As of 9/11/23

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

San Francisco County Transportation Authority

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		
Supervisorial District(s):	Citywide		
Is the project located on the 2022 Vision Zero High Injury Network ?	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		

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.

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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

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.
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.

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San Francisco County Transportation Authority

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

Project Cost Estimate		**Funding Source**		
Phase	**Cost**	**Prop L**	**Other**	**Source of Cost Estimate**
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
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San Francisco County Transportation Authority

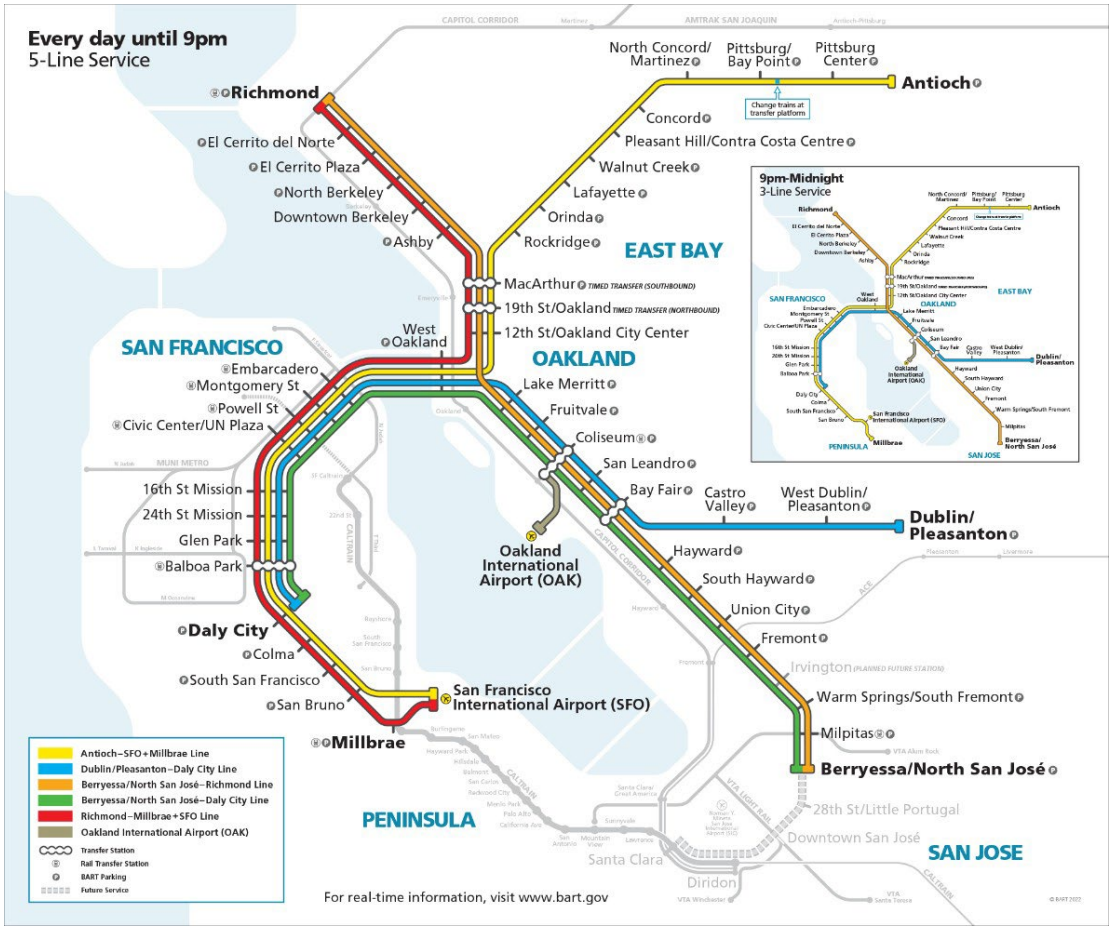
Prop L Supplemental Information Please fill out each question listed below (rows 2-8) for all projects.	
Project Name	***BART Core Capacity - Fleet of the Future 54 Expansion Vehicles***
Relative Level of Need or Urgency (time sensitive)	See Attachment A, pg. 5.
Prior Community Engagement/Level and Diversity 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.
Compatability 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	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. 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.

