



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Matt Loesch

SUBJECT: See Below

DATE: March 23, 2026

Approved

Date:

3/26/2026

SUBJECT: City Infrastructure Strategy Semi-Annual Status Report – City Fleet Management Program

RECOMMENDATION

Accept the City Infrastructure Semi-Annual Status Report - City Fleet Management Program, including program highlights and challenges, further integration of an electrified vehicle inventory, and current state regulations.

BACKGROUND

Pursuant to the Transportation and Environment (T&E) Committee work plan, the Administration provides a semi-annual status report on the City Infrastructure Strategy. In this update, The T&E Committee requested the report focus on a review of the Citywide Fleet Management Program, including the current Electric Vehicle inventory and future approaches, and associated required infrastructure, including charging equipment and facility electrical upgrades. The Fleet Management Program is managed by the Department of Public Works and includes over 3,000 active fleet assets in service today. The annual operating budget for Fiscal Year 2025-26 is \$48 million, which includes \$7.1 million dedicated to fuel purchases and \$8.5 million for vehicle replacements (General Fleet and Police Department vehicle replacement). In addition to these budgets, Fleet also manages an average of \$16 million in special funds, such as for Fire, Airport, Transportation, Environmental Services, Library, and Parks, Recreation, and Neighborhood Services, for vehicle replacements annually.

Program assets have had a major impact on the City's initiatives since vehicle technology is on the forefront of both smart and environmental innovation. Continued

progress toward the City’s Climate Smart San José (“Climate Smart”) goals has been achieved with 53% of City vehicles powered partially or fully by alternative fuel, which benefits the transition to San Jose’s future sustainability plans and helps build compliancy with California Air Resources Board requirements. Expanded adoption of innovative vehicle technology in the areas of telematics, idle reduction, renewable fuel, cleaner emissions, fuel efficiency, electric vehicles, and infrastructure, support significant progress towards sustainability and reduced greenhouse gas emissions.

Fleet Management is a progressive organization that serves all departments in the City, which there are currently 62 dedicated, highly trained, and skilled employees that completed approximately 20,000 work orders in Fiscal Year 2024-25. Overall, Fleet Management is a customer-service driven organization closely connected with its partner departments. However, it has experienced incredible challenges maintaining its high customer service levels, Climate Smart goals, and adequate funding for maintenance and vehicle / equipment replacement. These challenges and goals include acquiring a newer and greener fleet with limited budget, continuation of improved service delivery to Departments and operations serving the public, increasing staffing levels to be consistent with industry standards, expanding the use of fleet data tracking technology, and actively participating in nationally-recognized governmental fleet management organizations.

In meeting these goals, Fleet Management will continue to be a model organization for both the public and private sectors. Many of the Fleet Management team members hold positions in various regional and national organization boards including the Public Fleet Supervisors Association and the Municipal Equipment Maintenance Association, providing guidance and collaboration with other leading fleets across the country. Fleet Management has received several past awards as well, most notably from Government Fleet Magazine as a top fleet program in the country, and has recently submitted its application for award consideration in the 2026 cycle.

ANALYSIS

The City’s overall fleet inventory is comprised of the following owned assets:

Type	Quantity	% of Total
Light Duty Vehicles	1,598	51.7%
Medium Duty Vehicles	316	10.2%
Heavy Duty Vehicles	240	7.8%
Other Equipment	935	30.3%
Total Unit Inventory	3,089	100%

Department	Quantity	% of Total
Police	901	29.2%
Fire	275	8.9%
Non-Public Safety	1,913	61.9%
Total Unit Inventory	3,089	100%

Fuel Base	Quantity	% of Total
Unleaded Gasoline	1,220	39.5%
Renewable Diesel	764	24.7%
Hybrid	443	14.3%
All Electric	397	12.9%
Natural Gas/Bi-Fuel	33	1.1%
Non-Fueled Equipment	232	7.5%
Total Unit Inventory	3,089	100%

Public Safety vehicles differ from the remainder of the general fleet in the requirements of emergency response, including travel at high rates of speed through city streets, thus it is necessary to equip these vehicles with unique and special devices such as speed-rated components, visibility characteristics (special warning lights, sirens, and graphics) and communication equipment including both radio and computer systems. It is paramount that these units are prioritized over non-public safety vehicles to make certain their proper functionality to help save lives and infrastructure, which the units are maintained at the highest levels to ensure safety of our emergency personnel as well as the motorists and pedestrians that share the roads with these vehicles.

