

Committee of the Whole (Working Session) Report

DATE: Wednesday, January 24, 2024

WARD(S): ALL

TITLE: VAUGHAN COMPLETE STREETS GUIDE

FROM:

Haiqing Xu, Deputy City Manager, Planning and Growth Management

ACTION: DECISION

Purpose

To seek approval of the Vaughan Complete Streets Guide (hereafter referred to as the “Guide”, enabling the City and the development community to implement Complete Streets when planning, designing, rehabilitating, and maintaining new and existing City streets.

Report Highlights

- Complete Streets are streets that are designed to be safe and comfortable providing access for all ages, abilities, and modes of travel, whether one is walking, cycling, taking transit, driving a private automobile or delivering goods. The approach prioritizes safety for everyone and aims to enhance the public realm and complement the adjacent land uses.
- The Vaughan Complete Streets Guide (VCS) is a design and implementation framework that ensures a consistent approach to planning, designing, rehabilitating, operating, and maintaining Complete Streets, which will enable use of the street network for all users while also creating high quality public realm.
- The VCS provides a strategic planning lens and establishes the policy context to improve safety for all street users within transportation planning studies, capital infrastructure projects, development applications review, streetscape design and construction, and street operations and maintenance.

Recommendation

1. That the Vaughan Complete Streets Guide (Attachment 1) be approved.

Background

Vaughan has undergone a significant transformation, originating from a collection of primarily rural villages and roads to one of the largest and most rapidly growing municipalities in Canada. The dramatic growth of Vaughan since the 1970s has been transformative. As noted in the Vaughan Official Plan 2010, in less than forty years, over 200,000 people and 150,000 jobs have been accommodated in the City.

While Vaughan is evolving into a large metropolitan city, automotive travel has been and remains the dominant mode of transportation. The City's transportation system has traditionally been designed to prioritize efficient vehicular through-traffic on arterial roads and local traffic on neighbourhood streets. Pedestrian and cycling infrastructure are found throughout the city, but there are many gaps and deficiencies in the network. The rapid growth and urbanization have resulted in greater demand for multi-modal travel options, including walking, cycling, transit, ride-sharing / ride-hailing, and for goods movement.

To address these growth challenges as Vaughan transitions into a more urban City, it is important that the planning and design of roads and streets be integrated with land uses and urban design in a manner that creates a safe, high quality, people-oriented, sustainable built environment that supports sustainable and long-term mobility objectives. The City of Vaughan's policy documents, including the Vaughan Official Plan (VOP) and Vaughan Transportation Plan (VTP) recognize the need to provide a safe, sustainable, future-ready street network with diverse mobility choices, accessible to all. As such, this Guide aimed to develop a design & implementation framework to improve the street network for all current and future users.

The Guide serves as the go-to resource for members of the development community, consultants, residents, stakeholders, Council and staff, with principles, guidelines, details and implementation strategy to establish a street network that is safe for all street users.

The Guide outlines the decision-making process of planning, designing and constructing streets and provides a number of tools depending on the nature of a project (retrofit, reconstruction or new construction). It also provides directions to measure performance for effective delivery of Complete Streets. Street design teams will seek to make each project as complete as possible with available resources, regardless of the category, project type, scale, or complexity.

The Guide commenced in August 2021 and was developed in five (5) phases of work, including:

- **Phase 1:** Background Review and Analysis (Aug – Dec 2021)
- **Phase 2:** Communication & Consultation Strategy (Sep – Nov 2021)

- **Phase 3:** Complete Streets Design & Classification (Jan – Aug 2022)
- **Phase 4:** Complete Streets Design Manual & Guidelines (Feb– Aug 2023)
- **Phase 5:** Complete Streets Guidelines Implementation (Jun – Dec 2023)

Engagement and Consultation

As part of the project, a comprehensive communication and engagement plan was followed to ensure the appropriate input and feedback was received, including:

