



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: John Ristow

SUBJECT: ELECTRIC MOBILITY ROADMAP IMPLEMENTATION REPORT

DATE: January 13, 2021

Approved

Date

1/19/21

RECOMMENDATION

Accept the report providing an implementation update on the Electric Mobility Roadmap.

BACKGROUND

On January 14, 2020, the City Council accepted the *San José Electric Mobility Roadmap* (Roadmap), a short-term plan to accelerate the electrification of transportation in the city. The Roadmap is consistent with and advances the goals of *Climate Smart San José*, which seeks to dramatically reduce greenhouse gas emissions by, in part, accelerating transportation electrification.

The Roadmap's action items are grouped into four categories: 1) Increasing the number and distribution of electric vehicle (EV) chargers in the city; 2) Converting the remainder of the City's fleet to EVs and encouraging other fleet operators to do the same; 3) Expanding electric vehicle ownership; and 4) Expanding electric shared mobility services.

In accepting the Roadmap, the City Council approved a memo signed by the Mayor and several Councilmembers that directed staff to return to the Transportation & Environment (T&E) Committee by June 2020 with:

- A draft ordinance authorizing a one-way vehicle sharing program;
- An updated Green Fleet policy; and
- Recommendations for electrifying the city's remaining non-electric fleet where technologically feasible.

The Council also asked staff to explore options to:

- Create a financial counseling program with a community-based organization that promotes economic empowerment and the feasibility of electric mobility for low-income communities;
- Incentivize EV carsharing programs;
- Establish a pilot program with an EV manufacturer, carsharing company, and an affordable housing developer to operate an EV carsharing program in a new affordable housing project; and
- Create an electric school bus demonstration project in partnership with Prospect Silicon Valley, San José Clean Energy (SJCE), the City's Department of Transportation (DOT) and a school district.

This report provides an update on San José Electric Mobility Roadmap activities undertaken since the City Council's last report in October 2020 as part of the Climate Smart plan semi-annual update. At the T&E Committee meeting, staff will provide a more detailed update on one-way vehicle sharing in San José.

ANALYSIS

Increasing EV Charging Stations

1. **EV Charge Network Program (EVCN):** On December 14, 2020, the Council approved agreements for the City to participate in PG&E's EVCN program. In 2021, PG&E will install 112 charging ports (typically two ports per charger) distributed across four City facilities: Happy Hollow Park and Zoo (40 ports), two employee parking lots at Police Headquarters (42 ports), Mabury Service Yard (20 ports), and the South Service Yard (10 ports). PG&E will fund the upgrade of the electrical capacity at each site to support the chargers. The City will purchase and install the chargers. The total cost to the City is \$108,000. The chargers at all sites will be available for use by the City's fleet and its employees; the public will have access to chargers at Happy Hollow Park and Zoo. The new chargers are essential to the City's continued conversion of its fleet to alternate fueled vehicles.
2. **Electrify America**, a subsidiary of Volkswagen (VW), has installed eight clusters of electric vehicle chargers around the city as a result of VW's emissions settlement agreement with the state. Five of the clusters are active: Bank of America Financial Centers on Bernal Rd and on Blossom Hill Rd, Plaza Shopping Center, Princeton Plaza Mall, and Safeway on Berryessa Rd. The clusters comprise three fast chargers, and some also include one Level 2 charger. Three other clusters will open soon: Bank of America Financial Center on Alum Rock Ave, Safeway on West San Carlos St, and Save Mart Lucky on W. Capital Expy. At a California Energy Commission (CEC) workshop on permitting, Electrify America publicly praised the City's EV charger permitting process as a model that other cities should follow.

