

Low Carbon Transit Operations Program (LCTOP)
PROJECT DESCRIPTION AND ALLOCATION REQUEST (SUMMARY)

Project Information:

Lead Agency:	San Francisco Municipal Transportation Agency
Project Name:	Expanded service on 9R, 28R, 31, 44, and 38R lines.
Project Type:	<i>See Attachment A</i> A2: Expand/Enhance transit service
Description of Project (Short):	SFMTA will expand service on the 9R San Bruno Rapid, 28R 19th Ave Rapid, and 31 Balboa. SFMTA will also use LCTOP funds to continue expanded service on the 44 O'Shaughnessy and 38R Geary Rapid, which were funded by LCTOP in FY15.
Project Location:	Surface transit across San Francisco (see map)
Project Start Date (anticipated):	July 2016
Project End Date (anticipated):	June 2019

Funding Information:

Funding Year:	FY 2015-2016
Requested Amount of PUC 99313:	\$0
Requested Amount of PUC 99314:	\$8,156,592
Total LCTOP Funding:	\$8,156,592
Total Project Cost:	\$8,156,592

Project Benefits:

Greenhouse Gas Benefits (off of worksheet)

Estimated GHG Reduction:	7940.61 MTCO _{2e} .
Project Life:	Not Applicable for Operating Projects.
Estimated Total GHG Reduction:	7940.61 MTCO _{2e} .

Disadvantaged Communities (DAC) Benefits:

Does your service area have a DAC?	Yes. See attached map.
Does the Project Benefit a DAC?	Yes.
Identify the DAC Census Tracts?	6075023103, 6075017801, and 6075012502.
Identify Specific DAC Benefit Criteria? <i>See Attachment B</i>	TP 2A: Project provides improved local bus transit service for riders using stations or stops that are accessible by walking within 1/2 mile of a DAC.
Qualitative Description of DAC Benefit?	The 31 and 44 have stops located within San Francisco DACs. The 9R and 38R serve stops within 1/2-mile of SF DACs. Additional service hours on these lines will improve the frequency of service as well as reduce crowding for customers.
Describe the DAC Need Project Addresses?	Expanding service on routes that serve DACs will increase access for DAC residents to other parts of the city, including medical facilities, schools, shopping opportunities, and regional transit connections.
Total GGRF \$ Allocated to DAC Benefits?	\$5,791,180

Co-benefit

Critical Air Pollution Reduction:	
VMT Reduction:	
Ridership Increase:	
Fuel Use Reduction:	
Energy Use Reduction:	

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: Sonali Bose

Signature:



Title: Chief Financial Officer

Agency: San Francisco Municipal Transportation Agency

Date: 1/27/16

Amount: \$8,156,592

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:

Signature:

Title:

Agency:

Date:

Amount:

Low Carbon Transit Operations Program (LCTOP)

PROJECT DESCRIPTION AND ALLOCATION REQUEST (FUNDING)

	15/16	16/17	17/18
Request Amount per PUC 99313:	\$0		\$0 \$0
Request Amount per PUC 99314:	\$8,156,592		\$0 \$0
Total Project Allocation Request:	\$8,156,592		\$0 \$0
Project Title:	Expanded service on 9R, 28R, 31, 44, and 38R lines.		
Project Location/Address:	Surface transit across San Francisco (see map)		

Table 1: Project Lead Information

Agency Name: SFMTA	Legislative District Numbers	
Contact Person: Joel Goldberg	Assembly:	17, 19
Contact Phone #: 415.701.4499	Senate:	11
Email Address: joel.goldberg@sfmta.com	Congressional:	12, 14
Address: 1 So. Van Ness, 8th Floor	Amount:	PUC Funds Type:
	\$ 8,156,592	99314
	\$	

Table 2: Contributing Sponsor Information

Name:	Amount :	PUC Fund Type:
Contact:	\$	
Contact Phone #:	\$	
Email Address:		
Address:		
<i>Other Contributing Sponsors: (Attach sheet with contact information)</i>	Amount:	PUC Fund Type:
Name:	\$	
Name:	\$	
Name:	\$	
TOTAL \$8,156,592		

(*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)).

