



The CanBikeCO Full Pilot: Long-Term Results and Analysis

K. Shankari, Ph.D.

Principal Investigator, NREL OpenPATH
National Renewable Energy Laboratory

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Joint work with Andrew Duvall and Cemal Akcicek,
National Renewable Energy Laboratory;
and Zack Aemmer, University of Washington



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Comprehensive Travel Data: Key to Decarbonization



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Paris' Vision for a '15-Minute City' Sparks a Global Movement

LOCAT
Partnership



Avoid

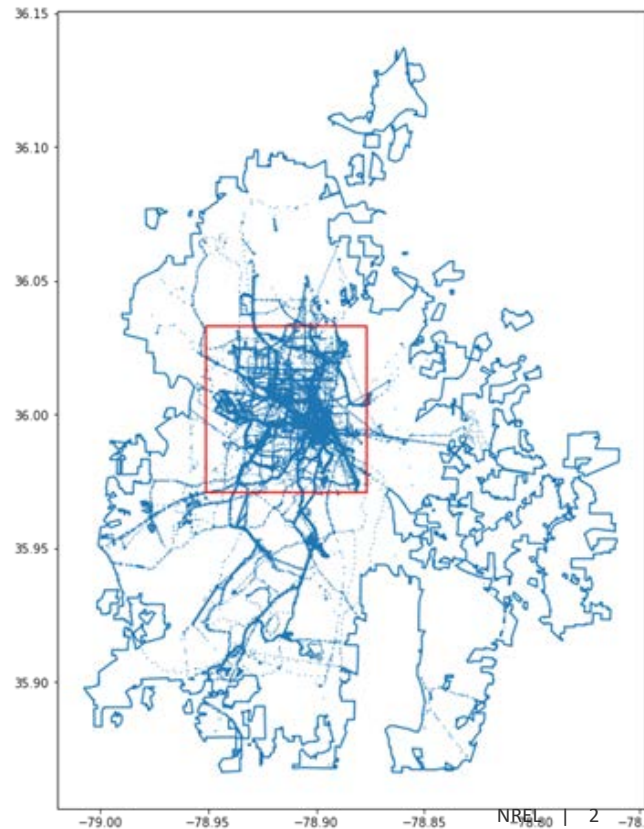
Shift

Improve



40%–60% decarbonization

If you cannot measure it,
you cannot improve it





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Can Do Colorado E-Bike Program



