Integrated Major Transit Station Area Study

Existing Conditions Summary –

Transportation, Land Use and Commercial Analysis

January 2023

TABLE OF CONTENTS

1. Study Background

1.1 Purpose and Objectives

In Spring 2022, the City of Oshawa sought a qualified consultant to undertake a Master Land Use and Urban Design Plan, and an area-specific Transportation Master Plan (Phases 1 to 4 of M.C.E.A. process, that satisfies the requirements of Schedule A, A+, B and C Environmental Assessments (E.A.)) in the Central Oshawa Major Transit Station Area (M.T.S.A.). Completed as one integrated study, the Integrated M.T.S.A. Study (referred to hereafter by its name or by "the Study") intends to streamline the requirements of both the Oshawa Official Plan and the Municipal Class Environmental Assessment process.

Specific objectives of the Integrated M.T.S.A. Study include advancing development and sustainable multimodal transportation networks in the study area that supports and accommodates the future Central Oshawa GO Station and achieves Provincial population and job density targets in the Durham Regional Official Plan and City of Oshawa Official Plan. Given the location of the M.T.S.A., the future developments should be compatible and integrated with the surrounding neighbourhoods and the adjacent Downtown Oshawa Urban Growth Centre.

The purpose of the Integrated M.T.S.A. Study is to ensure that future development:

- Meets Provincial population and employment density targets;
- Is sensitive to the existing urban fabric of the study area;
- Promotes active transportation and enhances safety for vulnerable road users;
- Emphasizes sustainability and the protection/enhancement of the existing natural and cultural environments; and,
- Integrates well with surrounding neighbourhoods, including the Downtown Oshawa Urban Growth Centre.

1.2 Study Area and Urban Context

1.2.1 STUDY AREA

The study area for the Integrated M.T.S.A. Study is located in Central Oshawa and is approximately 1.3 km by 1.2 km in size. It is generally bounded by John Street and Eulalie Avenue to the north; a portion of Ritson Road South to the east; Highway 401 to the south; and the Oshawa Creek flood plain to the west (generally parallel to Centre Street South). It primarily includes lands that are within the Central Oshawa Transportation Hub, as designated in the Oshawa Official Plan. In addition, it also comprises certain lands east of Ritson Road South, which include areas along Viola Street, Oshawa Boulevard, Kitchener Avenue, Dean Avenue between Ritson Road South and Normandy Street, and Monash Avenue, as well as properties on the east side of Ritson Road South between Monash Avenue and Highway 401. It is expected that these lands will be incorporated into the Central Oshawa Transportation Hub in the City's Official Plan once the Regional Municipal Comprehensive Review has been completed and the Durham Regional Official Plan amended accordingly.

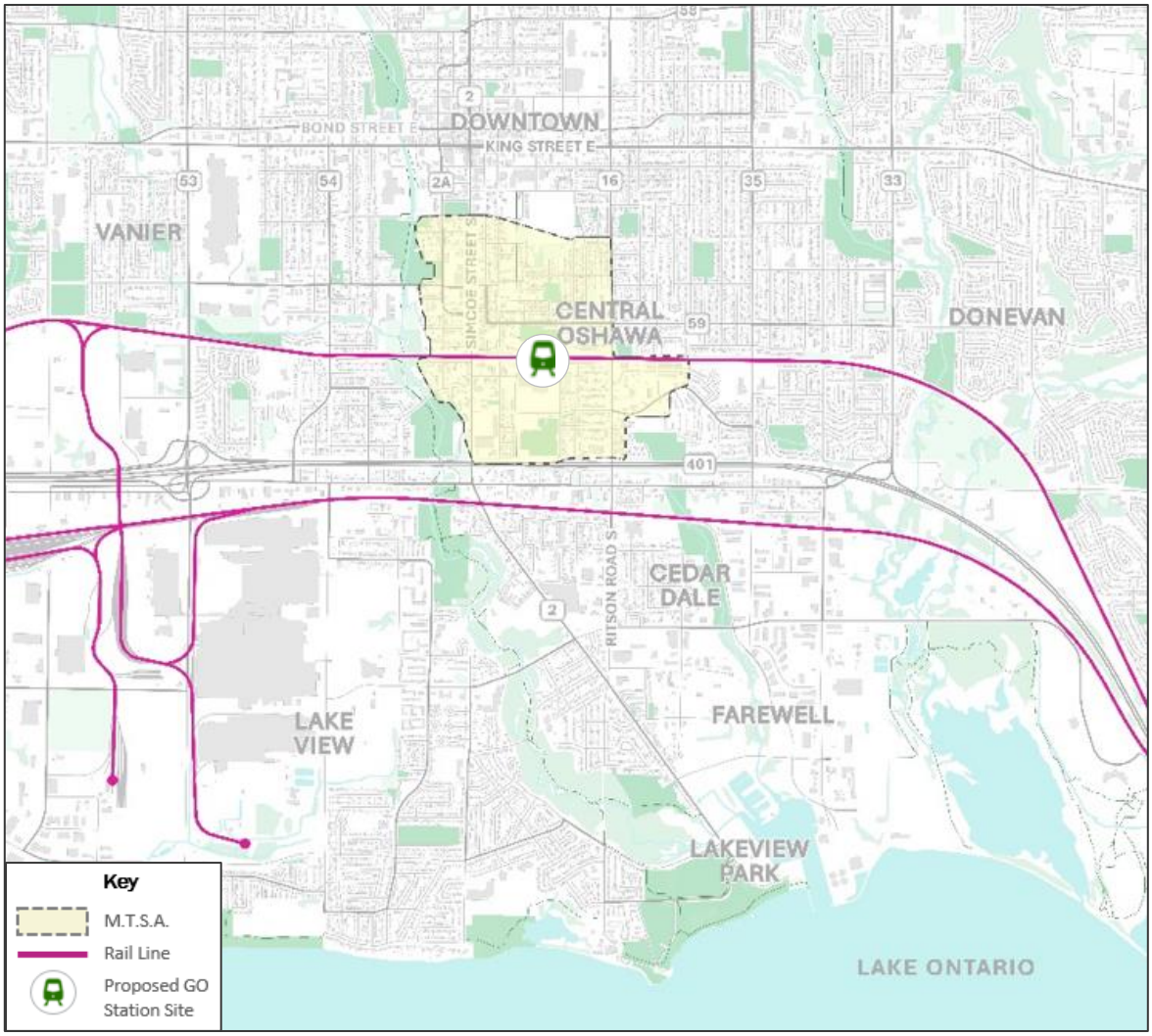
The study area is reflective of the area identified by Durham Region through Regional Official Plan Amendment (R.O.P.A.) #186 and a "Protected Major Transit Station Area" (P.M.T.S.A.) for Central Oshawa. R.O.P.A. #186 is currently with the Provincial Government awaiting their approval. It is anticipated that this designation of lands will be incorporated into the City's Official Plan once the Durham Regional Official Plan has been amended accordingly. Given this, for the purposes of the Integrated M.T.S.A. Study, the study area is also referenced as the "Central Oshawa M.T.S.A.".

The Central Oshawa M.T.S.A. is adjacent to the Downtown Oshawa Regional Centre/Urban Growth Centre to the north, as designated in both the Durham Regional Official Plan and the Oshawa Official Plan. The M.T.S.A. consists predominantly of established residential neighbourhoods and industrial properties along Simcoe Street South and Ritson Road South, as well as some commercial land uses and a planned commercial centre in the southern section. To the west of the study area, there is a north-south open space corridor along the Oshawa Creek valley which spans the length of the City to the lake. Currently, this area does not have a Secondary Plan or a Part II Plan. The future GO Rail service will be accommodated along the existing east-west C.P. Rail corridor that bisects the M.T.S.A.

