not less than bi-monthly, to discuss and resolve issues related to the construction of the Project.

2.9 State shall designate a Project Manager to monitor the Project and inspect the work performed by BNSF or UPRR. While occupying UPRR property, State's Project Manager shall be accompanied by a BNSF or UPRR representative and observe all applicable BNSF and UPRR safety rules, regulations, and standards, including those requiring use of protective eyewear and clothing. BNSF shall provide a copy of the applicable safety rules of

BNSF and UPRR to State's Project Manager. State's Project Manager and all State employees entering UPRR property shall annually complete the "Railroad Contractor Safety Orientation" online training, located at www.contractororientation.com and www.erailsafe.com, and shall be governed accordingly.

2.10 BNSF shall seek or cause to be sought and receive all required permits and approvals necessary to perform Project work, if any. The cost of permit applications is included in the project cost or it was paid for during Project engineering. Permits and approvals are defined as all approvals legally required by any public agency that has jurisdictional authority or responsibility over regulating or permitting Project work. The Parties shall jointly agree upon which permits are considered legally required for Project. In the event that any public agency claims jurisdictional authority or responsibility over regulating or permitting Project work and asserts a need to issue one or more unanticipated permits, the Parties shall work jointly to resolve the issuance of said permit. Should the Parties jointly agree that said permit is required, State shall, at its sole discretion, either provide additional funding where necessary as integral to the Project, or meet with BNSF to modify Project so that no additional State funding shall be required. If BNSF determines that a condition of a permit or approval or any of the commitments or conditions described in Section 2.11 is unreasonable or cost prohibitive, the condition shall be reviewed by the Parties to determine options acceptable to both parties and if options acceptable to both parties are not identified then either party may terminate this Contract.

2.11 Subject to Section 2.10, BNSF shall comply with all of the commitments and conditions set forth in the CEQA Environmental Impact Report (EIR), permits, approvals, and applicable agreements as those commitments and conditions apply to work performed by BNSF including implementing any mitigation measures required thereby. BNSF shall be responsible to monitor and ensure UPRR compliance with all of the commitments and conditions set forth in the EIR, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to the UPRR Work. Nothing in this Contract shall be deemed a waiver of the preemptive effect of any federal or state law.

2.12 BNSF shall maintain, or cause to be maintained, the track and other improvements built as part of the Project for a minimum of twenty (20) years after completion of construction ("Operating Term") under the terms set forth in Paragraph 2.12.1-2.12.3 of this Contract. Should any of the improvements built as part of the Project be damaged or destroyed during the Operating Term, BNSF shall restore and repair or cause to be restored or repaired, such damage and destruction under the terms set forth in Paragraph 2.12.1-2.12.3, below:

2.12.1 BNSF shall, or shall require pursuant to its contract with UPRR that UPRR shall, maintain, repair, and renew the track, signals, and other railroad-related facilities constructed as part of the Project.

2.12.2 If during the Operating Term BNSF determines that it is reasonably necessary and economically justified, BNSF will upgrade or cause to be upgraded, at BNSF's expense, the track between Kern Junction and Sand Cut and between Tehachapi and Cameron from the current Automated Block System to a Centralized Traffic Control system.

2.12.3 The State shall not be responsible for any cost associated with the work, maintenance, or repair described in Paragraph 2.12-2.12.2

Article III – Period of Performance

This Contract shall be effective on December 1, 2012 contingent upon Commission approval of amended scope of work and revised budget as well as execution by both parties, and shall terminate on June 30, 2019 (unless extended by supplemental contract or amendment) provided, however, that termination shall not release any party from specific continuing obligations incurred hereunder prior to termination.

Article IV – No Right to Goods or Services

The Parties intend for the Project to both benefit the public and to become a permanent part of the BNSF's or UPRR's working capital. The State will not receive and will not be entitled to any specific goods or services from the respective BNSF or UPRR or their affiliates in return for any payments by the State to the Railroads in connection with this Contract.

Article V – Costs and Payment Provisions

5.1 State agrees to provide funds, less salvage contributions authorized pursuant to Article VIII, the net sum of which is not to exceed 50% of the total amount shown in Exhibit C, "Project Budget."

5.2 The Parties shall comply with the TCIF Guidelines as defined by the California Transportation Commission and found at <http://www.catc.ca.gov/programs/tcif.htm>, to the extent that the TCIF Guidelines are applicable to the Parties' respective obligations under this Contract.

5.3 The Parties intend for TCIF funds to be paid on a one-to-one basis with Supplemental Funding up to the full amount of the TCIF funds and in no event shall the TCIF funds exceed fifty percent (50%) of the total Project costs.

5.4 Expenditures for construction, engineering, environmental permitting, and right-of-way acquisition incurred since adoption of the Project into the TCIF program on April 10, 2008, count towards BNSF's contribution to the Project and qualify as Supplemental Funding.

5.5 Expenditures that do not qualify as Supplemental Funding for matching TCIF funds 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 or any agency or department thereof to the cost of the Project, or to reimburse BNSF or any of its contractors for any such cost.

