

2023 Prop L 5-Year Prioritization Program

BART Core Capacity

Approved: October 24, 2023



**San Francisco
County Transportation
Authority**

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This report was prepared by the San Francisco County Transportation Authority in coordination with the San Francisco Bay Area Rapid Transit District.



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1. Introduction

In November 2022, San Francisco voters approved Proposition L (Prop L), extending the ½-cent sales tax to fund transportation improvements and approving a new 30-year Expenditure Plan, which superseded the prior Proposition K Expenditure Plan. The Prop L Expenditure Plan determines eligibility for sales tax funds through a list of 28 programs. It also sets caps for the maximum amount of Prop L funds that will be available for specific programs over the 30-year Expenditure Plan period, totaling up to an estimated \$2.6 billion (2020 \$'s). In order to fully fund the programs, the Expenditure Plan assumes that the Prop L dollars will leverage (or match) another \$23.7 billion (2020 \$'s) in other federal, state, regional, and local funds for a total program cost of \$26.3 billion (2020 \$'s). Some of those leveraged funds will be distributed to San Francisco through funding formulas. In other cases, San Francisco project sponsors will have to aggressively compete for discretionary funds in order to fully fund the Expenditure Plan programs.

The Expenditure Plan includes a number of requirements, including the development of 5-Year Prioritization Programs (5YPPs) as a condition for receiving allocations in each program in the Expenditure Plan. The 5YPPs are intended to provide a stronger link between project selection and expected project performance, to support on time, on-budget project delivery, and optimize use of federal, state and regional matching funds. Other major benefits of the 5YPPs include:

- Provide transparency about how Prop L projects are prioritized,
- Enable public input early and throughout the planning process, and
- Improve agency coordination within and across projects at the earlier stages of the planning process.

The desired outcome of the 5YPPs is the establishment of a strong pipeline of grant-ready transportation projects that can be advanced as soon as funds (including Prop L, federal, state, and other funds) are available. The 5YPPs are critically important to help achieve the leveraging needed to fully fund the Expenditure Plan programs.

As its centerpiece, each 5YPP contains a 5-year Program of Projects (or project list), ideally including project descriptions, schedule milestones, cost estimates, and full funding plans showing Prop L funds by fiscal year and other matching funds. The Program of Projects (project list) for BART Core Capacity is contained in Section 7 of this document.

2. Eligibility and Expected Fund Leveraging

2.1 | ELIGIBILITY

Eligibility for the Prop L BART Core Capacity program as identified in the voter approved Expenditure Plan is as follows, with amounts shown in millions of 2020 dollars:

“BART Core Capacity: Improvements that will allow BART to operate up to 30 ten-car trains per hour in each direction through the existing Transbay Tube (an increase from the current capacity of 23 trains per hour). Eligible project types include: new (additional) rail cars; a new communications-based train control system; a new rail car storage yard at the Hayward Maintenance Complex; and additional traction power substations to provide the power needed for more frequent service. Includes project development and capital costs. As a prerequisite to allocation of funds, the Transportation Authority Board shall consider whether Alameda and Contra Costa Counties have contributed a commensurate amount to the BART Core Capacity Program. Sponsor Agency: BART. Total funding: \$3,536.4M; EP: \$100M.”

BART stands for San Francisco Bay Area Rapid Transit District.

2.2 | EXPECTED FUND LEVERAGING

Leveraging Prop L funds against non-Prop L fund sources is necessary to fully fund the Expenditure Plan programs. Prop L sales tax funds will be used as seed funding for planning and project development to make projects competitive for discretionary fund sources, and to serve as local match needed to secure federal, state, regional, and other grant funding.

Based on Priority 1 (conservative forecast) funding levels, for BART Core Capacity, the Prop L Expenditure Plan assumes that for every \$1 of sales tax revenue spent, on average it would be leveraged by about \$34.36 in non-Prop L funds. The Transportation Authority reviews leveraging at the project and project phase (e.g. planning, design, construction) levels as well as for each Expenditure Plan program as a whole.

3. Public Engagement

Transportation Authority staff conducted public engagement to inform the development of the 5YPPs. This section summarizes feedback heard from that

engagement, as well as information provided by project sponsors regarding public engagement and community support.

During the Prop L Expenditure Plan development, the Transportation Authority conducted a robust outreach process from Spring 2021 - Winter 2022. The New Expenditure Plan for San Francisco's Half-Cent Sales Tax for Transportation: Outreach Findings report can be found on the Transportation Authority website. Key themes emerged from this process including broad support for improving transit, including improvements to reliability, customer experience, better connections, and additional service.

As part of development of the 2023 5YPPs, the Transportation Authority conducted outreach and hosted public meetings to gather input about which specific projects and project types should be funded through Prop L in the next five years and to seek input on how to select projects for each Expenditure Plan program. The meetings included a virtual meeting for interested members of the former Expenditure Plan Advisory Committee who helped develop Prop L and representatives of equity-focused community-based organizations; a virtual town hall; and presentations at community group meetings, as requested. There was also an online multi-lingual survey and opportunities for public input through the Transportation Authority's website and at multiple Transportation Authority Community Advisory Committee and Transportation Authority Board meetings. The Transportation Authority website also includes a list of staff contacts to facilitate public engagement directly with project sponsors.

To learn more, visit sfcta.org/ExpenditurePlan. The findings from the 5YPP outreach process will be published on this webpage in September 2023. Key themes emerged from this process including support for transit reliability improvements.

4. Performance Measures

Prop L requires the establishment of performance measures for each program in the Expenditure Plan. The intent is to demonstrate the system performance benefits of sales tax projects (e.g. reduced transit travel time), to ensure funds are being used cost effectively, and to inform programming of future Prop L funds, as well as programming and prioritization of other funds by the Transportation Authority (e.g. Transportation Fund for Clean Air, Prop AA Vehicle Registration Fee funds).

After reviewing San Francisco's Congestion Management Program and consulting with eligible sponsoring agencies, the Transportation Authority recommends that the following performance measures be applied to projects included in the BART Core Capacity 5YPP:

- Improved reliability - train delays related to train control system
- Increased peak hour capacity - capacity to operate X trains per hour through the Transbay Tube

5. Project Delivery Snapshot

Since this is the inaugural Prop L 5YPP, we are looking to the prior Prop K sales tax program to assess project delivery trends for similar types of projects. Project delivery for previously-funded projects is one important consideration when we evaluate project sponsors' proposed requests for Prop L funding, particularly with respect to project readiness.

As required by the Prop L Expenditure Plan, the next 5YPP update also will be informed by the citywide geographic distribution of sales tax project allocations and the distribution of projects located in Equity Priority Communities and/or benefiting disadvantaged populations.

Prop K Project Delivery

While the BART Core Capacity program was not part of the Prop K Expenditure Plan, the Transportation Authority allocated Prop K funds to BART to complete design engineering for replacement of a traction power substation at Powell Street Station (See Table 1 below). This project is similar to some elements of the Core Capacity Program.

The Powell traction power substation grant has been on hold due to BART engineering staffing challenges. In June 2023, BART reported that they are onboarding new engineers and consultants and anticipate resuming work on the substation by October 2023. BART's latest progress report indicated that the project is at 95% complete with the design phase.

Table 1. Prop K Project Status

| SPONSOR | PROJECT NAME | PHASE(S) FUNDED | FY OF ALLOCATION | ALLOCATED (AS OF JUNE 2023) | REMAINING BALANCE (AS OF 8/25/23) | OPEN FOR USE? |
|---------|---|--------------------|------------------|-----------------------------|-----------------------------------|---------------|
| BART | Traction Power Substation Replacement, Powell St. Station | Design Engineering | 2021/22 | \$1,500,000 | \$631,617 | No |

BART Core Capacity

The BART Core Capacity Program is a package of strategic investments that will allow BART to operate up to 30 ten-car trains per hour (300 cars) in each direction through the existing tube (current capacity is 24 trains per hour), maximizing throughput in the most heavily used part of its system. The Core Capacity Program includes four elements: 306 additional rail cars to provide the additional trains needed, a new communications-based train control system that will allow closer headways (shorter wait times between trains), a new railcar storage yard at the Hayward Maintenance Complex (Phase 2), and additional traction power substations to provide the additional power needed for the more frequent service.

BART Core Capacity is one of Prop L's major transit projects and it is a Bay Area's megaproject with a current \$4.4 billion overall cost. It is funded with a wide variety of federal, state, regional, and local grants including the highly competitive Federal Transit Administration's (FTA's) Capital Investment Grant (CIG) Program. As part of the CIG Program, BART Core Capacity is subject to oversight by the FTA and FTA's Program Management Oversight Consultants or PMOC. The Transportation Authority has been participating in periodic funding partner meetings with BART, the Metropolitan Transportation Commission, and the sales tax authorities from the other two BART district counties, namely Alameda County Transportation Commission and the Contra Costa County Transportation Authority. With the passage of Prop L providing \$100 million for BART Core Capacity, the Transportation Authority will begin attending the FTA/PMOC meetings, with the concurrence of BART staff, as part of our oversight on this project. FTA's PMOC has just completed a risk review of the BART Core Capacity Program and BART is in the process of considering updates to the project cost and funding plan to address the risk review.

Appendix B provides the current project delivery status for each of the four elements of the BART Core Capacity Program, major risks for the overall program and each element, and how BART is seeking to mitigate or address those risks. As a major transit project in Prop L, the Transportation Authority staff will work with BART to provide a BART Core Capacity update to the CAC and Board in concert with planned allocations of Prop L funds.

6. Project Prioritization

The intent of establishing and documenting a methodology to select proposed projects is to provide the Transportation Authority Board, the public, and project sponsors with a clear understanding of how projects are prioritized for funding within each Prop L program. Working in consultation with project sponsors and drawing upon the Transportation Authority's experience with prioritizing projects for grant

funding, Transportation Authority staff developed a set of Prop L program-wide criteria to help select projects in each of the 28 Prop programs. In addition, most programs also have program-specific criteria to inform priorities such as improving transit reliability and travel time or replacing assets at the end of their useful lives. The Prop L program-wide criteria include:

- Project readiness
- Relative level of need or urgency
- Benefit to disadvantaged populations
- Level and diversity of community support
- Leveraging

The above criteria, along with any program-specific criteria, are scored for each proposed project. In addition, the evaluation process also considers a fair geographic distribution and cost-effectiveness.

San Francisco's [Equity Priority Communities](#) are an important factor in assessing projects and benefits to disadvantaged populations. See the map on the Transportation Authority's website: <https://epc-map.sfcta.org/>

The Project Scoring Table in Section 7 shows the Prop L program-wide criteria, the program-specific criteria, criteria definitions, and maximum possible points for projects proposed for the BART Core Capacity 5YPP. For each proposed project, the project sponsors first scored the project and then Transportation Authority staff reviewed and refined the scoring, as needed, to ensure consistent application of the prioritization criteria.

