



Agenda Report

August 25, 2025

TO: Honorable Mayor and City Council

THROUGH: Finance Committee

FROM: Department of Transportation

SUBJECT: **AUTHORIZE THE CITY MANAGER TO ENTER INTO A CONTRACT FOR THE PURCHASE OF 17 FUEL CELL ELECTRIC BUSES FROM NEW FLYER OF AMERICA, INC FOR PASADENA TRANSIT FOR A NOT TO EXCEED AMOUNT OF \$32,050,255**

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the proposed action is exempt from the California Environmental Quality Act (CEQA) pursuant to State CEQA Guidelines Section 15061(b)(3);
2. Authorize the City Manager to enter into a contract with New Flyer of America, Inc. for the procurement of 17, 40-foot Fuel Cell Electric Buses (FCEB), based on the California Association for Coordinated Transportation (CALACT)/Basin Transit Purchasing Cooperative pricing, for an amount not-to-exceed \$32,050,255, which includes the base contract amount of \$29,136,595 and a contingency of \$2,913,660 (10%) to provide for any necessary change orders;
3. Authorize the inclusion of an option to purchase up to two additional 40-foot FCEBs from New Flyer of America, Inc., with pricing adjusted per the CALACT/Basin Transit Purchasing Cooperative contract under the same terms and conditions, with funding for these option buses subject to future City Council approval and availability of funds;
4. Authorize the City Manager to approve no-cost amendments to the subject contract including durational extensions;
5. Amend the FY 2026 Capital Improvement Budget by appropriating \$14,196,701 as detailed in the Fiscal Impact section; and
6. Find that neither Competitive Bidding nor Competitive Selection are required pursuant to City Charter Section 1002(H) contracts with other governmental entities or their

contractors for labor, materials, supplies or services, and Pasadena Municipal Code Section 4.08.049(8), contracts for which the City's best interests are served.

BACKGROUND:

In alignment with the City's conservation and sustainability initiatives and in compliance with the California Air Resources Board's (CARB) Innovative Clean Transit (ICT) Regulation, the City continues to focus its procurement on 100% zero-emission buses (ZEBs). On January 30, 2023, the City Council adopted the Pasadena Zero Emission Bus Rollout Plan (Rollout Plan), which outlines the phased approach to transitioning the entire Pasadena Transit fleet to zero-emission buses by 2037. As part of the adoption of the Rollout Plan, City Council directed staff to aggressively pursue funding opportunities for Fuel Cell Electric Buses (FCEBs) and infrastructure to replace aging renewable natural gas (RNG) vehicles as soon as possible. On July 8, 2025, staff presented to the Municipal Services Committee (MSC) on the progress of the Rollout Plan, highlighting an aggressive effort to secure vehicle and infrastructure grant funding. As discussed at MSC and City Council, the Rollout Plan recommends a mixed fleet approach with FCEB for Pasadena Transit and battery electric buses (BEB) for Pasadena Dial-A-Rid based on a comprehensive needs assessment that included a route energy analysis, charging/fueling analysis, utility analysis and resilience planning.

In spring 2025, Pasadena put in service its first ZEB to provide drivers, maintenance and staff experience with electric buses prior to this first multi-vehicle order. The next major step in this transition is the procurement of 17 FCEBs, to replace aging renewable natural gas (RNG) vehicles that have reached the end of their useful life. FCEBs are fueled with hydrogen. Hydrogen fuel cells generate electricity to power the electric motor and its byproducts are water and vapor emissions.

Consistent with the Rollout Plan, at this stage, FCEBs continue to present the optimal direction for Pasadena Transit's needs, particularly in the areas of resiliency, range, and operational efficiency. Recent wildfire events highlighted the importance of having a transit fleet that can remain functional during emergencies. During these incidents, grid power was shut down across portions of the City. FCEBs are not dependent on the electrical grid for charging, a key advantage that allows them to continue operating when supported by backup power systems for hydrogen fueling. This ensures continuity of service even during disruptions—something that has become increasingly important in our region.

Additionally, after real world experience with the City's first Battery Electric Bus (BEB) that went into service this spring and discussions with other transit service providers, to match the range and service flexibility of 17 FCEBs, the City would require up to 34 BEBs to operate the route profile based on evolving service needs and real-world data, representing a higher replacement ratio than initially projected. While BEBs are an important part of the zero-emission landscape and continue to evolve, the size and complexity of a BEB-based fleet of this scale would increase both capital and operating costs, and require more space, additional drivers, and added maintenance resources. FCEBs allow the City to adopt a more operational efficient, cost-effective and resilient

solution while maintaining the high level of service our community expects. This decision does not preclude the use of BEBs, as a mixed propulsion fleet is part of the plan; it reflects the optimal choice for today's service environment and positions Pasadena to meet both environmental and operational goals responsibly.

