4.0 > STREETS AND TRANSPORTATION

This is the first of seven sections containing the policies of the Secondary Plan.

The policies of this section build upon those in Sections 4 and 9.1.1 of Volume 1 of the Official Plan. The transportation network and policies of this Secondary Plan have been developed to support the growth projections for the VMC and facilitate the establishment of a downtown, as described in Section 3.1. The physical barriers within and adjacent to the VMC, including Highways 400, 407 and 7, pose challenges for movement to and within the VMC, which the network and policies below seek to address. The important and complex issue of how to most effectively manage and reduce through traffic in the VMC, particularly truck traffic, is partly addressed by the plan but will require further detailed study that considers a range of potential network improvements beyond the VMC as well as other traffic management strategies.

At the centre of the planned transportation network will be the Vaughan Metropolitan Centre Subway Station at Highway 7 and Millway Avenue, which will establish the VMC as a mobility hub and be vital to creating a high density downtown.

The policies in this section support the objectives set out in Section 3 of this plan, specifically Objectives 3.1, 3.5 and 3.6. The further general intent of the policies in this section is to:

- Develop a multi-modal transportation system in the VMC that is efficient, safe and convenient and supports planned land uses.
- Encourage routine use of existing and planned transit services by residents and workers in the VMC and Vaughan citizens generally.
- Encourage walking or cycling for most daily trips within the VMC.
- Establish and maintain logical and direct connections to the surrounding network of roads and highways.
- Encourage the diversion of through traffic, particularly truck traffic, to peripheral roads.
- Ensure the provision and efficient use of parking facilities, including parking structures and onstreet parking, required to support the planned land uses.
- Ensure planned and appropriate transportation infrastructure, including public transit facilities and roads, is coordinated with development and supports the urban design objectives for the VMC.

4.1 General Policies

4.1.1 Street life is central to the vision for the VMC, and all development in the VMC, including infrastructure and buildings, should promote walking. Some areas within the VMC shall be considered pedestrian priority zones, including areas immediately surrounding the subway station, VIVA stations, schools, community and cultural facilities, civic and neighbourhood parks, and streets with a concentration of retail or entertainment uses. In pedestrian priority zones, sidewalks and areas for pedestrians shall be generous, streets shall be designed for

slow speeds and on-street parking, and streetscapes shall include pedestrian amenities and wayfinding elements. As the planned heart of the VMC, the area surrounding the subway station, from the outset, shall be treated as a pedestrian priority zone.

- 4.1.2 The transportation system developed for the VMC, including public transit facilities, the street network and other elements of the pedestrian realm, shall be planned and designed for universal accessibility.
- 4.1.3 Public streets are intended to be the arteries for pedestrian movement in the VMC and the setting for retail uses. Direct underground pedestrian connections to the subway station from adjacent development shall be encouraged; however, the development of an under-ground network of paths lined with retail and other commercial uses, linking multiple buildings to one another, shall be discouraged.
- 4.1.4 The City shall require with applications for *significant development* the submission of a Traffic Impact and Mobility Study that assesses the impacts of the proposal on the road network and how it facilitates access and circulation by transit users, cyclists and pedestrians.
- 4.1.5 Travel demand management (TDM) will be critical to achieving a balanced transportation system in the VMC, one that provides and promotes attractive alternatives to the automobile. The City shall work with the Region of York and transit agencies, and with developers and businesses in the VMC, to develop and implement measures that promote the use of transit, walking and cycling. Applications for development shall be required to include TDM plans prepared by a qualified consultant that describes facilities and programs intended to discourage single-occupancy vehicle trips, minimize parking, and promote transit use, cycling, car sharing and car pooling.

4.2 Public Transit

- 4.2.1 This plan is predicated on the extension of the Spadina Subway Line to the VMC and on planned improvements to York Region Rapid Transit facilities along Highway 7. The City of Vaughan will continue to cooperate with York Region and the relevant transit agencies to expedite the planning, design and construction of proposed transit infrastructure.
- 4.2.2 The subway station planned at Highway 7 and Millway Avenue is intended to support the establishment of a high density, mixed use community and facilitate intermodal transit, linking directly to the York Region transit system. Unlike planned stations at Highway 407 and Steeles Avenue to the south, the VMC station will not include a dedicated public commuter parking lot.

