

City of Vaughan

Transportation and Infrastructure Task Force



Findings and Recommendations Report

April 20, 2022



Table of Contents

1. INTRODUCTION.....	1
2. OBJECTIVES	2
3. BACKGROUND.....	3
4. RECOMMENDATIONS AND RATIONALE	4

List of Appendices

APPENDIX A – TRANSPORTATION AND INFRASTRUCTURE TASK FORCE TERMS OF REFERENCE

APPENDIX B – TRANSPORTATION AND INFRASTRUCTURE TASK FORCE DETAILED RECOMMENDATIONS



1. Introduction

At its meeting on May 14, 2019, Council adopted Item 9, Report No. 7 of the Finance, Administration and Audit Committee titled “*Mayor Maurizio Bevilacqua’s 2018-2022 Term of Council Priority Task Forces.*” In so doing, Council approved the establishment of three task forces, including the Transportation and Infrastructure Task Force. Ward 3 Councillor Rosanna DeFrancesca, and Local and Regional Councillor Gino Rosati were appointed Chair and Vice-Chair, respectively, of the Task Force.

In October 2019, Council approved the Terms of Reference, provided in **Appendix A**, for the Transportation and Infrastructure Task Force with the following overall mandate:

“To assist the City in finding new and innovative ways to manage and make its transportation systems more sustainable amid the rapidly changing landscape of Vaughan. This will also include developing a coordinated set of transportation priorities and identifying new revenue sources dedicated to making the City’s transportation system more reliable, efficient and better prepared to accommodate future growth.”

Recruitment was undertaken for 12 individuals consisting of four (4) technical members and eight (8) citizen representative members with a diverse skill set to fulfill this mandate. Council appointed members of the Task Force include the following:

Technical Members:

- Fabrizio Guzzo, Director, York Region Transit (YRT)
- Margaret Mikolajczak, Senior Project Manager, Ontario Ministry of Transportation (MTO)
- Doug Spooner, Director, Service Planning, Planning & Design, Metrolinx
- Brian Titherington, Director, Transportation & Infrastructure Planning, York Region

Citizen Representative Members:

- Alexander Bonadiman
- Anthony Francescucci
- Celia Lewin
- Daniel Henrique
- Guillermo Rybnik
- Jillian Britto
- Lito Romano
- Lucio Polsinelli
- Majid Babaei
- Maurizio Rogato
- Thanh Nguyen



Advisory and technical support for the Task Force was provided by staff from the City's Infrastructure Planning & Corporate Asset Management, Transportation & Fleet Management Services, and Corporate and Strategic Communications departments. Staff made themselves available to provide support, educate, clarify, and aid the Task Force in their deliberations. The Task Force thanks City staff for their valued assistance and support.

2. Objectives

The Transportation and Infrastructure Task Force was given the following objectives:

1. Serve as a forum for improving transportation and infrastructure solutions among residents, businesses, and other stakeholders.
2. Work with key organizations, like the Association of Municipalities of Ontario (AMO), the Federation of Canadian Municipalities (FCM), the Regional Municipality of York, Ontario Ministry of Transportation (MTO) and Metrolinx to ensure Council-approved initiatives are advocated for to the Provincial and Federal governments.
3. Further explore research, best practices and findings related to innovative congestion management efforts across Canada and the world. Advise in identifying strategies, policies and activities for a comprehensive approach to congestion management.
4. Provide strategic input for the update and implementation of the City's Transportation Plan.
5. Recommend measures to increase the use of active transportation in the City, resulting in recognizable and measurable improvements in cultivating a healthier and safer community.
6. Review matters referred to the Task Force by Council relating to the safe and efficient movement of people and goods, and the development of the City's infrastructure to provide strategic input where necessary.
7. Identify opportunities to leverage partnerships and opportunities with relevant parties, including York Region, other local municipalities, governance organizations, other levels of government and the non-profit sector, to:
 - a. Achieve objectives of the Transportation and Infrastructure Task Force; and
 - b. Contribute to areas of common interest aligned with the City's Citizen Satisfaction Survey results, Transportation Master Plan, and the 2018-2022 Term of Council Service Excellence Strategic Plan.
8. Align the work of the Task Force members with Council-approved priorities identified in the 2018-2022 Term of Council Service Excellence Strategic Plan.



