

# MAKING THE CASE FOR **CYCLE HIGHWAYS** IN METRO VANCOUVER



**41% OF PEOPLE IN  
METRO VANCOUVER  
WANT TO CYCLE MORE**

*Photo credit: Cycle  
Superhighways,  
Capital Region  
of Denmark*



## **What Are Cycle Highways?**

Cycle highways are the highest quality bike routes, covering long distances (5km+) and providing regional connections between major destinations. They are direct, paved, protected, lit, of ample width, and with intersections prioritizing people cycling. This, along with clear signage, branding, and regular maintenance, ensures cycle highways are safe, comfortable, and easy to use for people of all ages and abilities at all times of the day and year.



# Current Mobility Challenges In Metro Vancouver

**Currently, Metro Vancouver faces numerous challenges within the realm of mobility and transportation. These include:**

**Population growth, densification, and congestion** – congestion leads to losses of \$1.7 billion annually.

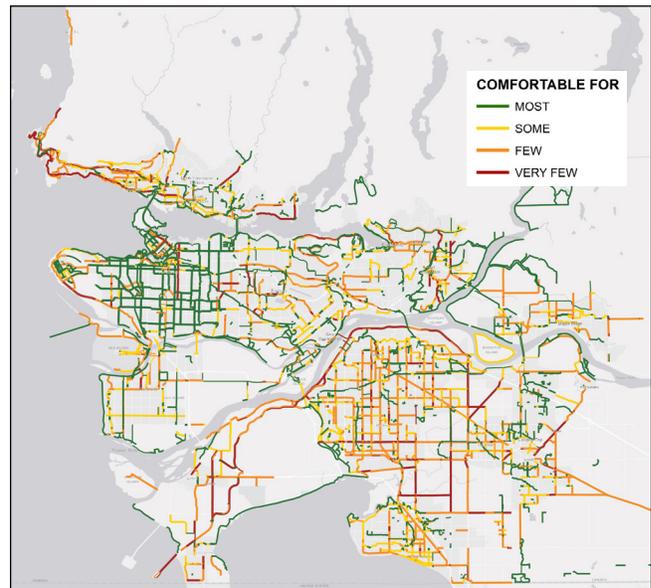
**Climate Change** – Transportation accounts for 45% of greenhouse gas emissions in the region.

**Equity** – One in three homes spend more than 70% of before tax income on housing and transportation.

**TRAFFIC MODELLING ON THE 675KM OF PROPOSED CYCLE HIGHWAY ROUTES IN THE NETHERLANDS FOUND COMMUTERS ARE ESTIMATED TO SAVE 3.8 MILLION HOURS PER YEAR**

**Major Events** – Covid-19 induced half of transit users to shift into private car/active transportation. Most recently, the invasion of Ukraine has resulted in historically high gas prices across the globe.

Cycling is the fastest growing mode of transportation in the region, however, over half of the cycling network in Metro Vancouver is uncomfortable for most people. Outside of Vancouver, the most comfortable facilities are disconnected and don't form a complete network.



*Only 46% of the Cycling Network is safe and comfortable for most people (State of Cycling, 2019)*



# Why Cycle Highways Are A Solution

### Benefits of Cycle Highways

- Reduces climate impacts
- Alleviates congestion
- Improves affordability
- Improves equity and access
- Enhances individual and public health
- Encourages tourism

### Complements the rise of e-bikes

E-bikes can replace the conventional bike, bus, and even up to 76% of car trips. Additionally, car owners have been found to be more willing to use an e-bike than a conventional bike and public transport.

Cycle highways and e-bikes complement each other. People are more likely to buy an e-bike if good infrastructure exists, and e-bikes make traveling longer distances easier.

### Cycle highways are rolling out around the world

Since the introduction of the CS3 cycle highway in London, cycling has increased by 83%.



**LOCAL E-BIKE FIRMS ARE EXPERIENCING A SHARP UPTICK IN SALES IN THE PAST TWO YEARS, RANGING FROM 100-500% GROWTH.**

On the Rijnwaalpad cycle highway in the Netherlands, one-third of users are new to cycling and 20% of users bought an e-bike because of the Rijnwaalpad. People cycling ride 16km in under 45 minutes, without having to stop once.

In Denmark, the cycle highway network is estimated to create 720,000 fewer car journeys and 55,000 fewer hours spent in traffic every year. At least 60% increase in people cycling, many shifted from driving. The average trip link was at least 7.5km.



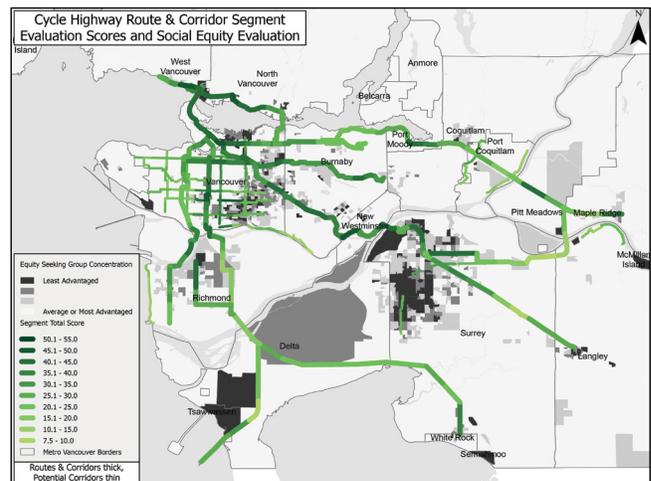
Photo credit: Cycle Superhighways, Capital Region of Denmark

# Analysis And Results

## Design characteristics of cycle highways include:

- Directness
- Longer Lengths
- Connections Between Major Destinations
- Capacity to Maintain Speed
- Cycle-Specific Paths
- Intersection Treatments and Minimal Stops
- Consistent and Ample Widths
- Consistent and High-Quality Paving
- Lighting
- Minimizing and Alleviating Slopes
- Clear Signage and Branding
- Regular Maintenance and Winter Service
- Service Stations

The map on the top right of this page shows a Cycle Highway Corridor GIS Analysis overlaid with equity-seeking populations. Higher scores (dark green) meet more desired characteristics.



### TOP SCORING ROUTES

- BC Parkway + Extension
- Central Valley Greenway
- Adanac & Francis Union + Extension
- Tri-Cities to North Shore Corridor

## Cycle Highway Recommendations for Metro Vancouver

All of the routes we examined are potential routes for a cycle highway. Top routes all included Vancouver, were existing high-quality cycle routes, had a number of destinations, and were relatively flat.

Cycle routes in more suburban areas tend to score lower, due to fewer destinations, lower population density, etc, but these areas stand to gain the most from a cycle highway. Future analysis could better capture cycling future potential. Read the full Cycle Highways report at [www.bikehub.ca/cyclehighways](http://www.bikehub.ca/cyclehighways)