

## MOTION

To address climate change, it is essential to electrify the transportation sector. In California, the transportation sector accounts for more than 50% of greenhouse gas (GHG) emissions, after accounting for extracting, refining and transporting vehicle fuels. In 2019, tailpipe emissions accounted for over 90% of the transportation sector's GHG emissions, and passenger vehicles alone accounted for 72%.

The federal, State and City governments have taken dramatic steps to promote electric passenger vehicles (EVs). The United States government provides a federal tax credit of up to \$7,500 per EV. The State of California plans to ban the sale of gas-powered cars by 2035, and its CleanCars4All program provides up to \$12,000 towards the purchase of EVs for income-qualified residents. The City of Los Angeles has embarked on an extensive program to install EV chargers, and the Department of Water and Power provides up to \$2,500 towards the purchase of used EVs, and up to \$2,000 for the installation of residential EV charging stations.

However, simply switching to EVs is not sufficient to meet our climate change goals. The California Air Resources Board has established a goal of reducing vehicle miles traveled by 25% by 2030, and promoting active transportation is essential toward meeting that goal.

Pedal-assisted electric bicycles (E-bikes) can provide a feasible alternative to passenger vehicles for many people. This is especially true in Los Angeles, where nearly half of all trips are less than 3 miles. E-bikes make it easier to ride on hilly terrain or in hot weather, to transport children or cargo, and to ride longer distances, especially for those who are older or less physically fit. While e-bikes may not be feasible for every trip, they provide enormous potential for multi-vehicle households to replace one or more vehicles with e-bikes.

E-bikes are environmentally preferable to EVs, especially given the types of vehicles that are prevalent in our streets. EV pickup trucks require about 50kWh/100 miles, and crossovers/SUVs require 25-30kWh/100 miles. E-bikes are more than 20 times more efficient, averaging about 1.1kWh/100 miles according to an ongoing study.

Because e-bikes are smaller and lighter than EVs, a typical e-bike battery uses less than 1% of the raw materials—such as lithium, cobalt and manganese—than the typical EV battery. A shift to e-bikes thus means less environmental degradation from mining, and less reliance on source countries with egregious human rights records. Moreover, the extra weight of EVs can create additional safety risk for pedestrians and bicyclists.

E-bikes are also far more affordable than EVs. Even with federal tax credits, nearly all EVs cost more than \$30,000. A good quality e-bike typically costs about \$2,000. In addition, because e-bikes can be charged from a standard 120V outlet, they do not require electrical upgrades (which DWP heavily subsidizes). While far cheaper than a motor vehicle, is still out of reach for many Angelenos.

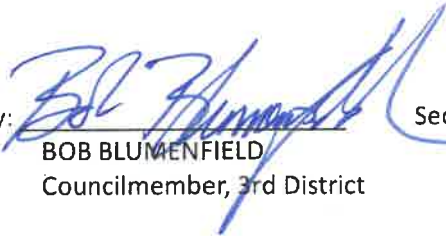
Despite the importance of e-bikes toward meeting climate change goals, the federal, state and local governments generally have failed to adopt policies or subsidies to promote their purchase and use. The City should fill this gap, and follow the lead of other cities that have implemented local rebate or subsidy programs, including Santa Monica and Pasadena.

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I THEREFORE MOVE that the Los Angeles Department of Water and Power (LADWP) be INSTRUCTED to report within 90 days on the feasibility of an e-bike subsidy program with qualifications similar to existing federal, state and local rebates for electric vehicles (EVs) and residential EV charging stations, with a focus on e-bikes that are likely to be used for utilitarian purposes and to replace vehicle trips, rather than for purely recreational purposes.

Presented by:

  
BOB BLUMENFIELD  
Councilmember, 3rd District

Seconded by:



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