<u>Operations Projects</u>		<u>Capital Projects</u>	
	A1		Bi
X	A2		Bii
	A3		Bii
	A4		
	A5		

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.

SFMTA will expand transit service on a number of routes to improve transit service for San Francisco by making transit more frequent, which results in more convenient and more comfortable service for customers across the City including those living in San Francisco's nearby or adjacent Disadvantaged Communities.

Expansions will be implemented on the following routes:

- 9R San Bruno Rapid
- 28R 19th Ave Rapid
- 31 Balboa

SFMTA also expanded service in 2015 on the following routes using LCTOP funds. SFMTA will use 2016 LCTOP funds to continue these expanded services.

- 38R Geary Rapid
- 44 O'Shaughnessy

The project goals are to reduce crowding on these key routes and corridors, including to DACs, improve service reliability, and reduce GHG emissions.

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>.

All five routes serve San Francisco and provide access between neighborhoods, jobs, medical facilities, schools, and regional transit connections. See the attached map for the transit route service areas.

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:
 Operations: 36 months

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.

By providing 53,438 additional total transit service hours annually the SFMTA estimates to achieve a 7,940.61 MTCO₂e greenhouse gas reduction annually.

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

The two main factors by which this operating project will increase mode share are:

1. Increased frequencies: Riders will not need to wait as long for buses, making the service more comfortable, reliable, and with shorter door to door travel times because the typical wait at bus stops for each vehicle will be shorter.
2. Better quality trip: more service typically results in more capacity and reduced crowding. By offering more frequent service on these lines, the SFMTA is increasing mobility options, improving transit's competitiveness as a travel mode, and increasing modal shift opportunities to transit.

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

Low Carbon Transportation Projects			Transit Projects			
<input type="checkbox"/>	1A	<input type="checkbox"/>	2A	1A	<input type="checkbox"/>	2E
<input type="checkbox"/>	1B	<input type="checkbox"/>	2B	1B	<input type="checkbox"/>	2F
<input type="checkbox"/>	1C	<input type="checkbox"/>	2C	1C	<input checked="" type="checkbox"/>	2G
<input type="checkbox"/>	1D			1D	<input type="checkbox"/>	2H
				1E	<input type="checkbox"/>	2I
				1F	<input type="checkbox"/>	

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 9R, 31, 38R and 44 key Muni lines serve customers in the City's Bayview/Hunter's Point and Tenderloin DAC neighborhoods. In combination, these routes connect these DACs to medical facilities, schools, shopping opportunities, and regional transit connections.

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.

<input type="checkbox"/> Improved Safety	<input type="checkbox"/> Coordination with Educational Institutions
<input checked="" type="checkbox"/> Improved Public Health	<input type="checkbox"/> College/University <input type="checkbox"/> Grades K-12
<input type="checkbox"/> Reduced Operating/Maintenance Cost	<input checked="" type="checkbox"/> Promotes Active Transportation (walking, biking)
<input checked="" type="checkbox"/> Increase System Reliability	<input checked="" type="checkbox"/> Promotes integration with other modes of transportation
<input type="checkbox"/> Other Benefits (describe below)	

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

More frequent, more comfortable transit service encourages transit usage and reduces auto mode share. All transit trips have a walking component, encouraging an active lifestyle. And all of our buses have bicycle racks that enable bicyclists to expand their origin and destination travel ranges. While the increased service is not coordinated with Educational Institutions, per se, the outcome is to give residents of DACs and the City as a whole better access to all elements of living in San Francisco: its shops, its medical facilities, its cultural and educational institutions.

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	July 2016
End expanded/enhanced transit services	June 2019
Begin Closeout Phase	August 2019
End Closeout Phase	November 2019

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

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

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.

