



Department of Public Works

**AUTHORIZE PURCHASE ORDER CONTRACT
WITH 72 HOUR LLC
FOR PURCHASE OF EIGHT SPORT UTILITY
VEHICLES, SEVEN 3/4 TON TRUCKS AND TWO 1/2
TON TRUCKS
FOR A TOTAL OF \$739,763**

City Council
September 20, 2021
Item # 5





Overview

Department of Public Works

- Public Works, Building Systems and Fleet Management Division (BSFMD) is tasked with providing vehicle replacement for various City departments based on a condition scoring system (including factors such as the vehicle's age, mileage, usage, maintenance and repair history).
- FY2021 – 2023 3-Year Fleet Replacement Plan for implementation to comprehensively address City's aging fleet:
 - Support department's operations
 - Ensure safe modes of transportation for staff to perform duties/services
 - Decrease fleet maintenance and repair costs
- Expansion of City's Fleet to Zero Emission Vehicles (ZEV)
 - Internal research & discussion with departments for ZEV options.
 - Staying current with manufacturers development and forecast of ZEV.
 - Staying current with available rebates/grant programs.
 - Determining life cycle and associated costs



City's Zero Emission Fleet Strategy

Department of Public Works

Criteria & Considerations for ZEV Expansion

- Research and Validation - Availability of alternative ZEV including any electrification of vehicle sub-equipment.
- Pilot testing and transition in department operations.
- Considerations and viability (pros & cons) for hybrid models.
- Outreach to other municipalities with existing ZEVs already in use to verify reliability.
- Align with current CARB guidelines to develop ZEV Market Development Strategy.



PASADENA



City's Current ZEV & Hybrid Fleet

Department of Public Works

55 of City's 418 passenger/light duty vehicles are currently Zero Emission Vehicles (ZEV) or hybrid

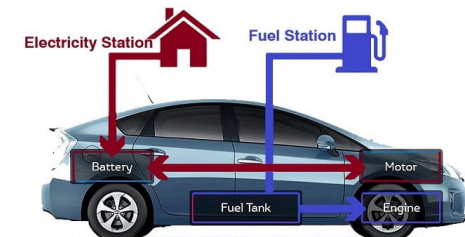
➤ 53 ZEV (passenger/light duty) purchased/leased

- > 49 Fully Electric Chevy Bolts (ZEV)
- > 3 Fully Electric Volkswagen Golfs (ZEV)
- > 1 Fully Electric Toyota RAV4 (ZEV)



➤ 2 Hybrid Plug-In vehicles leased

- > 1 Honda Clarity Hybrid
- > 1 Mitsubishi Outlander Hybrid





City's Zero Emission Fleet Forecast

Department of Public Works

2022 & 2023 Replacement Plan

- 57 passenger & light duty vehicles due for replacement
 - 29 vehicles (50%) will transition to ZEV based on current market availability.
- 26 heavy duty vehicles – currently no availability of equivalent EVs on the market.
- As manufacturer's roll out ZEV inventory in the market, this will be incorporated in future assessment of purchases and percentage of ZEV replacements increase.
- City's Fleet will grow to a total of 82 ZEV by 2023.



City's Zero Emission Fleet Forecast

Department of Public Works

2022 Pilot Program – TESLA S

- Replace 2 police patrol vehicles with 2 Tesla S Model Zero Emission Vehicles (\$69k current base price + estimated \$25k additional cost per vehicle for customized builds).





Background

Department of Public Works

- As part of year 1 of the Fleet Replacement Plan, 17 vehicles are identified for replacement under 3 departments (Parks & Recreation Community Services, Police Department and Public Works).
 - 8 Public Safety SUVs
 - ✓ for responding to calls for service, major traffic incidents, collection of physical evidence, and emergency responses including, high power output, and top speed performances.
 - ✓ equipped with Code 3 packages,
 - ✓ includes large interior size for transportation of personnel and major accident investigation tools.
 - 9 Full Size Medium to Heavy Duty trucks
 - ✓ equipped with Tool boxes, and Ladder Racks
 - ✓ transportation of multiple variations of construction equipment, tools and supplies for job performances in the field.



