

San Francisco Bay Area Rapid Transit District

2150 Webster Street, P. O. Box 12688, Oakland, CA 94604-2688



COMMITTEE MEETING AGENDA

Friday, September 16, 2022

9:30 AM

**via Teleconference Only. Zoom Link:
<https://us06web.zoom.us/j/88392379523>**

Bond Oversight Committee

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT
2150 Webster Street, P. O. Box 12688, Oakland, CA 94604-2688

NOTICE OF MEETING AND AGENDA
BOND OVERSIGHT COMMITTEE

Friday, September 16, 2022
9:30 a.m. – 12:00 p.m.

COMMITTEE MEMBERS: Marian Breitbart, Daren Gee, Michael McGill (Chair), Catherine Newman (Vice Chair), Cindy Simon Rosenthal, Vinit Shrawagi, Sonja C. Stewart

Please note, pursuant to all necessary findings having been made by the Board of Directors of the San Francisco Bay Area Rapid Transit District (for itself as well as all subordinate legislative bodies) to continue remote public meetings in the manner contemplated under urgency legislation Assembly Bill No. 361, public participation for this meeting will be via teleconference only.

Presentation materials will be available via Legistar at <https://bart.legistar.com>

You may join the Bond Oversight Committee (BOC) Meeting via Zoom by calling 1 (833) 548-0282 and entering access code 883 9237 9523; logging in to Zoom.com and entering access code 883 9237 9523; or typing the following Zoom link into your web browser:
<https://us06web.zoom.us/j/88392379523>

If you wish to make a public comment:

- 1) Submit written comments via email to ljohnso@bart.gov, using “public comment” as the subject line. Your comment will be provided to the Committee 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. of the day of the committee meeting in order to be included in the record.
- 2) Call 1 (833) 548-0282, enter access code 883 9237 9523, dial *9 to raise your hand when you wish to speak, and dial *6 to unmute when you are requested to speak; log in to Zoom.com, enter access code 883 9237 9523, and use the raise hand feature; or join the Committee Meeting via the Zoom link (<https://us06web.zoom.us/j/88392379523>) and use the raise hand feature.

Public comment is limited to three (3) minutes per person. Your phone will be muted until you are called upon.

AGENDA

1. Call to Order (9:30 am)
 - A. Roll Call
2. General Public Comment (Approx. 10 minutes)
3. Administrative Items: (For Discussion/Action - Approx. 15 minutes)
 - A. Approval of Meeting Minutes June 17, 2022
 - B. Ethics Training Discussion

Attachments: [Approval of Meeting Minutes June 17, 2022 - Minutes](#)

4. Annual Report (For Discussion/Action – Approx. 25 minutes)
 - A. Follow up on 2022 Annual Report Board Presentation & Directors Feedback
 - B. 2023 Annual Report Outline Suggestions
 - C. Appoint 2023 Annual Report Sub-committee
5. Measure RR BART Safety, Reliability and Traffic Relief Program Presentation (For Discussion)
 - A. Measure RR Overall Progress (For Discussion Approximately 5 minutes)
 1. Budget Update
 2. Schedule Update
 3. Q&A (Approx. 15 minutes)

Attachments: [Measure RR BART Safety, Reliability and Traffic Relief Program Presentation](#)

6. Future Agenda Items & Questions (For Discussion Approx. 15 minutes)
7. Committee Member & Staff Announcements (For Discussion Approx. 5 minutes)
 - A. Invitation to 50th Anniversary Sound Track Events.
8. Adjournment (12:00 pm)

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

Friday, June 17, 2022

9:30 AM – 12:00 PM

Via Zoom Conference Call

*******DRAFT MINUTES*******

MEETING NUMBER	MEETING DATE	MEETING TIME
Term 3, Meeting 4	Friday, June 17, 2022	9:30 am – 12:00 pm
	Present Members Michael McGill, Chair Catherine Newman, Vice Chair Marian Breitbart Daren Gee Sonja C. Stewart Cindy Simon Rosenthal Vinit Shrawagi	

Agenda Item	Meeting Notes
1. Call to Order (15 minutes)	Chair McGill calls the meeting to order.
A. Roll Call	All members are present.
2. General Public Comment	None.
3. Meeting Minutes: April 1, 2022	Member Gee moves to approve the minutes, Member Rosenthal seconds the motion. Everyone approves except Member Shrawagi who abstained as he was absent from the April 1, 2022 meeting.
4. Annual Report	Measure RR Staff Liaison Linton Johnson introduces Communications Officer Chris Filippi who leads discussion.

A. Annual Report Subcommittee Report	Chris Filippi discusses final edits to the report.
B. Q&A	Committee members ask clarifying questions.
C. Vote on Adopting 2022 Measure RR Annual Report	Annual Report Subcommittee Chair Gee moves to adopt the Annual Report with edits and suggestions from other committee members. Member Breitbart seconds the motion. The motion passes unanimously.
D. Appoint Member to Present to BART Board in July	Vice Chair Catherine Newman agrees to present. Members Rosenthal and Stewart agree to attend and be Vice Chair Newman's backup.
5. Measure RR BART Safety, Reliability and Traffic Relief Program Presentation	Assistant General Manager of Design and Construction Carl Holmes presents.
A. Measure RR Project Successes	Suresh Devarajan, Senior Manager of Engineering Programs Financial Analysis & Administration presents. Member Rosenthal says the information in slides 5 and 6 is powerful information but wants these slides to be clearer.
B. 10 Min Break	Committee takes break after item 5.C.
C. Preview of Next Year's Projects by Program	Devarajan presents.
D. Staff Organization Chart	Chief Maintenance and Engineer Sylvia Lamb presents.
E. Appendix: Financial Outlook, Project Status & Milestones	This item is for information only.
6. Future Agenda Items & Questions	Member Rosenthal refers to the paragraph of "Equity in RR" in the Annual Report and says she would like to have on the agenda in the coming year a nuanced discussion of what the Committee's expectations are about how the Committee reports on equity issues for the next report.
7. Committee Member Announcements/Thank BART Staff	Vice Chair Newman reminds members that the September meeting is a good time to dig into appendix items. She also says slides 5 and 6 of the presentation are good materials for next year's annual report. The Vice Chair also

	wants to see more info on equity and small business impacts shown geographically against the BART map. Maceo Wiggins, Director of the Office of Civil Rights, says his staff is working on creating a layered map to geographically show equity impacts.
8. Adjournment	Chair McGill adjourns meeting.