1.2.2 DEMOGRAPHICS AND URBAN CONTEXTUAL CONDITION

The M.T.S.A. (**Map 3-1**) is situated in a unique condition within the wider urban and Regional context. It bridges a gap between the traditional downtown and major infrastructure connections to the south of the M.T.S.A. These connections include two heavy rail lines, as well as Highway 401, all providing vital east-west transportation connections. The M.T.S.A. is mostly made up of a traditional single-family residential community, essentially bisected by the rail line which will service the M.T.S.A. as part of the planned Lakeshore East GO Extension. The wider context shows a very developed condition of urban, suburban, and industrial land uses as dominant features. The M.T.S.A. is bounded by the Oshawa Creek corridor to the west, which constitutes one of the primary natural heritage features in the City. The corridor, which contains active transportation facilities, and Simcoe Street South also provide two of the most direct connections to Lake Ontario and the City's waterfront parks network.

MAP 1-1: THE M.T.S.A. WITHIN OSHAWA



This 1930s community provides a point of reference in the evolution of the City. Developed after the rail corridor and before Highway 401, the M.T.S.A. has been greatly impacted, physically and socio-economically, by the rail and Highway 401 infrastructure. Today, it is an underserved part of Oshawa, sharply different from newer communities in the north and the industrial focus to the south of the M.T.S.A. The redevelopment of the M.T.S.A. can inspire new opportunities for the area, which can make better use of the land and its infrastructural assets.

As reported in Oshawa's Official Plan, in 2021 the City had a population of approximately 174,695 residents, making it the largest area municipality by population in Durham Region, and an estimated employment of 84,660. Oshawa's forecasted population in 2031 is expected to be 197,000, a 12.7% increase, with employment expected to increase

7.2% to 90,790 jobs. This excludes post-secondary students who temporarily reside outside of the City. The Province of Ontario forecasts that by 2051, Durham Region will grow to 1.3 million residents and employment will reach more than 460,000. Furthermore, Downtown Oshawa is designated as an Urban Growth Centre within the Province's Greater Golden Horseshoe Growth Plan (2020), prioritizing it for significant population and employment growth.

The estimated population and employment of the M.T.S.A. is approximately 2,824 while the employment is 576 (as of 2016). These estimates were determined using Durham Regional traffic zones within the M.T.S.A.

1.3 Report Outline

The following report provides a summary of the existing conditions assessment which has been completed by the study team as part of the first phase of the Integrated M.T.S.A. Study. Below are assessments of the existing transportation system, land use and sustainable development, and commercial components. To complete the first stage of the Study, these findings will be presented at Public Information Centre Number 1 on February 2nd, 2023. Stage 1 of the assignment will include the development of three land use alternatives and the transportation solutions needed to support these alternatives.

The preliminary existing conditions assessment has begun and will be completed once the improvements required along the transportation corridors within the study area are identified as part of the Stage 2 work. A summary of this information will be presented in a future report and at Public Information Centre #1 in early 2023 for review and comment by stakeholders and members of the public.

2. Transportation Assessment

2.1 Transportation Policy Context

2.1.1 PROVINCIAL POLICY

2.1.1.1 Provincial Growth Plan for the Greater Golden Horseshoe (2020)

The Provincial Growth Plan for the Greater Golden Horseshoe (Growth Plan) provides policies for Major Transit Station Areas (M.T.S.A.s). Section 3.2.3: Moving People of the Growth Plan indicates that:

- Public transit will be priority for transportation infrastructure planning and major transportation investments.
- All decisions on transit planning and investment will be made according to the following criteria:
    - How they align with, and support, the priorities identified in Moving People Schedule 5: Transit of the Plan.
    - Prioritizing areas with existing or planned higher residential or employment densities to optimize return on investment and the efficiency and viability of existing and planned transit service levels.
    - Increasing the capacity of existing transit systems to support Strategic Growth Areas (S.G.A.s).
    - Expanding transit service to areas that have achieved, or will be planned to achieve, transit-supportive densities and provide a mix of residential, office, institutional, and commercial development, wherever possible.
    - Facilitating improved linkages between and within municipalities from nearby neighbourhoods to urban growth centres, M.T.S.A.s, and other strategic growth areas.
    - Increasing the modal share of transit
    - Contributing towards the provincial greenhouse gas emissions reduction targets.

The Growth Plan indicates that all M.T.S.A.s will be planned and designed to be transit-supportive and to achieve multimodal access to stations and connections to nearby major trip generators by providing, where appropriate, connections to local and Regional transit services to support transit service integration, infrastructure to support active transportation, including sidewalks, bicycle lanes, and secure bicycle parking, and commuter pick-up/drop-off areas.

2.1.2 METROLINX PLANS AND STUDIES

In 2016, Metrolinx announced the extension of GO Rail service along the Lakeshore East Corridor from Oshawa to Bowmanville by 2024. This proposed Lakeshore East Corridor expansion is part of their Regional Transportation Plan and includes a GO station at the centre of the study area along the C.P. Belleville Mainline at 500 Howard Street. The new station is expected to bring transformational change to the study area, including higher density residential and commercial developments, new jobs, improved connections to Oshawa's downtown core, and transform the way Oshawa residents move while reducing CO_2 emissions from private vehicle use.

2.1.2.1 Metrolinx Regional Transportation Plan (2018)

In March 2018, the Metrolinx Board of Directors adopted the 2041 Regional Transportation Plan (R.T.P.) for the Greater Toronto and Hamilton Area (G.T.H.A.). The R.T.P. is a strategy centered on creating an integrated, multimodal Regional transportation system that will serve the needs of residents, businesses, and institutions. It sets out a broad vision for where and how the Region will grow and identifies policies on transportation planning in the G.T.H.A. and supports the Growth Plan. The goals of the R.T.P. are to achieve strong connections, complete travel experiences, and sustainable and healthy communities.

The R.T.P. recognizes that M.T.S.A.s can be attractive locations for new employment, public institutions and Regionally significant services, and can create important transit network connections, integrate various modes of transportation, and accommodate an intensive concentration of places to live, work, shop, or play. M.T.S.A.s are particularly significant because of their combination of existing or planned frequent rapid transit service with an elevated development potential.

Metrolinx approved a market-driven Transit Oriented Communities (T.O.C.) Program in 2018 to deliver new transit stations across their rail network. The program seeks to leverage Metrolinx real estate assets and/or the third-party investment to unlock land value and utility to achieve the following objectives:

- Increasing transit ridership and reducing traffic congestion;
- Increasing housing supply (including affordable housing) and jobs;
- Catalyzing complete communities based on good planning principles;
- Offsetting the cost of station construction which would save tax payers' money; and,
- Stimulating the economy through major projects for years after COVID-19.

2.1.2.2 Metrolinx Initial Business Case Update (2020)

As part of the Initial Business Case (I.B.C.) Update, in 2019 a review of four alternative rail corridor alignments was conducted, which included two scenarios using the CN Rail Corridor, placing the GO station south of Highway 401 rather than the initially proposed location north of Highway 401 within the study area at 500 Howard Street.

In 2020, the I.B.C. Update was approved. Under this update, the preferred alternative scenario 'Alignment 2' was selected where the station remains north of Highway 401, and thereby does not present additional significant impacts on the study area. The proposed alignment includes one new rail track, sidings, and passing tacks from the existing Oshawa GO Station. It will follow a route along the existing General Motors spur line (owned by C.P. Rail) and travel towards Bowmanville.