Zero Emission & Hybrid Alternatives

Department of Public Works

- Zero emission alternatives to replace the 9 full size medium to heavy duty trucks have been evaluated. At this time, no available or feasible alternatives currently on the market will meet department needs and specific vehicle duties.
- Higher-end models of alternatives vehicles have also been evaluated for the 8 public safety vehicles.
 - Tesla
 - Ford Explorer Hybrid



Zero Emission Alternative

Department of Public Works

2022 Tesla Y AWD Long Range

- Quoted at \$60,288 (base price) from Tesla's local Pasadena dealership.
- 6 Month lead time
- Associated mounting and support for specialized upfitting for public safety vehicles are unavailable at this time on this model.
 - Typical upfitting includes: MDC and radio consoles, ballistic door panels, antennae, cabling, PC, keyboard, stabilizing rack, cradle point router, light bar, sirens, heavy duty push bar front bumper, shot gun/rifle racks, in-car video system, in-cabin microphone system, forward facing dash cam, cabling storage space, etc.





Hybrid Alternative

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- The only hybrid SUV option in the market suitable for public safety needs is a larger model 2021 Ford Explorer Hybrid.
 - How does this compare to the proposed purchase of 8 new Ford Edge (to replace 8 old Public Safety SUVs – Ford Crown Victoria)?



	OLD! <u>Ford Crown Victoria</u> <u>(2007-2010)</u>	NEW! <u>2021 Ford Edge</u>	NEW HYBRID! <u>2021 Ford Explorer</u> <u>Hybrid</u>
Configuration:		ST	Limited Hybrid
Pricing	Existing City Fleet	\$36,350*	\$48,750*
Engine/Transmission			
Engine	4.6L V8	2.0L EcoBoost Twin Scroll I4 Turbo	3.3L Hybrid V6
Transmission	Automatic	8-Speed Auto	10-Speed Auto
Fuel & MPG			
City Fuel Economy	15 MPG	21 MPG	23 MPG
Hwy Fuel Economy	23 MPG	29 MPG	26 MPG
Combined Fuel Economy	18 MPG	24 MPG	25 MPG

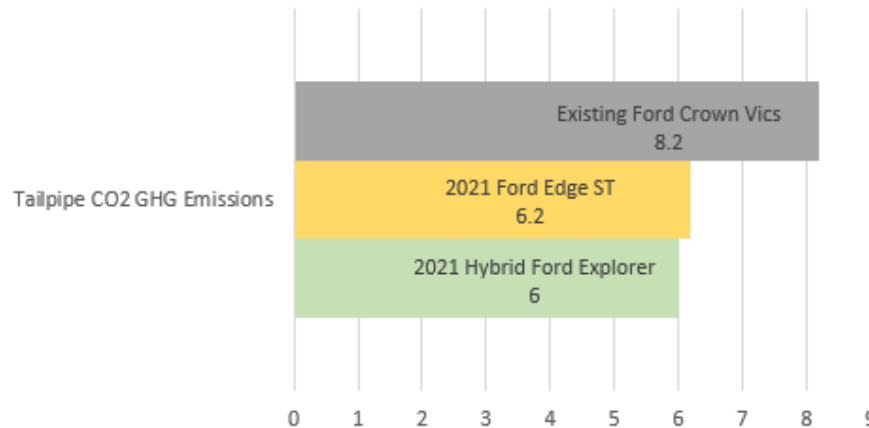
*Based on Sourcewell pricing as of Jul 2021



GHG Emissions Analysis

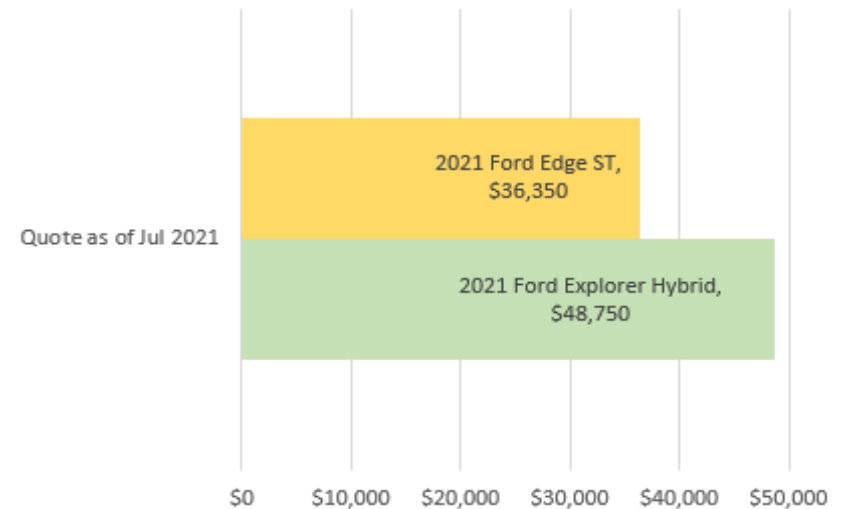
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CO2 GHG Emissions in Tons per Year



CO2 Emissions – The U.S. EPA has found that a typical 22 MPG gas-based car emits about 5 tons of carbon dioxide per year. On average, one ton of CO2 is emitted for about every 2,500 miles you drive

Cost Per Vehicle



Cost Difference per Vehicle = \$12,400
additional for hybrid option

TOTAL Additional Cost = \$99,200
if replacing all 8 vehicles with **hybrid**.