The need to procure FCEBs to replace the aging RNG fixed route buses at this time is critical due state of the existing aging fleet in need of replacement. Vehicles are currently operating beyond their useful life expectancy, and the maintenance needs have increased beyond routine maintenance into major engine component overhauls. This creates impacts to the reliability of service which can be detrimental to ridership and significantly increases operating costs.

The Department of Transportation has identified the 2025 New Flyer Xcelsior CHARGE H2 40-foot fuel cell electric bus as a suitable and comparable ZEB model to replace the 32 and 35-foot RNG vehicles purchased in 2012 and 2014. These FCEBs are in service at peer agencies such as Foothill Transit, SunLine Transit of Coachella Valley including Palm Spring, AC Transit of Alameda and Contra Costa counties including Oakland, Orange County Transportation Authority (OCTA), and Omnitrans of San Bernardino County, and are recognized for their reliability, range, and one for one, seamless replacement with existing fixed-route operations. Staff has determined that the selected ZEBs are reliable, technologically mature, and compatible with Pasadena Transit's existing service and maintenance requirements.

By replacing 17 RNG vehicles with zero-emission FCEBs, this procurement will increase the share of zero-emission vehicles in Pasadena Transit's fixed-route fleet from 2% to approximately 46% and is expected to significantly reduce tailpipe greenhouse gas emissions and other harmful pollutants generated from the current transit fleet. According to CARB, as well as CALSTART, a Pasadena based, non-profit organization that specializes in developing and implementing clean and efficient transportation solutions, that conducted the modeling in the Pasadena Zero Emission Bus Rollout Plan, FCEBs can achieve a reduction of up to 100% of tailpipe CO₂ emissions, as well as eliminate NO_x and particulate matter emissions, improving air quality, particularly in disadvantaged communities disproportionately impacted by transportation-related pollution.

To support operational flexibility for potential future vehicle replacement or service expansion, staff is recommending the inclusion of an option to purchase up to two (2) additional FCEBs as part of the current procurement. Exercising the option would be contingent upon the availability of funds and future City Council approval. Including these buses as an option would allow the vendor to incorporate them into the existing production schedule, thereby avoiding additional costs and lead time associated with a separate procurement.

FUELING AND RE-APPROPRIATION OF FUNDING

The 17 vehicles are anticipated to be delivered in spring 2027. Following delivery, a six-month commissioning period is required to prepare the buses for revenue service. The

process includes training for drivers and maintenance personnel, installation of the regional fare collection system, and installation of other Pasadena-specific technologies.

Fueling will be provided by the City's future permanent Hydrogen Fueling Station, Capital Improvement Project planned for 159 S. Kinneloa Avenue. This station is currently in design and on target to be operational by the summer of 2027, aligning with the delivery of the new fleet of FCEBs. Initially, a temporary hydrogen fueling station was necessary as stated in the plan; however, due to this revised schedule, it is no longer required. Staff recommends that the funds previously allocated for the temporary station be reprogrammed to address the increased cost of the buses resulting from the procurement delay.

For infrastructure redundancies related to fueling, staff are in the early stages of exploring opportunities to coordinate with Foothill Transit. This involves considering the use of their existing fueling station in Pomona and their future Arcadia hydrogen fueling station, which is expected to begin construction in 2026. This would be a similar arrangement to the one Foothill Transit has with another public transit operator, allowing them to use their hydrogen fueling station.

PROCUREMENT

In order to help medium, small, rural and specialized transportation providers meet rigorous federal transit vehicle procurements, Basin Transit that serves the Morongo Basin, a member of the California Association of Coordinated Transportation (CALACT), formed the CALACT/Basin Transit Vehicle and Materials Purchasing Cooperative (CALACT Cooperative). This is not a sole source agreement but a procurement that has become the State's purchasing cooperative for smaller agencies statewide to use to ensure federally compliant procurements.

