

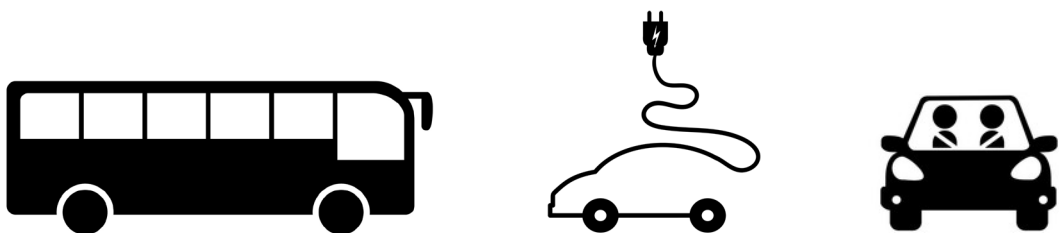
Improving Transportation Efficiency and Bus Ridership: Arapahoe Basin Ski Area

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Introduction

A primary objective of this project was to help Arapahoe Basin become a more sustainable and accessible ski area. Part of improving sustainability and access involved establishing current transportation trends. This baseline transportation data helped identify areas that should be improved to achieve sustainability goals at Arapahoe Basin. Improving transportation efficiency included vehicle occupancy and bus ridership (Snowstang and Summit Stage) data collection and comparison, a review of relevant literature concerning electric vehicle (EV) usage, and a transportation survey.



Methods

1. Vehicle occupancy study
2. Data collection and comparison for Summit Stage and Snowstang bus routes
3. Transportation survey targeted to frequent visitors of Arapahoe Basin
4. Review of Colorado EV plans and other relevant EV literature
5. Analyze data and develop recommendations

