August 27, 2021

BY EMAIL ONLY (Katerina.Downard@ontario.ca)

Katerina Downard Ministry of Transportation Environmental Policy Office 777 Bay Street, Suite 700 Toronto, ON M7A 2J8

Re: Greater Golden Horseshoe Transportation Plan – Discussion Paper (ERO #019-3839)

Thank you for the opportunity to comment on the Ministry of Transportation (MTO)'s Greater Golden Horseshoe (GGH) Transportation Plan Discussion Paper ("the Paper"). We understand that the Paper proposes a 30-year vision for mobility designed as a safe, seamless, and accessible transportation system for all Ontarians. It also sets out current and future transportation challenges and illustrates and describes ongoing and conceptual actions to help overcome them, including innovative approaches to policy solutions and new ways to partner, procure and deliver infrastructure and related services. Ultimately, feedback is being sought to inform the development of the forthcoming GGH Transportation Plan ("the Plan"), which is targeted for release later in 2021.

The Toronto and Region Conservation Authority (TRCA) conducts itself in accordance with the objects, powers, roles, and responsibilities set out for conservation authorities (CA) under the *Conservation Authorities Act* and the Ministry of Natural Resources and Forestry Procedures Manual chapter on CA policies and procedures for plan review and permitting activities. TRCA is:

- A public commenting body under the *Planning Act* and *Environmental Assessment Act*;
- An agency delegated the responsibility to represent the provincial interest on natural hazards under Section 3.1 of the Provincial Policy Statement (PPS);
- A regulatory authority under section 28 of the *Conservation Authorities* Act (CA Act);
- A service provider to municipal partners and other public agencies;
- A Source Protection Authority under the Clean Water Act;
- A resource management agency; and
- A major landowner in the Greater Toronto Area.

In these roles, and as stated in the Made-in-Ontario Environment Plan, TRCA works in collaboration with municipalities and stakeholders to protect people and property from flooding and other natural hazards, and to conserve natural resources.

Through the application of <u>The Living City Policies</u> (LCP), TRCA promotes natural heritage conservation and landscape connectivity throughout our jurisdiction. TRCA takes a watershed-based approach to our review of transportation infrastructure projects within our Regulated Area through various avenues, including service level agreements, review of master plans and environmental assessments (EAs), as well as through our Permit or Voluntary Project Review (VPR) processes for projects at the detailed design stage. TRCA works with transportation agencies, municipalities and

developers in the planning, siting, and alignment of public infrastructure, recognizing the critical role of protecting people, property and infrastructure from natural hazards and avoiding or mitigating impacts to the natural heritage system in our watersheds. In this way, TRCA and its public and private partners take a collaborative and inter-disciplinary approach to ensuring a sustainable interface between transportation systems and the natural system that strives for resilience to climate change. Also integral to this work is TRCA's nature-based recreation network of parks and trails on TRCAowned or managed lands that provides opportunities for active transportation, forming an important part of the regional transportation network.

General Comments

TRCA generally supports the Paper's long-term vision for mobility across the GGH, particularly as it relates to a more resilient and environmentally sustainable transportation system that will mitigate environmental impacts and adapt and respond to climate change risks. We believe that to optimize transportation infrastructure investments requires an integrated approach of complete community building that employs active transportation, avoids, or mitigates and remediates natural hazards, and conserves and enhances greenspace, thereby improving mobility and reducing transportation-related environmental and human health impacts. To this end, we offer the following comments and **bolded** recommendations for the Ministry's consideration. Please note, in conjunction with these general comments, **the enclosed attachment provides detailed commentary specific to sections of the Paper**.

1. Further Integrate Transportation Planning with Land Use and Environmental Planning:

Certain sections of the Paper are fragmented from the Province's land use planning and environmental frameworks. For example, rapid growth is deemed a key transportation issue and extensive transit and road expansions are identified as capacity and connectivity solutions with vast economic benefits. However, there are other forward-looking policy solutions put forward in related provincial plans that could be coordinated with these actions to improve integration and implementation. For instance, the goals of improving access to jobs, reducing congestion (and carbon emissions), facilitating active transportation and transit-oriented development, and reducing environmental impacts are co-dependent on planning for complete communities with transitsupportive densities and ensuring infrastructure is optimized, while protecting natural systems. **We recommend integrating or cross-referencing policies and objectives of the Plan with other provincial policy goals to ensure transportation system planning, land use planning and transportation investment are coordinated effectively**.