Based on the recommendations of the I.B.C. update, the Preliminary Design Business Case (P.D.B.C.) for the Lakeshore East extension was initiated and confirmed that the selected alignment was feasible. Metrolinx continues to advance opportunities to deliver the proposed GO stations through the Transit Oriented Communities Program which aims to create opportunities for third parties to fund the design and delivery of new transit infrastructure for Metrolinx to own and operate.

1.1.2.3. Metrolinx Preliminary Design Business Case (2022)

On May 6, 2022, Premier Doug Ford announced the Province intended to invest $730 million to bring two-way, all-day GO Train service to Bowmanville. On April 20, 2022, Metrolinx released the P.D.B.C. for the GO Lakeshore East Extension to Bowmanville. The P.D.B.C. confirmed the planned route north of Highway 401. This extends rail service on the Lakeshore East corridor, with planned station stops at Thornton's Corners, Central Oshawa, Courtice and Bowmanville. Metrolinx also released a Request for Proposal to invite proponents to prepare and submit competitive submissions to perform work for the Bowmanville Expansion Project.

The P.D.B.C. confirmed the intentions of the Provincial government to not fund the construction of the four stations. The P.D.B.C. noted as follows: "The proposed stations are to be delivered through a market driven strategy in partnership with third party stakeholders. Durham Region will be a key stakeholder in the delivery of the new stations."

2.1.3 REGIONAL POLICY

2.1.3.1 Durham Regional Official Plan (2020)

The Durham Regional Official Plan (D.R.O.P.) provides a framework of transportation policies specifically for road network and design, transportation demand management, transit, Regional cycling, goods movement, and mitigating community and environmental impacts.

The study area for the Integrated M.T.S.A. Study is located within a Regional Centre and between two Regional Corridors in the D.R.O.P.'s Regional Structure. Regional Centres are specific policy areas that are planned to be main concentrations of urban activities and to favour pedestrian traffic and public transit. Regional Corridors are the main transportation links between Durham Region's Centres and are to be developed with a higher density to promote public transit ridership. The Regional Structure also indicates the planned GO Rail line and Central Oshawa GO Station.

The study area is designated as a *Transportation Hub* in the D.R.O.P.'s Transit Priority Network and is situated adjacent to a Rapid Transit Spine (Simcoe Street). Transportation Hubs are defined as major travel destinations that facilitate intermodal connections and travel, while the Rapid Transit Spine is planned to provide dedicated transit lanes and intersect with local transit services. The D.R.O.P. outlines specific policies for development adjacent to both Transportation Hubs and Rapid Transit Spines, including higher density and mixed uses, street-oriented buildings, limited surface parking, and non-automobile supportive facilities such as drop off facilities, bus bays, bus loops, bus shelters, walkways, and trails. Development adjacent to a Transportation Hub is defined as generally being within a

500-metre radius. However, the boundaries for land use designations to implement the D.R.O.P.'s policies shall be detailed in area municipal official plans.

In December 2022, Amendment #186 to the D.R.O.P. was adopted by the Region. It is currently with the Provincial Government awaiting their approval. This Amendment delineates the boundaries of Protected Major Transit Station Areas (P.M.T.S.A.) within the Region, including the Central Oshawa M.T.S.A., introduces policy framework to support transit-oriented development, and establishes a minimum density target of 150 people and jobs per hectare within P.M.T.S.A.s. Through the establishment of the P.M.T.S.A.s, municipalities must complete secondary planning exercises (or equivalent) to establish land use policies for the area, including setting minimum densities for buildings. Once approved, the Amendment will be incorporated into the new Regional Official Plan through the Envision Durham Municipal Comprehensive Review (Envision Durham).

2.1.3.2 Durham Transportation Master Plan (2017)

The Durham Transportation Master Plan (Durham T.M.P.) is a strategic multimodal plan that establishes the policies and programs needed to manage the anticipated transportation demands of the future. Strategic areas of focus for this plan include public transit, walking, cycling, auto vehicles, and goods movement. Key directions and actions for the development and implementation of M.T.S.A. policies from the Durham T.M.P. include:

- Strengthening the connections between transportation and land uses, through transit-supportive development and creating travel demand management supportive development strategies;
- Promoting and enhancing the role of integrated public transit including rapid transit;
- Making walking and cycling more practical and attractive and supporting them through the development review process and implementation of design and policy documents;
- Promoting sustainable travel choices; and,
- Investing strategically in the transportation system.

2.1.3.3 Regional Cycling Plan (2021)

The Regional Cycling Plan (2021) (R.C.P.) provides high-level guidance and policy for Regional cycling infrastructure planning, design and implementation, programming and outreach, and behaviour change and policy development. It focuses on Regional cycling routes and infrastructure on regional roadways, regionally held public lands and connectivity to area municipal on and off-road cycling networks within the Region of Durham. The

The R.C.P. expands on the idea of the Primary Cycling Network (PCN), a network of core cycling facilities servicing key travel destinations, and outlines the recommended infrastructure, timeline considerations, and development applications needed to achieve its build out by 2040. It specifies that the PCN should focus on providing connections to trip generators, like transit hubs, through dedicated and context appropriate cycling infrastructure.

Within the M.T.S.A., the existing Michael Starr Trail is part of the Region's PCN. The 2040 PCN Vision also has a future in-boulevard multi-use pathway along the Gibb Street-Olive Avenue extension, which is designated as a short-term capital project for 2022-2029.

2.1.4 CITY OF OSHAWA POLICY

2.1.4.1 City of Oshawa Official Plan

City of Oshawa Official Plan (O.O.P.) establishes a set of policies and land uses designations to guide development in the City. Providing an integrated and balanced transportation system is a core aspect of the O.O.P. The O.O.P. works towards optimizing the existing infrastructure and providing multiple travel mode choices throughout the City while minimizing adverse economic and environmental impacts and promoting financial and environmental sustainability.

The O.O.P. generally refers to the M.T.S.A. as the Central Oshawa Transportation Hub. In this designated area, the O.O.P. envisions high connectivity and the integration of multiple modes of transportation, emphasizing that the area will be accessible by foot and bicycle in a "convenient, safe, accessible, and comfortable manner". Key themes include:

- Achieving a multi-modal transportation environment through a balanced approach to Level of Service (L.O.S.) measures (Section 3.2.19);
- Increasing public transit use and encouraging transit-supportive design of developments (Section 3.3.1);

- Supporting walking and cycling through infrastructure that is safe, accessible, connected, direct, comfortable, and attractive (Section 3.4.1); and,
- Developing and implementing urban design that supports the implementation and operation of an integrated network of transit services and active transportation facilities for pedestrians and cyclists (Section 3.6.2)

Section 3.4.5. in the O.O.P. speaks directly to the Michael Starr Trail as a key component of the Central Oshawa Transportation Hub's public realm that functions as a high-quality pedestrian and cycling connection between the M.T.S.A. and Downtown. Any new development along this corridor must provide high-quality, active facades with direct access to building entrances from the corridor.

The O.O.P. also specifies that significant developments may require corridor plans that provide the design's vision to address the existing and planned vehicular and active transportation function of the corridors. Specifically, it states that Master Land Use and Urban Design Plans and implementing urban design guidelines must be undertaken for Transportation Hubs and areas adjacent to future commuter stations to guide development and ensure a high quality, coordinated urban environment where buildings, spaces and connections are designed with pedestrian priority.

2.1.4.2 City of Oshawa Integrated Transportation Master Plan (2015)

The City's Integrated Transportation Master Plan (I.T.M.P.) provides guidance for transportation-related decisions as Oshawa develops over the coming years and helps the City to "more effectively anticipate future challenges and opportunities" in transportation. The I.T.M.P envisions a balanced, sustainable, multi-modal and integrated transportation system, with integration being the key theme, and intends to support multiple modes working together seamlessly.