▶ 5. Measure RR BART Safety, Reliability and Traffic Relief Program Presentation

Bond Oversight Committee
September 16, 2022



Bond Oversight Committee

Duties & Responsibilities

- 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

Executive Summary

- Through June 2022, \$1.34B of the Measure RR funds have been invested to complete 41% of the work
- Successes
 - Completion of Power Upgrade to the Transbay Tube for the Oakland Emergency Generator Project
 - NTP for Hayward Maintenance Complex Phase 2: Civil/Grading
 - Board adoption of Stage Gate 1 for Link 21 (NTRC) Project
- Challenges
 - COVID-19
 - Material availability
 - Increased costs of labor and materials
 - C-Line Train derailment

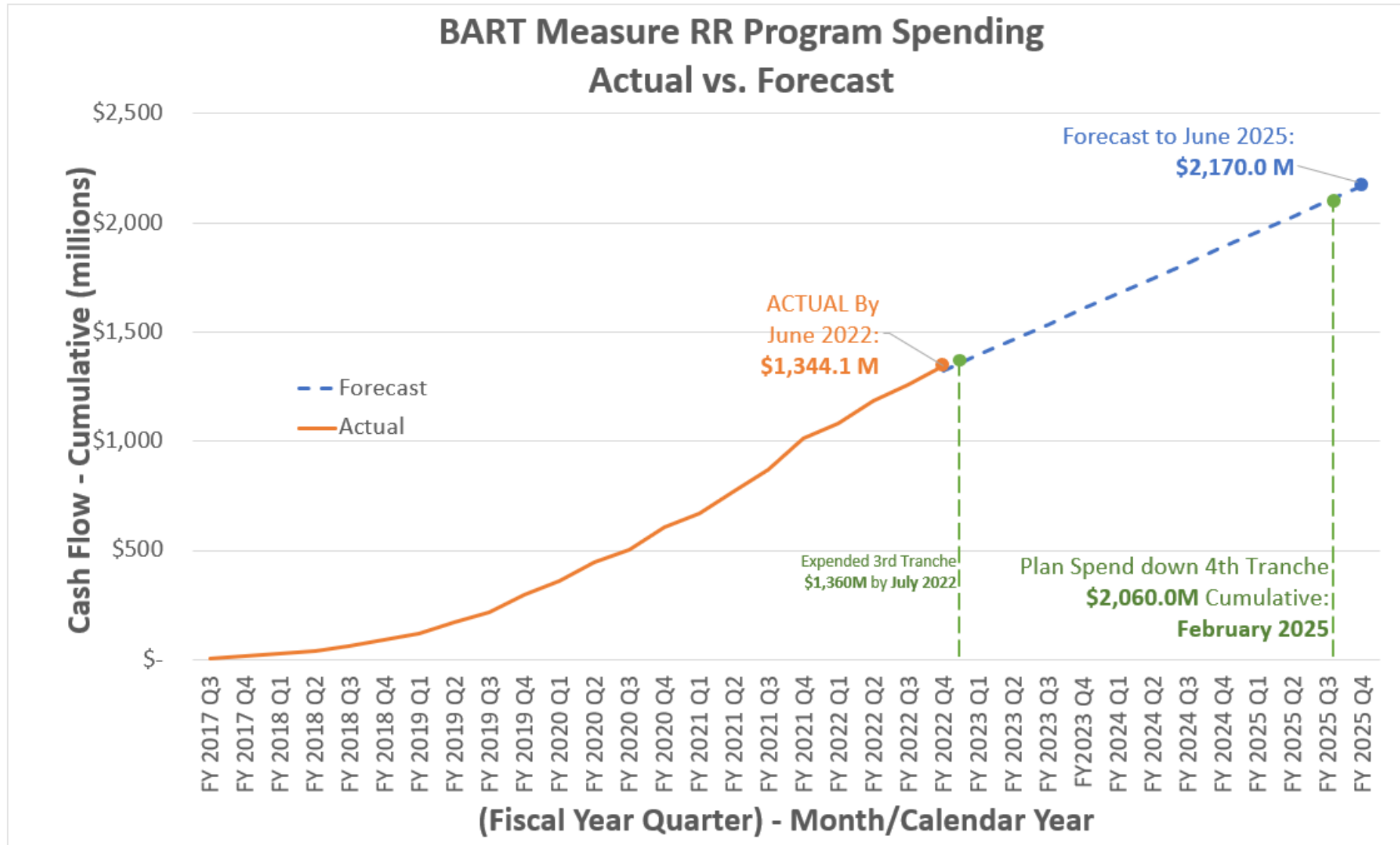
# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
3	36 (-1)	18	51 (+1)	45 (+2)	153(+2)

- + (Projects added in the phase)
- (Projects no longer in the phase)

