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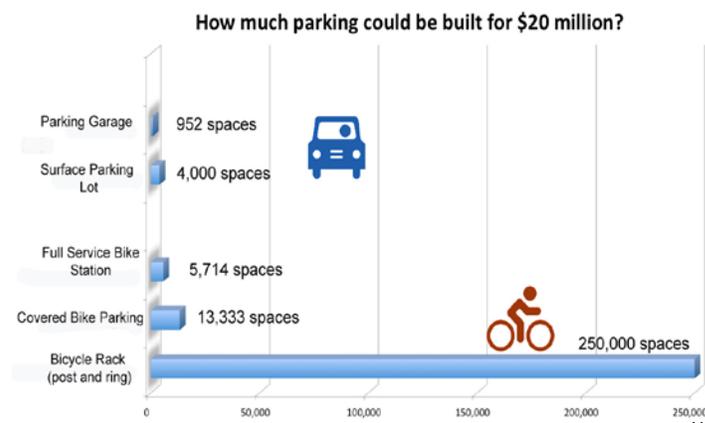
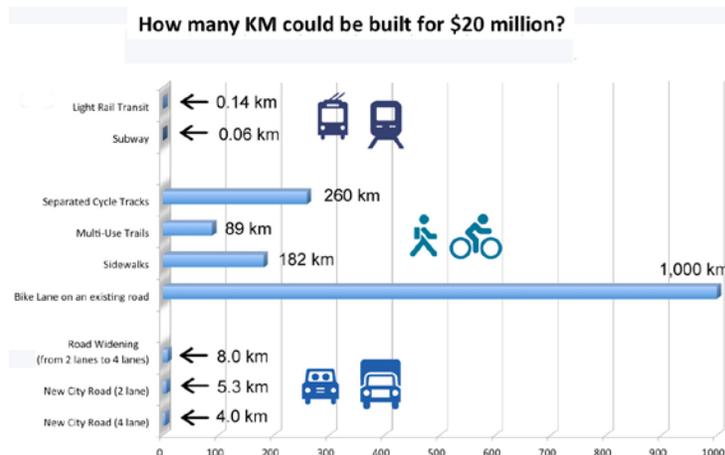
WHY SHOULD WE INVEST IN ACTIVE TRANSPORTATION?

We Have an Opportunity and Strong Public Support for More Investment

The Greater Toronto and Hamilton Area (GTHA) is undergoing substantial growth and change. As part of the process to prepare the region for current and projected population growth, Metrolinx, the regional transportation authority, developed a regional transportation plan called The Big Move. Metrolinx has estimated a need for \$2 billion of dedicated annual funding to support the next phase of The Big Move. Of this \$2 billion, Metrolinx has proposed that 25% or \$60 million be allocated to local projects.¹ Of this 25%, 5% has been identified as going to support smaller projects including active transportation, fare integration, local roads and other projects.² It is not clear yet what proportion of this 5% will be allocated specifically for active transportation, nor whether this proportion will be consistent across the municipalities. The Big Move stated that an increasing provincial funding commitment to at least \$20 million would be invested annually to help municipalities to complete their cycling and walking networks.³ A 2013 Stratcom survey of 1523 adult Ontario residents found that 73% believe that investing in walking and cycling infrastructure is a critical component of The Big Move.⁴ There is no better time to realize this proposed investment. As population growth continues, the region shows lower active transportation than many other communities in Ontario and the rest of Canada.⁵

What could we do with \$20 million?

Active transportation capital infrastructure projects are extremely cost effective especially when considered relative to investments in other transportation modes. There are several different options for bicycle infrastructure with varying costs and applications.⁶ Pedestrian infrastructure can also include urban design elements that improve the quality of the walking environment. A comparison of available costs estimates per kilometre shows that bicycle and pedestrian facilities are far lower than the costs for other modes.^{7 8 9 10} Parking for bicycles costs a fraction of what is needed for cars, and is far more space efficient.¹¹



¹ Metrolinx. The Next Wave. 2013. <http://www.bigmove.ca/what-were-building/the-next-wave>

² Ibid.

