Progression of Design

- **Overhead Catenary System (OCS):**
  - Complete design for Segment 2 Work Area 3 and Segment 4 Work Area 2
  - Continued design for other Segments 2 and 4 Work Areas

- **Signal System:**
  - Complete design of System Ductbanks for Segment 2 and 4
  - Continued submission and review of 65% signal design for Segments 2 and 4
  - Continued technical coordination with Union Pacific Railroad for systemwide signal system design
  - Met with FRA headquarters regarding proposed solution for Consistent Warning Time
Progression of Design

• Traction Power System:
  – Completed design of Traction Power Facilities plans in Segment 2
  – Completed design of Traction Power Substation 2 in Segment 4
  – Continued coordination with PG&E on design of interconnection

• Communication System:
  – Continued work on systemwide communication design

<table>
<thead>
<tr>
<th>Design Discipline</th>
<th>OCS</th>
<th>Signal</th>
<th>Traction Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment 2</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Segment 4</td>
<td>3</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Systemwide</td>
<td>4</td>
<td>1</td>
<td>4</td>
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</table>
## Construction Progress

<table>
<thead>
<tr>
<th>Segment</th>
<th>Work Area</th>
<th>Foundations</th>
<th>Poles</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Required¹</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>256</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>366</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>622</td>
<td>256</td>
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</tbody>
</table>

Note:
¹Foundations Required do not match Poles Required as guy foundations are needed in some locations for extra support.
Unloading Cages in the Burlingame Storage Yard

OCS pole on flatbed truck
OCS pole on flatbed truck

ELECTRIFICATION

OCS pole lifted off flatbed truck
Crew placing OCS pole on foundation

Installed OCS Pole
Other Electrification Contracts

- **Supervisory Control and Data Acquisition (SCADA) Contract**
  - Received and reviewed baseline schedule
  - Continued work on SCADA points list and database
- **Tunnel Modifications**
  - Advertised construction contract February 20
  - Received and answered potential bidders’ questions and answers
  - Bid opening May 11
- **Centralized Equipment Maintenance and Operations Facility (CEMOF)**
  - Progressed designed to Issue for Bid – civil portion only
Other Electrification Contracts (continued)

• Pacific Gas and Electric (PG&E)
  – Continued progress on power quality studies with PG&E
  – Continued coordination for substation improvements
  – Temporary power construction @ FMC in San Jose started in April
  – Continued PG&E utility overhead relocation in Segment 2 Work Area 4
Goal of 5.2% ($36,223,749) of the DB contract

- As of March 31, 2018
  - $7,508,058 has been paid to DBE subcontractors

Contractor will receive incentives when they exceed the 5.2% goal
- A $300,000 incentive will be paid out for each 1% over the 5.2% goal, up to $900,000
Final Designs Reviews for major systems conducted and being finalized for Caltrain approval

Carshell fabrication and splicing underway

Subsystem (e.g. HVAC, Propulsion, Brakes, Doors, Wheelchair Lifts, Passenger Seats, Communication) component manufacturing underway

Technical and commercial discussions with substitute PTC supplier (Wabtech) commencing

Manufacturing and Final Assembly Facility construction underway in Salt Lake City, which is expected to be available for first car shell delivery in August 2018
EMU

Stadler’s Utah Manufacturing Facility

EMUS

Prototype Cab HVAC Unit
Upper Deck Assembly

Upper Carbody and Lower Carbody Subassemblies Coming Together
EMU FTA Buy America Status Update

- 60% of components and subcomponents to be U.S. origin, plus final assembly in U.S.
- Caltrain conducted FTA required Pre-Award Audit May 2016
- Pre-Award Audit concluded Stadler’s plan is reasonable to achieve Buy America requirements
- Caltrain conducted Buy America review with Stadler in Salt Lake City March 19-21, 2018
- The current Buy America review concluded Stadler’s activities exceed Buy America requirements with a reasonable margin
Note: Schedule Subject to Change
• Review Cost and Schedule Impacts of Risk Register
• 282 risks; 92 active; 190 retired
• Top Risk: BBII may be unable to develop grade crossing modifications that meet regulatory requirements prior to scheduled testing and commissioning of the consistent warning system
# BUDGET & EXPENDITURES