Measure RR Overall Progress

5.A.1. Budget & Schedule Update

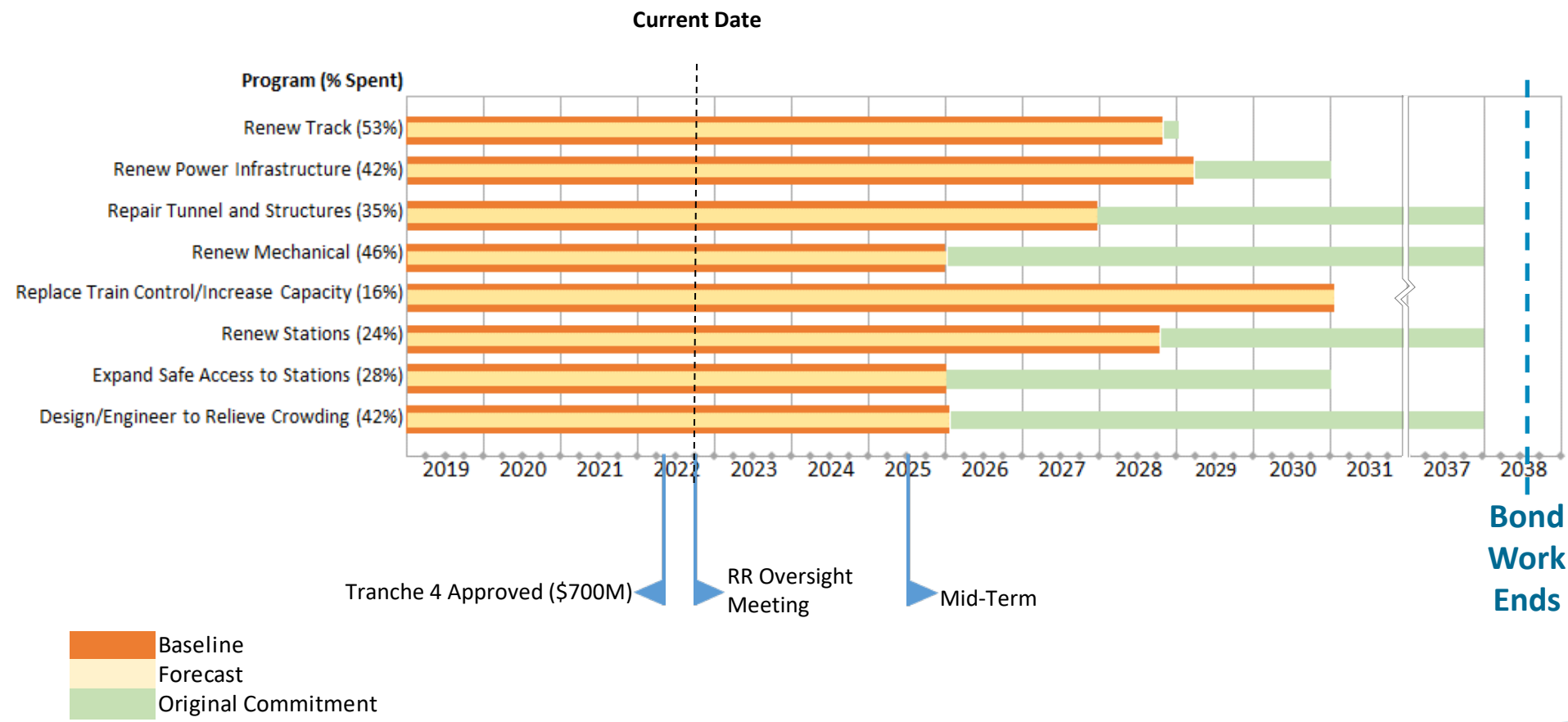
RR Overall Program Budget Progress



Measure RR Cashflow (\$ Millions) – Mid-Term & Long-Term Outlook

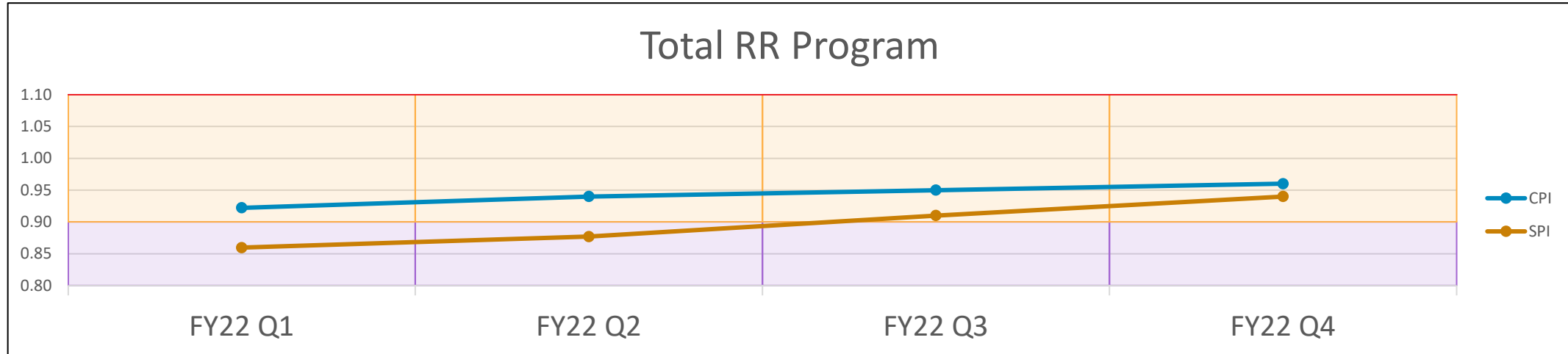
Program	Expended (thru March 2022)	Expended (thru June 2022)	Period Cashflow (April 2022 – June 2022)	% Expended out of Total Bond Investment	Forecast Expenditures	
					MID-TERM (thru 2025)	LONG-TERM (thru End of Bond)
Renew Track	\$314.3	\$332.9	\$18.6	53%	\$433.5	\$625
Renew Power Infrastructure	\$472.9	\$513.3	\$40.4	42%	\$868.0	\$1,225
Repair Tunnels & Structures	\$183.1	\$189.8	\$6.7	35%	\$318.3	\$549
Renew Mechanical	\$68.7	\$71.3	\$2.6	46%	\$133.0	\$156
Replace Train Control/Increase Capacity	\$62.1	\$63.6	\$1.5	16%	\$113.1	\$400
Renew Stations	\$49.4	\$51.0	\$1.7	24%	\$107.1	\$210
Expand Safe Access to Stations	\$36.1	\$37.4	\$1.3	28%	\$69.2	\$135
Design/Engineer to Relieve Crowding	\$72.3	\$84.8	\$12.5	42%	\$127.8	\$200
Total	\$1,258.8	\$1,344.1	\$85.2	38%	\$2,170.0	\$3,500

