

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



# **Executive Monthly Progress Report**

June 30, 2022

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#### **1.0 EXECUTIVE SUMMARY**

#### 1.1 Introduction

The Peninsula Corridor Electrification Project (PCEP) will upgrade 51 miles of diesel service to electrified service from San Francisco to San Jose (Tamien Station). The PCEP scope of work includes design and construction of an overhead contact system, traction power facilities, modification of the existing signaling and grade crossing protection system to make it compatible with the electrified railroad, substation improvements at Pacific Gas and Electric (PG&E) substations, and modifications at existing tunnels and Caltrain's maintenance facility. It also includes the design, manufacturing, assembly, testing, and delivery of the Electric Multiple Units (EMUs).

Caltrain rebaselined the program budget and schedule in December of 2021. Caltrain completed a thorough assessment of all aspects of the program including cost, schedule, risks and organization. Caltrain is committed to deliver PCEP and achieve revenue service in September of 2024.

#### 1.2 Program Cost and Budget

On December 6, 2021, the JPB adopted a new PCEP program budget of \$2,442,690,697. As of June 2022, the project is on budget:

- The current project total cost at completion (EAC) is the same as Board adopted budget of \$2.44 billion.
- As of June 2022, a total of \$756,460 has been drawn down from the Shared Risk Pool of \$50 million.
- As of June 2022, \$132,365 was drawn from project contingency of \$40 million.
- There is no new award of the Project incentive pool of \$18.5 million.

#### 1.3 **Program Progress and Schedule**

As of June 30, 2022, the overall project completion is 72.65%. The current program schedule is still on track with PCEP's substantial completion date of April 2024 and Revenue Service by September 2024.

#### 1.4 Change Management Board (CMB)

In June 2022, the following change order was submitted for CMB approval:

CMB approved:

- Drill Tech Foundation Issue Resolution Log Settlement in the amount of \$868,103.
- Tree Trimming and Removal Allowance Adjustment and Conversion to Lump Sum Issue Resolution Log in the amount of \$900,000.

#### **1.5** This Month's Accomplishments

The project team has completed the following notable activities for the month of June 2022:

• There were zero reportable injuries for this month. All contractors and subcontractors continue to have COVID-19 plans in place that meet federal, state and local requirements.

- Established safety special task force working group including TASI, Rail Operations and PCEP to address communications, process and procedure improvements.
- Continued to bring on experienced, qualified resources to fill key management positions for PCEP delivery. This month, the management team interviewed a Quality Assurance Manager and a Document Controls Manager.
- Submitted Single-Phase Study for TPS 2 to PG&E.
- TPS 2 battery was successfully tested on June 30, 2022.
- Performed scheduling workshop for program reforecast effort with focus on remaining OCS construction and energization of Segment 3 in spring of 2023.
- Held PCEP Executive and Project Team Partnering session.
- Completed Project Document Control assessment.
- Performed TPS 2 and PS7 punch list walkthrough and completion of Segment 4 completion joint walk-through and punch list.
- Continued Roadway Worker Protection (RWP) Safety rule and procedural training.
- Continued providing PCEP progress updates to funding partners, leadership, elected officials, citizens, and business community.
- Continued EMU Static Testing on the first two trains.

#### 1.6 Upcoming work

For the next six months, the PCEP team has set additional goals as described below:

- Develop and finalize Segment 4 energized rail isolation and protection procedure.
- Rollout OCS awareness training for all Caltrain staff, TASI, and contractors prior to Segment 4 energization.
- Continue to hold CMB and PCEP partnering sessions and finalize procedures for the implementation of the Configuration Management Board from the Funding Partners Oversight Protocol.
- Continue to hold Executive and Project Team Partnering session.
- Finalize TPS 2 Single Phase Study.
- Execute transmission operating load agreement (TOLA) with PG&E.
- Finalize Program Management Plan (PMP) based on FTA/PMOC comments.
- Energize TPS 2 on August 27, 2022 and commence OCS testing under power.
- Segment 4 energization and commence System Integration Testing and EMU Trainset 3 commissioning.
- Implement joint task force quality audit findings.
- Continue pursuing federal and local grants to close the funding gap.
- Hold Monthly CMB meeting for program status and change order approval.
- Continue issues resolution practice and monitor shared risk pool.
- Perform project reforecast effort with Design Builder with focus on OCS installation and wiring sequences; energize Segment 3 by next spring to allow 24 miles track to be electrified for EMU testing for Caltrain.