In response to Metrolinx's Mobility Hub Guidelines, the I.T.M.P. outlines several recommendations for mobility hubs and the designation of two mobility hubs at the existing Durham College Oshawa GO Station and downtown Oshawa. These recommendations include the review and update of land use planning and zoning to maximize intensification within mobility hubs, construct active transportation facilities as identified in Oshawa's Active Transportation Master Plan, and review the system of one-way streets in Downtown Oshawa. Although the I.T.M.P. predates the M.T.S.A.'s designation as a Transportation Hub in the O.O.P. and its pending designation as a P.M.T.S.A. by Durham Region through R.O.P.A. #186, it provided the foundation for transit-oriented policies within Oshawa's land use planning.

2.1.4.3 City of Oshawa Active Transportation Master Plan (2015)

The City's Active Transportation Master Plan (A.T.M.P.) is a long-term strategy to promote "active lifestyle opportunities and choices for residents, visitors, and employees" to encourage and support "a high quality of life for all residents in the long term". It builds upon existing City policies to reflect best practices in cycling, pedestrian, trail planning and design, and includes a framework for project prioritization as well as a phased implementation strategy to 2031.

A key component of the A.T.M.P. is the implementation of a multimodal transportation system that meets the needs of all Oshawa residents, no matter their age or abilities. It recognizes that creating the physical infrastructure alone will not lead to a successful active transportation network, therefore it recommends a strategic framework that supports and manages an effective AT network encouraging promotional and educational programs and maintenance activities.

The City's proposed Active Transportation Network was selected based on several criteria and features up to 200 kilometres of new active transportation facilities. Priority is given to gaps in the sidewalk network along roads and segments near to commercial centres, major institutions, transit hubs or retirement/long-term care residences.

2.2 Existing Mobility Networks

This section will thoroughly review and inventory the existing multimodal transportation system in the study area. It will document any issues, challenges and safety concerns associated with the existing conditions including areas of conflict between modes, sightline issues, and intersection configuration issues.

2.2.1 ROAD JURISDICTION AND CLASSIFICATION

The study area contains both City and Regional roads. It is adjacent to a provincial highway, Highway 401, which travels east-west along the southern boundary of the study area and provides an important corridor to/from other areas of the City and the Greater Toronto Area (G.T.A.). All Regional roadways within the M.T.S.A. are classified as Type B Arterial

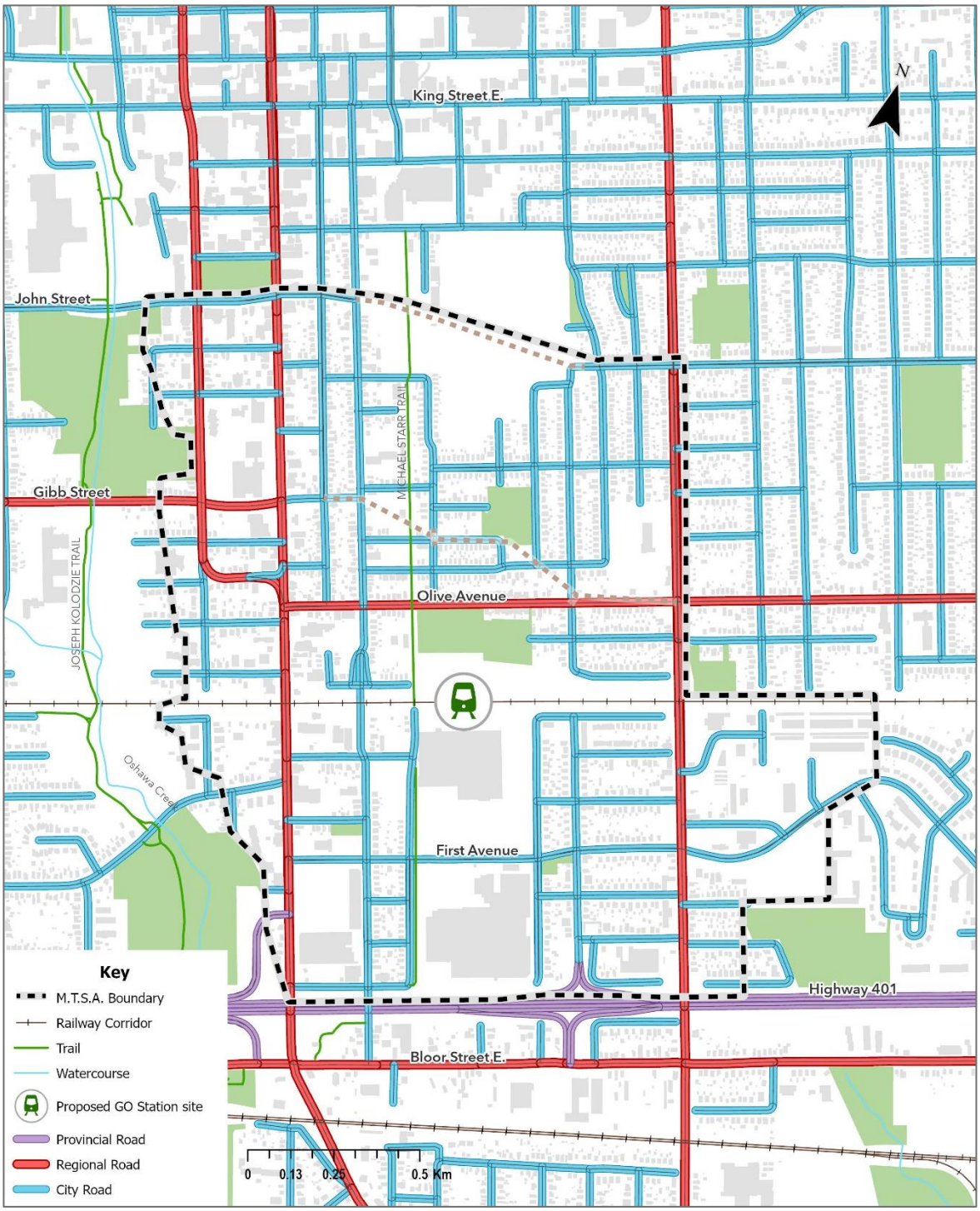
roads, with the exception of Olive Avenue and Gibb Street, which are both classified as Type C Arterial roads. Municipal roads in the study area are either collector or local roads, with the exception of Albert Street and Celina Street, which are Type C Arterial roads north of Olive Avenue.

Table 2-1 summarizes the arterial and collector roadways in the study area, based on the Oshawa Official Plan, and their respective jurisdiction. Maps 2-1 and 2-2 present the jurisdiction and classification of the M.T.S.A.'s road network.