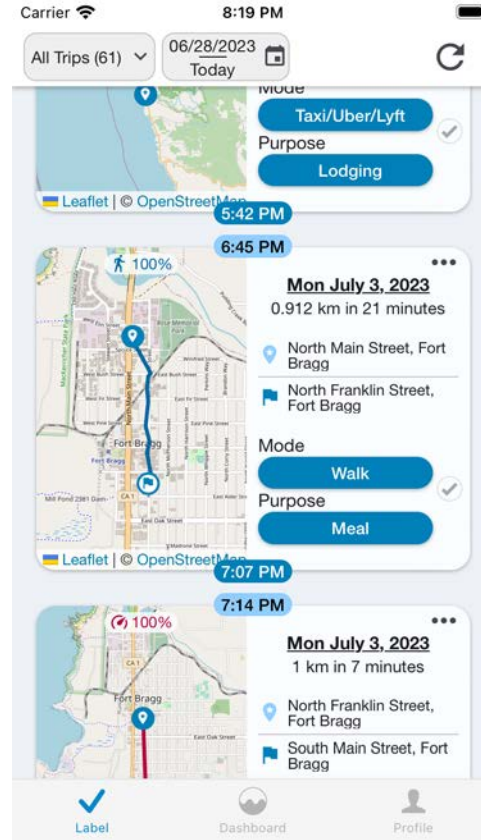
Low-income workers

Free e-bike

Program support, including training, equipment, and route selection

Mini Pilot

- 13 users
- 3 months
- Downtown Denver



Full Pilot: Expansion

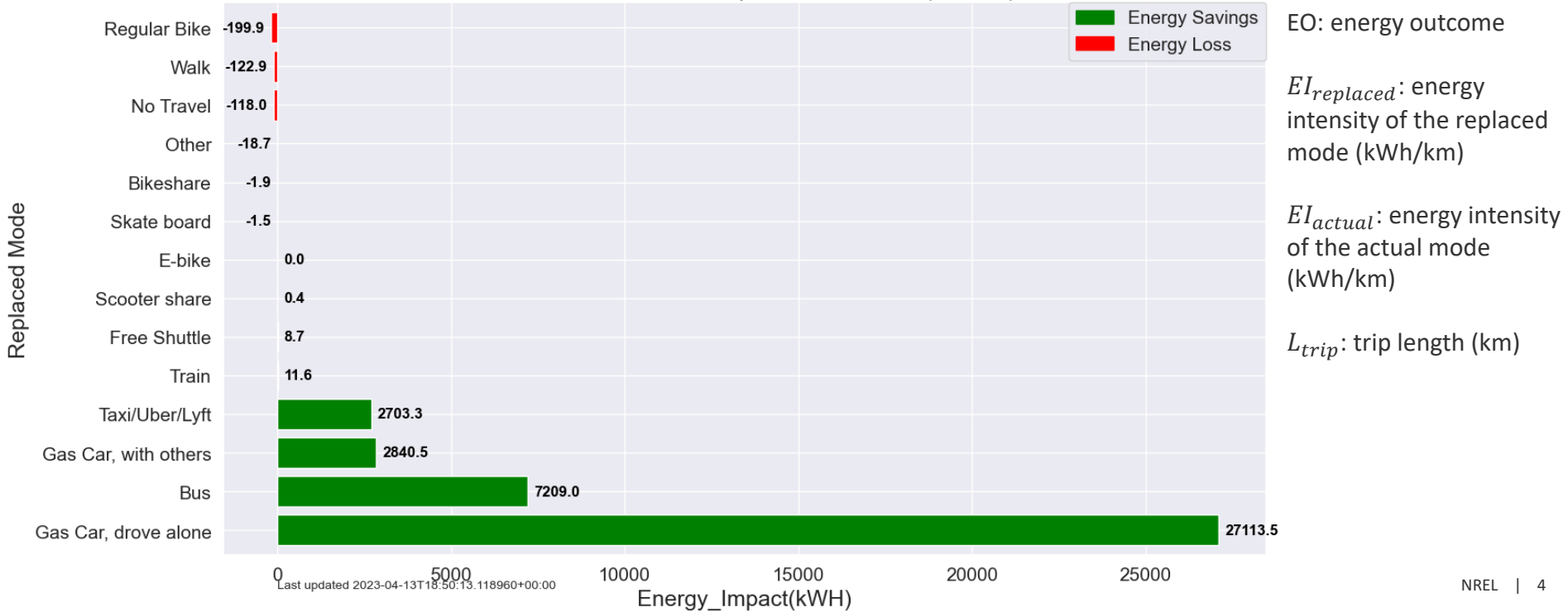
- 125 users, 61,000 trips
- 1.5 years, 242,000 miles
- 6 locations in Colorado



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$$EO = (EI_{replaced} - EI_{actual}) \times L_{trip}$$