- Three Core Project Team meetings were held among managers of departments in charge of key decision-making process in streets design and implementation.
- Three Technical Advisory Committee (TAC) meetings were held, including internal departments, such as Infrastructure Planning and Corporate Asset Management, Policy Planning and Special Programs, Transportation and Fleet Management Services, Development Engineering, Parks, Forestry and Horticulture Operations, as well as our partnering agencies of York Region, York Region Transit, and adjacent municipalities.
- One meeting was held with key Stakeholders, including the Building Industry and Land Development (BILD) association.
- Two public engagements were conducted including a “Have Your Say” Survey in July 2022 and a virtual public meeting held on Oct 12, 2023, with public service announcement and other notices sent out across the City.

The following is a summary of some of the key concerns and feedback received from the public and key stakeholders:

- Concern over the safety of cyclists and pedestrians, with speeding traffic. Request for physically separated bike lanes throughout the City with well-integrated network;
- Suggestions to consider street design measures to encourage traffic calming such as speed bumps, stop signs and crossing signals to improve safety for vulnerable road users;
- Desire to see enhancements to and maintenance of the streetscape, such as pavement, furniture, planting, and routine maintenance;
- Desire for more dedicated and safe connections over roadways and waterways, citing a number of abrupt endings to sidewalks and cycling routes;
- Some public members expressed frustration with traffic backed up at intersections and difficulties in making turns due to signals being out of sync and having intersections too close together. Suggestion for more four-way stops and traffic signals used appropriately to control traffic flow and safe passage – perhaps altering the signal timing based on the time of day;
- Desire to see on-street parking to better support local retail businesses and also help reduce traffic speeds.

In addition to the above meetings, a dedicated project website was created to provide regular updates on the Guide:

[Vaughan Complete Streets Guidelines](#)

Previous Reports/Authority

Not applicable.

Analysis and Options

The Guide will serve as a comprehensive reference document to help shape development and infrastructure planning to promote safety for all street users, high quality design excellence, connectivity and placemaking in the City's many Communities.

Vaughan has a complex and diverse public and private street system, whereby the size, use, character and priorities for each street vary across communities and the city as a whole. The key goal of the VCS Guide is to establish clear process, techniques, and performance metrics to assist in the delivery of Complete Streets that consider and balance priorities while providing every user group with safe travel and access to destinations. A second, and equally important goal is to clarify internal roles and responsibilities through clear decision-making protocols to coordinate the different interests and priorities of all City Departments that are affected by or influence street design and operations.

The VCS's approach to establish a consistent decision-making design process is based on these guiding principles:

- **Create Safe Streets for all Users:** Providing a safe pedestrian and cycling experience along Vaughan streets has been highlighted at all levels of policy and to ensure streets are accessible to users of all ages and abilities.
- **Work towards a Healthy Community:** Enhance overall public health by improving streetscape to create a safe and comfortable environment for walking and cycling.
- **Respond to Existing and Future Context:** Streets designed to respond to their functional roles and adjacencies will be more animated, comfortable, and complete.
- **Reduce Gaps in Active Transportation Network:** Connected and complete pedestrian and cycling networks will support healthier communities, provide first and last-mile connections, make streets safer and offer mobility choices reducing car dependence.
- **Make Streets Sustainable and Resilient:** Integrating green infrastructure within the design of streetscapes will lead to resilient street trees with larger canopies, treat stormwater runoff and increase water percolation, and improve the micro-climate.
- **Streets as Vibrant and Animated 'Places':** Streets reflect the neighbourhood's unique identity based on its context or heritage. Vibrant streets will invite visitors,

facilitate commerce, and strengthen a sense of community, enhancing Vaughan's public realm.

