Date of Hearing: June 26, 2023

ASSEMBLY COMMITTEE ON TRANSPORTATION
Laura Friedman, Chair
SB 30 (Umberg) – As Amended February 27, 2023

SENATE VOTE: 40-0

SUBJECT: Transportation: zero-emission vehicle signage

SUMMARY: Requires the California Department of Transportation (Caltrans) to develop and design light-duty zero-emission vehicles (ZEV) charging and fueling station signage to be placed along state highways. Specifically, **this bill**:

1) Requires Caltrans, in coordination with the Governor's Office of Business and Economic Development (GO-Biz) and the State Energy Resources Conservation and Development Commission (CEC), to develop and design light-duty zero-emission vehicle charging and fueling station signage to be placed along state highways based on charger or fueling type and vehicle compatibility, to increase consumer confidence in locating electric vehicle chargers and hydrogen fueling stations.

2) Allows Caltrans to adopt rules and regulations for purposes of this section.

EXISTING LAW:

1) Requires Caltrans to adopt rules and regulations prescribing uniform standards for all traffic control devices, including signs and markings, known as the Manual of Uniform Traffic Control Devices (MUTCD). All traffic control devices must conform to these standards. (Vehicle Code Section 21400)

2) Establishes, through Executive Order, a goal of the State that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035, that 100% of medium-and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. (EO N-79-20)

FISCAL EFFECT: According to the Senate Appropriations Committee, pursuant to Senate Rule 28.8, negligible state costs.

COMMENTS: The Legislature has set a number of goals to reduce greenhouse gas (GHG) emissions and address climate change. The Global Warming Solutions Act of 2006, AB 32 (Nuñez), Chapter 488, Statutes of 2006 and subsequent companion legislation SB 32 (Pavley), Chapter 249, Statutes of 2016, requires California to reduce statewide GHG emissions to 40% below the 1990 level by 2030. The 1990 level is an aggregated statewide limit, and is not sector- or facility-specific. The California Air Resources Board (CARB) is responsible for developing a Scoping Plan to detail how the state will achieve its GHG emissions reduction targets mandated by law.

Nearly 40% of California's GHG emissions are generated by the transportation sector, which includes both the light-duty (passenger) and medium- and heavy-duty fleets. Heavy-duty diesel trucks also contribute to unhealthy levels of ozone, inhalable particulate matter, carbon

monoxide, NOx, and sulfur dioxide, affecting local air quality. In the transportation sector, measure to reduce GHG emissions include requiring the use of low carbon fuels, cleaner vehicles, and strategies to promote sustainable communities and improved transportation choices that reduce growth in number of vehicle miles traveled.

To further these efforts, at the end of 2020, Governor Newsom issued Executive Order (EO) N-79-20 which requires 100% of in-state sales of new passenger cars and trucks to be zero-emission by 2035. EO N-79-20 charges CARB with developing and proposing passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the State towards that goal.

ZEVs sales and related infrastructure increasing. California surpassed one million ZEV sales in 2021 and leads the country in all ZEV market metrics including the highest level of public funding, the largest EV market share percentage of nearly 18%, and the most extensive public charging infrastructure. The success of the state's programs has led to ZEVs becoming a top export and has spurred major advances in manufacturing and job creation.

While hydrogen and electric vehicle charging stations (EVCSs) are growing, they are still relatively new. Range anxiety remains one of the most significant barriers to the sale and use of electric vehicles. There is a common misconception that ZEV stations are not easily available. The lack of ZEV charging signage on highways contributes to this misconception.
Raising the visibility of EV charging stations can increase driver awareness of local charging opportunities, potentially raising consumer confidence in ZEV viability and facilitating the transition to ZEV ownership. Transitioning to ZEV vehicles will reduce smog and air pollution which will positively impact everyone throughout the state.

Adequate charging infrastructure is essential to achieving our EV deployment goals. A recent survey by Consumer Reports found that concerns about charging logistics (e.g. where and when an EV can be recharged) was the most cited barrier for potential EV buyers. Similarly, a recent JD Power study found increasing dissatisfaction with EV charging among EV owners, noting that public charging continues to provide challenges to overall EV adoption and current EV owners alike.

ZEV charging signage can be helpful. There is increasing awareness of the need to deploy more ZEV charging and to better inform drivers of ZEV charging availability. While most ZEV drivers are made aware of ZEV charging through apps in their vehicle, signage can be helpful and creates awareness among yet-to-be ZEV buyers. The National Electric Vehicle Infrastructure Program (NEVI), a federal EV charging program created as part of the Infrastructure Investment and Jobs Act, provides that highway signage is an authorized use of NEVI funding. Additionally, California's Clean Transportation Program provides planning grants to local governments for ZEV infrastructure planning and authorizes installation of signage for previously installed chargers.

Caltrans has published a ZEV charging station sign installation guide which includes model signage that has been approved by the MUTCD (see below). Moreover, Caltrans has an existing program which places signs on highways when requested by a local government, or when the CEC identifies a need for signs, at no cost to the requestor. As of September 2022 about 230 signs have been installed on freeways.

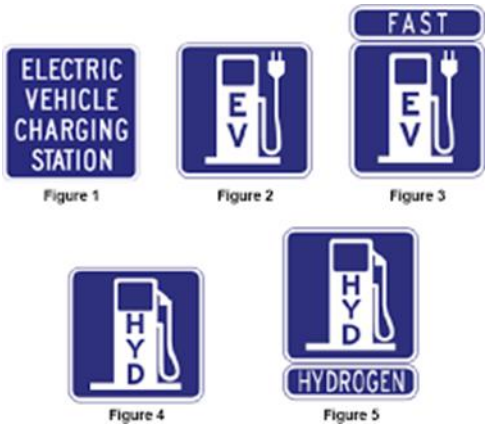

Figure 1 Figure 2 Figure 3 Figure 4 Figure 5

According to the author, "SB 30 will require ZEV charging station signage to be placed along state highways. This signage will inform drivers where they can charge their electric vehicles or fuel up their hydrogen fuel cell vehicles. SB 30 will also build awareness for non-ZEV motorists by bringing ZEV infrastructure to the forefront of their minds, helping eliminate range anxiety during daily driving routes and trips throughout the state. SB 30 strives to increase confidence in California's ever-growing ZEV station infrastructure. Adding more ZEVs on the road will improve public health and the environment and adding refueling station signs will help the state meet its transportation goals and help boost local economic development."

In support, Breathe California writes, "As zero-emission vehicles become increasingly commonplace, drivers must be confident in their ability to travel long distances without depleting their fuel supplies. Adding this signage to highways is a simple and cost-effective way to improve our state's transportation infrastructure by helping drivers of zero-emission vehicles find charging/fueling stations for their cars."

Previous legislation. AB 400 (Alejo) Chapter 693, Statutes of 2015, requires, prior to June 30, 2016, the California Department of Transportation (Caltrans) to update its policies regarding changeable message signs, as prescribed.

AB 634 (Salas) Chapter 95, Statutes of 2019, requires roundabouts to be included in the list of highway facility types that may be used for memorial or dedication signing as designated in the California Manual on Uniform Traffic Control Devices (MUTCD).

REGISTERED SUPPORT / OPPOSITION:

Support

Breathe California
California Electric Transportation Coalition
California Hydrogen Coalition

Opposition

None on file

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