³ Metrolinx. *The Big Move*. Greater Toronto Transportation Authority. 2008. <http://www.metrolinx.com/thebigmove/en/strategies/strategy2.aspx>

⁴ Stracom. *Ontario Polling Results Fielded May 14-17, 2013 for Share the Road Cycling Coalition*. <http://www.sharetheroad.ca/research-s15929>

⁵ Toronto Centre for Active Transportation. *Backgrounder: Active Transportation and the Regional Transportation Plan: The Big Move*. 2013.

<http://tcat.ca/TheBigMoveBackgrounder>

⁶ Toronto Centre for Active Transportation. *Backgrounder: Bikeway Options*. 2011. <http://tcat.ca/BikewayOptionsBackgrounder>

⁷ City of Vaughan. *Transportation Master Plan*. Appendix K. 2012.

⁸ Region of Peel. *Active Transportation Plan*. 2012.

⁹ Metrolinx. *The Big Move Conversation Kit*. 2013.

¹⁰ Burda, Cherise and Haines, Graham. *Making Tracks to Torontonians*. Pembina Institute. Jan 2011.

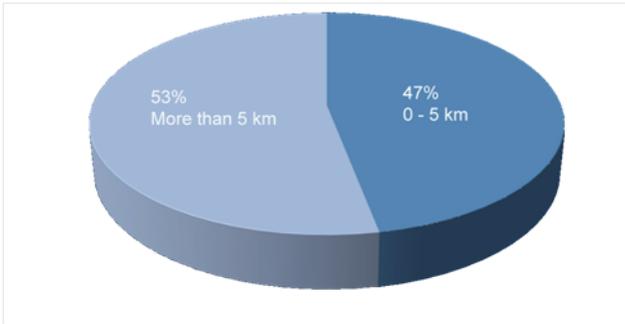
¹¹ City of Toronto estimated costs for covered parking and bicycle station projects (unpublished).

¹² Litman, Todd. *Transportation Cost and Benefit Analysis II – Parking Costs*. Victoria Transport Policy Institute. 2012.

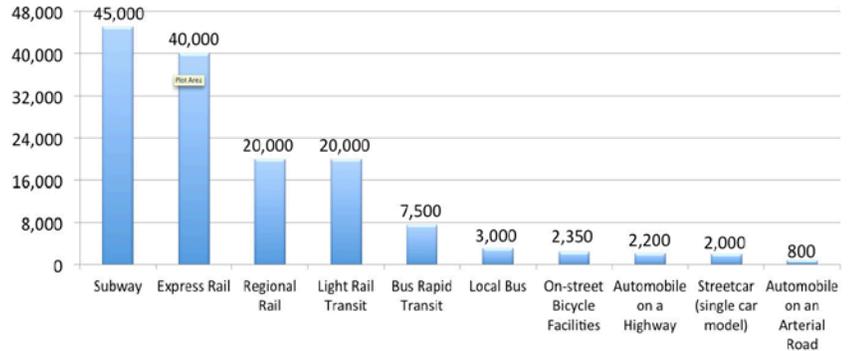
Active Transportation Could Improve Local Traffic Congestion

Investing in active transportation infrastructure to increase levels of walking and cycling will help to reduce motor vehicle congestion and improve access to transit and other services. Approximately 47% of automobile trips by residents of the GTHA are between 0 and 5 km long.¹³ These distances could feasibly be covered by cycling or walking trips. Metrolinx has committed to “increase the percentage of people who live within two kilometres of rapid transit from 42% to 81%”¹⁴ Enabling residents to use bicycles to travel this 2km distance will encourage more transit use and reduce local traffic congestion and parking pressures.