3. Background

The Transportation and Infrastructure Task Force met on the third Wednesday of every other month from November 2019 to April 2022, with a brief pause in early 2020 to adapt to the pandemic conditions, and a Council approved extension to April 2022. In addition to extensive discussions, the Task Force heard presentations on the following City and Regional projects:





- Vaughan Transportation Master Plan;
- Vaughan Traffic Management Strategy;
- Vaughan Shared Mobility Pilot – Feasibility Study;
- York Region Transportation Master Plan;
- Vaughan Environmental Assessment Updates;
- An Update on York Region’s Municipal Comprehensive Review;
- Vaughan MoveSmart Mobility Management Strategy;
- Vaughan Active Transportation Update;
- Vaughan Micro-Mobility Framework;
- GTA West Transportation Corridor Route Planning, Preliminary Design and EA Study – Stage 2; and
- City of Vaughan Strategic Plan (2022-2026).

The Task Force members’ experience and expertise provided valuable insight in developing recommendations for future transportation planning within the City in line with the following strategic themes:

1. Improvements to existing communities to support alternative modes of transportation;
2. Value for money in infrastructure improvements (cost benefit analysis);
3. New and emerging transportation technologies to complement / inform a transportation system; and
4. Multi-modal streets – balancing road widening with active transportation improvements.

The Transportation and Infrastructure Task Force members were divided into two sub-committees to delve deeper into the key strategic themes, which commenced with understanding the problems within each theme to determine what the future outcome would look like once the problem is solved.



Improving System Sustainability	Channeling Innovation
 Improvements to existing communities to support alternative modes of transportation.	 New and emerging technologies to complement a transportation system.
 Multi-modal streets – balancing road widening with active transportation improvements.	
 Value for money in infrastructure improvements.	

The key opportunities and proposed recommendations from the Task Force are outlined in the following section.

4. Recommendations and Rationale

Over the term of the Transportation and Infrastructure Task Force, the appointed members with support from City staff, developed detailed recommendations to address current transportation issues and potential future transportation needs. These recommendations are a combination of current City initiatives and projects, and leverage partnerships with all appropriate government agencies, such as York Region, York Region Transit, Metrolinx, MTO and TTC.

A variety of recommendations were considered to ensure short-term and long-term improvements to Vaughan's transportation system focusing on the key strategic themes noted in the above section. Based on information gathered, the following represent the Transportation and Infrastructure Task Force recommendations and provide rationale behind the development of these recommendations. A detailed list of recommendations is provided in **Appendix B**.

Recommendation #1:



Implement the MoveSmart Mobility Management Strategy, specifically the Road Safety Program, the Sustainable Mobility Program, and the Active School Travel Pilot to encourage greater use of alternative modes.

Rationale: There are currently many existing communities that are very auto dependent with very little incentive to change established travel behaviours. Introducing Transportation Demand Management (TDM) measures could help provide incentives to adopt alternative modes of transportation.



Recommendation #2:



Implement the Rutherford Maple GO Mobility On-Request Pilot Project to reduce the number of transit users who drive and park at GO stations.

Rationale: Many Vaughan residents who live within transit-distance drive to and from GO stations. For approximately half the year, active transportation such as walking, rolling, and cycling is not a feasible mode of travel for first and last mile trips. Additionally, local transit is not always accessible or convenient, thus discouraging the use of public transit for such trips.

A Shared Mobility Feasibility Study completed in early 2020 identified micro-transit as the preferred type of service for a convenient alternative to driving to GO stations. Implementing this Pilot Project would be a step forward in the City investing in providing first and last mile mobility options, the lack of which are often a key barrier preventing commuters from utilizing public transportation. It will also allow for the testing of more flexible transit service options other than conventional fixed route bus service to economically accommodate lower ridership and enhance mobility at GO stations and beyond.

Recommendation #3:



Incentivize major employment developments within the City so that residents can live and work in Vaughan.

Rationale: There is currently a lack of businesses and/or major headquarters choosing to locate in Vaughan. Attracting these types of developments will support mixed-use communities and shorter trips as people would be able to work and live in Vaughan. Mixed-use communities would encourage more pedestrian and cycling trips, enhance the City's economy and provide a sense of place. It is key to work with major employers and businesses to understand and address barriers to locating offices in Vaughan.

Recommendation #4:



Design streets for people of all ages and abilities consistent with the Pedestrian and Bicycle Master Plan, the upcoming Vaughan Complete Streets Guidelines, and the future update of the Engineering Design Criteria and Standard Drawings.

