



HOW TO CREATE A SUCCESSFUL ELECTRIC BICYCLE INCENTIVE PROGRAM

Electric bicycles reduce barriers to bicycling by helping people ride more often and for longer distances. Electric bicycle incentive programs offer a low-cost, accessible and efficient solution for achieving our nation's climate, sustainability, health and transportation goals. We gathered our top recommendations for decision-makers to consider when developing a state or local electric bicycle incentive program.

1. **Make the program voucher-based or provide an instant rebate option.**

Low-income customers are far less likely to have the funds available to purchase an electric bicycle at full cost then wait months for a rebate check, which may discourage them from using the program. For tax-based incentives with a delayed rebate, leveraging options like a dealer transfer provision can ensure consumers can access a point-of-sale discount.

2. **Include in-store and online retailers.**

Including both in-store and online retailers allows program participants to choose from the widest range of bikes to meet their needs.

3. **Include higher or tiered incentives for low-income participants.**

Additional financial incentives for both the purchase of an electric bicycle and riding accessories (i.e. helmet, lock, panniers, baskets, etc.) for lower-income earners may further encourage their use of the program. Equitable access to electric bicycles is crucial, as lower-income people can often benefit the most from their use as a low-cost mobility solution.

4. **Include all forms of electric bicycles within the three-class system.**

Many models of electric bicycles such as electric mountain bikes or electric cargo bikes can be more expensive than utilitarian or leisure models. All forms of electric bicycles should be eligible for a program to further incentivize healthy and carbon-free forms of recreation and transportation. Additionally, 38 states have adopted the three-class model legislation for electric bicycles, using the industry-accepted definition of what a safe, low-speed electric bicycle is and giving it similar rights and duties to that of a traditional bicycle.

5. **Partner with local nonprofits and bike retailers as you develop your program.**

Local nonprofit organizations and bicycle advocacy groups can help provide advice and marketing communications to target communities. Retailers can provide advice on program logistics to help shape a successful program. PeopleForBikes can connect you with these stakeholders.



Scan this QR code to learn more about electric bicycle incentive programs and a guided process to create one in your community.

ELECTRIC BICYCLE INCENTIVE PROGRAM FAQ

How much should an electric bicycle incentive be and what is the most effective subsidy amount for inducing new purchases of electric bicycles?

The majority of incentive programs fall in the range of \$200 to \$600, with additional incentive amounts for qualified low-income applicants. Anecdotal evidence suggests that in order to support low-income groups and incentivize additional purchases, fixed program budgets should distribute fewer, larger subsidies reserved for income-qualified participants.¹

Should I make my incentive program a flat or proportional-instant rebate?

Flat rebate structures provide better income equity because the rebate amount is not tied to the purchase price and therefore not tied to the spending ability of the rebate recipient. Because of this, flat rebate structures are recommended for the development of new programs.²

How do expenses related to an electric bicycle compare to a car?

The purchase price of a commuter or leisure-style electric bicycle ranges from \$1,000 to \$5,500, averaging around \$2,600, while cargo-style electric bicycles range from \$2,000 to \$9,000, averaging around \$5,000. Ownership, maintenance and charging costs for electric bicycle users are around \$400/year, including battery replacements. This is in contrast to average ownership costs of more than \$8,000/year for a private vehicle with an average purchase price of around \$28,000.³

How many electric bicycles are sold each year in the U.S.?

Electric bicycles sales in the U.S. more than tripled from 2019 to 2021. The average selling price of an electric bicycle dropped about 15% over the last three years. According to the Light Electric Vehicle Association, electric bike sales outpaced electric vehicle sales in 2021.⁴

Why is the three-class system of electric bicycles important?

39 states and the U.S. Department of Transportation have passed laws that define three classes of electric bicycles in their traffic statutes. This language excludes low-speed electric bicycles from the definition of motorized vehicles and instead regulates electric bicycles more similarly to traditional bicycles. The purpose of this legislation is to provide clear rules for consumers, small businesses and local governments to understand how electric bicycles must be equipped and operated and ensure clear enforcement guidelines for public safety officials to follow. To learn more about the three-class system, visit peopleforbikes.org/topics/electric-bikes.⁵

How can the increased adoption of electric bicycles help lower carbon emissions?

A 2019 study from the Transportation Research and Education Center at Portland State University found that if electric bicycle usage increased by 15% across the U.S., we could reduce an estimated 12% of transportation-related CO2 emissions.⁶

¹MacArthur, J., & Bennett, C. (2022). Using E-Bike Incentive Programs to Expand the Market—Trends and Best Practices.

²MacArthur, J., & Bennett, C. (2022). Using E-Bike Incentive Programs to Expand the Market—Trends and Best Practices.

³MacArthur, J., & Bennett, C. (2022). Using E-Bike Incentive Programs to Expand the Market—Trends and Best Practices.

⁴NPD Group. (2022). Cycling Point of Sale Retail Report.

⁵Carnes, A. J. (2022, April 25). Are electric bike sales outpacing electric vehicle sales? 11Alive.com. Retrieved July 20, 2022

⁶McQueen, M., MacArthur, J., & Cherry, C. (2019). The e-bike potential: Estimating the effect of e-bikes on person miles traveled and greenhouse gas emissions.