Program Level Schedule Update



Earned Value Rollup by Program As of June 2022

Goal: CPI and SPI between 0.9 and 1.1



RR Program	Total RR Budget	Physical % Complete	Planned Value	Earned Value	RR Accrued to Date	CPI	SPI
Renew Track	\$625	61%	\$371.93	\$378.90	\$371.74	1.02	1.02
Renew Power	\$1,225	44%	\$613.54	\$539.82	\$612.67	0.88	0.88
Repair Tunnels and Structures	\$549	36%	\$200.30	\$199.27	\$194.32	1.03	0.99
Renew Mechanical	\$156	46%	\$81.28	\$71.94	\$70.11	1.03	0.89
Replace Train Control/ Increase Capacity	\$400	15%	\$65.36	\$60.10	\$63.56	0.95	0.92
Renew Stations	\$210	27%	\$56.85	\$57.30	\$55.28	1.04	1.01
Expand Safe Access to Stations	\$135	27%	\$42.18	\$37.10	\$37.86	0.98	0.88
Design/Engineer to Relieve Crowding	\$200	42%	\$89.98	\$83.82	\$90.34	0.93	0.93
Total	\$3,500	41%	\$1,521.44	\$1,428.24	\$1,495.86	0.95	0.94

CPI – Cost Performance Index SPI – Schedule Performance Index



Track Program Drill Down

Project	Count
Number of Projects (>25% Spent)	17
CPI <0.9 or >1.1	2
SPI <0.9 or >1.1	2
Number of Risk Register Updates Performed in Previous Period	15
Number of Project(s) with Quality Reviews Performed in Previous Period	5

Project	Physical % Complete	CPI	SPI	Comments
Replace Direct Fixation Pads	83%	1.03	1.64	Realized efficiencies during construction
Frog Capital Maintenance	80%	1.11	0.97	Work performed shifted to normal blanket hours
Switch Replacement	48%	0.70	1.13	Added 37 switches to scope to increase total to 85. Realized efficiency from extended blanket hours but at higher cost.

Power Program Drill Down

Project				Count
Number of Projects (>25% Spent)				19
CPI <0.9 or >1.1				6
SPI <0.9 or >1.1				3
Number of Risk Register Updates Performed in Previous Period				5
Number of Project(s) with Quality Reviews Performed in Previous Period				2
Project	Physical % Complete	CPI	SPI	Comments
San Leandro and Transbay Tube East Substation Replacements	89%	0.83	1.04	Costs of pre-requisite work increased due to complex site conditions. Working with contractor to minimize project impact
CWS Bulk Supply Transformer	81%	0.89	0.94	Material procurement and PSPS-related delays increased construction management and design costs
A-Line 34.5kV AC Cable Replacement	51%	0.89	1.03	Differing site conditions lead to multiple change orders. Working with contractor to minimize project impact
MPR Install & Rectifier Rehab	48%	0.91	0.77	Installation progress impacted by R-Line emergency repairs
Stations Emergency Lighting	47%	0.88	0.56	Change notice executed to address differing site conditions
SFTS Transformer / Bus Upgrade	30%	0.73	0.30	Coordination with external agencies for transformer design, testing and installation plans
R-Line 34.5kV AC Cable Replacement	27%	0.77	1.05	Accelerated installation impacted by R-Line emergency as work was performed over extended hours and multiple crews.

Tunnels & Structures Program Drill Down

Project	Count
Number of Projects (>25% Spent)	26
CPI <0.9 or >1.1	0
SPI <0.9 or >1.1	3
Number of Risk Register Updates Performed in Previous Period	6
Number of Project(s) with Quality Reviews Performed in Previous Period	7

Project	Physical % Complete	CPI	SPI	Comments
Water Intrusion Escalator/Elevator	76%	0.97	0.77	Installation progress impacted by R-Line emergency repairs
Wayside Regulatory Signage	48%	1.07	0.83	Resources reallocated to higher priority projects
Substation Roofs	34%	1.07	0.73	New safety requirements impacted the schedule

Mechanical Program Drill Down

Project				Count
Number of Projects (>25% Spent)				21
CPI <0.9 or >1.1				1
SPI <0.9 or >1.1				1
Number of Risk Register Updates Performed in Previous Period				2
Number of Project(s) with Quality Reviews Performed in Previous Period				3

Project	Physical % Complete	CPI	SPI	Comments
Replace Fire Hoses and Piping	99%	1.24	0.99	Self-performed to improve efficiency.
Turntables replacement at OCY and ORY	39%	1.08	0.56	Challenges associated with turntable manufacturer supply chain, and alternate/temporary power feed for new turntable

Station Access Program Drill Down

Project				Count
Number of Projects (>25% Spent)				15
CPI <0.9 or >1.1				1
SPI <0.9 or >1.1				0
Number of Risk Register Updates Performed in Previous Period				0
Number of Project(s) with Quality Reviews Performed in Previous Period				0

Project	Physical % Complete	CPI	SPI	Comments
North Berkeley Station Access Improvement	27%	1.09	0.70	Resources reallocated to higher priority projects

Relieve Crowding Program Drill Down

Project				Count
Number of Projects (>25% Spent)				5
CPI <0.9 or >1.1				0
SPI <0.9 or >1.1				2
Number of Risk Register Updates Performed in Previous Period				5
Number of Project(s) with Quality Reviews Performed in Previous Period				2
Project	Physical % Complete	CPI	SPI	Comments
Civic Center Scissor Stairs	79%	0.95	0.81	Stainless steel cladding fabricating taking longer than anticipated
Hayward Maintenance Phase 2	30%	1.11	0.66	Schedule recovery from stop notice issued to consultant team