SFMTA will tap into its fleet of almost 800 buses and a workforce with over 2,000 operators to provide transit service for these service improvements. Service expansions funded by LCTOP improvements include:

- 9R San Bruno Rapid: Decrease AM peak period headways from 12 min to 10 min; Decrease PM peak period headways from 12 min to 10 min.
- 28R 19th Ave Rapid: Expand span of service from peak periods only to 6AM-7PM.
- 31 Balboa: Decrease PM peak period headways from 14 min to 12 min.
- 44 O'Shaughnessy: Decrease weekday AM peak period headways from 10 min to 7-8 min; Decrease PM peak period headways from 9-10 min to 8 min. No change.
- 38R Geary Rapid: Decrease weekday AM and PM peak period headways from 5-6 min to 4-5 min, and implement Sunday service at an 8 minute frequency from approximately 8:30am to 8:00pm. No change.

b) Describe the fare structure for this system.

Adult Fare: \$2.25
Senior/Disabled Fare: \$0.75
Youth Fare: \$0.75

For a full listing of SFMTA fares and passes, please see: <https://www.sfmta.com/getting-around/transit/fares-passes>.

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

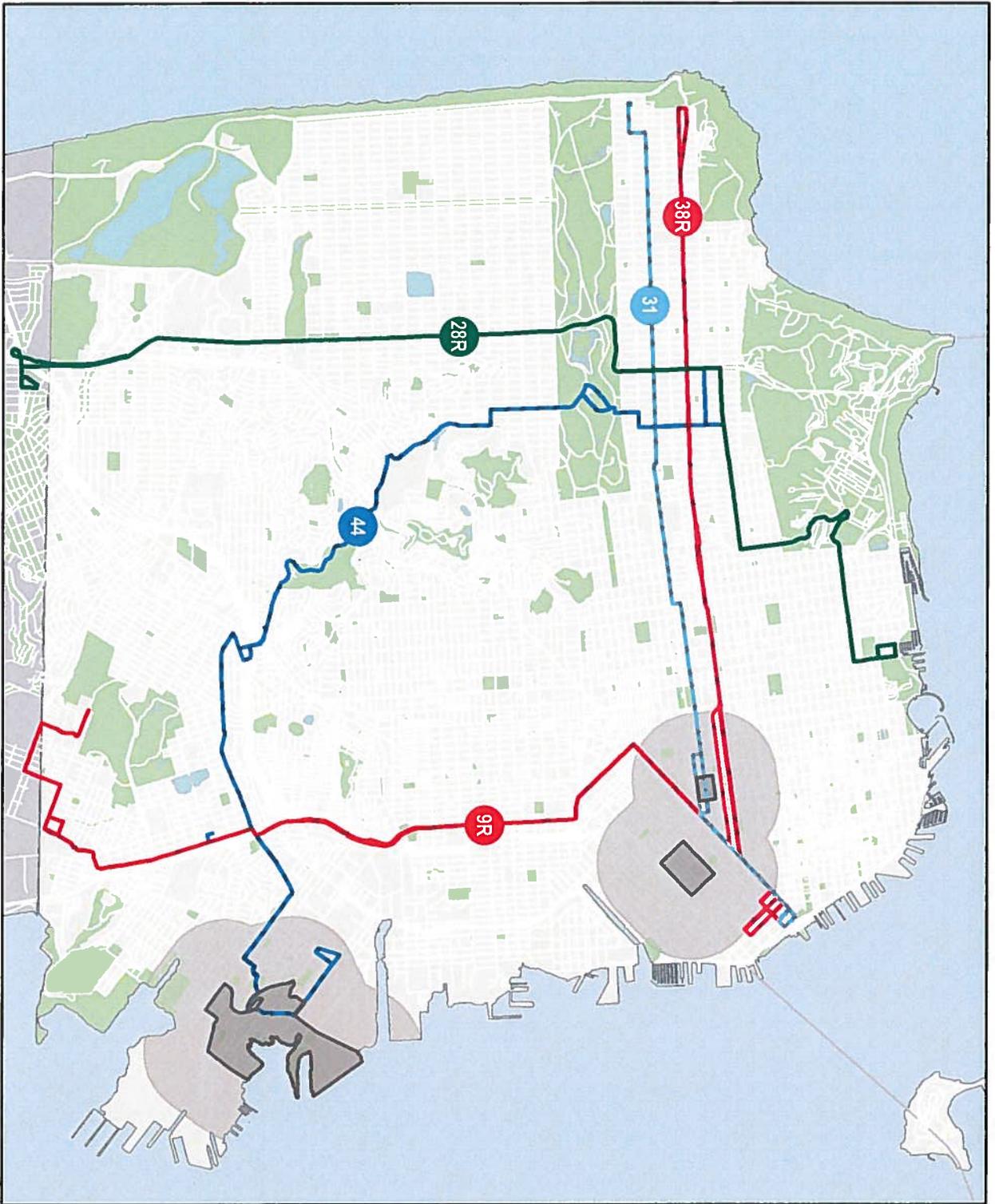
Because the GHG calculator requires total annual ridership by route, SFMTA used the latest annual NTD ridership figures available. The base year for the 44 and 38R used FY14 data because those projects had increases funded by LCTOP in FY15. The other routes used FY15 data as the base year because LCTOP funded increases occur in FY16. We estimated ridership increases using the annualized service hours increase multiplied by an estimated ridership-service elasticity factor of 0.3.

