Mode Constrained Travel at UVM: Travel Preferences, Barriers, and Policy Implications

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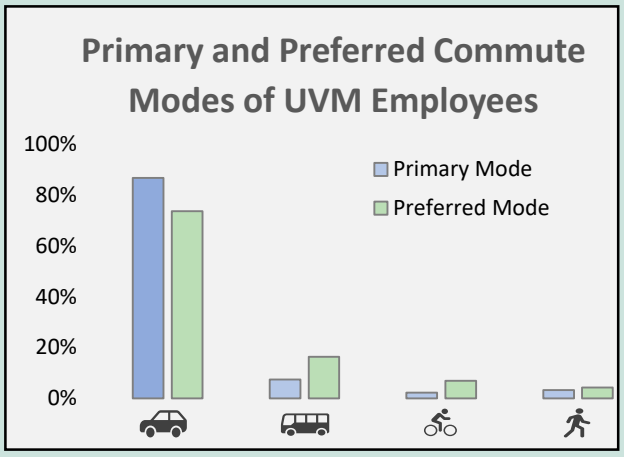
Overview

One of the objectives of the Chittenden Area Transportation Management Association (CATMA) is to encourage commuters to shift from driving to more sustainable travel modes such as walking, bicycling, and public transit. To understand barriers to switching to greener modes among UVM employees, we evaluated CATMA's 2019 Transportation Survey to compare the modes that UVM employees currently use to the modes that they prefer to use. We also identify barriers to switching to preferred travel modes. The results show untapped potential for divesting from driving, with respondents citing several mitigatable barriers.



Key Research Findings

***Potential for mode shift*:** Over one fifth (21%) of UVM employees reported that they do not use their preferred mode. 17 % of employees reported that they drive but would prefer to ride a bicycle, bus, or walk, while 3% indicated that they would prefer to drive although they currently ride a bicycle, bus, or walk. The remaining 1% reported that they ride a bicycle, bus, or walk but would prefer to use another green mode.

Barriers to mode shift: Many respondents who wish to walk or ride a bicycle indicated that bicycle and pedestrian infrastructure in Burlington feels unsafe. Others cited hilly terrain and winter conditions as a barriers to walking bicycling, and using transit. Of those who wish to drive, many noted that the availability of parking permits or the distance from parking to their work location was a barrier. A summary of barriers commonly cited by respondents who are not using their preferred mode is shown on page 2.

Policy Implications

Strategies that may address barriers to green commuting at UVM include investing in and maintaining bicycle and pedestrian infrastructure, bicycle winterization programs (education, equipment, and maintenance), adjusting bus routes, and programs that increase the use of e-bikes. Many of these strategies are already in place, but may benefit from additional resources or targeted investments in specific locations.

Evaluating of the location of commuters citing each type of barrier and direct engagement with UVM students and employees can highlight specific locations to target for improvements and provide an indication of the desirability of different strategies to address barriers.

Acknowledgments

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Further Reading

Espeland, S., 2021, 'Mode-Constrained Travel: Characteristics, Barriers, Outcomes, and Satisfaction of Commuters Using Their Non-Preferred Mode', Undergraduate Honors Thesis, University of Vermont, Burlington, VT.