5.6 BNSF shall submit to State, monthly in arrears, an invoice that has been signed by BNSF's Project Manager, for actual funds expended for Project work. State shall remit payment of invoices to BNSF within forty-five (45) days of receipt, minus credit received for salvage. Any unquestioned allowable invoice amounts remaining unpaid after forty-five (45) days shall have become overdue and State shall be liable to pay interest pursuant to the California Prompt Payment Act. The interest rate shall be at the rate of one (1) percent above the rate accrued on June 30 of the prior year by the Pooled Money Investment Account, not to exceed a rate of fifteen (15) per cent (California Government Code 927.6(b)). BNSF shall submit a detailed invoice to the State for interest charges on unpaid amounts. Allowable invoice

amounts for Project costs shall be determined pursuant to the provisions of Article VII, Paragraph 7.2.

5.7 BNSF and its subcontractors shall establish and/or maintain an accounting system and records that properly accumulate and segregate incurred Project costs. BNSF and its subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), enable the determination of incurred costs at interim points of completion, and provide support for payment of invoices.

5.8 It is expected that BNSF has performed appropriate risk management analysis and included appropriate contingencies in Project estimate. Subject to the terms of this Contract, BNSF will fund all Project costs including cost overruns in excess of the funds provided by State as set forth in Section 2.1.

5.9 The Parties recognize that the actual cost of the Project may vary from the amount obligated under this Contract, and intend that State's obligation hereunder is reasonable to cover such; provided, however, that the State shall in no event be required to pay amounts in excess of the amount established in Article V, Paragraph 5.1, and herein above. The Parties further recognize that BNSF cannot fully and completely ascertain the actual cost of the Project until the Project is completed

5.10 Following completion of the Project, BNSF shall determine the actual final allowable cost of the Project and provide a final billing to State. BNSF shall be responsible for preparing a final Project expenditure report and submitting it to State within one hundred eighty (180) days of Project completion. The report shall identify the itemized costs incurred on the Project and the sources of funds.

5.11 BNSF or UPRR may, at their sole discretion, select material and vendors following established policy of BNSF or UPRR (as applicable) relative to bidding and procurement for non-contract reimbursed Project work. Reimbursable costs for material (excluding appropriate overhead additives) will be valued as follows: New stock material will be valued at BNSF inventory price; second hand material will be valued at fifty (50) percent of new BNSF inventory price; shop manufactured material will be valued at BNSF inventory price; and non-stock material will be valued at invoice price. Working stock (including, but not limited to non-stock field material) not properly identifiable in one of the above categories will be valued at fair market value as determined by BNSF. Material will be included on invoice when received or otherwise assigned to the Project. In each case, "inventory price" above, shall mean that price carried on BNSF's books for all material of that character used for work on Project and all other work of a similar nature performed by BNSF in that regional area.

Article VI – Indemnity

6.1 Indemnification by BNSF. Except as provided in Section 6.2, BNSF shall indemnify, defend, and hold harmless the State and its boards, officers, agents, employees, contractors, assigns, and successors in interest from and against all fines, claims, lawsuits, judgments, awards, liabilities, losses, damages, and expenses, including but not limited to attorney fees (both in-house and outside counsel) and costs (including all actual litigation costs incurred by the indemnified party, including but not limited to costs of experts and consultants) (collectively "Claims") for injury or death to all persons, including a State's employees and representatives, and for loss or damage to property belonging to any person or entity, including

the Parties, that is incurred on or before the date that the State submits the Final Delivery Report to the extent caused by any negligent acts or omissions or intentional misconduct of BNSF or others acting in its behalf in connection with construction activities related to the Project. BNSF shall also indemnify and hold State harmless from and against BNSF's misuse of State funds, Project generated income or interest, and other fiscal acts or omissions of BNSF.

6.2 Indemnification by the State. To the fullest extent permitted by California law, the State shall defend, indemnify, and hold harmless BNSF and its boards, officers, agents, contractors, employees, assigns, and successors in interest from and against all claims for injury or death to all persons, including a Party's employees and representatives, and for loss or damage to property belonging to any person or entity, including the Parties, for any damage or injury proximately caused by reason of the activities of State authorized by this Contract, including damages or injuries caused by the acts or omissions of BNSF, its boards, officers, agents, employees, or contractors so long as those acts and/or omissions are not the product of sole negligence or willful misconduct of BNSF and/or its contractors.

6.3 Choice of Counsel. When defending another Party against Claims, the indemnitor shall retain counsel reasonably satisfactory to the indemnitee in the indemnitee's discretion. An indemnitor shall not settle any Claims in a manner that would impose any expense, penalty, obligation, or limitation on an indemnitee without the indemnitee's prior written consent. The indemnitee shall have the right, but not the obligation, to defend any Claim. An indemnitee's election to defend shall not affect an indemnitor's obligation to indemnify and hold harmless the indemnitee from and against all Claims to the extent set forth in this Contract.

Article VII – Record Retention/Audit

7.1 BNSF shall maintain for a period not less than four (4) years from the date of the final acceptance of the Project (as described in Section 10.3) and shall require its contractors and subcontractors to maintain for a period not less than four years from the date of the final acceptance of the Project, each of the following:

7.1.1. Adequate books, records, and supporting documents to verify the amounts and uses of all disbursements of funds in conjunction with the Project;

7.1.2. Records sufficient to identify the application of funding, together with supporting documentation, including, without limitation, paid invoices; and

7.1.3. All other records necessary to disclose the amount and disposition of funding hereunder, including the following: (a) the nature of such expenditures; (b) the total cost of each undertaking for which funds were disbursed hereunder; (c) the amount, if any, of funds supplied by other sources for the construction of the Project; and (d) any other books, records, and documents reasonably necessary to maintain a complete verification of BNSF's obligations hereunder.

