Transportation Networks: A Primer for Municipalities

ACTIVE TRANSPORTATION

Active Transportation is a critical element of equitable, efficient, and diverse transportation networks. It involves using human power (e.g., walking, cycling) and hybrid mobility aids to get from place to place.[1] Active transportation can have a significant impact on physical, mental, and social health, the environment, and the economy.

PHYSICAL HEALTH

More than 50% of Canadians are not reaching the recommended level of daily physical activity.[2]

Walking or cycling to work can reduce the risk of developing chronic disease by 11%.[1]

INJURY PREVENTION

In Middlesex-London, emergency department visits and hospitalizations due to injuries from motor vehicle collisions involving pedestrians increased from 2020 to 2022.[3,4]

In Middlesex-London, the hospitalization rate for motor vehicle collision-related injuries for cyclists was three times higher in 2022 than 2020.[5]

MENTAL AND SOCIAL HEALTH

20-30 minutes of walking everyday can increase physical and mental wellbeing.[1]

Active transportation can bring people together and make them feel more connected to their community.[6]

ECONOMIC

Active transportation is cheaper than the total cost of owning and using a car.[1]
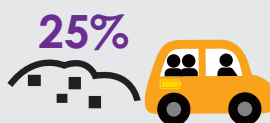
Adding bike lanes can increase store visits and potential spending.[1]

ENVIRONMENT

Almost 25% of Canada's greenhouse gas emissions came from transportation in 2020.[1,7]

Walking, cycling, and riding public transit increases the capacity to move more people to and from destinations.[1]

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To protect and promote the health of Middlesex-London residents, municipalities should prioritize active transportation in the development and implementation of transportation networks.

Municipalities can implement the following policy recommendations and actions to prioritize active transportation:

1. **Walking, cycling, and public transit should be prioritized in the design of communities and transportation networks over single-occupancy vehicles.**

   - Provide a complete and well-maintained cycling network to encourage active daily travel.
   - Provide well-maintained sidewalks on both sides of the street to promote accessibility and safety.
   - Provide adequate, convenient, and secure bike parking and shelters to encourage and support cycling as a viable transportation option.
   - Encourage convenient and reliable access to affordable public transit, through implementation of dedicated transit lanes, and accessible, proximal transit stops.
   - Enhance public transit use through the integration of intercommunity transit options.
   - Support multimodal travel by providing infrastructure (e.g., bike storage at transit stations, bike racks at the front of transit buses, park-and-ride lots) at transfer points to encourage the integration of travel modes and facilitate getting to a destination that is further away without the use of a personal vehicle.
   - Provide easy and safe connections to accessible trails and pathways within existing and new residential areas.
   - Maintain, strengthen, and promote existing trail networks to facilitate the use of active travel for both recreational and everyday needs.
   - Encourage easy and safe connections between new green space and the active transportation network.

2. **Prioritize accessibility and safety in the design and implementation of transportation networks.**

   - Promote accessibility through ongoing maintenance of AT infrastructure (e.g., sidewalks, bike lanes, and multi-use pathways).
   - Implement transportation policies that protect vulnerable road users from speed such as automated speed enforcement, red light cameras, traffic calming measures, and lower neighbourhood speeds.
   - Adopt and implement strategies to improve safety for all road users (e.g., Complete Streets, Vision Zero).
   - Provide infrastructure that protects vulnerable road users through separation from motor vehicle traffic (e.g., protected bike lanes, safety islands, longer leading pedestrian intervals).
   - Ensure that pedestrian crossings are designed, maintained, and operated in a manner that promotes safety, equity, and efficiency for all road users.
   - Incorporate design elements that provide safety and comfort while using AT such as benches, trees, pleasant streetscapes, and adequate lighting.
   - Develop, maintain, and improve navigation tools such as wayfinding systems and travel route mapping (e.g., bike and walking maps, trail guides).
   - Promote and support safe routes to school through school-based approaches such as Active and Safe Routes to School and neighbourhood school travel plans to encourage safe and active school commutes.
   - Encourage and promote workplace policies, programs, and incentives that facilitate active modes of commuting.

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3. Design neighbourhoods that are complete, compact, and connected to facilitate easy and equitable access to daily needs within a short walk or ride.

- Encourage transit-oriented development to facilitate connections to a variety of places.
- Design compact neighbourhoods with higher residential densities to support the use of active modes of transportation.
- Provide a mix of land uses and diverse housing options to shorten the distance between destinations while ensuring equitable access to school, recreation, faith-based institutions, services, and employment opportunities.
- Ensure active transportation connections are integrated into new development early in the planning stages.

4. Prioritize ongoing, meaningful, and inclusive community engagement in the development and implementation of active transportation infrastructure, policies, and programs.

The Middlesex-London Health Unit can support municipalities by:

- Providing relevant health evidence/data;
- Attending public participation meetings;
- Participating on project teams for municipal plan development; and/or
- Collaborating on transportation network initiatives and strategies.

Contact us at: health@mlhu.on.ca

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