



Department of Transportation

AUTHORIZE THE PURCHASE OF 15 PUBLIC TRANSIT VEHICLES INCLUDING THE FIRST ZERO EMISSION VEHICLE

City Council
April 24, 2023



Item 3



Recommendations

Department of Transportation

1. Find that the proposed action is exempt from the California Environmental Quality Act (“CEQA”).
2. Authorize the City Manager to enter into the following contracts:
 - a) New Flyer of America, Inc. for the procurement of nine larger capacity 35-foot Renewable Natural Gas (RNG) buses and one 35-foot Battery Electric Bus (BEB) and chargers for Pasadena Transit in an amount not to exceed \$8,208,411 including a contingency of \$354,887 (5%);
 - b) Creative Bus Sales, Inc. for the procurement of two Starcraft Allstar, Ford E450 25-foot RNG shuttles for Pasadena Transit in an amount not to exceed \$399,441 including a contingency of \$15,363 (4%); and
 - c) RO Truck & Equipment, LLC for the procurement of three Sunset, Ram Promaster low-floor unleaded vans for Pasadena Dial-A-Ride in an amount not to exceed \$399,021 including a contingency of \$15,347 (4%).



Recommendations

Department of Transportation

3. 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(B), contracts for which the City's best interests are served.



Background

Department of Transportation

- Total Transit Fleet: 44



- Fleet: 29 vehicles
- Reached End of Life: 12 vehicles
- Recommended Purchase:
 - > 10, 35ft transit buses & 2 cutaways
 - > Includes first pilot zero emission bus
- Ridership: Larger vehicles to relieve significant overcrowding



- Fleet: 15 vehicles
- Reached End of Life: 2 vehicles
- Recommended Purchase:
 - > 3 ProMaster Vans (no zero emission options yet)
- Ridership & Accessibility: Additional vehicle for additional capacity and access narrow streets
- Grant: Secured operating funds



PASADENA



Adopted Zero Emission Rollout Plan

Department of Transportation

- Consistent with adopted Pasadena Zero Emission Bus Rollout Plan

- > Adopted January 30, 2023
- > Provides roadmap to transition to ZE
- > Pasadena Dial-A-Ride transition by 2028
- > Pasadena Transit transition by 2036

2026

Phase 1: Build Infrastructure (Started)

Transit Operations Maintenance Facility (TOMF)

- Secured \$65.4 Million Metro Measure R MIP
- Charge up to 45 Transit Vehicles
- Anticipated Completion 2026

Hydrogen Fueling Station

- Finalizing Hydrogen Fueling Station Feasibility Study
- Grants Update
 - FTA Bus Facilities/LowNo (pending)
 - State TIRCP (Awarded)
 - EnergIIZE (May)
 - Carl Moyer (May)
- Anticipated Completion 2026

Phase 2: Implement Pilot (Today)

1 Pasadena Transit & 1 Pasadena Dial-A-Ride pilot bus

Gain operational experience to prepare for future vehicle replacements

- Zero Emission will change maintenance and operations system
- Avoid missteps other agencies have made in the zero emission transition

Phase 3: Major Replace Vehicles (2026-2036) – On Track

2026 - Replacing 1/3 of the fleet

- 8 Pasadena Transit
 - Fuel Cell Electric Buses (Hydrogen)
- 7 Pasadena Dial-A-Ride
 - Battery Electric Buses

