



City of Culver City

Staff Report

File #: 22-285, Version: 1

Item #: A-1.

CC - (1) Presentation on the Culver City Zero-Emission Rollout Plan; (2) Adoption of a Resolution Approving the Culver City Zero-Emission Rollout Plan; (3) Adoption of a Resolution Accepting Grant Funding in the Amount of \$5,200,000 from the California Energy Commission for GFO-20-601 - Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure and GFO-20-602 - Zero-Emission Transit Fleet Infrastructure Deployment; (FOUR-FIFTHS VOTE REQUIREMENT: Authorization to Increase FY2021/2022 Appropriations to Capital Project 20380000.PB002 by \$5,200,000; (5) Approval of an Agreement with Southern California Edison for Services Performed through the Charge Ready Program and Authorization to the City Manager to Negotiate the Final Terms and Conditions of such Agreement; and (6) Direction to the City Manager as Deemed Appropriate.

Meeting Date: September 20, 2021

Contact Person/Dept: Mike Tobin, Deputy Transportation Officer /Transportation
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Fiscal Impact: Yes No **General Fund:** Yes No

Public Hearing: **Action Item:** **Attachments:**

Public Notification: (E-Mail) Meetings and Agendas - City Council (09/15/2021);

Department Approval: Rolando Cruz, Chief Transportation Officer (09/08/2021)

RECOMMENDATION

Staff recommends the City Council (1) receive a presentation on the Culver City Zero-Emission Rollout Plan; (2) adopt a Resolution approving the Culver City Zero-Emission Rollout Plan; (3) adopt a Resolution accepting grant funding in the amount of \$5,200,000 from the California Energy Commission for GFO-20-601 - Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure and GFO-20-602 - Zero-Emission Transit Fleet Infrastructure Deployment; (4) approve a budget amendment to authorize an increase to the FY2021/2022 appropriations to Capital Project 20380000.PB002 by \$5,200,000 (budget amendment requires four-fifths vote); (5) approve of an agreement with Southern California Edison for services performed through the Charge Ready Program and authorize the City Manager to negotiate the final terms of such agreement; and (6) provide other direction to the City Manager as deemed appropriate.

BACKGROUND/DISCUSSION

Culver City Zero-Emission Rollout Plan

The California Air Resources Board (CARB) Innovative Clean Transit (ICT) regulation requires all public transit agencies in the State of California to transition from conventional fossil-fueled buses (compressed natural gas, diesel, propane) to zero-emission buses (battery-electric or fuel cell electric) by 2040 and to create a Rollout Plan to guide this transition. The Rollout Plan is considered a living document and is meant to guide the implementation of a zero-emission fleet and help transit agencies work through many of the potential challenges and explore solutions. An adopted plan and resolution are required to be submitted by small transit agencies to CARB by July 1, 2023.

With guidance and direction from the City Council, the Culver City Transportation Department will transition Culver City's entire bus fleet to a 100% zero emission fleet by 2028, well in advance of California Air Resources Board's (CARB's) Innovative Clean Transit (ICT) 2040 goal and zero emission bus (ZEB) purchasing mandates. To meet this goal, Culver City has established a multi-phased project to develop a ZEB transition plan, design and build charging infrastructure, and replace its current RCNG fleet with battery electric buses (BEB) starting in 2021 and achieving a 100% zero emission fleet by 2028, in alignment with the Transportation Electrification Partnership with LACI and in-time for the Los Angeles World Olympics in 2028.

Moving forward, the City will replace its fleet of transit buses with zero emission vehicles on a one-for-one basis as they reach the end of their useful life. Culver City has moved forward in leveraging California's statewide DGS contract and executed a purchase order with New Flyer of America for the purchase of 10 battery electric buses and associated charging infrastructure.

The first four buses are scheduled to be delivered in August/September 2021, with an in-service target date within 30 days. A temporary ABB plug-in pedestal charger has also been procured and will be installed and commissioned no later than October 15th of 2021. The next six buses are scheduled to be delivered at the end of 2022.