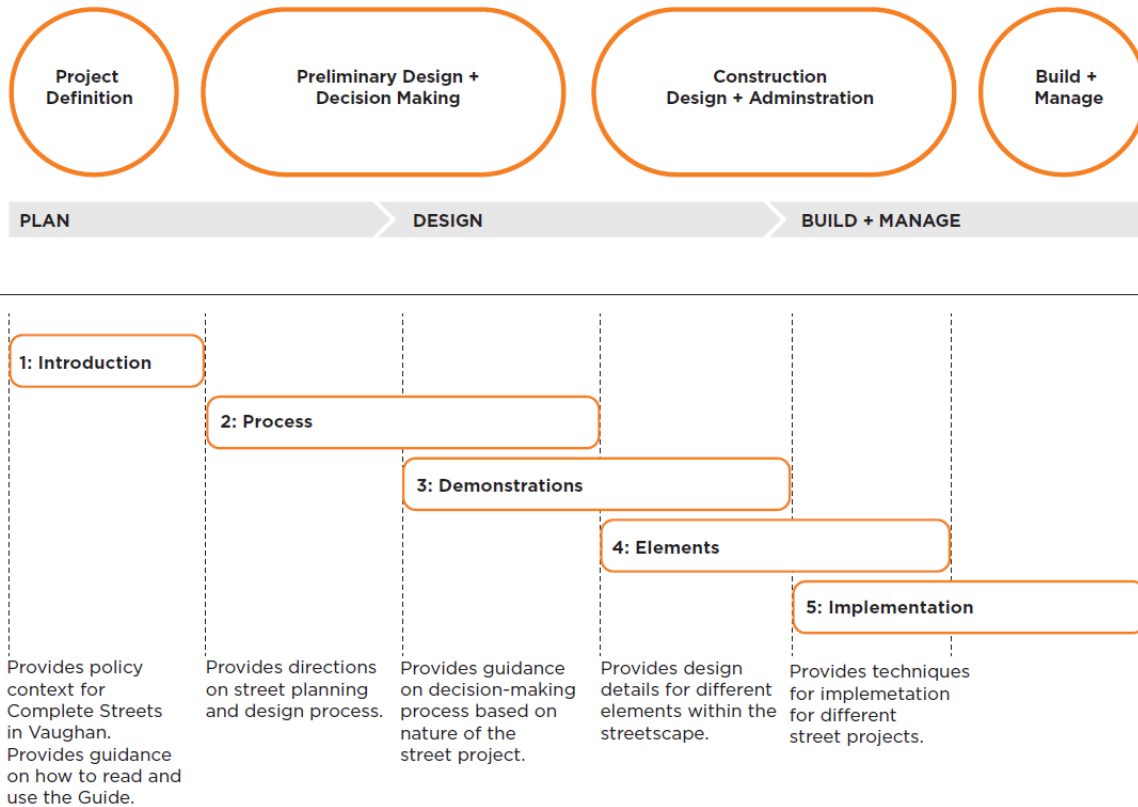
- **Design Future-ready Streets:** There has been an increase in app-driven rideshares and zero-emission automated vehicles (EVs) on the streets. Street design and planning processes need to recognize the changing users and plan and adapt designs to accommodate the same.
- **Enhance Economic Viability:** Efficient and context-sensitive street designs will incorporate multi-modal transportation systems, attracting people and businesses. Investment in such streets will boost the local economy.

The Guide recognizes that no one-size fits-all solution is appropriate for street design, as each street is unique in its context, requiring different planning approaches, design solutions and implementation strategies.

Within the different and varying streets contexts, a sensitive approach needs to balance the requirements of multiple users, whether they relate to mobility, utilities, placemaking, curbside uses or green infrastructure. To address these diverse interests and demands, street design requires unique solutions that reflect the street's specific function, location, context, and future role.

The Guide establishes a range of minimum and/or preferred values for elements to provide flexibility in street design and incorporate sound engineering practices. It also builds on the direction provided in provincial, regional, and municipal policies, standards and guidelines, along with non-governmental organizations and other relevant sources. The document is the result of co-ordination between the City Staff and experts in the design and planning profession and is based on best practices from similar contexts. The Guide is not prescriptive, as it cannot cover all scenarios; it encourages innovative design solutions.

