

# Transportation and Health in Metro Vancouver



my Health  
my Community

Transportation connects us to our community, our place of work and our friends and family. The way transportation infrastructure is designed and the modes of transportation that we have access to impact our lifestyle and our health.

Evidence shows that well-planned and accessible transportation systems influence our health by increasing our physical activity, improving air quality and reducing vehicle injuries, leading to better physical and mental health.

To understand the health of our communities, the My Health My Community Survey was conducted in 2013-2014 across the Lower Mainland of British Columbia. Over 28,000 Metro Vancouver residents, aged 18 years and older, participated in the survey. Of these, 79% indicated their primary mode of commuting to work or school, along with information on various health outcomes, lifestyle behaviours and neighbourhood characteristics. The responses were examined to look at the association between mode of commuting and health.

## ➔ KEY MESSAGES



ACTIVE TRANSPORTATION USERS HAVE **LOWER BODY MASS INDEX**



ACTIVE TRANSPORTATION USERS **WALK MORE EACH DAY**



CYCLISTS AND WALKERS **MEET RECOMMENDED WEEKLY PHYSICAL ACTIVITY GOAL**



ACTIVE TRANSPORTATION USERS HAVE **MORE POSITIVE LIFESTYLE\* ATTRIBUTES**



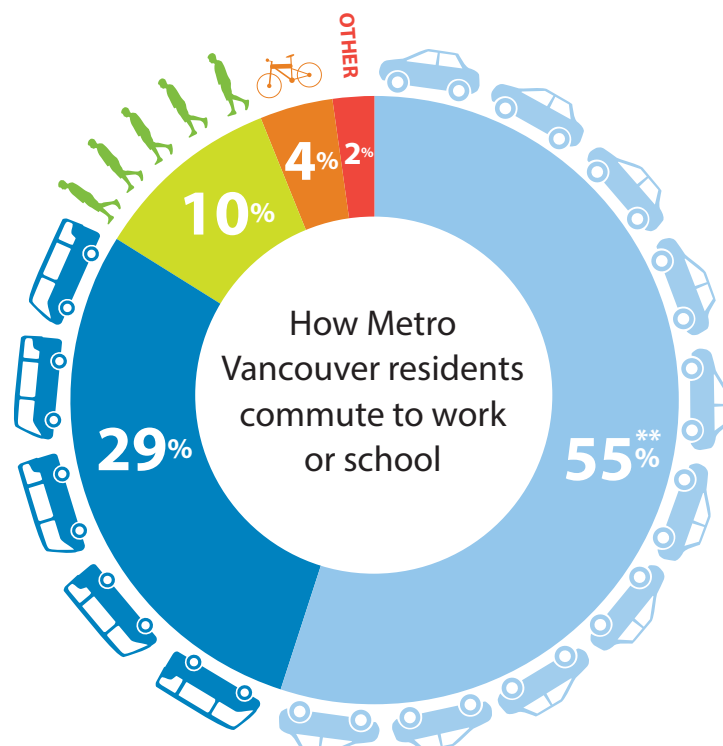
CAR USERS WITH LONGER COMMUTE TIMES HAVE **LOWER SENSE OF COMMUNITY BELONGING**



TRANSIT USE IS **HIGHEST AMONG LOWER INCOME HOUSEHOLDS, VISIBLE MINORITIES AND RECENT IMMIGRANTS**

\*Lifestyles characterised by eating 5+ servings of fruits and vegetables a day, 30+ minutes of walking a day, 150+ minutes of moderate or vigorous physical activity a week, and not smoking.