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

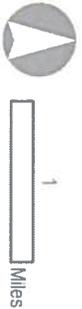
Operating cost projections are based on the increased number of annualized revenue hours multiplied by the National Transit Database (NTD) FY15 operating cost per revenue hour for the appropriate mode minus general and administration costs. All routes are motor coach, except for the 31 Balboa, which is trolley coach. Please see "Cost Estimate & Ridership Calcs" tab. The full service span increases to 28R involve an increase of 21,138 service hours. In order to keep the request within the total LCTOP allocation amount, these hours were reduced on the allocation request. Reducing hours on the 28R maximizes funds spent on routes providing benefits to DACs.

Low Carbon Transit Operations Program

SFMTA FY16



- 9R San Bruno Rapid
- 28R 19th Ave Rapid
- 31 Balboa
- 38R Geary Rapid
- 44 O'Shaughnessy
- San Francisco DACs
- Within Half-Mile of SF DAC



Scale 1:75,535
Created: 1/15/16



Service Hour Increase Cost Estimates

Route	Annualized Service Hours - Before	Annualized Service Hours - After	Increase in Annualized Service Hours	Percent Increase in Annualized Service Hours	Mode	Cost/Revenue Hour for Mode	Annual Cost	Provides Benefits to DAC (whether directly within or within 1/2-mile)?
9R San Bruno Rapid*	98,572	118,056	19,484	20%	Motor Coach	\$ 153.19	\$ 2,984,754	Yes
28R 19th Ave Rapid**	15,897	31,408	15,511	98%	Motor Coach	\$ 153.19	\$ 2,376,154	No
31 Balboa	56,086	58,325	2,239	4%	Trolley Coach	\$ 139.97	\$ 313,393	Yes
38R Geary Rapid*	195,640	205,790	10,150	5%	Motor Coach	\$ 153.19	\$ 1,554,879	Yes
44 O'Shaughnessy	72,584	78,638	6,054	8%	Motor Coach	\$ 153.19	\$ 927,412	Yes
Total							\$ 8,156,592	

* Service Hours are calculated for 9/9R and 38/38R together as they are scheduled together. However, increases only apply to 9R and 38R.

** Full service span increases to 28R involves an increase to 37,035 service hours. Hours have been reduced to fall within total LTOP appropriation while maximizing funds spent on routes providing benefits to DACs.

Sources: Annualized Service Hours from SFMTA Schedule Data, Cost/Revenue Hour from FY15 NTD Rates as of 1/7/16

Calculation of Share of Funds Providing Benefits to DACs

Total Funds Allocated to Routes Providing Benefits to DAC	Total Funds	Share of Funds Providing Benefits to DACs
\$ 5,780,438	\$ 8,156,592	71%

Annual Ridership Projections

Route	Percent Increase in Service Hours	Ridership-Service Elasticity Factor	Year 1	Year F	Total Annual Ridership - Year 1*	Total Annual Ridership - Year F*
9R San Bruno Rapid	20%	0.3	2015	2016	1,791,927	1,898,186
28R 19th Ave Rapid	98%	0.3	2015	2016	555,697	718,360
31 Balboa	4%	0.3	2015	2016	2,919,521	2,954,486
38R Geary Rapid*	5%	0.3	2014	2016	7,237,564	7,350,211
44 O'Shaughnessy*	8%	0.3	2014	2016	5,159,806	5,288,915

* 38R and 44 show Year 1 as 2014 as these increases occurred in 2015 funded by LTOP. 2014 ridership reflects FY14 NTD data, and 2015 ridership reflects FY15 data.

