



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: Public Works

To: City Council

From: City Manager & Staff

Council Meeting Date: November 21, 2022

Re: Agreement with Center for Transportation and the Environment, Inc. for Services related to Procurement and Deployment of Three Battery Electric Buses.

Executive Summary

Authorize the City Manager to execute a consultant services agreement with Center for Transportation and the Environment, Inc. (CTE) in the amount of \$540,500 to provide services related to the procurement and deployment of five (5) battery electric buses. This agreement and the three (3) buses will be funded by a Federal Transit Administration (FTA) Low or No Emission grant awarded to the City of Columbia in the amount of \$2,896,675. The additional two (2) buses will be funded by a separate FTA grant awarded to the City of Columbia in the amount of \$2,229,324. The grant funds are being appropriated to the project accounts with this legislation.

Discussion

The Public Works transit division was awarded a \$2,896,675 federal grant under the FTA's Low or No Emission grant program. The purpose of the grant is to improve the efficiency and sustainability of transportation systems and assist public transit agencies with management and analysis of alternative energy vehicle deployments. This grant will fund three (3) battery electric 35' buses, project administration, engineering and design, depot design and build. The grant requires a local match of \$538,825 for a total project cost of \$3,435,500.

Staff is requesting that council authorize the City Manager to execute the consultant services agreement with CTE in the amount of \$540,500 which will be paid from the grant funds. Following is a summary of services to be performed by CTE (see the agreement for more details):

- Project Planning-detailed project planning to refine the general schedule to incorporate specific goals and constraints, finalize scope and approach, define tasks, roles and responsibilities, and preliminary risks.
- Requirements Analysis-bus modeling, route simulation, charge and rate modeling and confirmation of the technical specifications for the bus and charging equipment.
- Bus Procurement and Build-support to finalize specifications and other documents required for bus procurement.
- Infrastructure Procurement, Design & Build-finalize site plans for charging infrastructure.
- Bus & Infrastructure Deployment-conduct a series of tests to validate the performance and operation of the buses.
- Deployment Validation and Key Performance Indicators-collect various operational data points to measure and report actual energy savings, cost savings, and greenhouse gas emissions reductions.



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- Project Closeout-issue a final report summarizing project results, findings, and lessons learned.
- Project Management, Administration, Reporting & Control-guide the project by the following control and risk management procedures: collaboration tools, communication plan, reporting plan, schedule control plan, and risk management & mitigation plan.

The useful life of the battery electric bus is 10 years/350,000 miles. The three (3) buses will be used on the fixed route system within the City of Columbia.

The Public Works transit division was awarded a federal grant in the amount of \$2,229,324 under 5307 funding. The purpose of the grant is to provide funding to the agency for replacement of aging fleet. The grant will fund two (2) battery electric 35'buses. The grant requires a local match of \$393,411 for a total project cost of \$2,622,735.

Fiscal Impact

Short-Term Impact: The agreement with CTE is for a not to exceed amount of \$540,500 and will be paid from an FTA Low or No Emission grant. The Low or No grant awarded to the City is \$2,896,675 and the City's local match of \$538,825 will be paid from Transportation Sales Tax. The separate FTA grant awarded to the City of \$2,229,324 and the City's local match of \$393,411 will be paid from Transportation Sales Tax.

Long-Term Impact: None

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Resilient Economy, Secondary Impact: Organizational Excellence, Tertiary Impact: Reliable Infrastructure

Comprehensive Plan Impacts:

Primary Impact: Mobility, Connectivity, and Accessibility, Secondary Impact: Environmental Management, Tertiary Impact: Infrastructure

Legislative History

Date	Action
09/04/2018	B203-18 Authorizing a consultant services agreement with Center for Transportation and the Environment, Inc. relating to the procurement and deployment of three (3) 30-foot battery electric buses; appropriating funds.



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Suggested Council Action

Authorize the City Manager to execute a consultant services agreement with Center for Transportation and the Environment, Inc. (CTE) to provide services related to the procurement and deployment of five (5) battery electric buses, and appropriate grant funds.