## ➔ MODE OF COMMUTE TO WORK OR SCHOOL



**43% ACTIVE TRANSPORTATION =**



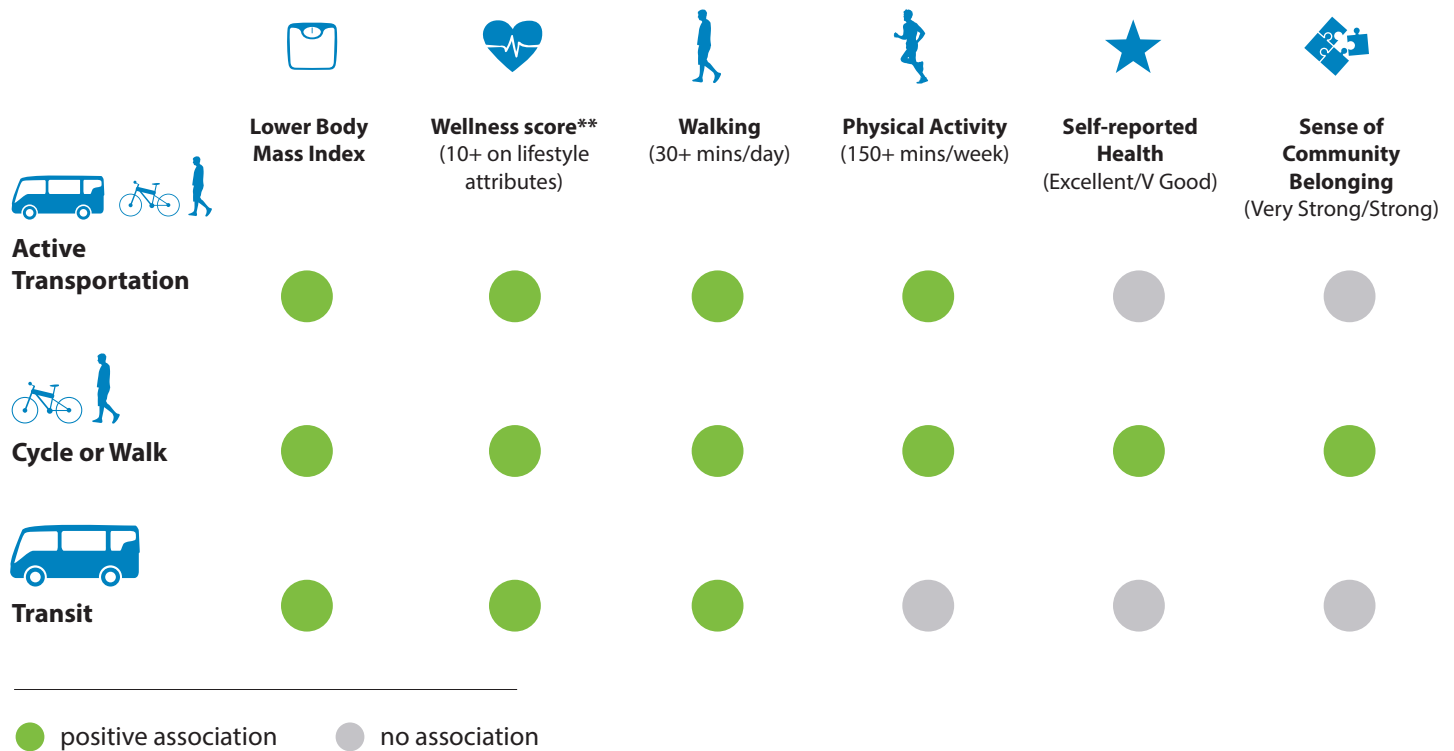
\*\*Car as driver or passenger



a place of mind  
THE UNIVERSITY OF BRITISH COLUMBIA



## ➤ HEALTH AND HEALTH BEHAVIOUR\*



\* Controlling for: age, gender, income, education, ethnicity, chronic diseases, commute time, weekly physical activity, time in Canada, 5 minutes to transit stop.

\*\* Lifestyles characterised by eating 5+ servings of fruits or vegetables a day, 30+ minutes of walking a day, 150+ minutes of moderate or vigorous physical activity a week, and not smoking.



