



**Modernization Program  
Peninsula Corridor Electrification Project  
(PCEP)**



**3<sup>rd</sup> Quarter FY 2016  
Progress Report**

**January 1, 2016 to March 31, 2016**

**Peninsula Corridor Electrification Project**  
**3<sup>rd</sup> Quarter FY 2016 Progress Report**

**Funding Partners**



FTA Core Capacity  
FTA Section 5307/5337 (Environmental /  
Pre Development only)  
FTA Section 5307/5337 (EMU only)



Prop 1B (Public Transportation  
Modernization & Improvement Account)  
Caltrain Low Carbon Transit Operations  
Cap and Trade



Prop 1A  
High Speed Rail Cap and Trade



Carl Moyer Fund



RM2  
RM1  
Bridge Tolls



SFCTA



San Mateo (SMCTA) Contribution  
SMCTA Measure A



VTA Measure A  
Santa Clara (VTA) Contribution



San Francisco Contribution

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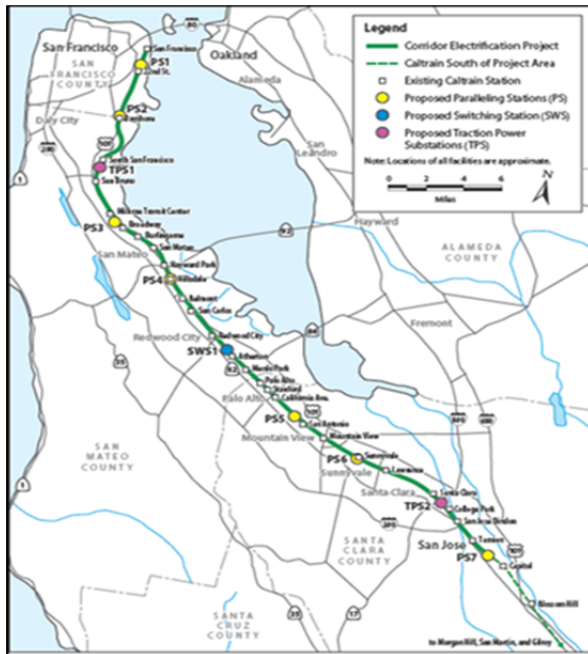
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## 1.0 PREFACE

Over the last decade, Caltrain has experienced a substantial increase in ridership and anticipates further increases in ridership demand as the San Francisco Bay Area's population grows. The Caltrain Modernization (CalMod) Program, scheduled to be implemented by 2020, will electrify and upgrade the performance, operating efficiency, capacity, safety, and reliability of Caltrain's commuter rail service.

The Peninsula Corridor Electrification Project (PCEP) is a key component of the CalMod Program and consists of converting Caltrain from diesel-hauled to Electric Multiple Unit (EMU) trains for service between San Francisco Station (at the intersection of Fourth and King Streets in San Francisco) and Tamien Station in San Jose. The project will entail the installation of new electrical infrastructure and the purchase of electrified vehicles. Caltrain will continue Gilroy service and support existing tenants.

An electrified Caltrain will better address Peninsula commuters' vision of an environmentally friendly, fast, reliable service. Electrification will modernize Caltrain and make it possible to increase service while offering several advantages in comparison with existing diesel power use, including:



**Improved Train Performance, Increased Ridership Capacity and Increased Service:** Electrified trains can accelerate and decelerate more quickly than diesel-powered trains, allowing Caltrain to run more efficiently. In addition, because of their performance advantages, electrified trains will enable more frequent and/or faster train service to more riders.

**Increased Revenue and Reduced Fuel Cost:** An electrified Caltrain will increase ridership and fare revenues while decreasing fuel costs.

**Reduced Engine Noise Emanating from Trains:** Noise from electrified train engines is measurably less than noise from diesel train engines. Train horns will continue to be required at grade crossings, adhering to current safety regulations.

**Improved Regional Air Quality and Reduced Greenhouse Gas Emissions:** Electrified trains will produce substantially less corridor air pollution compared with diesel trains, even when the indirect emissions from electrical power generation are included. Increased ridership will reduce automobile usage, resulting in additional air quality benefits. In addition, the reduction of greenhouse gas emissions is not only good for our regional air quality, but will also help meet the State's emission reduction goals.

An electrified Caltrain system would set the stage for an enhanced, modern commuter rail service and for future blended California High-Speed Rail (CHSR) service. While this project will not include or study all infrastructure necessary to implement high-speed rail service on the corridor (such as CHSR maintenance facilities, station improvements, or passing tracks), the electrical infrastructure (such as overhead wire systems) will be compatible with later blended service.

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## **2.0 EXECUTIVE SUMMARY**

During the third quarter of fiscal year 2016 the PCEP team continued to make progress on the project. Currently in the procurement process for the Electrification contract, a Best and Final Offer (BAFO) addendum was issued in December with subsequent addendums issued in January and February. BAFO proposals were received from the short listed proposers in February and were reviewed by the Technical Evaluators and Evaluation Committee. Evaluations were completed and firms were notified that a Best Value proposer was selected to begin negotiations in April 2016.