The PCEP Project is currently on budget and on time for achieving Revenue Service in September of 2024.

# 1.7 Critical Items

As of June 2022, the top critical items and related actions are highlighted below.

Table 1-1. Critical Iss	sues and Actions
Critical Issues	Actions
Overhead Contact System (OCS) installation delay due to low productivity Note: The project OCS work was on hold from March 10, 2022, to March 28, 2022 during the safety stand down.	<ul> <li>Additional BBII OCS crew training for regulation and variance in the OCS design / installation due to redesign &amp; accommodations to resolve foundation Differing Site Conditions (DSC) issues.</li> <li>Hiring additional BBII OCS staff members to prevent schedule slippage and help in future installation planning.</li> <li>Hold OCS construction scheduling recovery workshop for remaining OCS installation and testing.</li> </ul>
Timely completion Traction Power Substation (TPS) 2 battery replacement, timely completion of Single- Phase Study and execution of PG&E Transmission Operating Load Agreement (TOLA) will impact Segment 4 energization to OCS/TPS Commissioning and EMU Testing (on target to complete this task; expected to retire this risk next month).	<ul> <li>The technical team meets with PG&amp;E weekly to finalize the number of cases required to complete the Single-Phase Study. It was submitted to PG&amp;E for review – COMPLETED.</li> <li>Expedite battery replacement effort, choose battery enclosure option, and completed PG&amp;E witness testing on June 30, 2022 – COMPLETED.</li> <li>Additional resources have been brought in to expedite Single-Phase Study effort.</li> <li>Caltrain leadership met with PG&amp;E representatives to outline the path forward. Both management teams meet weekly to track the status.</li> <li>Caltrain and PG&amp;E jointly reviewed TOLA comments and will finalize agreement by June 2022.</li> </ul>
Timely completion of Segment 2 Signal/2SC cutover	<ul> <li>Perform comprehensive cutover planning; develop and track dashboard for each cutover, including design submittal, duct bank completion, flagger needs.</li> <li>Work closely with Rail Operations to maximize track access.</li> <li>Advance notification to the public on train schedule service changes for weekend shutdown.</li> </ul>
Funding of \$410 million program gap	<ul> <li>Special task force is in place to identify federal and state grant opportunities to pursue.</li> <li>Targeted advocacy is ongoing.</li> <li>Prepare earmarks grant scope and application.</li> </ul>
Equipment procured and installed (e.g., wayside cubical batteries and TPS cables) are not in compliance with contractual requirement or not in compliance with issue for construction (IFC) design	<ul> <li>Assigned focus group including technical lead and delivery director for issue resolution.</li> <li>Commenced joint task force (designer, builder and PCEP Team) for quality audit with focus on wayside equipment and TPS; findings reported out and currently going through project QA process.</li> <li>Timely address design change notice and design variance requests.</li> <li>Perform root cause analysis and correction actions to avoid future mishaps.</li> </ul>
Lack of field railway worker in charge (RWIC) for increased work crews	<ul> <li>Design-builder brought in more watchmen for off- track work.</li> <li>TASI to expedite RWIC hiring and training.</li> <li>Explore third party field resource procurement path.</li> <li>Assess operational impact for expanding work limits with track and time.</li> </ul>

# Table 1-1. Critical Issues and Actions

# 2.0 SAFETY

There were zero reportable injuries for June, but we have not received the monthly hours for the month. The Reportable Injury Rate (RIR) for 2022 through May is at 2.08.

The Balfour Beatty Utility Strike Avoidance Policy and training program was implemented in June 2022 to mitigate future occurrences. The project team also investigated incidents during the month involving a Roadway Worker Protection rules violation, minor first aid injury, and EMU coupler damage sustained at the maintenance facility (CEMOF).



Figure 2-1. Cumulative project Reportable Injury Rate (RIR) for 2021

#### 2.1.1 Completed Work

Safety staff continues to coordinate with contractors to identify opportunities to improve safety performance. Organizational-wide safety briefings are being performed to ensure staff understand the application of post incident mitigation measures including rules and procedural changes designed to enhance safety. Project Safety continues to reinforce jobsite safety practices throughout the Caltrain alignment, investigate incidents, and identify mitigation measures to prevent re-occurrences. Safety project coordination meetings continue to be conducted monthly to promote a clear understanding of project safety requirements.