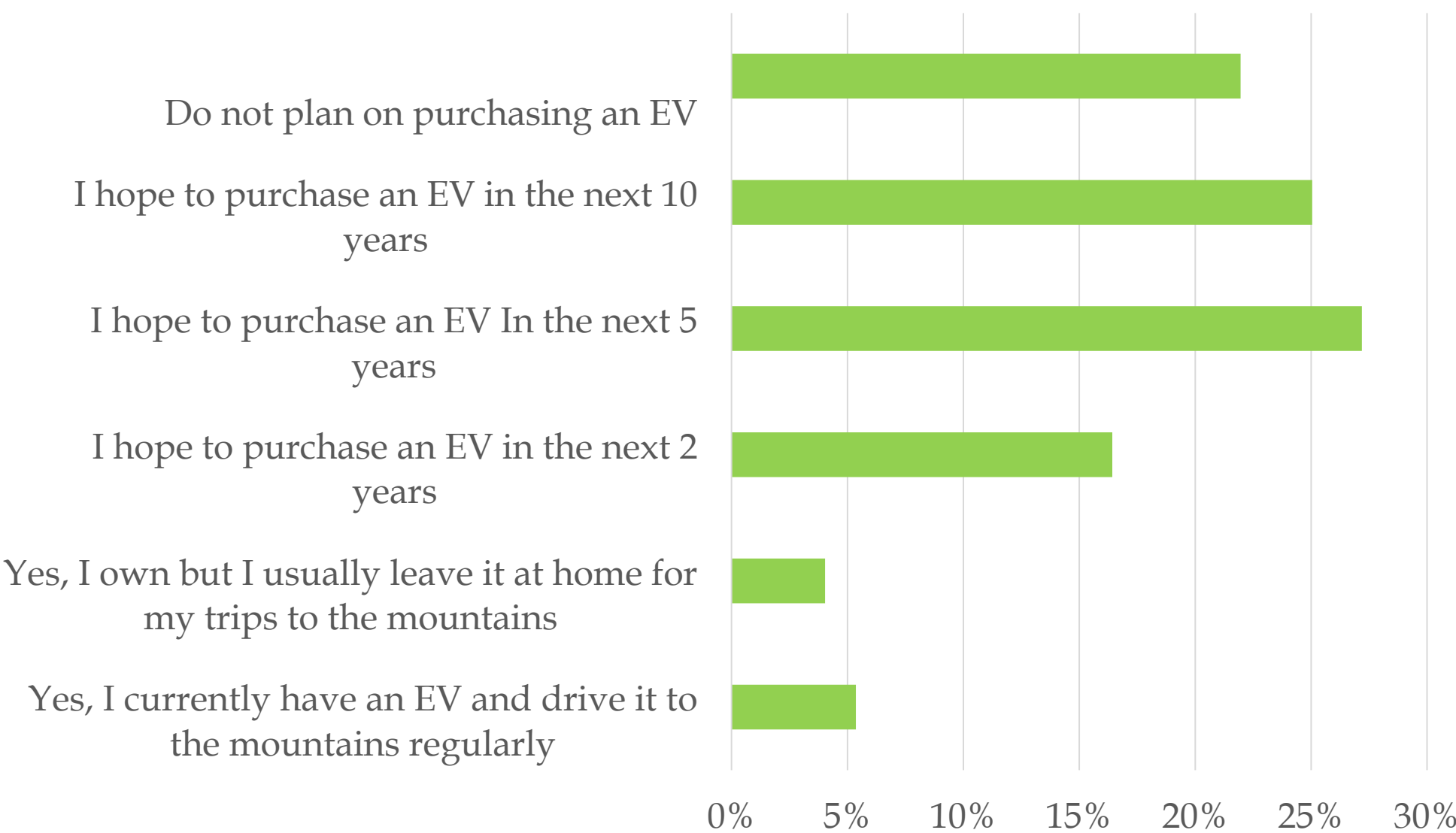


Results

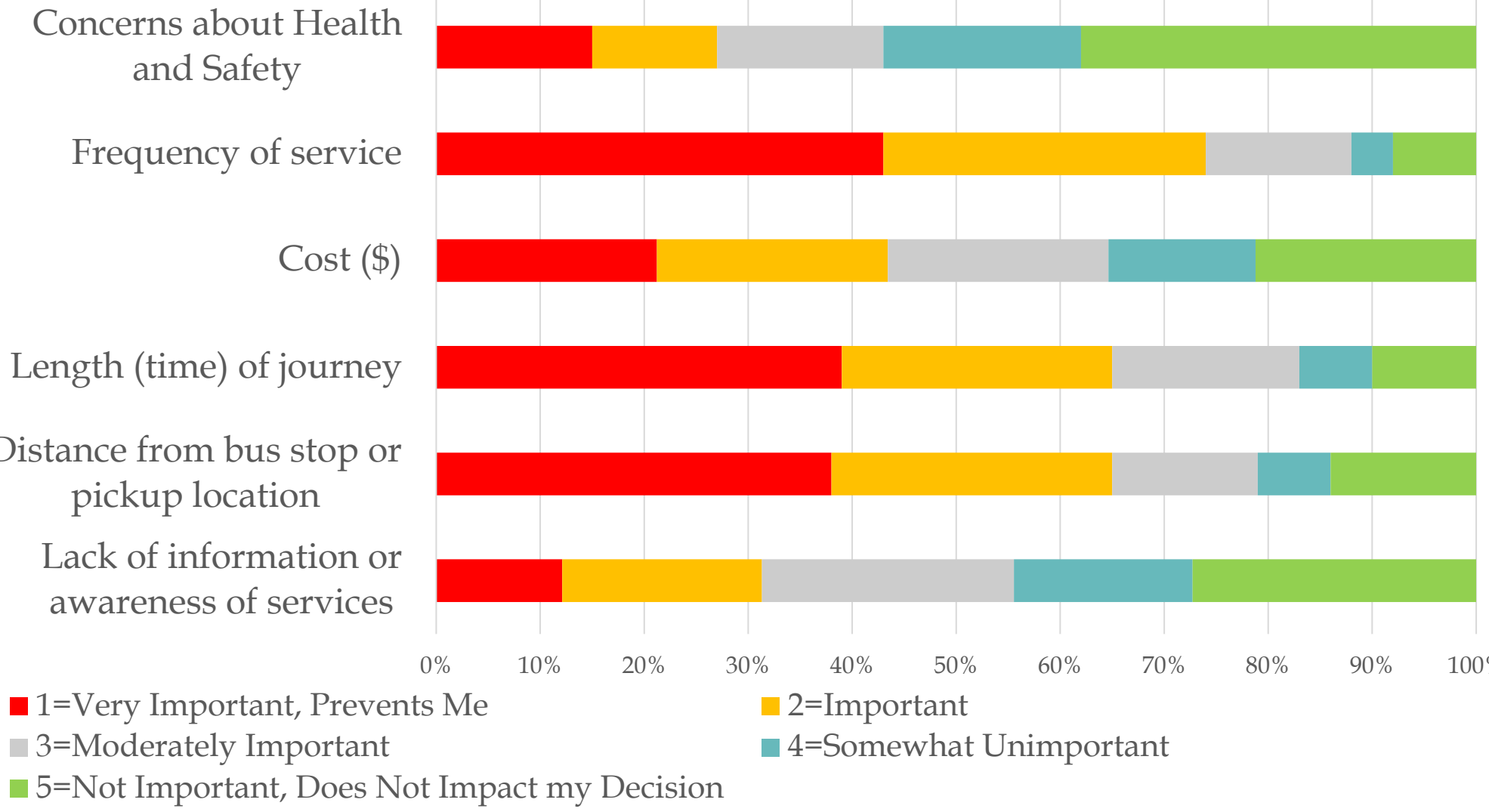
Over **2,300** survey responses.