The procurement process also continued for an Electric Multiple Units (EMU) manufacturer. In the third quarter four additional addendums to the EMU RFP were issued (total of nine) and proposals were received in February 2016. The PCEP team continues to work with California High-Speed Rail Authority (CHSRA) to identify and reconcile interface issues. PCEP continues to monitor Amtrak's new locomotive procurement with interest in purchasing several of its existing AEM-7 locomotives for use as test trains and backup. Amtrak has indicated that once all new locomotives are accepted they will begin discussions with Caltrain.

The Tunnel Modification project continued in the preliminary design phase. As an option the tunnel modification construction contract will include the Caltrain Tunnel 1 and Tunnel 4 Drainage Rehab Project.

The Central Equipment and Maintenance Operating Facility (CEMOF) modifications design effort is on hold at this time. The preliminary design effort has proceeded to a stage where detailed information from the EMU manufacturer is required to finalize the design.

Addendum #1 to the PCEP Environmental Impact Report (EIR) was adopted by the JPB in February 2016. This addendum included a new location of the traction power facilities sites for paralleling station 7 (PS 7). A new PS 7 site was needed as the initial three locations included as part of the PCEP EIR were found to be no longer viable. Due to project changes subsequent to the 2009 Environmental Assessment and Finding of No Significant Impact (FONSI), the JPB requested that FTA re-evaluate the 2009 EA / FONSI. In February 2016 the FTA confirmed that the 2009 EA/FONSI remain appropriate for the project.

The PCEP team is in the process of evaluating the Master Program Schedule (MPS) in conjunction with responses to the electrification and EMU RFPs. The project team anticipates issuing a revised baseline schedule in the next quarter.

The PCEP team continued to meet with members of the nine-party MOU to keep them informed of progress and issues. Negotiations with individual members continued to secure funding agreed to in the MOU. In addition the team continues to work towards receipt of Core Capacity Grant from the FTA. The PCEP team has had positive interactions with the FTA and meets with the FTA's appointed Project Management Oversight Contractor (PMOC) on a monthly basis. The team continues to work with the funding partners to secure commitments to fund the entire program.

### **3.0 ELECTRIFICATION**

The PCEP team continued to work through the procurement steps as a result of the August 2015 responses to the Electrification RFP. During the quarter BAFO addendums were issued to three short listed proposers and BAFO proposals were received at the end of February. The technical reviewers and evaluation committee reviewed and scored the BAFO proposals to determine the best value proposer based on the combination of 60% technical and 40% price. The 10 member evaluation committee included representatives from SFMTA, VTA, and CHSRA. Additional PCEP funding partners were observers to the final scoring. Evaluations were completed and firms were notified that a Best Value proposer was selected to begin negotiations in April 2016. The anticipated award of the Electrification contract is summer 2016.

Ongoing discussions with Pacific Gas & Electric (PG&E) on a Power Quality study to determine scope and necessary infrastructure to support Caltrain loads required for electrification continues to be on hold as the project team works to resolve outstanding issues with PG&E.

The project team continued to provide technical support for ongoing coordination efforts with third party jurisdictions such as California Public Utility Commission (CPUC) as well as the local cities and counties.

The base operating system for Caltrain Operations and Control is the ROCS system. If a different system for control of the electrification were to be chosen a major integration effort between two different systems would be required, thus increasing cost and overall risk to the program. To reduce the risk due to the major integration effort necessary between two differing systems, consideration of ongoing maintenance in the future and a technical evaluation, the project team recommended the system be implemented by the provider of the existing ROCS system, including the integrated components of CBOSS PTC. The PCEP team prepared scope and estimate documents for the sole source procurement.

### **4.0 ELECTRIC MULTIPLE UNITS**

The project team continues to work with CHSRA to identify and reconcile technical integration/interface items. Several technical items are being discussed at monthly review meetings between PCEP team and CHSRA. Two issues were elevated to Executive Committee(s) for resolution.

Discussions have continued with Amtrak regarding their interest in selling several of their AEM-7 locomotives to Caltrain. These locomotives will be used for testing the electrification system and will serve as back up. In a May 2015 response letter, Amtrak noted that it would wait to put the AEM-7 units up for sale until after acceptance of the new Siemens locomotives is complete. In their initial letter the target date for acceptance of the new locomotives had been indicated to be December 1, 2015. However the overall delivery of the new locomotives to Amtrak by Siemens has been delayed resulting in the sale date of their locomotives to be moved out to a target date of June 2016.



The PCEP team completed coordination with all Caltrain departments in follow up Intelligent Transportation Systems (ITS) workshops covering EMU technology and associated wayside requirements for full implementation of these technologies. Follow up meetings with Caltrain Operations and IT will be conducted and actions will be addressed that involve participation from both Operations and the EMU team that affected both the EMU and Electrification contracts. Future meetings, as required, will be coordinated to bring this item to closure.

JPB received a letter on January 13, 2016, from the Federal Railway Administration (FRA) following their review of JPB's petition for a modification of its waiver of compliance from certain provisions of Title 49 Code of Federal Regulations (CFR) 238, Passenger Equipment Safety Standards. The FRA determined that granting a modification to JPB's existing relief is in the public interest and consistent with railroad safety, therefore granted the requested relief, subject to identified conditions.