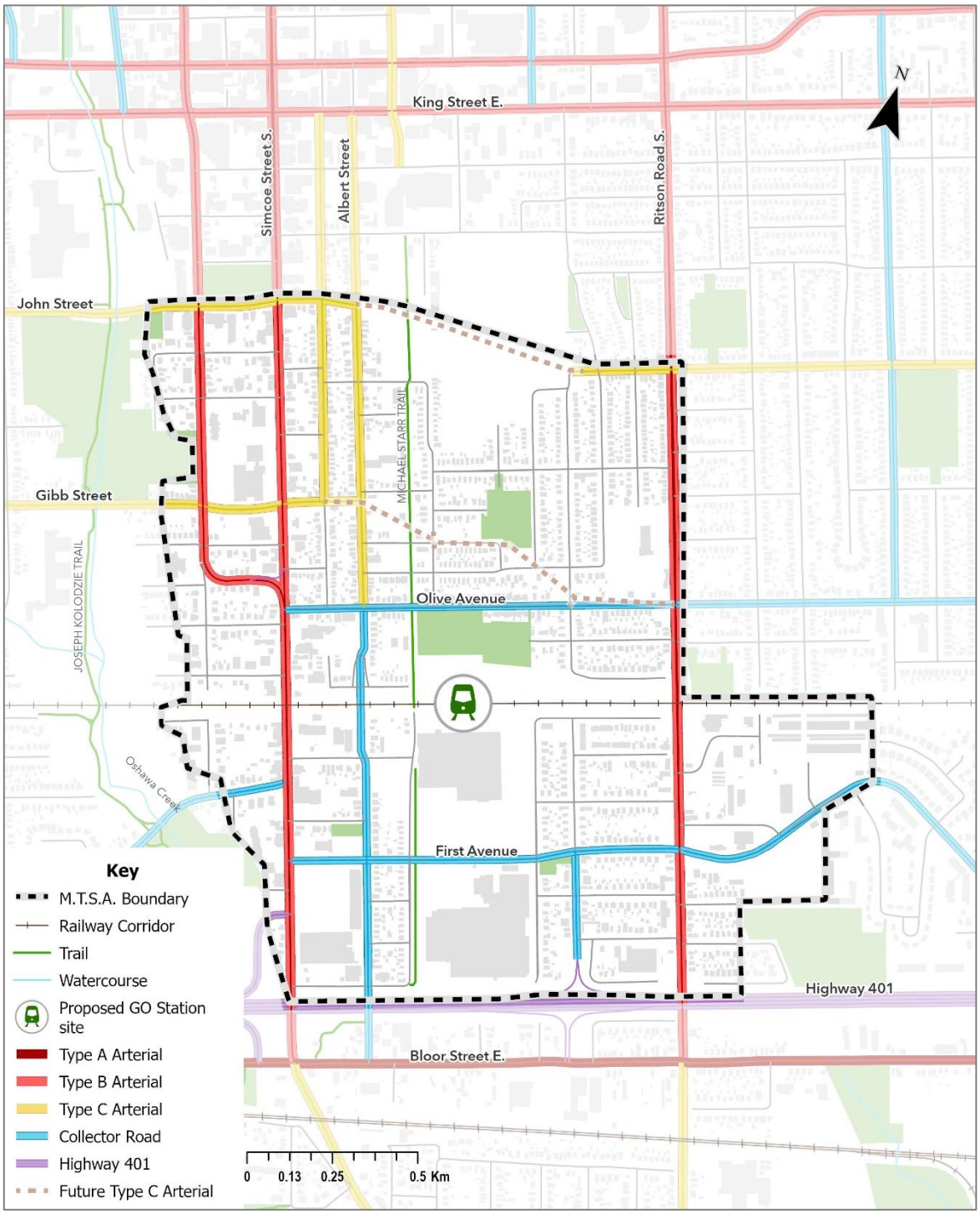
TABLE 2-1: ROADWAY CLASSIFICATION AND JURISDICTION

Roadway	Classification	Jurisdiction
Northbound/Southbound		
Simcoe Street South	Type B Arterial	Regional
Centre Street South	Type B Arterial	Regional
Ritson Road South	Type B Arterial	Regional
Albert Street	Type C Arterial/Collector	City
Celina Street	Type C Arterial/Local	City
Drew Street	Collector/Local	City
Eastbound/Westbound		
John Street/Eulalie Avenue	Type C Arterial	City
Olive Avenue	Type C Arterial	Regional
Gibb Street	Type C Arterial	Regional
Fairbanks Street	Type B Arterial	Regional
First Avenue/McNaughton Avenue	Collector	City
Mill Street	Collector	City

MAP 2-1: ROAD NETWORK JURISDICTION



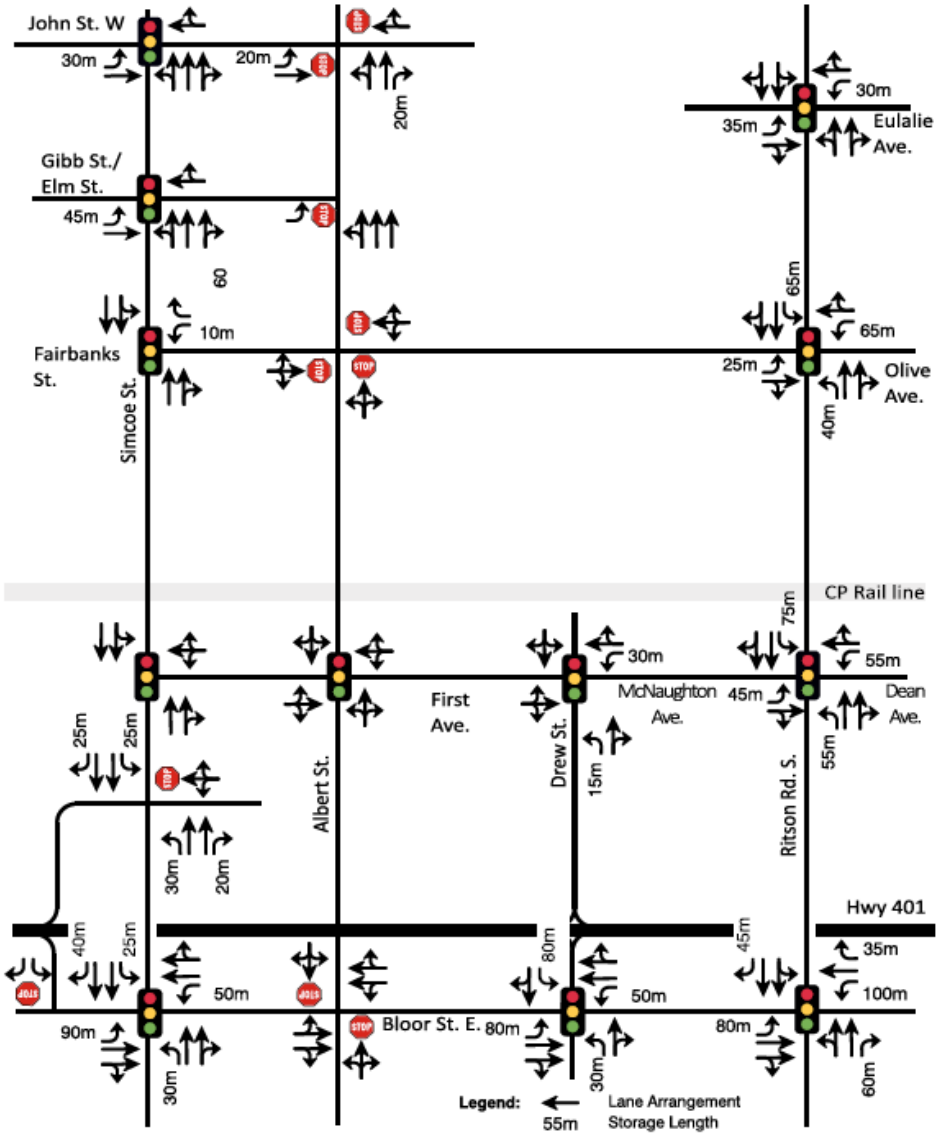
MAP 2-2: CLASSIFICATION OF THE ROAD NETWORK



2.2.1.1 Arterial and Collector Road Characteristics

There are several major transportation corridors within the study area that are described below. Given Simcoe Street South and Albert Street change roadway characteristics once they intersect with Olive Avenue, they have been divided into northern and southern sections that will be discussed separately. **Figure 2-1** presents the lane configurations.

