# Caltrain Electrification Project Update

**Peninsula Corridor Joint Powers Board** 

March 7, 2024

Agenda Item #14





# Project Highlights



# **Project Highlights**

- Schedule: No change to revenue service date fall 2024
- Budget: No change to project budget \$2.44B
  - \$337K January 2024 draw from "\$50M Shared Risk Pool"
  - No January 2024 draw from "\$40M Project Contingency"
- Construction
  - OCS Construction Complete including SF Station
  - Feb 3<sup>rd</sup> Winter Storm Damage
    - San Antonio Section Repair is Complete
    - Burlingame Section Repair Commences in March
  - Short Circuit Testing
    - Rescheduled Due to Storm Damage
    - Mountain View to Redwood City Test Performed on Feb 23 was Incomplete. Retest Scheduled for March
  - Live Runs Scheduled for March and April
- Electric Trains
  - Eight Trainsets On-Site; 4 trainsets burn-in complete and
  - Next Two Trainsets Expected March 2024

# Safety and Security

| Time Period                   | Reportable Injury Rate |
|-------------------------------|------------------------|
| January 1 to January 31, 2024 | 0                      |
| Since Project Start (2017)    | 1.95                   |

Note: National Average Reportable Injury Rate is 2.4.

- No reportable injuries for January 2024
- Project Safety Awareness trainings ongoing for Local Fire and Police Departments (1,000 emergency responders trained to date)
- Completed 25kV training for all TASI and tenant railroad staff
- Development of emergency responder safety presentation for local first responders



# **Project Contingency and Shared Risk Pool**

| Item                  | Amount   | Drawn in<br>January 2024 | Drawn To Date<br>January 2024 | Amount<br>Remaining |
|-----------------------|----------|--------------------------|-------------------------------|---------------------|
| BBII Shared Risk Pool | \$50.00M | \$0.34M                  | \$15.74M                      | \$34.26M            |
| Project Contingency   | \$40.00M | \$0.00M                  | \$30.48M                      | \$9.52M             |
| Total                 | \$90.00M | \$0.34M                  | \$46.22M                      | \$43.78M            |



### Top Risks

- Traction Power Short Circuit Testing
- Theft of Impedance Bonds Cables
- Timely Completion of Integrated Testing and Live Runs
- Contractor Quality Control and Quality Assurance



# Service Changes and Customer Experience



# **Upcoming Weekend Service Changes**

March 9-10 & Two Weekends in April

- Service changes to support electric train test runs between San Francisco and Mountain View
- Morning Service (Significant Impacts):
  - No Caltrain service between San Francisco and Mountain View (Approximately 7am to 1pm)
  - Replacement bus bridge provided at high ridership stations:
    - San Francisco, Millbrae, Hillsdale, Redwood City, Palo Alto, and Mountain View
    - There will be no replacement bus or train service at other stations between San Francisco and Mountain View. Alternative transit suggestions provided.



# **Upcoming Weekend Service Changes**

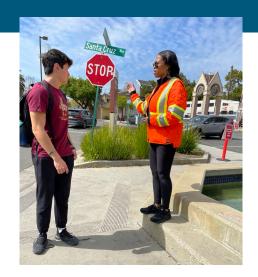
March 9-10 & Two Weekends in April

- Mid-Day Service (No impacts)
  - Regular Northbound Service Resumes with Train #237 at 12:12 p.m.
  - Regular Southbound Service Resumes with Train #236 at 11:58 a.m.
- Evening Service (Some impacts)
  - Southbound Train #280: Departs 30 minutes prior to regular schedule at 10:28pm
  - Last Northbound Train #281 (11:05pm): Canceled. No replacement bus service
  - Last Southbound Train #284 (12:05am) Canceled. No replacement bus service



# **Customer Communication**

- Web/Mobile
  - Landing page: caltrain.com/status
  - Caltrain Mobile App Alerts
  - Social Media
  - Nextdoor.com Posting
  - Website & 511 Transit Alerts
- Stations/Onboard
  - Station Signage (Notification and Wayfinding)
  - Train Seat Drops
  - Station Ambassadors
  - Station Audio Announcements
- Press Release
- Transit Alternatives List





### **NOTICE**

#### TEMPORARY WEEKEND SERVICE CHANGE

#### NO MORNING TRAIN OR BUS BRIDGE SERVICE AT THIS STATION FOR NORTHBOUND Trains #221, 225, 229 & 233

Regular Northbound Service Resumes at 12:12 pm from San Jose Diridon

SOUTHBOUND Trains #224, 228 & 232 Regular Southbound Service Resumes at 11:58 am from San Francisco Southbound Train #680 Departs at 10:28 pm

#### TRAIN SERVICE CANCELED

Northbound Late Night Train #281 Southbound Late Night Train #284

Please use alternate transit options near these stations to complete your journey or board the train at a station with a bus bridge in place.