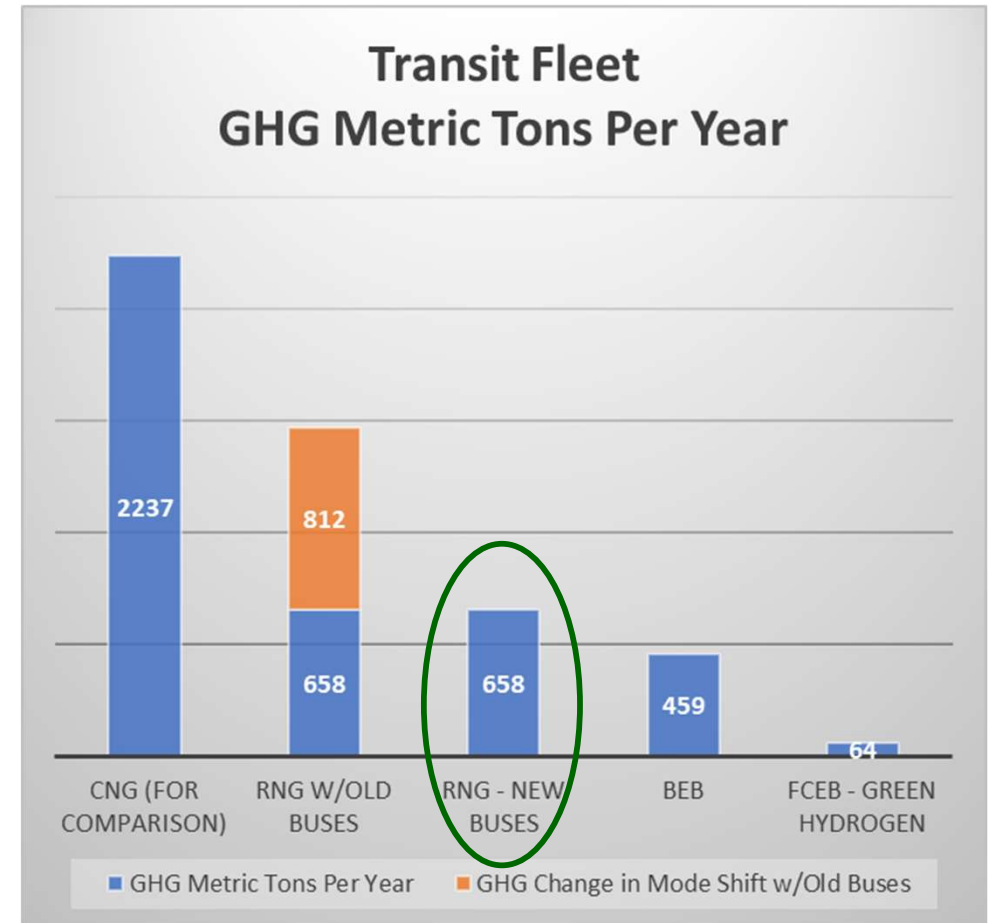
Secured over \$10 million in grant funding



Zero Emission (ZE)

Department of Transportation

- Pasadena's transit fleet reduces 3,508 metric tons of GHG each year per system ridership
- Postponing replacement buses negatively impacts the community
 - > At least doubles GHG produced systemwide
 - Mode shift
 - » 1,400 metric tons GHG annually
 - Older engine technology
 - > Increase in operating cost
 - > Reliability of service impacts





Zero Emission Transition Progress

Department of Transportation

- Summer 2023: 1st Pasadena Dial-A-Ride ZE pilot bus order
- Transit Operations Maintenance Facility (TOMF)
 - > Secured \$65.4 Million Metro Measure R MIP
- Hydrogen Fueling Station
 - > Finalizing Hydrogen Fueling Station Feasibility Study
 - > Grants Update
 - FTA Bus Facilities/LowNo (pending)
 - State TIRCP (Awarded)
 - EnerglIZE (May)
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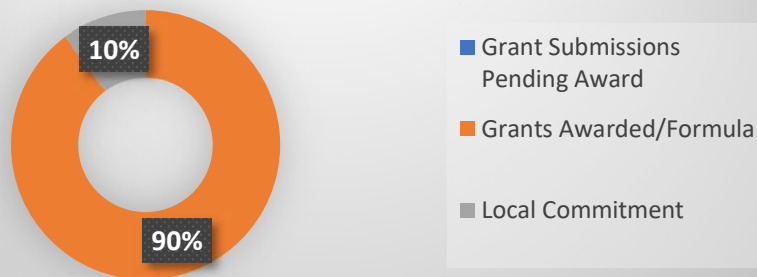
Zero Emission Transition Progress