Distance of Auto Trips by GTHA Residents



Peak Capacities of Different Travel Modes
of persons per km



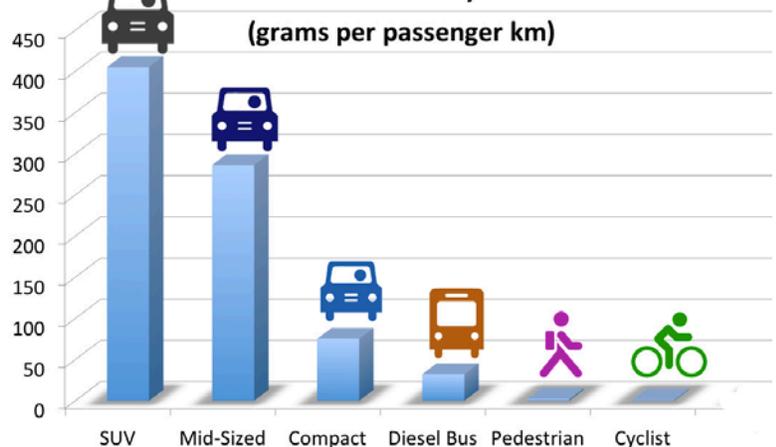
Active Transportation Moves More People More Efficiently

Research showing exact capacities for bicycle and pedestrian facilities is limited. However, in downtown environments, active transportation can move more people, more efficiently than motor vehicles. Where cars and bicycles travel at similar speeds, bike lanes can accommodate 7 to 12 times as many people per metre of lane per hour than car lanes and sidewalks can carry approximately 20 times the volume of people per hour compared to cars.^{15 16 17}

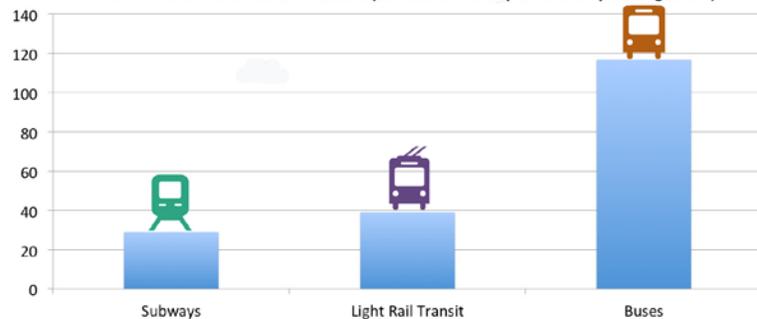
Choosing to Cycle and Walk Has a Significant Impact on Local Air Quality and Greenhouse Gas Emissions

Rail transportation produces considerably less greenhouse gas emissions than road transportation. Active transportation produces almost no greenhouse gas emissions at all. Comparing emissions by travel mode, we can see that a shift away from motor vehicle use toward a combination of active transportation and transit could have a dramatic impact on reducing GHG emissions and improving air quality in the region.^{18,19} These benefits along with demonstrated health and economic benefits of increased active transportation²⁰ make a solid case for investment. Metrolinx’s plans include creating 4,500 kilometres of new, dedicated, cycling and walking facilities in the region, and reducing annual GHG emissions and energy consumption from passenger transportation by 0.7 tonnes GHG and 7.3 Gigajoule per person per year.²¹ Dedicated investment to complete safe and connected cycling and walking networks in the GTHA will be essential to realize these goals.

Direct CO2 Emissions by Travel Mode
(grams per passenger km)



GHG Emissions from Transit (tonnes of CO2e per million passenger km)



¹³ Data Management Group. Transportation Tomorrow Survey. 2006.

¹⁴ Metrolinx. *The Big Move: Investing in our Future*. <http://www.bigmove.ca/investing-in-our-future/learn-more/merlin>

¹⁵ Transport Canada. *Active Transportation in Canada: a resource and planning guide*. 2011.

¹⁶ Metrolinx. *The Big Move Conversation Kit*. 2013.

¹⁷ Allen, D. Patrick et. al. *Operational Analysis of Uninterrupted Bicycle Facilities*. Transportation Research Record. Vol. 1636. 1998. pp. 29-36.

¹⁸ Gagnon, Luc. *Greenhouse Gas Emissions from Transportation Options*. Hydro Quebec. 2006.

¹⁹ Burda, Cherise and Haines, Graham. *Making Tracks to Torontonians*. Pembina Institute. Jan 2011.

²⁰ Toronto Centre for Active Transportation. *Background: The Economic Impacts of Active Transportation*. 2012. <http://tcat.ca/EconomicImpactsBackgrounder>

²¹ Metrolinx. *The Big Move: Investing in our Future*. <http://www.bigmove.ca/investing-in-our-future/learn-more/merlin>