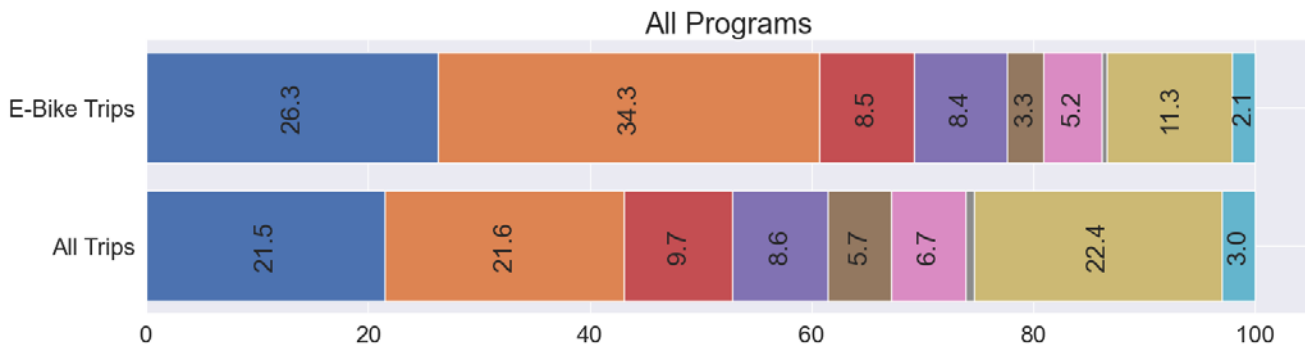
Sketch of Energy Impact of E-bike trips
 Contribution by replaced mode towards a total of 39424.17(kWh)
 Based on 17348 confirmed E-bike trips from 120 users
 of 61496 total confirmed trips from 122 users (28.21%)



