Your **Cycling** Connection

bikehub.ca

HUB Cycling Feedback for Clean Air Plan and Climate 2050

Vision for the future and support for 'desired future state in 2050'

HUB Cycling supports a future where all travel within the region is made by active transportation or using zero emission technologies powered by clean, renewable energy.

Zero emission technologies will largely power public transportation (transit, ferries) and goods movement vehicles. This includes e-assist bikes for last km delivery. While there are low emission private vehicles available for use, people will not need to rely heavily on them as there will be a variety of options for active transportation and transit use. When needed, residents will be able to use shared vehicles.

Active transportation takes low or zero emissions a step further, with a range of benefits beyond reduced pollution - improved heart health, cardiovascular system, lower stress, and lower risk for a number of diseases including high blood pressure, hypertension and diabetes.

People will be able to easily walk or roll to many destinations in their compact, walkable communities. Safe, reliable transit is available for longer trips and most are within walking distance to the frequent transit network. Transit is designed to be multi modal. People will make most of their trips by active transportation and transit, and quality walking and rolling infrastructure will get them to the places they want to go.

Across Metro Vancouver, robust cycling infrastructure connects major destinations and all Metro Vancouver municipalities through a network of 'super cycle ways', which connect seamlessly to local cycling networks, enabling safe and comfortable connections across the region. All cycling infrastructure is safe and comfortable for most people, and those new to cycling feel comfortable using them.

The cycling infrastructure is designed to a high standard, and the facilities have ample width. Faster cycles and e-assist bikes have enough room to pass, and cargo bikes and other users have enough room to maneuver. E-assist bikes allow more people to cycle, especially those limited by travel distance or hilly terrain, energy levels, mobility issues, and end of trip facilities.

Off-street greenways and trails for walking and rolling connect major green spaces and parks. These trails are integrated into the wider active transportation network, allowing users to easily travel from home to parks along comfortable trails, without needing to drive to recreation.

Active transportation needs are built into the infrastructure of the region. End of trip cycling facilities in residential, commercial and office buildings include secure parking, changing and showering facilities. Cycle parking facilities are designed to easily allow e-assist bike parking and charging and also provide space for cargo bike parking. There is seamless integration for people using active transportation with transit vehicles, transit stations, ferries, airports, train stations and other transportation hubs. Secure short term and long term parking options encourage people to consider cycling and active transportation as part of their trip.

Shared micro-mobility options are available throughout the region, such as regional bike share and e-assist bikes. Residents can start a trip in one municipality and end in another easily and without penalty.

Big ideas

Idea: Reduce emissions through mobility pricing

Comments: Mobility pricing offers a way out of the induced demand dilemma, where increased road capacity results in more driving, thus returning congestion to its previous levels. Mobility pricing would have a strong impact on lowering vehicle kilometres travelled (VKT), helping to shift more trips to other modes of travel.

Mobility pricing is contentious, and needs to be implemented carefully. As much support as possible should be gathered beforehand. Consideration should be given to social equity issues, such as not placing an unfair burden on those with less financial means, businesses and goods movement.

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Idea: Broaden accessibility of zero emission transportation options

Comments: People tend to do what is convenient for them. Increasing the convenience of zero emission transportation options would go a long way to helping people shift away from other forms of transportation. In particular, transit can move large numbers of people in an efficient manner. Paired with cycling, the reach and flexibility of transit increases, especially compared to just walking.

Increasing cycling is tied to the provision of cycle infrastructure that is safe and comfortable for most people. The cycle network in Metro Vancouver has increased substantially over the last decade, but still less than half of cycling facilities are classified as comfortable for most, according to the recent HUB Cycling State of Cycling report. Closing gaps in the network and building facilities that are comfortable for most people will encourage more people to cycle for transportation and everyday activities.

End of trip facilities, such as secure bike parking (including at transit stations and hubs and workplaces) and changing, showering, and storage spaces increase the convenience and accessibility of cycling.

Rebates can make e-assist bikes more accessible to people, helping to increase their adoption. Rebates should be as broad-based as possible, allowing both individuals and businesses to apply. While trading an older vehicle in to get the rebate is a great incentive, it shouldn't be restricted to just this.

Actions

Action: Bike share programs make cycling a convenient and accessible option for more trips

Comments: An integrated bike share program across Metro Vancouver would greatly increase transportation options for people. Ideally, the bikes would include e-assist bikes, increasing the accessibility for riders with lower fitness levels and physical limitations. The bike share should be seamlessly integrated with transit, allowing people to easily connect with transit hubs and stations.

Action: Regional Parking Strategy will optimize parking space requirements to encourage switching to modes other than single occupancy vehicles

Comments: A parking strategy is an excellent method to reduce reliance on vehicle trips. Free or low cost parking incentivizes people to drive to their destination, rather than considering other transportation possibilities. In this way, free or low cost parking acts as a driving 'subsidy' while inflating the cost of other goods and services. Parking guru Donald Shoup recommends a three step approach for a parking strategy. On street parking should be fairly priced so there are always open spots, reducing congestion and pollution caused by people circling the block, while maintaining a high occupancy rate. Parking minimums for off-street parking should be either removed or replaced with parking maximums. This will reduce the oversupply of parking, and let developers determine the amount of parking that makes the most sense. The third step is to establish parking benefit districts. A portion of the money raised by public parking (such as on-street meters) will go back to the local business or residential area. The money will pay for needed amenities such as beautification or cleaning, and help those most affected see the benefits of a parking strategy.