Rationale: The introduction of Bus Rapid Transit (BRT) lanes along the centre of the road and consequently centre islands has led to more traffic making U-turns at intersections, more congestion and aggressive driving behavior hindering pedestrian safety. This is mostly a problem along residential streets such as Centre Street. The design has increased traffic in residential areas, leading to pushback against high-density developments.



Recommendation #5:



Implement recommendations of the Pedestrian and Bicycle Master Plan, including providing separated pedestrian and cycling facilities consistent with the Contextual Guidance for Selecting All Ages and Abilities Cycling Facilities.

Rationale: There is currently a lack of separated pedestrian and cycling facilities along major roadways. Cyclists mixing with general traffic is a major safety concern and, in some cases, when pedestrians must walk on the shoulder of arterial and/or collector roads that have sidewalks only on one side. Considering the low volume of cyclists and pedestrians in most areas of Vaughan, it is common for drivers to be unaware of them on the road, especially at intersections.

Majority of bike lanes are just paint on the road with no physical protection or separation from general traffic, resulting in a minimal increase in safety for cyclists. One example of greater separation between all modes of transportation is to implement cycling facilities adjacent to the BRT lanes and utilize centre medians as a physical barrier.

Recommendation #6:



Continue implementing the Transportation Demand Management Guidelines which encourage new developments to incentivize transit ridership.

Rationale: Higher-density developments and intensification needs to be in place to support local and higher-order transit services like GO trains and subway stations. This is key in ensuring that residents of these developments have adequate access and incentives to establish using non-auto modes of travel from day one. Therefore, new developments need to ensure they have an appropriate TDM plan in place through the development application process.

Recommendation #7:



Implement a transportation pilot program which will test new forms and methods of offering non-auto travel to residents and businesses.

Rationale: Currently Vaughan is an auto dependent City with almost 90% of trips made using a car while over 50% of trips are under five kilometers in length according to the Transportation Master Plan. There is currently a lack of incentives to switch from auto to non-auto modes of travel especially once these travel behaviours are established. While there is no one solution, it would be beneficial to encourage more pilot projects to test new forms and innovative methods of accommodating shorter distance trips using alternative modes of transportation especially for large trip generators such as universities, hospitals, business parks and high-density residential developments.



Recommendation #8:



Encourage and promote development in intensification areas and corridors by reducing reliance on single-occupant vehicles through lowered mandatory parking requirements for residents, increasing transit frequency and affordability, and enhancing transit and active transportation coverage and safety.

Rationale: Currently, the City is very car-centric in some residential areas and traffic congestion is one of the major concerns among residents. Although this is the outlook today, our vision for the future of Vaughan should be similar to that of the City of Toronto and we should maintain focus on a multi-modal approach. The vision for the City should be one where the combination of transit and active transportation is more convenient than driving. Society is moving towards non-auto modes of travel and higher densities are required to support that vision.

High mandatory parking requirements leads to the issue of housing affordability as the cost of providing this parking is subsidized by the whole building. Increasing transit frequency and availability to make it easier for residents to move away from cars could help with housing supply and affordability.

Recommendation #9:



Improve safety at pedestrian crossings through the MoveSmart Mobility Management Strategy, including the consideration of improved pavement markings, providing pedestrian signals and/or countdown timers, incorporating leading pedestrian intervals at signalized intersections and implementing pedestrian "scramble" phases at appropriate locations.

Rationale: There are several safety concerns with respect to pedestrian crossings at intersections. Major intersections are very wide to accommodate the number of through and turning lanes, which results in a less pedestrian friendly environment due to the large crossing distances. Additionally, low volume of cyclists and pedestrians in most areas of Vaughan results in drivers being unaware of them on the road, especially in congested areas.



Recommendation #10:



Incorporate mixed-use or residential developments above existing or new parking structures.

Rationale: Existing or future parking structures at major transit stations such as GO Transit and TTC stations could have mixed-use or residential developments above them to utilize the height and support higher-order transit services. This could be considered through the Official Plan Review process.

Recommendation #11:



Provide adequate flexibility with respect to daylight triangle requirements at intersections to design for all ages and abilities in conjunction with signal timing plan improvements to manage conflicts between u-turning and right-turning vehicles.

Rationale: The introduction of the centre BRT lanes has increased u-turning traffic at intersections within the corridor. This has led to an increase in conflicts with right-turning vehicles from the adjacent leg of the intersection such as at the intersection of Highway 7 and Pine Valley Drive.

