

Committee of the Whole (Working Session) Report

DATE: Wednesday, May 3, 2023

WARD(S): ALL

TITLE: 2023 VAUGHAN TRANSPORTATION PLAN

FROM:

Vince Musacchio, Deputy City Manager, Infrastructure Development

ACTION: DECISION

Purpose

To provide an overview of the 2023 Vaughan Transportation Plan, including a summary of the future transportation network and supporting actions, policies and guidelines. Additionally, to highlight the City's current efforts in improving Vaughan's transportation system in support of the 2022-2026 Term of Council Service Excellence Strategic Plan.

Report Highlights

- The Vaughan Transportation Plan is the guiding document for transportation infrastructure, policy and programs across the entire City, with a vision to provide high quality, attractive, competitive and sustainable choices for every trip made by residents and businesses of Vaughan.
- As the city continues to grow, people will need more options to travel from one place to another to make better use of existing streets, to limit the effects of growth on existing residents, businesses and visitors, and to address climate change.
- Providing choices that allow people to drive less is a vital component of managing congestion in Vaughan.
- Actions are already underway to achieve the vision of the Vaughan Transportation Plan, including critical initiatives and studies undertaken by Infrastructure Planning and Corporate Asset Management, Traffic and Fleet Management Services, Economic Development, Development Engineering, Parks Infrastructure Planning and Development, and Policy Planning and Special Programs.

Recommendations

1. That Council approve in principle the 2023 Vaughan Transportation Plan; and
2. That the 2023 Vaughan Transportation Plan be used to set the direction for the City's future transportation investments and policies, and is to be incorporated into the City's Official Plan.

Background

The Service Excellence Strategic Plan has identified Transportation and Mobility as a strategic priority area for the 2022-2026 Term of Council. To meet the objectives of this priority area, the Vaughan Transportation Plan provides steps towards improving Vaughan's road/street network, advocating for improved public transit and improving active and emerging modes of transportation.

The Vaughan Transportation Plan provides directions for future transportation-related studies, projects, initiatives, and policies and will guide transportation decision-making in the City to establish a network supportive of all users

The Vaughan Transportation Plan (VTP) is a long-range Transportation Master Plan (TMP) for the City of Vaughan. This study was launched in November 2019 with an objective to build upon foundation set in the 2012 Vaughan Transportation Master Plan, while at the same time preparing the city for new trends and travel patterns that have emerged since 2012.

By 2051, Vaughan's population is projected to increase to over 570,000, and over 350,000 people will be employed in the City. Today, most people in Vaughan choose to travel using their private vehicles. This is because much of Vaughan was developed to prioritize vehicle travel, where destinations such as workplaces, schools, grocery stores, and other amenities are too far to walk or cycle from most homes. This also makes providing frequent, convenient transit service a challenge as well. As a result, traffic in Vaughan can be very congested during peak times, especially on major roads, because of the number of people who are trying to travel to work, school, home, or run errands, all at the same time on the same roads.

As Vaughan continues to grow, people will need more options to travel from one place to another to make better use of the streets that we already have, to limit the effects of growth on existing residents, businesses and visitors, and to address climate change. The VTP identifies the steps that need to be taken to draw on the opportunities that we have and to address the challenges that we face.

The VTP was conducted to meet the requirements of Phases 1 and Phase 2 of the Municipal Class Environmental Assessment process

A Transportation Master Plan is a study defined in the Municipal Class Environmental Assessment (MCEA/EA) process (October 2000, as amended in 2007, 2011, and 2015), which identifies the long-term transportation objectives of a defined area and specific solutions requiring further study. The VTP process followed Phase 1 and Phase 2 of the five-phase EA process by first defining a problem and/or opportunity statement followed by identifying and evaluating a range of alternative solutions to select one or more preferred solutions. Upon completion of the VTP, the preferred solutions can be studied further to meet the requirements of Phases 3, 4, and 5 as required.

The VTP is a comprehensive study integrating transportation with land-use planning in support of the City's Growth Management Strategy and updates to Provincial, Regional and other City Master Plans. The primary objectives of the VTP are:

- To prepare a detailed priority list and implementation plan (including high level costs) for new infrastructure to accommodate future growth;
- To provide direction on infrastructure, policies and programs, which will transform an existing transportation system that is highly reliant on private automobiles to a system with options that are more flexible, resilient to disruption and environmentally and financially sustainable; and
- To position the City appropriately to respond to changing preferences for moving people and goods, new technology, climate change, and development pressures.