For information visit www.caltrain.com/status







### TEMPORARY WEEKEND SERVICE CHANGE

#### **MORNING BUS BRIDGE**

There will be NO train or bus bridge service for these trains at 22<sup>nd</sup> St., Bayshore, So. San Francisc San Bruno, Broadway, Burlingame, San Matee, Hayward Park, Belmont, San Carlos, Menlo Park, California Ave. and San Artonio stations.

Regular Service Resumes with Northbound Train #237 at 12:12 pr

| Train No.                | 621   | 625    | 629    | 633        | 281          |    | Train No.                | 624    | 628    | 632    | 680    | ı |
|--------------------------|-------|--------|--------|------------|--------------|----|--------------------------|--------|--------|--------|--------|---|
| Tentro                   |       | 9.05m  | 100%   | 1105a      |              |    | Bus Bridge - For bus slo |        |        |        |        | Z |
| San Jose Distribu        | 7:19a | 9.17a  | 10.17a | 11:17a     |              | П  | San Francisco            | 750a   | 9:00a  | 10.20a | 10:28p |   |
| Santa Clara              |       | 9.18a  | 10.18a | 1118a      |              | П  | 77 <sup>nd</sup> Street* |        |        | -      | 10:33p |   |
| Lawrence                 |       | 9.74s  | 10.24s | 11:24a     |              | П  | Eaphore*                 | _      |        | -      | 10:38p |   |
| Surreyvale               |       | 9.78a  | 10.28a | 11:28a     |              | П  | S. San Francisco*        |        |        | -      | 10:45p |   |
| Arrives Mountain View    |       | 9:34n  | 1034a  | 1134a      |              | ı  | San Brano*               | _      | _      | -      | 10:49p | l |
| Bus Bridge - For bus sto |       |        |        | train com/ | italius      | ľ  | Milbrae                  | 8:17a  | 9-77a  | 10-Ca  | 10:54p |   |
| Departs Mountain View    | 750a  | 9.50a  | 10:40s | 11:40a     |              | П  | Broadway*                | -      | _      | -      | 10:57p |   |
| San Antonio*             | -     | -      | -      | -          |              | П  | Baringane*               |        |        | -      | 11:01p |   |
| Cultifornia Ave*         | -     | -      | -      | -          |              | П  | San Mateo*               | -      | -      | -      | 11:54p |   |
| Palo Alto                | 8.09a | 10:09a | 105/h  | 1150a      | 2            | П  | Hayward Fask*            |        |        | -      | 11:07p |   |
| Menio Park*              | -     | -      | -      | -          | Bus Service. | П  | HISGIN                   | 8:34a  | 9.8fa  | 11:94a | 11:11p |   |
| Redwood City             | 8:37a | 10:32a | 11:22a | 12:22p     | 2            | L  | Brimost*                 |        |        | -      | 11:14p |   |
| San Carlos*              | -     | -      | _      | -          | 7            |    | San Carlos*              | -      | _      | -      | 11:18p |   |
| Belevot*                 | -     | -      | -      | -          | 2            | ı  | Redwood City             | 850a   | 10:024 | 11:22a | 11:22p |   |
| Hillsdale                | 853a  | 10.53a | 11:40a | 12:43p     | Replacement  | Г  | Meedo Park*              | _      | _      | -      | 11:28p |   |
| Hapward Park*            | -     | -      | -      | -          | æ            | ı  | Polio Altio              | 9.18a  | 10.7%  | 11/45a | 11:37p |   |
| San Mateo*               | _     | -      | -      | -          | 8            | ı  | California Ave*          | _      | -      | -      | 11:36p |   |
| Subsyste*                | -     | -      | -      | -          | Canceled.    | ı  | San Antonio*             |        |        | -      | 11:40p |   |
| Broadway*                | -     | -      | -      | -          | 2            | ı. | Arrives Mountain View    | 950a   | 11.00a | 12:20p | -      |   |
| Milbran                  | 913a  | 11:13a | 12:03p | 1:93p      | 2            |    | Departs Mountain View    | 10.0%a | 11:16a | 12:36p | 11:45p |   |
| San Bruno*               | -     | -      | _      | -          | baln 281     | U  | Sunnyvale                | 10:11a | 11:21a | 12:41p | 11:50p |   |
| S. San Francisco*        | -     | -      | -      | -          | 3            | Г  | Lawrence                 | 10:15a | 11:3%a | 12:46p | 11:55p | I |
| Baption*                 | -     | -      | -      | -          |              | Ĺ  | Santa Clara              | 10.71a | 11:32a | 1252p  | 12:01a |   |
| 77 <sup>nd</sup> Street* | -     | -      | -      | -          |              | ı  | San Jose Disidon         | 10:30a | 114th  | 1:00p  | 17:09u |   |
| San Francisco            | 9.46a | 11:46a | 12:36p | 1:36p      |              | r  | latin                    | 10:Eu  | 11:45a | 1:05p  | -      |   |

