3.3 Mobility

3.3.1 Existing Street Network

The primary City streets within the study area are Scott Street, Parkdale Avenue and Holland Avenue. Both Scott Street and Parkdale Avenue are classified as arterial roads in the City's Official Plan. Holland Avenue is classified as a major collector. All other study area streets are classified as local streets.

With regard to right-of-way widths, the Official Plan protection policy for Scott Street, Parkdale Avenue and Holland Avenue is 26.0 metres (m).

With regard to the number of lanes, Scott Street is generally three lanes wide west of Holland Avenue, five lanes wide from Holland Avenue to Parkdale Avenue and four lanes wide from Parkdale Avenue to Bayview Road. Parkdale Avenue is generally comprised with two lanes for traffic with left-turn lanes at signalized intersections with on-street parking permitted at certain times adjacent to the west curb. Holland Avenue is generally two lanes for traffic with left-turn lanes at signalized intersections and parking permitted on both sides at certain times.

Current peak hour traffic volumes on the major streets in the study area vary. As a general summary, peak hour volumes on Scott Street range from 400 vehicles per hour (vph) to 850 vph per direction depending on the location. On Parkdale Avenue they range from 350 vph to 650 vph per direction, and on Holland Avenue they range from 300 vph to 700 vph per direction.

As a long established area in the inner city, there are limited opportunities to alter the street network by creating new streets or widening existing ones. With the City's focus on encouraging alternatives to driving, and the shift to prioritizing pedestrians, cyclists and public transit near LRT stations, the challenge is to improve facilities for pedestrians and cyclists within existing right-of-ways and enhance the network of pathways.

Scott Street is the primary east-west road in the study area for all modes of transportation and is an important transportation corridor in the City for all modes of transportation. It links the Westboro area and beyond with Albert and Slater Streets in the downtown core. In addition to accommodating the above-noted traffic volumes, it also accommodates cyclists and pedestrians via a combination of sidewalks, bike lanes (not continuous), a multi-use pathway and crosswalks at signalized intersections. Given the traffic volumes, the high turn movements at the major signalized intersections and the substandard pedestrian and cycling facilities, Scott Street "feels" like vehicle traffic has priority over pedestrians and cyclists. One of the challenges of this study is to develop a new conceptual Scott Street cross-section within the available right-of-way that improves the pedestrian and cycling environment while maintaining the necessary vehicle capacity.

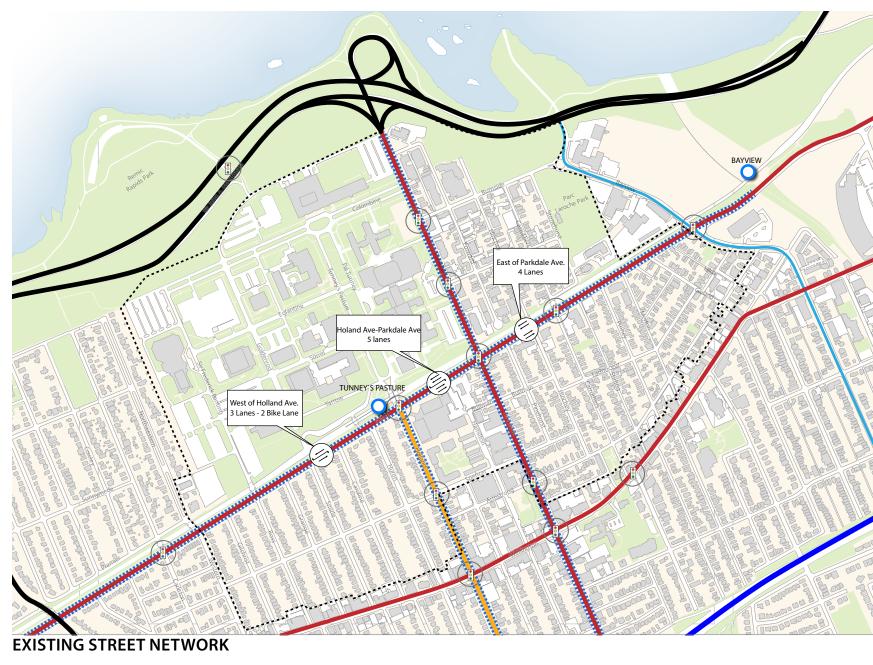
Existing Intersection Operation

Many of the study area intersections are currently operating at an acceptable level of service during weekday peak hours; however, a few key intersections are not. Those intersections currently operating at congested conditions or experiencing significant delay in one or more movements include Island Park/Sir John A. Macdonald, Island Park/Scott, Parkdale/Scott, Parkdale/Wellington and Scott/Ross.