FIGURE 2-1: EXISTING LANE CONFIGURATIONS



Source: Central Oshawa GO Station - Transportation Review by Dillon Consulting

Northbound-Southbound Arterials and Collector Roads

Simcoe Street South, north of Olive Avenue is a four-lane, northbound flowing Regional Road designated as a Type B Arterial road, Centre Street South forms its southbound component. Simcoe Steet South connects the study area to Downtown Oshawa and extends northward.

Simcoe Street South, south of Olive Avenue is a four-lane, two-way undivided Regional Road designated as a Type B Arterial road. Simcoe Street South crosses over Highway 401 and the C.P. Rail Corridor and extends to the Port of Oshawa, connecting the study area to the communities south of the highway. South of First Avenue, there is a Highway 401 westbound on-ramp, and to the south of the study area there is an eastbound off-ramp close to the intersection of Simcoe Street South and Bloor Street East.

Centre Street South/Fairbanks Street is a three-lane, one-way southbound flowing Regional Road designated as a Type B Arterial road. Simcoe Street South north of Olive Avenue forms its northbound component. At Fairbanks Street, the roadway reduces to two-lanes and runs eastbound, connecting to Simcoe Street South at Olive Avenue.

Ritson Road South is a four lane, two-way flowing undivided Regional Road designated as a Type B Arterial road. This road forms the eastern boundary of the M.T.S.A.

Albert Street, north of Olive Avenue is a three-lane northbound flowing municipal road designated as a Type C Arterial road. It terminates at King Street East, three blocks north of the M.T.S.A.'s border, connecting the area to Downtown Oshawa. Generally, there is two-hour on-street parking permitted along the east side of the roadway.

Albert Street, south of Olive Avenue is a two-lane two-way flowing undivided municipal road designated as a Collector Road that terminates one block south of the M.T.S.A. at Bloor Street East. Albert Street is one of the three C.P. Rail corridor and Highway 401 crossings for vehicles within the study area. The Albert Street Bridge is a wooden bridge that runs over the C.P. Rail corridor between Albany Street and Fisher Street. It has identified that it is too low to allow GO trains to pass underneath, therefore it would need to be removed and potentially replaced for the Metrolinx GO East Expansion to proceed. Options for the future of this crossing will be analyzed as part of this Integrated M.T.S.A. Study.

Celina Street is a three-lane, southbound flowing municipal road designated as a Type C Arterial road. Albert Street forms its northbound component. At Elm Street, Celina Street turns into a Local Road. Celina Street terminates at Olive Avenue to the south and King Street East, three blocks north outside the M.T.S.A.

Eastbound-Westbound Arterials and Collector Roads

First Avenue/McNaughton Avenue/Dean Avenue is a two-lane, two-way undivided municipal road designated as a Collector Road. The road changes names as it travels through the study area: from Simcoe Street South to Drew Street it is First Avenue, from Drew Street to Ritson Road South it is McNaughton Avenue, and east of Ritson Road South it is Dean Avenue. Dean Avenue connects to the communities to the east and terminates just before Harmony Road South.

Olive Avenue is a two-lane, two-way flowing undivided Regional road designated as a Type C Arterial road. Once realigned with Gibb Street, Olive Avenue will turn into a local road west of Drew Street to Simcoe Street South. The road is predominately fronted by residential properties. The road begins in the study area at Simcoe Street South and terminates at Townline Road South on the border of Oshawa and Clarington.

Gibb Street is a two-lane, two-way flowing Regional road designated as Type C Arterial road. East of Simcoe Street South, Gibb Street becomes a municipal roadway and changes name to Elm Street which terminates at Albert Street. There are plans underdevelopment for the extension and realignment of Gibb Street/Elm Street to connect with Olive Avenue.

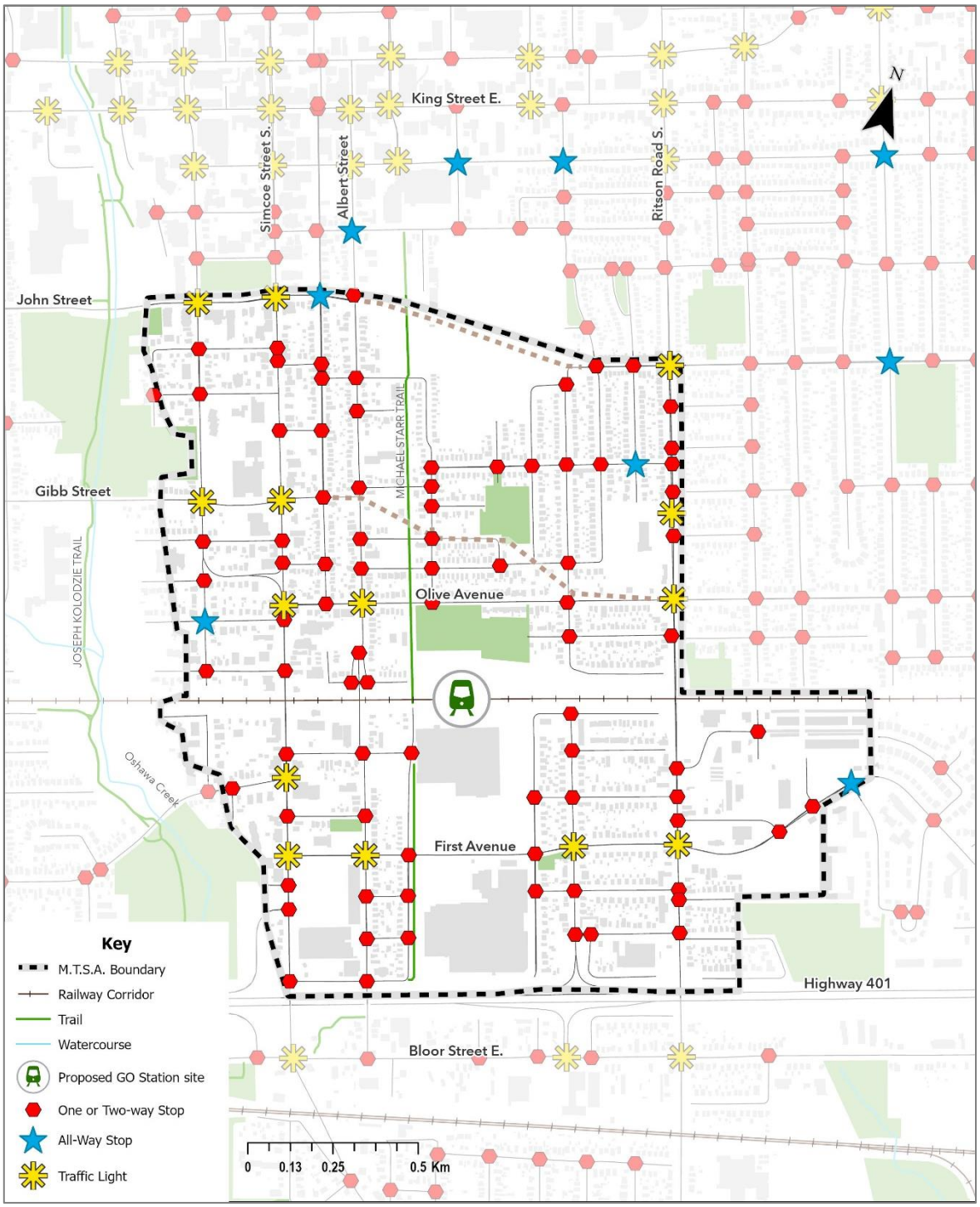
John Street is a two lane, two-way flowing municipal road designated as a Type C Arterial road. John Street terminates just east of Albert Street at the Michael Starr Trail.