For information, visit www.caltrain.com/statu

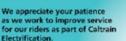


### WEEKEND SERVICE SHUTDOWNS IN EFFECT!

INTERRUPCIONES DEL SERVICIO DE FIN DE SEMANA

周末服务暂停

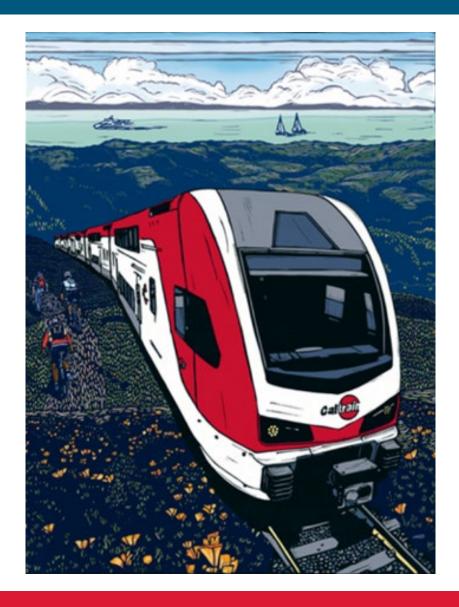
Check status: CALTRAIN.COM/STATUS



Customer Service: 1.800.660.4287 Weekdays: 7 am - 7 pm Weekerds & Holidays: 8 am - 5 pm



### **Electric Train Tour**



- Event Details
  - Date: May 11, 2024 (National Train Day)
  - Time: 10a-2p
  - Location: San Carlos Station
- Activities
  - Electric Train Tour
  - 160 Years of Passenger Rail
  - Community Booths
  - Food Trucks

# **Upcoming Board Items**



# **Upcoming Board Items**

Monthly Updates on Construction Progress and Service Changes

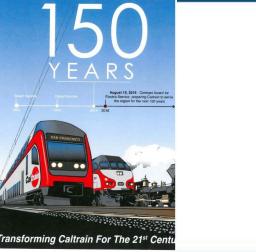


### March 7, 2024

Caltrain Board of Directors Update









### **Focus Areas**

- ➤ Continue viewing everything thru the Zero Harm lense Improving RIR 1.68 2023, 1.66 Job to Date
  - Zero Recordables or Lost Times for the month of January and February
- OCS Production Regulation
  - Main Line Regulation Complete
  - > SF Station and Yard to Complete
  - Sectionalization for Main Line Complete
  - San Antonio Re-Build Complete
  - Burlingame Re-Build On-Going Schedule to be complete March 14, 2024
- Traction Power Stations and WPCs
  - Short Circuit Test 4 & 5 Update / Findings
  - Short Circuit Test Revised Plan March/April 2024
  - SCADA Testing Complete for Main Line, WPC 1 & WPC 2 happening this week
- Training Schedule
  - OCS Complete
  - ➤ Signals Complete
  - Traction Power April/May 2024
- Punchlist Execution
  - > 85% of the areas walked & punch list established
  - > 59% punch list items complete
- Closeout Execution
  - ➤ As-Built 95% complete and submitted to the EOR for redline
- Measuring what we do every day