The Guide's overall framework is organized as follows into five (5) chapters:



Chapter 1: Introduction

Provides policy context, principles for Complete Streets and guidance on how to read and use the Guide.

Chapter 2: Project Delivery Process (PDP)

Defines the design process and how to make decisions to achieve Complete Streets in Vaughan.

- The process highlights roles and responsibilities of key City departments, divisions and external agencies when designing and operating Vaughan streets.
- The Project Delivery Process (PDP) integrates Complete Streets into each stage of the project, from initiation, conceptual design, detailed design, construction and maintenance.
- Project review and compliance stage ensures consistency across different projects, assisting in making holistic decisions to expedite project delivery, and applying lessons learned from one project to another.
- Streets are classified hierarchically as per their functional role in the overall street network and place within the City's Urban Structure. The Guide refines the street classes and rights-of-way adopted in the Vaughan Transportation Plan to inform context sensitive guidance. The Vaughan Transportation Plan identifies a 10-street classification (Figure 2.5), based on their functional roles (arterial, major collector, minor collector and local) and their surrounding urban context (intensification, community, employment, and natural areas) within the city. The reason for identifying streets by their surrounding context is to recognize that

different streets will have different priorities depending on what and where they are.

		Urban Structure			
		Natural Areas	Community Areas	Employment Areas	Intensification Areas
Functional Classification	Arterial	Arterial - Natural (36m ROW)	Arterial - Community, Employment, Intensification (36m ROW)		
	Major Collector	Major Collector - Natural, Community (30m ROW)		Major Collector - Employment (30m ROW)	Major Collector - Intensification (30m ROW)
	Minor Collector	Minor Collector - Natural, Community (24m ROW)		Minor Collector - Employment (24m ROW)	Minor Collector - Intensification (24m ROW)
	Local	Local - Natural, Community, Employment (20m ROW)			Local - Intensification (21m ROW)

Figure 2.5. Street classification based on functional role and surrounding urban context in Vaughan.

- The key directives for decision-making are based on:
 - SAFETY - All decisions will first consider, without compromise, the safety of all road users, informing safer street design are to prioritize vulnerable users, manage vehicle speed, minimize risk, and improve predictability.
 - PLACE - Considering the place where a street exists is foundational and critical to making streets more complete and to ensure the comfort of pedestrians.
 - LINK - Understand and accommodate desire lines, design for person throughput and mobility (not just vehicles) and develop a network of complete and connected streets.
 - GREENING - Greening streets will enhance safety, help to expand the overall urban forest, efficiently manage stormwater, help mitigate and adapt to climate change, and improve place-making.
 - LIFE CYCLE & MAINTENANCE - Understanding the life cycle and maintenance of complete streets are to understand the total cost, support four seasons of use, and select robust materials.
- Each project requires collaboration between all stakeholders during the initial stages of design to establish project objectives. Prioritization of various design elements within the street will differ based on several factors – functional role of the street, available space, existing and future users, etc. Some elements will

benefit one user group over the other, however, the need of the most vulnerable user is to be prioritized.

Chapter 3: Demonstrations

Illustrates applications of the Complete Streets approach to different intersection types. The demonstrations are intended to exemplify how the Complete Streets approach can lead to different outcomes and help satisfy broader city building goals. Each intersection demonstration contains an analysis, ideas for a retrofit and reconstruction. It is hoped that the concepts will inform decision-making and can be applied throughout Vaughan. Five representative intersection types commonly found in Vaughan are illustrated. Each of the demonstrations includes a brief description and illustration of the existing condition, noting challenges and opportunities. The five demonstration intersections include:

- Local to Local
- Local to Arterial
- Collector to Collector
- Arterial to Collector
- Trail to Arterial.