Previous Reports/Authority

[Infrastructure Master Plans Update – Fall 2021, SC1. Memorandum from the Acting Deputy City Manager, Infrastructure Development, dated November 26, 2021 – Committee of the Whole \(2\), December 7, 2021](#)

[Infrastructure Master Plans Update – Spring 2021, SC2. Memorandum from the Deputy City Manager, Infrastructure Development and the Director, Infrastructure Planning & Corporate Asset Management dated April 9, 2021 – Committee of the Whole \(2\), April 13, 2021](#)

Analysis and Options

The VTP sets and maintains the overall direction for the transportation system in Vaughan through initiatives, policies and guidelines that support the Official Plan as well as the City's Strategic Priorities, with a vision to provide high quality, attractive, competitive and sustainable choices for every trip made by residents and businesses of Vaughan.

Providing choices that allow people to drive less is a vital component of managing congestion in Vaughan. The more people who are able to choose to walk, cycle or take transit rather than drive means fewer vehicles on the road, leaving room for those who must drive to get to where they're going. By building the right infrastructure, encouraging a culture change, and thinking forward, the City has an opportunity provide comprehensive and modern transportation system.

The VTP was developed by building a better understanding of the future of transportation and mobility and was guided by input from the public and stakeholders on key aspects of the plan

Meaningful public and stakeholder engagement was a fundamental component of developing the VTP. The goal of the public and stakeholder engagement process was to facilitate robust conversations on future directions for developing a longer-term plan for how residents and workers will move about the City.

Public and stakeholder consultation was organized in three phases and was guided by a communications and public engagement plan. Engagement methods were adapted in April 2020 to pivot to virtual methods in response to the COVID-19 pandemic. In-person methods were utilized for Phase 1 engagements prior to this date, and virtual methods were utilized for Phases 2 and 3. While the method for delivering the engagement process changed, the commitment to effective public and stakeholder engagement remained the same.

There was a high level of interest in the VTP and participation by the public and stakeholders was thoughtful, constructive, and forward-thinking. There is much interest in how the plan will be implemented. The stakeholders who were involved in the engagement process, including the major businesses and employers, goods movement

and logistics companies, builders and development representatives, Ratepayers' Associations and Cycling Advocates have expressed interest in continuing to be involved and supporting the City as it moves forward to implementation. Key messages heard from the public include:

- **Driving** - The backbone of Vaughan's vehicle network consists of major arterial roads spaced about two kilometres apart from one another. These roads connect but also create natural barriers between blocks of residential, commercial, and employment lands. Providing more connections between these blocks and across highways would provide drivers with more route choices and reduce the reliance on the major roads to travel. This would mean that if one road was congested, drivers would be able to choose other routes. At the same time, it is important to make sure that our existing roads are operating as safely and efficiently as possible.
- **Walking** - Vaughan's pedestrian network is developing, but there are opportunities to improve the walking experience for crossing major roads such as Highway 400 or Highway 7. Employment areas are often very spread out and have very few nearby sidewalks. Walking can be improved by creating pedestrian-friendly streets, providing a fine-grid network for better connectivity, and improving sidewalk conditions between transit and major employment destinations.
- **Cycling** - The cycling network in Vaughan has been improving over time. Prioritizing safe and comfortable cycling routes gives people another choice when traveling to a destination a short distance away, and also provides residents with recreation and exercise opportunities. Cyclists in Vaughan generally prefer to use bike paths that are separated from motorists and pedestrians. In addition, providing more cycling connections between destinations and home, as well as more education on bike use and safety would encourage more people to ride.
- **Transit** - People will choose to take transit when service is frequent and reliable, and it is easy to get to and from transit stops. There are opportunities to improve transit by making transit more reliable through special traffic signal timing or dedicated bus lanes, by providing more frequent transit service during more hours of the day, and by reducing the distance people need to walk or cycle to transit stops.

