NOTICE OF MEETING AND AGENDA
BOND OVERSIGHT COMMITTEE

Friday, September 18, 2020
9:30 a.m. – 12:00 p.m.

COMMITTEE MEMBERS: Marian Breitbart, Michael Day, Leah Edwards, Daren Gee, Michael McGill, Catherine Newman

Please note, pursuant to Governor Newsom’s Executive Order N-29-20 and the California Shelter-in-Place mandate, which prevents all but essential travel, public participation for this meeting will be via teleconference only.

Presentation materials will be available at: www.bart.gov/about/bod/advisory/bond

You may join the Bond Oversight Committee Meeting via WebEx by calling 1-866-528-2256 (US/Canada) and entering access code 4114165.

If you wish to make a public comment:

Submit written comments via email to mmorale@bart.gov, using “public comment” as the subject line. Your comment will be read into the record and will become a permanent part of the file. Please submit your comments as far in advance as possible. Emailed comments must be received before 9:00 a.m. in order to be included in the record.

Public comment is limited to three (3) minutes per person.

AGENDA

1. Call to Order (5 minutes)
   A. Roll Call
   B. Introduction of BART Staff

2. Meeting Minutes: May 29, 2020 (For Discussion/Action) (5 minutes)

3. Update on the Search for Filling Project Management Institute Vacancy (For Discussion) (5 minutes)

4. Chairman Recaps His Presentation of the 2020 Annual Report before BART Board of Directors (For Discussion/Action) (5 minutes)

5. Annual Report Subcommittee – Set Dates for 2021 Annual Report and Subcommittee Meetings (For Discussion) (5 minutes)

6. BART Safety, Reliability and Traffic Relief Program (Measure RR) Presentation (For Discussion) (72 minutes)
   A. Office of Civil Rights (5 minutes)
      1. Q&A (10 minutes)

   B. Human Resources/Staffing (5 minutes)
      1. Q&A (10 minutes)
C. San Francisco 34.5kV Cable Replacement Project (10 minutes)
   1. Q&A (10 minutes)

D. Program Updates (12 minutes)
   1. Q&A (10 minutes)

7. Requests for Future Agenda Items (For Discussion) (5 minutes)
   A. Staff Recommendation: Station Modernization

8. Committee Member Announcements (For Discussion) (5 minutes)

9. Public Comment (5 minutes)

10. Adjournment (5 minutes)

BART provides service/accommodations upon request to persons with disabilities and individuals who are limited English proficient who wish to address Committee matters. A request must be made within one and five days in advance of Board/Committee meetings, depending on the service requested. Please contact the Office of the District Secretary at (510) 464-6083 for information.
San Francisco Bay Area Rapid Transit District
Measure RR Program

BART Bond Oversight Committee
*******DRAFT*******
Friday, May 29, 2020
9:30 AM – 11:00 AM
Via WebEx Conference Call

<table>
<thead>
<tr>
<th>MEETING NUMBER</th>
<th>MEETING DATE</th>
<th>MEETING TIME</th>
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</thead>
<tbody>
<tr>
<td>Term 2, Meeting 3</td>
<td>Friday, May 29, 2020</td>
<td>9:30 am – 11:00 am</td>
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<table>
<thead>
<tr>
<th>Attendees</th>
<th>Present Members</th>
<th>Staff</th>
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<tbody>
<tr>
<td></td>
<td>Michael McGill, Chair</td>
<td>Linton Johnson</td>
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<td></td>
<td>Catherine Newman, Vice Chair</td>
<td>Chris Filippi</td>
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<tr>
<td></td>
<td>Michael Day</td>
<td>Sylvia Lamb</td>
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<td></td>
<td>Marian Breitbart</td>
<td>Vicky Tam</td>
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<td></td>
<td>Daren Gee</td>
<td>Jamal Thompson</td>
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<td></td>
<td>Leah Edwards</td>
<td>Mickey Morales</td>
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<tr>
<td></td>
<td></td>
<td>Travis Engstrom</td>
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<td></td>
<td></td>
<td>Tracy Johnson</td>
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<td></td>
<td></td>
<td>Antoinette</td>
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<td></td>
<td></td>
<td>Carl Holmes</td>
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<td></td>
<td></td>
<td>Joseph Towner</td>
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<tr>
<td></td>
<td></td>
<td>Rose Poblete</td>
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<td></td>
<td></td>
<td>Javier Martinez</td>
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<td>Audrey Tam</td>
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<thead>
<tr>
<th>Agenda Item</th>
<th>Meeting Notes</th>
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<tbody>
<tr>
<td>1. Call to Order</td>
<td>All committee members are present. T. Engstrom explains how WebEx works.</td>
</tr>
<tr>
<td>A. Roll Call</td>
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<tr>
<td>B. Introduction of BART Staff</td>
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<tr>
<td>2. Meeting Minutes: December 20, 2019</td>
<td>Committee unanimously passes the minutes.</td>
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<tr>
<td><strong>3. Appointment of Committee Vice President; and Update on Filling Project Management Institute Vacancy</strong></td>
<td>Committee elects member Catherine Newman to be the Vice Chair.</td>
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</tbody>
</table>
|   | **YES** | M. McGill  
M. Day  
D. Gee  
M. Breitbart  
L. Edwards |
|   | **ABASTAIN** | C. Newman |
|   | **NO** | None |
|   | L. Johnson updates the committee on the search to fill the vacant Project Management Institute seat. |   |
| **5. Finalize and Approve the Draft BART Safety, Reliability and Traffic Relief Program (Measure RR) Annual Report** | C. Filippi gives overview of the report and thanks staff and committee for their assistance with the report. |
|   | D. Gee says the report has quite a bit of information yet is still concise. He thanks those who put the report together. | |
|   | L. Edwards says the report is well done. She mentions that some people might flag that the funding gap between the needs of BART and what Measure RR funds is growing between annual reports. C. Holmes reminds the committee that the public has always been told that Measure RR does not solve all our problems and that the system is getting older. | |
|   | L. Edwards also points out that the federal funding has decreased between reports. M. Breitbart agrees and says the committee needs to keep an eye on it. However, C. Holmes says that the federal funds available are not decreasing but is a “snapshot in time” of the federal funds currently available to the project in that annual report year. | |
M. Day says it’s a “very good-looking report.” He says that it continues to improve on previous reports.