7.2 If any litigation or claim involving this Contract has been filed before the expiration of the four-year period described in Section 7.1 or any audit permitted hereunder has commenced before the expiration of the four-year period described in Section 7.1, BNSF shall maintain the records required by Section 7.1: (1) in the case of any litigation or claim, until completion of the action and resolution of all issues which arise from it, or until the end of such

four-year period, whichever is later; and (2) in the case of any audit, until completion of the audit or until the end of such four-year period, whichever is later. Except as may be required by court order or in the context of litigation, in no case do the terms of this Contract require BNSF to maintain records longer than six years after payment of the final invoice.

7.3 The records and materials described in Section 7.1 will be available for review and audit by the State or its agents or designee, during normal business hours and upon at least seven (7) days advance written notice. Upon reasonable notice, the State likewise will have authority to interview any knowledgeable officer or employee of BNSF or any of its contractors or subcontractors regarding transactions related to TCIF funding for the Project. BNSF will reasonably cooperate with any audit conducted by the State and will provide full access to all relevant materials. Nothing herein is meant to be or will be interpreted to be a waiver of any protection against disclosure of records or communication otherwise provided by law, including, without limitation, protection provided by attorney-client privilege or the attorney work-product doctrine. Documentation is subject to disclosure in compliance with the California Public Records Act, but BNSF privileged or proprietary information can be redacted to remove it from disclosure. The State and BNSF will work together cooperatively to determine the adequacy of the documentation for these purposes.

7.4 In the event of an audit, the State will provide the preliminary audit, findings, and recommendations to BNSF. BNSF will review the preliminary audit findings and recommendations, and provide written comments within sixty (60) days of receipt. Any audit dispute not resolved by the Parties is subject to dispute resolution as described in Article XV. Any TCIF funds provided to BNSF that been found ineligible by the audit shall be refunded within sixty (60) days of the final audit or dispute resolution findings, whichever is later.

Article VIII - Title

Title to material purchased by BNSF for installation or use in connection with the Project and paid for by State shall be vested in State until said material is installed or used. Title to all improvements made under the Project, including materials after installation, shall be vested in BNSF or UPRR, subject to the provisions of this Article VIII. If materials are salvaged in connection with construction of said Project, those materials shall be reused on the Project or sold by BNSF or UPRR as scrap, free on board the point of removal. Proceeds from the sale of said materials, minus a fifteen (15) per cent charge to cover costs of handling and sale, shall be distributed in proportion to the funding contributions of the respective parties; with the exception that said net proceeds may be used to fund Project costs pursuant to Article V, Paragraph 5.1.

Article IX - Change in Terms

9.1 No change in or modification of this Contract shall be effective unless made in writing, dated, and executed by duly authorized representatives of the Parties hereto. Notwithstanding the foregoing, Change Orders modifying the Plans do not need to be approved in writing by State unless such Change Order would increase the overall budget for the Project, or modify the anticipated Public Benefits described on Exhibit F.

9.2 The failure of BNSF to perform, in whole or in part, any of the obligations of BNSF under this Contract, by reason of the occurrence of acts of terrorism, riots, insurrection or war, strikes or lockouts by third parties providing labor, material or services

under contract to a party, delays caused by another party to this Contract, third-party litigation or court order, derailments, wrecks or freight embargoes, inability to procure critical materials, unforeseen delays in obtaining any required permits or approvals, lack of issuance of a Notice to Proceed for State Funding Purposes by the date construction is contemplated to commence, unforeseen physical conditions, environmental conditions including cultural, archaeological, paleontological, or other protected resources or catastrophic railroad emergencies anywhere within the BNSF or UPRR rail system, and earthquake, fire, flood, explosion, disaster, tornado or other phenomena of nature beyond the power of a party reasonably able to foresee or to make preparation in defense against, or any other cause beyond the reasonable control of BNSF (hereinafter referred to as "Force Majeure Occurrence") shall be excused for all purposes, including time performance; provided, that BNSF shall promptly begin work when the Force Majeure Occurrence abates and complete the work. However, if the Force Majeure Occurrence has delayed work or increased costs so that Project scope of work cannot be completed as specified in this Contract, for the cost or in the time or manner specified in the exhibits, BNSF need not proceed with completion of work until the Parties have amended the Project or this Contract in ways necessary to complete the work hereunder in order to enable the Project scope of work to be completed in the revised manner, for the revised amount and/or in compliance with the revised schedule. In the event of a claimed Force Majeure Occurrence, BNSF shall promptly notify and consult with State as to how to proceed pursuant to the provisions of this Contract under the circumstances presented by the Force Majeure Occurrence.

Article X – Completion and Acceptance/Reporting

10.1 BNSF shall issue a notice of substantial completion to State within thirty (30) days of substantial completion of work on the Project as defined in Exhibit D, "Description of Work." Substantial completion will occur when the Project is able to be placed in service in accordance with applicable laws and regulations, subject only to minor punch list items that do not materially affect the utility of the Project. Upon receipt of BNSF's notice of substantial completion, the Parties will conduct a joint inspection of the Project at a mutually agreeable time. All punch list action items needing correction, repair, or replacement must be completed within sixty (60) days of the date of the joint inspection (subject to any delays attributable to work performed by UPRR) or upon such other schedule as agreed in writing among the Parties at the time of inspection.