Based on field observations of peak period traffic flow, Parkdale Avenue appears to be the most traffic-sensitive of the study area roads. Based on six peak hour observations, lengthy queues were observed on (or approaching) Parkdale Avenue at (or through) the signalized Scott/Parkdale and Parkdale/Wellington intersections. These observations are also consistent with the comments of area residents, who also report that Parkdale Avenue is frequently congested outside the peak hours.

Based on these six independent observations, the amount of traffic congestion on Parkdale Avenue can fluctuate significantly day-by-day. There are days where Parkdale Avenue experiences very little queuing and operates very well (within the study area) and there are days where it experiences heavy queues for hours. It was also observed that traffic congestion on Parkdale Avenue can rapidly transition (within the study area) from no queues, to significant queues and back to no queues, in a span of 30 minutes.

The amount of traffic congestion on Parkdale Avenue (within the study area) is dependent on how the Parkdale/Highway 417 interchange and the Sir John A. Macdonald Parkway are operating, if the Parkdale Market is open, and how busy Wellington Street West is. Often when Highway 417 is heavily congested, drivers will exit at Parkdale Avenue, travel north to the Sir John A. Macdonald Parkway as an alternate east/west route, and similarly in the reverse direction, if the Sir John A. Macdonald Parkway is heavily congested.





Existing Signalized Intersection

Carrefour avec feux de circulation actuel



Transitway Station Station du Transitway



Collector Route collectrice

Protection de l'emprise (26 m)



Arterial *Artère* Provincial Highway
Autoroute provinciale

Major Collector
Importante route collectrice
Federally Owned Road
Route fédérale

3.3.3 Existing Multi-Use Pathways

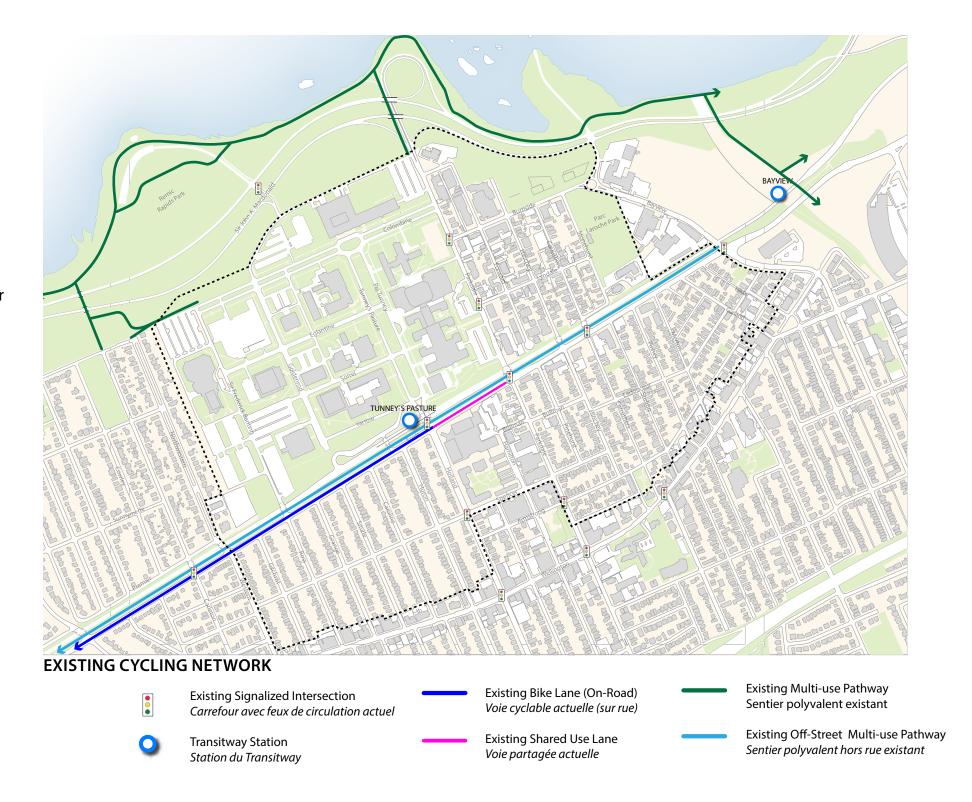
The pedestrian network in the study area is comprised of a combination of sidewalks and multi-use pathways. The major roads of Parkdale Avenue, Holland Avenue and Wellington Street West each have sidewalks on both sides. Scott Street has a sidewalk on its south side and a multi-use pathway on its north side. The Sir John A Macdonald Parkway has no sidewalks, but there is a multi-use pathway that parallels it along the Ottawa River. All other streets within the study area are local streets which typically have sidewalks on both sides, however, there is the occasional street that only has a sidewalk on one side. This is common in Mechanicsville, where the narrow right-of-ways of most streets do not allow for sidewalks on both sides. The study area's existing pedestrian network and the location of signalized intersections is depicted in Figure 3.

