Date of Hearing: April 18, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION Laura Friedman, Chair AB 2807 (Mia Bonta) – As Introduced February 18, 2022

SUBJECT: Transportation funding programs: eligibility: public transportation ferries

SUMMARY: Expands existing program eligibility for various programs that provide moneys for zero- and near-zero-emissions transportation technologies to include public transportation ferries. Specifically, **this bill**:

- 1) Expands the eligibility for the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to include public transportation ferries.
- 2) Expands the eligibility of the Clean Transportation Program (CTP) to include public transportation ferries.
- 3) Expands the eligibility of the Air Quality Improvement Program (AQIP) to include public transportation ferries.
- 4) Expands the eligibility of the Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Purchasing Assistance Program to include public transportation ferries.
- 5) Expands the eligibility of the Low Carbon Transit Operations Program (LCTOP) to include public transportation ferries.

EXISTING LAW:

- 1) Defines "public transportation ferries" as ferryboats operated, sponsored, funded, or subsidized by any public agency, including, but not limited to, those ferryboats operated under agreement with a private operator.
- 2) Establishes the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, with appropriated moneys, to fund development, demonstration, precommercial pilot, and early commercial deployment of zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies.
- 3) Establishes the CTP to provide appropriated moneys, through competitive means to fund development and deployment of innovative technologies and alternative and renewable fuels.
- 4) Establishes the AQIP, which shall use appropriated moneys to fund projects that reduce criteria air pollutants, improve air quality, and provide funding for research to determine and improve air quality impacts of alternative transportation fuels and vehicles, vessels, and equipment technologies.
- 5) Establishes the Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Purchasing Assistance Program to make financing tools and nonfinancial supports available to the operators of medium- and heavy-duty vehicle fleets to enable those operators to transition their fleets to zero-emission vehicles.

6) Establishes the LCTOP to provide operating and capital assistance for transit agencies to reduce greenhouse gas emissions and improve mobility, with a priority on serving disadvantaged communities.

FISCAL EFFECT: Unknown

COMMENTS:

ZEV climate goals. Transitioning California's transportation system away from gasoline to ZEVs is a fundamental part of the state's efforts to reduce GHG emissions and help meet the state's goals to reduce GHG emissions 40% below 1990 levels by 2030. Governor Newsom's Executive Order (EO) N-79-20, dated September 23, 2020, establishes the goal that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. The EO further requires that 100% of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible.

Ferry vessel emissions and regulations. Ferry vessels are one of the largest emitting categories of commercial harbor craft in the state according to the California Air Resources Board (CARB). While ferries only represent 2% of the harbor craft population, they emit 11% of total commercial craft particulate matter emissions, and 15% of total commercial harbor craft nitrogen oxides emissions. In 2018, CARB estimated that ferries powered by diesel engines in the Bay Area emitted more than 88,000 short tons of CO₂, equivalent to 17,400 cars worth of yearly driving.

CARB adopted the Airborne Toxic Control Measure for Diesel Engines on Commercial Harbor Craft in 2008 to reduce emissions of diesel particulate matter, oxides of nitrogen, and reactive organic gases from diesel engines used on commercial harbor craft operated in regulated California waters. CARB amended the original regulation in 2010 to include additional vessel categories, including crew and supply, barge, and dredge vessels. The current regulation will be fully implemented by the end of 2022. At the end of 2021, CARB proposed to amend the current regulation to further reduce emissions from harbor craft in impacted communities. By 2035, the amendments are expected to result in an 89% reduction in particulate matter emissions and a 54% reduction in nitrogen oxides emissions. CARB adopted these amendments in March 2022.

Zero- and near-zero-emissions ferry technologies and deployment. Currently, alternative technologies to traditional diesel engines include battery electric and hydrogen fuel cell technologies. For ferries, these technologies are relatively new, carrying a significant cost to operate at the scale necessary to power large vessels such as ferries. Pacific Environment estimates the number of zero-emissions ships currently in operation around the world is over 400 with another 182 on order. California deployed the first hydrogen fuel cell-powered ferry in the Bay Area in 2021. The project received a \$3 million grant from CARB, administered by the Bay Area Air Quality Management District (BAAQMD), with funds coming from the California Climate Investments initiative.

Clean transportation funding programs. The California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program was created by SB 1204 (Lara), Chapter 524, Statutes of 2014 to guide CARB's heavy-duty investments funded with Cap-and-Trade auction proceeds. The purpose of this program is to help accelerate the introduction of the next generation of cleaner heavy-duty vehicles and engines with a priority on projects that benefit disadvantaged communities. This program was further modified by SB 1403 (Lara), Chapter 370, Statutes of 2018 to develop and include a three-year investment strategy for zero- and near zero-emission heavy-duty vehicles and equipment as part of the annual Low Carbon Transportation and Air Quality Improvement Program Funding Plan.

The CTP was established by AB 118 (Núñez), Chapter 750, Statutes of 2007, which took effect January 1, 2008. AB 8 (Perea), Chapter 401, Statutes of 2013 extended the program through January 1, 2024. The program was established to: 1) expedite development of conveniently located fueling and charging infrastructure for low- and zero-emission vehicles, 2) accelerate advancements and adoption of alternative fuel and advanced technology vehicles, including low-and zero-emission medium- and heavy-duty vehicles, 3) expand in-state production of alternative low carbon renewable fuel, and 4) support manufacturing and workforce training to help meet the needs of the state's growing clean transportation and fuels market. The program is paid for by funds collected from vehicle and vessel registration, vehicle identification plates, and smog abatement fees. The program provides approximately \$95.2 million annually. The current investment plans for fiscal years 2022-2023 and 2023-2024 include \$298 million for medium-and heavy-duty ZEVs and infrastructure, \$30 million for hydrogen refueling infrastructure, \$125 million for ZEV manufacturing, and \$10 million for workforce development. The CTP recently invested \$4 million in hydrogen fuel cell demonstrations for rail and marine applications at ports.