Chapter 4: Elements

Provides guidance for the typical elements that make up a Complete Street and each element can be applied to the street classes. The elements are organized to focus on the most vulnerable users first to support the Complete Streets principles:

- Pedestrian Realm and Placemaking provides guidance for elements typically found in the boulevard, such as the pedestrian clearway, the planting and furnishing zone, the edge zone, and other curbside management or place-making opportunities.
- Cycling Infrastructure focuses on where people cycle. Depending on the context, cycle infrastructure can either be part of the boulevard or part of the roadway.
- Travel way provides guidance for the design of the parts of the street where transit infrastructure, trucks, vehicles, emergency vehicles, on-street parking and curbside management are located.
- Infrastructure provides guidance for green infrastructure, street trees and landscaping and utilities.
- Intersections provides techniques for designing more complete intersections.

Flexibility in design is possible as context and specific site conditions and inputs will influence the ultimate design.

Chapter 5: Implementation

Recommends steps to ensure the successful delivery of Complete Streets in Vaughan.

- The key strategies for implementation include:
 - Understand the scale of street networks
 - Leverage Investments and funding sources

- Prioritize the safety of the vulnerable user
- Begin with quick wins
- Promote testing with pilot projects
- Collect robust context information early on
- Decisive action is needed to achieve the overall vision established in this Guide. Recommended action lists are organized into three theme categories:
 - Policy - Establish or update the rules and regulations governing Complete Streets, such as VOP, VTP, and other standards and guidelines used to design, operate, and maintain complete streets;
 - Process - Adapt and improve existing operating procedures, practices, and organizational structures to align with the Guide;
 - Prioritization - Create an inventory of existing and future street projects which can be most impacted by Complete Street techniques. This includes coordinating with existing initiatives, grouping various initiatives, and targeting quick wins
- Defining performance metrics for different stages of the Project Delivery Process will establish a mechanism to evaluate successes and lessons learned. Findings based on performance metrics help the City assess impacts on transportation budgets and track compliance with overall Complete Streets objectives.

Financial Impact

There are no direct financial impacts associated with the adoption of the Vaughan Complete Streets Guide. The endorsed Guide will be used by staff and our development community when developing street designs as part of the City's capital program, as well as to inform the review of development applications. Any financial impacts resulting from complete streets implementation will be brought forward through the regular business planning and budget process.

Operational Impact

As noted previously, internal stakeholders have been consulted throughout the study process, including key departments such as Infrastructure Planning and Corporate Asset Management, Policy Planning and Special Programs, Transportation and Fleet Management Services, Development Engineering, and Parks, Forestry and Horticulture Operations.

Broader Regional Impacts/Considerations

York Region has participated as a stakeholder throughout the study process, providing input on regional road designs and reconstructions, as well as comments on operational and maintenance roles and responsibilities. Further consultation and collaboration with the Region will be required for the planning and design of new and retrofit street networks to ensure optimal implementation of Complete Streets.

Conclusion

The Vaughan Complete Streets Guide provides a comprehensive approach to building safer, more complete streets that accommodate all users and uses across the City. The Guide will help to balance and coordinate different interests and priorities for City streets with a clear decision-making framework for the many internal and external stakeholders involved in street design, construction, operations, and maintenance. The Guide establishes a standardized and formalized approach to the implementation of Complete Streets across all projects to ensure safer streets while improving street functions and enhancing quality of life.

For more information, please contact:

Shahzad Davoudi-Strike, Manager, Urban Design and Cultural Heritage, ext. 8653 or
Christopher Tam, Manager, Transportation Planning and Engineering, ext. 8702.

Attachment

1. Complete Streets Guide, by DTAH, January 2024 (to be provided prior to the meeting)

Prepared by

Shirley Marsh, Urban Design Project Manager, ext. 8561
Christopher Tam, Manager, Transportation Planning and Engineering, ext. 8702
Nancy Tuckett, Director of Development Planning, ext. 8529

Approved by



Nancy Tuckett, Acting Deputy City
Manager, Planning and Growth
Management

Reviewed by



Nick Spensieri, City Manager