**What is an E-bike?**

Electric bikes or e-bikes vary widely in their technology and style. This study focuses on e-bikes that are essentially standard pedal bicycles that have a battery and small motor to assist the rider with propulsion. Electric scooters with pedals are not considered e-bikes for the purposes of this project.

**Objectives**

To increase understanding of the factors influencing the purchase and use of e-bikes.

**Methodology**

We surveyed 446 e-bike owners, using an instrument adapted from Monash University. The survey was distributed online starting March 7, 2013 and continues to be open at this time. Data for this poster shows results from 446 respondents through May 24, 2013. The survey was distributed through e-bike blogs, forums, Facebook pages, Twitter accounts, e-mails to manufacturers and retailers, and via postcards to retailers in the Portland region.

**Demographics of respondents**

- **Gender**
  - Male: 48%
  - Female: 52%

- **Age**
  - 18-24: 13%
  - 25-34: 35%
  - 35-44: 26%
  - 45-54: 16%
  - 55 and older: 12%

- **Education**
  - High School: 29%
  - Some College: 26%
  - College: 18%
  - Graduate Degree: 15%

- **Income**
  - Under $5,000: 7%
  - $5,000 to $10,000: 10%
  - $10,000 to $15,000: 8%
  - $15,000 to $20,000: 10%
  - $20,000 to $25,000: 8%
  - $25,000 to $35,000: 6%
  - $35,000 to $50,000: 5%
  - $50,000 to $75,000: 5%
  - $75,000 to $100,000: 6%
  - $100,000 to $150,000: 3%
  - $150,000 to $200,000: 2%
  - $200,000 or more: 1%

**Demographic summary**

- 91% white
- 82% of women responded that they ride to different destinations on e-bikes that are essentially standard pedal bicycles
- 81% of men responded that they ride to different destinations on e-bikes that are essentially standard pedal bicycles
- 81% of women responded that they ride to different destinations on e-bikes that are essentially standard pedal bicycles
- 81% of men responded that they ride to different destinations on e-bikes that are essentially standard pedal bicycles

**Purchase Decisions**

Over half (56%) purchased an e-bike, while 44% converted a bike to electric-assist.

**What type of bike did you convert?**

- Converted: 44%
- Purchased: 56%

**In which year did you purchase your electric bike or conversion kit?**

- 2005 or before: 3%
- 2006: 3%
- 2007: 3%
- 2008: 3%
- 2009: 4%
- 2010: 6%
- 2011: 11%
- 2012: 19%
- 2013: 36%

**How much did your electric bike or conversion kit cost to purchase?**

- Under $500: 18%
- $501 - $1,000: 21%
- $1,001 - $1,500: 16%
- $1,501 - $2,000: 17%
- $2,001 - $2,500: 14%
- $2,501 or more: 7%

**Motivations**

**What were the main reasons you bought an electric bike, or converted a standard bike (check all that apply)?**

- To replace some car trips: 63%
- To ride with less effort: 51%
- Health - To increase fitness: 49%
- Because you live or work in a hilly area: 40%
- Health - Medical condition reduced your ability to ride a standard bike: 22%
- To be able to keep up with friends/family: 13%

**What is the main reason that you use your electric bike (purpose of trips)?**

- Transportation: 64%
- Recreation: 20%
- Other*: 16%

*Open-ended responses not yet coded

**Electric Bike Use**

- Over 90% (93) use their e-bikes weekly or daily
- Three quarters (75%) ride to different destinations on their e-bikes than they did on a standard bike
- Over half (52%) reported that the battery has run out while they were riding
- 66% either agreed or strongly agreed that their top speed was higher on an e-bike
- Over 80% (83) either agreed or strongly agreed that their average speed was higher on an e-bike

**Differences between men and women**

- 52% of women responded that they take a different route on their electric bike than they did on their standard bike as compared to 42 percent of men.
- 82% of women responded that they ride to different destinations on their electric bike than they did on their standard bike compared to 73 percent of men.

**What were the main reasons you bought an electric bike - to be able to keep up with family/friends when I go for rides.**

**Differences between older and younger adults**

- 59% of respondents 55 years of age and older indicated that one of the main reasons they bought an electric bike was to ride with less effort compared to 50% of those under 55.

**What were the main reason that you use your electric bike?**

- “To encourage me to ride longer distances and be able to keep up with family & friends who were more fit” – Survey Respondent

**Conclusions and next steps**

The survey remains open and data collection continues. There are a number of open-ended survey questions that will be coded and categorized to get additional information and richer descriptions. As this survey was adapted from Monash University in Australia, a comparison between the two countries is one of the next steps. We would like to thank Geoff Rose from Monash University for allowing us to use their survey instrument.