2. Consider Additional Innovative, Sustainable Transportation Solutions:

Further to the above comment, we note that there are other transportation solutions successfully being implemented in comparable urban regions, such as future high-speed rail to connect urban centres, that could be coordinated with the actions identified in the Plan. We recommend integrating transit hubs with linkages to active transportation in areas outside highly urban areas, and exploring opportunities to improve the state of natural hazards or natural heritage connectivity through new infrastructure projects.

Further to the above, the Paper provides little emphasis on the need to reduce environmental impacts associated with transportation and land use patterns that favour automobile access. As

transportation infrastructure expands and extends, so too does the accompanying built form that is typically over, adjacent, or in relative proximity to it. This can have a multitude of impacts on the natural system (e.g., anthropogenic pressure, habitat loss, pollutants) and the ecosystem benefits provided (e.g., stormwater management, carbon sequestration), which should be considered in relation to other public interests (e.g., economic, social). We recommend that, where appropriate, Plan policy should support the adaptive reuse and upgrade of existing transportation infrastructure (particularly road/highway networks) prior to expansion, and especially for cyclist, pedestrian and public transit use and stormwater management, and encourage a shift away from auto-centric engineering standards and road/highway expansion as the primary means of alleviating congestion. This would be in keeping with a priority identified by respondents to MTO's 2020 survey on the GGH Transportation Plan to "make better use of the roads, railways and other infrastructure we already have."

3. Emphasize Protection of the Natural System to Avoid and Mitigate Climate Change Impacts:

A top priority identified by respondents to MTO's 2020 survey on the GGH Transportation Plan is to, "make getting around healthier for me and the planet." To help achieve this important objective, **the Plan should emphasize protection of the natural system as a means of avoiding and mitigating climate change impacts**. This includes designing and constructing the region's transportation system to: avoid natural features and hazards, but where crossings must be located in these areas, ensure they are appropriately sized to convey appropriate storm events (e.g., conservation authority regulatory storm events); allow for natural channel movement and water balance; minimize impacts on side slopes, and include construction impacts related to staging, storage and access requirements in detailed design (i.e., in addition to the infrastructure footprint). These objectives are important to protect people and infrastructure from natural hazards like flooding and erosion, and to preserve the form and long-term function of these features. Components of the natural system like wetlands, woodlands, valleys, and watercourses all contribute to resiliency and climate regulation by filtering air and water pollutants, mitigating for urban heat island effects, and slowing storm and flood waters, while also providing habitat that helps maintain biodiversity.

4. Codify an Ecosystem Compensation Process to Ensure no Net Loss of the Natural Heritage System and Strive (where possible) for Net Gain:

Goal 6 (Future Ready) includes sample actions for minimizing the impact on the natural environment such as supporting the adoption of low and zero carbon modes and green technologies. While these are important, one of the most significant environmental impacts of establishing or expanding transportation corridors is the amount of land removed from the natural system. Where possible, transportation infrastructure should generally be located outside of the natural system, and where crossings are required, their locations should be specifically located to minimize impacts to the natural system. Although new and upgraded transportation systems often cannot avoid impacts to natural heritage, including wildlife corridors and overall landscape connectivity, the preservation of natural areas and features should be examined first. **Given the common necessity of locating transportation infrastructure within or crossing the natural system, we recommend policy that requires ecosystem compensation to achieve, at a minimum, no net loss of natural areas, and where possible, strives for a net gain. This would contribute to achieving other objectives and cobenefits as well, such as air quality, healthy living and managing climate change risks. TRCA has**

worked with Metrolinx to develop an "ecological compensation" framework where feature removals within designated natural areas are required to facilitate Metrolinx capital projects. This protocol is based on <u>TRCA's Guideline for Determining Ecosystem Compensation</u> and has been incorporated into the <u>Metrolinx Vegetation Guideline, 2020</u>. We would be pleased to work with the Province to develop a similar protocol.