10.2 The Parties shall each issue a certificate of final acceptance of the Project:

10.2.1 Within thirty (30) days after the joint inspection, or;

10.2.2 If necessary corrective punch list action items are noted during the joint inspection, final acceptance will be issued within thirty (30) days after corrections are completed to all Parties' reasonable satisfaction.

10.3 The Project shall be deemed completed and the responsibilities for operation and maintenance of the Project will be allocated as described herein upon the issuance of certificates of final acceptance by the Parties. The Parties' issuance of such acceptance shall mean only that the Project as constructed meets their respective expectations and shall not be deemed to mean that either Party certifies that the Project is structurally sound or appropriate or

that any plans, specifications, construction, or other matter related to the Project meets applicable regulations, laws, statutes, or local ordinances or building codes.

10.4 The State shall submit a Final Delivery Report to the Commission to include such items as the scope of the completed Project, final cost, duration, and performance outcomes as compared to the anticipated benefits presented in Exhibit F, "Public Benefits. The State must submit the Final Delivery Report within 180 days after the Parties issue their certificates of final acceptance for the Project. To assist the State in preparing the Final Delivery Report, BNSF agrees to provide timely responses to requests for information that the State requires in order to complete the report; except, BNSF shall not be required to provide any confidential, privileged or proprietary information.

Article XI - Nondiscrimination

11.1 With respect to BNSF's construction of the Project, BNSF and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over forty [40]), marital status, and denial of family care leave. BNSF and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (California Government Code, Section 12900 *et seq.*) and applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 *et seq.*). The applicable regulations of the Fair Employment and Housing Commission implementing California Government Code, Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this Contract by reference and made a part hereof as if set forth in full with respect to BNSF's construction of the Project. BNSF and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other contract.

11.2 BNSF shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Contract.

Article XII - Subcontracting Clause

Any subcontract in excess of \$25,000, entered into exclusively as a result of this Contract, shall contain all of the provisions stipulated in Articles VII, XI, and XVIII of this Contract to be applicable to subcontractors. BNSF assures that its subcontractor's costs invoiced comply with 48 CFR, Federal Acquisition Regulations system, Chapter 1, Part 31, *et seq.*

Article XIII - Termination

13.1 State may terminate this Contract upon a finding that BNSF is not in compliance with the terms of this Contract if BNSF does not correct such default as set forth below in Article XVI.

13.2 State must pay invoices in accordance with Article V, Paragraph 5.2. BNSF may commence termination of this Contract upon State's non-payment of any undisputed BNSF invoices after one hundred twenty (120) days. Termination shall be by written notice specifying the reason for termination and giving State thirty (30) days to make payment. Should

State not make payment on or before 30 days of BNSF's written notification of termination, then and in that event this Contract shall be terminated.

13.3 In the event Contract is terminated by State or by the mutual agreement of the Parties, or by BNSF as provided for under Article II, Paragraph 2.10, this Article XIII or Article XIV of this Contract, State shall pay BNSF for work performed after the Notice to Proceed for State Funding Purposes up to the point of down scoping or termination, including the cost to dispose of material on hand, less any applicable credits; and any cost incurred to restore the site to a reasonably safe and usable condition. State shall also pay BNSF all properly invoiced allowable costs associated with services provided by contractors to BNSF for Project work that was either completed or obligated and not capable of being halted when Project was terminated. The total of all State payments due BNSF, including termination or down scoping costs, shall not exceed the express available State funding limits as described in Exhibit C, "Project Budget." Prior to termination by State or by the mutual agreement of the Parties, or by BNSF as provided for under Article II, Paragraph 2.10, this Article XIII or XIV, State and BNSF agree to negotiate in good faith to determine if the Project can be modified based on work performed to date to generate some portion of the performance guarantees contemplated by the Project. If the Parties agree to such modifications then the Parties may amend this Contract to so reflect such modifications to the Project and the anticipated Public Benefits described in Exhibit F.

13.4 Should (i) conditions of permits or approvals under Article II, Paragraph 2.10, or (ii) unforeseen underground conditions, or (iii) unanticipated cultural, archaeological, paleontological, or other protected resources are discovered during construction, cause the revised estimated cost of the Project to exceed the total amount shown in Exhibit C, "Project Budget," and should the Parties not be able to determine options acceptable to both parties that will keep costs within the total amount shown in Exhibit C, "Project Budget," then the Contract may be terminated by BNSF. If the parties are unable to agree on options acceptable to both parties and BNSF is unwilling to pay the additional costs, then State may terminate the Contract. Unforeseen underground conditions shall be defined as sub-surface conditions within the Project limits that are newly discovered in spite of BNSF's due diligence investigation of geotechnical conditions and that vary from actual field conditions discovered and predicted during pre-construction. BNSF's failure to exercise accepted geotechnical investigation methods in developing the Project shall not be a valid cause to exercise BNSF's termination provisions under this paragraph.

13.5 If down scoping or termination of Project renders the Project ineffective, then the State agrees to pay BNSF to remove, at BNSF's sole discretion, all or portions of the improvements and return those track, signal, grading, drainage, grade crossings, grade separations, and fencing improvements to their original state.

Article XIV – Funding Requirements

14.1 It is understood by the Parties that this Contract may have been written before ascertaining the final availability of State funds for the mutual benefit of both parties in order to avoid program and fiscal delays that would occur if this Contract were executed after that determination was made.