Measure RR Overall Progress

5.A.2. Q&A

5.B. 10 Minute Break

5.C. Financial Outlook, Program Status & Milestones

5.C.1. Office of Civil Rights

RR Program Update – Small Business

Program	Total RR Commitment	Total RR SB Commitment	SB Commitment %	# of SB Contracts	Total RR Payments on RR Contracts	RR Payments to SBs	SB Payment %
Renew Track	\$155.2 M	\$34.1 M	22%	142	\$123.1 M	\$27.6 M	22%
Renew Power	\$363.1 M	\$115.1 M	32%	312	\$241.3 M (+\$11 M)	\$111.6 M	46%
Repair Tunnels & Structures	\$144.5 M	\$30.3 M	21%	146	\$115.1 M	\$15.5 M	13%
Renew Mechanical	\$35.6 M	\$12.3 M	35%	79	\$24.8 M	\$9.3 M	37%
Replace Train Control/Increase Capacity	\$31.8 M	\$6.5 M	20%	117	\$23.1 M	\$2.7 M	12%
Renew Stations	\$151.9 M	\$28.6 M	19%	122	\$44.3 M	\$10.1 M	23%
Expand Safe Access to Stations	\$20.4 M	\$6.2 M	30%	163	\$14.0 M	\$4.8 M	34%
Design/Engineer to Relieve Crowding	\$136.2 M	\$34.8 M	26%	197	\$78.5 M (+\$9M)	\$21.4 M	27%
Total	\$1,038.7 M	\$267.9 M	26%	1277	\$664.2 M	\$202.9 M(+\$25M)	31% (+1%)

Notes: All amounts are based on RR fund percent only. Amounts are updated to July 31, 2022. 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 – 2022 Outreach



Recently Completed Events

- How to do Business with BART- Zoom
- CA Hispanic Chamber of Commerce Annual Statewide Convention - Oakland

Upcoming Events

- How to Become a BART Certified Vendor - Zoom
- Learn BART's Procurement Process and Meet Procurement Staff – Zoom






5.C.1.1. Q&A

5.C.2. Human Resources/Staffing

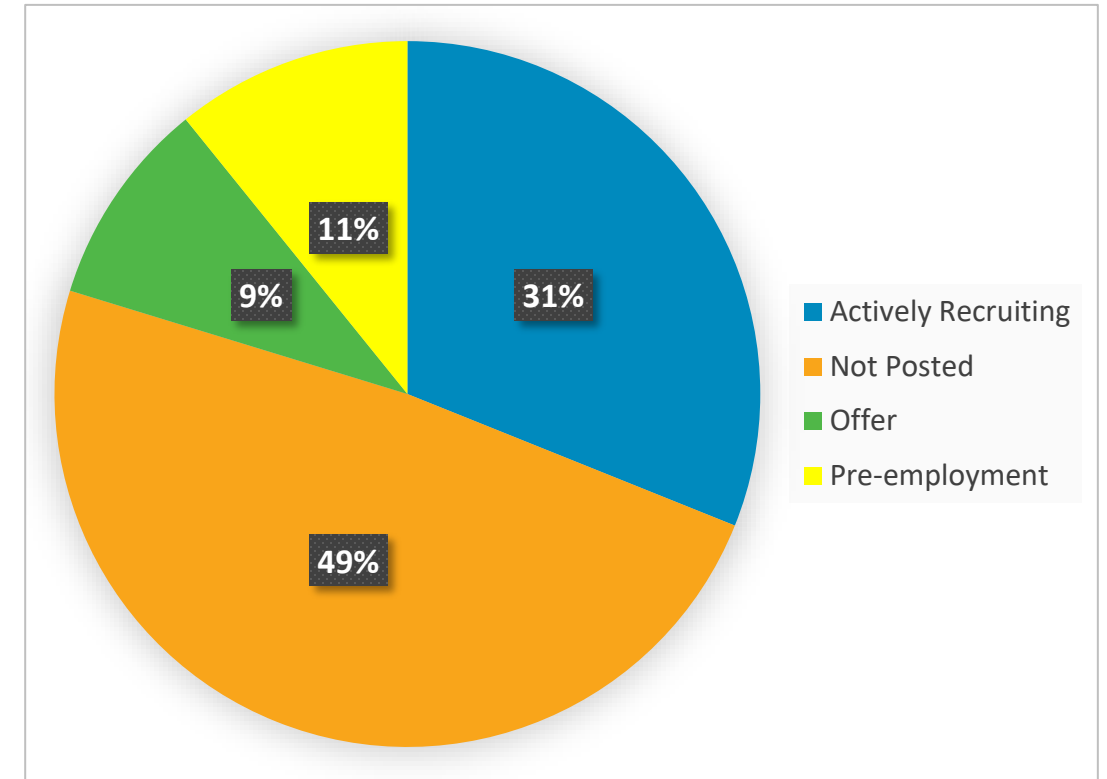
Recruitment Status Summary

Description	Number of Positions
Filled Positions	238
Vacant Positions	74
RR Positions Hired FY22	33

	Vacant Position Categories	Number of Positions
	Engineering	18
	Project Management/Support	22
	Construction Crews	34

Data as of 9/1/2022

VACANT MEASURE RR POSITIONS



Talent Acquisition Strategies – Vacant Positions

CREATING A STRONG BART TALENT SOURCING PRESENCE



- Leveraging Internal Partnerships
 - External Affairs
 - Workforce Development
 - Office of Civil Rights



- Strengthening External Workforce Partnerships
 - Community Based Organizations
 - Educational Institutions
 - Pre-apprenticeship Programs