With regard to the pedestrian crossing opportunities along Scott Street, the spacing of signalized intersection is not consistent over its length, thus crossing the corridor comfortably at some locations can be problematic. As growth occurs in Tunney's Pasture, additional signalized intersections will be required, providing more protected crossings for pedestrians. At some locations, and particularly at the Holland Avenue and Parkdale Avenue entrances to Tunney's Pasture, even though pedestrians have sufficient green time to cross, they can feel threatened by the high volume of turning traffic at these intersections as they share the same "green time" with pedestrians.



3.3.4 Existing Cycling Network

The bicycling network in the study area is comprised of a combination of multi-use pathways, delineated on-road cycling lanes and shared use lanes. These are depicted on Figure 4 along with the study area's signalized intersections. The City is not currently planning any significant changes to the network within the study area. Nevertheless, there are opportunities to introduce more dedicated cycling facilities along Scott Street when the LRT is constructed and on future public streets within Tunney's Pasture. As further development in Tunney's Pasture occurs, there will also be opportunities to extend the multi-use path network along key streets, such as Parkdale Avenue and Sir Frederick Banting Driveway.



3.3.5 Existing Transit Service

Transit service to the study area is provided by a combination of on-road local bus routes, and express bus service on the Transitway. Relevant Transitway stations are located in the middle of the study area adjacent to the north side of Scott Street (Tunney's Station) at Holland Avenue and at the O-Train intersection at the east end of the study area (Bayview Station). The existing transit network is depicted on Figure 5.

Planned Light Rail Transit

Very important to the transit service discussion is the City's planned LRT project that extends from the Tunney's Station, under downtown and east to Blair Station. The construction of the Confederation Line is now underway, with the existing Transitway being converted to Light Rail Transit, and a new LRT tunnel being provided through downtown. The Tunney's Pasture station will be reconstructed to an LRT station along with a bus interface for Transitway buses to/from the west. The Confederation LRT line is planned to be operational in 2018. It is noteworthy that in the City's recently released Transportation Master Plan Update, the extension of the LRT line west and south to Baseline Station and Bayshore Shopping Centre is planned for 2023.





Ligne de transport en commun rapide par autobus/ligne de TLR prévue

THE PLAN

3.4 Utilities

3.3.7 Summary of Mobility Opportunities

Based on the foregoing overview of the existing conditions, the following is a listing of considerations for the Scott Street CDP to enhance the pedestrian and bicycle environment within the study area while continuing to accommodate vehicular travel:

- encourage more mixed-use development as this will reduce the length and number of vehicle trips;
- provide enhanced connections to transit stations for pedestrians and cyclists with improved and new pathways and improved/additional pedestrian crossings of Scott Street;
- enhance connectivity through Tunney's Pasture with new pathways and dedicated cycling facilities on key streets; and
- ensure major new office and residential development implement transportation demand management (TDM) strategies.

The following section is based on the Scott Street District Community Design Plan Municipal Infrastructure Report.