**Active transportation** users are **33% less likely to be overweight or obese** compared to those who commute by car. Specifically, walkers or cyclists are 48% less likely and transit users are 22% less likely to be overweight or obese



Those who use **active transportation** are **twice as likely to meet 30+ minutes of daily recommended walking** compared to car users



Compared to car commuters, **cyclists and walkers** are **27% more likely to report excellent or very good health**



**Active transportation** users are **40% more likely to achieve a wellness score of 10+** compared to those who commute by car, indicating a tendency towards more positive lifestyle behaviours (i.e. less likely to smoke, consume more fruits and vegetables and more likely to engage in physical activity)

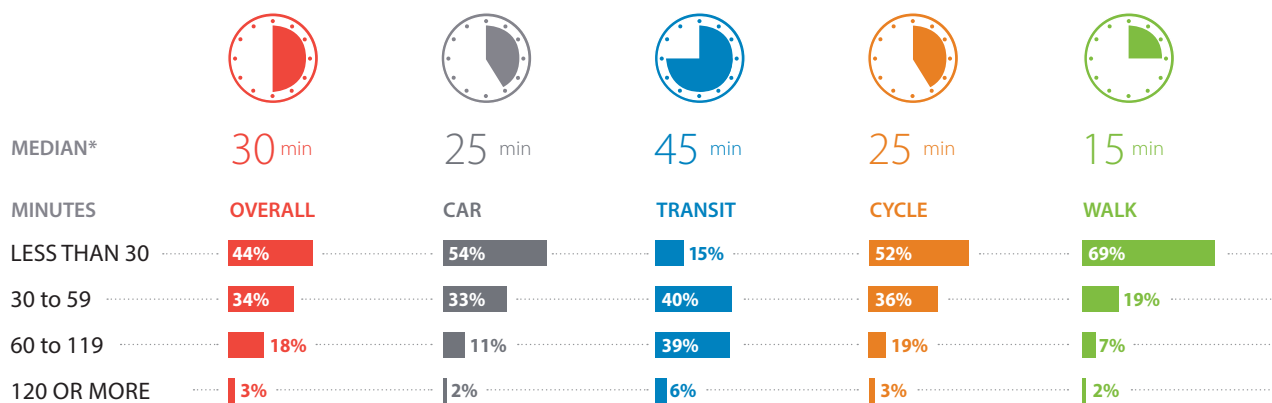


**Cyclists and walkers** are **69% more likely to** achieve the recommended 150+ minutes of **moderate or vigorous physical activity per week** compared to those who commute by car



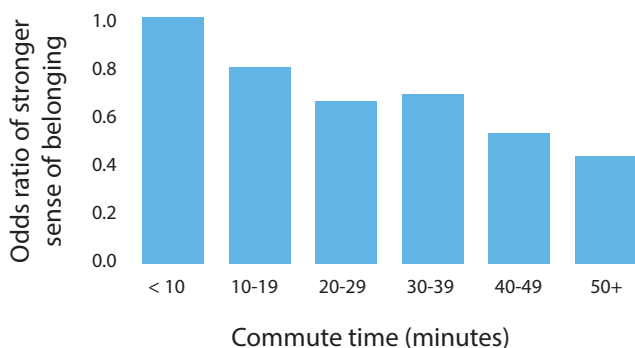
**Cyclists and walkers** are **17% more likely to report a strong sense of community belonging** compared to those who commute by car