14.2 Further, this Contract is subject to any additional regulations, restrictions, limitations, conditions, or any statute enacted by the United States Government, the California Legislature or the California Treasurer that may affect the provisions, terms, or funding of this Contract in any manner instituted prior to completion of the Project. If any such additional regulations, restrictions, limitations, conditions or statute adversely affects the BNSF then BNSF may terminate this Contract by written notice to State.

14.3 It is mutually agreed that the Project is funded in an amount up to 50% of eligible Project costs by TCIF funds, and as a condition to the State disbursing TCIF funds the Legislature must appropriate and the Commission must allocate TCIF funds in an amount sufficient to cover requested disbursement up to a maximum of 50% of the amount as reflected in Exhibit C, "Project Budget." If sufficient TCIF funds are not allocated to fund the Project, this Contract shall be amended to reflect any reduction in funds. If the Parties cannot agree on such amendment then either party may terminate this Contract by written notice to the other.

14.4 State will notify BNSF when the funding contemplated in Paragraphs 14.1 and 14.3 has been appropriated, allocated and made available for the Project (the "**Notice to Proceed for State Funding Purposes**"). State has the option to terminate this Contract, upon thirty (30)-days' notice to BNSF if funding is not available as contemplated in Paragraphs 14.1 and 14.3 above. In any event, State will pay BNSF for allowable Project work performed after Notice to Proceed for State Funding Purposes up to the point of termination. In the event this contract is terminated or amended to reduce funds, State agrees to reimburse BNSF for the effects of down scoping or termination pursuant to the terms set forth in Article V, Paragraph 5.1, and Article XIII.

Article XV – Dispute Resolution

In the event of a dispute between Parties arising under the terms of this Contract, the Parties shall first attempt to resolve the dispute through direct discussions. If the Parties are unable to resolve the dispute informally, they shall participate in mediation. Either Party may initiate mediation at any time prior to resolution of a dispute by sending a written request for mediation to the other Party. The Parties shall jointly select a mediator. If they cannot all agree on a mediator, the mediator will be selected randomly from between the Parties' preferred choices. The Parties shall share equally in the cost of mediation. The Parties shall participate in mediation in good faith. Absent agreement among the Parties or a court order, neither a dispute nor the mediation process shall relieve the Parties from continuing with construction of the Project or complying with the terms of this Contract. By participating in mediation, the Parties will not waive any rights, causes of action, or defenses that may otherwise exist. No opinions or conclusions expressed by a mediator will be binding upon either Party. A Party may not file a civil complaint arising under this Contract until the conclusion of the mediation process or forty-five (45) days after such Party first presents a written request for mediation related to the dispute in question, whichever comes first.

Article XVI – Default and Remedies

The Parties acknowledge that in the event of a default or breach of any of the terms of this Contract, damages may not be an adequate remedy, and the non-defaulting Party may seek the entry of decrees for specific performance in favor of such party. A defaulting Party shall have thirty (30) days to cure any default following receipt of written notice from another Party. If

such cure can reasonably be expected to take more than 30 days, the defaulting Party shall be deemed to have effectuated a cure if it commences such cure within 30 days of notice and proceeds to complete all activities necessary and does in fact complete such cure using due diligence; provided, however, this sentence shall not apply to the payment of any fees or expenses pursuant to this Contract. The Parties agree that their remedies under this Contract shall be limited to actual direct damages and specific performance and specifically exclude consequential, exemplary, or punitive damages. Nonpayment of any fees or expenses pursuant to this Contract that continues beyond the cure period will be processed in accordance with the Prompt Payment Act. Notwithstanding the foregoing, if a bona fide dispute exists with respect to the amount of any fee or expense, the Party obligated to pay such fee or expense shall pay the undisputed portion thereof at the time and in the manner required, and such Party shall not be deemed to be in default with respect to the nonpayment of the disputed portion of such fee or expense until such time as the dispute has been resolved, at which time the additional amount (if any) which is to be paid by such Party will be promptly paid in accordance with the Prompt Payment Act.

Article XVII – National Labor Relations Board Certification

Pursuant to Public Contract Code Section 10296, BNSF hereby states, under penalty of perjury, that no more than one final unappealable finding of contempt of court by a Federal court has been issued against BNSF within the immediately preceding two (2)-year period because of BNSF's failure to comply with an order of a Federal court that orders BNSF to comply with an order of the National Labor Relations Board.

Article XVIII – Drug-Free Workplace Certification

BNSF complies with the Drug Free Workplace Act of 1990. BNSF's documentation of same is on file with State.

Article XIX – Miscellaneous

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

19.2. Headings. The Article headings in this Contract are for convenience only and shall not be used for any purpose in the interpretation of this Contract.

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

19.4 Relationship of the Parties. Each Party is and shall at all times be and remain independent from the other Party and shall not be deemed an agent or fiduciary of the other Party. Nothing contained herein shall have the effect of creating a trust, joint venture, or partnership between the Parties. No Party has any right or power to obligate or bind the other Party in any manner whatsoever.

19.5 Assignment. This Contract shall be binding upon and inure to the benefit of each of the Parties and to their respective transferees, successors, and assigns. Neither Party may assign its rights or obligations under this Contract to a third party without the written

consent of the other Party, except where assignment occurs as a result of a sale or transfer of all or substantially all of such Party's assets pursuant to merger, sale, consolidation, combination, or order or decree of governmental authority.

19.6 No Third Party Beneficiaries. Except to the extent certain indemnities may expressly favor either party's contractors as set forth hereinabove, enforcement of the terms of this Contract is reserved to the Parties, and nothing contained in this Contract provides any claim or right of action for enforcement to any other party.

