Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (SUMMARY)

Project Information:

Lead Agency:	San Francisco Bay Area Rapid Transit District
Project Name:	BART Additional Rail Car Procurement Project
Project Type: *See Attachment A*	A2: Expand/Enhance transit service
Description of Project (Short):	Procurement of new, electric powered passenger vehicles
Project Location:	San Francisco Area
Project Start Date (anticpated):	1-Jul-18
Project End Date (anticpated):	30-Jun-19

Funding Information:

Funding Year:	FY 2015-16
Requested Amount of PUC 99313:	
Requested Amount of PUC 99314:	$4,476,845
Total LCTOP Funding:	$13,476,845
Total Project Cost:	$ 13,476,845

Project Benefits:

Greenhouse Gas Benefits (off of worksheet)

Estimated GHG Reduction:	-13506
Project Life:	25
Estimated Total GHG Reduction:	0

Disadvantaged Communities (DAC) Benefits:

Does your service area have a DAC?	yes - several
Does the Project Benefit a DAC?	yes - several
Identify the DAC Census Tracts?	6075017801, 6075023103, 6075012502
Identify Specific DAC Benefit Criteria? *See Attachment B*	TP 1A: Project provides improved transit or intercity rail service for stations or stops in a disadvantaged community.
Qualitative Description of DAC Benefit?	This project is both located within several DACs & provides benefits to these DACs. Specifically this project provides improved transit rail service for stations in a disadvantaged community by providing greater capacity on existing lines that are nearing capacity. As illustrated on the attached map, eight BART stations are within or on the border of a DAC, and 26 of 44 BART stations are within a zip code that includes a DAC. Every one of the five BART lines runds through a DAC therefore improved service anywhere on the ystem will benefit a DAC.
Describe the DAC Need Project Addresses?	This project will increase service in DACs as well as in zip codes where DACs benefit.
Total GGRF $ Allocated to DAC	$ 2,645,408

Co-benefit

Critical Air Pollution Reduction:	
VMT Reduction:	
Ridership Increase	

Fuel Ues Reduction:	
Energy Use Reduction:	

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (ALLOCATION)

	Regional Entity:
Project Lead: San Francisco Bay Area Rapid Transit District	**County:** Alameda
Project Title: BART Additional Rail Car Procurement Project	

Project Lead:

I certify the scope, cost, schedule, and benefits as identified in the attached Allocation Request (Request) and attachments are true and accurate and demonstrate a fully funded operable project. I understand the Request is subject to any additional restrictions, limitations or conditions that may be enacted by the State Legislature, including the State's budgetary process and/or auction receipts. In the event the project cannot be completed as originally scoped, scheduled and estimated, or the project is terminated prior to completion, project lead shall, at its own expense, ensure that the project is in a safe and operable condition for the public. I understand this project will be monitored by the California Department of Transportation - Division of Rail and Mass Transportation.

Name: Kerry Hamill

Signature:

Title: Assistant General Manager, External Affairs

Agency: San Francisco Bay Area Rapid Transit District

Date: 26-Jan-16 **Amount:** $ 4,476,845

Contributing Sponsor(s):

*If this project includes funding from more than one project sponsor, the project lead above becomes the "recipient agency" and the additional contributing project sponsor(s) must also sign and state the amount and type of LCTOP funds (PUC Sections 99313 and 99314) contribution. Sign below or **attach a separate officially signed letter providing that information. If there is more than one contributing sponsor, please submit additional page, or a letter from the additional contributors.**

Name: N / A

Signature:

Title:

Agency:

Date: **Amount:**

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (FUNDING)

LCTOP Allocation	15/16	16/17	17/18
Request Amount per PUC 99313:	$0	$0	$0
Request Amount per PUC 99314:	$4,476,845	$0	$0
Total Project Allocation Request:	$4,476,845	$0	$0

Project Title: BART Additional Rail Car Procurement Project

Project Location/Address: Oakland, CA

Table 1: Project Lead Information

Agency Name: San Francisco Bay Area Rapid Transit District

Contact Person: Kerry Hamill

Contact Phone #: 510-464-6153

Email Address: khamill@bart.gov

Address: 300 Lakeside Drive, 18th floor
Oakland, CA 94612

Legislative District Numbers

Assembly: 11, 14, 15, 16, 17, 18, 19, 20, 22, 24

Senate: 7, 9, 10, 11, 13,

Congressional: 9, 11, 12, 13, 14, 15

Amount:	PUC Funds Type:
$ 4,476,845	99314
$	

Table 2: Contributing Sponsor Information

Name:

Contact:

Contact Phone #:

Email Address:

Address:

Amount :

$

$

PUC Fund Type:

Other Contributing Sponsors: (Attach sheet with contact information)

Name:

Name:

Name:

Amount:

$

$

$

PUC Fund Type:

TOTAL **$4,476,845**

(*Contributing project sponsors provide signed letters of verification as to amount and eligibility or sign cover page)

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (PROJECT)

Table 3: Type of Project

See Attachment A for category of project (example: Category 1A Implement new or expanded transit service (for new routes or expansion of existing routes).

Operations Projects

	A1		Ai
X	A2		Aii
	A3		Aiii
	A4		Aiv
	A5		

Capital Projects

	B1		Bi
	B2		Bii
	B3		Bii
	B4		

Table 4: Project Summary

a) Project Description - Describe the project in your own words, using comprehensive overall project description regarding improvements to be made, increased level of service and performance goals.

BART will use $4.5 million of FY2015-16 LCTOP funds and $9.0 million of anticipated FY2016-17 and FY2017-18 LCTOP funds to purchase four additional BART rail cars. The four cars will be used to lengthen some of BART's overcrowded trains, providing added capacity to carry more riders in the San Francisco Area.

b) Project Location - Describe the location of the project. Also provide an 8 1/2" X 11" project site map that shows the transit service area and project location. Use link to CalEPA website for information, http://www.calepa.ca.gov/EnvJustice/GHGInvest/default.htm.

The project is located in the San Francisco Area, please see the attached map.

c) Project Life - For capital projects, state the Useful Life of the Project. For operations project state the number of months service will operate.

Capital: 25 years
Operations:

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (BENEFITS/OUTCOMES)

Table 5: Description of Major Benefits/Outcomes

a) Greenhouse Gas Reduction - Describe how this project will reduce greenhouse gases and any assumptions or data that support this description. For example, "The expanded transit service will reduce VMT and greenhouse gas emissions by replacing auto trips with transit trips. Initial estimates indicate that the expansion could add 50 commuter bus riders per day to replace an average auto trip of 10 miles each way." If available, please provide the expected amount of VMT reductions and greenhouse gas reductions.

BART is using the LCTOP GHG Quantification Calculator developed by ARB. However BART is experiencing a LCTOP GHG Calculator issue. ARB and Caltrans are working to address this issue, BART is submitting its LCTOP application using the existing LCTOP GHG Quantification Calculator; and BART has documented this issue in its application.

The BART-specific calculator uses BART-specific values for GHG emissions by transit vehicles rather than using statewide averages. BART vehicles have particularly low GHG emissions – BART gets 2/3 of the electric power needed to run its vehicles from hydroelectric and solar sources. The average annual VMT replaced is 5,282,545, Total GHG Emission Reduction is calculated to be -13,506. Total GHG Emissions Reduction / Total GGRF funds Requested is 0.0010.

b) Increased Mode Share - Describe how this project will directly increase mode share.