#### 2.1.2 Upcoming Work

The Fire/Life Safety Committee continues to work with the San Jose and Santa Clara Fire Departments on Emergency Preparedness in preparation for the energization of Segment 4. The safety team is coordinating with Operations and the EMU team to develop an emergency responder safety familiarization EMU presentation. Once completed, the presentation will be shared with emergency responder jurisdictions through the project Fire/Life Safety Committee.

Monthly Progress Report – June 2022

# 3.0 PROGRAM SCHEDULE

3.1 Introduction

PCEP has a Master Program Schedule (MPS) which illustrates the timeline of majorelements of the PCEP program depicted in **Figure 3-1**.

The Electrification Substantial Completion Date is forecast by April 1, 2024 based on design-builder June 2022 progress schedule update. The Revenue Service Date (RSD) date remains on September 26, 2024, with 6 months schedule contingency.





# Monthly Progress Report – June 2022

#### 3.2 Critical Path

The current critical path for PCEP continues to run through the design, installation, and testing of the signal and crossing modifications required to make the signal system compatible with the electrified railroad, followed by integrated testing and cutover.

As of June 30, 2022, the overall delay to the critical path is 0 days compared to the project re-baseline schedule.

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| Communications/SCADA Acceptance Testing & Commissioning (All Segments) | 22   | 22   
   
   | 0%  | 21-Sep-23  | 29-Oct-23  | 0   
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| Final Systemwide Integrated Testing                                    | 20   | 20   
   
   | 0%  | 29-Oct-23  | 04-Dec-23  | 0   
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   |   |   | Final Systemwid   | le Integrated Te  
  | sting  |   |  |   |
| Additional CWT-25 Final Systemwide Integrated Testing                  | 16   | 16   
   
   | 0%  | 04-Dec-23  | 01-Jan-24  | 0   
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| Project Schedule Contingency   | 91   | 91   
   
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| BBI Electrification Substantial Completion                             | 0  | 0  
   
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   | 33%   | 24-May-22 A  | 16-Jun-22  | 1   
  |   | Prep  | for Segme  | nt2 Phase SC   |   |  
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| Segment 2 Phase 5 Cutover  | 4  | 4  
   
   | 0%  | 17-Jun-22  | 20-Jun-22  | 1   
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| Prep for Segment2 Phase 1Culover                                       | 31   | 31   
   
   | 0%  | 21-Jun-22  | 21-Jul-22  | 1   
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| Segment 2 Phase 1 Cutover  | 4  | 4  
   
   | 0%  | 22-Jul-22  | 25-Jul-22  | 1   
  | 1   | 1.1   | Segment  | 2 Phase 1 Cut  | tiver   |  
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| Prep for Segment 2 Phase 8 Cutover                                     | 90   | 90   
   
   | 0%  | 26-Jul-22  | 23-Oct-22  | 1   
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| Prep for Segment 2 Phase 7 Cultiver                                    | 90   | 90   
   
   | 0%  | 26-Jul-22  | 23-Oct-22  | 1   
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| Prep for Segment 2 Phase 6 Cultiver                                    | 90   | 90   
   
   | 0%  | 26-Jul-22  | 23-Oct-22  | 1   
  |   |   |  | Prepfor  | Segment 2 Pt  | ale 6Culover   
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| Segment 2 Phase 8 Cutover  | 23   | 23   
   
   | 0%  | 24-Oct-22  | 15-Nov-22  | 1   
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| Segment 2 Phase 7 Cutover  | 23   | 23   
   
   | 0%  | 24-Oct-22  | 15-Nov-22  | 1   
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| Segment 2 Phase 6 Cutover  | 23   | 23   
   