As the City grows with support from provincial and regional transit investments, there are opportunities to address the needs of all modes of travel by improving the connectivity and safety of active transportation infrastructure and the accessibility and frequency of transit service

Through three objectives, the VTP is a plan that will Build Infrastructure, Change Culture and Think Forward:

Build Infrastructure

Investing in accessible, safe and efficient infrastructure is key to offering residents, visitors and businesses more mobility choices. Ensuring that all users, whether they are walking, cycling, riding a bus or driving, can move around safely and efficiently is a cost-effective and environmentally friendly strategy to manage congestion and accommodate growth in the transportation system. The Build Infrastructure objective will focus on the following priorities:

- Address gaps in the street network, particularly in the east-west direction to create better connectivity for all modes of travel;
- Create a safer walking environment throughout Vaughan to make it easier to get to places on foot and via transit; and
- Create protected bike routes so that people can cycle comfortably to work, school, shopping and other services.

Change Culture

Transportation culture is shaped by built form and land use, as well as past behaviours and one of the key methods of achieving the VTP's vision is to change culture. The VTP provides the framework for strategies and programs to encourage the use of sustainable modes. Each person that is able to use an alternate form of travel is one less car on a congested road, leaving more space for those that must drive, thereby reducing the need for costly new roads and road expansions, in addition to reducing greenhouse gas emissions. The Change Culture objective will focus on the following priorities:

- Focus on building complete communities to reduce the need for and distance of travel;
- Support improved, frequent and reliable transit service, which precedes or coincides with development and not afterwards; and

- Encourage employers to add bike racks, change and shower facilities to make it easier to cycle to work.

Think Forward

Innovative technologies such as automated, connected, electric and shared vehicles, and smartphone apps are changing the way travelers think about and use roadways, transit and other transportation services. The VTP includes direction for policies and guidelines to ensure that Vaughan is prepared to harness new technologies which can help enable more travel choices, and evolve how we use our existing and new infrastructure to maximize value for all users. The Think Forward objective will focus on the following priorities:

- Create sustainable transportation options by encouraging new development to include electric vehicle charging stations;
- Evaluate new services such as electric “on-demand” transportation to make the transportation system more equitable, providing all residents with more ways to get around without having to rely on driving themselves; and
- Address the transportation needs of the aging population - including increasing accessibility to transit with more specialized transit options for seniors.

For Vaughan to continue to be a world-class city and a city of choice for new residents and businesses, it is essential to create a transportation system that is reliable, accessible and seamless. Through these directions, the 2023 VTP strives to balance transportation needs for all modes of travel and to develop a flexible and fiscally sustainable strategy that is adaptable to external factors, including changing travel patterns and behaviours, climate change impacts, economic conditions, development market trends, evolving provincial infrastructure investment priorities, and funding requirements. Work is already underway to transform the transportation system.

Vaughan is accelerating change for more sustainable travel through building infrastructure

- The VTP addresses the limited number of east-west connections in the network through planned road improvements, new road construction and targeted bridge enhancements to resolve bottlenecks and reduce gridlock.
- The City of Vaughan and its partners advanced more than 120 km of all ages and abilities active transportation infrastructure projects in 2022 as part of the

City's and Region's capital programs, with many 2021 projects moving to the next phase of implementation.

- Vaughan has advanced discussions with York Region to define roles and responsibilities regarding the ownership and use of curb and street boulevards for active transportation. The Municipal Act does not explicitly define the respective responsibilities of the Region or the City of Vaughan for all boulevard elements, which has created uncertainty around future ownership and maintenance.
- New developments are planned to provide a balanced transportation system proving options for all modes of travel by implementing fine-grained street and active transportation networks as demonstrated through the Promenade Secondary Plan Area. To complement the transportation network, new, sustainable mobility technologies such as micro-mobility (shared electric scooters and bikes) are also accommodated by the Secondary Plan.
- Vaughan continues to work effectively with our partners at York Region, Ontario's Ministry of Transportation, Metrolinx and national railway carriers to advocate for enhanced transit and GO rail service and enable upgrades to essential links in the road network.