Action: Cycling highways enable cyclists to reach their destinations faster

Comments: Cycle highways are continuous cycle paths (usually at least 5 km in length) that have limited stops or intersections, are designed for most people, and are separated from pedestrians and motor vehicles and designed for people cycling. Cycle highways provide an easy, comfortable and convenient way for people to go longer distances on cycling infrastructure. Cycle highways also pair well with e-assist bikes, especially over longer distances. While much more common in Europe, there are some examples in BC. On Vancouver Island, the Lochside and Galloping Goose trails resemble cycle highways, with parts paved, off street and grade separated. In Metro Vancouver, the Central Valley Greenway and BC Parkway have some characteristics of cycle highways, and provide a possibility to upgrade to cycle highways. Ideally, cycle highways would connect communities across Metro Vancouver, and provide opportunity for longer distance travel by bicycle. The Major Bike Network provides a template for how cycle highways could efficiently connect the region. A key consideration with cycle highways is ensuring they are continuous, and not broken up with multiple crossings and intersections.

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Action: 80% of residents can easily walk or bike to meet all basic daily non-work needs and have safe pedestrian or bicycle access to transit

Comments: This is a big goal and ties in with existing goals for the region, including TransLink's Regional Transportation Strategy target that 50% of all trips are by sustainable transportation modes. Creating mixed, dense and walkable communities will make it easy and convenient for people to use active transportation for more of their daily needs. In order to achieve this, metro Vancouver municipalities will need to work together to create the kind of connected and dense communities that encourage walking and cycling.

Specific strategies should be outlined on how to achieve this vision. Forms of 'sprawl repair,' such as retrofitting a strip mall into a mixed use development (residential, commercial, etc) can help create a kind of 'town centre' in more suburban areas. Zoning changes will need to be enacted in some areas to allow for the kind of mixing of uses necessary to create these kinds of areas.

Across North America, these kinds of walkable and bikeable neighbourhoods are in high demand, resulting in higher prices. Measures will need to be considered to maintain affordable living spaces.

Achieving this goal will require building partnerships with municipalities and creating buy-in to the vision.

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Action: Delivery micro-hubs reduce freight emissions by bundling goods in urban centres and supporting final delivery by zero emission modes, including cargo bikes and small electric delivery vans

Comments: Freight delivery in urban environments is a necessity in today's economy, but many of the vehicles currently in use produce unhealthy amounts of pollution, especially NOx and particulate matter. A study in the UK estimated that around 50% of current deliveries in urban areas could be completed by e-cargo bicycles. E-Cargo bikes produce no pollution while in use, and require little space for parking during deliveries. The addition of human muscle power and the small vehicle size mean that electricity demands are much lower. Since e-cargo bikes can use cycling facilities, they can outperform vehicle speeds in a congested urban environment. E-cargo bikes do need cycling infrastructure that can accommodate their longer and wider frames, while providing enough space for passing.

Existing loading zones could accommodate loading and unloading. E-cargo bikes can also easily use sidewalk space for parking provided there is sufficient width. E-cargo bikes produce very little noise while in use, and emit no exhaust or fumes produced while in operation. There is increased safety for other road users and much lower likelihood of major injuries as the result of an accident.

Additional Ideas

Idea: Future Proofing

Comments: New technologies and modes are changing the transportation landscape. Bike sharing has been steadily growing over the last decade. New micromobility modes include e-scooters and e-assist bikes, both privately owned and as part of a shared fleet. Cities are grappling with how to accommodate these modes, and provide appropriate space and facilities for them.

Looking toward the future, and ways to increase efficiency and reduce energy use, Metro Vancouver should prepare for the future by providing space and facilities for low or zero emission modes. Ideas include allocating space for free-floating devices (bikes, scooters, etc) to be parked near high demand areas such as transit stations, stadiums, business districts, etc). Facilities such as bike parkades in residential and commercial buildings should be outfitted to accommodate various types and sizes of micromobility devices including conveniently located plugs for electric scooters and bikes and enough space to maneuver larger devices including cargo bikes.

The current pandemic illustrates that the current system needs additional resiliency, and a boost of future proofing. Active transportation including cycling is very low in Greenhouse gas emissions (GHGs), and doesn't require the same resources to operate as other more energy intensive modes, and is more resilient at adapting to disruptions to the supply chain while providing people with exercise and fresh air. Future proofing Metro Vancouver includes providing space, infrastructure and facilities for various micromobility modes including e-assist bikes.

Idea: Multi-modal connections ensure that alternative transportation benefits from seamless integration between modes.

Comments: Alternative ways to move around beyond just the personal vehicle is more comfortable and enticing when connections between various modes are streamlined and simple. A person can ride an e-scooter to the bike parkade at a transit station, take the train to the ferry, then hop on a bike share on the other end. For this to occur, each node needs to offer

a variety of options for parking and storage of different devices, as well as other modes to continue the journey.

To achieve this, new projects, such as transit facilities, ferry terminals, etc should incorporate measures for micromobility and activity transportation modes.

Concluding Thoughts

COVID-19 has shown the resilience of active transportation modes, especially when there are system disruptions. Cycling in particular has seen a massive uptake across the world. Cities have allocated increased road space for active transportation modes, with some planning longer term changes. Metro Vancouver municipalities have allocated road space of their own to active transportation. Let's build on this for safer, cleaner and more active cities.

The pandemic illustrates the need for future proofing, and planning for modes that are not only efficient with a low carbon footprint, but also resilient to shocks including sea level rise, pandemics, and energy disruptions.

About HUB Cycling

HUB Cycling is a charitable not-for-profit organization that has spent over 20 years removing barriers to cycling in Metro Vancouver, while cultivating the health, environmental, and economic benefits that active transportation can bring. HUB has educated thousands of people, motivated thousands more, and championed improvements that #UnGapTheMap to create a connected cycling network.

HUB Cycling's mission is to get more people cycling more often. We make cycling better through education, action and events. More cycling means healthier, happier, more connected communities. We're leading the way in making cycling an attractive choice for everyone.