



Sunnyvale

City of Sunnyvale

Agenda Item

20-0138

Agenda Date: 2/27/2020

2020 COUNCIL STUDY ISSUE

NUMBER

ESD 19-02

TITLE Encourage Adoption of Electric Vehicles

BACKGROUND

Lead Department: Environmental Services Department

Support Departments: Office of the City Manager

Office of the City Attorney

Department of Public Works

Community Development

Sponsor(s): Sustainability Commission

History: 1 year ago: Deferred by Council

2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

On-road transportation is the largest contributor (54% of total) to communitywide greenhouse gas emissions in Sunnyvale. A combination of strategies is necessary to address these emissions, which includes, among others, fuel switching traditional gasoline powered private vehicles to zero emission or electric vehicles (EVs). With the implementation of Silicon Valley Clean Energy (SVCE), which provides carbon-free electricity to our community, Sunnyvale is poised to decarbonize transportation by fuel, switching from fossil fuel-driven vehicles to electric vehicles (EVs).

The Bay Area has witnessed rapid growth in both EV ownership as well as EV infrastructure in the last several years. As of 2017, several neighboring communities, such as Mountain View, Cupertino, Los Altos, and Saratoga, had greater electric vehicle (EV) adoption rates than Sunnyvale (Source: County of Santa Clara, Department of Motor Vehicles, 2018). With more than 44 battery electric and plug-in hybrid electric vehicles available to consumers and growing EV charging infrastructure at public and private locations in Sunnyvale, the City has an opportunity to advance the growth of EVs. Further, reducing emissions by fuel switching to EVs is aligned with Council's Policy Priority of Accelerating Climate Action and with the City's Climate Action Playbook (adopted August 2019) Strategy 3: Decarbonizing Transportation and Sustainable Land Use.

What are the key elements of the Study?

The Study would:

- Review best practices employed by leading cities for promoting adoption of EVs.

- Explore viable public outreach and education approaches to be implemented in Sunnyvale (possibly in partnership with SVCE) to provide information on: (a) electric vehicles, and (b) residential and workplace charger installations.
- Evaluate options for strengthening City policies to enhance requirements for direct installation of EV chargers or for pre-wiring to support them, in new construction and in significant remodels of existing buildings, for both residential and commercial properties.
- Evaluate options to encourage installation of public DC Fast-Charging (Level 3) infrastructure, including possible ownership, installation, and operation by third parties (e.g., Electrify America, Tesla).
- Study potential for establishing standards for placement and appearance of signage to direct EV drivers to public EV charging stations.
- Identify the key elements needed for electrifying the City's vehicle fleet, including funding strategies, modeled on cities that have already electrified their fleets.
- Evaluate potential for installing public EV charging stations in key city locations, including potential installations on City-owned streetlights.
- Identify costs and savings to the City, developers, residents and businesses of pursuing each of the potential actions above.
- Identify benefits to the community and the environment.

Estimated years to complete Study: 1-2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost): Moderate

Funding Required for Non-Budgeted Costs: \$100,000

Funding Source: Will seek grant or partnership funding

Potential costs to the City to conduct this Study would be for consultant support to develop a Community EV Readiness and Infrastructure Plan that would address all the elements of this Study. In addition, it would require staff time to guide the consultant, to collaborate across departments (ESD, DPW and CDD), and to collaborate with external partners (SVCE or other cities).

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, and identify cost-sharing opportunities such as partnering with SVCE, given that SVCE and neighboring jurisdictions have expressed a strong interest in collaboration around several of the elements in this study.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability Commission, Planning Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at the 2020 Study Issues Workshop.

The City has recently adopted an updated Climate Action Playbook (adopted August 2019), which addresses the elements of this Study Issue. The Playbook identifies “Decarbonizing Transportation and Sustainable Land Use” as one of the six key strategies for reducing greenhouse gas emissions by 2050. Within this strategy, Play 3.3 specifically focuses on increasing zero-emission vehicles, and includes the following specific actions (called Next Moves) that the City plans to implement within the next three years:

- Move 3.J - Develop a Community EV Readiness and Infrastructure Plan
- Move 3.K - Promote and seek incentives for community adoption of EVs
- Move 3.J - Electrify municipal fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure

The implementation of these Moves will address all the elements of the proposed Study, and many are already underway. For example, staff is working on the development of a community EV education and awareness program (anticipated to launch in spring 2020) and held a Sustainability Speaker Series event that featured an EV expo and a workshop on November 9, 2019.

In addition, interest from surrounding South Bay communities and SVCE on this topic provides opportunities for gaining information or developing collaborative programs to address several elements of this study. For example, SVCE has already developed an Electric Vehicle Infrastructure Joint Action Plan for identifying a strategy to enhance charging infrastructure in its service area.

Given adoption of the Playbook and the progress made on implementation, staff recommends dropping this topic as a study issue.

Prepared by: Nupur Hiremath, Environmental Programs Manager, Environmental Services Department

Reviewed by: Ramana Chinnakotla, Director, Environmental Services Department

Reviewed by: Chip Taylor, Director, Department of Public Works

Reviewed by: Trudi Ryan, Director, Community Development Department

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager