



Region of Waterloo

Transportation and Environmental Services

Transportation

Date: August 10, 2021

Memorandum

To: Katerina Downard, Ministry of Transportation Ontario – Environmental Policy Office

From: Darryl Spencer, Transportation Planning, Region of Waterloo

Subject: Waterloo Region Comments on the Greater Golden Horseshoe Transportation Plan Discussion Paper

File Number: 019-3839

Thank you for the opportunity to comment on the MTO Greater Golden Horseshoe Transportation Plan – Discussion Paper released on June 29, 2021. This memo contains a consolidated set of comments in response to the discussion paper on behalf of the municipalities within Waterloo Region including input from the City of Cambridge, City of Kitchener, City of Waterloo, and Region of Waterloo.

Overall Comments:

It is stated in the introduction that, in the period of 2001-2016, demand on highways grew three times faster than the rate of new road capacity. This past trend is very unlikely to change unless steps are taken in transportation planning to address it. It is physically and financially unfeasible to build sufficient road capacity to reduce congestion without focusing on the reduction of the car's modal share in transportation. However, the presented Plan does not explicitly highlight the need to shift the modal share for the benefit of non-car modes. Our concern is that it is very likely that the proposed plan will result in the growth of single occupant vehicles both in absolute (total number of cars) and relative (modal share) terms. In this regard, the amount of effort and investments is not properly balanced between transit/active transportation and roadway related improvements and we'd like to see a bigger and bolder approach to this Transportation Plan.

Questions: Is there an objective to decrease the non-car modal share by 2050? Has the Plan considered the impact of CAV's and/or other emerging technologies that could increase capacity without the need for extensive widening and/or the extension of new highways?

Comments Pertaining to Goal 1: Improve Transit Connectivity

The importance of various elements must be considered by comparing their relative importance in the entire plan. No details are provided about the amount of investment into various modes of travel, which would provide a clearer picture of the real priorities.

Most transit investments are for high-cost transit infrastructure, which means most of the transit funding is for relatively small geographic areas. Focusing on some high-density corridors is good and effective, but the freeway expansions will continue to generate much more low-density, car-oriented land uses. The short-term impacts of the additional capacity would provide some relief from congestion, but the inability of non-car modes to compete in these areas and the resulting car-oriented land use will generate mostly car-based trips, and a much worse congestion condition in the medium/long-term. The well-known impacts of car-based transportation on land use and the associated induced travel seem to be unaddressed in this Plan. In this regard, it may be more meaningful to use funding intended for highway expansion to provide greater access to higher order transit to/from areas that would otherwise be auto-centric. In order to create a fundamental shift in travel demand and modal share, alternate modes of transportation need to be faster, more convenient and less expensive than single occupant vehicles. Focusing funding on the connection of land use, transit and active transportation would have a much better chance to achieve the stated vision.

The importance of sequencing the implementation of facilities for different modes is also fundamental. If transit improvements come first, they will trigger appropriate land use and travel behaviour, resulting in lower mode share of car travel. If car-based transportation comes first (with highway capacity expansion), land use will become car-oriented and it will be very difficult to change the resulting travel behaviour and land use and the modal share of cars will only increase over time.

For example, in the context of the Region of Waterloo, there are both highway and transit improvement initiatives. There are plans to improve the rail connection between Kitchener/Cambridge and Guelph (and Toronto), and there are plans to provide a newly realigned freeway between Kitchener and Guelph. While improvements to both modes of travel would be good for the Region, the ultimate impacts on travel behaviour and land use will be different depending which improvement happens first. Having transit improvements first (such as GO and Via Rail improvements) would shift travel behaviour away from cars whereas, on the contrary, providing the freeway improvement first would do the opposite.

Changing the structure of the transit network from a radial to a grid design makes sense from the perspective of better connectivity between various areas in the GTA/GGH. However, for a grid structure to be effective (i.e. sufficient frequency) and sustainable (i.e. sufficient ridership), there must be supporting land use density around these lines and/or nodes. Land use decisions, transit investments and roadway expansion plans must be coordinated so that they would support each other. This means that there must be supportive land use plans to increase density along these corridors/nodes and much less low density/car oriented development far from these nodes; and (ii) highway based investments in these corridors should not be competing with transit. An enhanced focus on strategic station area planning would also help to alleviate congestion related to passengers accessing the major transit areas.