The EMU proposals were received on February 17, 2016. EMU Guidelines and Technical Summary Memos were distributed to the Technical Reviewers for their review of the technical sections of the proposal. The Evaluation Committee, which included representatives from SFMTA, VTA, and CHSRA, completed its scoring and reached consensus on a selected proposer. The financial portion of the proposal was opened and is currently under evaluation. Discussions have been conducted with the proposer for clarification purposes.

The JPB finalized the Maintenance Services sections that pertain to performance incentives/deductions. This included procedures and metrics for availability, reliability, on-time, safety and training (issued under Addendum No. 9). Maintenance Services proposals were received March 10, 2016. Details are currently being reviewed and finalized with Caltrain Engineering and Operations to determine the method (in-house or outside contract) to be used to perform the required improvements to the Santa Clara Drill track as a test track to support vehicle testing.

## **5.0 TUNNEL MODIFICATION**

Tunnel modifications will be required on the four tunnels located in San Francisco. This effort is required to accommodate the required clearance for the overhead catenary system (OCS) to support electrification of the corridor. The PCEP team continued work on preliminary design for the Tunnel Modification including design plans and specification, construction schedule, construction cost estimate and overall constructability of the project. Preliminary cost estimate and construction schedules were reviewed by the team and Caltrain Engineering and Construction. Comments from preliminary reviews will be addressed in the upcoming quarter and reflected in revised cost estimate and construction schedules. Work continues on the overall constructability of the project including a review of the necessary weekend shutdowns of Caltrain operation required to complete the project.

Caltrain Engineering and Construction has requested the PCEP team to manage completion of design and construction management for the Tunnel 1 and Tunnel 4 Drainage Rehab Project. This project is separate and distinct from the PCEP and will have its own budget and funding source. The Tunnel Modifications and Tunnel 1 and 4 Drainage Rehab Project contract will be included in a separate comprehensive Design-Bid-Build package for coordination and cost reduction. This project will not be a part of the Electrification contract.

## **6.0 CENTRAL EQUIPMENT MAINTENANCE AND OPERATIONS FACILITY MODIFICATIONS FOR EMU'S**

The CEMOF Modifications project is will provide safe work areas for performing maintenance on the new EMUs. The schematic design for CEMOF modifications is complete. Preliminary design efforts remain on hold until after an EMU manufacturer is selected. Selection of a car body is necessary to complete design of maintenance platforms.

## **7.0 ENVIRONMENTAL STATUS**

California Environmental Quality Act (CEQA): Addendum #1 to the PCEP Environmental Impact Report (EIR) was adopted by the JPB in February 2016. This Addendum included a new location of the traction power facilities sites for paralleling station 7 (PS7). The three PS 7 locations included as part of the PCEP EIR were found to be no longer viable. One of the three locations was no longer viable due to the shortening of the project limits as a result of cost containment measures. The remaining two locations were partially located on Caltrans property. These two locations were determined by Caltrans to be unacceptable due to their potential future expansion of Highway 87.

National Environmental Policy Act (NEPA): Due to project changes subsequent to the 2009 Environmental Assessment and Finding of No Significant Impact (FONSI), the JPB requested that FTA reevaluate the 2009 EA / FONSI. In February 2016 the FTA confirmed that the 2009 EA/FONSI are still appropriate for the project.

### **Permit Activity:**

- Section 106 National Historic Preservation Act (NHPA) process has concluded.
- Section 7 of the Endangered Species Act (ESA) process has concluded.
- The target completion date for completing the United States Army Corps of Engineers (USACE), San Francisco Regional Water Quality Control Board (SFRWQCB), California Department of Fish and Wildlife (CDFW) and the San Francisco Bay Conservation Development Commission (SF BCDC) is summer 2016.

PCEP Mitigation Program: The JPB has prepared a Mitigation Monitoring and Reporting Program (MMRP) to ensure that mitigation measures identified in the PCEP EIR are fully implemented during project implementation. The JPB will implement the mitigation measures through its own actions, those of the design-build contractor and actions taken in cooperation with other agencies and entities.

Comprehensive Agreements: The purpose of the comprehensive agreements are to memorialize the parties' consultation and cooperation, designate their respective rights and obligations and ensure cooperation between the JPB and the cities and counties in connection with the design and construction of the PCEP. A comprehensive agreement is planned for each of the 17 cities and three counties along the Caltrain ROW and within the PCEP limits. The target date for executing all comprehensive agreements is summer 2016.

## **8.0 UTILITIES**

The PCEP team completed review of the PG&E System Power study and continued work on the Power Quality study to determine transmission capacity to support Caltrain loads for the Electrification component of the project. Work with PG&E remains on hold as the PCEP team continues to resolve outstanding issues with PG&E in regards to the master agreement for scoping and preliminary design.

