

Date of Hearing: June 21, 2021

ASSEMBLY COMMITTEE ON TRANSPORTATION  
Laura Friedman, Chair  
SB 671 (Gonzalez) – As Amended April 28, 2021

**SENATE VOTE:** 40-0

**SUBJECT:** Transportation: Clean Freight Corridor Efficiency Assessment

**SUMMARY:** Creates the Clean Freight Corridor Efficiency Assessment to be developed by the California Transportation Commission (CTC), in coordination with other agencies, and codifies the eligibility of specified medium- and heavy-duty zero emission vehicle (ZEV) infrastructure projects for funding from Trade Corridors Enhancement Account (TCEA).

Specifically, **this bill:**

- 1) Requires CTC in coordination with the State Air Resources Board (CARB), Public Utilities Commission (CPUC), State Energy Resources Conservation and Development Commission (CEC), and the Governor's Office of Business and Economic Development (GO-Biz), to develop the Clean Freight Corridor Efficiency Assessment and in it identify:
  - Freight corridors, or segments of corridors, throughout the state that would be priority candidates for the deployment of medium- and heavy-duty ZEVs.
  - The top five freight corridors, or segments of freight corridors, with the heaviest freight volume and near-source exposure to diesel exhaust and other contaminants.
  - Projects that would achieve the goals of the assessment, including, but not limited to, all of the following projects:
    - a) Medium- and heavy-duty ZEV charging and fueling infrastructure.
    - b) Highway improvements needed to accommodate charging and fueling infrastructure, including parking facilities.
    - c) Highway improvements on the corridor to increase safety and throughput, such as dedicated truck lanes.
    - d) Improvements to local or connector streets and roads to support the corridor.
    - e) An identification of areas where micro-grids or similar technologies could be deployed for ZEV charging or fueling.
  - Potential sponsors of projects to achieve the goals of the assessment, including, but not limited to, the Department of Transportation (Caltrans), regional transportation planning agencies, local governments, the freight industry, and nonprofit organizations.

- Barriers and potential solutions to achieving the goals of the assessment and the deployment of medium- and heavy-duty ZEVs.
  - The impact on roads and bridges due to the increased weight of ZEVs.
  - Methods to avoid displacement of residents and businesses on the freight corridor when considering projects that achieve the goals of the assessment.
  - Potential funding opportunities for project types.
  - Benefits from the deployment of medium- and heavy-duty ZEVs, including, but not limited to, environmental, air quality, public health, and highway safety benefits, and economic competitiveness.
- 2) Requires CTC to submit a report containing the assessment's findings and recommendations to certain committees of the Legislature by December 31, 2023.
  - 3) Requires the assessment's findings and recommendations to be incorporated, to the extent feasible and applicable, into CARB and CEC's programs and guidelines documents related to freight infrastructure and technology. This shall not limit the ability to award freight infrastructure and technology program funds on a competitive basis.
  - 4) Requires the state freight plan to include a description of needed infrastructure, projects, and operations for the deployment of medium- and heavy-duty ZEVs and the development of freight corridors identified in the assessment.
  - 5) Provides that projects that employ advanced and innovative technology to improve the flow of freight, and also environmental and community mitigation or efforts to reduce environmental impacts of freight movement, are infrastructure projects eligible for funding from the TCEA.

**EXISTING LAW:**

- 1) Requires the California State Transportation Agency (CalSTA) to develop the California Freight Mobility Plan (CFMP) in accordance with federal guidelines and establish an advisory committee made up of federal, state, local, and regional representatives as well as private sector and specified interest groups to guide CFMP development.
- 2) Establishes the TCEA and requires CTC to allocate monies for infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on the Primary Freight Network, and along other corridors that have a high volume of freight movement, as determined by CTC and as identified in the CFMP. The program, known as the Trade Corridor Enhancement Program (TCEP), is funded with revenue collected from a portion of the diesel excise tax and federal funds.
- 3) Requires projects to be included in an adopted Regional Transportation Plan (RTP) in order to be eligible for TCEP funding. Projects within the boundaries of a metropolitan planning organization (MPO) shall be included in an adopted RTP that includes a

sustainable communities' strategy (SCS) determined by CARB to achieve the region's greenhouse gas (GHG) emissions reduction targets.