### **Current Short Circuit Testing and Live Run Testing Plan**

| SC Test | Track | Teams @ MP  | Revised Dates | Sub Station | Limits             |
|---------|-------|-------------|---------------|-------------|--------------------|
| Test 1  | MT 2  | 45.24       | 3/23/2024     | TPS 1       | 1.1 to 45.24       |
| Test 2  | MT 1  | 26.2        | 3/22/2024     | TPS 1       | TPS 1 to 26 Mp     |
| Test 3  | MT 2  | 1.1         | 4/5/2024      | TPS 2       | TPS 2 to 1.1       |
| Test 4  | MT 2  | 26.2        | 3/15/2024     | TPS 2       | TPS 2 to 26.2      |
| Test 5  | MT 2  | 38.61(PS 6) | 3/16/2024     | TPS 2       | TPS 2 to SWS(26.1) |

Note: The Short Circuit Testing dates are confirmed by PG&E



### **Overall Path To Completion**

|  | Jan | uary |   |   | Feb | ruary | , | Ma | rch |  | Αp | ril |  | M | ay |      | Ju | ne |   | Ju | ıly |  |
|--|-----|------|---|---|-----|-------|---|----|-----|--|----|-----|--|---|----|------|----|----|---|----|-----|--|
| OCS Main Line Completion - COMPLETE        |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| OCS Panning/Loop/HighPot Testing Complete  |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| OCS SF Station Completion                  |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| Sectionalization Testing                   |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| SCADA Testing Complete                     |     |      |   |   |     | Ī     |   |    |     |  |    |     |  |   |    |      |    |    |   |    | Ī   |  |
| Parallel Station Complete                  |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| Wayside Power Cabinets Complete            |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    | Ī  |   | Ī  | Ī   |  |
| Short Circuit Testing                      |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    | <br> |    |    |   |    |     |  |
| Segment 1 & 2 Live Run Test                |     | Ī    | Ī | Ī |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    | Ī   |  |
| End to End Test                            |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    | <br> |    |    |   |    |     |  |
| Substantial Completeion Documents Complete |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    | ļ |    | Ī   |  |
| Substantial Completion                     |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    | <br> |    |    |   |    | ļ   |  |
| Punchlist Complete                         |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| Final Acceptance Documents Complete        |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |
| Final Acceptance Documents Complete        |     |      |   |   |     |       |   |    |     |  |    |     |  |   |    |      |    |    |   |    |     |  |

| Revised Path to Completion - Weather Event 02.04.2024  | Janı | uary | F | ebru | ary | Ma | arch |  | Apr | il | Ma | ay |   | Ju | ine |  | July | , | Aug | gust | Se | ptem | nber |
|--|------|------|---|------|-----|----|------|--|-----|----|----|----|---|----|-----|--|------|---|-----|------|----|------|------|
| OCS Main Line Completion - COMPLETE                    |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Complete Re-Build for San Antonio & Burlingame/Re-Test |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| OCS Panning/Loop/HighPot Testing Complete              |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| OCS SF Station Completion                              |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Sectionalization Testing                               |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| SCADA Testing Complete                                 |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Parallel Station Complete                              |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Wayside Power Cabinets Complete                        |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Short Circuit Testing                                  |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Segment 1 & 2 Live Run Test                            |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| End to End Test  |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Substantial Completeion Documents Complete             |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Substantial Completion                                 |      |      |   |      |     |    |      |  |     |    |    |    | ] |    |     |  |      |   |     |      |    |      |      |
| Punchlist Complete                                     |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Final Acceptance Documents Complete                    |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |
| Final Acceptance                                       |      |      |   |      |     |    |      |  |     |    |    |    |   |    |     |  |      |   |     |      |    |      |      |



### What are the action items to ensure Substantial Completion?

### > What gives us confidence in the path to substantial completion

- > Regulation on the Mainline is complete. This is what is needed for SC Testing **Done**
- > Crews on track with Cat A & Cat B Punchlist items **Done**
- > Sectionalization Main Line Done
- > OCS SFO Station Done
- > Traction Power SCADA Testing Tracking WPC 1 & WPC 2 left to complete
- > Short Circuit Readiness Meetings Internal & Joint weekly bi-weekly meetings

### ➤ Are there still risk to the plan?

- > Yes
  - ➤ Weather
  - Completing weather-damaged areas prior to the revised SC Testing Dates
  - ➤ Successful Short Circuit Testing
  - > Closing out every piece of paperwork Time to do it, time to review it, time to close it



### FOR MORE INFORMATION

WWW.CALTRAIN.COM