5. Reference the Importance of Managing the Risk associated with Natural Hazards:

There is minimal reference to natural hazards (e.g., flooding and erosion) throughout the Paper. We recognize that, by nature, certain infrastructure may need to cross hazardous lands and, by virtue of its location and design, can adversely affect risk to life and property associated with natural hazards, particularly in more urban areas. However, the level of risk, and number and severity of emergency responses, can be mitigated by infrastructure siting, alignment, design and construction standards that consider natural hazards. We suggest that the Plan require that, where possible, new, replaced, upgraded and/or expanded transportation infrastructure be carefully sited and designed to:

- avoid, mitigate and remediate risks associated with flooding, erosion or slope instability
- protect, rehabilitate and restore existing landforms, features, and functions; and
- provide for aquatic, terrestrial and human access

The Plan should also reference the above direction as part of any proposed coordinated emergency response plan. Please note that, where transportation infrastructure must be located within hazardous lands or hazardous sites, TRCA has experience working with municipalities and other public infrastructure providers to ensure potential emergencies during construction and operation are addressed through techniques such as environmental monitoring, and contingency and emergency management planning.

6. Enable Implementation of Sustainability Initiatives:

TRCA supports proposed initiatives that would improve the sustainability of the region's long-term transportation system, such as building transit stations in highly urban areas, supporting low- and zero-carbon modes, including active transportation, electric and hydrogen powered vehicles, encouraging off-peak delivery, and better connecting walking and cycling paths. We generally support the integration of these sustainability initiatives into the Plan based on feedback from key partners, including conservation authorities. **Should future policies be developed to reflect the proposed sustainability initiatives, we recommend cross-referencing them with actions and associated impacts and/or co-benefits to help ensure policies are more comprehensive and inclusive in nature. For example, there are opportunities for points of synergy between goods movement and air quality issues or active transportation and fuel options, both of which are increasingly important in urban areas. We suggest referencing the <u>Metrolinx Sustainability Strategy</u> as a starting point in this regard.**

7. Promote a Connected/Integrated Active Transportation Network:

We note proposed actions to create a safe, connected and comprehensive active transportation network and improve local and regional cycling linkages by working with municipalities, Indigenous communities and agencies to connect existing and planned cycling routes, infrastructure and amenities with the Province-wide Cycling Network. TRCA has developed a <u>Trail Strategy for the</u> <u>Greater Toronto Region</u> in consultation with our municipal partners to achieve the vision of a

complete regional trail network that connects our growing communities to nature, to culture, and to each other. It serves as a framework to protect potential trail alignments for a network from the Oak Ridges Moraine, through the valleys of nine watersheds within TRCA's jurisdiction and along the Lake Ontario shoreline. Further supporting these regional trail alignments, are the local trails which provide connections between the network and the communities they benefit, further connecting residents to nature and to each other, and providing opportunities for community, recreation, active transportation, and healthy living. TRCA's <u>Trail Strategy for the Greater Toronto Region (and Trail</u> <u>Strategy Data</u>) can help provide the foundation for existing and planned active transportation routes across our jurisdiction, as well as potential strategic points of synergy with broader trail networks and major transportation infrastructure projects and mobility hubs.

8. Participate in Voluntary Project Review (VPR):

Under the EA Acts (federal and provincial) TRCA is a commenting agency engaged in the review of transportation infrastructure projects. However, where municipalities and private sector proponents are required to obtain TRCA permits under the *Conservation Authorities Act*, Crown agencies are exempt from doing so. In recognizing TRCA's science-based expertise to avoid impacts to natural systems, mitigate risks from flooding and erosion, and identify opportunities for ecosystem restoration and enhancement through the review of detailed designs submitted through the EA review and TRCA permit process, Metrolinx engaged TRCA to develop a VPR process. **Metrolinx has made a commitment for obtaining VPR from TRCA at the detailed design stage for all station expansion and ancillary facilities. It is recommended that MTO commit to TRCA's VPR process for transportation projects in our jurisdiction.**

Thank you once again for the opportunity to provide comments on the GGH Transportation Plan Discussion Paper. Should you have any questions, require clarification on any of the above, or wish to meet to discuss our remarks, please contact the undersigned at 416.661.6600, Ext. 5281 or at laurie.nelson@trca.ca.