C. Newman thanks the team for the effort put in the report and Chairman McGill. She requests that the committee flag issues they believe should go in the 2021 report.

Chairman McGill thanks the committee for a job well done.

Committee unanimously approves the report.

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<tr>
<th>6. BART Safety, Reliability &amp; Traffic Relief Program (Measure RR) Update</th>
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<tr>
<td>T. Johnson leads the discussion on the report. She speaks on how the impact of COVID-19 has had on projects. She describes how the reduced service hours at BART has allowed more time for crews to do work.</td>
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<tr>
<td>S. Lamb says the graveyard shift now starts at 10 pm instead of 1 am, giving more time for crews to do more work. However, social distancing requirements make the actual work more challenging.</td>
</tr>
<tr>
<td>J. Martinez provides an update on the Core Capacity and Communication Based Train Control (CBTC) project.</td>
</tr>
<tr>
<td>D. Gee says he appreciates the advantages of the longer work windows, which allow for greater trackway access now that train service has been cut because of the impact COVID-19 on ridership. But he also recognizes that social distancing will present its own challenges and he appreciates BART staff working thru these issues. He says it will be a challenge for the committee to review funding changes that may result from the impact of the pandemic.</td>
</tr>
<tr>
<td>J. Thompson reviews the program milestones.</td>
</tr>
<tr>
<td>V. Tan discusses cashflow of the major projects in the Measure RR portfolio.</td>
</tr>
</tbody>
</table>
L. Edwards say in the future she would like to learn more about the watch list items. C. Newman and D. Gee agree.

M. McGill requests that staff schedule the meetings longer to give members more time to ask questions.

S. Lamb provides an update on earned value and go

J. Towner provides an update on small business outreach.

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<thead>
<tr>
<th>7. Committee Member Announcements</th>
<th>In the interest of time, M. McGill skips this item.</th>
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<tbody>
<tr>
<td>8. Request for Future Agenda Items</td>
<td>Item skipped.</td>
</tr>
<tr>
<td>9. Public Comment</td>
<td>C. Edwards asks staff to make sure that the WebEx access code for future meetings is correct as the code on the meeting agenda is incorrect.</td>
</tr>
<tr>
<td>10. Adjournment</td>
<td>M. McGill adjourns the meeting.</td>
</tr>
</tbody>
</table>
**San Francisco Bay Area Rapid Transit District**  
**Measure RR Program**

**Summary of 2020 Bond Oversight Committee 2020 Annual Report Presentation to BART Board Meeting on July 23, 2020**

**Director Saltzman:** *What are we doing to get word out about the report?*

BART issued a news release that included a link to the report to nearly 300 reporters as well as approximately 30,000 people who have signed up for BART news alerts. BART published social media posts on Facebook and Twitter that included key RR facts as well as links to the full report. Additionally, the report is posted on the Bond Oversight Committee page on bart.gov as well as on the “Reports” and “Better BART, Better Bay Area,” pages of the website.

**Director Ames:** *Is it possible to show more details on projects instead of buckets so we can see what’s coming in the midterm and the long-term vision?*

The primary goal is to produce a report that can be easily understood by the public. An important part of that is creating a document that doesn’t intimidate someone from reading it. Sometimes less is more. What we don’t want is to end up with a report that is so bogged down by detailed spreadsheets that the typical rider or taxpayer doesn’t bother to read the main conclusions of our work. We’ve tried to strike an appropriate balance. For example, Page 14 of this year’s report includes a graphic that highlights of the lifespan of RR. Also, page nine has a pie chart that shows BART’s long-term capital needs and how RR is only part of the answer.

**Director Allen:** *I want to thank the committee for asking for greater context for the data they’re presented by staff. What was the staff response for that improved context?*

Staff has been working collaboratively with the oversight committee to meet the needs of committee members. This has been an evolving and on-going process that has led to the committee having a clearer understanding of the progress on projects. Staff has been responsive to questions and suggestions from committee members and has strived to include requested changes in presentations and reports.