The intersections along BRT corridors should be designed according to the latest Provincial and Regional guidelines with adequate signal timing plan improvements to manage conflicting movements. Additionally, the design should allow for flexibility in the size of the required daylight triangles.

Recommendation #12:



Develop a set of guidelines for micro-mobility devices including where and how they are permitted to operate, park, and charge, and an appropriate licensing regime.

Rationale: Currently, it is illegal to operate micro-mobility devices such as e-bikes, scooters and other self-powered vehicles in Vaughan, except in designated recreational areas within York Region. Micro-mobility is a low-cost mode of transportation that is an attractive first and last mile option to access public transit services. However, there is currently no clear guidance on how or where they can be used, safety regulations, licensing, etc.



Recommendation #13:



Incorporate charging facilities for electric vehicles at existing and new parking lots, and at all City facilities.

Rationale: The Government of Canada has set a mandatory target for all new light-duty cars and passenger trucks to be zero-emission by 2035. The City of Toronto has already started developing standards for electric vehicle parking provisions. Vaughan will also need to start updating their parking requirements to align with Provincial directives to prepare for electric vehicles leading the transportation system.

Recommendation #14:



Reduce minimum parking requirements as currently prescribed in the Vaughan Comprehensive Zoning By-Law No. 001-2021.

Rationale: Minimum parking requirements tend to lead to an oversupply of parking, which results in an increase in auto-dependency and greenhouse gas emissions. An abundance of parking encourages people to drive more often leading to an increase in traffic congestion, which hinders transit when in mixed-traffic conditions and makes it more difficult to improve travel conditions for non-auto modes such as walking, cycling and transit.

The trends we are seeing in transportation are shifting from auto-dependence to wanting a variety of mobility options. To better manage auto-dependence and build more sustainable and healthy communities, the City of Toronto has eliminated most minimum parking standards and have introduced maximum parking standards for most uses; Vaughan should also be looking to move in the same direction.

Recommendation #15:



Collect and analyze additional sources of transportation data such as Open Data, GPS, Bluetooth, embedded sensors and commercially available datasets.

Rationale: With the City growing and intensifying, travel demand will only increase to a point where typical road infrastructure improvements will not be able to keep up with the population and economic growth. Instead, innovation and technology should be considered to maximize the efficiency, reliability and sustainability of the road network for all users. There are various sources of data available within the public and private sectors that should be collected and analyzed to identify areas of higher traffic accidents, congestion, crime, etc.



Recommendation #16:



Incorporate data collection devices into all transportation construction projects.

Rationale: To assist the collection and analysis of transportation data, it is imperative to plan and design transportation infrastructure to include the required sensors and equipment for such collection prior to the construction rather than retrofitting the roadways or intersections later.

Recommendation #17:



Utilize key streets as temporary pedestrian zones for special events.

Rationale: City streets currently function as places to drive whereas streets need to be a more pleasant place to live and meet people or participate in various activities. Streets could be used to promote seasonal or permanent events such as farmer's markets or food festivals.

Pedestrian-only streets can be utilized to make communities more livable and walkable, especially when they are strategically connected to key public transit facilities, pedestrian paths, and bicycle routes. They can be used to prioritize people in areas of high commercial activity such as in mixed-use developments or downtown locations either through temporary closures to vehicular traffic or through the incorporation of Woonerfs or living streets.

Recommendation #18:



Advance discussions with Metrolinx and neighbouring transit agencies with respect to fare integration, distance-based fares and minimizing additional fares across jurisdictional boundaries.

Rationale: The transit experience can be challenging or overwhelming for some residents, especially when crossing municipal boundaries or switching between transit systems. The current approach to fares is very complex and varies with each transit service provider. In situations where the transit fare does not reflect the value of the trip could be discouraging transit use such as when short trips that cross municipal boundaries require two fares. In other situations, it is the complexity of navigating the rules of multiple service providers for a single trip that discourages travelers.

Transit service provision needs to be straightforward and hassle-free, with customer experience as the top priority to deliver seamless travel and a better commuting experience. Some strategies to enhance transit experience and increase ridership is fare integration on a regional level, off-peak fare discounts and distance-based pricing.



Recommendation #19:



Explore the feasibility of implementing grade-separated turn lanes at key intersections in Vaughan without affecting transit and active transportation.

Rationale: Major intersections within the City such as Weston Road at Rutherford Road experience heavy congestion especially during the morning and afternoon peak commute periods. The City could consider grade separation of turning lanes to improve traffic flow instead of the typical road or intersection widening.

