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DATE: January 22, 2024

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Jared Hall – Transit Manager, Public Works and Utilities (PW&U)  
Gina Benedetti-Petnic, PE – Assistant Director of PW&U  
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SUBJECT: Resolution Authorizing the Purchase of Four Battery Electric Buses from New Flyer Industries and Authorizing Staff to Execute All Necessary Documentation to Complete the Purchase

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### **RECOMMENDATION**

It is recommended that the City Council adopt the attached Resolution authorizing the purchase of four battery electric buses from New Flyer Industries and authorizing staff to execute all necessary documentation to complete the purchase.

### **BACKGROUND**

Petaluma Transit operates transit services throughout the City of Petaluma. In order to do so, the City owns and operates a vehicle fleet of different vehicle types and sizes to best fulfill the requirements of providing a variety of transit service options throughout the community.

To maintain a reliable transit fleet, the City regularly replaces transit buses upon reaching the end of their operational lifespan. Four of Petaluma Transit's fixed-route buses have reached the end of their operational lifespan, are now considered obsolete, and are in need of replacement. The proposed action would replace these four vehicles with new units to continue the operational capacity of Petaluma Transit. The need for replacement presents Petaluma Transit with the opportunity to acquire its first battery-electric buses to help move towards the City's goal of reaching carbon neutrality by 2030. The Petaluma Transit bus fleet is currently comprised entirely of internal combustion engine vehicles (aside from a Chevy Bolt EV pool car), and this purchase represents the first step in converting the fleet to electric transit vehicles, setting the standard for future electric bus purchases.

Petaluma Transit utilizes a vehicle replacement policy whereby Federal Transit Administration (FTA) transit funds are allocated through the Metropolitan Transportation Commission (MTC) and then made available to the City of Petaluma as allocated through MTC's Transit Capital

Priorities (TCP) program. In addition to TCP funds, Petaluma Transit has been applying for various grant funding, rebates, and programming capital funding for several years in anticipation of purchasing electric buses. As a result, over \$4 million in various grants and funding sources have been received to assist with this purchase. In addition to the available TCP funding grant/incentive funding received towards the purchase of the electric buses includes the Low Carbon Transit Operations Project (LCTOP) Grant, Transportation Fund for Clean Air (TFCA) Grant, Hybrid and Zero-Emission Voucher Incentive Program (HVIP) rebate, and Transit and Intercity Rail Capital Project (TIRCP) Grant.

Per guidance and input from the community over the past several years, a list of bus requirements was assembled. Priorities from this list included zero-emission operations/motors, reliability, comfort, operational range, availability timeline, customizability, appropriate size, flexibility of operations, aesthetics, and cost, among other factors. Accordingly, staff began researching current product offerings for purchasing four battery electric transit buses (two 35' electric buses and two 40' electric buses). Upon order and receipt, these vehicles would replace the four buses that have reached the end of their lifecycles. Future bus purchases will help ensure a balanced fleet of different vehicle types and sizes to fulfill the community's needs. This includes the next anticipated vehicle purchase of three electric paratransit/micro transit cutaway vans or minibuses anticipated for Q2 2024.

Among the options available within the outlined criteria, staff identified the New Flyer XE40 and XE35 bus models and created the criteria and specifications for the preferred models. New Flyer is the largest bus manufacturer in North America, and several Bay Area transit agencies have successfully operated the XE bus line with a proven track record of efficient performance and reliability.

The identified buses will have 545kw battery packs, with an estimated operating range of 180 miles; 250 miles advertised minus an estimated 30% inefficiency factor typically experienced in operating electric buses in a real-world application for several reasons – heating/air conditioning, signage, additional electric system energy draws, operational elevation changes, driver technique, etc. The buses would seat 35 people and accommodate approximately 50 passengers at full capacity.

Staff has been working with New Flyer to finalize bus specifications and pricing, working through the California Department of General Services (DGS) purchasing contract #1-19-23-17B to provide cost and staff time savings vs purchasing via a separate City contract. Upon approval, staff will finalize an agreement with New Flyer via the DGS contract and order the buses in January 2024.

Prior to receipt of the buses, Petaluma Transit would work with its City and contracted transit staff to ensure adequate training for all aspects of the buses (operations, charging, maintenance, etc.) before their introduction into revenue service. Staff is also working towards implementing the purchase and installation of bus chargers and associated infrastructure improvements at the Petaluma Transit Yard (555 N. McDowell Blvd.) in advance of delivery of the buses to ensure they can start operation upon their delivery and final prep work (installation of graphic bus wraps, training, etc.)

## **DISCUSSION**

The purchase of four New Flyer XE battery electric buses is recommended. The vehicles would be manufactured and delivered with an estimated 14-month build and delivery timeline (estimated receipt in February 2025). These electric buses would replace the four 2007 internal combustion engine fixed-route buses that would be retired upon the arrival of the new buses.