7. Project List

This section shows how the project proposed for funding from BART Core Capacity ranked based on the prioritization methodology described in Section 6; the 5-Year Program of Projects or Project List recommended for Prop L funds; and Anticipated Leveraging. The Project Information Form, with details on scope, schedule, cost, and funding is included in Appendix A.

The Transportation Authority advanced funds for the BART Core Capacity program in the original Prop L Strategic Plan Baseline beyond the pay-as-you-go amounts to about \$90M in the first ten years of the measure, \$35.350M of which are in this 5YPP period in order for BART to exercise an option on its railcar replacement contract. This 5YPP would program the \$35.296M in FY 2023/24 but with a less aggressive cash flow, pushing a total of \$9.35M cash flow from FY 23/24 and FY 24/25 into FY 25/26. This revised programming and cash flow will be reflected in a corresponding Strategic

Plan amendment. The changes proposed are very minor and any reduction in financing costs will be available for BART to program to Core Capacity in the next 5YPP update.

Prop L Project Submissions Evaluation - EP 03 BART Core Capacity

| | | Prop L-Wide Criteria | | | | | Program Specific Criteria | | | | |
|--|--|----------------------|--|---------------------------------------|--|------------|---------------------------|--------------------|----------------------|--|-------|
| District | Projects | Project Readiness | Relative Level of Need or Urgency (time sensitive) | Benefits to Disadvantaged Populations | Level and Diversity of Community Support | Leveraging | Safety | Increases Capacity | Improves Reliability | Commensurate Alameda/Contra Costa Contribution | Total |
| Citywide | BART Core Capacity Fleet of the Future 54 Expansion Vehicles | 5 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 2 | 35 |
| | Total Possible Score | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 39 |
| <p>Project Scoring Key: Projects are assessed using Transportation Authority Board adopted Prop L-wide criteria and program specific prioritization criteria. In general, the better a project meets the criteria as defined, the more points the project is assigned.</p> | | | | | | | | | | | |
| <p>Project Readiness: Highest possible score is 5. Project is likely to need funding in the fiscal year proposed. Factors to be considered include, but are not limited to adequacy of scope, schedule, budget and funding plan relative to current project status (e.g. expect more detail and certainty for a project about to enter construction than design); whether prior project phases are completed or expected to be completed before beginning the next phase; and whether litigation, community opposition or other factors pose a significant risk to project advancement, as proposed.</p> | | | | | | | | | | | |
| <p>Relative Level of Need or Urgency (time sensitive): Highest possible score is 4. Project needs to proceed in the proposed timeframe to enable construction coordination with another project (e.g. minimize costs and construction impacts), to support another funded or proposed project (e.g. signal conduit installation coordination with a street resurfacing project) or to meet timely use of funds deadlines associated with matching funds.</p> | | | | | | | | | | | |
| <p>Benefits to Disadvantaged Populations: Highest possible score is 5. Project provides direct benefits to disadvantaged populations, including communities historically harmed by displacement, transportation policies, and projects that utilized eminent domain. Project directly impacts the ability of disadvantaged populations to access transportation (e.g. new or enhanced infrastructure, new service or improved service, improved safety, etc.), whether or not the project is directly located in an Equity Priority Community. Points are based on the description of benefits presented in the Project Information Form.</p> | | | | | | | | | | | |
| <p>Level and Diversity of Community Support: Highest possible score is 5. Project has clear and diverse community support, including from disadvantaged populations and/or was developed out of a community-based planning process.</p> <p>Five points for a project that 1) is in an adopted community based plan or with evidence of diverse (neighborhood level and citywide) community support and 2) has documented support from disadvantaged populations.</p> <p>Three points for a project not in an adopted community based plan, but with evidence of support from <i>both</i> neighborhood stakeholders and citywide groups. Project does not have documented support from disadvantaged populations.</p> <p>One point for a project not in an adopted community based plan, but with evidence of support from <i>either</i> neighborhood stakeholders or citywide groups. Project does not have documented support from disadvantaged populations.</p> <p>Zero points for a project that was neither developed out of a community-based planning process nor has other forms of demonstrated community support.</p> | | | | | | | | | | | |
| <p>Leveraging: Highest possible score is 4. Project demonstrates actual or potential leveraging of Prop L funds, as indicated in the funding plan. Factors to consider include the status of other fund sources and the likely competitiveness for securing non-Prop L funds from discretionary sources.</p> | | | | | | | | | | | |
| <p>Safety: Highest possible score is 4. Project addresses documented safety issue(s), reduces potential conflicts between modes, and/or increases security. Additional priority for projects benefiting users of multiple modes (e.g. transit passenger, pedestrian, cyclist, motorist, transit employee). Points are based on the safety information presented in the Project Information Form.</p> | | | | | | | | | | | |
| <p>Increases Capacity: Highest possible score is 4. Project increases passenger capacity through the existing Transbay Tube.</p> | | | | | | | | | | | |
| <p>Improves Reliability: Highest possible score is 4. Project improves rail service schedule adherence.</p> | | | | | | | | | | | |
| <p>Commensurate Alameda/Contra Costa County Contribution: Highest possible score is 4. Alameda and Contra Costa Counties have contributed or committed to a commensurate amount.</p> | | | | | | | | | | | |

2023 Prop L 5-Year Project List (FY 2023/24 - FY 2027/28)

03- BART Core Capacity

Cash Flow (Maximum Annual Reimbursement)

Pending October 2023 Board Meeting

| Project Name | Phase | Fiscal Year of Reimbursement | | | | | Total |
|---|--------------|------------------------------|-------------|--------------|----------|----------|--------------|
| | | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | |
| Fleet of the Future Vehicle Procurement (54 Expansion Cars) | Construction | | | \$35,296,000 | | | \$35,296,000 |
| Cash Flow Requested in 2023 5YPP | | \$0 | \$0 | \$35,296,000 | \$0 | \$0 | \$35,296,000 |
| Cash Flow in 2023 Draft Strategic Plan Baseline | | \$6,100,000 | \$3,250,000 | \$26,000,000 | \$0 | \$0 | \$35,350,000 |
| Cumulative Remaining Cash Flow Capacity | | \$6,100,000 | \$9,350,000 | \$54,000 | \$54,000 | \$54,000 | \$54,000 |

Anticipated Leveraging

The table below compares Prop L Expenditure Plan assumptions with anticipated leveraging for the recommended projects based on the Project Information Forms. At time of allocation, Transportation Authority staff will again compare the actual leveraging to the expected leveraging.

Table 2. Prop L Leveraging: Expected vs. Proposed for Fiscal Years 2023/24 - 2027/28

| PROGRAM | EXPECTED LEVERAGING IN EP (NON-PROP L FUNDS) | ANTICIPATED LEVERAGING (NON-PROP L FUNDS) |
|--|--|---|
| BART Core Capacity Fleet of the Future 54 Expansion Cars [proposed in this 5YPP] | 97.2% | 81% |
| BART Core Capacity - Overall Project | 97.2% | 98% |

The Prop L leveraging for this Fleet of the Future 54 Expansion Cars project is 81%, but the anticipated Prop L leveraging for the entirety of the \$4.4 billion Core Capacity Program is 98%, slightly above what was outlined in the Expenditure Plan.

**Prop L Sales Tax Program
Project Information Form (PIF) Template**



| Project Name and Sponsor | | | | | |
|---|---|----|--|--|-----|
| Project Name: | BART Core Capacity - Fleet of the Future 54 Expansion Vehicles | | | | |
| Implementing Agency: | BART | | | | |
| Prop L Expenditure Plan Information | | | | | |
| Prop L Program: | 03- BART Core Capacity | | | | |
| Prop L Sub-Program (if applicable): | | | | | |
| Other Prop L Programs (if applicable): | | | | | |
| Project Information | | | | | |
| Brief Project Description for MyStreetSF (80 words max): | The BART Core Capacity Program (CCP) will relieve crowding, increase ridership, and decrease greenhouse gas emissions by increasing the frequency and length of trains operating on the system. CCP includes four project elements: 306 additional Fleet of the Future rail cars; a new communications-based train control system, replacing BART's legacy 50-year-old fixed block train control system increase reliability and enable significantly closer headways; additional rail car storage to accommodate the expanded fleet; and additional traction power substations to power the increased service. Prop L funds are requested to support purchase of 54 additional rail cars as part of planned 306 additional cars. | | | | |
| Project Location and Limits: | This Project includes work systemwide. BART's system is located in five counties: San Francisco, Alameda, Contra Costa, San Mateo, and Santa Clara | | | | |
| Supervisory District(s): | Citywide | | | | |
| Is the project located on the 2022 Vision Zero High Injury Network ? | <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">No</td> <td style="width: 50%; text-align: center;">Is the project located in an Equity Priority Community (EPC)?</td> </tr> <tr> <td></td> <td style="text-align: center;">Yes</td> </tr> </table> | No | Is the project located in an Equity Priority Community (EPC)? | | Yes |
| No | Is the project located in an Equity Priority Community (EPC)? | | | | |
| | Yes | | | | |
| Which EPC(s) is the project located in? | The project is located in EPCs with high levels of households with minority or low-income status, seniors, people who have limited English proficiency, single parent families, zero-vehicle households, and people with disabilities. | | | | |
| Detailed Scope (may attach Word document): Please describe in detail the project scope, any planned community engagement, benefits, considerations for climate adaptation and resilience (if relevant), and coordination with other projects in the area (e.g. | Please see Attachment A, pgs. 1-4. | | | | |
| Attachments: Please attach maps, drawings, photos of current conditions, etc. to support understanding of the project. | Please see Attachment A, pgs. 1-4. | | | | |
| Type of Environmental Clearance Required: | Categorically Exempt | | | | |

**Prop L Sales Tax Program
Project Information Form (PIF) Template**



Coordinating Agencies: Please list partner agencies and identify a staff contact at each agency.

In 2015, BART began community outreach through the Better BART educational campaign. Better BART focused on reinvestment to the system, specifically BART's CCP elements. BART conducted multiple outreach events to engage with community organizations, business groups, and municipalities. The public spoke on the need for increased capacity due to trains being full during commute hours. Comments also included the need to have more trains run throughout the day because the headways impacted the amount of time individuals waited on a train. Since then, BART has been partnering with multiple regional and state organizations to advocate for funding and coordinate implementation of CCP elements with other projects. Significant project partners include California Department of Transportation (CalTrans), MTC, San Francisco Municipal Transportation Agency (SFMTA), and City and County of San Francisco Department of Public Works. BART is coordinating with MTC to complete the Core Capacity Program. The program is included in MTC's adopted RTP, and MTC has been working with BART to assemble funding from various sources.