*Click* [here](https://bit.ly/3k5ecVN) *for the video link to the July 23, 2020 BART Board of Directors meeting, or copy and paste this link into your browser:*  
https://bit.ly/3k5ecVN
BART Safety, Reliability, and Traffic Relief Program (Measure RR) Update

Bond Oversight Committee
September 18, 2020
• Provide diligent, independent and public oversight over the expenditure of funds from the sale of District general obligation bonds

• Assess how bond proceeds are invested to ensure that all spending is authorized by the ballot measure

• Assess whether projects funded by bond proceeds are completed in a timely, cost-effective and quality manner consistent with the best interest of BART riders and District residents

• Publish an annual report that includes a detailed account of the Committee’s activities including its expenditures
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Executive Summary

• Through July 2020, $617.0M of the Measure RR funds have been invested to complete 21% of the work.

• Successes
  • Issued 3rd Tranche Bond – $700M
  • Overall program performing ahead of investment projections
  • Interlocking projects meeting performance metrics
    • C25 is complete
    • A65 on schedule

• Challenges
  • COVID-19

<table>
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<tr>
<th># Projects in Planning</th>
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<th># Projects Completed</th>
<th>TOTAL # Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>52 (-3)</td>
<td>24 (-3)</td>
<td>47 (+3)</td>
<td>18 (+4)</td>
<td>148 (+1)</td>
</tr>
</tbody>
</table>

+ (Projects added in the phase)
- (Projects no longer in the phase)
RR Program
Small Business & Outreach
# RR Program Update – Small Business

<table>
<thead>
<tr>
<th>Program</th>
<th>Total RR Commitment</th>
<th>Total RR SB Commitment</th>
<th>SB Commitment %</th>
<th># of SB Contracts</th>
<th>Total RR Payments on RR Contracts</th>
<th>RR Payments to SBs</th>
<th>SB Payment %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renew Track</td>
<td>$ 97,401,243</td>
<td>$ 30,300,659</td>
<td>31%</td>
<td>102</td>
<td>$50,478,206</td>
<td>$10,640,842</td>
<td>21%</td>
</tr>
<tr>
<td>Renew Power</td>
<td>$ 164,047,054</td>
<td>$ 81,211,507</td>
<td>50%</td>
<td>160</td>
<td>$101,031,280</td>
<td>$60,378,885</td>
<td>60%</td>
</tr>
<tr>
<td>Repair Tunnels &amp; Structures</td>
<td>$ 103,767,367</td>
<td>$ 24,385,423</td>
<td>24%</td>
<td>100</td>
<td>$55,493,955</td>
<td>$8,572,813</td>
<td>15%</td>
</tr>
<tr>
<td>Renew Mechanical</td>
<td>$ 30,122,709</td>
<td>$ 10,463,987</td>
<td>35%</td>
<td>53</td>
<td>$13,860,552</td>
<td>$4,837,727</td>
<td>35%</td>
</tr>
<tr>
<td>Replace Train Control/Increase Capacity</td>
<td>$ 9,814,691</td>
<td>$ 1,822,061</td>
<td>19%</td>
<td>22</td>
<td>$6,852,836</td>
<td>$991,305</td>
<td>14%</td>
</tr>
<tr>
<td>Renew Stations</td>
<td>$ 144,001,101</td>
<td>$ 26,379,454</td>
<td>18%</td>
<td>82</td>
<td>$18,420,136</td>
<td>$5,413,690</td>
<td>29%</td>
</tr>
<tr>
<td>Expand Safe Access to Stations</td>
<td>$ 15,048,236</td>
<td>$ 3,857,590</td>
<td>26%</td>
<td>91</td>
<td>$6,935,275</td>
<td>$2,464,762</td>
<td>36%</td>
</tr>
<tr>
<td>Design/Engineer to Relieve Crowding</td>
<td>$ 53,065,794</td>
<td>$ 14,193,410</td>
<td>27%</td>
<td>47</td>
<td>$9,399,404</td>
<td>$3,895,178</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 617,268,196</td>
<td>$ 192,614,090</td>
<td><strong>31%</strong></td>
<td><strong>656</strong></td>
<td><strong>$262,471,644</strong></td>
<td><strong>$97,195,201</strong></td>
<td><strong>37%</strong></td>
</tr>
</tbody>
</table>

Notes: All amounts are based on RR fund percent only. Amounts are updated to July 31, 2020. Includes formal contracts only; does not include informal purchases or work performed by BART’s own forces. SB totals include DBEs, MSBEs, SBs, and LSBs. Sources: RR commitments are based on RR Requisitions report, Procurement Sealed Bids Report and PeopleSoft Work Plans application. RR% for each project is based on Financial Analysts’ report, RR Funds / Total Project Budget. Payments based on PeopleSoft and B2GNOW.
RR Program Update – Outreach

• Recently Completed Events
  – BART HQ Trade Partner Outreach Meeting (Zoom)
  – BOC - DBE Certification Training (Zoom)
  – BART HQ Trade Partner Outreach Meeting – M/WBE and SF/Peninsula Firms (Zoom)
  – BART HQ Trade Partner Outreach Meeting – M/WBE and LGBTBE Firms (Zoom)