Recommendation #20:



Eliminate lane reductions on arterial roadways between signalized intersections such as Highway 7 west of Islington Road.

Rationale: There are certain locations along arterial roadways where the road narrows creating a bottleneck for traffic. This presents a challenge for merging vehicles especially in mixed traffic conditions where transit vehicles and cyclists share the road. Maintaining a consistent cross-section will eliminate choking points and improve safety of shared facilities.

Recommendation #21:



Investigate new or enhance existing non-fare transit revenue to fund future improvements.

Rationale: Currently, there is usually a delay between the planning of roadway improvements and its construction; this delay is typically due to the lack of available funds. The City should consider exploring alternative sources of revenue such as advertisements at transit shelters, stations and vehicles, and allocate these funds for future potential roadway improvements.





Transportation and Infrastructure Task Force

City of Vaughan

2141 Major Mackenzie Drive
Vaughan, ON L6A 1T1



City of Vaughan Transportation and Infrastructure Task Force



APPENDIX A

Transportation and Infrastructure Task Force Terms of Reference





Transportation and Infrastructure

TASK FORCE

TERMS OF REFERENCE

OFFICE OF THE CITY CLERK
City of Vaughan, City Hall
2141 Major Mackenzie Dr.
Vaughan, ON L6A 1T1





Transportation and Infrastructure Task Force



TERMS OF REFERENCE

MANDATE/OBJECTIVES

MANDATE:

The City of Vaughan Transportation and Infrastructure Task Force has an overall mandate to assist the City in finding new and innovative ways to manage and make its transportation systems more sustainable amid the rapidly changing landscape of Vaughan. This will include developing a co-ordinated set of transportation priorities and identifying new revenue sources dedicated to making the City's transportation system more reliable, efficient and better prepared to accommodate future growth.

OBJECTIVES:

The task force will:

1. Serve as a forum for improving transportation and infrastructure solutions among residents, businesses and other stakeholders.
2. Work with key organizations, like the Association for Municipalities of Ontario (AMO) and the Federation of Canadian Municipalities (FCM), Regional Municipality of York, Ministry of Transportation (MTO) and Metrolinx to ensure Council-approved initiatives are advocated for to the Provincial and Federal governments.
3. Further explore research, best practices and findings related to congestion management innovation efforts across Canada and the world. Advise in identifying strategies, policies and activities for a comprehensive approach to congestion management.
4. Provide strategic input for the update and implementation of the City's Transportation Master Plan.
5. Recommend measures to increase the use of active transportation in the city, resulting in recognizable and measurable improvements in cultivating a healthier and safer community.
6. Review matters referred to the task force by Council relating to the safe and efficient movement of people and goods and the development of the City's infrastructure to provide strategic input where necessary.
7. Identify opportunities to leverage partnerships

and opportunities with relevant parties, including York Region, other local municipalities, governance organizations, other levels of government and the non-profit sector, to:

- a. achieve objectives of the Transportation and Infrastructure Task Force.
 - b. contribute to areas of common interest aligned with the City's Citizen Satisfaction Survey results, Transportation Master Plan and the 2018-2022 Term of Council Service Excellence Strategic Plan.
8. Align the work of the task force members with Council-approved priorities identified in the 2018-2022 Term of Council Service Excellence Strategic Plan.

TERM

The Transportation and Infrastructure Task Force shall submit its findings and recommendations for review no later than April 2021.

MEMBERSHIP

1. The task force membership shall be composed of the following:
 - a. A maximum of two (2) Council members.
 - b. The Mayor will serve as an ex-officio member of the task force.
 - c. A maximum of fourteen (14) individuals:

Technical committee members (4):

- Metrolinx staff (1)
- York Region Transit (YRT) or York Region Rapid Transit Corporation (YRRTC) staff (1)
- York Region staff (1)
- Ministry of Transportation (MTO) staff (1)

Citizen representative members (10), which fall into at least one of the following groups:

- GO Transit user
- YRT user
- Transportation planner/engineer
- Post-secondary student
- Cycling representative
- Environmental interest
- Accessibility interest

- Member of a senior's group
 - Community members at large
- d. City of Vaughan staff will attend meetings, as required, to provide necessary subject matter expertise.
 - e. Task force will draw on additional subject matter expertise from external agencies (MTO, York Region, etc.) as required.
2. Members are to be appointed by Council. Any changes to the membership will require Council approval.