19.7 Conflicts. To the extent that the provision of this Contract conflict with any other agreement between the Parties with respect to the Project, the provisions of this Contract shall control.

19.8 Effectiveness. The effectiveness of this Contract and the respective rights and obligations of the Parties hereunder are expressly conditioned on certification by the applicable Lead Agency of the Tehachapi Rail Improvement Project Final Environmental Impact Report (SCH#2010071076) and approval of all related actions becoming final and non-challengeable.

19.9 CTC Reporting. BNSF shall work with State in good faith to provide all applicable information to State in support of California Transportation Commission Project reporting requirements.

Article XX - Notices

Any notice required by this Contract shall be in writing and directed to the representatives of the Parties identified herein by personal delivery or deposit with the United States Postal Service, first class postage prepaid:

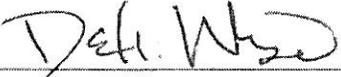
| | |
|-----------|---|
| Railroad: | BNSF Railway Company Dean Wise Vice President Network Strategy 2650 Lou Menk Drive Fort Worth, TX 76131-2830 PO Box 961034 Fort Worth, TX 76161-0034 |
| State: | California Department of Transportation Chief, Division of Rail 1120 N Street, Room 3400, MS-74 Sacramento, CA 95814 P. O. Box 942874, MS-74 Sacramento, CA 94274-0001 |

Article XXI – Contract Execution

This Contract shall be executed in six (6) counterparts and shall be valid when each of the Parties has executed copies of the signature page and a copy of the entire Contract incorporating original signature pages signed by the Parties has been distributed to each party (except for State, which shall receive five (5) copies).

In witness whereof, the parties hereto have caused this Contract to be executed by their duly authorized officers.

BNSF RAILWAY COMPANY

By: 
Name: Dean Wise
Title: Vice President Network Strategy

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By: _____
Contract Officer

Approved as to Form and Procedure

By: 
Attorney,
California Department of Transportation

Exhibit A

Description of Premises (Map)

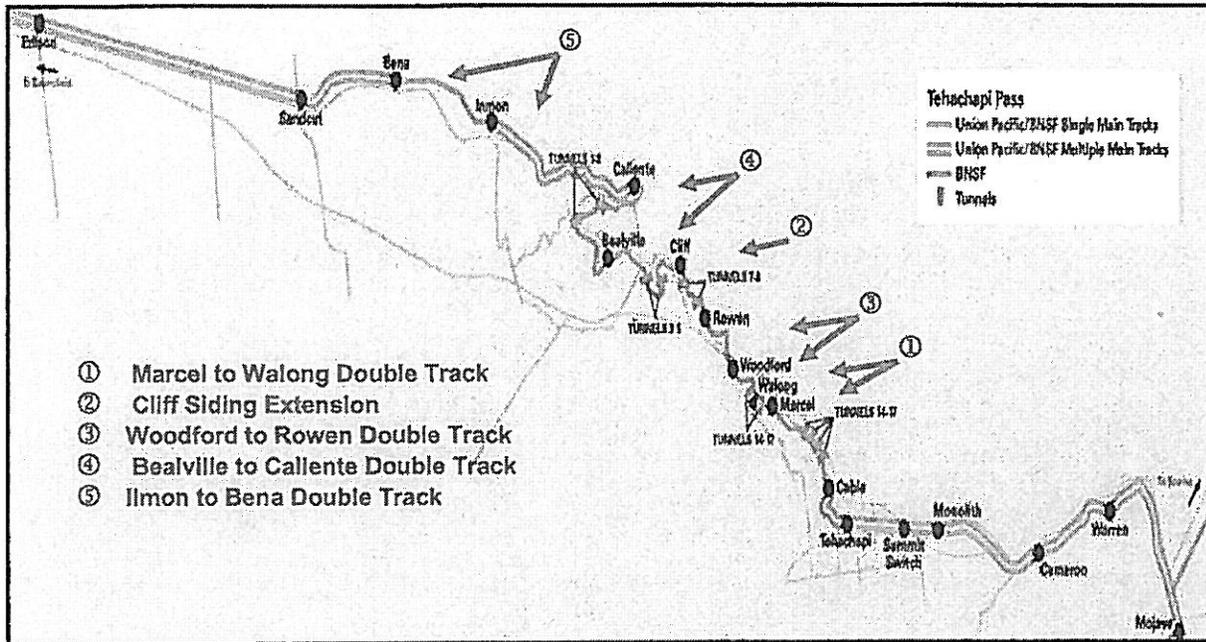


Exhibit B

Description of Premises

Project sites are located between the cities of Bakersfield and Mojave in Kern County on Union Pacific Railroad's Mojave Subdivision. Proposed locations are as follows:

| Reference Project Element | Railroad Stations/Sidings | Approx. Railroad Mileposts |
|----------------------------------|----------------------------------|-----------------------------------|
| 1 | Walong to Marcel | MP 352.2 to MP 353 |
| 2 | Cliff | MP 343.3 to MP 343.6 |
| 3 | Rowen to Woodford | MP 346.8 to MP 347.9 |
| 4 | Caliente to Bealville | MP 335.4 to MP 338 |
| 5 | Ilmon to Bena | MP 328 to MP 330.7 |