Note that service increases are implemented at start of signup periods, not at the start of the FY.

Sources: Annualized Service Hours from SFMTA Schedule Data, NTD FY14 and FY15 data



California Environmental Protection Agency
Air Resources Board

^{**}Updated Emission factors on December 18, 2015.

California Air Resources Board (ARB)
Greenhouse Gas Emission Reduction Calculator for the
California Department of Transportation (Caltrans)
Low Carbon Transit Operations Program (LCTOP)
Greenhouse Gas Reduction Fund
Fiscal Year 2015-16

The California Air Resources Board (ARB) is responsible for providing the quantification methodology to estimate greenhouse gas (GHG) emission reductions from projects receiving monies from the Greenhouse Gas Reduction Fund (GGRF).

This GHG emission reduction calculator accompanies the quantification methodology for the fiscal year (FY) 2015-16 GGRF Low Carbon Transit and Operations Program (LCTOP) available at: <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/finalctopgm.pdf>

Applicants must use this calculator to estimate the GHG reductions associated with the LCTOP projects. Refer to the quantification methodology document for background, step by step detailed instructions and examples. To use this calculator, follow these steps:

- Step 1 Identify the LCTOP proposed project type(s): The applicant must select at least one eligible project type from Tables 1 or 2 and may select additional project types from Tables 3 or 4.
- Step 2 Determine the inputs needed: The applicant will use Tables 5 and 6 to determine the required project details needed for input into this calculator tool for the applicable project type selected in Step 1.
- Step 3 Estimate GHG emission reductions: The applicant will enter the project details identified in Step 2 into this calculator tool to calculate the GHG emission reductions of the proposed project.

Read Me Tab (this page):
Enter the Project Name, Project ID and the contact information for person who can answer project specific questions from staff reviewers on the quantification calculations. The Project ID is assigned by Caltrans. This file will be submitted with other documentation requirements. Please use the following file naming convention: "[Project ID]_[Project Name]" not to exceed 20 characters. For example, if the application ID is "1-1C_001", the project name is "Transit BRT", and the file is the input file, the file name may be "1-1C_001Transit BRT." Project names may be abbreviated.

Project Name:	Expanded service on 9R, 28R, 31, 44, and 38R
Project ID:	
Contact Name:	
Contact Phone Number:	
Contact Email:	
Date Completed:	

Inputs Tab:
Headers in red indicate input needed by the project applicant. For each row, applicants must work from left to right and enter all relevant data. Some cells may not be applicable to the project. These cells will turn black and be locked based on inputs. Applicants should use as many rows as necessary to characterize all relevant features of the proposed project. Definitions are provided in the definitions tab, including how to determine Year 1, Year F, and adjustment factors. Inputs must be substantiated in the documentation provided to ARB; see Section C. Documentation of the quantification methodology.

Submit documentation: Save file for submittal. See Section C. Documentation of the quantification methodology for additional documentation requirements.