Fire apparatuses, especially trucks and engines, are held to strict standards of design, maintenance and testing governed by the National Fire Protection Association. Fire engines that pump water for fire suppression are required to have their pumps tested and certified annually. Fire trucks with ladders or aerial platforms must also be certified yearly as well. Police response vehicles are also regulated, primarily by the California Vehicle Code which defines warning light and siren requirements. Failure to install the correct systems and maintain their functionality creates unnecessary risks to staff and the public. Additionally, Public Safety fleet and operations may be deployed for mutual aid assistance across the State, which San Jose will provide such help beyond the boundaries of the city.

From the standpoint of vehicle maintenance capacity, Fleet’s volume of work has increased over time, with now nearly 20,000 work orders completed in the last year. However, of the 62 total employees within the team, only 43 are maintenance related, including Senior Mechanics, Mechanics, Equipment Mechanic Assistants, and

Apprentice Mechanics. Due to the increasing volume of work orders received and complexity of maintenance required either due to vehicle type or age, there is a significant backlog of work associated with the 3,089 fleet assets (not including new additional inventory being procured in Fiscal Year 2025-26), which maintenance staffing levels are 61% lower than industry standards for like-sized fleets. While the fleet inventory of vehicles and equipment has grown by more than 400 units over the last 15 years, staffing levels have remained level.

To help build a more reliable and efficient maintenance program, the Fleet team had established a Mechanic Apprenticeship course in 1984, recognized by the State and in partnership with DeAnza College, providing the necessary education and hand-on experience to staff to perform more complex maintenance work in-house. The course is voluntary and interested staff commit to multiple years of training and class work, much on their own personal time, which upon graduation they are promoted to Mechanic positions. Since inception, the program has resulted in more than 40 graduates. Additionally, as vehicle and equipment systems continue to evolve with each model year, veteran staff and apprentices are provided continuous training to adapt with the rapidly changing technologies.

To help increase the quantity of newer vehicles introduced into the fleet inventory that replace retirement eligible units, staff has updated the Vehicle Replacement Policy in June 2021 to decrease both the years of service and mileage criteria to allow for shorter replacement timeframes within certain vehicle types. Additionally, as the City is employing an “electric first” procurement model, any new vehicle acquisition will be initially assessed as an electric vehicle procurement (pending technology availability by type in the marketplace), including more compact sizes for additional gains in efficiency and maneuverability, which serves multiple benefits including compliance with California Air Resources Board requirements and City Climate Smart goals.

Having newer vehicles within the overall inventory will help reduce the volume of corrective maintenance needed as experienced with older fleet units, thus reducing work order backlogs. However, due to continued funding constraints and staffing limitations, acquisition and vehicle build-up timeframes can still be a lengthier process, along with the funding and timeline needed to properly install adequate charging stations where required for electric fleet. City Policy Manual 1.8.1 (“Use of City and Personal Vehicles”) has also been revised to include updates on the take home vehicle program use and related federal financial reporting, which has been approved and made publicly accessible in February 2026.

Fleet Electrification and Vehicle Availability

As the City continues to move towards its greenhouse gas reduction goals, newer vehicles are being procured with an all-electric fuel base, pending availability in both technology by vehicle type and supply in the marketplace. Certain vehicle types may

still only be available with combustible fuels and are not manufactured in an all-electric or hybrid version. For example, light duty sedans have become more available in the marketplace, whereas certain medium and heavy-duty vehicles and equipment are still only gas / diesel based.

