



**Date:** August 6, 2019

**To:** Thomas J. Bonfield, City Manager  
**Through:** Keith Chadwell, Deputy City Manager  
**From:** Bill Judge, Acting Transportation Director  
**Subject:** Electric Bus Procurement

### **Executive Summary**

The City of Durham adopted a resolution endorsing the development of a fundable action plan towards a road map to carbon neutrality in City operations by 2040. In furtherance of this effort, the Transportation Department applied for and has received a total of \$3,500,000 dollars in federal and state grants as well as local matching funds for the purchase of electric buses. In May 2019, the city issued a solicitation for the purchase of electric buses. Transportation is recommending City Council approve the purchase of two 40ft. electric buses including related power outfit from Gillig LLC for the price of \$1,042,913 per bus for a total contract amount of \$2,085,826. Staff is working on a separate but related track with Duke Energy for the energy company to build the required electric power infrastructure that would supply power to these buses for overnight charging. The buses are expected to be delivered by December of 2020.

### **Recommendation**

To authorize the City Manager to execute a purchase contract with Gillig LLC for the purchase and delivery of two 40ft. electric buses in the amount of \$1,042,913 per bus for a total purchase contract of \$2,085,826.

### **Background**

Last year the Transportation Department applied for and received federal grant (5339C) Buses and Bus Facilities Infrastructure Investment Program funds (CFDA#20.526) in the amount of \$2,125,000 for the procurement of electric buses. Prior to this award the Department also received two separate Congestion Mitigation and Air Quality (CMAQ) grants from the North Carolina Department of Transportation in the amount of \$800,000 for the same purpose of procuring electric buses. Altogether, the City is receiving a total of \$3,500,000 in federal and state grants as well as local matching funds for the purchase of two electric buses. These buses would replace two of our current 2003 Gillig buses. In May 2019, the city issued a solicitation requesting bids from electric bus manufacturing companies. Three bus manufacturing companies; Proterra, Gillig and New Flyer responded. Upon careful analysis of the bids prices, followed by testing of the respective products and an exhaustive reference checks from peer transit providers who are currently using similar electric buses, Transportation is recommending City Council approve the purchase of two 40ft. electric buses including related power outfit from Gillig LLC for the price of \$1,042,913 per bus. This price was the lowest priced bid based upon the compilation of an equals-cost comparison of the 40ft. electric bus bids submitted by Gillig LLC and Proterra, including optional equipment and parts. (New Flyer did not submit a bid for the 40ft. bus). Staff is working on a separate but related process with Duke Energy for the electric power company to build the necessary electric power infrastructure required to supply power to charge the buses overnight. The buses are expected to be delivered by December of 2020.

It is the desire of GoDurham to operate the electric buses on the following GoDurham fixed routes: Northgate Mall/Northpoint (approximately 88 daily miles), NC98/The Village/East Durham (approximately 82 miles/day), Hwy 54&55/Woodcroft/Southpoint Mall (approximately 87 miles/day), or other Trippers as may be decided by the daily operational needs. The electric buses, when run on the Transit Coach Duty cycle should cover at least 150 miles or 8 hours per day with full charge capacity.

**Issues and Analysis**

Below is the comparative cost analysis of the responsive bids received from two of the three companies that responded and were determined to be responsive to our solicitation.

Cost Comparison with Desired Optional Equipment

	Gillig	Proterra
Base Cost 40ft.	\$899,538	\$875,356
Delivery Charge per Bus	\$13,460	\$3,250
Charging Station	\$35,700	\$51,500
Optional items price	<u>\$94,215</u>	<u>\$139,095</u>
<b>Total Cost per bus</b>	<b>\$1,042,913</b>	<b>\$1,069,201</b>

**Alternatives**

- 1) Authorize the purchase of two (40ft.) electric buses manufactured by Gillig LLC; or
  
- 2) Do not authorize the purchase of these two electric buses from the Gillig LLC. Under this alternative federal and state funds earmarked for this procurement will be forfeited and the City may not meet its stated bus replacement/expansion goals which could significantly impact the City’s road map to carbon neutrality goals for 2040.

**Financial Impact**

The total cost for the purchase of two 40ft. low-floor, heavy duty total electric buses shall not exceed \$2,085,826 (or \$1,042,913 per bus). Funding application for this grant has been submitted to the Federal Transit Administration for the federal portion of this award. The local match in the amount of \$575,000 will be programed in the FY2021 transit fund budget.

**Equal Business Opportunity Summary**

This item has been reviewed for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting procurement.

**Workforce Statistics**

Please see the attached for the Workforce Statistics of Gillig.

**Workforce Statistics**

TOTAL WORKFORCE			
Employment Category	Employees	Males	Females

<b>Project Mgr.</b>	76	72	4
<b>Professional</b>	109	83	26
<b>Technical</b>	59	54	5
<b>Clerical</b>	201	160	41
<b>Labor</b>	531	515	16
<b>Total</b>	976	884	92

<b>UBE/SLBE REQUIREMENTS - MALES</b>					
<b>Employment Category</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>Indian or Alaska Native</b>
<b>Project Mgr.</b>	39	2	20	11	0
<b>Professional</b>	41	6	16	20	0
<b>Technical</b>	23	1	19	11	0
<b>Clerical</b>	47	4	75	34	0
<b>Labor</b>	96	27	298	94	0
<b>Total</b>	246	40	428	170	0

<b>UBE/SLBE REQUIREMENTS - FEMALES</b>					
<b>Employment Category</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian or Pacific Islander</b>	<b>Indian or Alaska Native</b>
<b>Project Mgr.</b>	4	0	0	0	0
<b>Professional</b>	13	1	5	7	0
<b>Technical</b>	3	0	2	0	0
<b>Clerical</b>	15	0	19	7	0
<b>Labor</b>	4	1	9	2	0
<b>Total</b>	39	2	35	16	0

Attachment: Purchase Contract