



## FHWA E-bike Case Study Series

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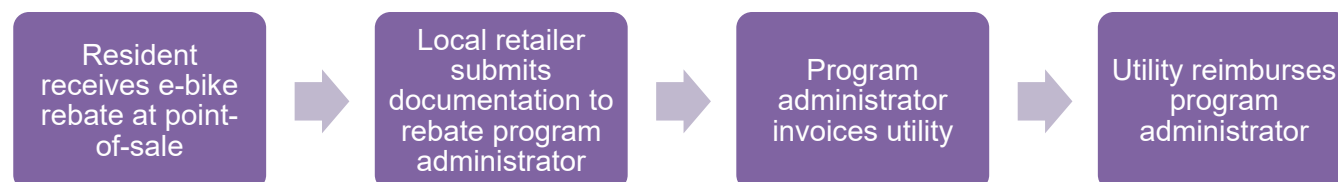
### Energy Utilities Provide E-bike Purchase Rebates in Vermont

Vermont's [Renewable Energy Standard](#) supports the State of Vermont's goals to develop markets for renewable energy and reduce environmental impacts associated with conventional energy production. To comply with the standard, electric distribution utilities in the State may implement "energy transformation projects" that reduce fossil fuel consumption and greenhouse gas emissions by the utilities' customers. Electric utilities have developed electric bicycle (e-bike) incentive programs as one type of energy transformation project to comply with the standard.

This case study focuses on the Burlington Electric Department (BED), Vermont's largest municipally owned electric utility, which serves about 20,000 customers in the city of Burlington and the Burlington International Airport.<sup>1</sup>

#### Program Overview

BED's [e-bike rebate program](#), launched in 2017, offers current Burlington residents or those purchasing on behalf of a Burlington business a \$200 rebate for a new e-bike or a retrofit/conversion kit, redeemable at seven participating retailers. The program is administered by [Local Motion](#), an organization advocating for active transportation. The program operates through the process illustrated below:



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<sup>1</sup> [Burlington Electric Department, Our History.](#)

Creating more livable communities through transportation choices



A majority of Burlington residents are renters, so to reach more people, program eligibility is based on residency rather than status as a utility customer. Working with local bicycle retailers was important to promote investment in the local economy and incentivize the purchase of e-bikes that could be serviced locally. Rebates also help level the playing field for local shops, making them more competitive with online sellers. Per Vermont's Renewable Energy Standard, the rebate value is capped based on the anticipated fossil fuel displacement associated with increased e-bike usage.

## Partnerships

E-bike rebates are one initiative in a constellation of related programs that improve Vermonters' access to e-bikes. To support the efficacy of the e-bike rebate program, BED has also:

- Funded an e-bike **lending library** operated by Local Motion. Through the library, Burlington residents considering purchasing their own e-bike or cargo e-bike can borrow one for several days at no cost to see how it fits into their lifestyle.
- Partnered with [CarShare Vermont](#) to provide an additional incentive for e-bike purchases by offering e-bike purchasers one year of free membership in the **carshare** program.
- Coordinated with [VBike](#), a nonprofit that focuses on new bike technology and design, which offers free bike **consultations** funded by [Go Vermont](#), the State's alternative transportation program. The consultations help Vermonters find the right e-bike or cargo e-bike for their transportation needs.



*A cargo e-bike available through the lending library partnership. Image courtesy of Local Motion.*

One local retailer participating in the program is the nonprofit bicycle shop [Old Spokes Home](#), which works to improve access to bicycles for all income levels. To make e-bikes more affordable to low-income individuals, the organization offers no-interest loans that do not require a down payment and sells e-bikes at cost.

The [Vermont State Employees Credit Union](#) (VSECU) offers low-interest energy improvement loans that can be used for various energy efficiency and energy saving purchases, including purchasing e-bikes. BED has partnered with VSECU to offer zero percent financing for e-bikes.

## Impact

The program has issued a total of 181 rebates since its inception, with 52 issued in 2020. Across Vermont, similar programs run through other electric utilities have provided approximately 700 rebates in 2020. BED estimates that the program has reduced carbon dioxide emission by approximately 701 tons. More intangibly, the program and others like it are helping to cultivate excitement around bicycling, expand access to bicycling to more people who cannot or choose not to use conventional bicycles, and create a constituency advocating for improved bicycling infrastructure across the State.

Federal Highway Administration: [www.fhwa.dot.gov/livability](http://www.fhwa.dot.gov/livability)



## Noteworthy Practices

Several other utilities in Vermont offer similar e-bike rebate programs, described below:

| Utility  | Rebate Value                          | Rebate Details   |
|--|---------------------------------------|--|
| <b>Green Mountain Power (GMP)</b>                    | \$200                                 | <ul style="list-style-type: none"><li>• Point-of-sale rebate</li><li>• Redeemable by customers</li><li>• Redeemable at 36 participating retailers</li><li>• Valid for e-bikes or retrofits costing at least \$500 (pre-tax) and that are intended for customer use and to replace car trips (not just recreational)</li><li>• GMP offered a \$300 rebate in April 2020 due to the COVID-19 pandemic, and saw a tripling in the number of rebates redeemed in 2020 relative to 2019</li></ul> |
| <b>Vermont Public Power Supply Authority (VPPSA)</b> | \$100                                 | <ul style="list-style-type: none"><li>• Mail-in rebate</li><li>• Redeemable by customers</li><li>• Redeemable at any Vermont-based retailer</li><li>• Valid for e-bikes or retrofits</li></ul>   |
| <b>Washington Electric Cooperative (WEC)</b>         | \$200 or 50 percent of purchase price | <ul style="list-style-type: none"><li>• Mail-in rebate</li><li>• Redeemable by customers</li><li>• Redeemable at any Vermont retailer</li><li>• Valid for new e-bikes</li></ul>  |

## Key Takeaways

BED's rebate program is expanding access to and increasing the number of e-bikes in Burlington. The program's implementation highlights a few takeaways for other jurisdictions interested in standing up similar initiatives.

***An e-bike rebate is only one way to reduce single occupancy vehicle use.*** Cyclists, whether using e-bikes or traditional bicycles, need safe infrastructure to reduce barriers to bicycling. To meet commuting needs year round, e-bike users and conventional bicyclists should consider accessories (e.g., snow tires, panniers, and fenders). Vermont bicyclists are also required by State law to use a front light and rear reflector.

***Education and outreach are critical*** to ensure people understand the benefits of bicycling, the viability of replacing car trips with e-bike and cargo e-bike trips, and programs available to support increased access to e-bikes. BED and its partner organizations conducted outreach through consultations, carshare promotions, and operation of a lending library.

***Consideration of equity is important***, given the high upfront cost of purchasing an e-bike. For example, some low-income people are uncomfortable working with conventional banks to access financing for traditional bicycles and e-bikes, so retailers are working to identify other options. In addition, some renters lack access to secure storage for e-bikes. Utilities like BED are working with partner organizations to reduce barriers to e-bike ownership and use, including offering zero percent financing through a local credit union.

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