

Orange County Transportation Authority Low Carbon Transit Operations Program – Projects Description

Bravo! Main Street/Ten Battery-Electric Buses

As described in the table below, to date, the Orange County Transportation Authority (OCTA) has programmed \$11,343,681 in funding for battery-electric buses and the associated infrastructure upgrades, including \$2,523,000 in fiscal year (FY) 2018-19 Low Carbon Transit Operations Program (LCTOP) funds. It is proposed that an additional \$2,594,886 in FY 2019-20 LCTOP funds would be used to allow the purchase of a total of ten battery-electric buses under the State of California contract, along with the associated infrastructure upgrades. This action will provide the funding necessary to cover the estimated cost of the electric buses and support systems.

The buses will be 40-foot standard low floor OCTA-equipped battery-electric buses with seating for 37 passengers, or 33 passengers and two wheelchairs, internal and external camera system, WIFI and mobile routers, a farebox equipped for mobile ticketing, automated passenger counters, radio system and automatic vehicle location, and a three-position exterior bike rack.

Utility and depot upgrades are necessary to charge the electric buses and, according to Southern California Edison (SCE), the current available energy required at the Garden Grove Base to support this project is currently available through SCE's transformer installed at that location; however, electrical cabling, trenching, dedicated charging stations, smart energy management controllers, and other devices similar in nature are still required.

Purchasing these ten buses with the required infrastructure will allow OCTA to test them along with the hydrogen fuel cell electric buses in the local environment and geography to see how both technologies perform within the OC Bus Service Plan.

The proposed funding plan is provided below:

Item	Cost Escalated to FY 19-20	SCCP (1)	HVIP (2)	LCTOP	FY 19-20 SGR (3)	VW Settlement (4)	Proposed LCTOP
Heavy Duty Battery-Electric Buses	\$ 10,721,130	\$ 3,699,424	\$ 1,520,000	\$ 1,083,000	\$ 2,070,281	\$ 900,000	\$ 1,448,425
Diagnostic Tools, Resident Inspector, Technical Assistance, Training for ten buses	\$ 1,261,952	\$ 630,976	\$ -	\$ -	\$ -		\$ 630,976
Depot Chargers and Installation	\$ 775,800	\$ -	\$ -	\$ 485,158	\$ -		\$ 290,642
Depot Construction (3)	\$ 809,999	\$ -	\$ -	\$ 769,999	\$ -		\$ 40,000
Depot Design / CM	\$ 369,686	\$ -	\$ -	\$ 184,843	\$ -		\$ 184,843
TOTAL	\$ 13,938,567	\$ 4,330,400	\$ 1,520,000	\$ 2,523,000	\$ 2,070,281	\$ 900,000	\$ 2,594,886

(1) SB 1 (Chapter 5, Statutes of 2017) Solutions for Congested Corridors Program (SCCP)

(2) The California Air Resources Board (CARB), in partnership with CALSTART, launched the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) and Low NOx Engine Incentives in 2009 funded with state Cap-and-Trade funds, to accelerate the purchase of cleaner, more-efficient trucks and buses in California. HVIP subsidy is paid to the vendor and expansion buses are eligible for \$152,000 per bus.

(3) SB 1 State of Good Repair (SGR) will replace about two buses with battery electric buses.

(4) The Volkswagen (VW) Environmental Mitigation Trust provides about \$423 million for California to mitigate the excess nitrogen oxide (NOx) emissions caused by VW's use of illegal emissions testing defeat devices in certain VW diesel vehicles. Funding is available for expansion buses at \$180,000 per bus.

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Bravo! 529 Rapid Bus Service Start-up and Operations Project

Bravo! 529 Rapid Bus started service in February 2019 and provides weekday service with 12-minute peak frequency and 19-minute off-peak frequency, primarily on Beach Boulevard from the Fullerton Park-and-Ride to the Goldenwest Transportation Center. FY 2017-18 LCTOP funds (\$4,787,534) were programmed to the start-up and operation of the Bravo! 529 Rapid Bus Service to support operations for two and a half years. LCTOP funds may be used for up to five years of start-up and operations and OCTA staff is recommending the use of an additional \$2,572,281 in LCTOP funds, which will derive from \$1,470,913 in FY 2019-20 LCTOP funds, \$812,976 in FY 2018-19 funds, and \$288,392 in accrued interest. These funds will support this service for up to 12 months.

Bravo! Main Street Rapid Bus service is not anticipated to start until FY 2022-23 and reprogramming the FY 2018-19 funds to the Bravo! 529 Rapid Bus Service Start-up and Operations Project allows for a more immediate use of the FY 2018-19 LCTOP funds.

Discounted Aged-Based Fare Program

OC Bus 360°, OCTA's comprehensive plan to improve bus service from all angles, identifies youth as a key audience for bus service growth. Beginning in January 2021, OCTA is proposing to offer subsidized youth passes. The cost of lost fare revenue over four years is estimated to be \$2,000,000. Additionally, this program would position OCTA to respond if legislation is passed requiring free fares to riders based on age. There are several legislative proposals circulating at present that would provide free fares to passengers based on age or other similar criteria.