## ➡ COMMUTE TIME TO WORK OR SCHOOL IN ONE DIRECTION



\*Middle value

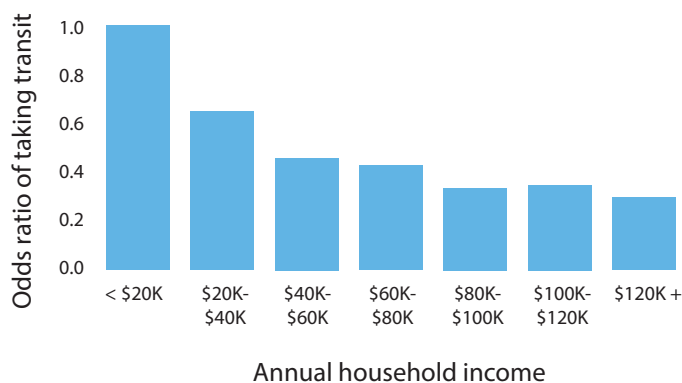
## ➡ COMMUTE TIME AND COMMUNITY BELONGING AMONG CAR USERS\*



**Sense of community belonging decreases with increasing commute time** – those with a commute time of more than 50 mins are 56% less likely to experience a strong sense of community belonging than those with a commute time of less than 10 mins

\*Controlling for: age, gender, income, education, ethnicity, chronic disease, weekly physical activity, time in Canada, 5 mins to transit stop.

## ➡ DETERMINANTS OF TRANSIT USE



**Highest** among those aged **18-29 years** old, and those aged **70+ years**



**14% higher** use in those **with any chronic condition**



**60% lower** use in **parents** with dependent children (under 18 years)



**50% higher** use among **visible minorities** (except South Asian); **73% higher** use among **Aboriginal people**



**Highest** use among **most recent immigrants** (5 years or less) and 30% lower in those who immigrated 16+ years ago and those born in Canada



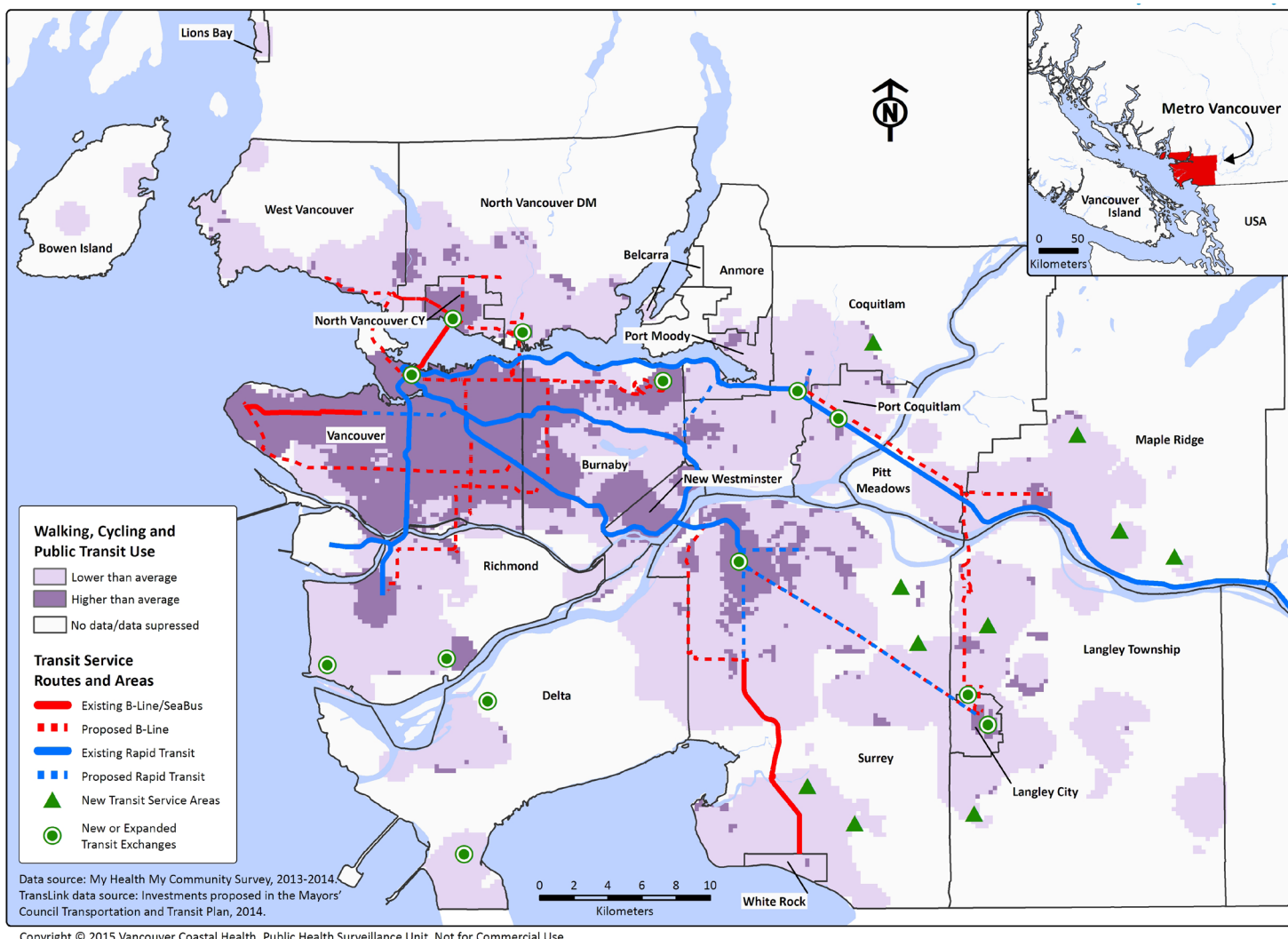
**Highest** use in those with household income **under \$20K** and decreases sharply with increasing income



