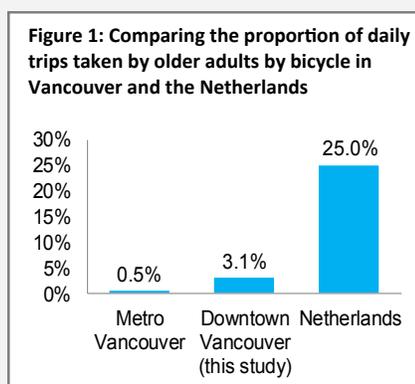


# “I grew up on a bike”: Cycling & older adults

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## BACKGROUND

One of the major challenges facing the growing population of older adults in Canada is a decline in **mobility** (1). **Physical activity** from an active lifestyle (e.g. walking, bicycling) has a protective effect on future decline in mobility (1). Bicycling for everyday trips such as errands and social outings is an affordable and sustainable way to build physical activity into daily routines. Moreover, bicycling for transportation can support independent travel when driving becomes a less feasible option with age.



Unfortunately, evidence suggests that older adults do not often bicycle, at least not in North America. In the Metro Vancouver, cycling mode share was a mere 0.5% for those aged 65-79, and 0.2% for those 80 + (2). Yet data from other cities with similar climates and cultures suggest regular cycling is both possible and popular amongst older adults. In the Netherlands, cycling mode share is common across the lifespan, with those aged 65 and older making

approximately 25% of their trips by bicycle (3). Given this gap, it is of interest to understand determinants of cycling behaviours in older adults (Figure 1).

## WHAT WE DID

To better understand the potential for cycling in North America, this study used a mixed methods approach to determine cycling rates and the facilitators and deterrents to cycling in one of the most walkable and **bikeable** neighbourhoods of Vancouver, Canada.

In the fall of 2012 the ‘Active Streets, Active People’ (ASAP) Team recruited 191 older adults (age  $\geq 60$  years) to take part in a before and after study evaluating the impact of a greenway development in downtown Vancouver on the mobility patterns of community-dwelling older adults. We gathered travel patterns for one week and self-reported typical cycling behaviours for all participants. We conducted in-depth interviews with a subset (27 older adults) to further understand their bicycling perceptions and experiences.

## KEY TERMS

### MOBILITY

The ability of a person to move about in their community setting.

### PHYSICAL ACTIVITY

Any bodily movement produced by the muscles that results in energy expenditure.

### BIKEABLE

An area supportive of cycling, in that it has bicycle routes that connect and are separated from motor vehicles, that it has relatively few hills, and has key destinations that can be reached by bike (e.g. shopping, jobs, parks) (4).



## PARTICIPANT FACTS

- 191 older adults
- Residents from Vancouver West End, Downtown and Yaletown neighbourhoods
- Age 60-91 (average age 70)
- 69 males, 124 females
- 69% had access to a car
- 11% used a mobility aid
- Average time in current home: 15.5 years

## KEY FINDINGS

We found that our participants made 3.1% of their daily trips by bicycle— a proportion six times greater than those aged 65-79 living in the Metro Vancouver region, and double the cycling rate across all ages (Figure 1). Of the 191 participants, over 1 in 4 (27%) reported cycling inside and/or outside their neighbourhood (Figure 2).

The cyclists made an average of 3.4 trips per week by bicycle for transportation purposes (e.g., to run errands) and 2.7 trips per week by bicycle for recreation or fitness purposes (e.g., cycling around the park) and spent an average of 5.8 hours (range: 0.7-26.0 hours) cycling weekly. The top cycling destinations reported included shops, parks or trails and cafes or restaurants.

In interviews, the following top facilitators and barriers to bicycling were reported by older adults in our study:

### FACILITATORS:

- ◆ *Supportive Environments:* Good cycling paths or routes that were away from traffic-laden streets
- ◆ *History of Activity:* Drawing on experience and skills gained riding a bike when younger
- ◆ *Social Aspects of Cycling:* Bicycling to visit friends, for recreation, or to shop and carry out daily errands

### BARRIERS:

- ◆ *Traffic Concerns:* Interaction with cars and pedestrians, busy streets
- ◆ *Safety:* Enforcement of bicycling rules, cyclists who ride aggressively, riding when it's dark
- ◆ *Theft:* Having bike stolen, need for more accessible and secure bike storage

## IMPACT

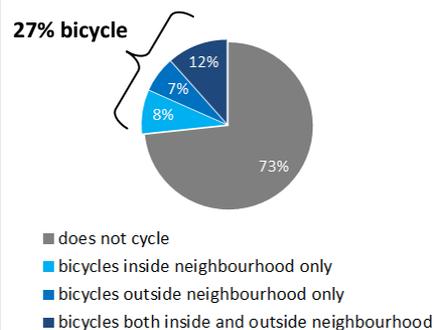
We found that older adults in North America do cycle, at least given the right conditions. These results indicate the importance of the safety and design of supportive bicycle routes, and public education (increased knowledge and information regarding cycling in the city) to promote cycling amongst older adults. It is crucial that cycling become a more common travel mode for older adults, given our aging demographic, the increased need for sustainable travel to address congestion and health concerns, and to promote health and mobility across the lifespan.

## INTERESTED IN LEARNING MORE?

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**Figure 2: Proportion of older adult study participants who bicycle inside and/or outside their neighbourhood (n=191)**



## INSIGHTS FROM INTERVIEWS

“I grew up on a bike; I didn't have a car when I was growing up. But I just think there's just so much traffic and I'm not as physically fit as I perhaps should be for a bicycle. And I could walk to most places, I don't need to.... When I cycle, I cycle for fun, not to get from A to B.”

“As a cyclist, you know, I'm just not that fast anyway.... But I think that's a big problem is the cyclists versus pedestrians, especially the older pedestrians”



## REFERENCES

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