   | 0%  | 24-Oct-22  | 15-Nov-22  | 1   
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 1.0         1.0         1.0         1.0         1.0         1.0</td><td>Choore Completion Milatore         0         0         0%         15.8p.23         2           Communication/SORDA Acceptions Butting &amp; Commissioning (Misigneric)         22         20         0%         23.5p.23         29.00.23         0.00           Final Systemwick Bringated Texting         16         16         0%         0.12m.24         0.00           Addround (MCS: Final Systemwick Bringated Texting         16         16         0%         0.14m.24         0.00           Self-Addriad Cost: Statutial Completion         0         0         0%         0.44p.24         0.00           Self-Addriad Cost: Statutial Completion         0         0         0%         0.44p.24         0.44p.24         0.44p.24           Segment 2 Phase S Cabour         11         11         0.1         0%         2.24Morg 22         2.34.32         1.24.32           Segment 2 Phase S Cabour         10         11         11        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Self-Addriad Cost: Statutial Completion         0         0         0%         0.44p.24         0.00           Self-Addriad Cost: Statutial Completion         0         0         0%         0.44p.24         0.44p.24         0.44p.24           Segment 2 Phase S Cabour         11         11         0.1         0%         2.24Morg 22         2.34.32         1.24.32           Segment 2 Phase S Cabour         10         11         11         11         0.06         2.54.322         2.13.422         1.14.32           Segment 2 Phase S Cabour         100         0%         0.56         2.54.322         2.13.422         1.14.322           Segment 2 Phase S Cabour         100         0%         0.56         2.54.322         2.13.422         1.14.324 | Choors:CompletionMinistree         0         0         0         0         0         15 Sep.3         2           Communisations:CACM Acceptions: Turing & Communisations: (ACM Acceptions): Turing & Communisations: (ACM Acception): Turing & 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<td>Charactering Michaeles       0       0       0       15 49-23       2         Communication/ACA Acaptores thing &amp; Communicating (Magmetti       22       2       0       2124-29       30-02       0         Addited (CV): 5 first Signard Singtores       36       3       0</td> | Chown Completion Mukatory000001540-232Communication (GA Acception Using & Communication (GA Acception Using & Com | Chown-Completion/Matana       0       0       0       0       13-69-23       2         Communication/GADA Acaptions Uning & Communicating (Al Segment)       22       22       0       15-00-23       75-00-23       0       0         Additional (VC)25 Ford Spannak Ingrade Uning       16       16       0 | Charactering Michaeles       0       0       0       15 49-23       2         Communication/ACA Acaptores thing & Communicating (Magmetti       22       2       0       2124-29       30-02       0         Addited (CV): 5 first Signard Singtores       36       3       0 | Channel Conjuntational 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# Figure 3-2. PCEP Critical Path Summary Schedule

#### 3.3 Schedule Issues

Issues that may impact critical path or major milestones are identified in the table below as of June 2022.

Issues	Actions
Construction work stoppage safety stand down due to the track safety incident which occurred on March 10, 2022.	• BBII developed a schedule recovery plan to mitigate the delay within Segment 2 signals cutover and avoid propagating the schedule slippage to Segments 3 and 1 signal cutovers.
OCS installation delay due to low productivity and the project OCS work was on hold from March 10, 2022 to March 28, 2022 during the safety stand down.	<ul> <li>Additional BBII OCS crew training for regulation and variance in the OCS design / installation due to redesign &amp; accommodations to resolve foundation DSC issues.</li> <li>Hiring additional BBII OCS staff members to prevent schedule slippage and help in future installation planning.</li> </ul>
2SC application logic defects found will require new software release and regression test and may impact Segment 2 cutover completion.	<ul> <li>Assign technical task force for defect fixes.</li> <li>Review with Rail Operations and FRA for approval.</li> <li>Roll out new application logic and perform regression test for the crossings that were cutover previously.</li> <li>Implement new allocation logic to the remaining crossings.</li> </ul>

#### 3.4 Contract Milestones

Milestone	Re- Baseline Dates	Current Forecast	Milestone Variance
Completion of Milestone #1 (PC-00-0980)	In the process of being redefined	November 10, 2022	TBD
Substantial Completion (GC-00-9990)	April 1, 2024	April 1, 2024	0
Final Acceptance (GC-00-9920)	July 31, 2024	July 31, 2024	0

Late completion TPS 2 single phase study, TPS 2 battery replacement, and TPS testing have caused delay of Segment 4 energization which impact Segment 4 substantial completion (Milestone 1). March 10, 2022 field work shutdown also contributes to the delay of Segment 4 OCS/TPS construction completion. There is no impact to full alignment substantial completion of April 1, 2024, and Revenue Service Date of September 2024.