Vaughan is accelerating change for more sustainable travel through changing culture

- In December 2019, the Pedestrian and Bicycle Master Plan was endorsed by Council. This plan identified the community priorities of Awareness and Culture, Safety, Infrastructure, and Connectivity. These priorities are at the core of every active transportation project or program the City delivers, and are also directly aligned with the priorities of the Vaughan Transportation Plan.
- In 2021, the MoveSmart Mobility Management Strategy was approved by Council, which was transformative for improving the safety and efficiency of the existing transportation system through the Road Safety Program, while encouraging the greater use of alternative modes through the Active School Travel Pilot and the Sustainable Mobility Program.
- In 2021, the City developed a Transportation Demand Management (TDM) Guideline and Toolkit to act as a guiding tool for the development community. TDM Plans provide details at the site-specific level of measures that will

encourage residents, visitors, or employees to travel sustainably and reduce the reliance on single-occupancy vehicle usage.

- In 2022, staff engaged with the community at all 8 Concerts in the park and at 6 YRP Bike Safety Pop-ups at Vaughan Public Libraries to provide education and receive feedback on pedestrian, cycling and micromobility rules, regulations and road safety, how to share spaces and sidewalk cycling.
- In 2022, more than 45 Public Service Announcements (PSAs) and associated social media contained active transportation and micromobility messaging. Topics included Bike Month, school zone safety and etiquette for walking, cycling and using trails, sidewalk cycling, micromobility safety, and active school travel,
- In 2022, the Transportation & Infrastructure Task Force (TITF) brought forward a Findings Report for Council consideration. 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.

Vaughan is accelerating change for more sustainable travel through thinking forward

- Vaughan is currently studying how a shared program of publicly available bicycles, electric bicycles (e-bikes) or electric scooters (e-scooters) could be used for travel in Vaughan. A shared micromobility system could support the city's greater transportation system, helping residents connect to the subway, BRT, active transportation network and key tourism destinations like Canada's Wonderland.
- The City is developing a Transportation Innovation Program to position Vaughan as an innovative City that is open to new transportation technologies. This program will test new modes of travel or services in order to evaluate them for effectiveness and safety, prior to wider use.
- In 2022, the City partnered with York Region Transit (YRT) and Metrolinx to bring Vaughan commuters the Mobility On-Request Maple-Rutherford GO Pilot Project helped commuters get a transit ride to and from Maple or Rutherford GO stations.

- Vaughan continues to work with York Region Transit to investigate potential service improvements and identify development areas where improvements could be beneficial. New transit service models, such as on-demand microtransit, are presenting new opportunities to serve existing and new communities as a feeder service to higher-order transit, which the City and York Region Transit can collaborate to pilot, and explore longer-term implementation, where warranted.
- Vaughan is developing a comprehensive transportation data collection and analysis system, exemplified by the Traffic Data Management Program of the MoveSmart Mobility Management Strategy. Collection of both traffic data and data for other forms of transportation which allows for both ongoing tracking of our transportation system and to help us plan for future demands.

The preferred future transportation network was identified using a holistic evaluation methodology developed specifically for Vaughan, and incorporated feedback from residents and businesses

The VTP developed the preferred future transportation network by assessing criteria based on six objectives: Accessibility and Connectivity, Environmental Stewardship, Equity, Financial Sustainability, Reliability and Resilience, and Safety. Through careful consideration and analysis of four alternative transportation networks, a Multi-Modal Alternative was selected as the preferred transportation infrastructure alternative which recommends strategic road improvements while maximizing active transportation and transit infrastructure.

Consultation with community members showed significant support for the Multi-Modal Alternative. This alternative provides a balanced combination of walking, cycling, transit, and auto network improvements, with the following key benefits compared to the base case:

- More jobs could be reached within a 45-minute travel time for drivers and transit users;
- More potential employees could reach Vaughan businesses within a 45-minute travel time for drivers and transit users;
- Less time was spent driving by Vaughan residents due to lower levels of congestion (relative to the base case); and
- More people travelled by transit.

Refer to Attachment 1 – “Recommended 2051 Network” map.

One of the challenges that the VTP immediately addresses is the limited number of east-west connections and bottlenecks in the road network

There are plans underway to construct or improve roads, as well as targeted improvements to bridge gaps and resolve bottlenecks such as the Kirby Road missing link between Bathurst Street and Dufferin Street, a new flyover of Highway 400 between Colossus Drive and Interchange Way, and Creditstone Road north of Highway 7.

It is recognized that many of the road widenings identified in the City's future transportation network are on Regional roads. These recommendations have been recently informed by the Region's 2022 Transportation Master Plan and underscores the importance of the arterial road network for Vaughan's transportation system.