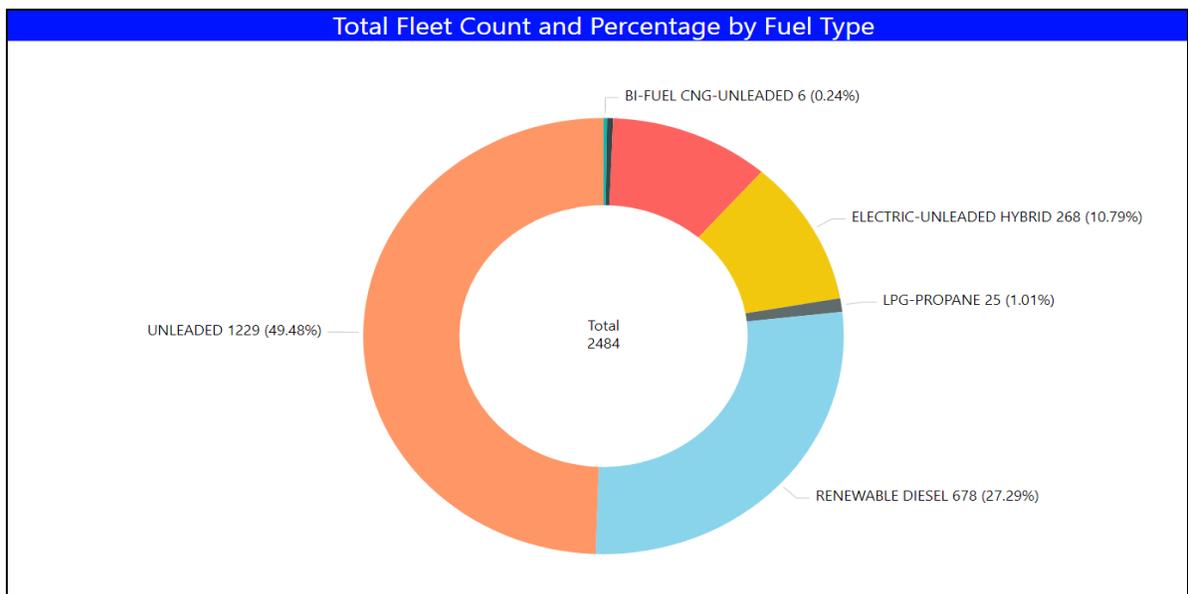
- 3. California Electric Vehicle Infrastructure Project (CALeVIP):** CALeVIP is a state-funded EV charging infrastructure program that works with local community partners to develop regional incentive projects to support the installation of electric vehicle chargers. San Jose Clean Energy collaborated with several other community choice aggregators and municipal utilities to create the \$50 million CALeVIP Peninsula-Silicon Valley incentive program. Of that total, \$14 million in project incentives was earmarked for San José, which was funded by a contribution of \$4 million from SJCE and a match of \$10 million from the CEC. Rebates can go to projects located at workplaces, multi-unit dwellings, public agencies, shopping centers, and other public charging locations. The funding available in FY20-21 for San Jose has been provisionally reserved: \$7 million for the installation of fast chargers and nearly \$4 million for Level 2 chargers; with over 25% of the funds for projects located in disadvantaged and low-income communities. The remaining nearly \$3 million has been set aside for fiscal year 2021-22. Due to lack of matching funds, the City did not submit an application for additional funding through the Peninsula-Silicon Valley program. In July 2021, at least a portion of the CALeVIP waitlisted applications from this first round will have another opportunity to secure funding. In early 2021, staff plans to develop a policy for Council consideration that would streamline the process for allowing private operators to install chargers on City property through programs such as CALeVIP, or independently, to strategically expand EV charging.

Accelerating Fleet Conversion

- 1. Fleet Replacement Policy and Green Fleet Policy:** During the January 14, 2020 Council meeting, the Mayor and City Council requested staff to return “with an updated Green Fleet policy that includes an ‘electrification first’ requirement for the city’s non-emergency fleet that aligns with our Climate Smart goals” and to provide “recommendations for electrifying the city’s remaining non-electric fleet where technologically feasible” with “a lifecycle cost analysis of replacing all non-electric vehicles with EVs within the next 5 years, and the charging infrastructure required to support it,” including for such vehicle types “where there isn’t a commercially available battery electric option available, identify and pursue grant funding for pilot programs.” The Public Works Fleet Management Division continues to transition the City's fleet assets to realize *Climate Smart San José's* greenhouse gas emission targets. As part of its approach, Public Works has already adopted an “electrification first” strategy for vehicle replacement when there are viable options. An updated Vehicle Replacement Policy and Green Fleet Policy will be completed in early 2021 that clearly supports and provides strategic direction to meet San José's electrification goals. To date in FY20-21, Public Works added 22 battery electric vehicles to the fleet as direct replacements for traditional fossil fuel powered vehicles. Additionally, 30 plug-in hybrid vehicles were purchased as direct replacements for other traditionally-powered vehicles in the City fleet to further reduce emission totals. One of the main setbacks to further the electrification of City fleet assets is a lack of funding resources to replace vehicles that currently meet replacement criteria for which suitable electric replacement options exist. For FY20–21, the General Fund budget allocation for vehicle replacements is \$1,390,000, sufficient to procure 25 vehicles, with a separate special funding allocation of \$8,900,000 to procure 60 vehicles for Police,

Fire, and other specialty vehicles, for a total of \$10,290,000. Of this \$10.3 million, \$692,000 (7%) is planned to be used to purchase electric vehicles. The low percentage is due to the types of vehicles that were scheduled for replacement this year. The majority of the replacement vehicles requested did not have a suitable electric equivalent or meet the operational needs of the requesting department. In order to replace the remaining light duty sedan and SUV fleet inventory with electric vehicles, an additional \$12,000,000 will be needed for the procurement of vehicles, and an additional \$1,500,000 for the procurement and installation of charging infrastructure, for a total of \$13,500,000 in additional budget. Although not readily available in the marketplace, as vehicle technologies continues to emerge, there will be additional options made available in the light duty truck, medium duty, and heavy duty fleet classifications, which at that time a cost analysis can be performed to identify unmet funding needs to fully convert the City's fleet inventory to electric. Staff, however, is exploring the possible procurement of six new electric buses at the Airport, as well as grant opportunities for medium duty vehicles.

