

Aaron Wiebe  
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## An Investigation into The Benefits of Power-assisted Active Transportation

Aaron Wiebe, Dr. John Church, Dr. Rob Higgins, Dr. Mark Rakobowchuk, Dr. John  
Karakatsoulis

Many municipalities have begun to encourage their citizens to leave their cars at home and explore the benefits associated with active transportation. Reasons include things like reducing carbon footprint, saving time, avoiding traffic, physical and mental health, and financial savings. An issue has arisen however as more people are moving faster using power-assisted transportation modes like electric scooters, skateboards, or electric bicycles. Advancements in transportation technology happen faster than the infrastructure can accommodate, and many places are unable to deal with the increased flow and rate of travel leading to safety concerns. Kamloops is no exception, as neighborhoods are not adequately connected with cycling corridors making it difficult to travel safely by bicycle, scooter, or skateboard. My study will investigate the transportation patterns in Kamloops and look at the disconnects in our infrastructure; I will compare what I find to places like Vancouver and Victoria for guidance. Looking at how much farther a typical cyclist will travel with an e-bike can help quantify the benefits associated with power assisted transportation. The hypothesis I'm testing is that even an experienced cyclist will ride more often and travel longer distances on an ebike vs a traditional pedal bicycle. My goal is to make a plan that would suit cities with topographic and fragmented infrastructure challenges typical of a rural Canadian city that it might benefit the population that wish for an alternative to driving.