The CALACT Cooperative developed bid documents and product specifications for a federally compliant competitive price-based procurement process for several classes of transit vehicles to be used by participating government agencies. The CALACT Cooperative executed contracts with various public transit vendors, including New Flyer, to establish the pricing for transit vehicles. The selection process that the CALACT Cooperative followed meets the more than 30 federal requirements specific to federally compliant transit procurements. As a participating member of CALACT, the City is eligible to use the CALACT Cooperative contract with these vendors for the purchase of transit vehicles. Using this agreement, the City will receive the same pricing and terms as other governmental agencies, consistent with Section 1002(H) of the City Charter and Pasadena Municipal Code Section 4.08.049(B), which exempts the contract from competitive selection in the City's best interests.

Contract Contingency

A 10% contingency is included in the total contract amount to address unforeseen necessary changes and mitigate financial risk. Of this total, 4% is allocated for minor technical or specification adjustments that are common during the bus manufacturing process, such as supplier-driven component updates. The remaining 6% is included to

address the uncertain nature of federal tariffs on imported parts and equipment. Projected tariff costs are anticipated to range between 3% and 15% of the base bus price. The final cost of any tariffs will not be known until the manufacturer, New Flyer, begins procuring materials in early 2026. While the 6% contingency may be sufficient, there is a possibility that final tariff costs could exceed this amount, and if so staff may need to return to the City Council to request additional funding.

COUNCIL POLICY CONSIDERATION:

The proposed action is consistent with the adopted Zero Emission Bus Rollout Plan and supports the City's Climate Action Plan (CAP) which sets forth strategies to reduce greenhouse gas (GHG) emissions and transition municipal operations to cleaner energy sources. The purchase of these buses will replace fossil fuel vehicles with zero-emission FCEBs, in line with the CAP's goals to improve local air quality, reduce transportation-related emissions, and promote sustainable mobility. In addition, these vehicles will enhance the public transit system by replacing vehicles that have met their useful life and expanding passenger capacity with larger buses.

ENVIRONMENTAL ANALYSIS:

The proposed action is exempt from the California Environmental Quality Act ("CEQA") under State CEQA Guidelines Section 15061(b)(3), the "common sense" exemption that CEQA applies only to projects which may have a significant effect on the environment. This procurement involves no construction or physical environmental changes, and the replacement vehicles will operate within existing routes and facilities. The new vehicles are zero-emission and would not generate greenhouse gas or air pollutant emissions. The limited change vehicle miles traveled (VMT) associated with the new vehicles would result in negligible adverse transportation impacts, which would be far below the City's significance thresholds and, further, would be partially offset by the reduction in automobile use that would result from the expansion of transit service. Finally, the new vehicles generate less operational noise than the existing public transit fleet vehicles (e.g., engine/motor humming, occasional squealing tires, reverse warning tones, etc.). Such noise would be well below the noise standards of the City's Noise Ordinance and General Plan Noise Element and, in the case of warning tones, would provide for enhanced safety.

FISCAL IMPACT:

The cost of this action will be \$32,050,255, with \$29,054,979 covered by various grant funding sources listed in the table below. Funding for this action will be addressed by utilization of existing Capital Improvement Program (CIP) budgeted appropriations in the Purchase of Fixed Route Transit Vehicles Project (CIP 75085) and new requested appropriations of \$14,196,701 as detailed below. There is no impact to the General Fund.

Funding Source			
Grant Revenue Source	Existing Appropriations	Requested Appropriations	Total
Volkswagen Mitigation Fund		\$6,720,000	\$6,720,000
Transit Intercity Rail Capital Project (TIRCP)	\$6,306,838		\$6,306,838
Metro ZEB Call for Projects	\$4,500,000		\$4,500,000
Metro Measure M Multiyear Subregional Program		\$4,481,425	\$4,481,425
Metro Prop C (non-local)	\$4,546,716		\$4,546,716
Carbon Reduction Program	\$2,500,000		\$2,500,000
Local Match (Local Prop A/C, Re-Appropriate from Hydrogen Fueling Station CIP 75133 to Replacement of Transit Vehicles CIP 75085)		\$2,995,276	\$2,995,276
Total Project Funding	\$17,853,554	\$14,196,701	\$32,050,255

This purchase qualifies for the State of California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP). This program provides point-of-sale vouchers to assist fleet owners with transitioning to zero emissions heavy-duty vehicles. If approved by the California Air Resources Board, the HVIP vouchers would reduce the net cost of this recommendation by \$720,000.

The replacement buses will be operated and maintained under the City's transit operations contract with First Transit, Inc.

Respectfully submitted,



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