In addition to rail improvements that would support targeted commuter areas such as Mississauga, Toronto, Brampton and Hamilton, the Region of Waterloo is in critical need of high-quality provincially-supported inter-regional commuter bus transit service between the Region of Waterloo and neighbouring municipalities (i.e. Hamilton/Burlington, Guelph, Brantford, London, etc.). We also feel it would be prudent to include the ION Stage 2 LRT project under the Committed network (rather than Conceptual) since the project has been given Transit Project Assessment approval.

Comments Pertaining to Goal 2: Relieve Congestion

As stated, this objective is often interpreted in different ways. For some, it may mean that congestion relief could be achieved by sufficiently increasing roadway capacity. There is plenty of experience showing that, in the long-term, congestion cannot be decreased in urban areas by focusing on increases to roadway capacity. We recommend changing this objective to a more meaningful one, such as: Reducing the Number of People in Congestion. This objective should be more focused on relieving congestion for the benefit of goods movement and transit users which would better capture the benefits of managed lanes, roadway/congestion pricing, and other measures that divert people from single occupant car travel during peak times.

The Plan for managing congestion relief should also include an element of addressing the long-term impacts of the current pandemic on transportation. Current models do not take into account hybrid working arrangements or staff relocation. These are very important aspects of society's new normal and will have a lasting impact on how and when transportation choices are made. A reduction of even 10% of daily commuters would have a major impact on the need for road widenings. Transportation models should be updated to reflect and predict the anticipated variations as a result of these societal changes. We did not see a reference to the impacts of the pandemic in this discussion paper.

This Plan should also encourage the optimization of the existing roadway network using tools such as the expansion of centralized traffic adaptive systems and the adoption of roundabouts at rural highway intersections as a means for small gains to maximize the

existing network, rather than a series of highway widenings and expansions to the network.

Comments Pertaining to Goal 3: Give Users More Choice

The inclusion of a Comprehensive Active Transportation Network is a good and much-needed element. The plan to work with municipalities on developing local cycling networks is an important one. While freeways provide good connectivity for motorists within and between urban areas, they provide barriers to active transportation in urban environments. One of the most effective short-term actions would be the revision of the interchange design standards and the introduction of designs that are fully-supportive of active transportation. These designs should include both the cross section elements of bridges/ underpasses and intersections/on/off ramps and should also provide retrofit design options as well.

Another important element is to focus on active transportation networks between urban centers. Linking cities with all ages and abilities (AAA) active transportation facilities throughout the province will provide an opportunity for a robust micromobility network. E-bikes can be a reasonable choice between urban centers if appropriate facilities are available.

Comments Pertaining to Goal 4: Keep Goods Moving

One of the significant issues of trucking is the lack of truck parking on 400 series highways. That is an issue not only from the economic perspective, but also from the traffic safety perspective. With Hwy 401 and other primary 400 series routes within the GGH being some of the busiest goods movement corridors in North America, there should be a review to allocating existing lane(s) to goods movement traffic only along the 400 series highways.

There may also be an opportunity for the province to promote urban design that truly integrates last-mile delivery in residential and commercial areas. This becomes more important with needed increases in mode shift to walking, cycling, and rolling, since a lack of neighbourhood planning for this means a lot of delivery trucks blocking sidewalks and cycling infrastructure. There should also be public policies that encourage low-energy, low-space delivery options, including and especially cargo e-bikes (there are currently some pilots running on this).

Comments Pertaining to Goal 6: Future Ready

Environmental impacts, including climate change does not figure prominently in the report. Due to its importance, there should be much more emphasis on the impacts of transportation on GHG emissions.

Focusing on investments in the automotive sector to shift to electric vehicles and on the Ontario Vehicle Innovation Network are a very small step which may not produce the

GHG reductions that are vital to the planet's future. Road widening is known to increase vehicle kilometres travelled, which increases GHG emissions. Even if all vehicles transition to EVs, this will keep Ontario communities reliant on high-energy use and will be environmentally and financially unsustainable for individuals and governments. It will not be possible for municipalities to meet their GHG reduction targets and thrive in the energy transition underway while public policy and expensive widening projects increase VKT for energy inefficient vehicles. Further, any discussion of electric vehicles to reduce GHG's should also discuss the entire GHG lifecycle of an electric vehicle, including manufacturing, maintenance, disposal and particle pollution through daily use (tyre and brake particles).

The fundamental question is whether or not the entire transportation plan is positioned to achieve the GHG target emission reduction. Is there enough shift to no/low carbon travel to offset the growth in population and economic activity? It appears this aspect of future planning did not get sufficient attention.

Should there be any request for clarification from the MTO project team, please feel free to reach out for further discussion.

/DS

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