#### 4.0 COST AND BUDGET

#### 4.1 Introduction

This section presents current program cost and budget. On December 6, 2021, the JPB adopted a new Program budget of \$2.44 billion. Table 3-1 depicts a summary level of program budget, costs, and estimate at completion based on the latest update of the Electrification and EMU projects as of June 30, 2022.

#### 4.2 Program Budget and Cost

Description of Work	Current Budget (A) <sup>1</sup>	Cost This Month (B)²	Cost To Date (C) <sup>3</sup>	Estimate To Complete (D)	Estimate At	Variance at Completion (F) = (A) – (E)
Electrification	\$1,749,139,438	\$44,386,403	\$1,365,808,760	\$383,330,678	\$1,749,139,438	\$0
EMU	\$693,551,258	\$35,109,494	\$442,791,929	\$250,759,330	\$693,551,258	\$0
PCEP TOTAL	\$2,442,690,697	\$79,495,897	\$1,808,600,689	\$634,090,008	\$2,442,690,697	\$0

Table 4-1.	Budget	Summary	/ by	/ Proje	ect
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<sup>1.</sup> Column A "Current Budget" includes executed change orders and awarded contracts.

<sup>2.</sup> Column B "Cost This Month" represents the cost of work performed this month.

<sup>3.</sup> Column C "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

Table 4-2 depicts program budget, costs, and estimate at completion summarized by major elements of work. This budget table provides additional detail for the program and is broken down by major contracts for Electrification and EMU, minor contracts, real estate, utilities, project management oversight and other indirect support costs.

Description of Work	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
Electrification	\$1,097,149,881	\$37,562,738	\$798,773,837	\$298,376,044	\$1,097,149,881
EMU Procurement	\$556,204,966	\$34,352,240	\$365,273,712	\$190,931,254	\$556,204,966
Minor Construction Contracts (SSF, 25th Grade, Tunnel, CEMOF, SCADA, Non-BBI OCS)	\$67,055,072	\$519,716	\$64,431,604	\$3,659,590	\$68,091,194
Real Estate Acquisition & Support	\$34,914,177	\$62,851	\$23,755,468	\$11,158,709	\$34,914,177
PG&E, Utilities	\$132,088,995	\$1,780,596	\$198,821,928	-\$66,732,933	\$132,088,995
Management Oversight & Support	\$312,699,697	\$2,806,252	\$241,688,217	\$71,011,480	\$312,699,697
TASI Support	\$114,488,767	\$2,327,377	\$80,034,700	\$34,454,067	\$114,488,767

Table 4-2.	Budget	Summa	ry by	Major E	lements

Description of Work	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
Finance Charges	\$9,898,638	\$80,279	\$8,775,726	\$1,122,912	\$9,898,638
Insurance	\$6,581,851	\$0	\$4,581,851	\$2,000,000	\$6,581,851
Other Required Projects & Services	\$9,084,176	\$3,848	\$2,779,781	\$6,304,394	\$9,084,176
Environmental Mitigation	\$14,438,866	\$0	\$1,205,404	\$13,233,462	\$14,438,866
Caltrain Capital Overhead (ICAP)	\$48,217,887	\$0	\$18,478,460	\$29,739,427	\$48,217,887
Contingency	\$39,867,724	\$0	\$0	\$38,831,602	\$38,831,602
Total	\$2,442,690,697	\$79,495,897	\$1,808,600,689	\$634,090,008	\$2,442,690,697

# 4.3 Program Shared Risk Pool and Contingency

Caltrain and Balfour Beatty Infrastructure, Inc. (BBII) continue implementing new mechanisms to ensure a collaborative approach to Project delivery. The management team meets every week to review the issues log focusing on risk mitigation and issues resolution.

As part of global settlement, a shared risk pool of \$50 million was established to manage risks and mitigation proactively and collaboratively with the design-build contractor. Table 4-3 shows the current shared risk drawdown for the current month and to-date as well as the remaining balance of the shared Risk Pool by Risk Category. Any shared risk items that are above \$200,000 require Change Management Board (CMB) approval.