Sincerely,

<Original Signed by>

Laurie Nelson, MCIP, RPP Director, Policy Planning

Encl. <u>BY E-MAIL</u> cc: TRCA: John MacKenzie, Chief Executive Officer Sameer Dhalla, Director, Development and Engineering Services Anil Wijesooriya, Director, Restoration and Infrastructure Beth Williston, Associate Director, Infrastructure Planning and Permits

Greater Golden Horseshoe Transportation Plan: Discussion Paper (ERO#019-3839) TRCA Comments

Greater Golden Horseshoe Transportation Plan – Discussion Paper		
Section	TRCA Comments	
1. INTRODUCTION		
Purpose of this discussion paper	 We generally support the commitments to invest in a well-functioning transportation system for the GGH and engage with key partners to ensure shared goals related to the vision are realized. While the need to provide creative solutions to known challenges, new transportation options and better connections is important at a high level, more aspirational and innovative improvements to infrastructure, services and programs could be incorporated. For example, going beyond conventional short-term solutions, e.g., improving commute times through more frequent service and reducing gridlock through capacity expansion, and the conceptual action of "considering new technologies". We suggest outlining a more sustainable planning vision with detailed mobility solutions based on best practices from other urban regions, such as high-speed rail and more adaptive re-use of existing transportation infrastructure. 	
The transportation challenge	 The economic impacts of inefficient travel and goods movement and changing demographics associated with rapid growth are emphasized. However, there are other environmental and social challenges integrated with transportation planning which should also be noted. For example, the quantum of land needed to maintain and expand the region's transportation system (and associated development) that encroaches upon natural features and the resulting carbon emissions that result from increased vehicular travel. We suggest emphasizing the need to address these challenges in an integrated manner. TRCA is pleased to have been engaged in the previous 	
	consultations on the development of the GGH Transportation Plan and would be glad to continue to provide feedback as the Plan is finalized.	
2. A VISION FOR MOBILITY IN 2051		
Questions: Does this section contain the right initiatives and concepts? Do you agree with the elements of the vision?	 This section contains many good initiatives and concepts; however, the following actions should also be incorporated through the development of the Plan: Development of high-speed rail to connect urban corridors across the region. Transit hubs with linkages outside dense urban centers (in addition to within them). 	

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Getting people moving on a connected transit system	 Adaptive re-use of existing infrastructure (specifically road/highway) prior to expansion, including for cyclist, pedestrian, and stormwater reduction purposes. First-mile/last-mile solutions and for better services to act as viable connections between different modes. Funding to support infrastructure development/ investments, maintenance/state of good repair/life cycle management, and communications to promote use of alternatives should be emphasized. Active transportation modes, designated carpool lots to provide connection hubs, and support for and prioritization of electric vehicles, alternative and renewable fuels, are key to improving community health and reducing transportation related GHG emissions. The vision identifies a need for "new infrastructure", "better services" and "new policies". We agree with these in principle, but there are other needs which must also be considered, specifically the avoidance and mitigation of natural hazards and natural heritage in infrastructure planning with the aim of reducing (or other forms of active transportation) as a first choice for short trips should be linked to land use planning, i.e., compact, transit supportive and environmentally sustainable communities with proximity to employment, housing, public services, recreational opportunities, etc. Doing so reduces reliance on automobiles, improves access to transit and helps protect lands for other uses, e.g., agricultural, environmental. In the context of the 2051 vision, moving from "today's radial commuter network" to an "expansive grid" may not be reflective of long-term goals as Union Station and the surrounding downtown core will largely remain the focal point for commuting/connections. We suggest stating something like, "from today's radial commuter network" with most connections we suggest station, incorporate many different modes of transportation, also incorporate many different modes of transportation,
Question: Are these the right	 which seems in keeping with vision objectives. Explore high-speed rail to better connect the region's urban control improve commuting times and reduce reliance on
initiatives and concepts for the transit system in 2051?	centres, improve commuting times and reduce reliance on auto-related travel.