Purchasing Alternatives

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COST and CO₂ EMISSION IMPACT

Purchase Proposal and Options for Hybrid Model

(limited to funds earmarked for 8 vehicle replacement per current 3-year Replacement Plan)

		OLD Ford Crown Victoria	NEW! 2021 Ford Edge ST	NEW HYBRID! 2021 Ford Explorer Hybrid	
BASELINE: (per vehicle)	COUNT	na	1	1	
	Tailpipe CO2 GHG Emissions	8.2	6.2	6	
	Cost	0	\$36,350	\$48,750	
Proposal: Replace with 8 Ford Edge (all 8 old vehicles to be replaced)					
	COUNT	0	8	0	TOTAL
	Tailpipe CO2 GHG Emissions	0	49.6	0	49.6
	Cost	0	\$290,800	\$0	\$290,800
Option 1: Replace with 6 new Ford Explorer Hybrid (2 old vehicles to remain in Fleet)					
	COUNT	2	0	6	8
	Tailpipe CO2 GHG Emissions	16.4	0	36	52.4
	Cost	0	\$0	\$292,500	\$292,500
Option 2: Replace with 4 new Ford Edge + 3 new Ford Explorer Hybrid (1 old vehicle to remain in Fleet)					
	COUNT	1	4	3	8
	Tailpipe CO2 GHG Emissions	8.2	24.8	18	51
	Cost	0	\$145,400	\$146,250	\$291,650



Solicitation

Department of Public Works

Solicitation:

- Sourcewell is a national municipal contracting agency. Sourcewell contracts are available for member agencies to utilize such as the City of Pasadena.
- In December 2016, Sourcewell issued a Request for Bids for Vehicles, Cars, Vans, SUVs, and Light Trucks with Related Equipment, Accessories, and Services. 72 Hour LLC earned the highest score out of the three respondents with 862 points out of a possible 1,000, and was awarded a contract through January 2022.
- 72 Hours LLC has agreed to extend contract pricing, terms, and condition under Sourcewell Contract #120716-NAF
- The competitive selection process undergone by Sourcewell has resulted in competitive pricing.
- It is in the best interest of the City to issue PO to 72 Hour LLC for a of \$739,763 for this proposed vehicle purchase (includes \$67,251 contingency allowance for inflation).



Local Outreach Efforts

Department of Public Works

Local Outreach:

- Comparative pricing from nearby dealerships was conducted to verify price savings.
- These were obtained from dealerships outside of the city limits since none of the Pasadena-based vendors carry or sell these types of vehicles.
- Out of the five dealerships who responded, only three have these vehicles in stock and provided pricing that was an average of 15% higher than the discounted pricing extended by 72 Hour LLC through the Sourcewell contract.



Purchase Order Contract

Department of Public Works

Vendor and Purchase Information:

- 72 Hour LLC has done business with the City for over 4 years.
- City issued POs with payments totaling \$2,033,217 since FY2016.
- Proposed purchase order for new vehicles for a not to exceed amount of \$739,763 consists of:
 - 8 new Ford Edge SUVs for \$290,804 (unit price \$36,350),
 - 7 Ford F250 trucks for \$303,694 (unit price ranging between \$39,271 to \$40,606 depending on build option needs), and
 - 2 Ford F150 trucks for \$78,014 (unit price \$39,007).
 - > Additional 10% contingency allowance for \$67,251 for inflation
- After receipt of the purchase order, vendor expected to deliver within 120 days.
- Outfitting will be installed after delivery, consistent with unique needs of the respective department's intended usage of each vehicle.



Staff Recommendation

Department of Public Works

It is recommended that the City Council:

- Find that this action is exempt under the California Environmental Quality Act (CEQA) in accordance with Section 15061(b)(3), the General Rule that CEQA only applies to projects that may have an effect on the environment; and
- Authorize the issuance of a purchase order contract to 72 Hour LLC (72 Hour) for the purchase of eight sport utility vehicles (SUV), seven 3/4 ton trucks and two 1/2 ton trucks, in an amount not to exceed \$739,763. Neither Competitive Bidding nor Competitive Selection are required pursuant to City Charter Section 1002(H) and Pasadena Municipal Code Section 4.08.049(A)(3), contracts with other governmental entities.