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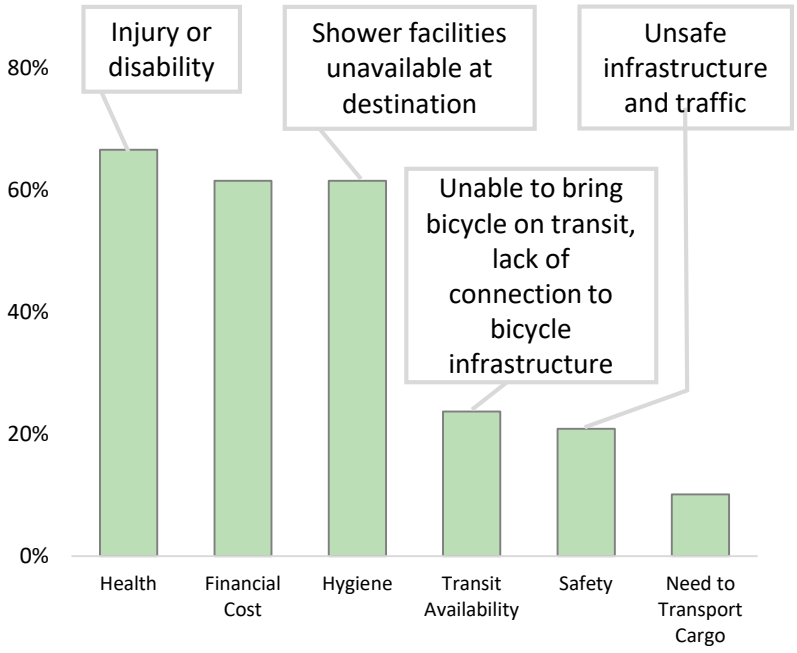
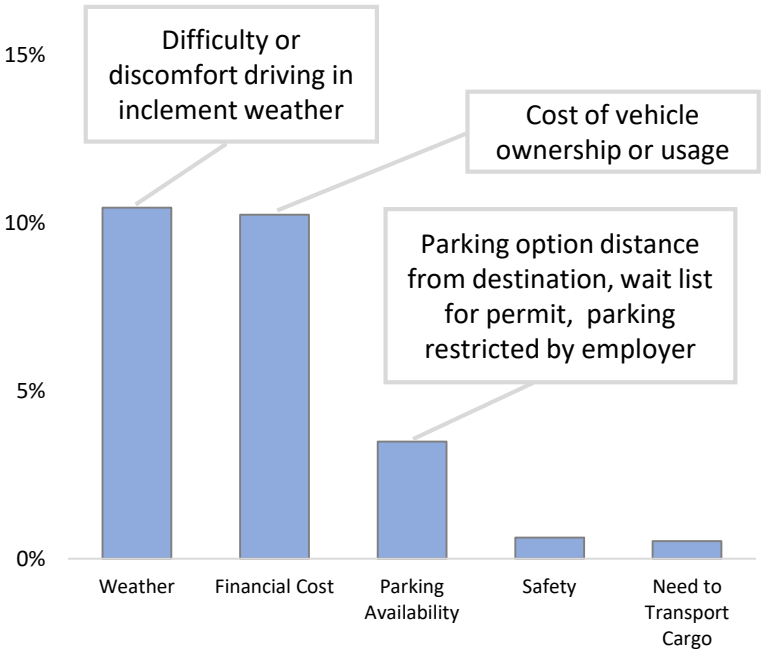
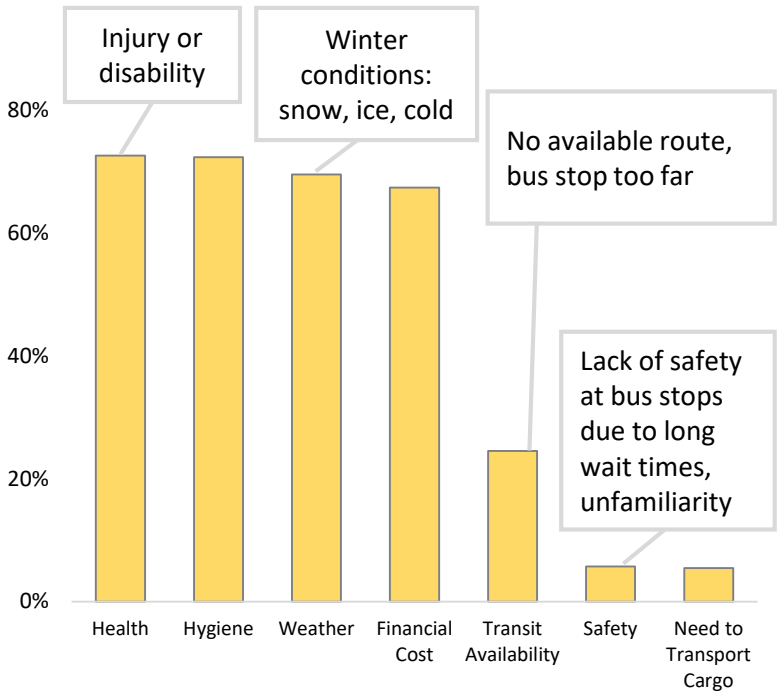
Barriers to Bicycling



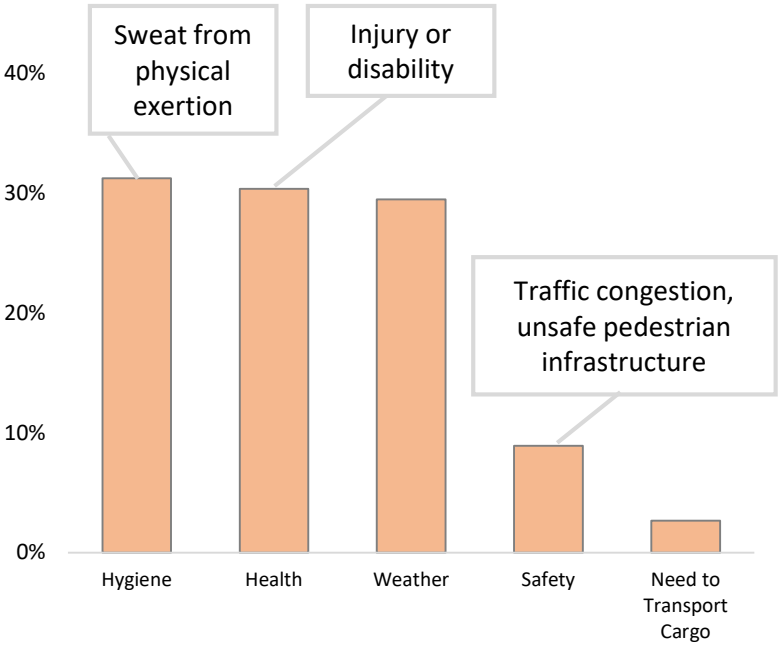
Barriers to Driving



Barriers to Transit



Barriers to Walking



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