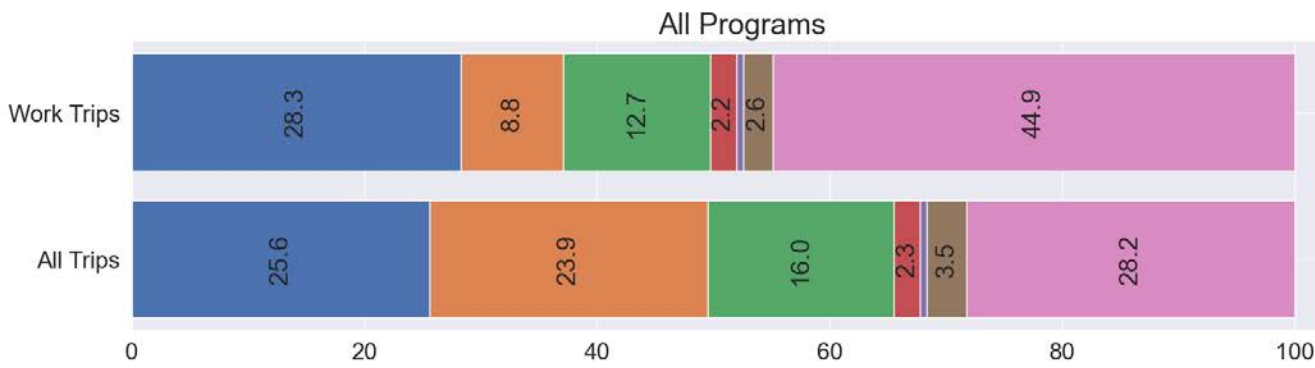


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Supports Access to Jobs



Distribution of trip purposes for all trips and e-bike trips

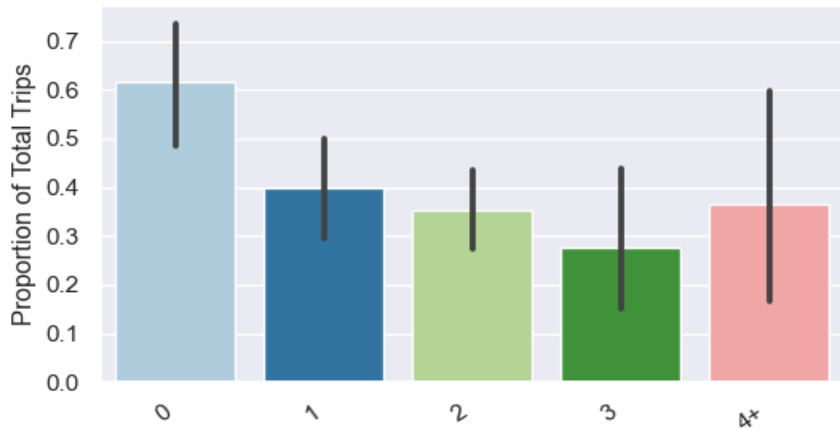


Distribution of trip modes for all trips and commute trips

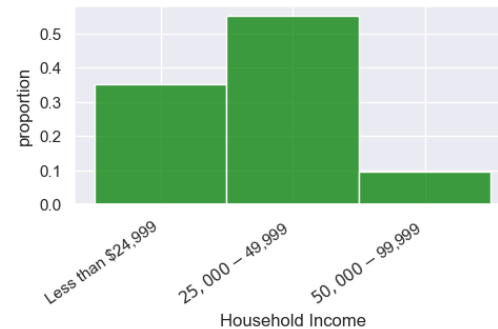
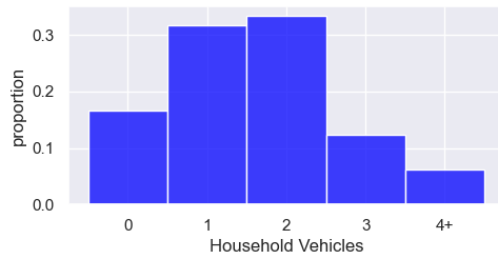
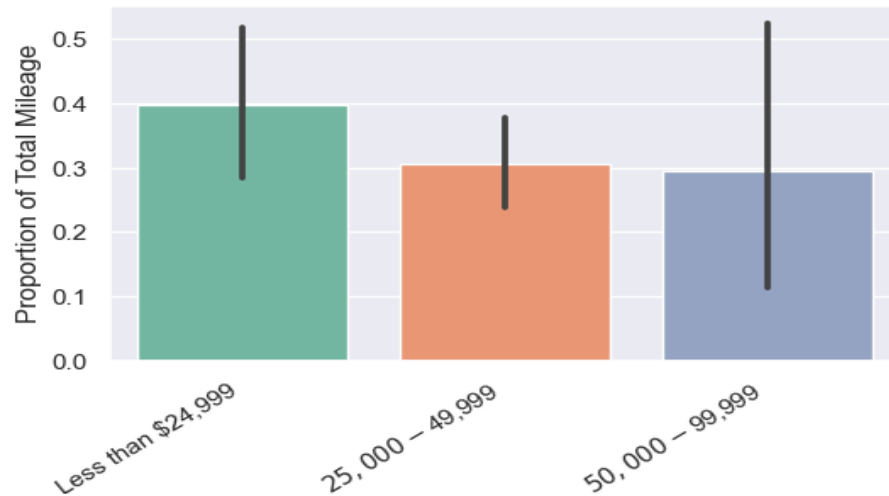


