

ASSEMBLY THIRD READING  
AB 117 (Boerner Horvath)  
As Amended May 24, 2021  
Majority vote

## SUMMARY

Adds incentives for purchasing e-bikes as a project eligible for funding under the Air Quality Improvement Program (AQIP).

### Major Provisions

Adds incentives for purchasing e-bikes as a project eligible for funding under AQIP.

## COMMENTS

Evidence from a variety of research studies indicates that e-biking, more so than conventional biking, substitutes for car travel (Kroesen, 2017). A review of European studies found that the proportion of car journeys being replaced by bike journeys ranged from 16 to 76% (Cairns et. al, 2017). It should be noted that in some of these study areas, there are already relatively low levels of car driving, and high levels of walking, so sustainable mode-shift effects could be greater in other regions. In North America, a commonly reported motivation for purchasing an e-bike is to replace car trips (MacArthur, 2018), but only a few studies quantify the car substitution rate, ranging from 11 to 46% (Fitch, 2019).

According to retail tracking services, e-bike sales in the United States have experienced impressive growth, both before and since the pandemic began, with June 2020 reporting a 190% sales increase over June 2019. Providing financial incentives to purchase e-bikes can further help with adoption, but should be coupled with other strategies such as safe streets and trails on which to ride. In 2017, the Legislature passed and the Governor signed SB 1 (Beall), Chapter 5, also known as the Road Repair and Accountability Act. SB 1 directs \$100 million annually from the Road Maintenance and Rehabilitation Account to the Active Transportation Program, significantly augmenting the available funding for active transportation infrastructure projects.

Unlike conventional bicycle costs, e-bike costs have been cited as one of the strongest barriers to adoption (Ling, 2017). E-bikes prices are coming down as the technology matures, but there is a wide range of prices depending on features. Entry level e-bikes cost around \$600, with higher-end "luxury" models topping out over \$10,000.

AQIP funds projects that reduce criteria air pollutants and improve air quality, along with certain related research projects. In developing guidelines for AQIP, California Air Resources Board (CARB) holds public hearings and workshops in northern California, southern California, and the Central Valley. CARB provides preference in awarding funding to projects with higher benefit-cost scores that maximize the goals of AQIP, but is limited to those projects explicitly called out in statute. Every year, CARB must submit a proposed Funding Plan to the board for approval. The funding plan serves as the blueprint for expending Low Carbon Transportation (Greenhouse Gas Reduction Fund, GGRF) and AQIP funds appropriated through the budget process. Examples of projects that have been funded by AQIP include truck loan assistance, Clean Vehicle Rebate Project, Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project, Truck Filter Replacements, and others. AQIP funds have totaled \$25 to \$30 million per year over the past few years. The most recent AQIP funding plan dedicated almost all of the

funds to HVIP. Note, this bill only establishes the option for e-bikes to be eligible for AQIP, but does not provide any funding for the program.

SB 400 (Umberg), Chapter 271, Statutes of 2019, expands mobility options under the Clean Cars 4 All Program (CC4A) funded by GGFR. CC4A allows income-eligible vehicle owners to scrap older, higher polluting vehicles and replace them with newer, cleaner hybrid, plug-in hybrid, and zero-emission vehicles. Beginning in 2021, CC4A provides participants the option to scrap an older vehicle and receive funding for an alternative transportation voucher that could be used for public transit, car sharing, or the purchase of an e-bike in lieu of a replacement vehicle. Proponents of incentives for e-bikes argue that the vehicle scrappage requirement is a barrier to widespread adoption of e-bikes. The program is currently limited to the participating air districts of South Coast, San Joaquin, Bay Area, and Sacramento, so residents in certain areas of the state will not be eligible for e-bike vouchers under CC4A.

The federal government is currently pursuing tax incentives for e-bikes. Representatives Earl Blumenauer (D-OR) and Jimmy Panetta (D-CA) introduced the Electric Bicycle Incentive Kickstart for the Environment (E-BIKE) Act. They designed the new legislation to make e-bikes more affordable. If the E-BIKE Act is eventually signed into law, it would offer a 30% tax credit of up to \$1,500 for buying an electric bicycle. To qualify, the electric bicycle would have to be priced below \$8,000. The majority of electric bicycles sold in the US are priced below that level and thus would qualify for up to a \$1,500 tax credit.

#### **According to the Author**

"As we continue electrifying transportation in California, we need to keep an eye to equitable incentives that help working Californians choose to get out of their cars. Many working families need to go on bicycle to get to where they need to go-for work, recreation-and, in many cases, this is their only reliable form of transportation. For many families, living in older, multifamily apartments, electric vehicles remain unattainable because there is no charging infrastructure where they can park. However, e-bikes are a more affordable and practical solution for solving the first/last mile problem, which in much of our state is a five mile problem. AB 117 will provide an incentive for electric bicycles, offering a more environmentally friendly alternative to encourage the expansion of biking as a viable form of transportation."

#### **Arguments in Support**

In support a coalition of environmental and active transportation groups writes, "Increasing the number of trips that Californians make by bicycle, in combination with land use changes and improvements to walking and transit, is essential to achieving the reduction in VMT called for in SB 375, and is absolutely necessary if we are to achieve our GHG reduction goals. The emergence of e-bikes is hugely beneficial to this goal and should be bolstered. Unfortunately, the expense of an e-bike makes them inaccessible to low-income people and deters even middle-income people from buying an e-bike. The adoption rate of e-bikes in the U.S., as a proportion of the bicycle market, is a small fraction of the adoption rate in many other countries. Financial assistance is necessary at this stage to foster their adoption at the rate necessary to take advantage of their utility to help meet California's climate, air quality, and health goals."

#### **Arguments in Opposition**

No opposition on file.

**FISCAL COMMENTS**

According to the Assembly Appropriations Committee, minimal fiscal impact, this bill only makes e-bikes eligible to compete for funding under the existing program.

**VOTES**

**ASM TRANSPORTATION: 11-0-4**

**YES:** Friedman, Berman, Cunningham, Daly, Gipson, Kalra, Lee, Medina, Nazarian, O'Donnell, Ward

**ABS, ABST OR NV:** Fong, Davies, Nguyen, Wicks

**ASM APPROPRIATIONS: 12-3-1**

**YES:** Lorena Gonzalez, Calderon, Carrillo, Chau, Gabriel, Eduardo Garcia, Levine, Quirk, Robert Rivas, Akilah Weber, Holden, Luz Rivas

**NO:** Bigelow, Megan Dahle, Davies

**ABS, ABST OR NV:** Fong

**UPDATED**

VERSION: May 24, 2021

CONSULTANT: Christine Casey / TRANS. / (916) 319-2093

FN: 0000713