MEETING PROCEDURES

The proceedings of the task force are to be governed by the City's Procedural By-law.

AGENDAS AND REPORTING

1. Agendas shall be prepared by the Office of the City Clerk in consultation with the task force chair.
2. Agendas shall be posted on the City's website one week prior to the scheduled date of meeting or as soon as practicable.
3. After each meeting of the task force, the City Clerk shall submit a report in the City's committee report format to the Committee of the Whole.
4. Following conclusion of the mandate of the task force, a report of recommendations will be brought to Council for further consideration.

MEETINGS

1. Meeting dates will be determined at the first meeting of the task force. The task force may meet on the schedule determined or at the call of the chair.
2. Meetings will be held every other month or as needed throughout the course of the task force term, except for July and August where no meetings will be scheduled.
3. The chair of the task force may call special meetings.
4. All regular meetings will be held at Vaughan City Hall located at 2141 Major Mackenzie Dr., Vaughan.
5. Meetings are to be open to the public in accordance with the Municipal Act, 2001.

NOTICE OF MEETINGS

Meetings will be noted on the Schedule of Meetings calendar posted on the City's website.

QUORUM

1. A majority of members, including the chair, shall constitute quorum.
2. Ex-officio members will not be counted for the purpose of calculating the total number of persons appointed to the task force, but will be counted as a member present when in attendance.

STAFF RESOURCES

The role of staff is to act as a resource to the task force, but not to be members of the task force or to deliberate or draft the findings of the task force. The following staff will provide advisory and technical support specific to the mandate and objectives of the task force:

1. The Office of the City Clerk will assign one staff person responsible for agenda and report production and distribution, the providing of procedural advice, the recording of proceedings of the task force and distribution of reports.
2. Corporate and Strategic Communications will assign one staff person to provide communications advisory services, prepare information, communications and assist in the development of the task force report.
3. An additional two (2) staff with subject matter expertise will be assigned to support the work of the task force.
4. The task force can be provided with additional administrative and/or technical support at the discretion of the appropriate administrative portfolio(s) or department(s).

AUTHORITY

The task force may not exercise decision-making powers or commit expenditures save for those specifically delegated by Council. Any request for expenditures determined by the task force for the sole purpose of conducting the business or work of the task force shall be forwarded to Council for consideration and approval.

The task force may not direct staff to undertake activities without authority from Council.

AMENDMENT/EXPANSION OF TERMS OF REFERENCE

Only Council can approve any amendment and/or expansion of the Terms of Reference.