**Prop L Sales Tax Program
Project Information Form (PIF) Template**



| Project Delivery Milestones | Status | Work | Start Date | | End Date | |
|---|-------------------|---|-------------------|--|-----------------|--|
| Phase | % Complete | In-house - Contracted - Both | Quarter | Fiscal Year (starts July 1) | Quarter | Fiscal Year (starts July 1) |
| Planning/Conceptual Engineering | 100% | In-house and Contracted | | Previous | Q4-Apr-May-Jun | Previous |
| Environmental Studies (PA&ED) | N/A | | | | | |
| Right of Way | N/A | | | | | |
| Design Engineering (PS&E) | 100% | In-house and Contracted | | Previous | Q1-Jul-Aug-Sep | Previous |
| Advertise Construction | N/A | | | | | |
| Start Construction (e.g. Award Contract) | | Contracted | Q2-Oct-Nov-Dec | 2020/21 | | |
| Operations (i.e. paratransit) | N/A | | | | | |
| Open for Use | N/A | | | | | |
| Project Completion (means last eligible expenditure) | | | | | Q4-Apr-May-Jun | 2029/30 |
| Notes | | | | | | |
| <p>Although our cash flow shows funding is needed for FY25-26, BART will request allocation of funds this fall to allow us to exercise railcar option 2.</p> <p>The Core Capacity cars (306 railcars) is a continuation of the current 775-car order. Conceptual Engineering (June 2013) and Final Design (September 2014) were completed as part of the 775-car contract. The schedule table above did not allow us to input information for years before 2018. No additional design were done as part of the Core Capacity car order.</p> | | | | | | |

**Prop L Sales Tax Program
Project Information Form (PIF) Template**



| | |
|----------------------|--|
| Project Name: | BART Core Capacity - Fleet of the Future 54 Expansion Vehicles |
|----------------------|--|

| Project Cost Estimate | Cost | Funding Source | | Source of Cost Estimate |
|---------------------------------|-----------------------|----------------------|-----------------------|-------------------------|
| | | Prop L | Other | |
| Planning/Conceptual Engineering | \$ - | \$ - | \$ - | |
| Environmental Studies (PA&ED) | \$ - | \$ - | \$ - | |
| Right of Way | \$ - | \$ - | \$ - | |
| Design Engineering (PS&E) | \$ - | \$ - | \$ - | |
| Construction | \$ 186,245,000 | \$ 35,296,000 | \$ 150,949,000 | Contract Option |
| Operations (i.e. paratransit) | \$ - | \$ - | \$ - | |
| Total Project Cost | \$ 186,245,000 | \$ 35,296,000 | \$ 150,949,000 | |
| Percent of Total | | 19% | 81% | |

| Funding Plan - All Phases - All Sources | | | | | | Cash Flow for Prop L Only (i.e. Fiscal Year of Reimbursement) | | | | |
|---|------------------------|--------------|--------------------|--|-----------------------|---|-------------|----------------------|-------------|-------------|
| Fund Source | Prop L Program | Phase | Fund Source Status | Fiscal Year of Allocation (Programming Year) | Total Funding | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 |
| Prop L | 03- BART Core Capacity | Construction | Programmed | 2023/24 | \$ 35,296,000 | \$ - | \$ - | \$ 35,296,000 | \$ - | \$ - |
| SB1 TIRCP | | | Allocated | | \$ 107,100,000 | \$ - | \$ - | \$ - | \$ - | \$ - |
| SB1 TIRCP | | | Allocated | | \$ 8,553,000 | \$ - | \$ - | \$ - | \$ - | \$ - |
| ACTC Measure BB | | | Programmed | | \$ 35,296,000 | \$ - | \$ - | \$ 35,296,000 | \$ - | \$ - |
| | | | | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total By Fiscal Year | | | | | \$ 186,245,000 | \$ - | \$ - | \$ 70,592,000 | \$ - | \$ - |

Notes

BART has asked the three BART District counties (Alameda, Contra Costa, and San Francisco) to contribute \$100 M each toward the BART Core Capacity Program. ACTC and SFCTA have \$100 M within Measure BB and Prop L respectively. CCTA has not secured funding yet, but is considering a \$100 million commitment in a future sales tax ballot measure (currently under consideration for 2028). ACTC staff anticipates allocating Measure BB funds in October 2023.

FTA's PMOC has just completed a risk review of the BART Core Capacity Program and BART is in the process of considering updates to the project cost and funding plan to address the risk review.

**Prop L Sales Tax Program
Project Information Form (PIF) Template**



| Prop L Supplemental Information Please fill out each question listed below (rows 2-8) for all projects. | |
|---|--|
| Project Name | <i>BART Core Capacity - Fleet of the Future 54 Expansion Vehicles</i> |
| Relative Level of Need or Urgency (time sensitive) | See Attachment A, pg. 5. |
| Prior Community Engagement/Level and Diversity of Community Support (may attach Word document): | See Attachment A, pg. 4-5. |
| Benefits to Disadvantaged Populations and Equity Priority Communities | See Attachment A, pg. 6. |
| Compatibility with Land Use, Design Standards, and Planned Growth | Yes |
| San Francisco Transportation Plan Alignment (SFTP) | Equity |
| | See Attachment A, pgs. 9-10. |
| The next section includes criteria that are specific to each Expenditure Plan program. The questions that are required to be filled out for each program will auto-populate once the Prop L program is selected on the Scope & Schedule tab. | |
| 03- BART Core Capacity | |
| Safety | |
| Increases Capacity | See Attachment A, see pg. 11. |
| Improves Reliability | See Attachment A, see pgs. 11-12. |
| Commensurate Alameda/Contra Costa County Contribution | <p>Alameda County (ACTC) is contributing a commensurate amount of funding - \$100M to the Core Capacity Program of which BART has requested \$35M for the Fleet of the Future Rail Cars included in the Core Capacity Program. ACTC staff anticipates allocating these funds in October 2023.</p> <p>A commensurate amount is planned in Contra Costa County and is being considered in the expenditure plan for the next sales tax revenue measure in Contra Costa County. CCTA is considering 2028 for a ballot measure.</p> |



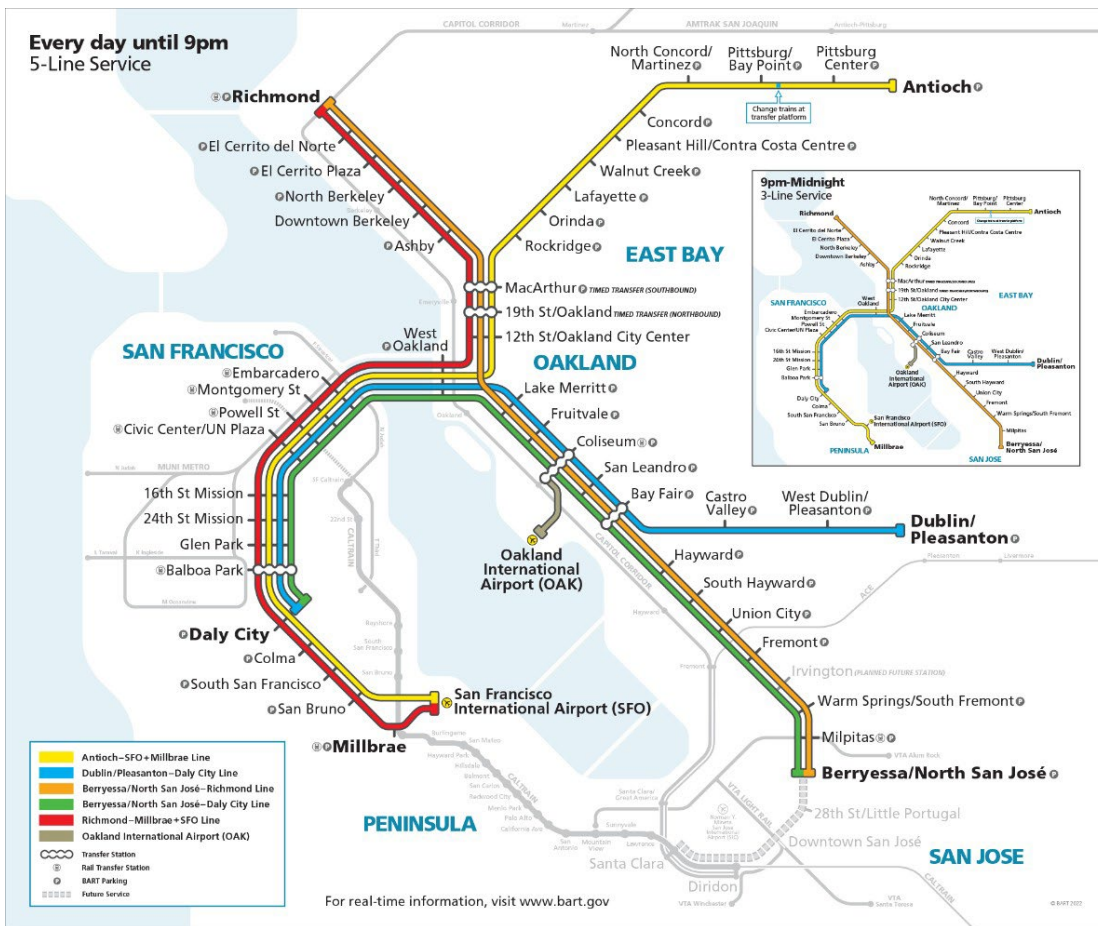
Core Capacity Program Attachment A



Detailed Scope

The San Francisco Bay Area Rapid Transit District (BART) requests to program \$35M of Proposition L (Prop L) funds through the 5-Year Prioritization Process (5YPP) for the Core Capacity Program (CCP). BART is a heavy-rail public transit system that connects the San Francisco Peninsula with communities in the East Bay and South Bay. BART service currently extends as far as Millbrae, Richmond, Antioch, Dublin/Pleasanton, and Berryessa/North San José, see figure 1. BART operates in five counties (San Francisco, San Mateo, Alameda, Contra Costa, and Santa Clara) with 131 miles of track and 50 stations. BART's ridership exceeded 420,000 trips per day before the COVID-19 pandemic. During the pandemic, BART experienced unprecedented ridership pattern changes. The average daily trip count for fiscal year 2022-2023 was 149,433. BART anticipates ridership to increase in the next few years as the Bay Area recovers from pandemic related impact. BART currently has the capacity to operate a maximum of 24 trains per hour in each direction through the Transbay Tube between San Francisco and Oakland. Expected long-term ridership trends require additional capacity. The CCP will ensure BART is ready to provide fast, reliable transportation for Bay Area residents and visitors to reach work locations, shopping centers, tourist attractions, entertainment venues, universities, and other destinations.