## BUDGET & EXPENDITURES (in millions)

<table>
<thead>
<tr>
<th>Project</th>
<th>Budget</th>
<th>Current Budget</th>
<th>FY18 Q3 Costs</th>
<th>Costs to Date</th>
<th>Estimate at Completion</th>
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</thead>
<tbody>
<tr>
<td>Electrification</td>
<td>$696.61</td>
<td>$695.96</td>
<td>$19.55</td>
<td>$203.41</td>
<td>$695.96</td>
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<tr>
<td>SCADA</td>
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<td>$3.45</td>
<td>$1.38</td>
<td>$1.38</td>
<td>$3.45</td>
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<td>EMU</td>
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<td>$0.42</td>
<td>$61.14</td>
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<td>PG&amp;E</td>
<td>$57.22</td>
<td>$88.49</td>
<td>$3.55</td>
<td>$18.09</td>
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<td>Separate Contract &amp; Support Costs</td>
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<td>$359.99</td>
<td>$12.02</td>
<td>$141.41</td>
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<tr>
<td>Contingency</td>
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<td>$0.00</td>
<td>$0.00</td>
<td>$271.88</td>
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<tr>
<td>Anticipated Changes</td>
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<td>$8.05</td>
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<td><strong>PCEP Total</strong></td>
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<td><strong>$1,980.25</strong></td>
<td><strong>$36.93</strong></td>
<td><strong>$425.43</strong></td>
<td><strong>$1,980.25</strong></td>
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</table>

Note: Budget / Expenditures as of March 31, 2018
### CONTINGENCY DRAWDOWN

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Amount</th>
<th>Contingency</th>
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</thead>
<tbody>
<tr>
<td>Beginning Contingency</td>
<td></td>
<td>$315,533,611</td>
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<tr>
<td>Drawdown</td>
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<tr>
<td>Executed Change Orders</td>
<td>$895,098</td>
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<tr>
<td>SCADA Contract</td>
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<tr>
<td>PG&amp;E Supplemental #4</td>
<td>$31,263,082</td>
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<td>Total</td>
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<tr>
<td>Remaining Contingency</td>
<td></td>
<td>$279,928,514</td>
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</tbody>
</table>

Note: As of March 31, 2018
### Anticipated Contingency Drawdown

<table>
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<tr>
<th>Contracts</th>
<th>Amount</th>
<th>Contingency</th>
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</thead>
<tbody>
<tr>
<td>Remaining Contingency</td>
<td>$279,928,514</td>
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<tr>
<td>Pending Contingency Drawdown</td>
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<tr>
<td>Change Orders In Process</td>
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<tr>
<td>Anticipated Remaining Contingency</td>
<td>$271,882,651</td>
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</table>

Note: As of March 31, 2018

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### Contingency Drawdown Curve

- **Actual** $280
- **Required** $223 as of 10/31/18

**Contingency Hold Points (CHP)**
- CHP01 - Determination of Baseline Budget Rev 4
- CHP02 - Entry Into Engineering
- CHP03 - PG&E Substation Design Acceptance
- CHP04 - Finish Segment 4A All Disciplines
- CHP05 - OCS Acceptance Testing Completion - Segment 1
- CHP06 - Construction & Testing Completion - All Segments
- CHP07 - EMU Conditional Acceptance of 14th Trainset
- CHP08 - Pre-Revenue Testing Complete

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**Axes:**
- **Baseline Budget**
- **Program Actuals**
- **Projected Drawdown**
• 7 Community Meetings re: Construction
  – (Atherton, SSF, Menlo Park, San Jose, San Jose (North), San Bruno, Millbrae)
• 25,745 Direct Mailers
• Website Updates: CalMod.org
“Did You Know” Public Education Campaign

- Share Caltrain history, highlight CalMod, spotlight electrification benefits
- Assets: Short cartoon, Facebook quiz, Social Media graphics

View video at CalMod.org/DYK

Did You Know? - Caltrain and the CalMod Program