# Table 4-3. Shared Risk Pool Status as of June 2022

#### Peninsula Corridor Electrification Project Monthly Progress Report – June 2022

Risk ID	Risk Description	Risk Amount	Current Month	Executed to Date	Remaining Balance
1	Permanent Power Availability	\$268,572	\$0	\$114,495	\$154,077
2	Different Site Condition for OCS Foundation	\$3,500,000	\$0	\$144,169	\$3,355,831
-*3	Different Site Condition for Duct bank	\$2,800,000	\$0	\$20,966	\$2,779,034
4	Condition of existing Fiber backbone infrastructure	\$3,150,000	\$0	\$42,175	\$3,107,825
5	Availability of TASI Resource	\$5,777,820	\$0	\$0	\$5,777,820
6	Signal Cutover access and work window	\$5,607,150	\$0	\$0	\$5,607,150
7	Condition of existing signal system	\$538,572	\$0	\$0	\$538,572
8	EMI Nonconformance by EMU Vendor	\$750,000	\$144,500	\$144,500	\$605,500
9	Reed Street Cutover	\$90,000	\$0	\$0	\$90,000
10	Availability of low voltage power for cutover testing	\$1,120,000	\$0	\$0	\$1,120,000
11	Third party Permits	\$150,000	\$0	\$0	\$150,000
12	SCADA integration for the entire alignment	\$159,524	\$0	\$0	\$159,524
13	Tunnel OCS Compatibility	\$167,500	\$0	\$0	\$167,500
14	Supply chain issue due to COVID 19	\$300,000	\$0	\$28,923	\$271,077
15	End to end Systems integration commissioning	\$2,100,000	\$0	\$0	\$2,100,000
16	Existing Caltrain Operating systems interface and integration	\$1,400,000	\$0	\$0	\$1,400,000
17	Third party Approval	\$150,000	\$0	\$0	\$150,000
18	Impact from Caltrain other capital or third-party projects	\$2,166,683	\$0	\$129,801	\$2,036,881
19	Track access delay for BBII Construction	\$1,800,000	\$0	\$0	\$1,800,000
20	Additional light Maintenance and Protection Needs	\$280,000	\$0	\$0	\$280,000
21	Crossing Protection	\$220,000	\$0	\$60,418	\$159,582
22	Power facilities	\$500,000	\$0	\$0	\$500,000
23	NCR's	\$0	\$0	\$0	\$0
24	Potholing	\$1,700,000	\$0	\$71,012	\$1,628,988
25	Pre-Revenue Service Operational Testing	\$250,000	\$0	\$0	\$250,000
26	TRO Contingency	\$3,000,000	\$0	\$0	\$3,000,000
27	Contingency	\$12,000,000	\$0	\$0	\$12,000,000
NA	Unidentified	\$54,179	\$0	\$0	\$54,179
	BBII Risk Pool Total	\$50,000,000	\$144,500	\$756,460	\$49,243,54

In addition to the established Risk Pool with BBII, the Re-Baseline Budget includes a program contingency of \$40 million to cover non-BBII potential changes and unknowns. Table 4-4 provides a detailed status of approved transfers from contingency due to executed Contract Change Orders and approved Budget Transfers.

Change Order	Description	Current Budget Contingency	EAC Contingency
Project Contingency	Previously Reported Balance	\$39,867,724	\$39,867,724
CCO-STA-039	Stadler – Multiple No Cost/No Schedule Impact Changes-Group 9	\$0	
ARINC-061-CCO-005	Traction Power Facility SCADA Database Changes Support	\$0	(\$1,036,122)
	PROJECT CONTINGENCY REMAINING BALANCE	\$39,867,724	\$38,831,602

Table 4-4. Program Contingency Drawdown Balance

Note: EAC Contingency reflects forecast contingency.

The total Program Contingency as of the December 2021 Re-Baseline Budget totaled \$90M including Allocated and Unallocated Contingency, and BBII Risk Pool. Table 4-5 summarizes the current remaining and forecasted contingency balance as of the monthly update.

Table 4-5.	Overall	Program	Contingency
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		Shared Risk Pool with BBII	Program Contingency		
	Total E = (A+D)	BBII Risk Pool (A)	Allocated (B)	Unallocated (C)	Subtotal D = (B+C)
PCEP Contingency	\$90,000,088	\$50,000,000	\$24,115,581	\$15,884,507	\$40,000,088
Drawn Contingency	(\$888,825)	(\$756,460)	\$0	(\$132,365)	(\$132,365)
Remaining Contingency	\$89,111,263	\$49,243,540	\$24,115,581	\$15,752,142	\$39,867,723
CMB July 2022 Approved	(\$2,804,224)	(\$1,768,102)	(\$500,000)	(\$536,122)	(\$1,036,122)
Forecasted Remaining Contingency \$86,307,033		\$47,475,437	\$23,615,581	\$15,216,020	\$38,831,601

#### 4.4 Electrification Design Builder Contract Incentives

The Global Settlement with BBII also includes incentives based on Milestone completions and remaining contract incentives. Table 4-6 provides a status of Design-Build Contractor incentives Budgeted, Awarded, and remaining Balance.