Department of Transportation

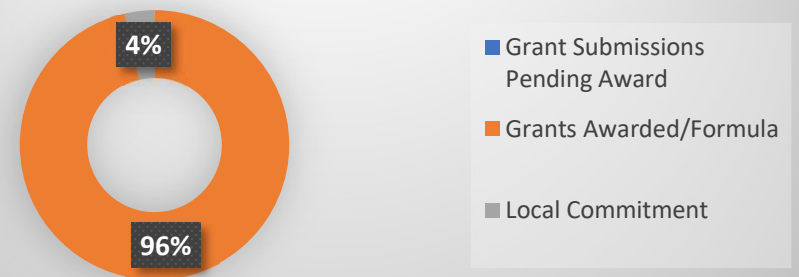
- Rollout Plan Update – On track – 2026 fleet replacement funding secured this year:

> FTA Section 5310	\$ 1,050,000	Federal
> VW Mitigation	\$ 1,600,000	State
> HVIP (Anticipated)	\$ 1,380,000	State
> LCTOP	\$ 100,000	State
> LTSS	\$ 5,000,000	Metro
> Measure M MSP	\$ 1,702,871	Metro
> TIRCP	\$14,424,000	State
> Total Grants	\$25,256,871	

2026 - 7 Dial-A-Ride BEB \$2.9M Funding Status



2026 - 8 Pasadena Transit H2 \$12M Funding Status





Procurement

Department of Transportation



- 9, 35ft, RNG Low-floor transit buses
- 2, 25ft, RNG cutaways
- 3, Unleaded Vans

- CalACT/MBTA Purchasing Cooperative
 - > Assist small and rural transit providers to meet federal transit procurement requirements
 - > Statewide procurement provide economy of scale



Procurement

Department of Transportation



- 1, 35ft, Battery Electric Bus, Low-floor transit bus
- Charger

- California DGS Cooperative
 - > Statewide procurement provide economy of scale
 - > Pilot bus to gain operational experience to prepare for future vehicle replacements



Fiscal Impact

Department of Transportation

- Purchase of 15 vehicles for an amount not to exceed \$9,006,873 from CIP 75085 and 75086. No General Fund impacts.

Project Budget Summary				
Vendor	Buses	Contingency		Total
New Flyer of America Inc. (NF)	\$ 7,853,524	\$ 354,887	5%	\$ 8,208,411
Creative Bus Sales (CBS)	\$ 384,078	\$ 15,363	4%	\$ 399,441
RO Bus Sales (RO)	\$ 383,674	\$ 15,347	4%	\$ 399,021
TOTAL CONTRACT AMOUNTS				\$ 9,006,873

Funding Sources						
Vehicle Type	Total	MSP	EnergIIZE	FTA 5310	Local Prop A/C	
NF: 9, 35-ft	\$ 6,755,120	\$ 4,670,015	\$ -	\$ -	\$ 2,085,105	31%
NF: 1, 35-ft BEB	\$ 1,453,291	\$ 335,075	\$ 171,003	\$ -	\$ 947,213	65%
CBS: 2, 25-foot	\$ 399,441	\$ 364,925	\$ -	\$ -	\$ 34,516	9%
RO: 3 Vans	\$ 399,021	\$ -	\$ -	\$ 145,800	\$ 253,221	63%
TOTAL	\$ 9,006,873	\$ 5,370,015	\$ 171,003	\$ 145,800	\$ 3,320,055	37%



Next Step

Department of Transportation

- Spring 2023: Setup PO with all vendors
- Late winter 2024: Charger infrastructure installation
- Summer 2024: Vehicle delivery
- Fall 2024
 - > Testing of vehicles
 - > Training staff on BEB
 - > Vehicles placed in revenue service



Department of Transportation

Supplemental Slides



Fixed Route: Fleet Replacement Plan

Department of Transportation

Fleet Type	Vehicle Length (in feet)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	
Pasadena Transit Fleet	35																					
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Legend

- RNG/Unleaded Bus Purchase
- ZEB Purchase
- ZEB Purchase If Funding Is Available



DAR: Fleet Replacement Plan

Department of Transportation

Fleet Type	Vehicle Length (in feet)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041		
		Pasadena Dial-A-Ride Fleet	25																				
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- Legend**
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