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Enhancing capacity and performance on congested roads	 Re: "Exploring options to manage passenger travel demand and congestion", we are pleased to see telecommuting and flexible work hours recognized. Doing so will help reduce vehicular travel and congestion – both of which have environmental benefits. However, reducing the need for travel in general is also a major issue. A multitude of engineering and planning studies maintain that widening highways, while having a positive effect in the short term, do not work in the long term to reduce congestion. Perhaps reconsider the goal to think more in terms of eliminating a need, then reducing it and then minimizing its impact.
Question: Are these the right initiatives and concepts to enhance the road network and address congestion?	 As noted above, highway widening is widely perceived to be an expensive short-term solution to alleviate traffic congestion. Integrated land use planning (e.g., complete communities) and alternate forms of transportation (e.g., public transit, active transportation) can be viable alternatives with sound economic benefits and reduced environmental and agricultural impacts.
Efficiently moving goods across GGH Question: Are these the right initiatives and concepts to address future freight needs?	 Goods movement should be addressed in a manner that also addresses other impacts and co-benefits, such as urban air quality, much of which particulates from diesel fuel burning. Improving goods movement while also incorporating alternative fuels could, in turn, improve local air quality and public health.
3. NEAR-TERM ACTIONS Question for each Goal: Are these the right actions to take now? What else can we do to improve these elements of transportation?	• In addition to addressing environmental impacts and climate impacts as part of the Future Ready section, there needs to be near-term actions, such as incorporating a climate lens into procurement of products and services. This could begin to lay the groundwork for reducing embedded carbon in the infrastructure that will be developed. This is another opportunity for leveraging current innovation for longer term gain, as Ontario is positioned economically as a leader in low carbon products and services in construction.
Goal 1: Improve Transit Connectivity	

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 A. Transit Connectivity B. Transit Integration C. Access to Transit by Active Transportation 	 Re: "Establishing a Fare and Service Integration Provincial- Municipal Table", recreation destinations should be included as key destinations. This has been essential to physical and mental health during the COVID-19 pandemic and can reduce the greenspace dedicated to parking. Re: "Making it easier to walk or cycle to or from transit", provide bike storage and repair facilities at transit hubs. Re: "Developing a best practices guideline document to support updates to the e-bikes framework", please note that this can be a good thing for people with physical limitations because it can allow then to go further than under their own power. 	
Goal 2: Relieve Congestion	 From a sustainability perspective, public transit and e- services should be included as significant contributors to congestion relief. The co-benefits of better work-life balance that would be created could also be highlighted. 	
 A. Optimize Existing Corridors B. Provide Route Alternatives C. Provide Alternative Ways to Travel D. Reduce the Need for 	 Re: "Developing transit-oriented communities at transit stations in strategic locations", active transportation should be considered an alternative travel choice. This could include cycling on major highways (no additional land base needed, with existing connection to communities). Leveraging major highway projects such as any new or expanding highway should, where appropriate, include 	
Travel Goal 3: Give Users More Choice	active transportation facilities (ideally separated to provide an improved perception of safety and therefore attract more users as a viable alternative to vehicular travel).	
A. Transit Availability	• Re. "Improving local and regional cycling linkages", TRCA's	
B. Comprehensive Active Transportation Network C. Barriers to Transit	<u>Trail Strategy for the Greater Toronto Region</u> was developed in consultation with our municipal partners and can provide the foundation for the existing and planned routes,	
Access D. Mobility as a Service	 infrastructure, and amenities in the TRCA region. We suggest improving linkages for trail and active transportation networks to the planned transportation network. There will be stand-alone local and regional cycling linkages but there will be some strategic projects that could be incorporated into planned major road infrastructure projects. TRCA's trail strategy may be useful in identifying 	
	where these synergies occur.	
Goal 4: Keep Goods Moving	• To improve officiancy all conneyed area dealling	
 A. Competitiveness B. Regional Coordination C. Sustainability and Efficiency 	 To improve efficiency, all approval agencies (including conservation authorities) should be engaged early (preferably during the RFP process) and often throughout all planning phases to understand and inform all criteria and planning/design requirements. 	