- Leveraging Social Media Platforms
 - Updating Marketing
 - External Job Boards



5.C.2.1. Q&A

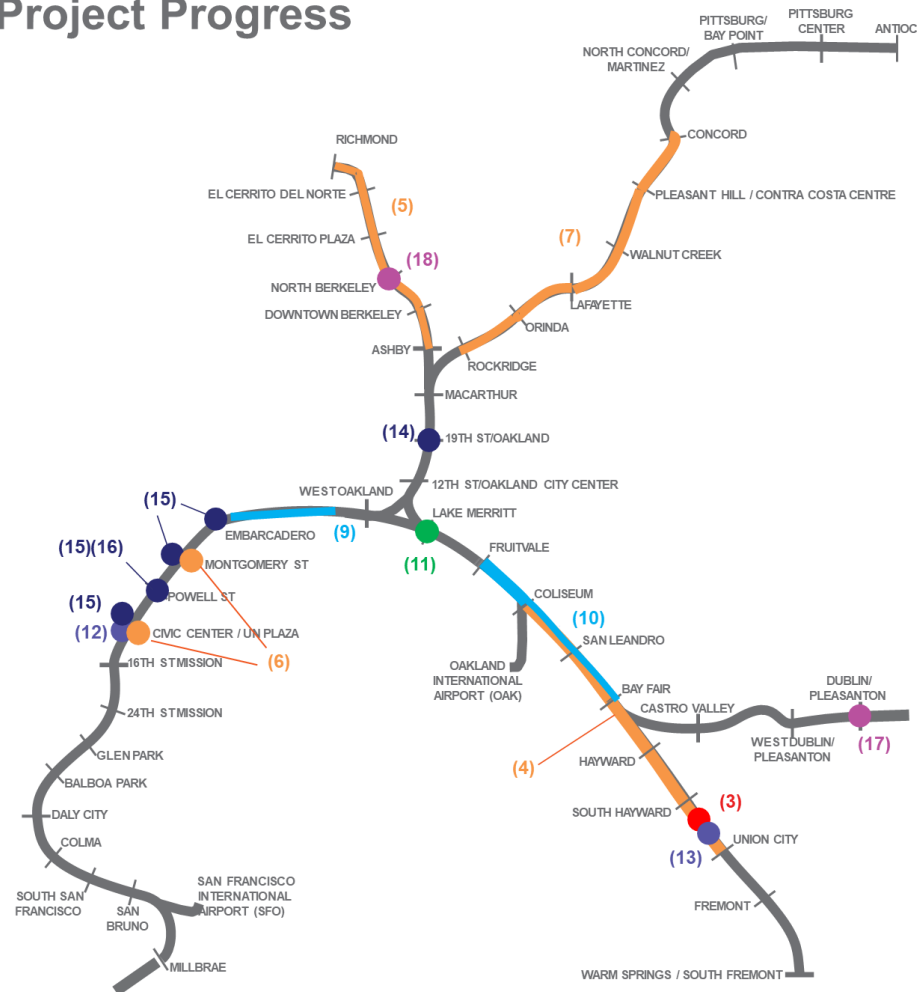
5.C.3. Program Updates

Work Progress Since Last Meeting



Examples of Active RR Projects in April 2022 – June 2022

Measure RR – Project Progress



*Updated projects

Renew Track

- 1 Replace Direct Fixation Pads (Systemwide Not Mapped) – Ongoing Construction
- 2 Rail Relay (Systemwide Not Mapped) – Ongoing Construction
- 3 A77 Track Interlocking Replacement – Ongoing Construction

Renew Power Infrastructure

- 4 A-Line 34.5kV Cable Replacement – Ongoing Construction*
- 5 R-Line 34.5kV Cable Replacement – Ongoing Construction
- 6 Substation for Core Capacity – Ongoing Construction
- 7 C-Line 34.5kV Cable Replacement – Ongoing Construction

Renew Tunnel & Structures

- 8 Water Intrusion at Train Control Rooms - Ongoing Construction - (Systemwide Not Mapped)
- 9 Earthquake Safety Program – Transbay Tube Retrofit – Ongoing Construction
- 10 Aerial Fall Protection A Line North – Ongoing Construction

Renew Mechanical

- 11 LMA HVAC Renovation – In Design

Design/Engineer to Relieve Crowding

- 12 Civic Center Scissor Stairs – Ongoing Construction
- 13 Hayward Maintenance Complex (HMC) Phase 2: Civil & Grading – Notice to Proceed*

Renew Stations

- 14 19th Street Station Modernization – Ongoing Construction
- 15 Market Street Canopies and Escalator – Ongoing Construction
- 16 Powell Street Station Modernization – Ongoing construction

Expand Safe Access

- 17 Dublin Iron Horse Tail Bridge (SR2B) – Began Construction*
- 18 North Berkeley Access Improvements – Ongoing Construction

Replace Train Control/Increase Capacity

- 19 Enabling Works (Systemwide Not Mapped) – Ongoing Construction*



Individual Program Milestones



Renew Track

STATUS & MILESTONES

EXPENDED Thru 6/2022: **\$332.9**

FORECAST Thru 6/2025: **\$433.5**

TOTAL PROGRAM VALUE: **\$625**

PERIOD CASHFLOW: **\$18.6**

STATUS – Renew Track

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
0	2	1	8	9	20

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (Jan 2023 – Mar 2023)
<ul style="list-style-type: none"> Contract Award for K Line Interlocking Replacement Special Trackwork (near Rockridge Station) <i>Substantial Completion of Construction by Contractor Oakland Yard Tracks</i> 	<ul style="list-style-type: none"> Completion of Design K Line Interlocking Replacement <i>Issue for Bid K Line Interlocking Replacement Special Trackwork (near MacArthur Station)</i> 	<ul style="list-style-type: none"> Substantial Completion of Construction A77 Track Interlocking Replacement Contract Award K Line Interlocking Replacement Special Trackwork (near MacArthur Station) Substantial Completion of Rail Reprofilng (Systemwide) <i>Issue for Bid for K Line Interlocking Replacement Traction Power Materials</i> <i>Complete Design of Richmond Yard Track Rehabilitation (Phase 1 Transfer Switches)</i> 	<ul style="list-style-type: none"> <i>Substantial Completion of Construction by BART forces Oakland Yard Tracks</i> <i>Issue for Bid Richmond Yard Track Rehabilitation Special Trackwork (Phase 1 Transfer Switches)</i> <i>Begin Construction of K Line Interlocking Replacement (near Rockridge Station)</i>

Italic: Modified milestones from previous report.