For more information on ARB's efforts to support implementation of GGRF investments, see: www.arb.ca.gov/auctionproceeds
Questions on this document should be forwarded to GGRFProgram@arb.ca.gov
Questions on the LCTOP program should be forwarded to LCTOPcomments@dot.ca.gov



California Air Resources Board (ARB)
Greenhouse Gas Emission Reduction Calculator for the
California Department of Transportation (Caltrans)
Low Carbon Transit Operations Program (LCTOP)
Greenhouse Gas Reduction Fund
Fiscal Year 2015-16

Project Name: Expanded service on 9R, 28R, 31, 44, and 38R
 Project ID: 0

Inputs into columns highlighted in YELLOW with RED headers are required fields dependent on project type (see quantification methodology)
 Must be filled out from left to right

Project Details					
Eligible Project Type	Transit Service Type	County	Year 1 (Yr1)	Year F (YrF)	Yr1 Annual Ridership
New/Expanded Service	Bus (local bus)	San Francisco	2016	2017	1,791,927
New/Expanded Service	Bus (local bus)	San Francisco	2016	2017	555,697
New/Expanded Service	Bus (local bus)	San Francisco	2016	2017	2,919,521
New/Expanded Service	Bus (local bus)	San Francisco	2016	2017	7,237,564
New/Expanded Service	Bus (local bus)	San Francisco	2016	2017	5,159,806

Displaced Autos Details						New/Expanded Vehicle Details		
Y/F Annual Ridership	Adjustment (A)	Length (L)	Adjustment (AA)	Length (LL)	Annual Average VMT Displaced	Fuel Type	Engine MY	Annual VMT or Units of Fuel
1,898,186	0.50	2.20	0.10	2.00	1,842,466.61	Diesel	2013	203,632
718,360	0.50	2.82	0.10	2.00	835,441.28	Diesel	2001	121,684
2,954,486	0.50	1.80	0.10	2.00	2,342,627.83	Electric (Trolley Bus, Cable Car, Street Car)	2002	15,332
7,350,211	0.50	2.13	0.10	2.00	7,041,535.03	Diesel	2015	129,604
5,288,915	0.50	2.23	0.10	2.00	5,297,075.60	Diesel	2013	53,842
					-			
					-			
					-			
					-			

Old Service Vehicle or Displaced Fuel Details					Net GHG Benefits
Useful Life	Additional Project Type	Fuel Type	Engine MY	Annual VMT or Units of Fuel	Total GHG Emission Reductions (MTCO2e)
12					429.44
12					100.10
12					1249.00
12					3453.90
12					2708.17



**California Air Resources Board (ARB)
 Greenhouse Gas Emission Reduction Calculator for the
 California Department of Transportation (Caltrans)
 Low Carbon Transit Operations Program (LCTOP)
 Greenhouse Gas Reduction Fund
 Fiscal Year 2015-16**

Project Name:	Expanded service on 9R, 28R, 31, 44, and 38R
Project ID:	0

Inputs in **RED** must be filled out

Results	GHG Emissions (MTCO2e)	Description
Net GHG Benefits	7,940.61	Total GHG Emission Reductions (MTCO2e)
LCTOP Funds Requested (\$)	-	Funds requested per State Controller's Office Eligible list for FY 2015-16
Total LCTOP Funds Requested (\$)	-	Includes all LCTOP allocations the applicant intends to utilize (up to three FY allocations including FY 2015-16) for the proposed project. Use the State Controller's Office Eligible list for FY 2015-16 allocation funding amounts to estimate the subsequent funding allocations.
Total GGRF Funds Requested (\$)	-	Includes the Total LCTOP fund requested and any other GGRF Program monies
Total GHG Emission Reductions / Total GGRF Funds Requested (\$)	#DIV/0!	The metric to be reported in the application.



California Air Resources Board (ARB)
Greenhouse Gas Emission Reduction Calculator for the
California Department of Transportation (Caltrans)
Low Carbon Transit Operations Program (LCTOP)
Greenhouse Gas Reduction Fund
Fiscal Year 2015-16