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	 Sustainability and Efficiency could be cross-referenced with being Future Ready, e.g., where there is reference to alternative fuels. Doing so could also help address an air quality and human health co-benefit.
Goal 5: Safe and Inclusive	
 A. User Safety B. Emergency Preparedness C. Equality of Opportunity 	 Re: "enhanced safety measures for at-grade road crossings", TRCA appreciates this being discussed in the Paper. Rail crossings can be a significant barrier to a well-connected active transportation network. The number of and severity of emergency responses can be reduced by siting and planning new or upgraded infrastructure to avoid/address natural hazards, and by designing infrastructure to a higher standard considering a "changing climate" as outlined in the PPS, 2020 and considering flood and erosion hazards, with support from conservation authorities.
Goal 6: Future Ready	
A. Environmental Impact	 The document needs to address the natural environment beyond carbon impacts, including minimizing impacts to sensitive environmental lands. Environmental impacts should also include embedded carbon in the development of infrastructure. Please note, Infrastructure Canada is currently making a similar request. They are also partnering with the cement industry to develop carbon neutral cement by 2050. This is an area where Ontario already has some leadership and could accelerate this progress through procurement practices and partnership with private sector and industry associations. The co-benefits of reduced impacts on the environment, climate, air quality and human health should be included.
B. Resiliency	 A stronger commitment to mitigating aspects of climate change while improving transportation systems is needed, including reducing flooding and erosion hazards and intrusions within natural systems. Overall, increasing resilience to climate change can be linked back to protecting and enhancing the natural system that helps offset GHGs and provides green infrastructure that contributes to mitigation of flooding and erosion. The Plan should tie back to the protection of natural systems through the avoidance and mitigation of impacts and speak to the need to provide compensation for any unavoidable losses. We suggest these links be made when developing the Plan.

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C. Emerging Technologies	 The innovation corridor is an excellent idea. TRCA's <u>Partners</u> in <u>Project Green</u> (PPG) program could assist with this initiative through its partnership with the Greater Toronto Airport Authority and its network of businesses. Our <u>Sustainable Technologies Evaluation Program</u> (STEP) could also help with the evaluation of new technologies. Transportation is a significant issue for urban air quality, especially with articulates. Alternative fuels would help to address air quality and human health as co-benefits. Low carbon technologies (beyond AVs) should be noted, including electric and hydrogen. Ontario announced its first bio-refinery by the private sector in 2019 and will produce renewable jet fuel and renewable diesel. Although not as clean as electric and hydrogen, they may be good transition fuels that support economic growth.
Goal 7: Muskoka, Haliburton and	•
4. IMPLEMENTATION & NEXT ST	
We are seeking your ideas for ways to achieve the vision, including: - Collaboration, coordination and new ways of working together to align our actions - New and innovative approaches to policy solutions and programs - New ways to partner, procure and deliver infrastructure	 Consider a consolidated planning option when working with multiple approval agencies, where you gather decision makers for all approval agency parties together in a single meeting early into the project. This would provide the opportunity to review the project, evaluate challenges and brainstorm solutions/mitigations. In doing so, all parties can see what all approval agencies' requirements are and come to a consensus solution that all parties can agree on or negotiate with. Such meetings held at regular intervals would assist with working through multi-agency issues and approvals to avoid delays.
Question: Are the goals and near-term priorities and actions the right areas of focus?	Please see general comments.
<i>Question</i> : What else should be done in the near-term?	 Invest in state of good repair of existing infrastructure so connectivity and functionality are not lost from the existing network.
Question: Are there implementation considerations as we develop the GGH Transportation Plan and turn the 2051 vision into reality?	Please see general comments.