TRAVEL DEMAND MANAGEMENT

See also Section 4.3.3 of Volume 1 of the Official Plan.

refer to schedule B

- 4.2.3 Schedule B identifies the general alignment of the Spadina Subway Line Extension through the VMC. As set out in this plan, the subway right-of-way shall be aligned with public open space adjacent to Millway Avenue or with a public right-of-way where adjacent public open space is not planned. The right-of-way extends to Portage Parkway to protect for a future extension of the subway beyond the VMC.
- 4.2.4 The subway station and track facilities extending from the station box, shall be located within and below a north-south open space reserved primarily for subway entrance and exit facilities, streets, utilities and municipal services, and park amenities, as generally identified in Schedule B. The location and design of the tail track, cross-over facilities and track tunnel generally shall permit the planting of mature trees in the open spaces above. Other than structures associated with the subway or required to support park uses, buildings generally shall not be permitted within the subway right-of-way.
- 4.2.5 Public transit facilities, including but not limited to right-of-ways, stations, station entrances, stops and utilities shall be integrated into the design of adjacent streets and open spaces. Utilities that are not required to be accommodated within the subway right-of-way, such as electrical substations and service buildings, shall be well integrated with adjacent development as unobtrusively and attractively as possible.
- 4.2.6 The central pedestrian entrance to the subway station shall be located within an open space adjacent to Millway Avenue, north of Highway 7. The entrance building shall include a waiting area visible from adjacent sidewalks and Millway Avenue and shall include sheltered bicycle parking facilities. The entrance building shall be set back from the Millway roadway to the east and buildings to the west to accommodate high pedestrian volumes around the entrance and in the open space.
- 4.2.7 Additional pedestrian entrances to the subway are planned to the north and south of the central entrance, in Millway Park, as generally indicated in Schedule B. The City and the Region of York shall coordinate the design and construction of each of these entrances with development on adjacent blocks.
- 4.2.8 The walls of the subway station at the concourse level shall include knock-out panels to allow future direct pedestrian connections to adjacent development and the planned bus station.
- 4.2.9 The Station Block identified on Schedule B is intended to be the location for a York Region Transit bus station directly linked to the planned subway station. York Region shall negoti-

STATION BLOCK refer to schedule B ate and secure appropriate land arrangements with the landowner and the City of Vaughan for such purpose, either through dedication, purchase, lease or expropriation.

- 4.2.10 Prior to development on the Station Block, including development of transit facilities, a Station Block Master Plan shall be prepared that satisfies the following:
 - a. The bus station shall be located on the Station Block and designed in a manner that allows for adjacent high density development with at-grade commercial uses along the Highway 7 and Millway Avenue frontages of the block. Alternatively, the bus terminal may be fully integrated with a mixed use development project on the block, above or below grade, provided active, continuous, pedestrian-oriented uses are located on the ground floor along Highway 7 and Millway Avenue.
 - b. In the event a bus terminal is constructed in advance of adjacent or integrated development fronting Millway Avenue and Highway 7, functional components of the terminal shall not be located on these roads and appropriate temporary landscaping shall be required to mitigate the visual impacts of the station.
 - c. A stand-alone bus station shall not be subject to the density and built form provisions of this plan. However, adjacent mixed use development or a development that incorporates the station shall be subject to such provisions.
 - d. Bus access to the station shall be provided on public streets on the north and/or east sides of the block. In the event these streets are not acquired prior to operation of the bus station, public easements providing bus access from existing roads shall be required.
 - e. A direct underground tunnel connection shall be provided from the bus station to the subway station.
 - f. Development on the block shall include an east-west mid-block street or generous pedestrian pathway.
 - g. Unless wholly integrated with a mixed use development, the bus station shall be designed to include a roof or allow the addition of a roof at a later date. A roof shall be built prior to occupancy of any adjacent buildings on the Station Block.