The AQIP was established by AB 118 (Núñez), Chapter 750, Statutes of 2007 to provide mobile source incentives to reduce greenhouse gas, criteria pollutant, and toxic air contaminant emissions through the deployment of advanced technology and clean transportation in the light-and heavy-duty sectors. Each year, the legislature appropriates funding to CARB for these incentives to reduce emissions and support advanced technology demonstrations and deployment. Since 2014-15, the majority of AQIP funds have been directed to the Truck Loan Assistance Program, which helps small business truckers secure financing for newer trucks to meet compliance deadlines for CARB's In-Use Truck and Bus Regulation. From fiscal year 2008-09 through fiscal year 2020-21, AQIP has allocated \$374 million. The allocation for fiscal year 2021-22 totals \$28.64 million.

The Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Purchasing Assistance Program was created by SB 372 (Levya), Chapter 639, Statutes of 2021, administered by the California Pollution Control Financing Authority, to make financing tools and nonfinancial support tools available to the operators of medium- and heavy-duty vehicle fleets to enable those operators to transition their fleets to zero-emission vehicles. The legislation specifies that 75% of the funds must be deployed in priority areas defined in the bill, and the financing tools and non-financial support must be accessible to fleets by January 1, 2023.

The LCTOP was established under SB 862 (Chapter 36, Statutes of 2014) as part of the Transit, Affordable Housing, and Sustainable Communities Program. The program is administered by the California Department of Transportation (Caltrans) in coordination with CARB and the State Controller's Office. The goal of LCTOP is to provide operating and capital assistance for transit agencies to reduce greenhouse gas emissions and improve mobility, with a priority on serving disadvantaged communities. Approved projects in LCTOP are intended to support new or expanded bus or rail services, expand intermodal transit facilities, and may include equipment acquisition, fueling, maintenance and other costs to operate those services or facilities, with each project reducing greenhouse gas emissions. The program is funded by continuous appropriations at 5% of the annual auction proceeds from the Greenhouse Gas Reduction Fund since 2015-16.

According to the author, "Ferry service is a critical part of the state's public transit sector carrying over 4 million passengers annually. Ferry ridership has increased dramatically as Californians look for transportation alternatives to gridlocked freeways. As an example, over the last decade (pre-COVID) ferry ridership has doubled on San Francisco Bay Ferry, which provides service to several counties in the San Francisco Bay Area.

The California Air Resources Board (CARB) has adopted regulations requiring public transit providers to transition their fleets to zero-emission technology and the state has made funding available to offset the cost. Unfortunately, these funding programs, which tend to focus on bus and rail, often inadvertently exclude ferries.

CARB amended the Commercial Harbor Craft Regulations in March to require operators to meet extensive emission reductions requirements and mandate zero emission ferries. Vessel conversions to zero emissions or replacement of diesel vessels with zero emission vessels will cost one agency alone over \$200 million. In addition, preliminary findings indicate that installation of shoreside charging infrastructure to support zero emission vessels will likely cost hundreds of millions of dollars.

AB 2807 makes clear that public transit ferries are eligible for the various state funding programs that exist to help transit providers transition to zero emission vehicles. As CARB finalizes the Commercial Harbor Craft regulations that, in part, mandate ferry vessels transition from diesel engines to zero emission engines, it will be critical that public transit ferries are eligible for state programs providing incentives for converting transit fleets to zero emission technology.

AB 2807 will ensure funding equity for all forms of transit as the state transitions from diesel to zero emission technologies."

Amendments: This bill expands five existing programs, including the Medium- and Heavy- Duty Zero Emission Vehicle Fleet Purchasing Assistance Program, to help transition public ferries to cleaner fuels. According to CARB, the intent of the legislation that created the Medium- and Heavy- Duty Zero Emission Vehicle Fleet Purchasing Assistance Program was to make financing options available to truck and bus fleet operators who may have difficulty securing financing directly from banking institutions, and was not intended to apply to ferries. Therefore the Committee has suggested, and the author has accepted, to amend the bill and strike Section 5 from the bill, which will remove language that would expand eligibility to public ferries under the Medium- and Heavy- Duty Zero Emission Vehicle Fleet Purchasing Assistance Program.

Related and previous legislation:

SB 372 (Levya), Chapter 639, Statutes of 2021 established the Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Purchasing Assistance Program to assist vehicle fleet operators in transitioning to zero-emissions vehicles.

SB 1204 (Lara), Chapter 524, Statutes of 2014 established the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to guide CARB's heavy-duty investments funded with Cap-and-Trade auction proceeds.

SB 862 (Chapter 36), Statutes of 2014 established the LCTOP to provide operating and capital assistance for transit agencies to reduce greenhouse gas emissions and improve mobility.

AB 8 (Perea), Chapter 401, Statutes of 2013 extended the CTP through January 1, 2024.

AB 118 (Núñez), Chapter 750, Statutes of 2007 established AQIP and CTP to provide mobile source incentives to reduce greenhouse gas, criteria pollutant, and toxic air contaminant emissions.

REGISTERED SUPPORT / OPPOSITION:

Support

Bay Area Council Bay Planning Coalition Golden Gate Bridge Highway and Transportation District Inland Boatman's Union International Organization of Masters, Mates, and Pilots San Francisco Bay Area Water Emergency Transportation Authority

Opposition

None on file

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