3.4.1 Water Distribution System

The Lemieux Island Water Purification Plant (WPP) is located immediately north of the Scott Street CDP area. This plant supplies water to approximately 60% of the serviced part of the City, including all of the CDP area. The CDP area is located in the 1W pressure zone. The 1950 mm dia. high pressure transmission main (HPTM) conveys water to 1W pressure zone from the Lemieux WPP, running west to east, along Bayview & Wellington streets. There is a 1067 mm dia. watermain along Scott Street that connects to the 1950 mm HPTM at Bayview intersection. This main interconnects the water supply from the Lemieux WPP to the Britannia WPP. All streets in the CDP area have local watermains ranging from 125 mm to 305 mm. The watermains are relatively new as they were replaced during street rehabilitation projects between 1992 and 2004.

It is expected that proposed intensification should be accommodated by the existing water distribution network, particularly considering the fact that the sizing of local watermains is driven by fire-fighting requirements; however the approval of each new development will require confirmation that adequate local fire supply exists.

3.4.2 Wastewater Collection System

The municipal wastewater collection system within the Scott Street CDP area was originally a combined system and has been separated in the last 20 years with the exception of a few combined pipes on Scott Street at Bayview Road, on Hilda Street and on Manchester Street. The City of Ottawa plans to replace these combined pipes as part planned road rehabilitation projects in the next ten-year planning horizon. Even though most of the storm and sanitary system had been fully separated within the CDP area, it still functions mostly as a partially separated system which conveys municipal wastewater and foundation drainage to the sanitary system. There are two major wastewater trunk sewers located in the CDP area: the West Nepean Collector (WNC) and the Cave Creek Collector (CCC). Future increases in sanitary flow contributions from new development to WNC and CCC are expected to be small in relation to the peak wet weather flows in these collectors. Any increase in sanitary contributions are expected to be compensated by the future infrastructure renewal and extraneous flow removal projects planned for the entire WNC and CCC drainage areas. In addition any new development or re-development in the CDP area will need to have the foundation drains connected to the storm sewer either by gravity or via a sump pump.

The local sanitary sewers in the CDP area comprises of pipes varying in size from 250 mm to 375 mm which outlet to the WNC along Scott Street. A small north-east section drains north along

Stonehurst Street and outlets to the CCC via the Bayview Street Sewer. The south-east section of CDP area also drains to CCC. Similar to the watermains, the local sanitary sewers are relatively new as they were replaced during street rehabilitation projects between 1992 and 2004 and are expected to accommodate wastewater intensification flows.

3.4.3 Stormwater Collection System

There are three main storm trunk systems that run through the CDP area. The West Transitway twin box stormwater sewer outlet, which was constructed in 1983, discharges immediately to the west of Lemieux Island. It connects to the 2100 mm twin box sewer at the Transitway just to the west of Merton. The twin box sewer along the Transitway was designed specifically to manage the drainage from the West Transitway. This sewer also provides an outlet for the 1800 mm. Pinhey Street Storm as well as number of local stormwater pipes along the way.

The Merton Stormwater Trunk Sewer (MTS) enters the study area as 1800 mm pipe upstream of the Merton and Scott Street combined sewer overflows and provides outlet for the 1050 mm storm pipe located along Scott Street. A 750 mm West Transitway connection at Merton Street also contributes flow from the east to the MTS. The 2100 mm MTS splits into twin 1800 mm pipes south of Burnside Street before discharging into the Ottawa River immediately east of the access bridge to Lemieux Island.

The Parkdale Stormwater Trunk is more localized as it drains the north-west corner of the area and outlets into Ottawa River north of Forward Street.

Local storm water pipes range from 375 mm to the 750 mm and are also relatively new as they were replaced during street rehabilitation projects between 1992 and 2004.

The key to managing impacts of intensification on the storm collection system in the area will be on-site stormwater management. In general, redevelopment in the CDP area will be required to maintain a property-level storm discharge at or less than pre-development level and will be subject to current stormwater controls measures.