- 4.2.11 Passenger pick-up and drop-off (PPUDO) facilities associated with the subway station shall be located within the right-of-ways of local streets west and east of Millway Avenue. Until the appropriate local streets are built, a temporary PPUDO facility may be located within the Station Block or within the subway right-of-way. To ensure Millway Avenue functions as intended for vehicular and bicycle movement and parking, PPUDO facilities shall not be located in the Millway Avenue right-of-way.
- 4.2.12 A York Region Rapid Transit (VIVA) station is planned in the middle of Highway 7 at Millway Avenue. The VIVA station shall provide direct access to the subway station and allow for safe, efficient movement by embarking and disembarking passengers. The design of the station shall enhance the Highway 7 streetscape.
- 4.2.13 Schedule B also identifies preferred locations for future YRRT/VIVA stations west and east of the planned station at Millway Avenue. The timing and precise locations for these stations will be dependent on the timing of construction of the Highway 7 Rapidway. The locations may vary from those shown on Schedule B without amendment to this plan.
- 4.2.14 In addition to rapid transit stations, bus stops shall be established at appropriate locations.
- 4.2.15 The City shall cooperate with the Region of York on the planning for future rapid transit facilities on Jane Street.

4.3 Street Network

- 4.3.1 A fine-grain grid of streets is fundamental to this plan. Schedule C identifies the public street network planned for the VMC. It is intended to optimize connectivity while providing flexibility for a range of development scenarios. Minor modifications to the location and alignment of planned streets are permitted without amendment to this plan, provided the intersections in Schedule C that include a major or minor collector street or arterial street are maintained in their general location.
- 4.3.2 Notwithstanding Policy 4.3.1, where a school or other public institution requires more contiguous land for its facility than the street and block pattern in Schedule C allows, two blocks divided by a local street may be joined, provided pedestrian access through the block is provided.
- 4.3.3 The hierarchy of streets identified in Schedule C includes the following classifications and standard right-of-way widths:

VIVA STATIONS

refer to schedule B

refer to schedule C

- Highway 7 55-68 metres (varies)
- Jane Street (arterial road) varies
- Minor arterial street 33 metres
- Millway Avenue (special collector) 33 metres
- Major collector street 28-33 metres
- Minor collector street 23-26 metres
- Local street 20-22 metres
- Mews street 20 metres
- 4.3.4 The figures in Appendix B illustrate the generally intended cross-sections for each type of street. These guidelines may be modified without amendment to this plan. Final right-of-way requirements will be determined during the review of development applications or through Environmental Assessment processes where necessary.
- 4.3.5 New collector and local roads identified in Schedule C shall be identified in all approved plans within the VMC and shall be conveyed to the municipality as a condition of approval of draft plans of subdivision and site plan applications, at no cost to the City.
- 4.3.6 To allow cars and trucks travelling through the VMC to divert from Highway 7 and Jane Street before entering the area, a bypass route shall be developed along the north and east edges of the VMC. Creditstone Road and Portage Parkway shall be linked to each other and to Highway 7 and Jane Street, as shown on Schedule C, to establish the bypass (henceforth, the Creditstone-Portage-Applewood Bypass). A southerly extension of Applewood Road to Highway 7, at the Highway 400 off ramp, will be required. An extension of Interchange Way, from Jane Street to Creditstone Road, will also be required; however, until the right-of-way for this extension can be secured, Peelar Road will provide the link between Jane and Creditstone.
- 4.3.7 The Creditstone-Portage-Applewood Bypass will help to mitigate through-traffic on Highway 7 and Jane Street. However, to realize the long-term plan for these streets, additional transportation improvements and strategies beyond the VMC will need to be planned and implemented over time. The City will work with the Region of York, the Ministry of Transportation and major industrial employers on other measures aimed at significantly reducing truck traffic and other through-traffic in the VMC. These measures may include new roads and other network improvements beyond the VMC.
- 4.3.8 It shall be a priority of the City to acquire the right-of-way for the future extension of Portage Road east from Jane Street to Creditstone Road through a land dedication as a condition of