- 4) Establishes the Global Warming Solutions Act of 2006, AB 32 (Núñez, Chapter 244, Statutes of 2006), that requires CARB to enact regulations and establish programs to reduce GHG emissions to 1990 levels by 2020 including the use of market-based mechanisms (cap-and-trade) to comply with these regulations. Requires CARB to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030 (SB 32, Pavley, Chapter 249, Statutes of 2016).
- 5) Establishes the Clean Transportation Program, administered by the CEC that supports innovations in transportation and fuel technologies and funds EV and ZEV infrastructure in California. The program is funded with revenue collected from vehicle and vessel registration, vehicle identification plates, and smog-abatement fees.
- 6) Requires, under federal and state law, Caltrans to develop and update the long-range California Transportation Plan (CTP) every five years. The CTP provides a framework for guiding transportation decisions and investments by all levels of government and the private sector, and analysis and policy recommendations regarding current transportation issues and future trends.

**FISCAL EFFECT:** Unknown

**COMMENTS:** Medium- and heavy-duty vehicles, such as delivery vans, Class 8 trucks, and cargo handling equipment, are integral to the movement of freight in California. According to a recent study by the American Council for an Energy-Efficient Economy, trucks, ranging from heavy-duty pickup trucks to 18-wheelers, account for 22% of vehicle carbon dioxide emissions, and they also emit substantial amounts of other pollutants, contributing to climate change and health problems. Therefore, reducing emissions from these types of vehicles is critical to achieving the state's climate goals.

California has been working aggressively to advance the transition to medium- and heavy-duty ZEVs by funding the purchase of these types of vehicles and related infrastructure. In September 2020, Governor Newsom signed Executive Order (EO) N-79-20, which set a goal that 100% of in-state sales of new passenger cars and trucks would be zero-emission by 2035. Additionally, 100% of medium- and heavy-duty vehicles will be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks and off-road vehicles and equipment.

CARB's Advanced Clean Truck regulation (approved in June 2020) requires an increasing percentage of medium- and heavy-duty ZEVs to be sold beginning in 2024 through 2035. This combined with technology advances will increase the number of these types of vehicles on the road. CARB's Draft 2020 Mobile Source Strategy projects that the state will need 180,000 medium- and heavy-duty ZEVs in 2030 to achieve state climate and air quality goals and comply with EO N-79-20.

AB 2127 (Ting), Chapter 365, Statutes of 2018 requires CEC to biennially assess the state's electric vehicle charging infrastructure. The CEC's most recently released report (May 2021) finds that an additional 157,000 chargers are needed to support 180,000 medium- and heavy-duty vehicles anticipated for 2030.

In 2015, Governor Brown issued EO B-32-15, which directed key agencies to create a sustainable freight plan with the goals of improving freight efficiency, transitioning to zero-emission technologies, and increasing competitiveness of California's freight system. These agencies adopted the Sustainable Freight Action Plan in 2016. The plan provides short and long-term goals for state agencies to consider when planning for freight sustainability.

California funds goods movement from a variety of agencies and sources. CARB and CEC focus funding on cleaning up the freight sector by supporting the purchase of zero-emission medium- and heavy-duty vehicles and funding the deployment of charging technologies to facilitate their use. Dedicated funding for goods movement corridor infrastructure is through the CTC. SB 1 (Beall), Chapter 5, Statutes of 2017 provides approximately \$300 million annually in state funds and approximately \$535 million annually in federal funds are provided for freight projects, under TCEP.

According to the author, "The emissions associated with freight corridors not only contribute to global warming—they also pose a serious risk to the health of our communities. In my district, as in many across the state, families that live near freight corridors are heavily burdened by pollution and suffer disproportionately from high rates of chronic diseases such as cancer, asthma, and other respiratory illnesses. Building cleaner freight corridors is not just an option, it is necessary to protect the health of our communities. We need to create a well-informed, robust assessment that will guide us to develop infrastructure that will support clean vehicles and emissions-reductions goals. The Clean Freight Corridor Efficiency Assessment will support these goals and build towards a future where every Californian has access to clean, breathable air."

*Staff comments:* In order to advance the deployment of medium- and heavy-duty ZEVs a robust network of infrastructure to support these vehicles is necessary. Involvement of the state's transportation entities such as CTC, Caltrans, and CalSTA is critical to making this transition a success. The expertise of these organizations is necessary to assess factors such as the potential degradation of existing roads and bridges due to heavier vehicles, adequacy and safety of roadside parking for charging along state highways, and the equitable placement of ZEV infrastructure. This bill would foster greater engagement of the state's transportation entities by requiring them to lead this assessment.

Current TCEP program guidelines allow for the funding of medium- and heavy-duty ZEV infrastructure and related projects that are tied to public benefits and this bill would codify these as eligible types of projects. However, to date, none of these types of projects have been funded because they have not been included in an MPO's RTP/SCS. Concerns have been raised that the timeline for these projects to get into the pipeline for TCEP funding could be long due to the nature of the RTP/ SCS process, but these projects could be incorporated as these documents are revised.

This bill requires the CTC to complete its assessment by December 1, 2023. This assessment may be slightly premature because the medium- and heavy-duty ZEV technology has not fully evolved. For example, the potential distance that medium- and heavy-duty ZEVs will ultimately be able to travel on a single charge is unknown, and currently this distance is very limited. Also, it is uncertain how businesses that purchase medium- and heavy-duty ZEVs will charge and/or fuel their fleets. It is unknown if businesses will charge their vehicles on-site, or instead rely on a

statewide network of charging infrastructure. Further, because the technology to develop these vehicles is complex and expensive, at this time, there are not many of these types of vehicles in operation at this time, but increasing numbers of ZEV trucks and buses are scheduled to be on the market in the next few years. As a result, the infrastructure to support the transition to clean freight has been slower to deploy.

In addition, medium- and heavy-duty vehicles tend to adhere to rigid operating schedules, making infrastructure planning for these vehicles unique. While set operating schedules may ease infrastructure planning and present opportunities for vehicle-grid integration, less downtime and the resultant need for higher-power charging also present challenges that should be taken into consideration in this assessment. Finally, it is unclear to what extent TCEP could actually fund charging infrastructure for medium- and heavy-duty vehicles used by the private sector and still satisfy the “public benefit” criteria.

*Arguments in Support:* The Alameda County Transportation Commission writes in support that this bill would provide the planning effort necessary “to identify and plan for a network of fueling and charging infrastructure needed to expand the use of ZEV trucks”. CALSTART states “SB 671 will allow for creation of more robust and creative strategies than what each agency can individually develop, enabling a more in-depth conversation across agencies about how to mitigate the negative environmental impacts of freight projects”.

*Double referral:* This bill will be referred to the Assembly Committee on Natural Resources should it pass out of this committee.

*Previous Legislation:* AB 2127 (Ting) Chapter 365, Statutes of 2018 requires CEC, working with CARB and CPUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of GHGs to 40% below 1990 levels by 2030.

AB 179 (Cervantes) Chapter 737, Statutes of 2017 requires CTC to meet at least twice per year with CARB to coordinate the implementation of transportation programs.

AB 14 (Lowenthal), Chapter 223, Statutes of 2013 requires CalSTA to establish a Freight Advisory Panel, and directs it to create a Freight Mobility Plan which is updated every five years. This Freight Mobility Plan summarizes the ongoing state of freight in California, and makes recommendations on further investments in freight mobility.

## **REGISTERED SUPPORT / OPPOSITION:**

### **Support**

Alameda County Transportation Commission  
Breathe Southern California  
Calstart INC.  
Community Action to Fight Asthma  
Edison International and Affiliates, Including Southern California Edison  
Elders Climate Action, Norcal and Social Chapters

Los Angeles County Metropolitan Transportation Authority  
Nevada County Norcal Elders Climate Action Network  
Regional Asthma Management and Prevention (RAMP)  
The Climate Reality Project Orange County Chapter  
Union of Concerned Scientists

**Support in Concept**

Natural Resources Defense Council

**Opposition**

None on file

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