Equitable Mobility for All

E-bike Use (Trips) by Available Vehicles



E-bike Use (Miles) by Income

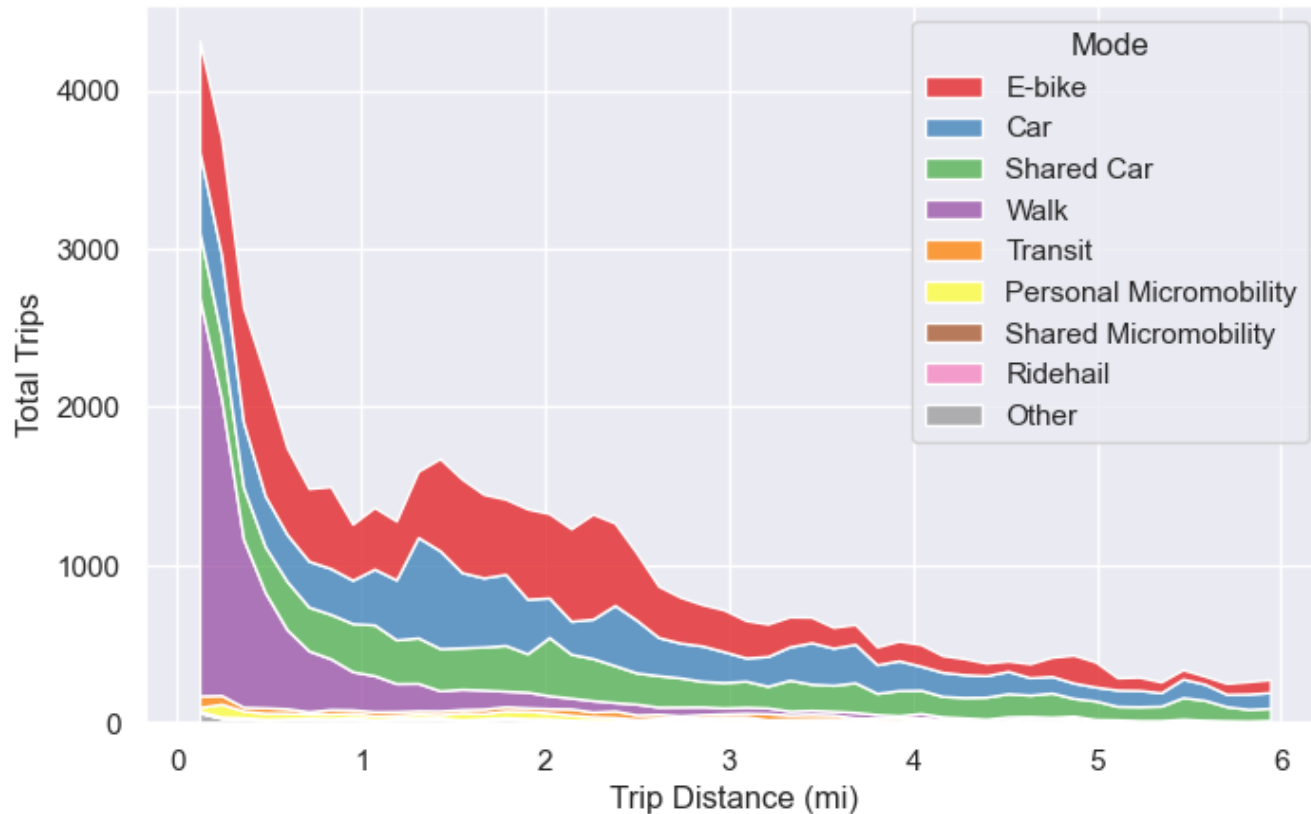




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Viable Mode for Majority of Trips