• Upcoming Events
  – BART SB Outreach – Learn About BART’s Procurement Process (Zoom)
  – BART SB Outreach - Meet Project Staff and Learn About Upcoming RR Opportunities (Zoom)
  – BART SB Outreach - How to do Business with BART (Zoom)
RR Program
Hiring
Recruitment

- Filled 29 positions since the last Committee Meeting
- 332 positions filled to date
- 76% of hiring goal fulfilled to date
- Load Shedding

**Bond Hiring Summary - To Date**

<table>
<thead>
<tr>
<th></th>
<th># of Positions</th>
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<tbody>
<tr>
<td>FILLED</td>
<td>332</td>
</tr>
<tr>
<td>REMAINING POSITIONS</td>
<td>103</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>435</strong></td>
</tr>
</tbody>
</table>

**RR Bond Hiring Summary**

- Filled 76%
- Remaining Positions 24%

**Load Shedding Operating to Capital due to Service Reduction**

Next Quarter staffing load shedding estimated 175 for temporary reallocation to take advantage of increased blanket time
Work Progress Since Last Meeting
Examples of Active RR Projects in April 2020–July 2020

*Updated projects
Projects with Accelerated work due to COVID-19 service reduction

Renew Track
1. Replace Direct Fixation Pads (Systemwide Not Mapped) – Ongoing Construction
2. C25 Track Interlocking Replacement – Substantially Complete*
3. Rail Relay – Ongoing Construction (Systemwide Not Mapped)

Renew Power Infrastructure
4. M-Line 34.5kV Cable Replacement – Ongoing Construction
5. A-Line 34.5kV Cable Replacement – Contract Awarded*
6. Third Rail Replacement (Systemwide Not Mapped) – Ongoing Construction

Renew Tunnel & Structures
7. Platform Edge Repair at Hayward Station – Ongoing Construction*
8. Earthquake Safety Program – Transbay Tube Retrofit – Ongoing Construction
9. Safety Barrier Phase 3 – Ongoing Construction (Systemwide Not Mapped)*

Renew Mechanical
10. Coverboard Enhancement – Ongoing Construction
11. Facilities HVAC Equipment Replacement System Wide Phase 1 – Ongoing Construction (Not Mapped)

Design/Engineer to Relieve Crowding
12. Civic Center Scissor Stairs – Ongoing Construction
13. Hayward Maintenance Complex Phase 2 - Track Work Procurement – Contract Awarded*

Renew Stations
14. 19th Street Station Modernization – Ongoing Construction
15. Market Street Canopies and Escalator – Ongoing Construction*

Expand Safe Access
16. eBART Antioch Parking Lot Contract – Ongoing Construction*
17. Embarcadero and Civic Center Bike Station Modernization – Substantially Complete*

Replace Train Control/Increase Capacity
18. Construction Management On-Call Contract(s) and Design Support for Train Control Modernization Project – NTP (Not Mapped)*
Updated Projects

Measure RR - Project Progress

Renew Track
1. Replace Direct Fixation Pads (Systemwide Not Mapped) – Ongoing Construction
2. C25 Track Interlocking Replacement – Substantially Complete*
3. Rail Relay – Ongoing Construction (Systemwide Not Mapped)

Renew Power Infrastructure
4. A-Line 34.5kV Cable Replacement – Ongoing Construction
5. A-Line 34.5kV Cable Replacement – Contract Awarded*
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Renew Tunnel & Structures
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18. Construction Management On-Call Contract(s) and Design Support for Train Control Modernization Project – NTP (Not Mapped)*
M-line 34.5 kV Cable Replacement
Single Tracking Sundays

- 28 single-tracking Sundays per year
- Single-tracking Window: 01:30 to 19:00
- Single-tracking will be for Work Limit #1 or Work Limit #2 never both.

**Work Limit #1 – from Powell to 16th St Mission**
- Installed 90% of raceway along M-1
- Pulled 90% cables along M-1
- Installed 75% raceway along M-2
- Pulled 70% cables along M-2
- Single Tracking Limit #1 - from Powell St to 16th St Mission
- Jun 2020 – Dec 2023

**Work Limit #2 – from 24th St Mission to Balboa Park**
- Installed 20% raceway along M-2
- Single Tracking Limit #2 - from 24th Street to Balboa Park
- Sep 2020 – Dec 2023
M-line 34.5 kV Cable Replacement
M-line 34.5 kV Cable Replacement – BART Electrician Installation of 3rd rail disconnect switches

- BART Electricians helped to install 3rd rail disconnect switches on both the M1 and M2 track just south of the Montgomery Platform.
- This shortens the contractor work limits on Sundays Single Tracking.
- For our patrons this enables more frequent Dublin/Pleasanton trains to downtown San Francisco and return to the East Bay.