Exhibit C

**Project Budget
Page 1 of 2**

| Reference Project Element | Description | Scope of Work | 2015 Cost (\$ thousands) |
|---------------------------|--|---|--------------------------|
| 1 | Connect Walong and Marcel sidings to create a segment of approximately 2.8 miles of double track | <ul style="list-style-type: none"> ▪ Construct approximately 0.8 mile of second mainline ▪ Related infrastructure | 10.1 |
| 2 | Extend Cliff siding to accommodate prevailing system train lengths | <ul style="list-style-type: none"> ▪ Construct approximately 900 feet of siding extending to portal of Tunnel No. 7 ▪ Related infrastructure | 6.53 |
| 3 | Connect Rowen and Woodford sidings to create a segment of approximately 4.2 miles of double track | <ul style="list-style-type: none"> ▪ Construct approximately 1 mile of second mainline ▪ Install single crossover plant ▪ Related infrastructure | 19.7 |
| 4 | Connect two segments of double track at Caliente and Bealville to create a segment of approximately 10.3 miles of double track | <ul style="list-style-type: none"> ▪ Construct approximately 2.6 miles of second mainline ▪ Install new universal crossover plant ▪ Related infrastructure | 39.16 |
| 5 | Connect Caliente to Bealville double track project at Ilmon to Bena with existing double track into Bakersfield | <ul style="list-style-type: none"> ▪ Construct approximately 2.5 miles of second mainline ▪ Install new universal crossover plant ▪ Related infrastructure | 25.97 |
| | | Total Project Costs | \$101.46 |

Exhibit C

Project Budget
Page 2 of 2

Construction Estimate Summary

| | |
|-----------------------|---------------|
| 1. Administrative | \$ 5,049,000 |
| 2. Civil Construction | \$ 55,565,000 |
| 3. Track | \$ 23,551,000 |
| 4. Signal | \$ 15,295,000 |
| 5. Engineering | \$ 2,000,000 |
| Total Project Costs | \$101,460,000 |

Exhibit D

Description of Work

| Reference Project Element | Description | Scope of Work |
|---------------------------|--|---|
| 1 | Connect Walong and Marcel sidings to create a segment of approximately 2.8 miles of double track | <ul style="list-style-type: none"> ▪ Construct approximately 0.8 mile of second mainline ▪ Related infrastructure |
| 2 | Extend Cliff siding to accommodate prevailing system train lengths | <ul style="list-style-type: none"> ▪ Construct approximately 900 feet of siding extending to portal of Tunnel No. 7 ▪ Related infrastructure |
| 3 | Connect Rowen and Woodford sidings to create a segment of approximately 4.2 miles of double track | <ul style="list-style-type: none"> ▪ Construct approximately 1 mile of second mainline ▪ Install single crossover plant ▪ Related infrastructure |
| 4 | Connect two segments of double track at Caliente and Bealville to create a segment of approximately 10.3 miles of double track | <ul style="list-style-type: none"> ▪ Construct approximately 2.6 miles of second mainline ▪ Install new universal crossover plant ▪ Related infrastructure |
| 5 | Connect Caliente to Bealville double track project at Ilmon to Bena with existing double track into Bakersfield | <ul style="list-style-type: none"> ▪ Construct approximately 2.5 miles of second mainline ▪ Install new universal crossover plant ▪ Related infrastructure |

Exhibit E

Project Schedule

| Phase | Date |
|---|---------|
| Begin Environmental Review | 1/2008 |
| Circulate Draft Environmental Impact Report | 9/2012 |
| End Environmental Review | 12/2012 |
| Begin Design | 1/2008 |
| End Design | 01/2013 |
| Begin Construction | 12/2013 |
| End Construction | 12/2018 |

Exhibit F

**Public Benefits
(7 Pages)**



ONE COMPANY | *Many Solutions*

BNSF Railway

**Cost-Benefit Analysis for the Tehachapi
Trade Corridor**

**Update to Remove Centralized Traffic
Control**

HDR | Decision Economics

November 12, 2012



Risk Analysis • Investment and Finance
Economics and Policy

BNSF Railway

Cost-Benefit Analysis for the Tehachapi Trade Corridor Update to Remove Centralized Traffic Control

November 12, 2012

Prepared By:

HDR | Decision Economics

1545 Carling Avenue, Suite 410
Ottawa, Ontario, Canada
K1Z 8P9

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MODEL UPDATES

This document updates the forecasted public benefits of the Tehachapi Trade Corridor (TTC), a railroad capacity project in California to account for a reduction in scope of the TTC project. This reduction consists of deleting one of the project elements, the installation of Centralized Traffic Control (CTC) signaling between Kern Junction and Sandcut, and between Tehachapi and Cameron. Instead, these two double-track line segments will continue to be operated under their present method, which is Double Track-Automatic Block Signals (DT-ABS). CTC and DT-ABS are methods of controlling train movements through signal indications. The signals are located at the side of the track they control, and provide to the train crew information about maximum allowed speed beyond the signal and the condition of the track ahead. The primary difference between CTC and DT-ABS on a double-track line segment is that CTC enables trains to move using signal indications in either direction on either track, whereas DT-ABS is a directional signal system under which trains move one direction with signal indication on one track, and the opposite direction on the other track. Train capacity on a double-track line segment is similar between CTC and DT-ABS under normal operating conditions, but when one track is undergoing maintenance, the trains running on the remaining track can continue to run at the same speed as before if CTC is employed, but only at much reduced speed if they are running "wrong direction" if DT-ABS is employed.