Mode Share by Trip Distance

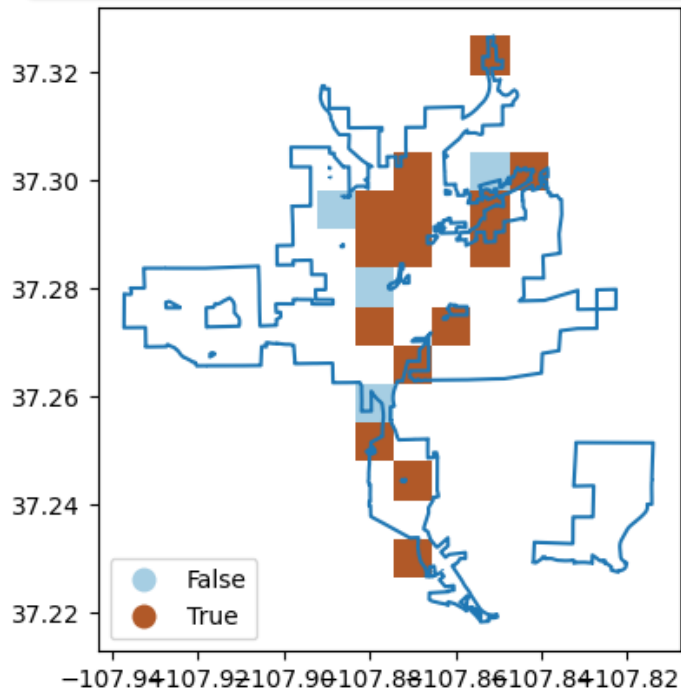




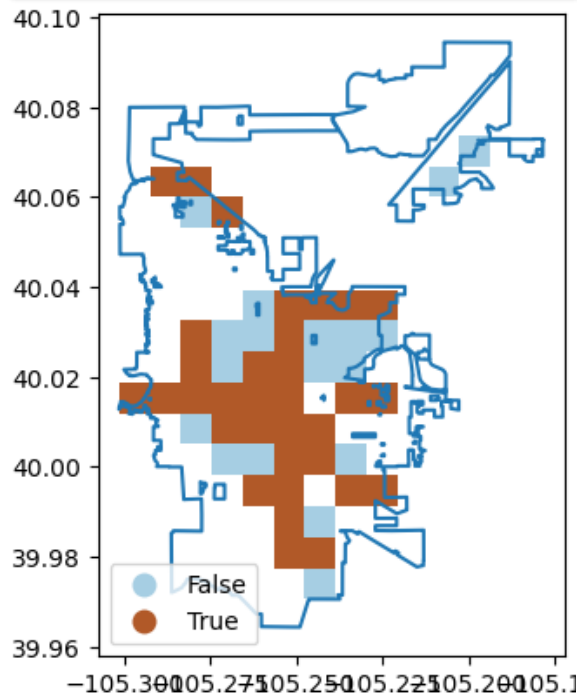
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Competitive With Cars in Some Locations

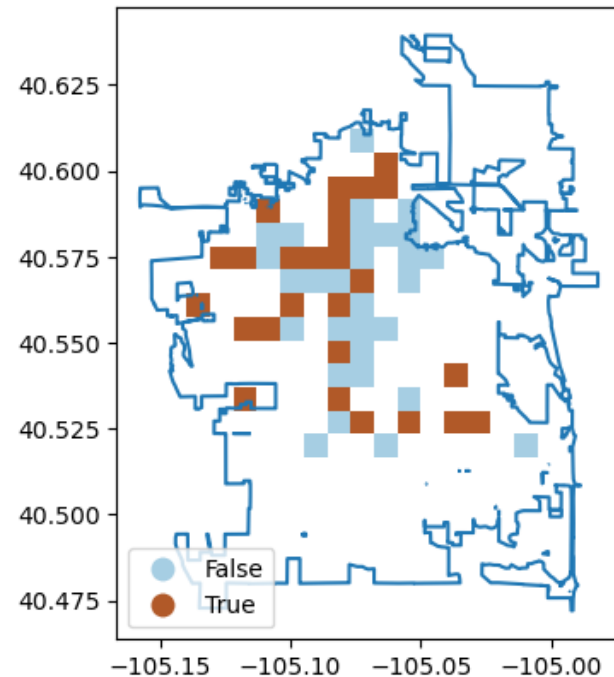
Durango



Boulder



Fort Collins



Brown pixels had more e-bike than car trips starting or ending at the location. Blue is the reverse. Blank indicates no data.

Explore These Data and More!

E-bike programs (mandatory and opt-in)

Completed

CEO 2021 pilot

Durham



Transportation
Secure Data Center
<https://www.nrel.gov/tsdc>

Testing/ongoing

MassCEC

Portland

Durango (55+)

Smart Commute

Denver CASR

Grand Junction

Fort Morgan

CARB rebate

Vail

Fort Collins

Garfield County

Boulder

Beyond e-bikes

Completed

UPRM ODT
baseline

PR congestion
reduction

Testing/ongoing

CA co-housing

Harvard/Busara

Questions?

www.nrel.gov

NREL/PR-5400-88057

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