BYPASS ROUTE

refer to schedule C

development approvals, outright purchase, expropriation or a combination of these.

refer to schedule C

4.3.9 The Special Study Area A identified on Schedule C recognizes the need for a successful resolution to the configuration of the Highway 400 ramps (Links 4 and 5) to facilitate the Creditstone-Portage-Applewood By-pass and other objectives in the area. Schedule C illustrates one concept for roads in this area. Further detailed study of this configuration will be required and will involve the City of Vaughan, the Region of York, Provincial ministries and the landowners. The study should consider improvements to the larger road network that would mitigate traffic impacts in the VMC. Alternative locations and configurations for the northbound ramp to Highway 400 may be considered, including a location north of Portage Parkway. Modifications to road alignments in the Special Study Area A may be made without amendment to this plan, provided the City is satisfied that the intent of this plan with respect to land use and transportation is met.

- 4.3.10 As identified on Schedule C, a road over Highway 400 linking Colossus Drive and Interchange Way is proposed. This road will provide an important connection between the VMC and lands west of the 400 planned for mixed-use intensification and will generally help to distribute east-west traffic in the area. A right-of-way for the road shall be secured by the City, and no new buildings shall be permitted within the protected right-of-way. Existing and future highway crossings should be pedestrian and bicycle friendly.
- 4.3.11 Millway Avenue has been classified in Schedule C as a Special Collector Road to recognize its location and function vis-à-vis the future subway station and its intended role as one of the VMC's primary commercial streets. As illustrated in Figure D in Appendix B, it is intended to have a right-of-way width of 33 metres, as measured from the right-of-way for the subway. This is to accommodate appropriate travel lanes for vehicular and bicycle movement as well as a generous pedestrian realm on both sides. To support ground-floor commercial uses on Millway and provide a buffer between pedestrians and moving traffic, on-street parking may be permitted.
- 4.3.12 Highway 7 through the VMC is intended to evolve into a grand avenue that balances its higher order function to accommodate rapid transit and vehicular traffic with its additional intended role as a pedestrian-friendly street that provides an attractive setting for residential and commercial development. The City shall work with the Region of York, the Province of Ontario and landowners to implement the vision for Highway 7, as illustrated in Figures A and B, and:

refer to appendix B

- a. Achieve a right-of-way width for Highway 7 that varies from 55 to 65 metres to accommodate rapid transit facilities in the centre of the road, three travel lanes on each side, left turn lanes where required and a generous pedestrian realm;
- b. Ensure the design of Highway 7 is guided by Section 4.4 of this plan and includes double rows of trees in the median and on both sides, except at VIVA station locations, where the right-of-way requirement may only permit a single row of trees in each boulevard;
- c. Ensure the planned development of bus rapid transit facilities initiates the transformation of Highway 7 into an urban avenue;
- d. Ensure future development on both sides of Highway 7 frames the street and contributes to an attractive and active pedestrian realm; and,
- e. Facilitate implementation of road improvements within and potentially beyond the VMC intended to relieve traffic on Highway 7, including the Creditstone-Portage-Applewood Bypass described in Policy 4.3.6.
- 4.3.13 To establish a pedestrian-friendly environment, major intersections within the VMC should be signalized. Moreover, dedicated right-turn lanes generally shall be prohibited on major and minor collector roads and minimized on arterial roads. Double left turn lanes generally shall be prohibited in the VMC.
- 4.3.14 Streets and intersections shall incorporate design standards and features intended to facilitate walking and street life.
- 4.3.15 In addition to the public streets identified in Schedule C, public or private laneways and/ or private streets may be required to service development within a block. The need for laneways and private streets, and their location, function and character, shall be determined during the preparation and review of Development Block Master Plans.
- 4.3.16 Mews streets, which may be considered as an alternative to a local street in the locations identified in Schedule C, may accommodate a vehicular laneway or be designed for pedestrians and cyclists only, but in either case shall include a generous pedestrian zone, lighting and trees.
- 4.3.17 In general, vehicular access to development for parking, servicing and pick-up/drop-off shall be provided from local streets and laneways.