Figure 1, BART System Service Map 2023

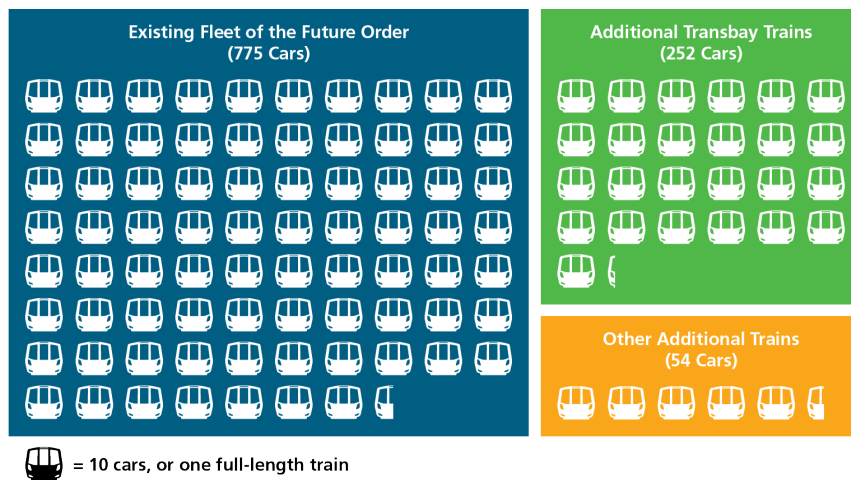


The CCP is a package of strategic investments that will allow BART to operate up to 30 ten-car trains per hour (300 cars) in each direction through the existing tube, maximizing throughput in the most heavily used part of its system. **The CCP includes four elements: 306 additional rail cars to provide the additional trains needed, a new communications-based train control system that will allow closer headways (shorter wait times between trains), additional rail car storage, and additional traction power substations to provide the additional power needed for the more frequent service.** This \$35M programming request is specifically to meet contractual obligations to procure a portion of the 306 additional rail cars. The rail car procurement contract is structured with a base contract and two options. The base contract included procurement of 100 rail cars and was exercised in October 2020, Option 1 included procurement of 152 rail cars and was exercised in March of 2023, and Option 2 included procurement of 54 rail cars and is scheduled to be exercised in December of 2023. The programming commitment and expected allocation of \$35M of Prop L funds, by the fall of 2023, will enable BART to meet contractual obligations with the prime contractor, Alstom, to exercise Option 2.

306 Additional Railcars

In order for BART to achieve a peak hour schedule of 30 ten-car trains through the Transbay corridor, BART will require additional cars to make up the added trains and to make longer trains. BART currently has 775 new rail vehicles on order, which will allow the agency to completely replace its aging fleet of 669 vehicles and to expand the fleet by 106 cars. When this order is completed, BART will be able to provide some additional capacity in the short-term but will need 306 more vehicles to get to the number of cars required to operate trains more frequently, which is a total requirement of 1,081 cars. Of the 306 additional cars required, 252 are needed for BART to operate 28 ten-car trains per hour on the four lines (Red, Blue, Green and Yellow) that operate through the Transbay Tube, and ultimately to run up to 30 trains per hour. The remaining 54 railcars are to increase capacity on the Orange Line (which does not operate through the Transbay Tube), and to increase ready reserve trains, which are needed in case delays occur, see figure 2.

Figure 2. 306 Railcars



Train Control Modernization Project (Communications-Based Train Control)

To achieve the shorter headways needed to operate 30 peak hour trains per hour through the Transbay Tube, BART will replace its existing fixed-block train control systems with a new, industry-proven, Communications Based Train Control System (CBTC). BART has developed a multi-phase implementation program that will begin by testing CBTC equipment on BART's existing test track in Hayward, and then once the CBTC equipment has been sufficiently proven on test tracks, BART will implement CBTC along the mainline tracks in stages. The scope of the CBTC project includes installation of lineside equipment within BART's existing right-of-way throughout the entire system. CBTC allows trains to safely operate closer together than the current fixed-block train control system, thus increasing throughput and capacity. CBTC has been implemented on many of the busiest rail systems in Europe and Asia, and is now the worldwide standard for high-capacity transit train control.

On January 9, 2020, the BART Board of Directors voted to award a \$798 million contract to Hitachi Rail STS USA, Inc. to design and build a modern Communications Based Train Control System (CBTC) that will dramatically improve future BART service, replacing the current fixed-block train control system, which is 50 years old. CBTC will allow BART to run more trains closer together and significantly enhance Transbay capacity. The contract is the largest single BART award contract in BART history.

Additional Rail Car Storage

To accommodate the additional new vehicles BART needs for the higher frequency service, BART will make investments to provide additional rail car storage.

Traction Power Substations

BART's trains are electrically powered through a third-rail system. With more frequent and longer trains, BART will need the traction power system that supplies electricity to the third rail to be enhanced with several new traction power substations. BART has conducted traction power simulations to assess the power requirements associated with operating 30 regularly-scheduled ten-car trains through the Transbay Tube per hour. The simulation revealed specific areas along BART's mainline where the traction power requirements for the more-frequent service exceed the capacity available from BART's existing traction power system. Five sites have been identified for new substations, see figure 3:

1. Downtown San Francisco—Civic Center Station
2. Downtown San Francisco—Montgomery Station
3. Oakland—near MacArthur station on 34th Street
4. Concord
5. Richmond

Figure 3, New Substations



A sixth substation would also be installed at the Hayward Maintenance Complex. The four locations in the East Bay are all within existing BART or Caltrans right-of-way and are at-grade locations. The two sites in San Francisco are located below grade within existing BART stations. BART is also undertaking a major program to replace and upgrade the existing traction power system. While this program will increase the amount of power available for train operation, it is not considered to be part of the CCP.

Relative Level of Need or Urgency

Programming and allocation of funds for the CCP is time sensitive. The allocation of funds, expected to take place by the fall of 2023, will enable BART to meet contractual obligations to exercise Option 2 of the contract with Alstom. Option 2 includes procurement of 54 rail cars.

Community Engagement/Level and Diversity of Community Support

- In 2011, BART implemented a Public Participation Plan (PPP), which was updated in 2015 following extensive outreach throughout the BART service area. The PPP guides the organization’s ongoing public participation endeavors. The PPP ensures that BART utilizes effective means of providing information and receiving public input on transportation decisions from diverse communities, including low-income, minority, and Limited English Proficient populations. As recommended in BART’s Public Participation Plan (PPP), BART has implemented a variety of outreach techniques for projects related to the overall CCP. In 2014, BART launched a “Fleet of the Future” outreach campaign to obtain public feedback on the design of BART’s new

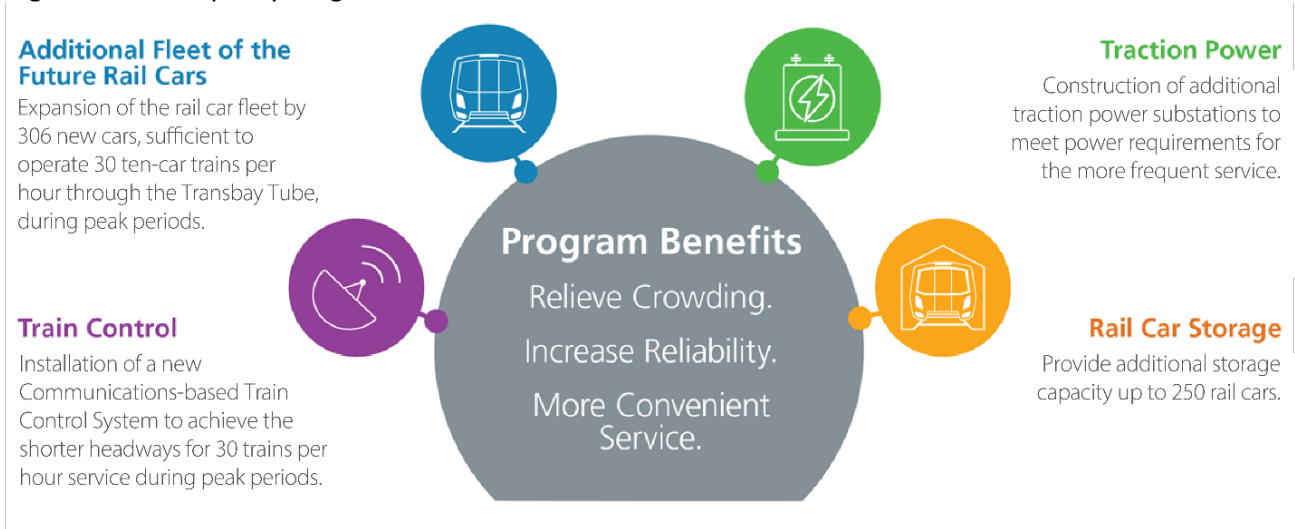
vehicles. A series of ten events were held at BART stations and in local communities throughout the Bay Area. Approximately 17,500 people attended the events and a total of 7,666 surveys were collected. BART staff consulted regularly with members of the disability community, including the BART Accessibility Task Force (BATF), on the design and functionality of the new BART trains. The BATF provided hands-on feedback on all aspects of the car design.

- Outreach related to the 2014 BART Vision Plan engaged over 2,000 people in exploring the tradeoffs involved in considering how BART can meet its future needs. The public helped BART staff narrow down future projects and investments BART should focus on by determining which ones are most important to the public and fit best into BART’s goals of serving the Bay Area for years to come. A total of ten in-station events were held and a total of 2,551 surveys were collected.
- BART’s Title VI/EJ Advisory and LEP Advisory committees meet regularly to assist BART on all issues of policy with a focus on meeting the needs of minority and disadvantaged communities and riders. In November 2017, both committees received a presentation on the CCP.
- In 2017, BART also partnered with MTC to conduct outreach on its Core Capacity Transit Study, a collaborative effort to improve public transportation to and from the San Francisco core. Outreach activities consisted of two public meetings to identify investments and improvements to increase transit capacity to the San Francisco core. Approximately 80 people participated in the public meetings.
- Outreach strategies to Disadvantaged or Low-Income Communities outlined in the PPP include:
 - Translation of flyers and other meeting materials and interpretation services
 - Outreach to Community-based Organizations (CBOs)
 - Providing notification using Ethnic Media Sources
 - Hosting meetings in accessible locations
- Additional outreach activities were included as part of the following relevant efforts:
 - Fleet of the Future New Train Car Model
 - BART Vision – Future BART
 - Embarcadero-Montgomery Capacity Implementation and Modernization Study
 - Better BART
 - Metropolitan Transportation Commission (MTC) Plan Bay Area 2040
 - MTC Core Capacity Transit Study
 - Hayward Maintenance Complex Noise Study

Benefits to Disadvantaged Populations and Equity Priority Communities

The primary benefit of the CCP, and specifically the implementation of Option 2, is that Bay Area residents and tourists will benefit from reliable service with new train cars. Taken together, the CCP projects will relieve crowding, increase reliability, and provide a more convenient service to all patrons, see figure 4.