Utility Coordination meetings were held monthly during the quarter with all Telecom carriers within the JPB ROW. Discussions have been focused on overall project schedule and relocation schedule, responsibilities of relocation, applicable design standards of relocation, and reconciliation of agreements and records. Utility companies were requested to submit preliminary relocation schedules. The project team will continue to work with all utility companies to refine relocation schedules and relocation criteria in the upcoming quarter.

## **9.0 REAL ESTATE STATUS**

Contracts necessary for acquisition of real estate parcels for both fee simple purchase and easements have been approved and are in place for consultants to begin work. Preparation of appraisal maps, plats and legal descriptions have continued for all Segments throughout the quarter. Environmental Site Assessment (ESA) Phase I and Phase II investigations are in progress for Segment 4 parcels to clear them for acquisition. The necessity of Phase II ESA's is determined based on results of Phase I ESA's. Initiation of real estate offer presentations for Segments 2 and 4 will begin in the next quarter.

A scan of current Segment 2 and 4 parcels to be acquired for OCS construction have been performed to determine where existing utilities interfere with the placement of infrastructure design and placement. The scan has identified the need to expand the size of some parcels and add several new parcels to the Segment 2 and 4 acquisition list.

The Project Management Oversight Consultant (PMOC) assigned by the FTA developed an additional round of comments and questions regarding the RAMP (Real Estate Acquisition Management Plan). The comments and questions were vetted and subsequent updates to the RAMP were performed as needed. The updated RAMP and all sets of comments and questions were provided to the PMOC for review.

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Table 9-1 provides an overview of property status.

Table 9-1 Overview Property Status

Segment	Appraisal Packages <sup>(1)</sup>	Appraisals Completed	Acquisition Offers	Public Permits/Easements Cities/Caltrans	
				Needed	Obtained
Segment 4	19	14	0	9	0
Segment 2	29	3	0	6	0
Segment 1	TBD	0	0	TBD	0
Segment 3	TBD	0	0	TBD	0
Total	48	17	0	15	0

*Note: Appraisal Packages include Plat Map, Legal Description and Appraisal Map. Union Pacific Railroad Company (UPRC) packages include Appraisal Maps only.*

**10.0 SCHEDULE STATUS**

The PCEP team is in the process of evaluating the Master Program Schedule (MPS) in conjunction with responses to the electrification and EMU RFPs. The project team anticipates issuing a revised baseline schedule in the next quarter.

A summary of the overall schedule status for the PCEP is provided in Table 10-1 below.

Table 10-1 Schedule Status

MILESTONES	PROGRAM PLAN	LAST QUARTER	THIS QUARTER
NEPA Reevaluation	08/31/2015	02/15/2016	02/11/2016 (A)
EMU Proposals Due	05/04/2015	02/17/2016	02/16/2016 (A)
EMU MSA Proposals Due	05/04/2015	12/18/2015	03/10/2016 (A)
Electrification BAFO Proposals Due	N/A	02/26/2016	02/26/2016 (A)
Request Entry into Engineering	N/A	04/01/2016	04/12/2016

**11.0 FUNDING STATUS**

As noted in the previous quarterly report, the PCEP formally submitted documents to the Federal Transit Administration (FTA) in support of a Core Capacity grant application. Since that time, the PCEP has been working with the FTA's appointed Project Management Oversight Contractor (PMOC) to provide needed documentation required for submission to FTA to achieve the Entry into Engineering milestone. As part of the required documentation will be formalization of the Core Capacity grant funding amount which will be based on the bids received for both the EMU and Electrification, as well as other project costs that have been refined since the initial submittal to FTA.

Caltrain Grants also finalized a funding agreement with the San Francisco Municipal Transportation Agency (SFMTA) for \$39M in general obligation bond funds. The funding from SFMTA is part of the City and County of San Francisco's \$60M obligation to the PCEP. Approximately \$21M has already been provided by the San Francisco County Transportation Authority (SFCTA).

Negotiations continue with California High Speed Rail Authority regarding oversight and technical issues. These negotiations are in support of finalizing the CHSRA's \$600M grant which is included in the nine-party funding Memorandum of Understanding (MOU).

Table 11-1 presents a summary of JPB Board approved funding to date.