Eulalie Avenue is two lane, two-way flowing municipal road designated as a Type C Arterial road. Eulalie Avenue runs from two blocks west of Ritson Road South and terminates at Wilson Road South, the next arterial road east of the M.T.S.A.

2.2.1.2 Intersection Control

Intersections on local roads within the M.T.S.A. are predominantly controlled by stop signs and are one to three-way stops. There are 12 signalized intersections, with 10 situated along Regional roads and two on municipal roads at Albert Street/First Street and Drew Street/First Street. There is one signalized crosswalk located on Ritson Road South between St. Eloi Avenue and Vimy Avenue. Intersections of local roads are predominantly controlled by stop signs. **Map 2-3** illustrates the existing intersection traffic control.

MAP 2-3: INTERSECTION CONTROL

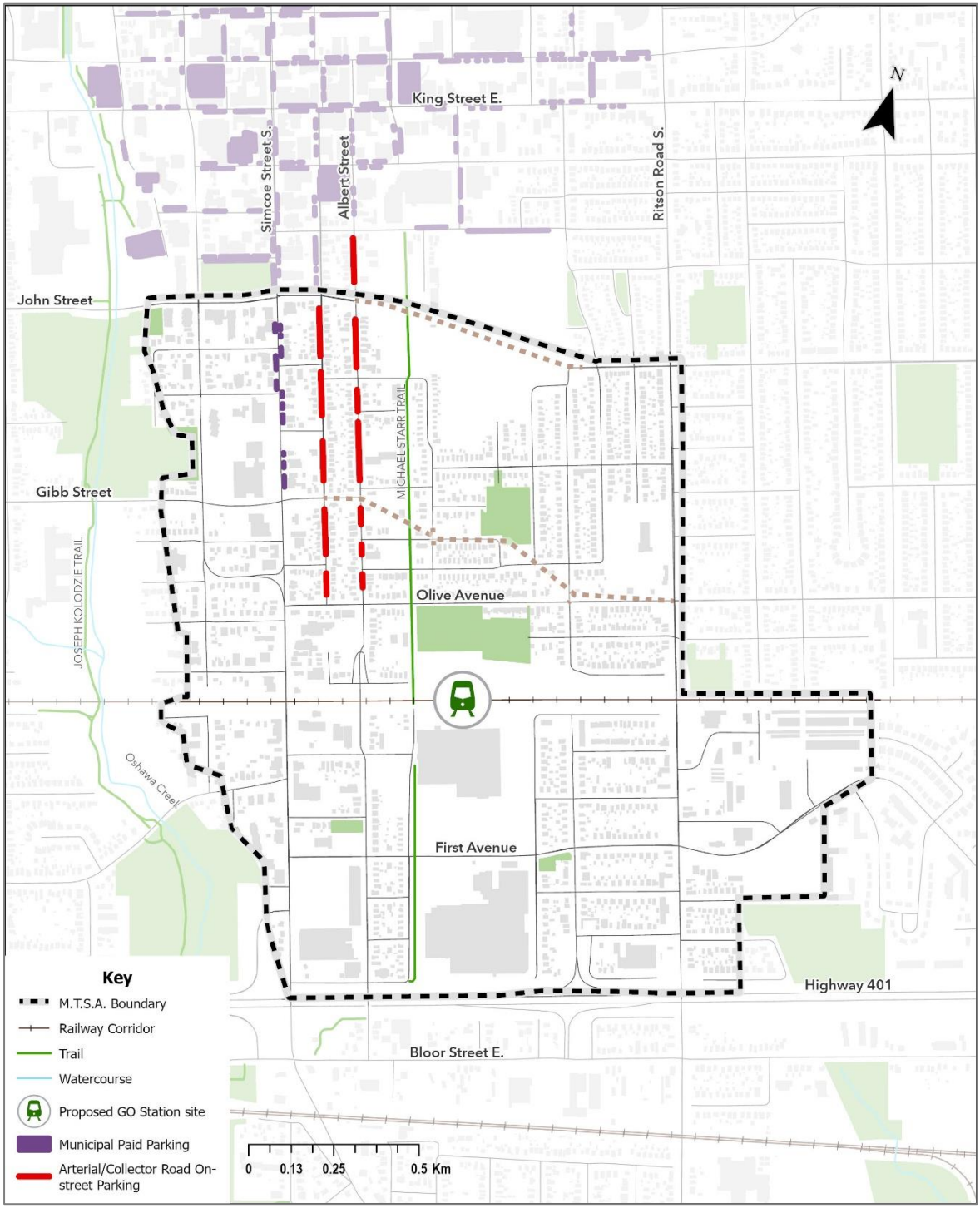


2.2.1.3 Vehicle Parking

To the north of the M.T.S.A. in Downtown Oshawa, lot and on-street municipal paid parking is offered. Demand for parking Downtown during the daytime is high and available parking spots are limited.

Within the M.T.S.A., metered parking is available along Simcoe Street South, north of Gibb Street, on weekdays between 8 A.M.–6 P.M. for $1.25/hour. After 6 P.M. and on weekends, parking is free. Parking has a maximum limit of 2 hours. Unless otherwise signed, on-street parking is generally permitted along local roads and has maximum limit of 3 hours. On-street parking is not permitted along Arterial or Collector roads within the study area, apart from Celina Street and Albert Street north of Olive Avenue for a maximum of 2 hours. **Map 2-4** illustrates parking available on arterial and collector roads, as well as all municipal paid parking.

MAP 2-4: PAY AND ON-STREET PARKING ALONG ARTERIAL AND COLLECTOR ROADS



2.2.2 GOODS MOVEMENT AND RAIL NETWORK

Goods movement is an integral component of Oshawa's transportation system and plays a vital economic role for the City. The movement of goods in and around the study area utilizes highways, roads, and rail.

An east-west travelling rail corridor bisects the study area which contains the C.P. Rail line and will accommodate the GO Rail service. To the south of the study area lies two important good movement routes; Highway 401, which is a key truck corridor of the provincial highway network that links the study area to significant commercial hubs, and Bloor Street (Regional Road 22), which is an arterial road part of Durham Region's Strategic Goods Movement Network. Both Highway 401 and Bloor Street are identified as preferred haul routes that are planned to accommodate commercial vehicles on a year-round basis.

2.2.3 PEDESTRIAN & ACTIVE TRANSPORTATION NETWORK

All arterial and collector roads, and most local roads have sidewalks on both sides. Oshawa's Engineering Design Criteria Manual states that "concrete sidewalks shall generally be constructed only on one side of all Local roads". Depending on land uses along the road and surrounding active transportation infrastructure the City reserves the right to require that sidewalks be provided on both sides of a local road. Existing pedestrian facilities within the M.T.S.A. are illustrated in **Map 2-5**.