Currently, the City's fleet inventory is comprised of the following types and quantities of vehicles:



- 2. Electric Vehicle Infrastructure for Fleet:** Electric vehicle infrastructure also continues to be a challenge as the current size of the City electric vehicle fleet exceeds existing infrastructure. With the addition of chargers that will be installed through the PG&E EVCN program, there will be bandwidth to expand the City fleet. Public Works also looked at other resources to increase infrastructure and purchased four portable solar powered electric vehicle charging stations that can be utilized to charge City fleet assets during extended power outages or natural disasters. These units can also be deployed throughout the City as necessary to serve as portable micro-grids that can provide power to first responders or City staff as needed to continue to provide essential services. More recently, Public Works

entered into discussions with ConnectMyEV, a partner of Prospect Silicon Valley and a tenant of the City's Environmental Innovation Center, to potentially demonstrate a new prototype of an automated EV charging unit.

3. **Electric School Bus Pilot:** The City and SJCE supported Prospect Silicon Valley's California Energy Commission grant proposal to help electrify school bus fleets in the Franklin-McKinley and Campbell Union school districts. The grant's proposed award will be announced in the first quarter of 2021. SJCE will actively support the project if awarded.

Expanding EV Ownership

1. **Drive Electric San José - Electric Vehicle Discount Program:** The DOT and SJCE developed Drive Electric San José, an electric vehicle public outreach and limited-time dealership discount program, to increase the number of people driving electric vehicles. The City partnered with Capitol Chevrolet, Capitol Hyundai, Capitol Kia, Premier Nissan of San Jose, and Stevens Creek Kia to offer extra discounts of up to \$3,000 on seven electric vehicle models between August - October 2020. Customers utilizing the limited-time discounts were encouraged to combine these with local, state, and federal grants and incentives for \$13,000 to \$17,000 in additional savings. The program also included extensive public education about electric vehicles and training for dealership sales representatives. Two-hundred people signed up for the Drive Electric San Jose program. The City was able to confirm the purchase of eight electric vehicles through an online survey, with several more EVs purchased through the program though not captured in the final survey data. At the conclusion of the program, the five participating auto dealerships expressed their desire to see the program continue in the future, believing the program to have facilitated increased EV sales during Covid-19.
2. **DriveForward EV Financial Assistance Program:** With financial support from the American Cities Climate Challenge, DOT and SJCE partnered with Peninsula Family Service to launch the DriveForward EV Financial Assistance Program. The program was designed to help low- and moderate-income San José residents improve their finances and, if they were interested, buy a new or used electric vehicle. Between August - October 2020, the team held four 90-minute virtual workshops in English, Spanish and Vietnamese, accessible online and by phone. The workshops covered money management including credit building strategies. The team also provided information on how to apply for \$5,000 - \$9,500 in income-qualifying state grants for a down payment on an electric vehicle, where to find affordable vehicle loans, and how to take advantage of state and federal EV rebates. Peninsula Family Service also provided free, one-on-one financial counseling sessions by phone or Zoom. The workshops were attended by 65 people; 43 took advantage of the one-on-one financial counseling sessions; and 44 participated in a follow-up survey. Of those, 40% percent said they were somewhat likely or very likely to purchase an EV. The household income of the vast majority of the respondents was very low to moderate. Staff is seeking funding to offer more DriveForward workshops in 2021.

Expanding access to shared electric mobility

1. **One-Way Vehicle Sharing:** Staff intends to bring forward a draft one-way vehicle sharing program to the City Council in the next few months. The proposed program would permit one-way shared vehicles (cars and mopeds) to park in metered & time limited parking areas as well as some residential parking permit zones. The latter would only be permitted if a neighborhood in a parking permit zone responds affirmatively to the program. Two companies offering one-way vehicle sharing services have expressed interest in expanding to San José. GIG Car Share, which is owned by the California State Auto Association, currently operates a hybrid-electric carshare service in the East Bay, San Francisco, and Seattle. Their grant-supported Sacramento service employs all-electric cars. Revel, a shared electric moped service provider, operates in New York City, Washington D.C., and Miami, and more recently expanded to Oakland, San Francisco and Berkeley.
2. **Multi-Unit Dwelling Electric Vehicle (EV) Car Sharing Initiative:** In October 2020, DOT provided a letter of support to First Community Housing and Envoy Technologies for a proposal they jointly submitted to the California Air Resources Board's Clean Mobility Options program. If awarded, the grant would allow the partners to deploy approximately 20 electric shared cars at up to ten First Community Housing's properties in Santa Clara County, several of which are in San José. This project would advance the City's goal to electrify transportation, particularly shared modes, and expand its benefits to a broader cross-section of the City's residents. The project will provide valuable insight into how EV car sharing might be made available to those who live in affordable housing developments and to better understand the conditions under which such programs best serve those residents. The grant program is reviewing applications on a first come, first serve basis. First Community Housing is near the top of the list. A decision is expected shortly.

COORDINATION

This memo was coordinated with the City Attorney's Office, the Department of Public Works, and San Jose Clean Energy.

/s/

JOHN RISTOW
Director of Transportation

For questions, please contact Laura Stuchinsky, DOT Emerging Mobility Team Lead, at Laura.Stuchinsky@sanjoseca.gov.