In the case of public safety vehicles, tractor drawn aerial fire apparatuses are not currently available in all-electric version, however, fire pumper trucks do have such units available. During procurement processes, Fleet Management will continue to research and evaluate available technologies and will perform suitability and feasibility studies to ensure vehicle models meet the expectations and operational needs of the requesting Department. For vehicle replacements that require City Council approval, though do not have electric equivalents available in the marketplace, procurement memorandums will include references to such feasibility studies conducted and explanations as to why zero-emission alternatives are not available. Manufacturing supply and labor shortage issues are still being experienced, with some vehicles continuing to require 12 – 30 months or longer for build time and delivery, and once in the City's possession, there is additional time required for City build-up activities (decals, telematics, radio communications, and other equipment) before end-user Departments may be able to receive and operate the units.

The stability of vehicle availability from manufacturers has also been a challenge on two fronts, with newer companies not staying in business for longer periods of time, as well as long term companies that are no longer making certain vehicle types. As in the case with the all-electric buses procured for the Airport operations, the manufacturer (Proterra) filed for bankruptcy in 2023, resulting in a large electric fleet inventory that no longer had customer or technical maintenance support, requiring the City to find other non-comparable means to keep the units functioning properly. Additionally, Ford had recently announced the F-150 all-electric pickup truck would no longer be made, causing a shift to procure alternate trucks in the market with a very limited amount of manufacturer choices within the same price points.

Electric vehicles of all types (light, medium, and heavy duty) will require associated charging equipment that involves proper design, engineering, procurement, and construction, in specific identified locations within City facilities, and necessitates adequate capital funding. Additionally, such facilities where the charger units are planned for installation will need an electric supply / capacity analysis to ensure the amount of new electrical demand from the chargers can be sustained by the existing electrical feed, or determine if service upgrades will be required, resulting in more time and funding to support such work.

State and Federal Regulations

In April 2023, the California Air Resources Control Board adopted the Advanced Clean Fleets Regulation (California Code of Regulations, Title 13, Sections 2013 and 2016) as

a step towards regulating emissions from mobile sources. Advanced Clean Fleets require California agencies to phase out internal combustion engine vehicles and replace them with equivalent zero emissions vehicle models by 2040. For fleets to comply, beginning January 1, 2024, 50 percent of annual vehicle purchases per calendar year must be zero-emissions, and beginning January 1, 2027, 100 percent of vehicle purchases must be zero-emissions. Regulations are further delineated by weight class composition, with most vehicles covered in the medium-to-heavy duty work trucks.

Advanced Clean Fleets include some flexibility including distinct pathways to compliance and exemptions. Staff is utilizing the Zero Emission Vehicle purchase schedule compliance pathway with qualifying one-time exemptions for non-available product classes. Flexibility exists through 2035 for Near Zero Emission Vehicles, defined as a hybrid plug-in vehicle, but is not utilized by the City as it is not aligned with green fleet procurement protocols that require full battery electric vehicles. Instead, the City will focus on only fully electric vehicle procurements to meet State regulations.

In September 2025, the California Air Resources Board introduced several updates to the Advanced Clean Fleets regulation that enhance compliance flexibility, including proposed repeals, and extended deadlines and exemptions. Key changes include delaying 100% zero emissions vehicle purchases until 2030 and additional exemption criteria to determine a vehicle's availability as a zero emissions vehicle or to replace internal combustion vehicles immediately due to theft. Associated penalties for non-compliance with the Advance Clean Fleets regulations is \$10,000 per vehicle per day, which the State has yet to enforce. California Air Resources Board annual fees are ongoing and have been steadily increasing each year, from \$21,000 in Fiscal Year 2021-22, to \$79,000 in Fiscal Year 2022-23, and to now \$116,000 in Fiscal Year 2024-25.