Renew Power

STATUS & MILESTONES

EXPENDED Thru 6/2022: \$513.3

FORECAST Thru 6/2025: \$868.0

TOTAL PROGRAM VALUE: \$1,225

PERIOD CASHFLOW: \$40.4

STATUS – Renew Power Infrastructure

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
0	4	4	19	2	29

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (Jan 2023 – Mar 2023)
<ul style="list-style-type: none"> Completion of Power to the Transbay Tube for the Oakland Emergency Generator Project Completion of Design for the K Line 34.5kV Cable Replacement Substantial Completion of Steppable Trays and AFM IDS Installation for A Line 34.5kV Cable Replacement 	<ul style="list-style-type: none"> Completion of Design for MET G Generator Replacement Project Issue for Bid Walnut Creek Traction Power Substation Replacement 	<ul style="list-style-type: none"> Contract Award Station Fire Alarm Replacement Phase 3 Issue for Bid PG&E Feed for Gap Breaker Project Substantial Completion of CWS Transformer Replacement 	<ul style="list-style-type: none"> <i>Substantial Completion of Fire Alarm Replacement Phase 2</i> <i>Design Completion for Fire Alarm Replacement Phase 4</i> <i>Issue for Bid for the Cast Coil Transformer Replacement Project</i>

Watchlist:

- Bid Package Development for Walnut Creek Traction Power Substation Replacement

Italic: Modified milestones from previous report.



Tunnels & Structures

STATUS & MILESTONES

EXPENDED Thru 6/2022: \$189.8

FORECAST Thru 6/2025: \$318.3

TOTAL PROGRAM VALUE: \$549

PERIOD CASHFLOW: \$6.7

STATUS – Repair Tunnels & Structures

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
0	9	2	7	8	26

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (January 2023 – March 2023)
<ul style="list-style-type: none"> Completion of Design for Water Intrusion at Track and Platform Joint at C and R Lines Completion of Design for Water Intrusion at Track and Platform Joint at A Line Completion of Construction for Renew Catwalks (<i>Pilot Project</i>) 	<ul style="list-style-type: none"> Completion of Design for Tunnel Waterproofing at R Line <i>Complete Trackway Demolition and Restoration for TBT Retrofit</i> 	<ul style="list-style-type: none"> Completion of Construction Aerial Fall Protection (A Line North & Central) Completion of Design for Tunnel Waterproofing at M Line Completion of Construction for Richmond Yard Fence Rehabilitation Completion of Design for Water Intrusion at Train Control Rooms (Package 2) <i>Complete Pump System Upgrade for TBT Retrofit</i> <i>Complete M2 Bore Retrofit for TBT Retrofit</i> 	<ul style="list-style-type: none"> <i>Completion of Design for Water Intrusion at Train Control Rooms (Package 3)</i> <i>Completion of Design for Slope Stabilization Systemwide</i> <i>Begin Construction for Water Intrusion at Escalator & Elevator</i>

Watchlist:

- Environmental Clearance for Slope Stabilization Systemwide

Italic: Modified milestones from previous report.



Renew Mechanical

STATUS & MILESTONES

EXPENDED Thru 6/2022: **\$71.3**

FORECAST Thru 6/2025: **\$133.0**

TOTAL PROGRAM VALUE: **\$156**

PERIOD CASHFLOW: **\$2.6**

STATUS – Renew Mechanical

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
1	7	3	4	11	26

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (Jan 2023 – Mar 2023)
<ul style="list-style-type: none"> • Completion of Construction for Rotoclones Replacement • Completion of Design for Control Tower HVAC 	<ul style="list-style-type: none"> • Completion of Design Facilities HVAC Replacement (Yard Control Towers) • Begin Construction for Fire Services at Hayward Yard • Procurement of Concord Yard Wheel Truing Machine 	<ul style="list-style-type: none"> • <i>Completion of Design for LMA HVAC Renovation</i> 	<ul style="list-style-type: none"> • <i>Issue for Bid LMA HVAC Renovation</i> • <i>Issue for Bid Fire Suppression Upgrade</i>

Watchlist:

- Issue for Bid Concord Yard Wheel Truing Facility Construction

Italic: Modified milestones from previous report.



Replace Train Control

STATUS & MILESTONES

EXPENDED Thru 6/2022: **\$63.6**

FORECAST Thru 6/2025: **\$113.1**

TOTAL PROGRAM VALUE: **\$400**

PERIOD CASHFLOW: **\$1.5**

STATUS – Replace Train Control / Increase Capacity

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
0	0	2	4	0	6
MILESTONES					
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (Jan 2023 – Mar 2023)		
<ul style="list-style-type: none"> • Begin installation of LIDAR survey bench markers on W, Y, M Lines • Completed CBTC Preliminary Design – Gate 1 and start CBTC Final Design Review (FDR) • Begin prep work for Enabling Works in-house and NTP for non-revenue equipment Hi-Railers • <i>Complete Electromagnetic Interface and Conductivity test (EMI/EMC) Survey on ROW for CBTC</i> 	<ul style="list-style-type: none"> • Complete CBTC Preliminary Design Gate 2 and continue FDR • Start Automatic Train Supervision (ATS) Human Machine Interface (HMI) & ATS sub-system requirement for Build Release 3 testing • <i>Begin proof of concept installation at Hayward Test Track</i> • <i>Advertise for Haz Mat on-call for Enabling Works</i> 	<ul style="list-style-type: none"> • Start CBTC equipment installations at Hayward Test Track • Issue NTP for Haz Mat on-call for Enabling Works 	<ul style="list-style-type: none"> • <i>Install foundations at Dublin and Hayward Test Track</i> • <i>Complete Vehicle Impacted Preliminary Design Review (PDR)</i> • <i>Advertise Traffic Control on-call</i> • <i>Begin Construction CBTC Wayside Phase 2</i> • <i>Begin Construction Dublin Test Track</i> • Complete CBTC Oakland Lab Installation 		

Watchlist:

- CBTC Lab Installation – Securing Building Permit from City of Oakland

Italic: Modified milestones from previous report.