Nearly **70% lower** use among households earning **\$100K+ per year**

## ➤ ACTIVE TRANSPORTATION USE

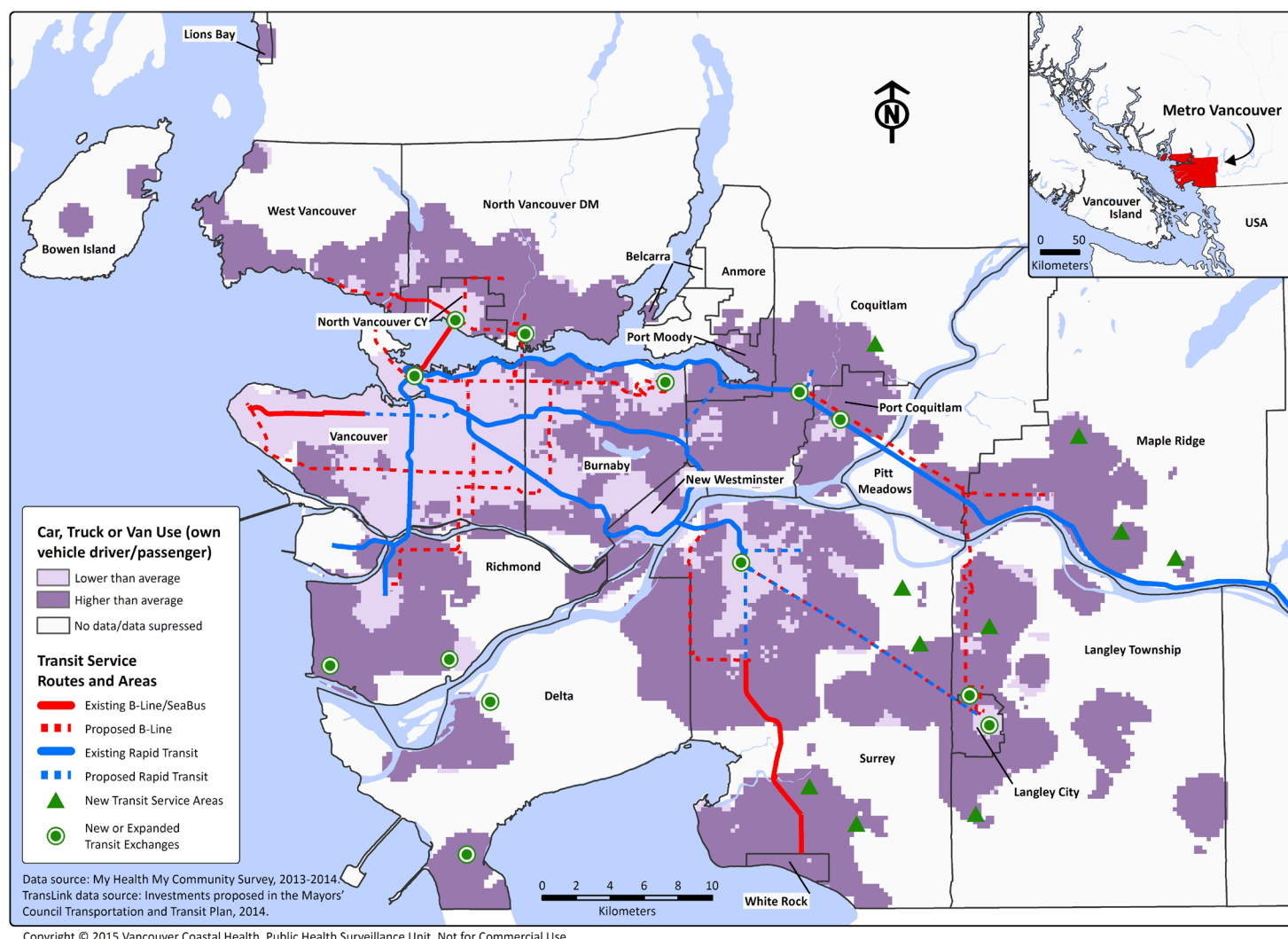
Walking, cycling and public transit commuters in relation to existing and proposed transit service routes and areas. My Health My Community Survey, Metro Vancouver 2013-2014