THE PLAN

3.5 The Public Realm

The public realm of a community includes its streets, parks and other publicly-accessible open spaces as well as institutions, such as schools, community centres and places of worship. The public realm is where people gather to play, exercise, shop, learn, celebrate, worship or simply interact with neighbours. The attractiveness, livability and prosperity of a community depend on the quality of its public realm. Streets, parks and other gathering places are the connective tissue of a community, and therefore how they are designed and how they function are important considerations of a community design plan.

Parks and Open Spaces

The network of green spaces in the study area is dominated by Laroche Park and the open spaces that surround many of the buildings in Tunney's Pasture. This suggests that the workers and residents north of Scott Street, who also enjoy proximity to the Ottawa River open space system, are well served by outdoor space for passive and active recreation. On the other hand, North Hintonburg contains only a few small parks and Wellington Village has none. In this context, Laroche Park becomes a neighbourhood park for more than one neighbourhood; in fact, its baseball diamonds attract users from across the city. The NCC lands along the river provide passive recreation; however there are limited access points to these lands.

Outside of Tunney's Pasture, there are no potential redevelopment sites in the study area that are large enough to

accommodate a new park, although some sites may afford the opportunity for a small, publicly-accessible open space. In light of this, there are four key opportunities to pursue to ensure existing and future residents in the area, as well as employees, have good access to parkland and park amenities:

- Build new parks in conjunction with residential development in Tunney's Pasture, including a significant neighbourhood park in the west half and smaller neighbourhood parks in the east half. The design and programming of the parks should consider the needs of the larger community.
- Enhance the facilities of Laroche Park. Given the important
 role of the park and how heavily it is used, some of its
 facilities need to be upgraded, including the ice rink and
 playground. The field house should be replaced with a larger
 building designed as a small community centre. The removal
 of one of the baseball diamonds would provide more
 green space for flexible use, and a fenced dog park should
 be considered. These ideas have been generated by the
 Mechanicsville community and should be the starting point
 for its redesign.
- Use a portion of the NCC lands north of Burnside Avenue to effectively extend Laroche Park and improve connections to the river. In keeping with the character of the Sir John A. Macdonald Parkway, the park extension could comprise mostly landscaped green space and pathways with benches.
- Improve pedestrian and bicycle connections to the NCC's riverfront lands. Two ways to accomplish this would be to

build multi-use pathways on the east side of Sir Frederick Banting Driveways, when it is extended to the parkway, and on the west side of Parkdale Avenue. Providing more openings in the fence around the NCC lands north of Burnside Avenue until they are developed, or removing the fence altogether, would also improve public access to green space.

Schools and Community Centres

The cluster of community facilities on the south side of Wellington Street West, between Parkdale and Carruthers Avenues, is a regular destination for many in the community, especially children and seniors. It is not expected that population growth outside of Tunney's Pasture will generate demand for additional schools or other major public indoor community facilities. A small community centre to replace the field house in Laroche Park should take some pressure off the Hintonburg Community Centre to provide the full range of recreational programming needed in the area. Even once this new facility is built, however, it will be important to maintain safe and comfortable walking routes to the schools in Hintonburg, for example, by improving the pedestrian crossing at Scott Street and Carruthers Avenue.

As mentioned in Section 3.1.4, future residential development in Tunney's Pasture will generate a need for community facilities that might exceed the capacity of existing facilities in the

area. The opportunity exists in the west half of the site to plan a community centre and potentially an elementary school adjacent to a neighbourhood park.

Scott Street

Most of the local neighbourhood streets in the study area have attractive streetscapes that encourage walking, in contrast to the area's major roads. In Mechanicsville, Burnside Avenue is one important street that can be made more pedestrian and bicycle friendly. Along major streets, like Parkdale Avenue, new development will create opportunities to incrementally improve adjacent streetscapes and make them more inviting to pedestrians with tree planting and other landscaping in the private realm. As noted in Section 3.3.1, however, the constraints of existing right-of-ways pose a challenge to making significant streetscape improvements in the area. The notable exception is on Scott Street.

As discussed in Section 3.3.1, the width of Scott Street, including the greenway on the north side, creates the opportunity to rebalance the street to make it more attractive for walking and cycling while maintaining the current roadway capacity. This will not only enhance the transportation role of the street; by significantly improving the landscaping on both sides with more trees and adding pedestrian amenities in the greenway, Scott Street can also become a place that feels and functions like a linear park.