At the Federal level, the requirements for clean fleet technologies have changed with compliancy relaxed with certain criteria. Due to the adjusting national program, some manufacturers have struggled to keep production levels high for varying electric vehicles types and have since reduced or stopped making particular models as some states do not have as stringent regulations as California. This results in a decreased amount of vehicle choices and a reduced availability for the City's fleet and Departmental operations. However, Fleet has continued to find opportunities to be an environmental leader within the nation, with 53% of the inventory being fueled by alternative options, including the use of renewable diesel, gas and electric hybrids, and all electric vehicles. Additionally, for stationary generators, diesel fuel scrubbers are used to remove contaminants from storage tanks to prevent engine failures and improve fuel quality.

Electric Vehicle Master Plan

In August 2025, staff completed the San Jose Fleet Electrification Assessment Plan, led by the Energy Department and consultant services, with support from Public Works and the Department of Transportation. The plan provides a structured, multi-year approach to electrify the City fleet and meet State requirements in a cost effective, operationally feasible, and environmentally impactful manner. The plan includes both replacing internal combustion engine vehicles with electric equivalents and installing new charging infrastructure at multiple City facilities. Such vehicle chargers are intended to be made available for the public to use also, as possible, with a focus in high-density disadvantaged community areas. The 15-year phased approach prioritizes vehicles that are more readily available and cost effective in the initial years, while scheduling emerging or complex vehicle technologies not fully in the marketplace yet, or at very high current costs, into the out years of the plan. Additionally, the plan includes infrastructure procurement recommendations that include a mix of Level 2 “slow chargers” and Level 3 “fast chargers”, which will optimize energy costs and Department operations based on each vehicle type charging needs.

The plan focuses on 1,572 total vehicle procurements of light, medium, and heavy-duty electric vehicles over the 15-year period, with 429 vehicles required for Advance Clean Fleets compliance. Charging infrastructure procurements will require installing 1,919 chargers (as the current ratio of electric vehicles to chargers is deficient) at 64 facilities citywide with a mix of 93% Level 2 units and 7% Level 3 units, of which 791 chargers will be specifically used for fleet use, and the remaining will be accessible for public, fleet, and employee use.

The total estimated costs will be \$110 million for vehicle replacements and \$65 million for charging infrastructure. Overall, including vehicle purchases, fuel cost, maintenance, registration, and charging infrastructure installation, the full fleet electrification process will cost an estimated \$224 million. The full transition to an electrified fleet will reduce nearly 123 million metric tons of greenhouse gas emissions from vehicle operations. As with any new technology that continues to change over time, training for staff and updating maintenance protocols will be critical, and an overall management of charging schedules will need to be established, particularly for heavy-duty equipment such as street sweepers, box trucks, and utility service vehicles that may need to be charged multiple times daily even with Level 3 fast chargers, to minimize service disruptions.

Challenges

Complying with Advance Clean Fleet regulations and fulfilling the master plan elements will be met with varying challenges, including limited capital procurement budgets, vehicle availability, and staffing limitations. Electric vehicle procurements cost an average of 200 - 300% more than comparable internal combustion engine vehicles

for initial procurement, depending on type, in particular for medium and heavy-duty vehicle equivalents. For example, a leaf body debris collection vehicle that supports Parks, Recreation, and Neighborhood Services Department's BeautifySJ operations has historically averaged \$108,000 per unit in a traditional fuel type, as compared to \$250,000+ for an all-electric version. While electric vehicles represent significant operational savings throughout their useful lives, estimated at a 45% savings level when compared to gas/diesel fueled vehicles, the much larger initial capital procurement budget needs have limited the amount of purchases that have been made over the last recent years.

As the typical annual General Fund replacement vehicle budget is between \$1.25 - \$1.5 million, Fleet Management has only been able to procure between 6 – 14 vehicles, combined between all-electric and traditional fuel bases, hence the overall vehicle replacement backlog has continued to grow. And during times when budget is available for such purchases, market availability can still be a limiting factor in the procurement process. Charging infrastructure is a massive expense as well, when considering all planning, engineering, and associated construction work, along with any facility electrical upgrades that may be required. For reference, to outfit the Police Administration Building with new charging infrastructure to support such public safety vehicles, including seven Level 3 chargers and eleven Level 2 chargers, is estimated at \$2.5 million.