Train Operator stopping short of the 3rd rail disconnection switch at Montgomery Station
3rd Rail Disconnect Switches
Renew Power Progress
M-Line 34.5kV Cable Replacement
Individual Program Milestones
Renew Track

STATUS & MILESTONES

EXPENDED Thru 7/2020: $200.9
FORECAST Thru 6/2021: $200
TOTAL PROGRAM VALUE: $625
PERIOD CASHFLOW: $32.7

STATUS – Renew Track

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
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<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>20</td>
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MILESTONES

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<tbody>
<tr>
<td>• Completion of Construction Shutdowns on C25 Interlocking (near Orinda Station)</td>
<td>• NTP for Oakland Yard Track Geometry Vehicle Storage Shed</td>
<td>• Mobilization/Construction Begin for R65 Interlocking Replacement (near Richmond Station)</td>
<td>• Completion of Construction Shutdowns for R65 Interlocking Replacement (near Richmond Station)</td>
</tr>
<tr>
<td></td>
<td>• Construction Shutdowns Begin for A65 Interlocking Replacement (near Hayward Yard)</td>
<td>• Mobilization/Construction Begin for Oakland Yard Track Geometry Vehicle Storage Shed</td>
<td>• Issue for Bid for Special Trackwork for A77 Interlocking Replacement (Near Hayward Yard)</td>
</tr>
<tr>
<td></td>
<td>• Contract Award for Oakland Yard Track Geometry Vehicle Storage Shed</td>
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</tbody>
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Watchlist:

• Material delivery delays
• Upcoming Change Order for C35

Italic: Modified milestones from previous report.
## Renew Power Status & Milestones

### Status – Renew Power Infrastructure

<table>
<thead>
<tr>
<th>Projects in Planning</th>
<th>Projects in Design</th>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7</td>
<td>6</td>
<td>14</td>
<td>2</td>
<td>29</td>
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</tbody>
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### Milestones

#### Completed (Apr 2020 – Jul 2020)
- Contract Award for A-line 34.5kV Cable Replacement (Alameda County)
- Contract Award of Substations for Core Capacity
- Contract Award for Transbay Tube East Bay Substation Installation
- Start Cable Pull for First Segment at M-line 34.5kV replacement (between 16th St and 24th St Stations in San Francisco)
- NTP for Replace CWS Bulk Supply Transformer (near Walnut Creek Station)
- NTP for Replace Station Emergency Lighting
- Complete Commissioning of New 34.5kV circuits for K-line between West Oakland and 19th St. Oakland

#### Q1 (Aug 2020 – Sep 2020)
- NTP for Transbay Tube East Bay Substation Installation
- Completion of Design for Station Fire Alarm Replacement Phase 3
- \textit{NTP for A-line 34.5kV Replacement (Alameda County)}

#### Q2 (Oct 2020 – Dec 2020)
- \textit{Completion of Design for 34.5kV Blocking Scheme Systemwide}
- Issue for Bid Station Fire Alarm Replacement-Phase 3
- Complete Commissioning of new Substation at San Leandro Station

#### Q3 (Jan 2021 – Mar 2021)
- Contract Award for R Line 34.5kV Cable Replacement
- Completion of Design for Station Fire Alarm Replacement Phase 4
- Completion of Design for Tunnel Lighting Replacement Phase 2 (Transbay Tube)

### Watchlist:
- \textit{R-Line 34.5kV Bids and Evaluation}

\textit{Italic: Modified milestones from previous report.}
## STATUS & MILESTONES

**EXPENDED Thru 7/2020:** $54.9  
**FORECAST Thru 6/2021:** $64  
**TOTAL PROGRAM VALUE:** $570  
**PERIOD CASHFLOW:** $10.4

### STATUS – Repair Tunnels & Structures

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
<th># Projects in Bid/Award</th>
<th># Projects in Construction</th>
<th># Projects Completed</th>
<th>TOTAL # Projects</th>
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<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>26</td>
</tr>
</tbody>
</table>

### MILESTONES

**Completed (Apr 2020 – Jul 2020):**
- Completion of Design for Renew Catwalks on the A Line
- NTP for Safety Barriers Phase 3 – Lift-Assist Bollards
- Contract Award for Aerial Fall Protection A Line North

**Q1 (Aug 2020 – Sep 2020):**
- Issue for Bid East Bay Street Grates (downtown Berkeley and Oakland)

**Q2 (Oct 2020 – Dec 2020):**
- Issue for Bid Cross Passage Doors (Systemwide)
- Construction begin for Aerial Fall Protection A Line North
- *Completion of Construction for Platform Rehabilitation at Hayward Station*

**Q3 (Jan 2021 – Mar 2021):**
- Completion of Construction for Substation Walls

### Watchlist:
- East Bay Street Grates

*Italic: Modified milestones from previous report.*
STATUS – Renew Mechanical

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
<th># Projects in Bid/Award</th>
<th># Projects in Construction</th>
<th># Projects Completed</th>
<th>TOTAL # Projects</th>
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<tr>
<td>1</td>
<td>10</td>
<td>6</td>
<td>8</td>
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<td>25</td>
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</tbody>
</table>