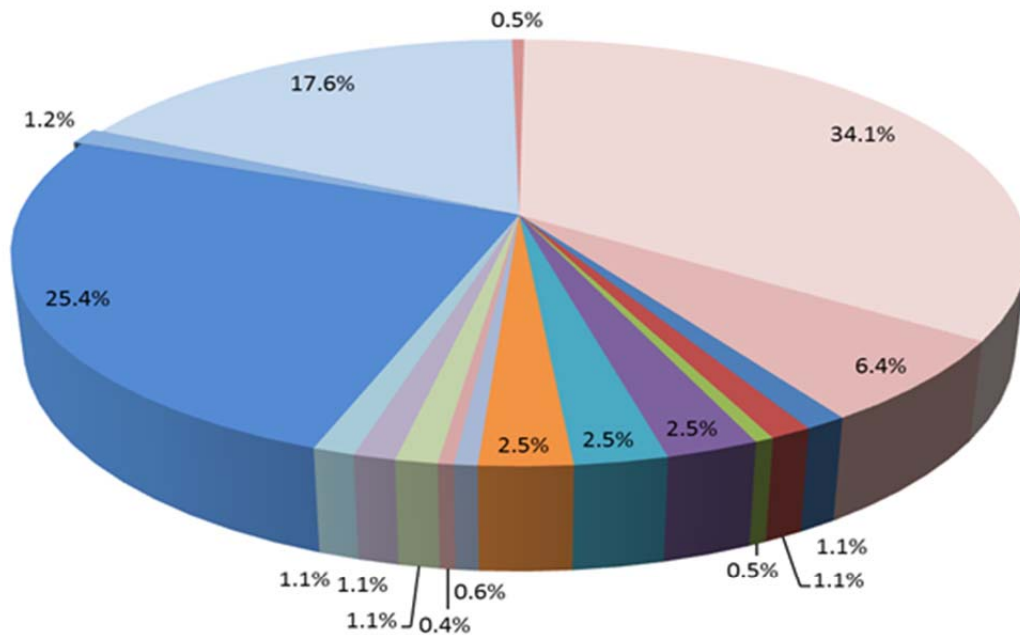
Table 11-1 Funding To Date Summary

<b>Source</b>	<b>Board Approved Funding</b>	<b>Available Funding</b>	<b>Unavailable Funding</b>
Federal	\$24,911,583	\$24,905,089	\$6,494
State	\$7,930,000	\$7,930,000	\$0
Local	\$38,907,803	\$38,889,179	\$18,624
Other	\$119,150,027	\$3,240,000	\$115,910,027
<b>Total</b>	<b>\$190,899,413</b>	<b>\$74,964,268</b>	<b>\$115,935,145</b>

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Figure 11-1 shows the percentage of contributions from the various sources that comprise the total \$1.758B funding plan.

Figure 11-1 Funding Plan



\$447,000,000	■ FTA Core Capacity
\$21,230,000	■ FTA Section 5307/5337 (Environmental / Pre Development only)
\$308,607,000	■ FTA Section 5307/5337 (EMU only)
\$8,000,000	■ Prop 1B (Public Transportation Modernization & Improvement Account)
\$600,000,000	■ Prop 1A
\$113,000,000	■ High Speed Rail Cap and Trade
\$20,000,000	■ Carl Moyer
\$20,000,000	■ RM2
\$9,000,000	■ RM1
\$44,346,667	■ SFCTA
\$44,346,667	■ SMCTA Measure A
\$44,346,667	■ VTA Measure A
\$11,000,000	■ Bridge Tolls
\$7,578,000	■ Caltrain Low Carbon Transit Operations Cap and Trade
\$20,000,000	■ Santa Clara (VTA) Contribution
\$20,000,000	■ San Francisco Contribution
\$20,000,000	■ San Mateo (SMCTA) Contribution

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**12.0 COST STATUS AND EXPENDITURES TO DATE**

A summary of the overall cost status for the PCEP is provided in Table 12-1 below.

Table 12-1 Cost and Expenditure Summary

Description of Work	Current Budget	Incurred This Period	Incurred To Date	Estimate At Completion
<b>ELECTRIFICATION</b>				
Electrification	\$565,905,226	\$0	\$497,378	\$565,905,226
Tunnel Notching	\$8,270,500	\$0	\$0	\$8,270,500
Real Estate	\$28,261,926	\$481,901	\$3,523,603	\$28,261,926
Private Utilities	\$10,525,750	\$13,039	\$1,749,674	\$10,525,750
Management Oversight	\$127,393,142	\$3,071,633	\$57,394,035	\$127,393,142
Executive Management	\$12,983,117	\$216,919	\$2,078,383	\$12,983,117
Planning	\$5,570,033	\$255,608	\$4,127,479	\$5,570,033
Community Relations	\$1,925,759	\$78,514	\$808,555	\$1,925,759
Safety & Security	\$2,350,737	\$33,396	\$410,228	\$2,350,737
Project Management Services	\$11,590,318	\$599,883	\$5,552,867	\$11,590,318
Engineering & Construction	\$11,706,143	\$216,889	\$1,853,778	\$11,706,143
Electrification Engineering & Management	\$40,886,474	\$1,061,533	\$12,366,014	\$40,886,474
IT Support	\$1,004,991	\$27,494	\$237,624	\$1,004,991
Operations Support	\$2,405,948	\$5,900	\$204,721	\$2,405,948
General Support	\$3,694,049	\$191,119	\$1,493,905	\$3,694,049
Budget / Grants / Finance	\$849,677	\$49,484	\$316,047	\$849,677
Legal	\$2,445,755	\$133,195	\$1,315,705	\$2,445,755
Other Direct Costs	\$4,441,493	\$201,699	\$1,090,082	\$4,441,493
Prior Costs 2002 - 2013	\$25,538,647	\$0	\$25,538,647	\$25,538,647
TASI Support	\$55,694,084	\$74,049	\$314,960	\$55,694,084
RRP Insurance	\$5,831,824	\$0	\$0	\$5,831,824
Environmental Mitigations	\$17,686,958	\$0	\$0	\$17,686,958
Required Projects	\$3,200,000	\$0	\$0	\$3,200,000
Maintenance Training	\$1,021,808	\$0	\$0	\$1,021,808
Finance Charges	\$3,168,200	\$0	\$0	\$3,168,200
Contingency	\$359,149,533	\$0	\$0	\$359,149,533
Owner's Reserve	\$0	\$0	\$0	\$0
<b>ELECTRIFICATION SUBTOTAL</b>	<b>\$1,186,108,951</b>	<b>\$3,640,622</b>	<b>\$63,479,650</b>	<b>\$1,186,108,951</b>
<b>EMU</b>				
EMU	\$462,248,000	\$0	\$0	\$462,248,000
CEMOF Modifications	\$1,344,000	\$0	\$0	\$1,344,000
Management Oversight	\$57,224,558	\$1,650,575	\$11,089,356	\$57,224,558
Executive Management	\$1,940,208	\$132,951	\$1,336,426	\$1,940,208
Community Relations	\$2,533,108	\$99,437	\$186,062	\$2,533,108
Safety & Security	\$570,000	\$20,469	\$91,028	\$570,000
Project Management Services	\$8,157,600	\$367,670	\$2,303,675	\$8,157,600
EMU Engineering & Management	\$30,799,200	\$709,261	\$5,330,164	\$30,799,200