City of Vaughan Transportation and Infrastructure Task Force



APPENDIX B

Transportation and Infrastructure Task Force Detailed Recommendations



Key Theme	Existing and/or Potential Issue	Rec. #	Recommendation	Type of Recommendation (Policy/Operational)
Improvements to existing communities to support alternative modes of transportation.	<ul style="list-style-type: none"> - Existing auto dependent communities with very little incentive to change travel behaviours. - Very few incentives to switch to non-auto modes of travel. 	1	Implement the MoveSmart Mobility Management Strategy, specifically the Road Safety Program, the Sustainable Mobility Program, and the Active School Travel Pilot in order to encourage greater use of alternative modes.	Operational
Improvements to existing communities to support alternative modes of transportation.	<ul style="list-style-type: none"> - Many Vaughan residents live within transit-distance drive to and from GO stations. - Active transportation is not a feasible mode of travel for half the year. - Local transit not always accessible or convenient. - Lack of first and last mile mobility options. 	2	Implement the Rutherford Maple GO Mobility On-Request Pilot Project to reduce the number of transit users who drive and park at GO stations.	Operational
Improvements to existing communities to support alternative modes of transportation.	<ul style="list-style-type: none"> - Lack of businesses and/or major headquarters choosing to locate in Vaughan. - Need employment uses to support mixed-use communities and shorter trips. - Need employment uses to support working and living in Vaughan. - Many barriers to locating offices in Vaughan. 	3	Incentivize major employment developments within the City so that residents can live and work in Vaughan.	Policy
Multi-modal streets – balancing road widening with active transportation improvements.	<ul style="list-style-type: none"> - BRT lanes along the centre of the road and centre islands has led to more U-turns at intersections, more congestion and aggressive driving behavior hindering pedestrian safety. - Mostly an issue along residential streets such as Centre Street. - Increased traffic in residential areas, leading to pushback against high-density developments. 	4	Design streets for people of all ages and abilities consistent with the Pedestrian and Bicycle Master Plan, the upcoming Vaughan Complete Streets Guidelines, and the future update of the Engineering Design Criteria and Standard Drawings.	Operational
Multi-modal streets – balancing road widening with active transportation improvements.	<ul style="list-style-type: none"> - Lack of separated pedestrian and cycling facilities along major roadways. - Cyclists mixing with general traffic is a major safety concern as well as pedestrians walking on the shoulder of arterial and/or collector roads that have sidewalks only on one side. - Drivers are unaware of pedestrians and cyclists, especially at intersections. - Bike lanes are just paint on the road with no physical protection or separation from general traffic. - Implement cycling facilities adjacent to the BRT lanes and utilize centre medians as a physical barrier. 	5	Implement recommendations of the Pedestrian and Bicycle Master Plan, including providing separated pedestrian and cycling facilities consistent with the Contextual Guidance for Selecting All Ages and Abilities Cycling Facilities.	Operational
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - Higher-density developments and intensification are needed for higher-order transit. - Residents in high-density developments or intensification areas need adequate access and incentives to establish using non-auto modes of travel from day one. - New developments should have TDM plans in place through the development application process. 	6	Continue implementing the Transportation Demand Management Guidelines which encourage new developments to incentivize transit ridership.	Policy
Improvements to existing communities to support alternative modes of transportation.	<ul style="list-style-type: none"> - Vaughan is an auto-dependent City. - Lack of incentives to switch from auto to non-auto modes of travel. - Vaughan needs to explore new forms and innovative methods of accommodating shorter distance trips using alternative modes of transportation. - Target customers should be large trip generators such as universities, hospitals, business parks and high-density residential developments. 	7	Implement a transportation pilot program which will test new forms and methods of offering non-auto travel to residents and businesses.	Policy & Operational
Multi-modal streets – balancing road widening with active transportation improvements.	<ul style="list-style-type: none"> - Vaughan is car-centric and traffic congestion is one of the major concerns among residents. - Our vision for the future of Vaughan should be similar to that of the City of Toronto and we should maintain focus on a multi-modal approach. - In the future, the combination of transit and active transportation should be more convenient than driving. - Society is shifting towards non-auto modes of travel and higher densities are required to support that vision. - High mandatory parking requirements leads to issues of housing affordability as the cost of providing parking is subsidized by the whole building. - Increase transit frequency and availability. 	8	Encourage and promote development in intensification areas and corridors by reducing reliance on single-occupant vehicles through lowered mandatory parking requirements for residents, increasing transit frequency and affordability, and enhancing transit and active transportation coverage and safety.	Policy
Multi-modal streets – balancing road widening with active transportation improvements.	<ul style="list-style-type: none"> - Safety concerns with respect to pedestrian crossings at intersections. - Major intersections are very wide making it less pedestrian friendly due to the large crossing distances. - Drivers are unaware of pedestrians and cyclists on the road, especially in congested areas. 	9	Improve safety at pedestrian crossings through the MoveSmart Mobility Management Strategy, including the consideration of improved pavement markings, providing pedestrian signals and/or countdown timers, incorporating leading pedestrian intervals at signalized intersections and implementing pedestrian "scramble" phases at appropriate locations.	Operational
Value for money in infrastructure improvements.	<ul style="list-style-type: none"> - Need more density at and surrounding major transit stations. - Mixed-use or residential developments above parking structures. - Consider through the Official Plan Review process. 	10	Incorporate mixed-use or residential developments above existing or new parking structures.	Policy
Improvements to existing communities to support alternative modes of transportation.	<ul style="list-style-type: none"> - BRT lanes has increased u-turning traffic at intersections. - Increase in conflicts with right-turning vehicles e.g.: Highway 7 at Pine Valley Drive. - Intersections along BRT corridors should be designed according to the latest Provincial and Regional guidelines. - Signal timing plan improvements should be implemented to manage conflicting movements. - Intersection design should allow for flexibility in the size of required daylight triangles. 	11	Provide adequate flexibility with respect to daylight triangle requirements at intersections to design for all ages and abilities in conjunction with signal timing plan improvements to manage conflicts between u-turning and right-turning vehicles.	Policy