New College Pass Programs

OC Bus 360°, OCTA's comprehensive plan to improve bus service from all angles, identifies college students as a key audience for bus service growth. According to OCTA's bus customer satisfaction surveys, work and school are the top trip purposes for bus riders.

Beginning in fall 2017, OCTA provided Santa Ana College (SAC) students, enrolled full- and part-time with a one-year free pass program funded through LCTOP. In May 2017, SAC students voted to pass a per semester student transportation fee to fund the program from fall 2018 through summer 2020. Using a cost-sharing approach to raise sufficient revenue to cover lost fare revenues, OCTA established the per semester student fee at \$6.75 for each full-time student and \$5.75 for each part-time student. The cost is established based on an analysis of the existing transit service and assumptions about current and future ridership.

Orange County Transportation Authority Low Carbon Transit Operations Program – Projects Description

As a result of this program, OCTA has seen significant ridership increases over the estimated ridership for this cohort before the incentive project. Based on this success, FY 2018-19 LCTOP funds were programmed for Santa Ana, Fullerton, and Golden West colleges. OCTA staff recommends \$749,243 in FY 2019-20 LCTOP funds be used to replicate this model at Irvine Valley, Saddleback, Cypress, and Coastline colleges for three years. The student enrollment fee will vary as it is based on the specific transit opportunities and demographics of each college. OCTA may need to revisit this request if proposed legislation to offer free transit to college students is passed.

Travel Training

OCTA staff recommends that \$315,000 in FY 2019-20 LCTOP be used to expand the travel training program by increasing the total amount of trainings both in workshop and individual travel training format, as well as introducing these two training formats in additional languages other than English and Spanish, over the next two contract years.

In FY 2018-19, LCTOP funds (\$685,000) were awarded for travel training to assist the senior and disabled community and new riders with using the fixed-route bus system to increase ridership. Individuals are trained at workshops, small groups, and one-on-one sessions. All of these individuals who are trained receive free day pass or 30-day pass.

Over a three-year period, approximately 24 workshops were proposed each year averaging two workshops each month for the next three years at senior centers, day program locations, and other sites to train approximately 517 people per year. In addition, approximately 103 people will receive one-on-one individual training. Follow-up surveys will determine usage of the OCTA system before and after training. For those trained with current paratransit eligibility, ridership data will be collected by tracking the unique identification number assigned to all users of OCTA's paratransit service. Additionally, all senior or disabled trainees without paratransit eligibility status will be encouraged to apply for a Reduced Fair Identification (RFID) Card. OCTA will use the unique identification numbers of the RFID card holders to determine usage of the OCTA system.

Metrolink Service Expansion

On September 23, 2019, the OCTA Board of Directors (Board) approved the use of \$2,100,000 in FY 2018-19 LCTOP funds for the Metrolink Service Expansion. Starting in April 2020, Metrolink service will be expanded on the Orange County line by up to two round trips between Laguna Niguel/Mission Viejo and Los Angeles Union Station, one round trip between the cities of Oceanside and Los Angeles and up to two weekday round trips on the 91/Perris Valley Line between Perris-South and Los Angeles Union Station, via Fullerton.

Orange County Transportation Authority Low Carbon Transit Operations Program – Projects Description

In order to approve the use of the FY 2018-19 funds, the California Department of Transportation and the California Air Resources Board must approve the project through approval of an allocation request. Allocation request may only be submitted once a year and OCTA would submit an allocation request for Metrolink Service Expansion using FY 2018-19 funds. For this reason, FY 2018-19 LCTOP projects are included in the resolution that is provided for Board consideration and approval.

Bravo! Main Street Operations

Bravo! Main Street is identified as one of the 11 corridors in the OC Transit Vision. This corridor runs parallel to State Route 55 and traverses through several disadvantaged communities. The bus service is on Main Street and the route starts at the Anaheim Regional Transportation Intermodal Center (ARTIC), which provides connections to Metrolink and Amtrak services to the cities of Los Angeles, Riverside, San Bernardino, Oceanside, and San Diego, and ends at South Coast Metro, a key employment center of the County. Bravo! Main Street will operate weekdays along Main Street serving 13 stops in each direction over 8.4 miles from ARTIC to MacArthur Boulevard.

In 2019, \$2,902,976 in FY 2018-19 LCTOP funds were approved to be set aside to contribute to the start-up operating costs for the Bravo! Main Street Rapid Bus Service. However, this service is not scheduled to start until FY 2022-23. In order to ensure timely-use of LCTOP funds, \$2,100,000 was previously approved to be used for a nearer term service expansion for Metrolink and the remaining funds are recommended to be used for the Bravo! 529 Rapid Bus Service Start-up and Operations Project as part of this item.