The electric buses purchased would be procured in compliance with Petaluma Municipal Code (PMC) Section 4.04.100 by utilizing an FTA-approved, competitively bid method of cooperative purchasing by joining another agency's publicly bid process. This would exempt the City from independently bidding for the buses while allowing the benefits of economies of scale to achieve lower pricing in a more extensive purchasing consortium process. The use of joint procurements and procurement consortiums to obtain better pricing and lessen transit agency staff burden is strongly encouraged by the MTC. This same method was used to purchase Petaluma Transit vehicles for all recent bus and cutaway vehicle purchases. These vehicles are being purchased through the California Department of General Services contract # 1-19-23-17B, which provides all relevant language necessary to buy the vehicles, including federal clauses, warranties, build and delivery requirements, etc.

As shown in Attachment 2, purchasing the buses via the DGS contract costs \$4,696,835. In addition, the City will have a few related costs to ordering the buses prior to their usage: \$35,000 for bus build inspection services, \$60,000 for exterior bus wraps (both of which are procured separately from local vendors), and \$50,000 in contingency for a total of \$4,841,835.

## **PUBLIC OUTREACH**

This item was discussed at the December 2023 meeting of the Transit Advisory Committee, wherein a unanimous action was approved recommending Council approval for the adoption of this item.

The goal of electrifying the Petaluma Transit fleet has been discussed for multiple years. It is included in the goals of the Petaluma City Council and Transit Advisory Committee and outlined in the Climate Emergency Action Framework.

Input from the community helped determine the specifications and build criteria for the electric buses and their ability to best meet the Petaluma Community's needs.

Additionally, this item appeared on the January 8, 2024, tentative agenda for the City Council, which was a publicly noticed meeting.

## **COUNCIL GOAL ALIGNMENT**

This action supports the following City Council Goals:

- Workplan item #42 - Find ways for City Operations to reduce greenhouse gas emissions, conserve water, decrease waste, and minimize the use of fossil fuels and investigate and pursue options for carbon sequestration.
- Workplan item #52 - Develop a framework to move the City and Transit vehicle fleet from fossil-fuel-based to hybrid, renewable compressed natural gas, and/ or electric vehicles; continue pursuing grant funding opportunities for electric vehicles.

## **CLIMATE ACTION/SUSTAINABILITY EFFORTS**

By replacing diesel and gasoline buses with zero-emission buses, Petaluma Transit can reduce greenhouse gas emissions from its vehicle fleet and provide its operations in a cleaner, greener way. This will help to achieve many of the goals outlined in the Petaluma Climate Action Framework, including assisting the City in attaining climate emission neutrality by 2030.

## **ENVIRONMENTAL REVIEW**

The proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Section 15061(b)(3) (the Commonsense Exemption), because it can be seen with certainty that there is no possibility that the purchase of electric buses to replace internal combustion engines would significantly impact the environment. Additionally, this action is categorically exempt pursuant to CEQA Section 15301 (Existing Facilities) as the purchases are to replace existing buses and will not expand the current use.

## **FINANCIAL IMPACTS**

The combined total cost to purchase the four vehicles is expected to be approximately \$4,841,835, which includes \$4,696,835 for the purchase of the buses, \$35,000 for bus inspection services, \$60,000 for bus graphic wrapping services (both inspection and wrapping services would be procured separately from local vendors), and \$50,000 in contingency expenses.

Various funding sources will be utilized to purchase the buses, as shown in Figure 1. All of the funding noted is currently allocated and contracted, with the exception of the Hybrid and Zero-Emission Voucher Incentive Program (HVIP) rebate, which is a formula funding source and will be applied for in Q1 2024.

**Figure-1**

<b>Funding sources</b>	<b>Amount</b>
Federal Transit Administration (FTA) 5307 & 5339/ MTC Transit Capital Priorities (TCP) funds	\$ 2,629,376
Low Carbon Transit Operations Project (LCTOP) Grant	\$ 684,291
Transportation Fund for Clean Air (TFCA) Grant	\$ 85,343
Hybrid and Zero-Emission Voucher Incentive Program (HVIP) rebate	\$ 480,000
Transit and Intercity Rail Capital Project (TIRCP) Grant	\$ 691,200
Transportation Development Act (TDA) Funds	\$ 271,625*
<b>Total</b>	<b>\$ 4,841,835</b>

*\*Any additional grant/incentive funds received prior to the final delivery of the buses will reduce the amount of TDA funding required to complete the project*

## **ALTERNATIVES**

Three alternatives are available to the City beyond the recommended action:

1. Not purchasing the recommended New Flyer electric buses.
2. Purchasing a different electric bus model or from a different manufacturer.
3. Issuing a City of Petaluma bidding process to purchase electric buses.

Staff do not recommend these options as the New Flyer buses were found to be the best available product to meet the agency's criteria. Purchasing the vehicles through a different process or methodology would add additional time to the order and receipt of the buses and is unlikely to produce more competitive pricing.

## **ATTACHMENTS**

1. Resolution
2. Quote from New Flyer via California DGS contract #1-19-23-17B