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IT Support	\$615,962	\$16,851	\$145,640	\$615,962
Operations Support	\$2,331,447	\$5,900	\$191,019	\$2,331,447
General Support	\$3,483,207	\$79,804	\$488,090	\$3,483,207
Budget / Grants / Finance	\$897,041	\$38,684	\$76,136	\$897,041
Legal	\$1,207,500	\$55,927	\$273,001	\$1,207,500
Other Direct Costs	\$4,689,286	\$123,622	\$668,115	\$4,689,286
TASI Support	\$2,740,000	\$0	\$0	\$2,740,000
Finance Charges	\$1,941,800	\$0	\$0	\$1,941,800
Contingency	\$46,669,148	\$0	\$0	\$46,669,148
Owner's Reserve	\$0	\$0	\$0	\$0
<b>EMU SUBTOTAL</b>	<b>\$572,167,506</b>	<b>\$1,650,575</b>	<b>\$11,089,356</b>	<b>\$572,167,506</b>
<b>PCEP TOTAL</b>	<b>\$1,758,276,457</b>	<b>\$5,291,197</b>	<b>\$74,569,006</b>	<b>\$1,758,276,457</b>

*Notes:*

1. *A revised baseline budget was established on September 28, 2015 at the time of the Core Capacity Grant application.*
2. *Based on the status of the PeopleSoft 9.1 data available, the above table is an estimate of the current cost.*

**13.0 CONTRACT STATUS**

**Contract Activity:**

- Ten On-Call Real Estate Support Services contracts were executed in the third quarter the process to issue work directives commenced. These contracts provide the following scope of work categories:
  - Real Estate Appraisal Services
  - Real Estate Appraisal Review Services
  - Title, Escrow Services and Title Insurance Services
  - Real Estate Acquisition/Relocation, Project Management & Coordination Services

**Invitation for Bids/RFQ/RFP Advertised this Quarter:**

- None

**Bids/Qualifications/Proposals Received this Quarter:**

- Electrification – Received proposals for BAFO from all three short-listed Design-Build firms on February 26, 2016
- EMU proposals were received on February 17, 2016
- EMU maintenance proposals were received on March 10, 2016



**Upcoming Bids/Qualifications/Proposals:**

- None

**Work Directive/Purchase Order Awards and Amendments:**

Table 13-1 shows Work Directive/Purchase Order awards and amendments issued during the reporting period.

Table 13-1 WD/PO Awards & Amendments Issued

Work Directive No.	Task Description	WDPO Date	Firm	Cost
5490B	System Safety (January – March 2016)	1/20/2016	B&G	\$70,558.00
7587B	Electrification Support Service	1/20/2016	GFI	\$170,000.00
7966	TASI Electrification Support	1/1/2016	TASI	\$75,000.00
7806A3	ROW Survey Amendment	2/10/2016	GFI	\$250,000.00
7926A1	EIP Delivery Consultant Service (Don Irwin) Amendment	2/12/2016	LTK	\$50,680.79
8071A1 8071A2	EMU Consultant Service (January – March 2016)	1/20/2016	LTK	\$319,000.00 \$147,897.38
8075 8075A1	EIP Vehicle Support (L. Welch) (January – March 2016)	1/22/2016	AECOM/URS	\$126,021.58
8086A2	Electrification Support (January – March 2016)	1/22/2016	GFI	\$1,210,293.49
8091A2	PM Services (January – March 2016)	1/22/2016	AECOM/URS	\$1,123,861.00
8165	Real Estate Acquisition Support in Segment 4 (10 Parcels)	3/14/2016	BRI	\$44,300.00
8166	Real Estate Acquisition / Relocation Support in Segment 4 (3 Parcels)	3/22/2016	ARWS	\$69,050.00
8173	Tree Mitigation	2/29/2016	ICF	\$137,454.00
8299A1	IT App Support (January – March 2016)	1/28/2016	COMPUCOM	\$36,000.00
8394	Real Estate Appraisal (Seg 4 – 1 Parcel)	1/21/2016	BRI	\$9,000.00
8432	Electrification DB Financial Qualifications Review	2/29/2016	PFM	\$25,000.00
8433	Financial Advisory Service (Electrification)	2/29/2016	PFM	\$45,000.00

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Table 13-2 shows Work Directive/Purchase Order awards and amendments to be issued for the 4<sup>th</sup> Quarter of FY16.

