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Electric Boost: Insights from a National E-bike Owner Survey

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ELECTRIC BOOST: INSIGHTS FROM A NATIONAL E-BIKE OWNER SURVEY

Electric bicycle (e-bike) use is a rising phenomenon in North America, as a growing number of manufacturers produce a variety of bicycles which can accommodate the needs of diverse populations. With the growth of the e-bike industry, e-bike users are an increasingly integral part of both the transportation network and recreational trail system. However, little research has been conducted on e-bikes within North America, especially on the individuals who have purchased e-bikes.

The first-known survey of e-bike owners in the United States was conducted by Portland State University in 2013. The present study seeks to strengthen our understanding of these issues, and to explore how the findings from the previous study may have changed over time and with the growth in the e-bike industry. Analysis of the survey results indicate that there has been little change in the primary reasons individuals are motivated to purchase an e-bike, and they tend to be related to various barriers which deter individuals from riding a standard bicycle; reducing physical exertion, challenging topography and replacing car trips continue to reign as a few of the most important reasons for buying an e-bike. The findings also reaffirm significant discrepancies in how these barriers are perceived by various subgroups of the population, as defined by the respondents' age, gender and physical ability.

Through analysis it became evident that e-bikes are making it possible for more people to ride a bicycle, many of whom are incapable of riding a standard bicycle or don't feel safe doing so. Additionally, the electric assist of the e-bike helps to generate more trips, longer trips and different types of bicycle trips. These findings are represented by the high value attributed to being able to avoid or tackle hills easier, ride farther and faster with less effort, and being able to carry more cargo or children when needed.

Electric bicycles, or e-bikes, have the potential to overcome many common barriers to bicycling. Survey results indicate that, by reducing the physical demands on the rider, e-bikes are encouraging more people to replace car trips with bike trips.

PROJECT TITLE
National Electric Bike Owner Survey (#2017-1041)

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