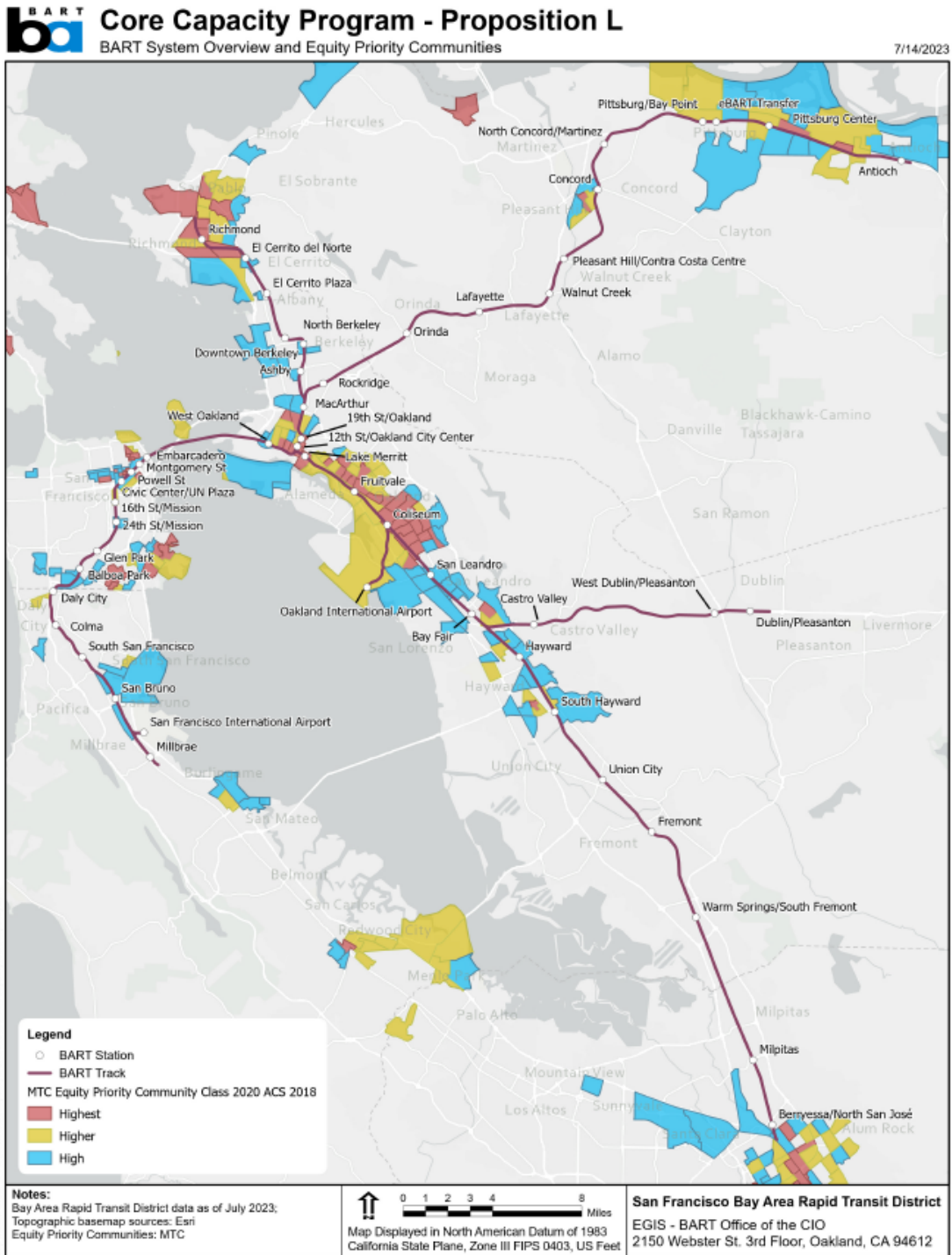
Figure 4. Core Capacity Program Benefits



Additionally, the CCP will also contribute to addressing equity and inclusion concerns in the Bay Area region. According to a City and County of San Francisco Planning Department document, “new housing option [...] were not nearly enough to meet the needs of communities of color, low-income workers, and at times further exacerbated their displacement; many were forced out of the city given the increase in rents. This displacement has also been impacting the environment by imposing longer commutes and led to the loss of local businesses, art and entertainment activities.”¹ With the improvements the CCP will yield for overall BART service, Disadvantaged Populations and Equity Priority Communities will more easily get to and from places of employment, education facilities, health care facilities, or leisure activities. These communities will benefit from the increased frequency, greater capacity and reduced crowding. Figure 5 below shows the extend of Equity Priority Communities who live near a BART station.

¹ "Context: Dismantling San Francisco's Housing Inequities," City and County of San Francisco Planning Department, April 202.


Figure 5, Core Capacity Program, Equity Priority Communities








Compatibility with Land Use, Design Standards, and Planned Growth

- The CCP is compatible with existing and planned land uses, with adopted standards for urban design, and supportive of planned growth in transit-friendly housing, employment, and services. The Project will comply with all applicable Federal requirements, including but not limited to, Buy America provisions, ADA regulations, Civil Rights requirements, Federal Motor Vehicle Safety Standards (FMVSS), and/or the Federal Motor Carrier Safety Regulations (FMCSR).
- The MTC adopted an update to its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Plan Bay Area 2050, which was released in October 2021. The update includes the capital projects and service assumptions that make up the CCP. The CCP meets guiding principles of Plan Bay Area 2050 in specific and measurable ways. See Figure 2 for a list of the guiding principles. The CCP meets these as follows:
 - Affordable: Reduce vehicle operation and maintenance (O&M) costs due to pavement conditions
 - Connected: Increase non-auto mode share
 - Healthy: Reduction of CO2 emissions and reduction of adverse health impacts
 - Vibrant: Increase share of jobs accessible in congested conditions

Figure 2. Plan Bay Area 2050 Guiding Principles



| GUIDING PRINCIPLE | DESCRIPTION |
|--|---|
|  AFFORDABLE | All Bay Area residents and workers have sufficient housing options they can afford – households are economically secure. |
|  CONNECTED | An expanded, well-functioning, safe and multimodal transportation system connects the Bay Area – fast, frequent, and efficient intercity trips are complemented by a suite of local transportation options, connecting communities and creating a cohesive region. |
|  DIVERSE | The Bay Area is an inclusive region where people from all backgrounds, abilities, and ages can remain in place – with full access to the region's assets and resources. |
|  HEALTHY | The region's natural resources, open space, clean water, and clean air are conserved – the region actively reduces its environmental footprint and protects residents from environmental impacts. |
|  VIBRANT | The Bay Area is an innovation leader, creating quality job opportunities for all and ample fiscal resources for communities. |

The Bay Area Air Quality Management District's 2017 Clean Air Plan provides a regional strategy to protect public health and the climate attaining all state and federal air quality standards, and eliminating health risk disparities from exposure to air pollution among Bay Area communities achieving ambitious GHG reduction targets for 2030 and 2050. The CCP will directly support these goals by shifting single occupancy vehicle trips to increased transit ridership, thus reducing harmful emissions.

San Francisco Transportation Plan Alignment (SFTP)

The CCP will advance SFTP goals as described below:

| SFTP Goal | CCP Alignment |
|---|---|
| <p>Equity</p> | <p>The existing BART system covers large portions of the Bay Area and bisects several communities, including those with designated minority and low-income populations. No impacts from the installation or operation of CCP new rail cars are anticipated; therefore, no disproportionately high and adverse effects are anticipated for any surrounding communities, including any Title VI/EJ communities.</p> <p>BART, as a recipient of federal funds, is required by the FTA to comply with Title VI of the Civil Rights Act of 1964 and its amendments (Act). Title VI of the Civil Rights Act of 1964 requires that no person in the United States, on the grounds of race, color, or national origin be excluded from, be denied the benefits of, or be subjected to discrimination, under any program or activity receiving federal financial assistance. Presidential Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” addresses environmental justice (EJ) in minority and low-income populations. Presidential Executive Order 13166 “Improving Access to Services for Persons with Limited English Proficiency” addresses services to those individuals with Limited English Proficiency (LEP).</p> <p>FTA Circular 4702.1B, dated October 1, 2012, titled Title VI Requirements and Guidelines for Federal Transit Administration Recipients (Title VI Circular) and FTA Circular 4703.1, dated August 15, 2012, titled Environmental Justice Policy Guidance for Federal Transit Administration Recipients (EJ Circular), require that federal funding recipients such as BART review its transportation decisions to ensure equity in the transportation decision making process and to ensure that decisions are not made on the basis of race, color, national origin, or socioeconomic status.</p> |
| <p>Environmental Sustainability</p> | <p>As part of its mission, BART is committed to integrating climate adaptation and resiliency practices into daily operations and future transit investments. BART’s Sustainability Policy (adopted in 2017) frames overarching resilience actions and initiatives, which are further detailed in BART’s 10-year Sustainability Action Plan. Specifically, implementation of the CCP will lead to specific sustainability benefits, including significant reduced Greenhouse Gas (GHG) emissions from pulling new riders from the Bay Area roadways. Additionally, increased BART capacity supports planned increases in housing and employment density around BART stations, allowing the Bay Area to meet requirements of the California Global Warming Solutions Act of 2006 (AB 32). Lastly, the CCP has no physical features that will lead to environmental impacts. The CCP has a categorical exclusion (CE) for the National Environmental Policy Act (NEPA) and negative declaration (ND) for California Environmental Quality Act (CEQA). These documents are available on BART’s CCP website https://www.bart.gov/about/projects/corecapacity.</p> |
| <p>Accountability & Engagement</p> | <p>BART is coordinating with MTC to complete the CCP. The program is included in MTC’s adopted RTP, and MTC has been working with BART to assemble funding from various sources.</p> |

| | |
|------------------------------|---|
| | Additionally, BART has been conducting extensive engagement as discussed on pgs.4-5. |
| Economic Vitality | Ranked by population, the Bay Area is the fourth largest metropolitan area in the United States. The nine-county region is home to more than 7.8 million people and 3.9 million jobs. The Bay Area’s economy continues to grow, despite setback from the COVID-19 pandemic, driven in part by the technology sector that is vital to growing the nation’s overall economy. By 2050, the region expects over ten million residents and five million jobs to be located here. ² AS the Bay Area’s second largest transit network, BART currently operates and maintains 50 stations and 131 miles of revenue track, serving over 149,000 passengers every weekday in the counties of Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara. The CCP program of projects will support expected economic growth and vitality in the Bay Area. |
| Safety and Livability | The new railcars will include many new safety features. BART’s new car design includes tripod poles that are strategically placed to give riders additional support, especially during times of peak hour crowding while also ensuring room for people in wheelchairs and those with luggage or strollers. Seats are positioned slightly higher providing room to stow backpacks, luggage, and strollers. Specially designated bicycle parking is included as well. To address the needs of customers with vision and hearing impairments, the new cars include interior and exterior digital displays, inter-car barriers, clear, automated announcements, and pole markings to improve contrast. For customers with mobility impairments, the new BART cars include differently-colored priority seating, floor markings for wheelchair areas, seats that are higher off the floor making it easier to sit down and stand up, and intercoms located near doors. |

Safety

- Compared to roadway conditions, BART is a significantly safer travel option. A 2013 Northwestern University study found that rail travel is about 17 times safer than traveling in a car, in terms of number of fatalities per billion-passenger mile. In 2019, BART experienced only 1.59 station incidents per million riders and 0.47 vehicle incidents per million riders. Station incidents and vehicle incidents are all incidents that meet the FTA criteria as “reportable” (mostly injuries and illnesses) and occur either in BART station areas or on BART train cars.
- The CCP will lead to a reduction of 152.2 million Vehicle-miles Traveled (VMT) on Bay area roadways by 2048. This reduction in VMT is due to increased ridership, which will decrease the number of cars the Bay Area roadways, thus reducing the number and frequency of vehicle crashes and increasing safety.
- BART’s existing train control system, originally built over 50 years ago, is reaching the end of its useful life. The new CBTC system will be a proven technology, ensuring that BART can operate more trains closer together, while maintaining the highest level of safety in train operation. Many systems worldwide have now converted to CBTC, such as the London Underground, the Paris Metro, portions of

² Plan Bay Area 2050, Plan Bay Area 2050 Final Plan



the New York City subway, and others, and BART will be following this path using fully tested and certified technology.