Key Theme	Existing and/or Potential Issue	Rec. #	Recommendation	Type of Recommendation (Policy/Operational)
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - It is illegal to operate micro-mobility devices such as e-bikes, scooters and other self-powered vehicles in Vaughan, except in designated recreational areas within York Region. - Micro-mobility is a low-cost mode of transportation that is an attractive first and last mile option to access public transit services. - No clear guidance on how or where they can be used, safety regulations, licensing, etc. 	12	Develop a set of guidelines for micro-mobility devices including where and how they are permitted to operate, park, and charge, and an appropriate licensing regime.	Policy
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - Mandatory target for all new vehicle sales to be zero-emission by 2035. - Vaughan will need to start updating their parking requirements to align with Provincial directives. 	13	Incorporate charging facilities for electric vehicles at existing and new parking lots, and at all City facilities.	Operational
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - Minimum parking requirements tend to lead to an oversupply of parking, and increase in auto-dependency and greenhouse gas emissions. - People drive more often leading to an increase in traffic congestion, hindering transit when in mixed-traffic conditions and improvements for non-auto modes such as walking, cycling and transit. - Transportation trends are shifting from auto-dependence to a variety of mobility options. - High minimum parking requirements deter from sustainable and healthy communities. - Toronto has eliminated most minimum parking standards and have introduced maximum parking standards. 	14	Reduce minimum parking requirements as currently prescribed in the Vaughan Comprehensive Zoning By-Law No. 001-2021.	Policy
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - Travel demand will only increase and road infrastructure improvements will not be able to keep up with the population and economic growth. - Innovation and technology should be used to maximize the efficiency, reliability and sustainability for all users. - Various sources of data are available within the public and private sectors that should be collected and analyzed to identify areas of higher traffic accidents, congestion, crime, etc. 	15	Collect and analyze additional sources of transportation data such as Open Data, GPS, Bluetooth, embedded sensors and commercially available datasets.	Policy
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - Data collection and analysis should happen from day one. - Plan and design transportation infrastructure to include the required sensors and equipment for data collection prior to the construction. - Retrofitting roadways and intersections is more costly. 	16	Incorporate data collection devices into all transportation construction projects.	Operational
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - City streets currently function as places to drive. - Streets need to be a more pleasant place to live and meet people. - Streets could be used to promote seasonal or permanent events such as farmer's markets or food festivals. - Pedestrian-only streets can be used to prioritize people in areas of high commercial activity such as in mixed-use developments or downtown locations. - Temporary closures to vehicular traffic or designing Woonerfs or living streets in new developments. 	17	Utilize key streets as temporary pedestrian zones for special events.	Policy & Operational
New and emerging technologies to complement a transportation system.	<ul style="list-style-type: none"> - Transit can be challenging or overwhelming when crossing municipal boundaries or switching between transit systems. - Fare policies are very complex and vary with each transit service provider. - Short trips that cross municipal boundaries require two fares. - Transit service needs to be straightforward and hassle-free. - Increase ridership through fare integration, off-peak fare discounts and distance-based pricing. 	18	Advance discussions with Metrolinx and neighbouring transit agencies with respect to fare integration, distance-based fares and minimizing additional fares across jurisdictional boundaries.	Policy
Multi-modal streets – balancing road widening with active transportation improvements.	<ul style="list-style-type: none"> - Heavy congestion at major intersections e.g.: Weston Road at Rutherford Road. - Especially congested during the morning and afternoon peak commute periods. - Consider grade separation of turning lanes to improve traffic flow instead of the typical road or intersection widening. 	19	Explore the feasibility of implementing grade-separated turn lanes at key intersections in Vaughan without affecting transit and active transportation.	Policy
Multi-modal streets – balancing road widening with active transportation improvements.	<ul style="list-style-type: none"> - Some arterial roads narrow between intersections creating a bottleneck for traffic. - Challenging for merging vehicles especially in mixed traffic conditions where transit vehicles and cyclists share the road. - Maintain a consistent cross-section to eliminate choking points and improve safety of shared facilities. 	20	Eliminate lane reductions on arterial roadways between signalized intersections such as Highway 7 west of Islington Road.	Policy
Value for money in infrastructure improvements.	<ul style="list-style-type: none"> - Delays between the planning of roadway improvements and its construction. - Typically, the delay is due to a lack of available funds. - Alternative sources of revenue should be explored e.g.: advertisements at transit shelters, stations and vehicles. - Allocate funds for future potential roadway improvements. 	21	Investigate new or enhance existing non-fare transit revenue to fund future improvements.	Policy