The train capacity increase afforded by the TTC project was previously estimated at 87% above the present day capacity with all of the project elements included. This capacity increase is now forecast to be 80% with the reduction in project scope through the deletion of the proposed Kern Junction-Sandcut and Tehachapi-Cameron CTC projects. This reduction is due to the loss of capacity that will occur when either of the main tracks in these two line segments is undergoing maintenance and thus not able to operate trains, and the remaining track will only be able to operate trains under signal indication for one direction of movement. This reduction percentage is estimated through analysis of train capacity on the TTC with consideration of its ruling grades and curvature that govern maximum train speed; the length of sidings and double-track segments that govern maximum train length as well as distance between locations where trains of maximum length can perform meet/pass events; and the running times of trains between sidings and double-track segments.

The following updates were made to the public benefit model:

- Capacity increase updated from 87% to 80% to reflect deletion of CTC signaling between Kern Junction and Sandcut, and Tehachapi and Cameron, from the project scope.
- Capital Costs updated to remove cost of CTC signaling between Kern Junction and Sandcut, and Tehachapi and Cameron, from the project scope.

RESULTS

This section provides a comparison of the original six planned project elements to the updated results for the five project elements currently programmed. The five project elements currently programmed include:

- Connect Walong and Marcel sidings to create a double-track line segment
- Extend Cliff siding to 8000 feet
- Connect Rowen and Woodford to create a double-track line segment
- Connect Caliente and Bealville to create a double-track line segment
- Install a second main track between Bena and MP 330.7

Table 1 provides a comparison of the results in monetary values for California only. Table 2 provides a comparison of the results in non-monetary metrics for California only. All comparisons are made with respect to the Addendum to the Cost-Benefit Analysis of the Tehachapi Trade Corridor dated August 13, 2008. This addendum was provided in response to certain Cambridge Systematics' comments with respect to the public benefits analysis prepared by HDR Engineering Inc. on behalf of BNSF Railway.

All results are presented in \$2007 dollars, using 2007 as the discounting benchmark year to bring monetary terms into present values.

Table 1: Discounted Value of Net Benefits (California Only)

| Net Benefit # | Net Benefit Name | Net Benefit Category | ORIGINAL 6 PROJECTS PLANNED | UPDATED 5 PROJECTS PLANNED |
|---|---|-----------------------------------|--|--|
| | | | Total Discounted Value of Benefits 2014-2038 (2007 US\$ M) | Total Discounted Value of Benefits 2014-2038 (2007 US\$ M) |
| | | | Mean | Mean |
| 1 | Reduced Cost of Train Delay at Current Capacity | Transportation System Savings | Benefit Removed | Benefit Removed |
| 2 | Reduced Transportation Costs from Displacing Heavy Truck Travel | Transportation System Savings | \$626 | \$560 |
| 3 | Change in Inventory Costs from Displacing Heavy Truck Travel | Transportation System Savings | (\$4) | (\$3.8) |
| 4 | Change in Inventory Costs from Reduced Train Delay | Transportation System Savings | \$0.3 | \$0.3 |
| 5 | Savings From Reduced Highway Congestion | Transportation System Savings | \$17.7 | \$15.7 |
| 6 | Reduction in Maintenance Costs from Displacing Heavy Truck Travel | Transportation System Maintenance | \$57 | \$51 |
| 7 | Environmental Savings from Displacing Heavy Truck Travel | Environmental Improvements | \$25 | \$22 |
| 8 | Environmental Savings from Reduced Train Delay (Idling) | Environmental Improvements | \$0.3 | \$0.3 |
| 9 | Reduced Accident Costs from Displacing Heavy Truck Travel | Transportation Safety | \$191 | \$171 |
| 10 | Aid in Case of Massive Natural Disaster Relief / Terrorist Attack | Emergency Relief | \$3.5 | \$3.5 |
| Total Discounted Value of Net Benefits (Note: Separate calculations, may not add) | | | \$921 | \$820 |

*As per "Cost-Benefit Analysis of the Tehachapi Trade Corridor, Addendum", August 13, 2008

Table 2: Impacts of the TTC Project Once Capacity is Reached (California Only)

| Impact # | Impact Name | ORIGINAL 6 PROJECTS PLANNED* | UPDATED 5 PROJECTS PLANNED |
|----------|---|------------------------------|----------------------------|
| | | Capacity Reached in 2029 | Capacity Reached in 2029 |
| | | Mean | Mean |
| 1 | Number of Truck Ton-Miles Diverted | 3.7 Billion | 3.4 Billion |
| 2 | Number of Truck Miles Diverted | 156 Million | 143 Million |
| 3 | Number of Trucks Taken Off the Road | 1,396 | 1,262 |
| | (This many fewer trucks on the road each day of the year) | | |
| 4 | Passenger Car Equivalent Miles Saved | 390 Million | 358 Million |
| 5 | Gallons of Fuel Saved | 22 Million | 20 Million |
| 6 | Tons of CO2 Emissions Avoided | 248 Thousand | 226 Thousand |
| 7 | Tons of NOx Emissions Avoided | 22 | 21 |
| 8 | Tons of VOC Emissions Avoided | (69) | (64) |
| 9 | Tons of PM Emissions Avoided | 2.8 | 2.6 |
| 10 | Number of Injuries Avoided | 94 | 87 |

*As per "Cost-Benefit Analysis of the Tehachapi Trade Corridor, Addendum", August 13, 2008