MILESTONES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Completion of Design for Fire Hose and Piping Replacement</td>
<td>• Construction Begin for Vacuum System Replacement (Oakland Yard)</td>
<td>• Completion of Construction Concord Yard Fire Services</td>
<td>• Completion of Construction for Rotoclones Replacement</td>
</tr>
<tr>
<td>• Contract Award of Vacuum System Replacement (Oakland Yard)</td>
<td></td>
<td>• Completion of Design for Hayward Yard Fire Services</td>
<td>• Completion of Design for Concord Yard Turntable Replacement</td>
</tr>
<tr>
<td>• Begin Self Performed Construction and Procurement of the Fire Hose Cabinet Replacement Project</td>
<td></td>
<td>• Construction Begin for Oakland Yard fire Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Re-Advertise Concord Yard Wheel Truing Facility</td>
<td></td>
</tr>
</tbody>
</table>

Watchlist:

- Unforeseen site conditions for Concord Yard Fire Service
- Combine scopes of Install Wet Standpipe to Hayward Yard Fire Services
- OKS Fire Yard Services protest
- Concord Wheel Truing Facility

Italic: Modified milestones from previous report.
# Replace Train Control

## STATUS & MILESTONES

EXPERNDED Thru 7/2020: $27.3
FORECAST Thru 6/2021: $39
TOTAL PROGRAM VALUE: $400
PERIOD CASHFLOW: $5.4

### STATUS – Replace Train Control / Increase Capacity

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
<th># Projects in Bid/Award</th>
<th># Projects in Construction</th>
<th># Projects Completed</th>
<th>TOTAL # Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

### MILESTONES

**Completed**
(Apr 2020 – Jul 2020)
- Notice to Proceed (NTP) for CBTC Construction Management Agreements
- NTP for CBTC Design Support During Construction Agreements

**Q1**
(Aug 2020 – Sep 2020)
- Notice of Award & Contract Execution for CBTC Design Build Contract/Mobilize
- OCIP Coverage/ Notice to Proceed for CBTC
- Issue CBTC Change Notice for Cost Proposal to Bombardier for D-Car Retrofit Design

**Q2**
(Oct 2020 – Dec 2020)
- Notice to Proceed for CBTC Design Build Contract/Mobilize
- Execute CBTC Change Notice to Bombardier for Conceptual Design Review & Preliminary Design Review
- Start Conceptual Design for CBTC Design Build Contract

**Q3**
(Jan 2021 – Mar 2021)
- Advertise Power Supply Cabinets & Switch Machine/Train Control

### Watchlist:
- Design Build Contract Award contingent upon Full Funding Grant Agreement

*Italic: Modified milestones from previous report.*
Renew Stations

STATUS & MILESTONES

EXPENDED Thru 7/2020: $22.2
FORECAST Thru 6/2021: $35
TOTAL PROGRAM VALUE: $210
PERIOD CASHFLOW: $3.7

STATUS – Renew Stations

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
<th># Projects in Bid/Award</th>
<th># Projects in Construction</th>
<th># Projects Completed</th>
<th>TOTAL # Projects</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

MILESTONES

**Completed**
(Apr 2020 – Jul 2020)

- Continue fabrication of first three escalators of Market Street Escalators Contract
- Construction continues at restrooms and other locations on the concourse and platform levels for 19th St Station
- NTP and Continue submittal processing and planning site work on Canopy Contract
- Begin Site Mobilization for Powell St. Station Modernization

**Q1**
(Aug 2020 – Sep 2020)

- Perform factory inspection of escalators being fabricated, deliver to site, and begin installation for Market Street Escalators Contract
- Continue processing submittals for Canopy Contract
- Hazmat abatement work for Powell St. Station Modernization
- Complete 100% Design for Walnut Creek TOD North Stairs

**Q2**
(Oct 2020 – Dec 2020)

- Continue installation of escalators and fabrication of additional escalators for Market Street Escalators Contract
- Begin potholing investigation for existing subsurface obstacles on Canopy Contract

**Q3**
(Jan 2021 – Mar 2021)

- Continue fabrication and installation of escalators for Market Street Escalators Contract
- Installation of systems infrastructure within Stations in preparation for Canopy Contract
- Southeast Escalator Commissioning & Turnover completion for Union City Intermodal Station Phase 2A
- *Submit Walnut Creek TOD North Stairs to Procurement*

**Italic:** Modified milestones from previous report.

Watchlist:

- Funding Walnut Creek TOD North Stairs Construction
Station Access
STATUS & MILESTONES

EXPENDED Thru 7/2020: $18.2
FORECAST Thru 6/2021: $46
TOTAL PROGRAM VALUE: $135
PERIOD CASHFLOW: $2.9

STATUS – Expand Safe Access to Stations

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
<th># Projects in Bid/Award</th>
<th># Projects in Construction</th>
<th># Projects Completed</th>
<th>TOTAL # Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>25</td>
</tr>
</tbody>
</table>

MILESTONES

**Completed**
(Apr 2020 – Jul 2020)

- Began Construction for eBART – Antioch Parking Lot Contract
- Substantial Completion for Embarcadero and Civic Center Bike Station Modernization
- Submit Bicycle Stair Channels Bid Documents to Procurement for Review
- Launch Safe Routes to BART Grant Program

**Q1**
(Aug 2020 – Sep 2020)

- Award of Safe Routes to BART grant
- Begin closeout for Embarcadero and Civic Center Bike Station Modernization

