



Approve Purchase of Battery Electric Buses and Selected Components From Proterra, Inc Using State Cooperative Purchasing Contract

City Council Meeting
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PROJECT BACKGROUND

- Proposed purchase begins CityBus' first deployment of Zero-Emissions Transit Buses
- Four Battery-Electric Buses (BEBs) will replace four model year 2002 diesel transit buses
- Proposed purchase informed by CADMUS study of CityBus fleet electrification needs (funded by Sonoma Clean Power), as well as staff research and survey of operators with current BEB deployments
- Reflects input from Council at April 2019 Study Session and September 2020 Climate Action Subcommittee

FUNDING AVAILABLE

- Proposed purchase supported by two federal competitive grants awards from Federal Transit Administration (FTA) 5339(b) Bus & Bus Facilities Program:
 - FY17 Award: \$1,206,518
 - FY18 Award: \$1,780,133
- Required Match (15%): \$527,057 using Transit's Transportation Development Act (TDA) reserves
 - Will pursue VW Mitigation Trust funding for potential reimbursement
- Total Funding: \$3,513,708



Federal Transit
Administration



PURCHASING MECHANISM

- CA Department of General Services State Cooperative Purchasing Contract (SCPC) for Zero-Emissions Transit Buses
 - Meets FTA procurement requirements
 - Achieves greater economy of scale than stand-alone RFP
 - Two qualifying manufacturers: New Flyer, Proterra



VEHICLE SELECTION

- Must be able to perform the majority of CityBus vehicle “blocks” (150-170 miles) on one charge, based on CADMUS study of energy use per mile
- Need some State of Charge (SOC) on return to MSC for safety, reliability
- Expect ~2% battery degradation annually
- Only one bus on State Contract able to meet range requirements over multiple years

PROPOSED PURCHASE

- Purchase four Proterra 660 kWh 40' buses to ensure adequate range and state of charge to operate CityBus vehicle blocks on a single charge
- Utilize Proterra battery lease program to provide for mid-life replacement of batteries

SELECTED BUS COST OPTIONS

- Proterra 660 kWh 40' Bus Estimated Cost

Purchase Method	Base Cost	Total w/ Options & Extended Warranty	Annual Battery Lease Cost	12-Year Lease Cost	Free Battery Replacement @ Yr-6	12-Year Capital Cost
Buy Outright	\$900,000	\$1,160,000	-	-	N	\$1,160,000
Battery Lease	\$605,000	\$730,000	\$52,000	\$624,000	Y (\$294,000)	\$1,060,000

BENEFITS OF BATTERY LEASE

- Free replacement battery at Year-6
 - Even if SOC is above warranty limit
 - Likely replaced with newer (2026/2027) battery technology
- Lower up-front capital cost (~\$430K per bus)
- Able to replace four diesel buses instead of only three

NEXT STEPS

- If today's recommendation approved, begin purchasing process for Proterra battery-electric buses
- Return to Council for review/approval of battery-lease agreement
- Return to Council for approval of contract to complete electrification infrastructure at MSC yard (complementing work to be done through PG&E EV Fleet Program)

RECOMMENDATION

It is recommended by the Transportation and Public Works Department that the Council, by resolution: 1) approve the Cooperative Procurement purchase under the California Department of General Services State Cooperative Purchase Contract 1-19-23-17C of four 40-foot battery-electric transit buses and selected components from Proterra Inc, Burlingame, California; 2) authorize the Purchasing Agent to issue a purchase order to Proterra Inc in an amount not to exceed \$3,513,708; 3) authorize the Director of Transportation and Public Works or his designee to execute all documents, including any necessary agreement(s), to effect the purchase, subject to approval as to form by the City Attorney; and 4) authorize the Chief Financial Officer to pay all proper claims for this purchase from Fund 1651-Transit Capital, JL Keys 45159 and 45160.

- Questions?