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**EVgo Comments on SB 1000 EV Charging Infrastructure
Deployment Assessment and Analysis**

Additional submitted attachment is included below.

July 22, 2021

Ms. Patricia Monahan
Commissioner
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

VIA DOCKET

Energy Commission Docket 20-TRAN-02

RE: EVgo Comments on Senate Bill 1000 Electric Vehicle Charging Infrastructure Deployment Assessment Staff Workshop

Dear Commissioner Monahan and Staff:

EVgo commends the California Energy Commission (CEC) for its leadership in helping the state meet its climate and zero emission vehicle (ZEV) goals through sustained and equitable investments in light duty charging infrastructure.

Headquartered in Los Angeles, EVgo is the nation's largest public fast charging network for electric vehicles, and the first to be powered by 100% renewable energy. With more than 800 locations in more across 34 states, including over 300 fast charging locations in California, EVgo serves more than 250,000 customers across the country.

EVgo thanks the Energy Commission for hosting its recent workshop previewing its 2021 analysis for SB 1000 which assesses light-duty electric vehicle (EV) charging infrastructure distribution and access. EVgo believes that the Commission's work around SB 1000 plays an integral part in ensuring equitable distribution of chargers for all, and EVgo applauds California for passing a historic Zero Emission Vehicle (ZEV) package this year that that will help the state meet goal of 1.5 million charge ports by 2035 and the governor's executive order for complete EV sales by 2035.

Below, EVgo respectfully submits the following comments for staff and Commission to consider as it moves forward with its charging distribution analysis and respective application for future funding programs. As always, EVgo looks forward to being a partner to the CEC in pursuit of a fully electrified transportation sector and welcomes itself as a resource should any questions arise.

Best,

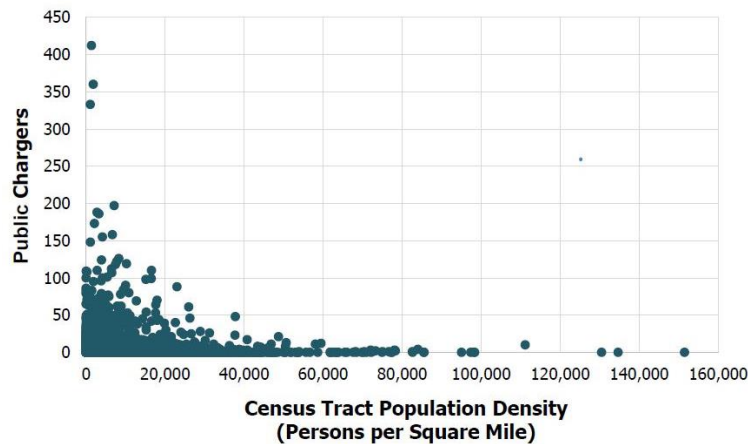


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1. EVgo supports the CEC’s continued work around SB 1000 to make charging infrastructure more equitable and accessible for all demographics of current and future EV drivers.

As the CEC and charging networks work toward meeting state goals for charging infrastructure, understanding where there are gaps in charging will be critical to ensuring no one is left behind in the transition to a fully electrified transportation system. One such gap noted was the shortage of public charging in high density areas as opposed to low density areas.

Figure 1: Public L2 and DCFC by Census Tract Population Density. Source: CEC SB 1000 Report



Given this correlation, EVgo commends the CEC for prioritizing a multi-unit dwelling solicitation to help promote equitable access to charging infrastructure, especially for apartment dwellers without access to home charging or onsite parking in dense urban areas. These programs will help make great strides in not only closing the projected gap on needed infrastructure but will also place them where they are needed most.

Notably, up to 81% of apartment-dwelling EV drivers and others without access to home charging or onsite parking rely primarily on public charging.¹ Similarly, a study of EV charging data from the University of California, Los Angeles (UCLA) found that residents of multi-unit housing units rely largely on public charging for their fueling needs.² This is because in denser urban areas not every home has a driveway, attached garage, or in many cases any dedicated parking. Additionally, per the UCLA study, other barriers for onsite charging at multi-unit housing including lack of financial incentive for renters to install equipment in a home they do not own, or a lack of dedicated parking altogether.

Given these barriers and the potential solutions, EVgo recommends that the CEC continue to pursue investment strategies to meet this demographic of EV drivers, including public DC fast charging (DCFC)

¹ International Council on Clean Transportation, *Quantifying the Electric Vehicle Charging Infrastructure Gap Across U.S. Markets*, January 2019, page 9; available at https://theicct.org/sites/default/files/publications/US_charging_Gap_20190124.pdf

² University of California at Los Angeles, Luskin Center for Innovation, *Evaluating Multi-Unit Resident Charging Behavior at Direct Current Fast Chargers*, January 2021,

funding programs near high density locations of multifamily housing in a way that is complementary to other programs running parallel in the state.³

2. CEC should weigh housing stock into its analysis to accurately evaluate the need for public fast charging in different communities.

In SB 1000’s December report, a lower overall number level of charging infrastructure in lower income areas was identified; however, it also showed a higher number of DC fast chargers per capita in low and moderate income areas. In the July 8th staff workshop, it was indicated that drive times to these DC fast chargers stations were higher in these dense areas, likely due to higher traffic volume in these areas.⁴

EVgo would recommend staff also weigh the density and type of housing stock into consideration in its analysis. A region with more multi-unit dwellings (MUD) may need more public fast chargers because less people will charge at home due to aforementioned barriers: lack of driveways, dedicated parking, or investment costs. For these reasons, there a strong need for even more DCFC in MFD dense areas.