This project will increase service on severely crowded BART trains, particularly during the peak weekday periods. Four new/additional cars allows BART to increase the number of trains on existing train sets. This project will increase the number of train cars in revenue service by 4/666 = 0.6% and annual ridership by 705,600 in the San Francisco Area.

c) Disadvantaged Communities (DAC) Project Criteria

See Attachment B for DAC Criteria to Evaluate Projects (example: Category 1B Project provides transit incentives to residents with a physical address in a disadvatage community (e.g., vouchers, reduced fares, transit passes).

Low Carbon Tranportation Projects

X	1A		2A
	1B		2B
X	1C		2C
	1D		

Transit Projects

	1A		1G		2E
	1B		1H		2F
	1C		2A		2G
	1D		2B		2H
	1E	X	2C		2I
	1F		2D		

d) Disadvantaged Communities (DAC) (if applicable*) - Describe how this project will directly benefit the DAC(s) within your service area in your own words. **For agencies whose service area includes disadvantaged communities, at least 50 percent of the total moneys received shall be expended on projects that will benefit disadvantaged communities.**

The addition of 4 new cars to the existing fleet will provide for increased passenger capacity via longer trains running throughout the BART system which includes several disadvantaged communities in it's service area as shown on the attached map.

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (BENEFITS/OUTCOMES)

Table 5: Description of Major Benefits/Outcomes

e) Co-Benefits - Check all additional Benefits/Outcomes.

X Improved Safety

Coordination with Educational Institutions

____	Improved Public Heath	____ College/University	____ Grades K-12
____	Reduced Operating/Maintenance Cost	____	Promotes Active Transportation (walking, biking)
X	Increase System Reliability	____	Promotes integration with other modes of transportation
X	Other Benefits (describe below)		

f) Co-Benefits - Describe benefits indicated above in d) and any other benefits not listed.

The BART system serves numerous disadvantaged communities and by adding additional cars these communities will experience increased passenger capacity via longer trains.

Table 6: Project Schedule

Capital Projects	
Begin Construction Phase **(Contract Award)**	
End Construction Phase **(Contract Acceptance)**	
Begin Vehicle/Equipment Order **(Contract Award)**	
End Vehicle/Equipment Order **(Contract Acceptance)**	
Begin Closeout Phase	
End Closeout Phase	

Operations Projects	
Begin expanded/enhanced transit services	1-Jul-18
End expanded/enhanced transit services	30-Jun-19
Begin Closeout Phase	1-Jul-19
End Closeout Phase	31-Dec-19

START DATE FOR LCTOP FUNDED PHASES MAY NOT PROCEED PROJECT APPROVAL LETTER.

Pre-construction costs (e.g design, environmental and right-of-way) are not eligible to be funded by LCTOP funds,they must be funded by other soures.

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (OPERATIONS DESCRIPTION)

Table 7: Operations Project Description

a) Describe the operating plan for this system.

BART currently experiences extremely overcrowded conditions during weekday peak periods. Providing more train capacity during these periods would reduce overcrowding and result in increased BART peak period ridership. BART's existing operating plan will be used and the additional rail cars will be incorporated to produce longer trains.

b) Describe the fare structure for this system.

BART's current fare structure applies. BART rail fares are computed using a distance-based formula. Distance-based fares are then adjusted based on the scheduled travel time versus travel time based on a system-wide average speed. In addition, surcharges apply to transbay trips and trips originating from or destined to stations located in San Mateo County, and a premium applies to trips to and from the San Francisco International Airport Station.

c) Describe the assumptions and process that were used to develop the ridership projections shown in the request.

Estimated using 2012 National Transit Database figures
- Average weekday unlinked trips: 391,777
- Vehicles available for maximum service: 666
- Average weekday trips per vehicle = average weekday trips / vehicles available = 588
- Increase in average weekday trips = 588 trips/vehicle x 4 vehicles = 2,352
- Ridership annualization factor = 300

d) Describe the assumptions and process for how the operating cost projections were developed.

The per-vehicle cost was derived using the approved project budget divided by the total number of vehicles to be procured. Please see the attached MS Word file labeled "Documentation" which outlines the inputs used.