**Q2**
(Oct 2020 – Dec 2020)

- Advertise for Bicycle Stair Channels Contract
- Submit Accessibility Improvement (Phase 1) Bid Documents to Procurement to prepare for advertising
- Execute Funding Agreements with Jurisdictions for Safe Routes to BART Grant Program
- Complete Financial Closeout for MacArthur Transit Improvement

**Q3**
(Jan 2021 – Mar 2021)

- Award Bicycle Stair Channels Contract
- Substantial Completion for eBART Antioch Parking Lot Contract
- Advertise Accessibility Improvement (Phase 1)
- Construction Completion of the Warm Springs West Pedestrian Bridge and Plaza Project

Watchlist:
- eBART – Antioch Parking Lot delayed due to COVID-19

Italic: Modified milestones from previous report.
## Status & Milestones

### Expended Thru 7/2020:
$26.3

### Forecast Thru 6/2021:
$41

### Total Program Value:
$200

### Period Cashflow:
$9.0

### Status – Design / Engineer to Relieve Crowding

<table>
<thead>
<tr>
<th># Projects in Planning</th>
<th># Projects in Design</th>
<th># Projects in Bid/Award</th>
<th># Projects in Construction</th>
<th># Projects Completed</th>
<th>TOTAL # Projects</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

### Milestones

- **Completed (Apr 2020 – Jul 2020)**
  - Complete Design for Hayward Maintenance Complex Phase 2: Civil/Grading
  - Brief BART and CCJPA Board on professional services contract for Planning/Environmental/Engagement for New Transbay Rail Crossing

- **Q1 (Aug 2020 – Sep 2020)**
  - Award for Hayward Maintenance Complex Phase 2: Trackwork Procurement
  - Award and NTP for Hayward Maintenance Complex Phase 2: (Mainline) Trackwork Procurement
  - Advertise Hayward Maintenance Complex Phase 2: Civil/Grading
  - Advance process for professional services contract for Planning/Environmental/Engagement for New Transbay Rail Crossing

- **Q2 (Oct 2020 – Dec 2020)**
  - NTP for Hayward Maintenance Complex Phase 2: Trackwork Procurement
  - Award Hayward Maintenance Complex Phase 2: Mainline Trackwork Procurement
  - Evaluating proposals for Planning/Environmental/Engagement for New Transbay Rail Crossing
  - Complete Redesign for Embarcadero New Platform Elevator

- **Q3 (Jan 2021 – Mar 2021)**
  - NTP for Hayward Maintenance Complex Phase 2: Civil/Grading
  - Award for Planning/Environmental/ Engagement for New Transbay Rail Crossing
  - Complete Redesign for Embarcadero New Platform Elevator

### Watchlist:
- Approval to award based on Full Funding Grant Agreement for Hayward Maintenance Complex 2: Mainline Trackwork Procurement

**Italic:** Modified milestones from previous report.
Budget and Schedule Status
# Measure RR Cashflow ($ Millions) – Mid-Term & Long-Term Outlook

<table>
<thead>
<tr>
<th>Program</th>
<th>Expended (thru March 2020)</th>
<th>Expended (thru July 2020)</th>
<th>% Expended out of Total Bond Investment</th>
<th>Period Cashflow (March 2020-July 2020)</th>
<th>SHORT-TERM (thru June 2021)</th>
<th>MID-TERM (thru 2025)</th>
<th>LONG-TERM (thru End of Bond)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renew Track</td>
<td>$168.3</td>
<td>$200.9</td>
<td>32%</td>
<td>$32.7</td>
<td>$200</td>
<td>$400</td>
<td>$625</td>
</tr>
<tr>
<td>Renew Power Infrastructure</td>
<td>$199.5</td>
<td>$237.0</td>
<td>19%</td>
<td>$37.6</td>
<td>$275</td>
<td>$608</td>
<td>$1,225</td>
</tr>
<tr>
<td>Repair Tunnels &amp; Structures</td>
<td>$44.5</td>
<td>$54.9</td>
<td>10%</td>
<td>$10.4</td>
<td>$64</td>
<td>$268</td>
<td>$570</td>
</tr>
<tr>
<td>Renew Mechanical</td>
<td>$19.4</td>
<td>$30.3</td>
<td>22%</td>
<td>$10.9</td>
<td>$46</td>
<td>$65</td>
<td>$135</td>
</tr>
<tr>
<td>Replace Train Control/Increase Capacity</td>
<td>$21.9</td>
<td>$27.3</td>
<td>7%</td>
<td>$5.4</td>
<td>$39</td>
<td>$286</td>
<td>$400</td>
</tr>
<tr>
<td>Renew Stations</td>
<td>$18.5</td>
<td>$22.2</td>
<td>11%</td>
<td>$3.6</td>
<td>$35</td>
<td>$148</td>
<td>$210</td>
</tr>
<tr>
<td>Expand Safe Access to Stations</td>
<td>$15.3</td>
<td>$18.2</td>
<td>13%</td>
<td>$2.9</td>
<td>$46</td>
<td>$86</td>
<td>$135</td>
</tr>
<tr>
<td>Design/Engineer to Relieve Crowding</td>
<td>$17.3</td>
<td>$26.3</td>
<td>13%</td>
<td>$9.0</td>
<td>$41</td>
<td>$69</td>
<td>$200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$504.7</strong></td>
<td><strong>$617.0</strong></td>
<td><strong>18%</strong></td>
<td><strong>$112.3</strong></td>
<td><strong>$746</strong></td>
<td><strong>$1,930</strong></td>
<td><strong>$3,500</strong></td>
</tr>
</tbody>
</table>
BART Measure RR Program Spending
Forecast vs. Actual