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

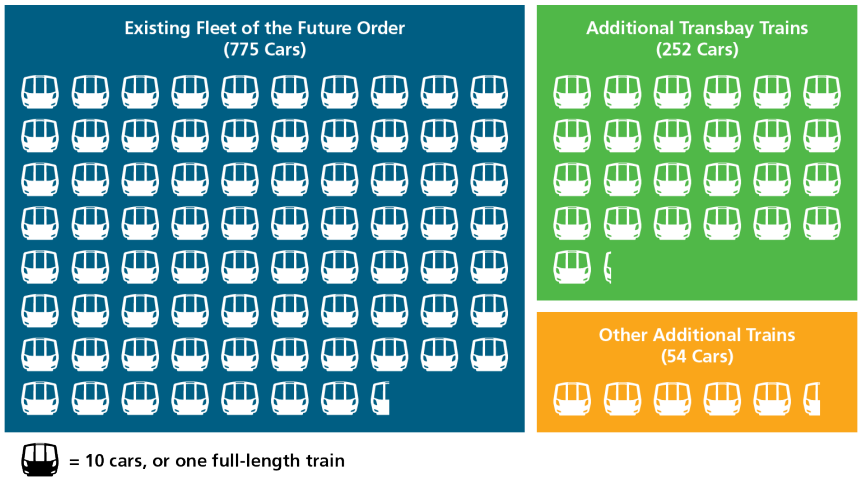


The CCP is a package of strategic investments that will allow BART to operate up to 30 ten-car trains per hour (300 cars) in each direction through the existing tube, maximizing throughput in the most heavily used part of its system. **The CCP includes four elements: 306 additional rail cars to provide 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

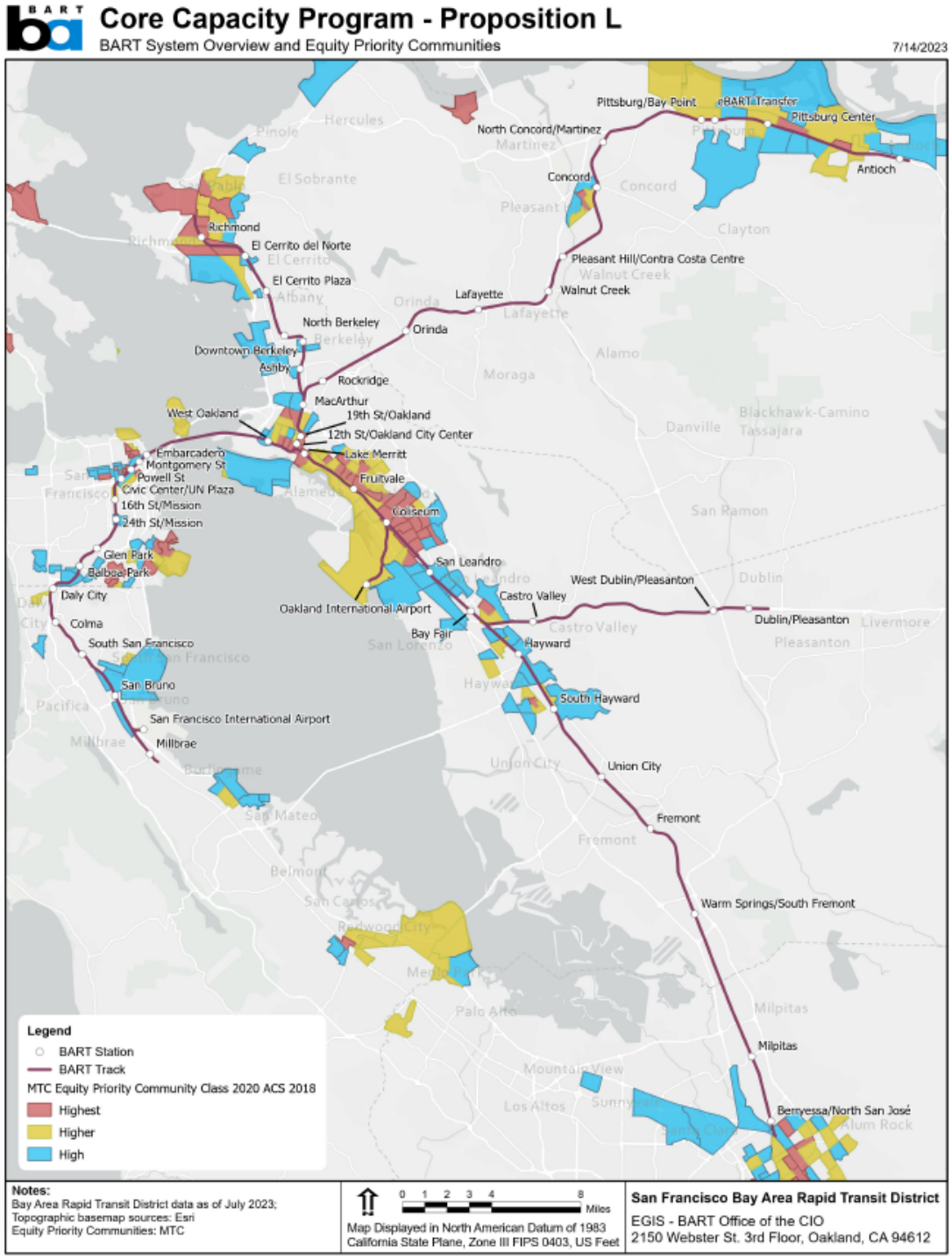
The primary benefit of the CCP, and specifically the implementation of Option 2, is that Bay Area residents and tourists will benefit from reliable service with new train cars. Taken together, the CCP projects will relieve crowding, increase reliability, and provide a more convenient service to all patrons, 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 C02 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
Equity	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. 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 original 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). 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.
Environmental Sustainability	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.
Accountability & Engagement	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.

	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

San Francisco County Transportation Authority

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%**	

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.

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.