- Before the COVID-19 Pandemic, the BART platforms at Embarcadero and Montgomery became extremely crowded, particularly when there was a service disruption. Extreme crowding on the platform can lead to unsafe conditions when people are too close to the platform edge. More frequent and longer trains will relieve crowding on BART platforms, making safer for people getting in and out of the train cars.
- The new rail cars include many safety features. BART’s new car design includes tripod poles that are strategically placed to give riders additional support, especially during times of peak hour crowding, while also ensuring room for people in wheelchairs and those with luggage or strollers. Seats are positioned slightly higher providing room to stow backpacks, luggage, and strollers. Specially designated bicycle parking is included as well.

Increases Capacity

- The CCP is a comprehensive program of projects that will increase capacity, relieve congestion and crowding, increase transit ridership, and decrease greenhouse gas (GHG) emissions and vehicle miles traveled (VMT) by increasing the frequency and capacity of trains operating on the entire BART system. The CCP will allow the maximum number of trains operating through the Transbay Corridor to increase from 23 up to 30 per hour, and peak hour train lengths to be increased from an average of 8.9 cars to ten, maximizing throughput capacity in the most heavily used and most congested travel corridor in the San Francisco Bay Area. The CCP has four major project components: 306 additional rail cars to provide the additional trains needed, a new communications-based train control system that will allow closer headways (shorter wait times between trains), additional rail car storage, and additional traction power substations to provide the additional power needed for the more frequent service. These four program elements of the CCP will allow BART to decrease headways on each of the five BART lines from 15 to 12 minutes, thus increasing frequency by up to 25 percent.

Improves Reliability

- Implementation of the CCP will have significant benefits to the reliability of the BART system. Reliability is a very important factor in users’ decisions to use transit over other modes, especially reliance on single occupancy vehicles. Table 1 shows that 16 percent of all trains are delayed due to the current BART Train Control (TC) system, which will be significantly reduced, or completely alleviated with implementation of the communications-based train control (CBTC) system aspect of the CCP.

Table 1, Number of Trains Delayed, Project Segment (Bay Fair to Warm Springs)

| Year | Total Number of Trains Delayed | # Of Trains Delayed due to Current TC System | % Of Trains Delayed due to Current TC System |
|--------------|--------------------------------|--|--|
| 2017 | 3,845 | 502 | 13% |
| 2018 | 1,962 | 279 | 14% |
| 2019 | 2,970 | 528 | 18% |
| 2020 | 1,662 | 331 | 20% |
| 2021 | 1,427 | 249 | 17% |
| 2022 | 3,312 | 560 | 17% |
| Total | 15,178 | 2,449 | 16% |

- The CCP will also increase accessibility to multimodal choices throughout the Bay Area by enhancing the reliability of the BART system to connect to the region’s job centers in San Francisco, Oakland, and Silicon Valley. Implementation of the CCP will allow riders to better rely on BART to get them to their destinations with more certainty on timing, making work, education, retail, and other trips easier on the BART system. Every BART station provides local bus connections, with some BART stations providing major intermodal transit connections to a substantial number of other transit services such as Caltrain, MUNI light rail and bus, AC Transit, SamTrans, Golden Gate Transit, ACE commuter rail, WETA ferries, and bus services to and from Solano and Napa counties.

**Prop L Sales Tax Program
Project Information Form (PIF) Template
Full Funding Plan**



| | | | | | | | | | | | | |
|--|-------------------------|-----------------------|---------------------------|---|-------------------------|--|----------------|----------------------|----------------|----------------|----------------|----------------------|
| Project Name: | | Core Capacity | | | | | | | | | | |
| Project Cost Estimate | | Funding Source | | | | | | | | | | |
| Phase | Cost | Prop L | Other | Source of Cost Estimate | | | | | | | | |
| Planning/Conceptual Engineering | \$ - | \$ - | \$ - | | | | | | | | | |
| Environmental Studies (PA&ED) | \$ - | \$ - | \$ - | | | | | | | | | |
| Right of Way | \$ 10,384,000 | \$ - | \$ 10,384,000 | | | | | | | | | |
| Design Engineering (PS&E) | \$ 504,830,000 | \$ - | \$ 504,830,000 | | | | | | | | | |
| Construction | \$ 3,903,588,000 | \$ 100,000,000 | \$ 3,803,588,000 | | | | | | | | | |
| Operations (i.e. paratransit) | \$ - | \$ - | \$ - | | | | | | | | | |
| Total Project Cost | \$ 4,418,802,000 | \$ 100,000,000 | \$ 4,318,802,000 | | | | | | | | | |
| Percent of Total | | 2% | 98% | | | | | | | | | |
| Funding Plan - All Phases - All Sources | | | | | | Cash Flow for Prop L Only (i.e. Fiscal Year of Reimbursement) | | | | | | |
| Fund Source | Prop L Program | Phase | Fund Source Status | Fiscal Year of Allocation (Programming Year) | Total Funding | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| Prop L | 03- BART Core Capacity | Construction | Programmed | 2023/24 | \$ 100,000,000 | \$ - | \$ - | \$ 35,295,335 | \$ - | \$ - | \$ - | \$ 64,704,665 |
| FTA Capital Investment Grant | | | Allocated | | \$ 1,169,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Federal Formula Funds | | | Allocated | | \$ 68,983,421 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| ARP CIG | | | Allocated | | \$ 87,075,133 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| CIG Supplemental Funds | | | Allocated | | \$ 3,982,303 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| MTC Exchange Account | | | Allocated | | \$ 179,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| BART Measure RR | | | Allocated | | \$ 475,783,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| BART Operating-to-Capital Allocations | | | Allocated | | \$ 162,310,346 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Regional Measure 3 | | | Programmed | | \$ 500,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| SB1 TIRCP | | | Allocated | | \$ 675,700,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| SBI SCCP | | | Allocated | | \$ 60,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| ACTC Measure BB | | | Programmed | | \$ 100,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| VTA | | | Programmed | | \$ 155,240,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| CCTA Sales Tax | | | Planned | | \$ 100,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| BART Operating-to-Capital Allocations | | | Planned | | \$ 87,075,133 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| RAISE | | | Planned | | \$ 25,000,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| TBD | | | Planned | | \$ 469,652,664 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total By Fiscal Year | | | | | \$ 4,418,802,000 | \$ - | \$ - | \$ 35,295,335 | \$ - | \$ - | \$ - | \$ 64,704,665 |
| Notes | | | | | | | | | | | | |
| BART is in the process of updating the full funding plan for the Core Capacity Program based on a FTA risk review. BART continues to explore and seek funding to fill the remaining funding gap, including but not limited to future rounds of TIRCP, RAISE, CA State SB1 programs, and other sources that may come available. | | | | | | | | | | | | |

NOTE: BART is in the process of updating the Core Capacity Program cost and funding plan as a result of a recently completed FTA risk review.



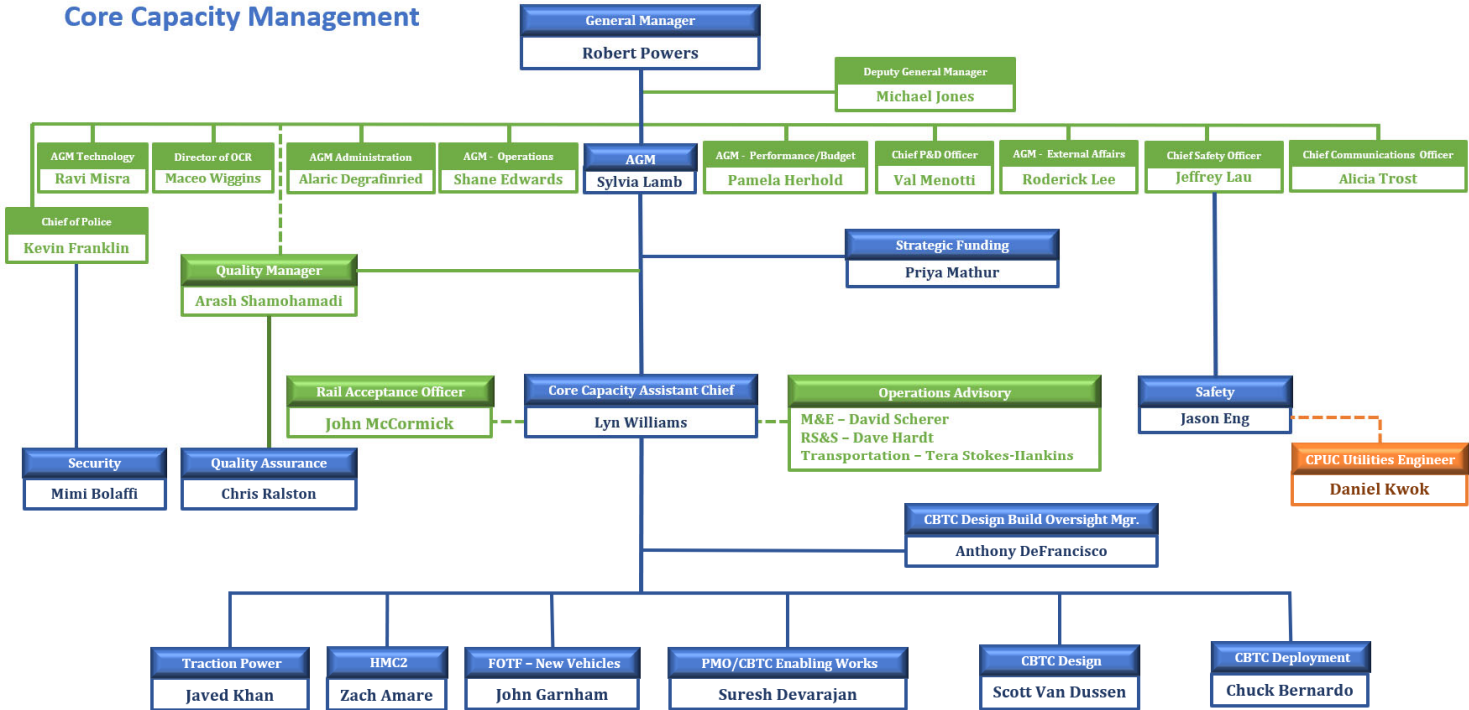
Core Capacity Program Status Update

San Francisco County Transportation Authority

Proposition L 5YPP



Organizational Structure



- Legend:
- Directly involved in Core Capacity Program
 - Organizational Support of Core Capacity Program
 - Core Capacity Program Oversight Stakeholder