- Forecast
- Actual

Actual by July 2020: $617.0
Forecast Cumulative Total by Jun 2021: $746M

Forecasted 1st & 2nd Tranche $660M
Cumulative Spend down Date by Sept 2020
<table>
<thead>
<tr>
<th>RR Program</th>
<th>Total RR Budget</th>
<th>Physical % Complete</th>
<th>Planned Value</th>
<th>Earned Value</th>
<th>RR Accrued to Date</th>
<th>CPI</th>
<th>SPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renew Track</td>
<td>$625</td>
<td>39%</td>
<td>$239.36</td>
<td>$241.73</td>
<td>$236.36</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>Renew Power</td>
<td>$1,225</td>
<td>24%</td>
<td>$325.24</td>
<td>$294.06</td>
<td>$293.51</td>
<td>1.00</td>
<td>0.90</td>
</tr>
<tr>
<td>Repair Tunnels and Structures</td>
<td>$543</td>
<td>11%</td>
<td>$73.25</td>
<td>$61.44</td>
<td>$63.33</td>
<td>0.97</td>
<td>0.84</td>
</tr>
<tr>
<td>Renew Mechanical</td>
<td>$162</td>
<td>24%</td>
<td>$45.67</td>
<td>$38.39</td>
<td>$34.63</td>
<td>1.11</td>
<td>0.84</td>
</tr>
<tr>
<td>Replace Train Control/Increase Capacity</td>
<td>$400</td>
<td>7%</td>
<td>$38.15</td>
<td>$27.46</td>
<td>$32.81</td>
<td>0.84</td>
<td>0.72</td>
</tr>
<tr>
<td>Renew Stations</td>
<td>$210</td>
<td>9%</td>
<td>$21.86</td>
<td>$18.50</td>
<td>$17.35</td>
<td>1.07</td>
<td>0.85</td>
</tr>
<tr>
<td>Expand Safe Access to Stations</td>
<td>$135</td>
<td>19%</td>
<td>$29.42</td>
<td>$26.32</td>
<td>$25.47</td>
<td>1.03</td>
<td>0.89</td>
</tr>
<tr>
<td>Design/Engineer to Relieve Crowding</td>
<td>$200</td>
<td>14%</td>
<td>$31.88</td>
<td>$28.26</td>
<td>$28.01</td>
<td>1.01</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,500</strong></td>
<td><strong>21%</strong></td>
<td><strong>$804.83</strong></td>
<td><strong>$736.16</strong></td>
<td><strong>$731.47</strong></td>
<td><strong>1.01</strong></td>
<td><strong>0.91</strong></td>
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## Track Program Drill Down

<table>
<thead>
<tr>
<th>Project</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Number of Projects (&gt;25% Spent)</td>
<td>12</td>
</tr>
<tr>
<td>CPI &lt;0.9 or &gt;1.1</td>
<td>5</td>
</tr>
<tr>
<td>SPI &lt;0.9 or &gt;1.1</td>
<td>2</td>
</tr>
<tr>
<td>Number of Risk Register Updates Performed in Previous Period</td>
<td>5</td>
</tr>
<tr>
<td>Number of Project Quality Reviews Performed in Previous Period</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project</th>
<th>Physical % Complete</th>
<th>CPI</th>
<th>SPI</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>C35 Interlocking Replacement</td>
<td>98%</td>
<td>1.13</td>
<td>0.98</td>
<td>Substantially complete; Efficiently using maintenance forces</td>
</tr>
<tr>
<td>Restraining Rail Replacement</td>
<td>93%</td>
<td>1.12</td>
<td>0.99</td>
<td>All rails replaced; Efficiently using maintenance forces</td>
</tr>
<tr>
<td>C25 Interlocking Replacement</td>
<td>77%</td>
<td>1.17</td>
<td>1.01</td>
<td>4 turnouts replaced; Construction cost less than planned</td>
</tr>
<tr>
<td>Replace Direct Fixation Pads</td>
<td>74%</td>
<td>1.22</td>
<td>2.23</td>
<td>11,800 pads replaced since April 1; Benefitting from extended blanket hours due to COVID-19 response</td>
</tr>
<tr>
<td>Friction Modification Study</td>
<td>62%</td>
<td>0.85</td>
<td>0.62</td>
<td>Project being rebaselined to include scope change</td>
</tr>
</tbody>
</table>
Program Level Schedule Update

Future updates may include additional projects as programs mature.
Next Steps

• Ongoing Development:
  — Award CBTC Design Build Contract
  — East Bay Substation Repackaging for Bid
  — Update forecast for 3rd Tranche

• Under Development
  — December 2020 Bond Oversight Meeting