



City of Sunnyvale

Agenda Item

16-0391

Agenda Date: 2/3/2017

2017 COUNCIL STUDY ISSUE

NUMBER

CDD 17-02

TITLE Increase Availability of Electric Vehicle Charging Stations in Private and Public Parking Facilities

BACKGROUND

Lead Department: Community Development

Support Department(s): Environmental Services

Sponsor(s):

Board/Commission: Planning Commission

History:

1 year ago: N/A

2 years ago: N/A

SCOPE OF THE STUDY

What are the key elements of the study?

The Sunnyvale Municipal Code currently requires pre-wiring for Level 2 electric vehicle (EV) chargers in new residential and industrial/R&D/office construction. Hotels, shopping centers and other nonresidential new construction projects are currently not required to provide any pre-wiring. There is no current specific requirement to install charging stations; however, projects subject to the City's Green Building Requirements can attain points in the LEED point rating system by installing chargers.

This study would explore ways to increase the availability of electric vehicle charging stations throughout the City and would examine the following:

- Expanding current requirements to require installation of charging stations, beyond pre-wiring;
- Expanding the requirement to other nonresidential uses such as hotels and shopping centers;
- Increasing the number of chargers required in residential and nonresidential projects or lowering the threshold for when chargers are required for nonresidential projects;
- Incentives for existing older private properties to provide charging stations; and
- Examining the feasibility to install charging stations at City Hall and other public parking lots/structures.

What precipitated this study?

The Planning Commission reviewed projects that were not required to provide electric vehicle (EV) charging stations and suggested the standards be modified to expand the types of development

required to provide charging stations.

Planned Completion Year: 2017

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required: Moderate

Amount of funding above current budget required: \$0

Funding Source: N/A

Explanation of Cost: N/A

EXPECTED PARTICIPATION IN THE PROCESS

Council-approved work plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Planning Commission, Sustainability Commission

STAFF RECOMMENDATION

Position: Drop

Explanation: Although the study could provide further direction in the type and number of EV charging facilities required in new developments, there are two other efforts scheduled or underway.

Currently, the Building Code requires pre-wiring for electric vehicle chargers in new residential construction (12.5% of required parking and in attached garages) and the Zoning Code requires pre-wiring for 3% of parking spaces in industrial/office new construction that have 100 spaces or more.

These two efforts will evaluate the approaches for increasing EV charging station deployment identified in this proposed Study Issue. Staff will be updating the green building program in 2017, after the new building codes are adopted. The update will include Climate Action Plan items. Staff recommends incorporating some of the electric vehicle charging requirements as part of the green building program update.

Per the strategies identified in the City's Climate Action Plan, staff (Environmental Services Department) has successfully secured funding through the California Energy Commission to purchase and install four charging stations at the Civic Center and close to Downtown Sunnyvale. Grant participation agreements were approved by the City Council in February 2016 and installations should be completed by fall 2016. Finding desirable locations sufficiently close to electrical infrastructure has been found to be a critical component to installing charging stations in existing facilities. In an effort to have a more efficient and strategic process for future charger installations, staff is also participating in a County of Santa Clara-administered grant project - *Driving to Net Zero*. This is a multi-year project, funded by the Strategic Growth Council, which kicked-off in February 2016 and is scheduled for completion in mid-2017. Among other objectives, the project will support participating agencies, such as Sunnyvale, with the development of a charging station siting plan. This plan would help identify strategic locations for deploying future charging stations and aid in pursuing additional future grants for additional EV charging infrastructure. Additionally, the project will

also evaluate existing codes implemented by local jurisdictions and develop a set of best practices for EV charging code requirements that can facilitate and incentivize optimal deployment of charging infrastructure. This review will include but is not limited to pre-wiring requirements in new single-family and multi-family residential development, charging station requirements for new and renovated multi-family and commercial development, and preferential parking requirements for new commercial development. The deliverables from this grant project will inform the green building program update and consideration of other possible code requirements that can be implemented and increase availability of EV charging infrastructure.

Prepared By: Amber Blizinski, Principal Planner

Reviewed By: Andrew Miner, Planning Officer

Reviewed By: Trudi Ryan, Director, Community Development Department

Reviewed By: Walter C. Rossmann, Assistant City Manager

Approved By: Deanna J. Santana, City Manager