As of: 05/22/23



Risk Management

- Fully complies with FTA requirements as part of their oversight role
- Maintain Risk Register – with almost 150 risks at Program and Project level
 - Monthly process advises BART managers and FTA of top risks, status and progress toward mitigation
 - Assesses potential cost and schedule impacts
 - Risk scores range 1 (lowest) to 25 (highest)
 - Scores result in risk level rating – Very Low, Low, Medium, High and Very High
 - Assigns probability of occurrence
 - Identifies mitigation strategies to minimize potential negative impacts
 - Determine needed Action, Action Owner and Due Date

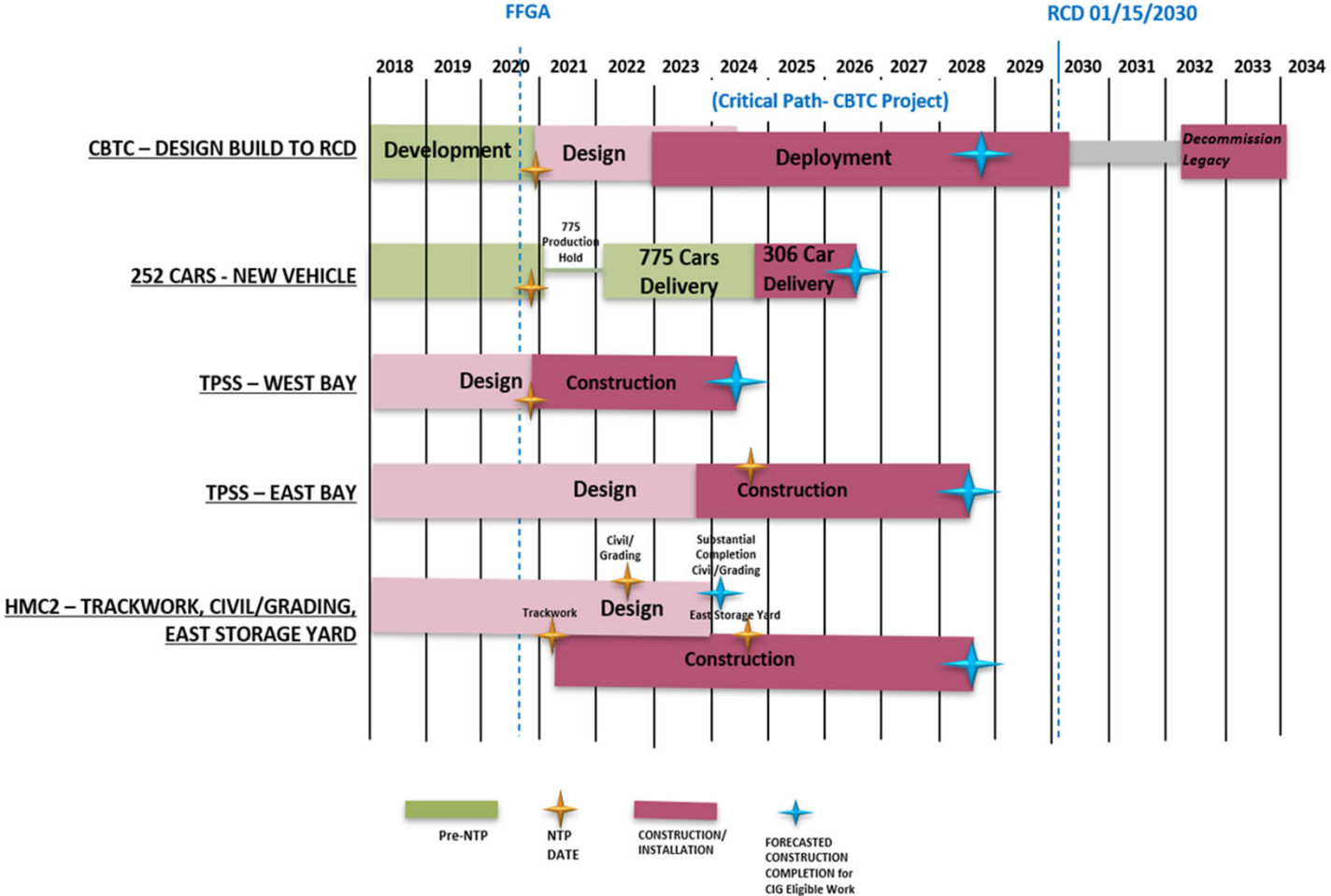
Top 5 Risks

| # | Risk ID | CCP Risk | Ongoing Mitigation |
|---|----------------|--|--|
| 1 | PROG FUND-11 | Because of the effects of the Pandemic, such as inflation, unstable supply chains, and limited labor availability, the cost of construction has increased nationwide, including all parts of Core Capacity. | BART is actively pursuing additional funding from local, state, and federal sources to cover the estimates at completion for the overall TCCCP. A revised funding plan to support revised cost estimates has been developed. Projects are developing alternatives to facilitate construction while additional funding can be secured. |
| 2 | CBTCI VEH-01 | CBTC Integration into 310 D-cars has technical implementation and commercial relationship considerations between Hitachi and Alstom. | Work is proceeding and Hitachi is being compensated for direct costs associated with administrative support to bring Alstom in as a subcontractor. |
| 3 | HMC2 CNST-11 | ESY is currently designed as one bid package, but now must be phased due to funding limitations. This results in increased cost and time requirements for design to be revised into several smaller packages with options that allow award within funding constraints. | Team is working on HMC2 completion plan that includes: [1] Taking preliminary steps to figure out constructability issues related to splitting project into several smaller bid packages. [2] Preparing 2 to 3 alternatives for different procurement strategies with pricing estimates based on 90% design + ROM premium for sub-packages (both cost and schedule). |
| 4 | TPE MKT-02 | Because of the specialized nature of TPSS construction as well as escalating construction industry costs in the current market, there is a risk of bid prices exceeding the design estimate. | The 100% estimate better assessed market conditions such as using vendor input. One more estimate review and Industry outreach survey will be performed as part of IFB. Include bid strategies to ensure that bids received are affordable and can be awarded. |
| 5 | CBTCI STAFF-12 | Master Staffing Risk: BART Resources for all required staffing to support CBTC implementation throughout deployment must be retained in time to avoid delay | To increase fitment to 14 cars per month from 10, will require more specialized and fully trained staff to successfully implement. 70 cars needed to support Phase 2, with the rest to follow in subsequent phases. We have commitment from AGM that other departments will provide support until new staff are hired. |

Quality and Safety & Security Management

- CCP Quality Management Plan (QMP) details policies and procedures
 - Meets the requirements of FTA's Quality Management System Guidelines and OP-24
 - Quality team undertakes performance surveillance and auditing
 - Also reviews quality plans written by designers, construction contractors, design-builders, consultants, suppliers and vehicle manufacturers
- Safety & Security Management Plans (SSMP) detail how safety and security will be addressed from initial project planning through initiation of revenue service
 - Proactively applies safety and security principles in compliance with BART's Public Transportation Agency Safety Plan (PTASP)
 - Implements California Public Utilities Commission requirements
- Safety & Security Certification Plans (SSCP) detail minimum training requirements for personnel and contractors who conduct safety audits and examinations or who are directly responsible for safety oversight

Schedule

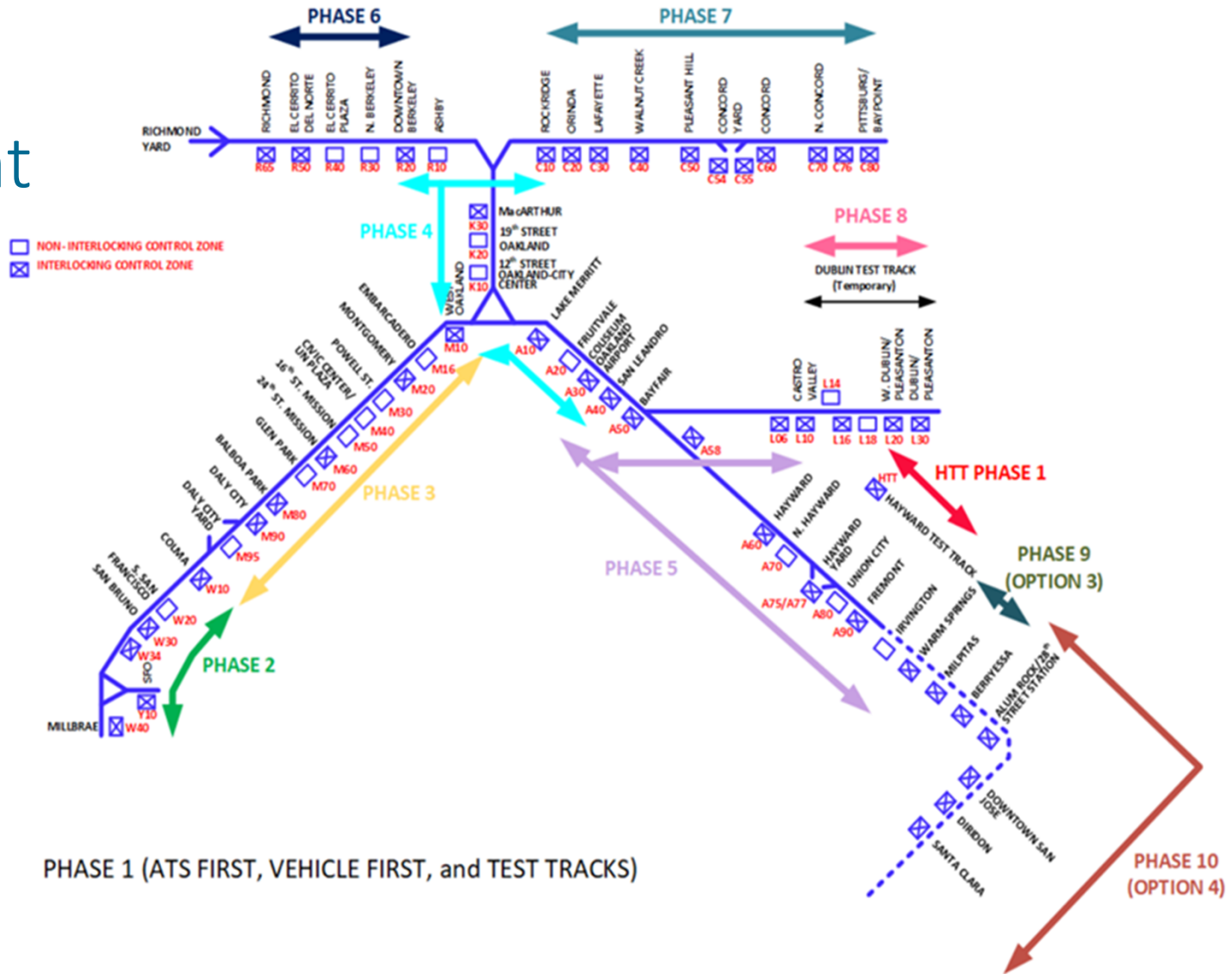


Project Element Status Updates

Communications-Based Train Control

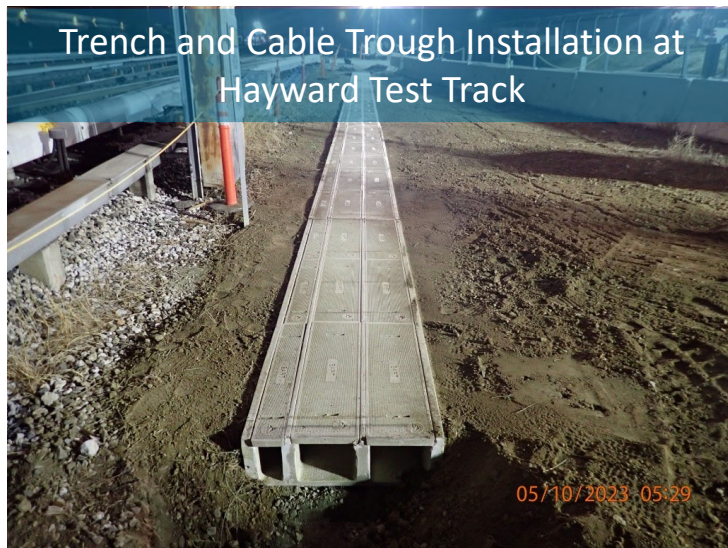
- Design-build contract with Hitachi
 - Base contract executed September 2020 (Phases 1-8)
 - 17% complete
 - Option 3 executed October 2022 (Phase 9 – SVRT Phase 1 Extension)
 - Option 4 not executed (Phase 10 – SVRT Phase 2 Extension (BSVII))
- Implementation Plan – map of phases
- Major Risks
 - Integration with Fleet of the Future
 - Implementation risk from coordination with BSVII – mitigated by not executing Option 4
 - Working with VTA on plan to implement CBTC on BSVII

CBTC Deployment Plan



CBTC Status Update

- Design review process for CBTC vehicle integration underway
- Deployment activities at Hayward Test Track underway
- Final design review (FDR) for CBTC Design forecast for completion Summer 2024



Fleet of the Future Rail Cars (CCP)

- Sole source follow-on contract (RC2) with Alstom
 - Base contract awarded September 2020 – 100 rail cars
 - Option 1 exercised March 2023 – 152 rail cars
 - Option 2 to be exercised December 2023 – 54 rail cars
 - Follow-on contract avoided expensive mobilization and design costs, as well as interoperability risks



Fleet of the Future Production Line

| Contract | # Rail Cars | Contract/ Option Execution Date (est.) | Months of Production | Start of Production | End of Production | All In Cost | Initial Payment due @ Execution | Funding Sources | | | | | Total |
|--------------|-------------|--|----------------------|---------------------|-------------------|-------------------|---------------------------------|-----------------|----------------------|-----------------|-----------------|---------------------------------------|-------------------|
| | | | | | | | | CIG | MTC Exchange Account | TIRCP | RM3 | County Transportation Agencies (CTAs) | |
| Base | 100 | 10/30/2020 | 6 | 8/1/2024 | 2/1/2025 | 389.87 | 22.66 | 208.87 | 144.50 | 31.41 | 5.09 | | 389.87 |
| Option 1 | 152 | 3/1/2023 | 10 | 2/1/2025 | 12/1/2025 | 529.41 | 34.44 | | 34.50 | | 494.91 | | 529.41 |
| Option 2 | 54 | 12/31/2023 | 3 | 12/1/2025 | 3/1/2026 | 186.24 | 12.26 | | | 115.65 | | 70.59 | 186.24 |
| Total | 306 | | | | | \$1,105.53 | | \$208.87 | \$179.00 | \$147.06 | \$500.00 | \$70.59 | \$1,105.53 |

Fleet of the Future Rail Car Procurement (CCP)

- Major Risks

- Tight management of the first contract (RC1) significantly reduced reliability risks
 - As a result, BART has now eliminated the RC1's \$400M risk reserve budget line item
 - Funding for this risk reserve were linked to BART's operating budget and are not available due to depressed operating revenues and the fiscal cliff
 - A 10% construction contingency remains in RC1

| Fleet of the Future Rail Car Procurement | Description | Total Project Cost Estimate | Per Rail Car Unit Cost | Project Status |
|--|---|-----------------------------|------------------------|--|
| Phase 1: 775 Rail Car Procurement | Replaces 669 rail cars and adds 106 rail cars, including 60 for SVRT Phase 1. | \$2,188M | \$2.8M | Underway; 576 delivered; 561 in revenue service. |
| Phase II: 306 Rail Car Procurement | Procures 306 Core Capacity rail cars. | \$1,106M | \$3.6M | Base contract 9/20; option 1 3/23; option 2 scheduled 12/23. |
| Phase III: 119 Rail Car Procurement | Procures additional 119 rail cars to support BSVII and BART service plans. | \$422M | \$3.5M | Options included in base contract 9/20. |

Traction Power Substations

- West Bay TPSS contract awarded August 2020
 - Downtown San Francisco Montgomery and Civic Center stations
 - Work is now 70% complete
- East Bay TPSS contract
 - Design 100% complete
 - RFP will be released Spring 2024
- Major risks
 - Bid price for EB contract could exceed design cost estimate due to construction cost escalation due to current market conditions – will do an industry survey and implement bid strategies to ensure competitive bids

Traction Power Substations – Status Update

- West Bay
 - Civic Center – traction power equipment field acceptance testing underway
 - Montgomery – preparing for installation of wall header support steel for HVAC
- East Bay
 - Plan to initiate procurement process in next 90 days



Rail Car Storage

- Two contracts awarded
 - Track Procurement contract awarded December 2020
 - Civil Grading contract awarded February 2022
- Major risks
 - Funding constraints – breaking up the planned single contract into multiple contracts that can be phased – phasing plan underway
 - Environmental – accidental wetland – mitigation plan with Hayward Area Recreation and Park District

Rail Car Storage – Status Update

- Trackwork Procurement

- All delivered special trackwork units inspected and no issues found
- 5,921 of 10,710 concrete ties delivered to date

- Civil Grading

- Retaining Wall 1A concrete placements – footing 968 ft + stem wall 580 linear ft – compl.



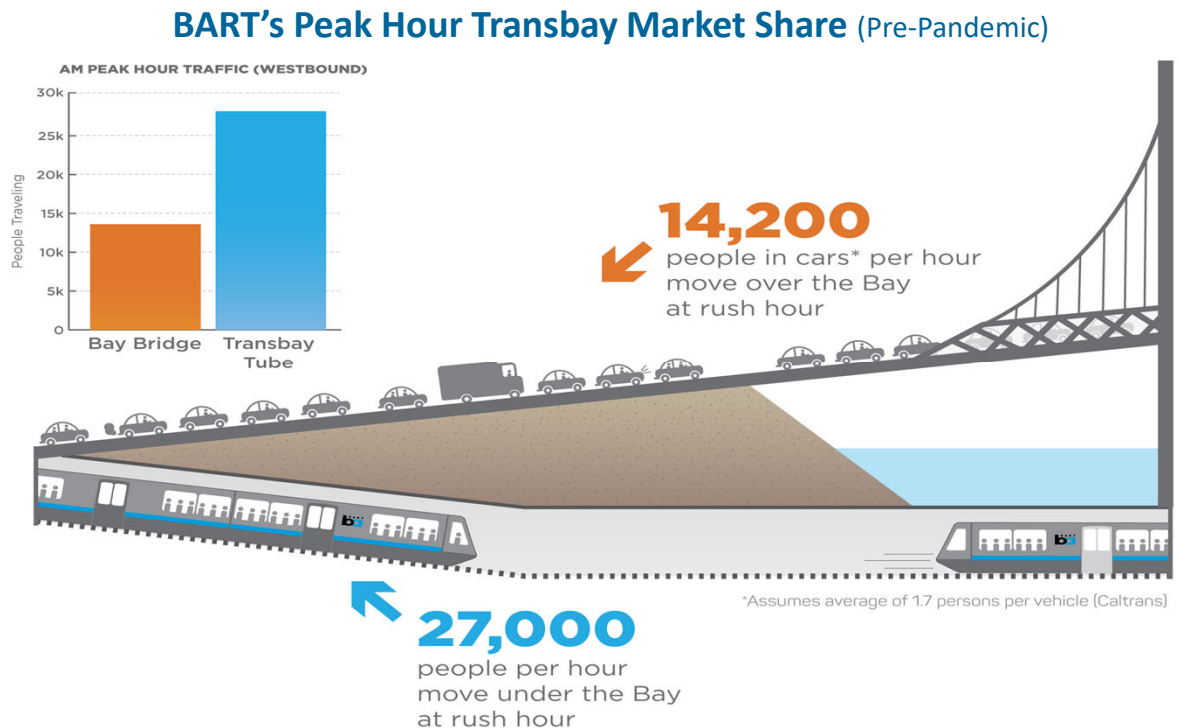
Background

Core Capacity Program Overview

- Program of projects to expand BART capacity systemwide:
 1. New **communications-based train control system** (CBTC) to run trains closer together (shorter headways)
 2. **306 additional rail cars** to deliver more service
 3. **Additional rail car storage** to store and maintain the fleet
 4. Additional **traction power substations** to power the expanded fleet

BART Core Capacity Program Benefits

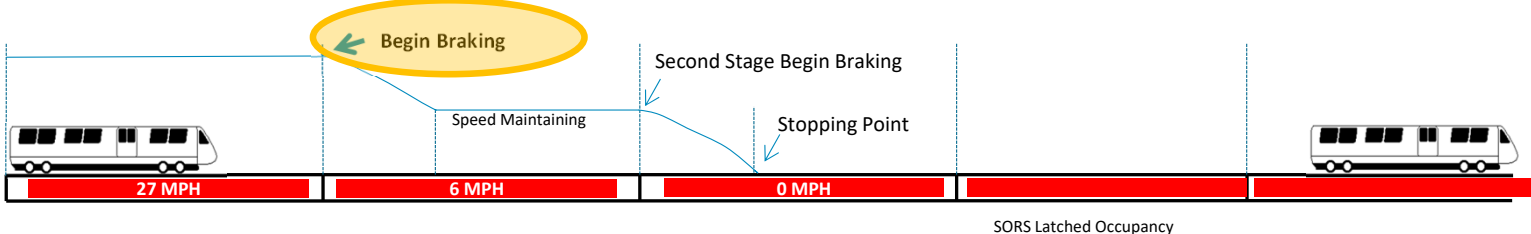
- Prepares the region for the **next 50 years**
- Will enable BART to **increase service by 30-40%**
- Up from 23 trains/ hour during peak periods today to up to **30 10-car trains/ hour** at completion
- More frequent BART service will **improve transit connections** in San Francisco across the region



Communications-Based Train Control Overview

- Replaces BART's 50-year-old train control system with a new, state-of-the-art CBTC
- Will enable closer headways and more frequent service from up to 23 trains/hour today to up to 30 10-car trains
- \$1.9 billion project

Existing Fixed Block Train Control



New Communications-Based (Moving Block) Train Control