Staff received authorization from Council on September 14th, 2020 to enter into a professional services agreement with CTE, the Center for Transportation and Environment. The agreement is for architectural and engineering services and the development of a long-term plan for the Transportation Department's BEB and Facility Electrification initiative. CTE is a nationally recognized non-profit organization that develops, promotes, and implements advanced transportation technologies, vehicles, and fuels that reduce environmental pollution and fossil fuel dependency. CTE's project portfolio includes 61 projects with 41 transit properties throughout the country.

This project with CTE will satisfy the CARB ICT requirements (Cal. Code Regs. Tit. 13 § 2023.1(d)) requiring each transit agency to submit a complete Zero-Emission Bus Rollout Plan (Rollout Plan), approved by its governing body, showing how it plans to achieve a full transition to zero-emission buses (ZEBs).

Culver City Transportation staff have been working diligently with CTE and its subconsultants on conducting the various analyses that will comprise the final Electrification Master Plan. However, this

update will specifically focus on the following analyses:

- **Operational Review/Service Assessment** - This task includes using real-world efficiency data to estimate the performance of the New Flyer BEB on Culver City routes. CTE creates nominal and strenuous efficiency estimates based on real-world data from other New Flyer BEBs in use at agencies around the US. The analysis uses energy, odometer, and temperature data recorded by meters and sensors located on the buses. The data is filtered to exclude values recorded outside the range of Culver City's climate and outside the range of average speeds of CCB's routes. CTE uses statistical analysis on the resulting dataset to create efficiency estimates for nominal and strenuous conditions on CCB routes. The results of this task will provide estimated fuel efficiency, range, and daily energy requirements under various loading and battery degradation scenarios.
- **Fleet Assessment** - The City has provided CTE with a current fleet inventory, bus procurement, and bus disposal schedule. CTE has used this to develop a vehicle replacement schedule, as well as to calculate year on year costs of replacing RCNG buses with Battery Electric Buses on a 1:1 basis.
- **Fuel Assessment** - This work product includes the use of BEB performance data from the bus modeling and route simulations to analyze and forecast the expected performance on each block in Culver City's service network to calculate daily energy requirements. This analysis shows different scenarios with varying levels of fuel consumption to estimate projected fuel costs over the life of the study.
- **Maintenance Assessment** - This work product involves an analysis of BEB labor and maintenance costs and the cost impact of mid-life overhauls of major components.
- **Facilities Assessment** - Using the bus and fueling requirements as inputs, this task includes a comprehensive review of the multiple infrastructure scenarios to accommodate the transition to 100% electric fleet. Scenarios are analyzed based on feasibility, cost, and operational impact. This section includes the final facility recommendation and the construction phasing and sequencing plan and details on utility upgrades necessary to meet increased energy demand.
- **Total Cost of Ownership** - The Total Cost of Ownership Assessment compiles and organizes the results from the Fleet, Fuel, Facilities and Maintenance assessments to show total and annual costs throughout the transition. It includes selected capital and operating costs of each transition scenario over the transition timeline

Each of these analyses are inputs to the Department's final Master Electrification Plan, which is the primary output of this project. This plan will serve as a living document that guides the agency's decision making regarding every facet of electrification including but not limited to procurement, training, performance evaluation, data collection, facilities, and infrastructure.

The Rollout Plan is not a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Sections 15060(c) and 15378(b). Future garage construction contemplated under the Rollout Plan would undergo separate environmental review.

Staff recommends the City Council adopt a Resolution approving the Culver City Zero-Emission Rollout Plan (Attachment 2).