78% of survey respondents currently own an electric vehicle or hope to purchase an electric vehicle within the next 10 years.

Electric Vehicle Ownership



Factors Influencing Bus Ridership



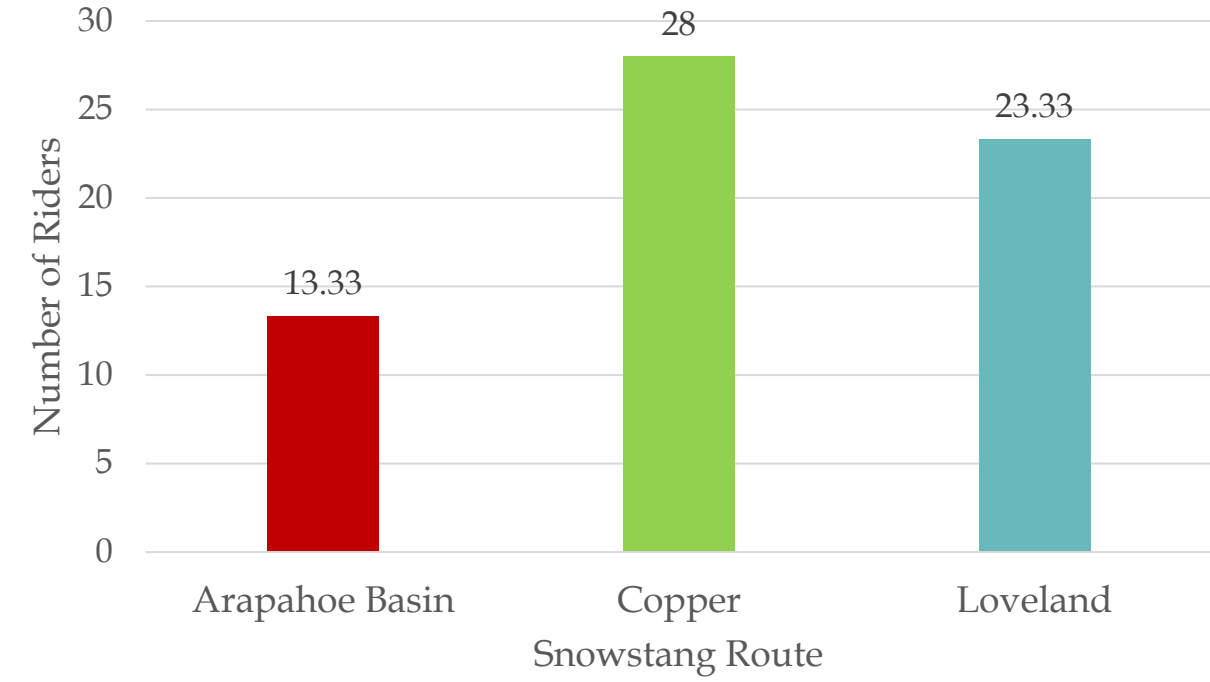
The **most** important factors preventing bus ridership to and from Arapahoe Basin are:

- ✓ Frequency of service
- ✓ Distance from the pickup locations
- ✓ Length of journey (time)

The **least** important factors are:

- ✓ Health and safety concerns
- ✓ Lack of information about services

Average Number of Riders per Trip



13.3 average number of passengers on the Arapahoe Basin Snowstang Bus

During the 2021-2022 season, Arapahoe Basin had the lowest average ridership and lowest total ridership among the three roundtrip, weekend Snowstang routes. Copper had the highest ridership with over 2,000 riders.

Conclusions

- Arapahoe Basin is exceeding its vehicle occupancy goal with an average of 2.07 riders per vehicle on weekend peak days.
- Bus ridership on the Snowstang line that services A-Basin is the lowest of the 3 roundtrip weekend lines. Exploring strategies to increase ridership such as partnerships with community organizations and sharing survey input with CDOT could increase ridership.
- Electric vehicle use is on the rise. Though only 10% of survey respondents currently own electric vehicles, nearly 4 out of every 5 respondents hope to own an electric vehicle within 10 years. Arapahoe Basin is located off U.S. 6, a corridor CDOT has identified to expand charging infrastructure. Arapahoe Basin should leverage this location to receive more grants for charging infrastructure.



Acknowledgments

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