Table 13-2 WD/PO Awards & Amendments Upcoming

<b>Work Directive No.</b>	<b>Task Description</b>	<b>Firm</b>	<b>Cost (Thousands)</b>
5490B	System Safety (April – June 2016)	B&G	\$71
7806A4	ROW Survey	GFI	\$286
7926A2	EIP Delivery Consultant Service (Don Irwin) Amendment	LTK	\$42
7966	TASI Foreman/Flagman	TASI	\$33
8091A3	PM Services (April – June 2016)	AECOM/URS	\$663
8173A1	Tree Mitigation (April – June 2016)	ICF	\$137
8071A2	EMU Vehicle Support (April - June 2016)	LTK	\$668
8075A1	EIP Vehicle Support (L. Welch) (April - June 2016)	AECOM/URS	\$102
8278A2	EIP Delivery Director (April – June 2016)	DCI	\$138
8299A2	IT Support (April – June 2016)	CompuCom	\$38
8337	PG&E Utility Design	PG&E	\$2,855
8430	Real Estate Appraisal (20 Parcels – Seg 2)	BRI	\$150

**14.0 COMMUNITY RELATIONS AND OUTREACH**

The following PCEP related community meetings and briefings took place during the quarter:

- Friends of Caltrain
- SF and Silicon Valley Bicycle Coalitions
- Local Policy Maker Group
- City / County Staff Coordination Group
- SAMCEDA Policy and Transportation Committee
- BART Community Working Group (San Jose)
- BART Community Working Group (Santa Clara)
- Peninsula Corridor Working Group (3)
- JPB Citizen Advisory Committee

- San Francisco Bay Area Planning and Urban Research Association (SPUR)
- California State Transportation Authority
- Congresswoman Nancy Pelosi Office
- Briefing New LPMG Members
- Presentation at Peninsula Freight Rail User Group
- Diridon Policy Advisory Committee
- Redwood City Chamber of Commerce
- Federal Delegation Members and Staff
- Senate and House Appropriations Staff
- Silicon Valley Leadership Group
- SaveMuni
- League of California Cities Peninsula Division
- Testimony at Assembly Transportation Hearing
- Mineta Transportation Institute Event

### **Board Actions**

No PCEP actions were taken at the Caltrain Board meeting on January 7, 2016.

On February 4, 2016 the JPB received the fifth quarterly update on the Peninsula Corridor Electrification Project (PCEP). The quarterly update highlights PCEP activities since the last quarterly update in November 2015. The Board also adopted Addendum #1 to the 2015 PCEP FEIR and approved inclusion of new potential site for Paralleling Station 7 for the PCEP.

No PCEP actions were taken at the Caltrain Board meeting on March 3, 2016.

## **15.0 LABOR STATISTICS**

Labor statistics will be reported after construction has commenced.

## **16.0 SAFETY STATUS**

Project safety staff continues to update the IndustrySafe Hazard Log application utilizing the initial PCEP Preliminary Hazard Analysis (PHA) identified hazards. This application will continue to be updated throughout the project lifecycle to document project hazards and mitigation measures.

The team updated the PCEP Preliminary Hazard Analysis (PHA) and Threat & Vulnerability Assessment (TVA) based on FTA Project Management Oversight (PMO) suggestions. Updated PHA and TVA document versions were reviewed and approved by the JPB Director of Safety & Security.

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As a result of the team's work in populating the IndustrySafe Hazard Log, minor software application changes were made to support a more user friendly hazard management application. The project specific Hazard Management Plan will be completed by the end of April 2016 and will include a description of the final hazard log application requirements.

Project safety staff continues to coordinate with the JPB Safety and Security Director on a weekly basis to support open dialogue between the PCEP and agency regarding project updates, review project document deliverables, and initiated changes as directed. Project staff reviewed the safety submittals for the selected EMU contractor and provided comments to the selection committee.

**17.0 QUALITY STATUS**

Quality Management continues to coordinate with the project team via training, audits and technical support. Six scheduled Quality Audits were performed during the quarter. Additionally three Non Conformance Reports (NCRs) were issued during the quarter. The three NCRs remain open with closure anticipated in the next quarter.

The Quality team also continues to perform QA reviews of Entry into Engineering submittal documents and monthly reports.

**18.0 PROGRAM RISK MANAGEMENT**

Risk Management continues to actively monitor the Risk Register originally produced in 2014. This active monitoring consists of updating risk descriptions, effects, and mitigations based upon weekly input from risk owners and through a monthly cycle of risk updating per the process established in the Risk Identification and Mitigation Plan. An updated Risk Register is based on decisions made at Risk Assessment Committee meetings. Selected risks are forwarded to risk owners for grading and planning of mitigation measures.

