

Affordable Walkability: Exploring the sustainable transport premium in Canadian cities

Advancing Transportation Equity Conference

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ABSTRACT

Encouraging walking as a safe and convenient mode of transport is increasingly seen as an important policy goal as cities grapple with moving towards sustainable transport systems. Walking is perhaps uniquely situated to address a wide range of societal goals including reducing GHG emissions and traffic congestion; increasing social inclusion and interaction, and improving air quality and population health. Walking plays a foundational role in transport systems – all trips, regardless of primary mode, contain some amount of walking (whether it is traversing a parking lot, walking to a bus stop, transferring from one subway to another, or walking after locking up or docking a bicycle). While not everybody is physically capable of walking on two legs, people of all abilities travel as pedestrians, sometimes using wheelchairs or other assistive devices. However, opportunities to safely and comfortably walk are not equitably distributed; residents of low income and minority areas experience increased exposure to pollutants (Sider et al, 2015) and traffic danger (Campos-Outcalt et al, 2003) and may need to walk to access destinations despite poor walkability (Manaugh & El-Geneidy, 2011). This inequity can impact access to employment, leisure, and civic engagement. In other words, poor environments for active transportation may perpetuate disadvantage along social and geographic lines. In addition, while most impacts of improved walkability are positive, large-scale pedestrian-oriented infrastructure projects (such as Manhattan’s ‘High Line’ and Philadelphia’s Rail Park project) have been criticized for possible gentrification and displacement impacts

(Rigolon & Németh 2018). Much of the transport equity scholarship focuses on public transit and automobiles; while this is partly to be expected as highway and large-scale transit projects involve much larger outlays of public money relative to pedestrian safety improvements, ‘pedestrian equity’ remains an understudied and vital topic.

This study examines the 2020 Statistics Canada Proximity Measures database and census datasets to analyse and identify spatial patterns and relationships across Canada between walkability, housing affordability, and residential displacement. The proximity datasets provide a comprehensive measurement of the quality of the built environment for active transportation by capturing local accessibility to a wide range of amenities and green and leisure space. We further posture the distribution of walkable environments as an affordability and equity issue through assessing other indicators of inequality and marginalisation, such as household income, dwelling value, and immigration status. Additionally, by comparing data on residential mobility, we identify how the distribution of walkable environments intersects with residential displacement.

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