4.4 Streetscaping

refer to

appendix B

- 4.4.1 Figures A-L, which illustrate typical general streetscape conditions for the different street types planned in the VMC, shall guide the placement of the streetscape elements addressed in the following policies. Generally, all streets shall be built with pedestrian zones on both sides, street trees, and vehicular and pedestrian scale lighting. Pedestrian zones include sidewalks and other hardscaping intended for pedestrians.
- 4.4.2 Detailed hierarchical streetscape standards and guidelines for the VMC, consistent with the policies below, shall be developed in a timely fashion to inform the design of new streets and the improvement of existing streets. Guidelines for Millway Avenue shall be developed in conjunction with the design of the subway right-of-way and station. The City shall work with the Region of York to prepare streetscape guidelines for Highway 7 and Jane Street. The City shall prepare special guidelines for Edgeley Road and general guidelines for other collector roads and local streets in the VMC.

Furnishings

4.4.3 Street furnishings, which include benches, bike racks, bollards, bus shelters, kiosks, newspaper vending machines, trash and recycling bins, banners and special lighting, should be used as unifying landscape elements. Because of their prevalence, their style, image and colour will be important to the overall visual environment of the VMC. Street furnishing should consist of materials utilitarian in character and function. A low maintenance, vandal resistant, easily replaceable and recognizable family of furnishings with common themes and colour palettes shall be identified for the VMC. These furnishing should be contemporary and elegant. This will not only minimize visual clutter but also help to distinguish distinct precincts and establish an attractive identity for the VMC.

Lighting

- 4.4.4 Street lighting performs a number of important functions and light standards will have an impact on the visual environment. Due to the prevalence of lighting fixtures on all streets, lighting should be used as a unifying streetscape element. In addressing issues of identity, aesthetics, safety and security, equal consideration shall be given to illumination, lighting pattern and colour. In designing the overall lighting system, energy conservation also shall be considered.
- 4.4.5 Street lighting shall consist of a coordinated family of poles and fixtures for both pedestrian and vehicular lighting. They shall be made of durable materials provide illumination levels that minimize glare while providing adequate levels of light for safety and security.

Generally, light poles shall be capable of incorporating pedestrian-scale lights and banners. In keeping with the image of a new downtown, their style should be contemporary.

Paving

4.4.6 The design and construction standards for paving shall add interest and coherency to the public realm through pattern, colour and texture. To ensure physical unity, a common palette of paving materials shall be developed for the VMC. Special paving with a distinct colour and texture shall be considered at street corners. Where paving stones are appropriate, they should be large and durable. Generally, crosswalks shall have a paving treatment distinct from the roadway to highlight the pedestrian network. All streets shall be accessible for the disabled through curb ramps, scored surface and clear passage ways.

Trees

4.4.7 Trees, and street trees in particular, are intended to be a distinguishing visual element in the VMC's identity. They provide shade, beauty and wildlife habitats; moderate microclimates for human comfort and buildings; mitigate wind; reduce glare and reflection; and help to unify a streetscape. All streets in the VMC should be lined with appropriate native trees resistant to salt, disease, drought and pests. Street trees shall be consistently spaced, generally 6-8 metres apart on centre. Generous tree and planting pits should be provided for maximum soil area to allow roots to spread and water and air to penetrate. Drip or other water-conserving systems should be installed in planting pits. Attractive grates or covers over tree pits or low, decorative tree guards should be used in high pedestrian areas. Other native plants in planting pits or raised planters may be considered.

Public Art

4.4.8 Public art will be an important element of the VMC's public realm, adding beauty and interest to streetscapes as well as parks, other open spaces and buildings. Several streetscape elements present opportunities for the integration of art, including build-ing canopies, storefronts, furnishings, lighting, paving, fencing, tree guards, information displays and utility elements such as manhole covers. The installation of public art projects within streetscapes generally shall be encouraged, and the City shall incorporate streetscape elements in a public art plan for the VMC.