The following are the top risks at the end of the quarter:

- Power upgrades to the PG&E system are required. Power requirements are not finalized and therefore the scope of any upgrades is unknown. The technical issues cannot be finalized until the PG&E agreement is finalized.
- Wayside signal / pole adjustments to avoid sighting distance problems.
- TASI ability to deliver sufficient resources to support construction and testing for the electrification contract.
- Rigid internal processes (SSWP and others) are not all consistent; subject to interpretation; may not be suited for a project of this magnitude.
- JPB is responsible for system Integration/configuration activities (interaction between existing and new systems):
  - Need appropriate agency and contractor staffing, in terms of expertise and availability, that is aware of the process and prepared to implement

- Need a systems (including SCADA) and O&M subject matter expert with knowledge of federal program process. Must have supervisory responsibility over operating staff in order to test and integrate system elements, develop O&M
- Proposing to run new duct bank from Caltrain ROW to proposed TPS1 site which runs under UPRR rails. Requires coordination with UPRR.
- Final commitment to full funding plan by all funding partners is not complete:
  - Parties to Nine-Party MOU have not been approved by respective agency boards
  - FTA Core Capacity FFGA has not been issued
  - Funding agreements with CHSRA are not complete
  - Risk of legal challenges associated with the use of CHSRA funding is high
- Time to relocate overhead utilities conflicts with Electrification contractor's schedule
- Potential delay in underground utility relocation or encountering unidentified utilities. Parallel fiber optic (UPRR) and fuel line must also be accommodated. Fiber optic lines carry long lead times for relocation. Conflicts between existing signal cables and pole locations, particularly in Segment 4.

Table 18-1 provides insight into the number of risks in each classification and the changes for the previous quarter.

Table 18-1 Summary of Risks

Risk Classification	Original (August 2014)	Last Quarter (ending 12/31/15)	This Quarter (ending 3/31/16)
Significant Risks	5	3	2
High Risks	79	58	59
Low Risks	80	64	68
<b>Subtotal</b>	<b>164</b>	<b>125</b>	<b>129</b>
Retired Risks	35 <sup>1</sup>	88	92
<b>Total Risks</b>	<b>199</b>	<b>213</b>	<b>221</b>

*Note: After initial identification 35 risks were deemed to be similar enough with other risks to either be retired or combined to add additional context.*

## **APPENDICIES**

Appendix A – Acronyms

Appendix B – Schedule

## Appendix A – Acronyms

**Peninsula Corridor Electrification Project**  
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AIM	Advanced Information Management	FRA	Federal Railway Administration
ARINC	Aeronautical Radio, Inc.		
BAAQMD	Bay Area Air Quality Management District	FTA	Federal Transit Administration
BAFO	Best and Final Offer	GO-26D	General Order 26D
CalMod	Caltrain Modernization Program	ITS	Intelligent Transportation System
CDFW	California Department of Fish and Wildlife	JPB	Peninsula Corridor Joint Powers Board
CEMOF	Centralized Equipment Maintenance and Operations Facility	MMRP	Mitigation, Monitoring, and Reporting Program
CEQA	California Environmental Quality Act (State)	MOU	Memorandum of Understanding
CHSR	California High-Speed Rail	NCR	Non Conformance Report
CIP	Capital Improvement Plan	NEPA	National Environmental Policy Act (Federal)
CPUC	California Public Utilities Commission	NHPA	National Historic Preservation Act
D-B	Design-Build	NMFS	National Marine Fisheries Service
DEMP	Design, Engineering, and Management Planning	NTP	Notice to Proceed
EA	Environmental Assessment	OCS	Overhead Contact System
EAC	Expenditure at Completion	PCEP	Peninsula Corridor Electrification Project
EIR	Environmental Impact Report	PG&E	Pacific Gas and Electric
EMU	Electric Multiple Unit	PHA	Preliminary Hazard Analysis
ESA	Endangered Species Act	QMP	Quality Management Plan
FEIR	Final Environmental Impact Report	QMS	Quality Management System
FONSI	Finding of No Significant Impact	RAMP	Real Estate Acquisition Management Plan
		RE	Real Estate



RFP	Request for Proposals
RFQ	Request for Qualifications
ROCS	Rail Operations Center System
ROW	Right-of-Way
RRP	Railroad Protective Liability Insurance
SamTrans	San Mateo County Transit District
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Code
SFBCDC	San Francisco Bay Conservation Development Commission
SFCTA	San Francisco County Transportation Authority
SFMTA	San Francisco Municipal Transportation Authority
SFRWQCB	San Francisco Regional Water Quality Control Board
SOGR	State of Good Repair
TASI	Transit America Services Inc.
TBD	To Be Determined
UPRR	Union Pacific Railroad
USACE	United States Army Corp of Engineers
USFWS	U.S. Fish and Wildlife Service
VTA	Santa Clara Valley Transportation Authority



Appendix B – Schedule