Incentives	Budgeted	Awarded	Balance
Contract Incentive:			
Quality	\$1,250,000	\$1,000,000	\$250,000
Safety	\$2,500,000	\$875,000	\$1,625,000
Community Outreach	\$2,500,000	\$1,750,000	\$750,000
DBE	\$900,000	\$0	\$900,000

Total Contract Incentive	\$7,150,000	\$3,625,000	\$3,525,000
Milestone Incentive:			
Early Signal and Crossing Cutover	\$4,000,000	\$0	\$4,000,000
Early Project Substantial Completion (NTE)	\$8,000,000	\$0	\$8,000,000
Early Revenue Service	\$3,000,000	\$0	\$3,000,000
Total Milestone Incentive	\$15,000,000		\$15,000,000

#### 4.5 Program Cash Flow and Funding

The remaining program expenditures are cash flowed in Figure 4-1 to illustrate by April 2023 additional funding will be needed to complete the program.

#### Figure 4.1 Expenditure – Funding Cash Flow



#### 4.6 Issues

#### Table 4-6. Cost and Funding issues identified, and actions taken for June 2022

Issues	Actions
Additional funding setup for \$410M Funding Gap.	<ul> <li>Actively pursuing additional State and Federal funding sources.</li> <li>Dedicated task force has been established at the</li> </ul>

JUNE 2022

#### 5.0 CHANGE MANAGEMENT

#### 5.1 Introduction

The change management process establishes a formal administrative work process associated with the initiation, documentation, coordination, review, approval, and implementation of changes during the design, construction, or manufacturing of PCEP. The change management process accounts for the impacts of the changes and ensures prudent use of contingency.

#### 5.2 Change Orders/SROs

5.2.1 Executed Change Orders/SROs

The following change orders/SROs were issued in June 2022:

- BBII SRO #12 Rail Imbalance and Working Level Immunity Testing in the amount of \$144,500 was executed on June 27, 2022.
- Stadler CCO-039 "LOA Category: 2 Changes to Ind. Emissions Limits and revision to payment schedule" was executed on June 3, 2022.
- 5.2.2 Approved Change Orders/SROs
  - BBII SRO Various Drill Tech Foundation Issue Resolution Log Settlement for \$868,000 was approved by CMB on June 22, 2022 and is being routed for JPB signatures and execution.
  - BBII SRO 098 Tree Trimming and Removal Allowance Adjustment and Conversion to Lump Sum for \$900,000 was approved by CMB on June 22, 2022 and is being routed for JPB signatures and execution.
- 5.2.3 Upcoming Change Orders/SROs
  - Negotiation of ARINC office SCADA time extension and remaining segments field points change.
  - Stadler Change Order 039 for "Multiple No Cost / No Schedule Impacts Group 9" to modify Inductive Emissions Limits per RFC-079 and Payment Schedule per RFC-079 is pending signatures in Aconex.
  - BBII SROs 013, 014, 023, 036, 118, 132, 136, 137, 152, 153, 168, 175, and 176 are being routed for approval.

#### 5.3 Issues

Issues	Actions
ARINC Contract Time Extension	<ul> <li>Discussions were held with ARINC management team to confirm the site support period to align the new baseline schedule, including a 1,000-hour availability test to be performed when the system is in production for the entire alignment. Team has finalized the scope of work, and the proposal request has been sent to ARINC.</li> </ul>
Segment 4 Maintenance Option in the existing BBII Contract was never exercised. Maintenance of OCS/TPS for Segment 4 will be needed post Segment 4 substantial completion once Caltrain is using it for EMU	<ul> <li>Prepare Scope of work and define Segment 4 maintenance needs.</li> <li>Define EMU testing and burn in work schedule.</li> <li>Seek a proposal from BBII for the maintenance option as existed in the current contract.</li> </ul>
testing under 25kV.	Evaluate the resource and price proposal.
	Execute Segment 4 maintenance option.