- This map shows the difference in the use of active modes of transportation across Metro Vancouver communities and some of the existing and proposed transit infrastructure.
- Overall **42.5% of Metro Vancouver residents use active modes of transportation** to commute to work or school.
- Areas in **dark purple indicate above average use of active modes of transportation**. Residents in these areas are **26% less likely to be overweight or obese**, and **49% more likely to walk 30+ minutes a day**.
- Areas with **greater active transportation use are concentrated around regional town centers** and neighbourhoods with **access to rapid transit**.
- This map only identifies some of the planned transit infrastructure. It does not include the increase in frequent bus service or new bus lines other than B-lines. For additional information on planned regional investments for transportation, please refer to the Metro Vancouver Mayors Council plan <http://mayorscouncil.ca/transportation-investments>

## CAR USE

Car (own vehicle driver/passenger) commuters in relation to existing and proposed transit service routes and areas. My Health My Community Survey, Metro Vancouver 2013-2014



- This map shows the difference in car use (own vehicle driver/passenger) across Metro Vancouver communities and some of the existing and proposed transit infrastructure.
- Overall **55.1% of Metro Vancouver residents use a car** to commute to work or school.
- Areas in **dark purple indicate above average car use**. Residents in these areas are **33% more likely to be overweight or obese**, and **34% less likely to walk 30+ minutes a day**.
- Areas with **greater car use** are **concentrated away from regional town centers** and neighbourhoods with access to rapid transit.
- This map only identifies some of the planned transit infrastructure. It does not include the increase in frequent bus service or new bus lines other than B-lines. For additional information on planned regional investments for transportation, please refer to the Metro Vancouver Mayors Council plan <http://mayorscouncil.ca/transportation-investments/>



My Health My Community is a non-profit partnership between Vancouver Coastal Health (VCH), Fraser Health (FH) and the eHealth Strategy Office (eHSO) at the University of British Columbia (UBC).

For more information or to provide feedback, please contact:

[info@myhealthmycommunity.org](mailto:info@myhealthmycommunity.org)



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