Currently, Fleet acquisition staffing consists of two full-time equivalent positions, which is not sufficient and creates a much larger backlog for scoping vehicle needs, managing purchases with the Finance Department, inspecting the vehicles multiple times upon their builds, and completing the State registration process, amongst the many other tasks associated in properly acquiring vehicles. Typical timelines for scoping and procuring a vehicle upon initial receipt of a Departmental request can be 6 – 12 months or longer, sequentially followed by the 12 – 30 month window for build and delivery. Each fiscal year, Fleet receives on average 150 vehicle requests, which contributes to the growing backlog. And, as maintenance staffing is severely deficient and as more space needs will be required to accommodate a growing fleet volume each year, more resource requests will continue during annual budget cycles, including capital funding to expand existing corporation yards to add more shop bay space.

Opportunities

Along with estimated needs discussed during annual capital budget cycles and referenced in the bi-annual Deferred Infrastructure Maintenance Backlog report, staff has continued to pursue alternate creative funding plans to support the acquisition of vehicles and associated charging equipment, including seeking and applying for various grants. Such opportunities include the creation of regional coalitions to apply for state and federal grant opportunities, which in the past, certain largely funded grants have

been awarded. Particularly, staff had applied for the Charging and Fueling Infrastructure Grant as offered through the federal Department of Transportation in 2024. Based on the details outlined in the application, which focused on Level 2 and 3 chargers being installed at City facilities within underserved communities, the City was selected to receive \$12 million in federal grant assistance to support this work in early January 2025. Subsequently in the same month as the new federal administration took office and rolled back several environmental initiatives, this grant was suspended and ultimately not received by the City.

The Energy Department is also currently administering and funding a fast-charging hub project in key areas within the City to promote and make more available charging infrastructure to the public, which City fleets may use as well. Specifically, several dozen new EV chargers are being planned and spread between the Market Street Garage, Rancho del Pueblo Golf Course, Evergreen Library, Tully Library, and the Seven Trees Community Center and Library. A tolling agreement for these projects is anticipated this Spring, with site design being finalized this calendar year and construction and use expected by early to mid 2027.

In order to ensure City facilities have the adequate electric supply to serve the newer Level 2 and 3 charging units, staff has been in coordination with the Pacific Gas and Electric Company to help plan and design certain sites to accommodate the increased electricity demand through the Rule 29 program. This program specifically assists fleet electric vehicle charging design and deployment through covering the costs associated with utility-side electric distribution infrastructure for separately metered charging infrastructure for commercial, industrial, and multi-family facilities.

Additionally, to assist in potentially lowering initial capital costs and deploying more rapid services, staff is exploring several options for both vehicles and charging equipment. For vehicles, rentals have been an option to help support immediate Department needs when permanent acquisitions may not be possible due to funding constraints or volume of vehicles needed and are exempt from current California Air Resources Board requirements. Rent-to-own vehicles are also opportunities to obtain vehicles sooner with a lesser up-front budget. With charging equipment, staff has researched possible “charge as a service” models, with equipment being installed at City facilities though owned and maintained by third party companies via longer term subscription services. And staff is reviewing opportunities for possible purchase orders in order to allow vehicle operators to charge in third party locations, such as in shopping complexes, that are available for all public to use. While these options may incur lower initial costs and provide for vehicles and charging services in a more rapid timeline, the ongoing costs / subscription commitments will continue to burden operating budgets and ultimately may become more costly to the City over the longer term.

As compliance for Advanced Clean Fleets and other regulatory requirements have continued to increase, and as the electric vehicle fleet and associated infrastructure inventory will need to grow proportionally as well, staff will continue to pursue creative funding strategies, internally and externally, to support such procurements and installations to help achieve compliancy within the upcoming due date years.

COORDINATION

This report has been coordinated with the Energy Department, City Manager's Budget Office, and the City Attorney's Office.

/s/

Matt Loesch

Director, Public Works

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