Renew Stations

STATUS & MILESTONES

STATUS – Renew Stations

EXPENDED Thru 6/2022: \$51.0

FORECAST Thru 6/2025: \$107.1

TOTAL PROGRAM VALUE: \$210

PERIOD CASHFLOW: \$1.7

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
0	2	0	4	3	9

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (Jan 2023 – Mar 2023)
<ul style="list-style-type: none"> Opening of the new offices/breakrooms at Sector 6 for Powell St. Station Modernization Completion of New glass barriers & faregates at Secondary Entrance/Sector 4 for Powell St. Station modernization Relocation of TVMs at Secondary Entrance for Powell St. Station Modernization Completion of Trash Bin Enclosure Renovation for Powell St. Station Modernization Completion of remainder of <i>first</i> escalators in the 2nd Group of Market St. Escalators and begin construction on the remainder of 3rd Group Begin Construction of Canopy 3 at Embarcadero Station and canopy 22 at Civic center Stations. 	<ul style="list-style-type: none"> <i>Complete last of 2nd Group and continue with 3rd Group of Market Street Escalators installation</i> Completion new office, breakroom and utility room at Sector 6 – Powell Modernization Completion of LED lighting at platform and trackside – Powell Modernization Completion of painting at platform level – Powell Modernization <i>Complete new Station Agent Booth and Fare Gate cutovers at the north end – 19th St Station Modernization.</i> <i>Complete new south end fare gate array – 19th St Station Modernization</i> 	<ul style="list-style-type: none"> Complete renovation of System Services Offices for Powell St. Station Modernization Completion of staircase LED lighting enhancement – Powell Modernization Installation of Light Box Art Work at Hallidie Plaza – Powell Modernization <i>Contract Completion for 19th St Station Modernization</i> <i>Complete construction of first two canopies (Powell and Montgomery) and continue with installation of second two canopies (Civic Center and Embarcadero) – Market Street Entry Canopies</i> <i>Complete Embarcadero platform escalator P2 for Market Street Escalators Project.</i> <i>Complete Art wall relocation – Powell Modernization</i> 	<ul style="list-style-type: none"> <i>Complete 2nd group of canopies (Civic Center and Embarcadero) and begin construction of two new canopies of the Market St. Entry Canopies Contract</i>

Italic: Modified milestones from previous report.



Station Access

STATUS & MILESTONES

EXPENDED Thru 6/2022: **\$37.4**

FORECAST Thru 6/2025: **\$69.2**

TOTAL PROGRAM VALUE: **\$135**

PERIOD CASHFLOW: **\$1.3**

STATUS – Expand Safe Access to Stations

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
0	10	6	3	11	30

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (Jan 2023 – Mar 2023)
<ul style="list-style-type: none"> Completed field punch list work for Warm Springs West Access Bridge Project Begin Construction of SR2B-funded City of Dublin Iron Horse Trail bridge 	<ul style="list-style-type: none"> Complete Design for 19th St. Active Access Improvement Project Re-Advertise for Accessibility Improvement (Phase 1 & 2) Begin Construction of SR2B-funded City of Fremont Walnut Ave./Liberty St. protected intersection Advertise for the East Bay Greenway II Project Advertise for PA System Improvement Advertise for Wayfinding Improvements Phase 4 	<ul style="list-style-type: none"> Award for Accessibility Improvement (Phase 1 & 2) Complete construction of SR2B-funded SFMTA 5th Street Improvement project Completion of Construction for 12th St. Bike Racks Begin Construction for Balboa Park – Upper Plaza Project Award for Wayfinding Improvements Phase 4 	<ul style="list-style-type: none"> NTP for Accessibility Improvement (Phase 1 & 2) Award for PA System Improvement Complete design for Ashby Access Improvement Project Complete design for the Dublin/Pleasanton Access Improvement Project NTP for East Bay Greenway II Project

Watchlist:

City of Pittsburg BART Ped/Bike Connectivity Project Construction

Italic: Modified milestones from previous report.



Relieve Crowding

STATUS & MILESTONES

EXPENDED Thru 6/2022: **\$84.8**
 FORECAST Thru 6/2025: **\$127.8**
 TOTAL PROGRAM VALUE: **\$200**
 PERIOD CASHFLOW: **\$12.5**

STATUS – Design / Engineer to Relieve Crowding

# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
2	2	0	2	1	7

MILESTONES			
Completed (Apr 2022 – Jun 2022)	Q1 (Jul 2022 – Sept 2022)	Q2 (Oct 2022 – Dec 2022)	Q3 (January 2023 – March 2023)
<ul style="list-style-type: none"> NTP for Hayward Maintenance Complex Phase 2: Civil/Grading Board adoption of Stage Gate 1 for Link 21 (NTRC) Project 	<ul style="list-style-type: none"> Mobilization for Hayward Maintenance Complex Phase 2: Civil/Grading Complete Opportunities and Constraints Report and Freight Rail Coordination Study for Link 21 (NTRC) 	<ul style="list-style-type: none"> Completion of Construction for Civic Center Platform Stairs Round 3 of Public Outreach and cocreation meeting for Link21 (NTRC) Program) 	<ul style="list-style-type: none"> <i>Complete Design for Hayward Maintenance Complex 2: East Storage Yard</i> <i>Complete Special Trackwork Delivery for Hayward Maintenance Complex 2: Trackwork Procurement</i>

Italic: Modified milestones from previous report.



Next Steps

- Appoint 2023 Annual Report Sub-committee
- December 2022 Bond Oversight Meeting



Thank you!