CALIFORNIA ENERGY COMMISSION (CEC) GRANT FUNDING

In support of funding for this long-term Master Electrification Plan, the Transportation Department applied for two grant programs solicited by the California Energy Commission in Summer of 2020 and was awarded the full amount requested:

- GFO-20-601 - Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure for \$200,000 to assist with the Transportation's development of blueprints used for facility electrification and to create a deliverable to be provided to the state which can be used as a model for other electrification efforts by similar entities.
- GFO-20-602 - Zero-Emission Transit Fleet Infrastructure Deployment for \$5,000,000 to support the implementation of capital requirements related to the full fleet electrification as outlined in the Transportation Electrification Master Plan.

Staff recommends the City Council adopt the Resolution approving the above-described grant funds (Attachment 3).

SOUTHERN CALIFORNIA EDISON'S CHARGE READY PROGRAM

Southern California Edison's Charge Ready Transport Program was designed to accelerate the electric vehicle charging markets in SCE's service territory to support California's zero-emission policies. Under the program, SCE performs infrastructure work on the utility side and customer side of the meter at low to no cost to its customers. Such work includes electrical design, construction and installation of electrical equipment like transformers, switchgear, and meters. The customer is responsible for procuring and maintaining the electric vehicle charging equipment. In addition to covering infrastructure costs, the Charge Ready Program will provide a rebate for the charging stations, up to a certain dollar amount, based upon the power output of the equipment specified. There is no cost to Charge Ready Program participants other than the obligation to acquire a quantity of vehicles and charging equipment equivalent to the number of charge ports supported by SCE's make ready infrastructure during the 10-year Program Participation Agreement term.

FISCAL ANALYSIS

Transportation has secured funding to support the acquisition of the first ten battery electric bus purchases using federal and state monies and authorized under FY2021/2022 Capital Project 20380000.PB001. Funding for the design of the infrastructure and implementation of Phase 1 has been secured, budgeted, and authorized under Capital Project 20380000.PB002 for Transportation Facility Infrastructure.

Resulting from the \$5.2 million in grant awards from the CEC, staff requests an increase of appropriations of \$200,000 in 20380000.619800.PB002 and \$5,000,000 in 20380000.730100.PB002 as consistent with Phase III of Electrification Plan. Grant funding will be received and reflected in revenue account 20380000.340935.PB002.

Moving forward, Transportation will continue to source funds from grants or other means of financial assistance and return to council for increases to the project budget to finance activities related to electrification infrastructure and electric vehicles as funds are secured and authorized by Council.

Staff anticipates near-term requests for additional appropriations given likely approval of a \$3,500,000 Congressionally Member Designated Project in the Federal Surface Transportation Act reauthorization pending reconciliation in the House and Senate.

Staff has drafted the capital plan identifying the funds needed for this project. Staff will be including potential sources into the Long-Term Transportation Funding Plan to be presented to Council in the Third Quarter of FY2021/2022.

ATTACHMENTS

1. Culver City Zero-Emission Rollout Plan
2. Proposed Resolution Approving the Culver City Zero-Emission Rollout Plan
3. Proposed Resolution Accepting Grant Funds from the California Energy Commission (CEC).

MOTIONS

That the City Council:

1. Receive and file a presentation on the Culver City Zero-Emission Rollout Plan;
2. Adopt a Resolution approving the Culver City Zero-Emission Rollout Plan;
3. Adopt a Resolution accepting grant funding in the amount of \$5,200,000 from the California Energy Commission for GFO-20-601 - Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure and GFO-20-602 - Zero-Emission Transit Fleet Infrastructure Deployment;
4. Approve a budget amendment to authorize an increase to the FY2021/2022 Appropriations to Capital Project 20380000.PB002 by Five-Million and Two-Hundred Thousand Dollars (\$5,200,000) as Outlined in the Fiscal Analysis Section (A budget amendment requires a four-fifths vote);
5. Approval of an agreement with Southern California Edison for services performed through the Charge Ready Program and authorize the City Manager to negotiate the final terms and conditions of such agreement;
6. Authorize the City Attorney to review/prepare the necessary documents;
7. Authorize the City Manager to execute such documents on behalf of the City; and
8. Provide direction to the City Manager as deemed appropriate.