Inputs	Description
Project Details	<p>Eligible Project Type Eligible projects fall into two Eligible Project types: "New/Expanded Service" and "Expanded Transit Facilities or Service Enhancements". See quantification methodology to select an eligible project and determine which project type to select.</p> <p>Transit Type Select the transit type (e.g. bus (local bus), train, multi-modal facility) that the project will service. Select Train for expanded train station or Bus (local bus) for new bus stops.</p> <p>County Select the county where the majority of the service occurs</p> <p>Year 1 (Yr1) Select the first year of service, or year that facility construction will be completed.</p> <p>Year F (YrF) Select the final year that the service is funded or of the facility useful life.</p>
Displaced Auto Details	<p>Yr1 Annual Ridership The estimated annual ridership in Yr1</p> <p>YrF Annual Ridership The estimated annual ridership in YrF</p> <p>Adjustment (A)* Adjustment factor to account for transit dependency Use: documented project specific data or system average developed from a recent, statistically valid survey or default Default: 0.5 for local bus service or 0.83 for long distance commuter service</p> <p>Length (L)* Length (miles) of average auto trip reduced Use: value based on specific project or system average reported to the National Transit Database (consult Caltrans for assistance)</p> <p>Adjustment (AA)* Adjustment factor to account for auto trips used to access transit service Use: value based on project specific data or system average developed from a recent, statistically valid survey or default Default: 0.1 for local bus service or 0.8 for long distance commuter service</p> <p>Length (LL)* Length (miles) of average trip for auto access to transit Use: value based on specific project data or default Default: 2 miles for local bus or 5 miles for long distance commuter service</p> <p>Annual Average VMT Displaced The estimated annual average auto VMT displaced by the project</p>
New/Expanded Vehicle Details	<p>Fuel Type Select the fuel type of the vehicle proposed for service (e.g. Electric/BEV or PHEV)</p> <p>Engine MY Select the engine model year of the new/expanded vehicle proposed for service</p> <p>Annual VMT or Units of Fuel Enter the annual vehicle miles traveled or units of fuel (e.g. gallons of diesel) of the proposed service. Units of fuel needed is only applicable for ferry service.</p> <p>Useful life Input 10 years for advance technologies (i.e., electric, hydrogen fuel cell buses); for others, use Federal Transit Administration guidance available here www.fta.dot.gov/documents/C_5010_1D_Finalpub.pdf. Documentation of useful life is required to be included with the application.</p>
Old Service Vehicle or Displaced Fuel Details	<p>Additional Project Additional projects fall into two Additional Project types: "Vehicle Improvements" and "Fuel Savings". See quantification methodology to select an eligible project and determine which project type to select.</p> <p>Fuel Type Select the fuel type of the old vehicle proposed for improvement, or of the "Fuel Savings" project (e.g. Diesel)</p> <p>Engine MY Select the engine model year of the old vehicle proposed for improvement</p> <p>Annual VMT or Units of Fuel Enter the annual VMT of the old service vehicle being replaced by a new vehicle (e.g., 1,000 miles) or for ferry service enter units of fuel (gallons of diesel) of the proposed service. For Fuel Savings projects enter the units of fuel displaced (e.g., 12,000 gallons of diesel).</p>
Net GHG Benefits	<p>Total GHG Emission Reductions (MTCO2e) The estimated net GHG benefits from the proposed project.</p> <p>FY 2015-16 LCTOP Funds Requested (\$) Funds requested per State Controller's Office Eligible list for FY 2015-16</p>
Funds Requested	<p>Total LCTOP Funds Requested (\$) Includes all LCTOP allocations the applicant intends to utilize (up to three FY allocations including FY 2015-16) for the proposed project. Use the State Controller's Office Eligible list for FY 2015-16 allocation funding amount to estimate the subsequent funding allocations.</p> <p>Total GGRF Funds Requested (\$) Includes the Total LCTOP fund requested and any other GGRF Program monies</p>

For "INPUT" tabs, the rows reflect the following routes:

Annual Ridership Projections

Route	Total Annual Ridership - Year 1	Total Annual Ridership - Year F
9R San Bruno Rapid	1,791,927	1,969,026
28R 19th Ave Rapid	555,697	819,668
31 Balboa	2,919,521	2,977,796
38R Geary Rapid*	7,237,564	7,425,310
44 O'Shaughnessy*	5,159,806	5,374,988

Average Trip Length

Route	Average Trip Length (from FY15)
9R San Bruno Rapid	2.20
28R 19th Ave Rapid	2.82
31 Balboa	1.80
38R Geary Rapid*	2.13
44 O'Shaughnessy*	2.23