The VTP envisions a future transportation network with infrastructure that accommodates all modes

The VTP future transportation network will be built in stages. In order to properly sequence and determine the appropriate time to build infrastructure, the implementation plan recommends the priority for each transportation project based on existing conditions, needs, and constraints. Additionally, some projects in areas of new development are not required until development proceeds, which occurs at the discretion of landowners. These projects are identified as improvements to "Deliver with Development". Finally, each year the City will reevaluate the priorities and constraints for projects as part of the annual budget process. Please review Attachment 2 – "Implementation of the 2051 Recommended Network" map for the implementation strategy. The full list of priority projects with their recommended implementation timeframe can be found in the final report.

While infrastructure is critical to the transportation network, supporting policies and guidelines create a modern, seamless transportation system

Building new infrastructure is only part of what makes a successful transportation system. The VTP recommends policies which will be incorporated into the City's Official Plan so that people are encouraged to choose more convenient and sustainable forms of transportation. The VTP policy recommendations are also flexible and anticipate the transportation needs of the future, allowing the City to harness new modes of transportation for the benefit of everyone. A full list of new policies and guidelines that will be developed in the future can be found in the final report, available at Vaughan.ca/TransportationPlan. The list of key recommended actions, policies and guidelines are summarized as follows:

Build Infrastructure:

- Develop a 10-year Capital Program
- Develop Resilient Infrastructure Design Guidelines
- Develop a Sustainable Goods Movement Strategy

Change Culture:

- Develop a VTP Education, Promotion and Outreach Program
- Develop 15-minute Neighbourhood and Private Streets Policies and Guidelines
- Develop a Framework for Community Mobility Hubs
- Develop a Curb and Street Management Policy
- Create a Sustainable Transportation Working Group within the City

Think Forward:

- Enhance existing traffic data collection by leveraging “big data” technologies and multi-modal data sources
- Continue to research and evaluate new forms of transportation, or repurposing existing forms of transportation for new use
- Continue to leverage partnership and funding opportunities with public and private organizations to provide transportation infrastructure, programs and services

Financial Impact

There are no direct financial impacts as a result of this report. However, the implementation of the Vaughan Transportation Plan will consist of new projects and potentially additional resource requests. These new capital and operating costs will be brought to for approval Council annually through the budget process and will account for recent and on-going changes to provincial legislation such as the Development Charges Act and the Planning Act.

Operational Impact

The Vaughan Transportation Plan was created in consultation with internal stakeholder departments, including but not limited to:

- Development Engineering
- Development Planning
- Economic and Cultural Development

- Infrastructure Delivery
- Infrastructure Planning and Corporate Asset Management
- Parks Infrastructure Planning and Development
- Policy Planning and Special Programs
- Transportation and Fleet Management Services

Broader Regional Impacts/Considerations

The VTP recommendations are consistent with the 2022 York Region Transportation Master Plan. Staff will continue to collaborate with York Region and York Region Transit to enable a seamless and connection transportation system for all users.

Conclusion

The VTP is the culmination of a three-year study that combined research and analysis with a public conversation about the future of mobility. The City analyzed transportation and transit data, policies, future trends and national and international best practices. Public engagement took place in-person and online with a dedicated project website. Key community and industry stakeholders as well as other levels of government were also consulted in the process.

The VTP builds upon and recognizes the critical initiatives and studies undertaken by Infrastructure Planning and Corporate Asset Management, Transportation and Fleet Management Services, Economic Development, Development Engineering, Parks Infrastructure Planning and Development and Policy Planning and Special Programs. The City is well underway in accelerating the available options for sustainable transportation options.

The VTP is future-focused and includes a number of actions to implement the plan over the short term (1-4 years), medium (5-8 years) and long term (9-20 years). Actions in the VTP will be undertaken by staff over the coming years. Those actions with budgetary implications be presented to Council for consideration through the City's annual budget process. Progress on the actions of the VTP and adjustments to the implementation plan will be tracked and reported annually, including any staffing requirements with comprehensive updates to the VTP taking place in coordination with updates to the Vaughan Official Plan.

For more information, please contact: Selma Hubjer, Director, Infrastructure Planning and Corporate Asset Management ext. 8674.

Attachments

1. Recommended 2051 Network Map.
2. Recommended 2051 Network – Implementation Map.

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