On the other hand, housing stock in more rural regions could subsist of more single-family homes. In these areas, the likelihood that drivers will rely on fast chargers as a primary fueling source is lower, as drivers may primarily be using L1 or L2 chargers if they can charge on their driveway. In Figure 1 below, the International Council on Clean Transportation reports that only 8-16% of EV drivers in detached house (i.e. single family homes) rely on public charging as their primary charging method compared to the 52-81% of apartment dwellers who rely on public charging. Therefore, drive time may not be the most accurate indicator for less dense communities where home charging is more relied upon than public charging.

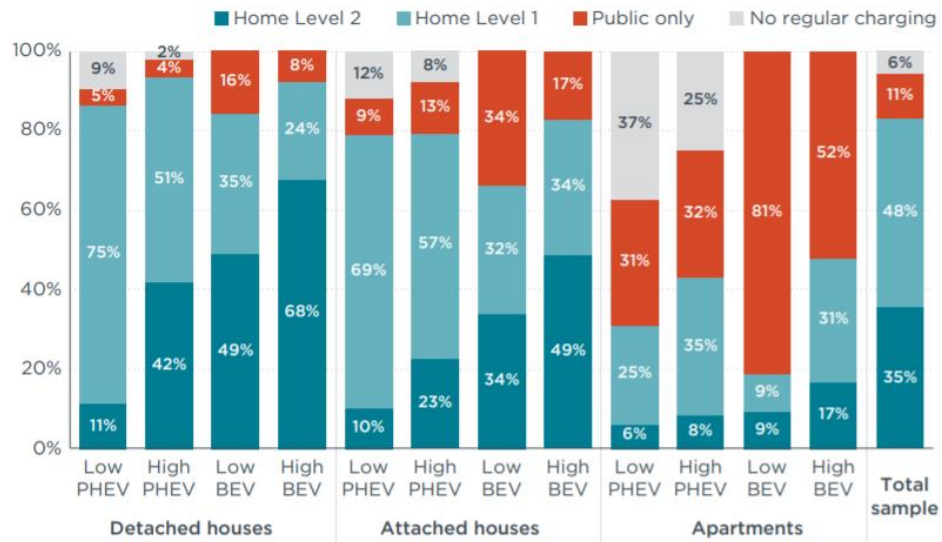


Figure 2: Percentage of electric vehicle households that use home and public charging in detached homes, attached homes, and apartments by vehicle type. Source: ICCT

³ Southern California Edison’s (SCE) ChargeReady 2 program, launched in July 2021, includes projected support for 38,000 ports in SCE territory. Much of this investment will be focused on Level 2 charging.

<https://energized.edison.com/stories/sce-launches-program-to-install-38-000-ev-chargers>

⁴ California Energy Commission, Docket Number 20-TRAN-02, Presentation - SB 1000 Staff Workshop 2021-07-08.

While drive time may be less important in areas with more single family homes and dedicated driveways, the UCLA Luskin Center’s study found that for the large plurality of multi-unit dwelling residents who rely on public DC fast chargers, there’s a strong preference for <10 minute drive time to locations with ample amenities to charge their vehicles.⁵ These locations are often at grocery stores, retail centers, and other locations where EV drivers can integrate fueling into their regular errands.

EVgo notes that in its recent comments to the CEC for its respective upcoming multiunit dwelling and rural charging infrastructure solicitation, EVgo recommended using drive time as a more suitable metric for distance to serviceable residences in the MUD solicitation. In line with UCLA’s study showing driver time preferences discussed above, EVgo recommended a 3-mile threshold, or <10 minute drive time for eligible locations under the multi-unit dwelling solicitation. Additionally, scoring rubrics should be adjusted to include locations with ample amenities to improve driver experience. Staff should use similar metrics for station accessibility in its SB 1000 analysis.

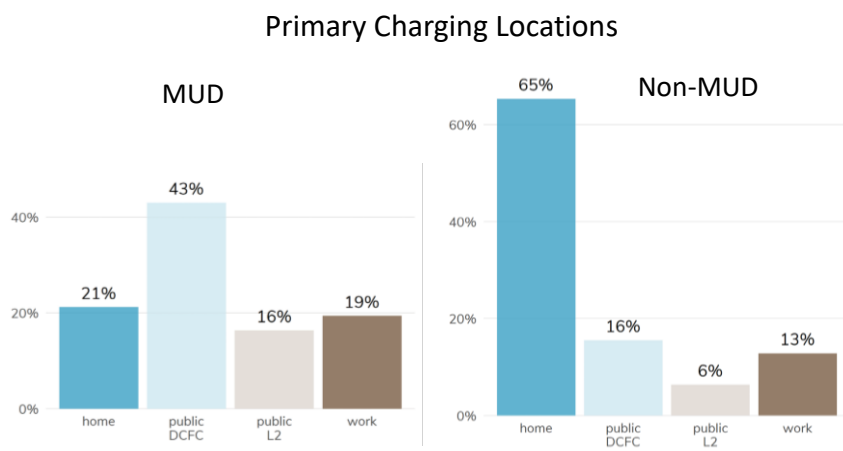


Figure 3: Primary charging location for MUD and Non-MUD Drivers. Source: UCLA Luskin Center Study

⁵ University of California at Los Angeles, Luskin Center for Innovation, *Evaluating Multi-Unit Resident Charging Behavior at Direct Current Fast Chargers*, January 2021.