Utilities

4.4.9 Generally, all electrical and telecommunication cabling within right-of-ways shall be located underground. The integration of required above ground utility infrastructure in adjacent buildings shall be encouraged. Any utility boxes required within the right-of-way shall be well integrated with the design of the streetscape. See also Section 9.1.1.9 of Volume 1 of the Official Plan.

4.5 Bicycle Network

- 4.5.1 All streets in the VMC shall be designed for the safety, comfort and convenience of cyclists.
- 4.5.2 Schedule D identifies the Bicycle Network for the VMC. It is intended to link directly to the planned city-wide Bicycle and Pedestrian Network. The cycling facilities identified in Schedule D are intended to be built as existing roads are improved and new roads are built.
- 4.5.3 As indicated on Schedule D, Highway 7, Jane Street, Creditstone Road and all major collector streets should include on-street bicycle lanes. Figures B-K illustrate where bicycle facilities should be accommodated within the right-of-way for each type of street.
- 4.5.4 In addition to the bike routes identified on Schedule D, major parks and open spaces shall include multi-use recreational trails linked to the street network to enhance connectivity for cyclists.
- 4.5.5 Bike lock-up facilities shall be provided at all public destinations within the VMC, including but not limited to transit stations, parks, schools, community centres, cultural facilities, other public institutions and retail streets.
- 4.5.6 Sheltered bike lock-up facilities shall be provided at subway station entrances.
- 4.5.7 Development adjacent to the subway station shall be encouraged to include public bicycle parking in accessible, secure indoor facilities.
- 4.5.8 All office and apartment buildings shall include secure, indoor private bicycle parking and storage facilities. The Zoning By-law shall establish minimum requirements for bicycle parking. *Major office* developments shall be encouraged to include change rooms, showers and lockers for bicycle commuters.

4.6 Parking

4.6.1 It is expected that vehicular parking facilities will take multiple forms in the VMC, including underground and above ground parking structures, small surface lots and on-street parking. Structured parking shall be the preferred form for off-street parking. Where surface parking is proposed as part of an initial phase of development, the phasing plan shall show how in subsequent phases, the parking will be incorporated into parking structures.

refer to schedule D

- 4.6.2 The City shall monitor the need for public parking in the VMC and may prepare a public parking strategy that considers:
 - The amount of parking required to support planned retail, entertainment and institutional uses;
 - The amount of on-street parking that can be provided to support planned commercial, entertainment and institutional uses;
 - The amount of office parking that could be made available to the public in the evenings and on weekends;
 - The potential for public and commercial parking facilities to be used by subway commuters;
 - · Appropriate locations and sizes for off-street public parking facilities;
 - Appropriate parking standards for commercial uses in the VMC based on the ability to complement private parking with public facilities;
 - The role of a municipal parking authority, to be considered as per Policy 4.3.2.1 of Volume 1 of the Official Plan.
- 4.6.3 Further to Policy 4.3.2.3 of Volume 1 of the Official Plan, the City shall consider adopting a cash-in-lieu-of-parking by-law for the VMC that would permit development applicants proposing office or retail-commercial uses to contribute funds toward public parking facilities in lieu of some or all of the on-site parking spaces required for commercial uses.
- 4.6.4 A portion of the parking provided for office uses in the Station Precinct shall be available for public parking for visitors who neither live nor work in the VMC. Generally, these shall be parking spaces used by office tenants during the day but not in the evening and on weekends. The number of parking spaces for public use and their location shall be determined when applications for development are reviewed.
- 4.6.5 Transit-supportive parking standards shall be adopted by the City to facilitate development of the VMC.
- 4.6.6 The design of off-street parking facilities shall be encouraged to accommodate spaces for car-share programs and include reserved spaces for drivers of car-share vehicles.

PUBLIC PARKING