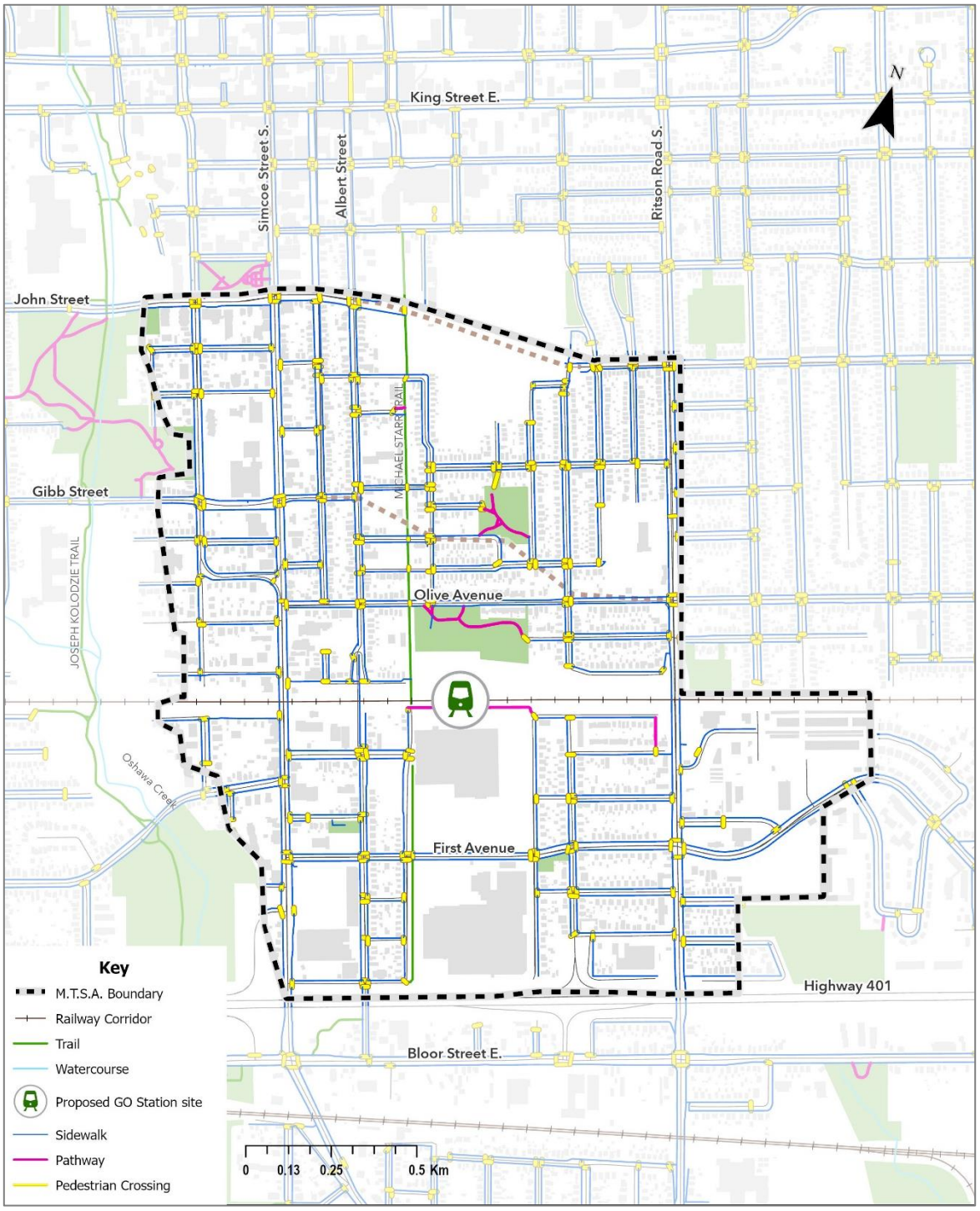
FIGURE 2-2: MICHAEL STARR TRAIL ADJACENT TO FRONT STREET

To the east of Simcoe Street South lies the Michael Starr Trail (**Figure 2-2**) which is part of Durham Region's Primary Cycling Network. This active transportation facility spans the length of the M.T.S.A., from Lviv Boulevard in the south up to Bruce Street just north of the study area, providing a connection to Downtown Oshawa. From Lviv Boulevard to the end of Front Street at the C.P. Rail crossing the trail is an in-boulevard facility, where it turns into an off-road trail to Bruce Street.

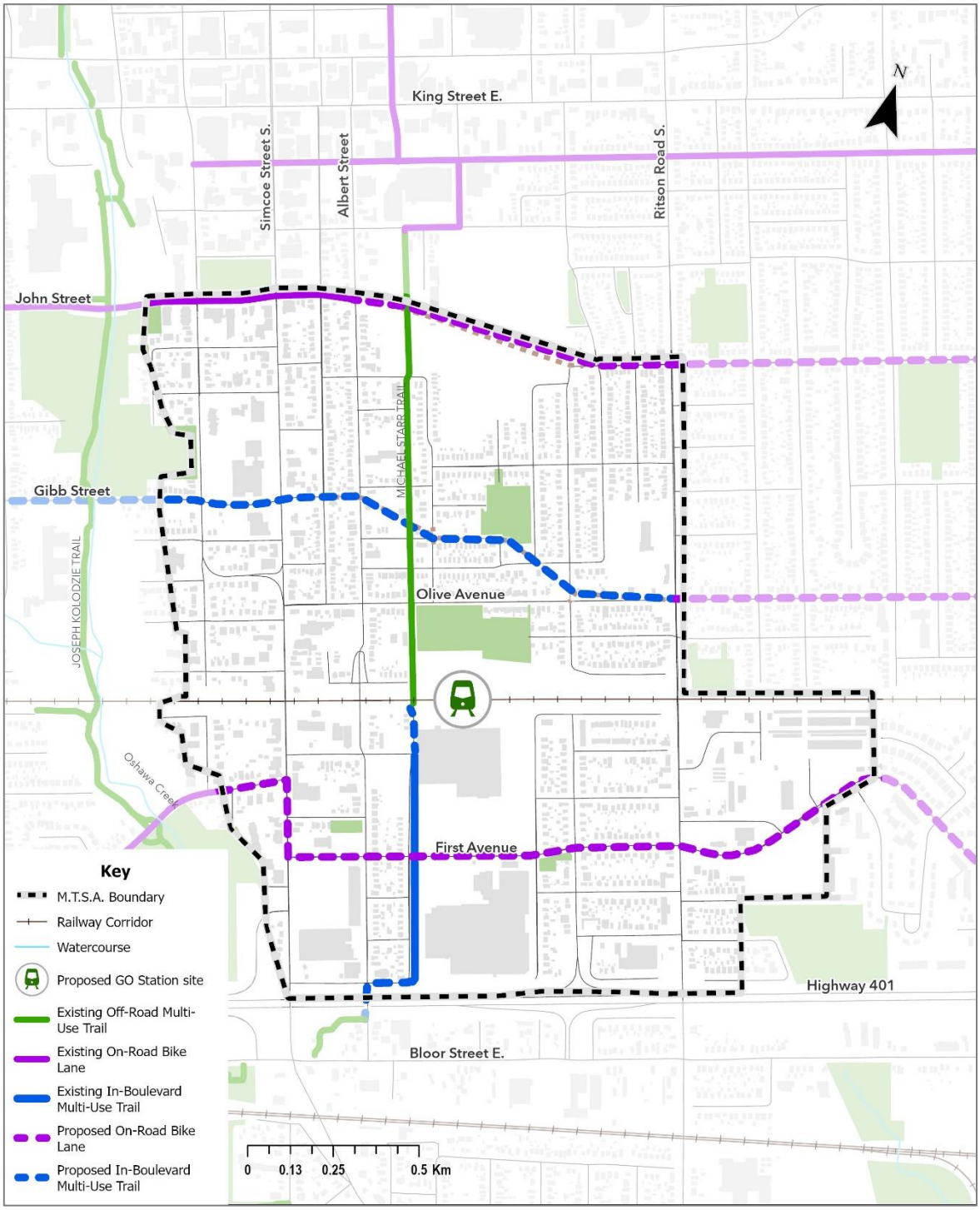
To the west of Simcoe Street is the Joseph Kolodzie Oshawa Creek Bike Path, which has several access points from the M.T.S.A. and travels north past Downtown Oshawa, and south toward Lake Ontario.

Durham Region's Cycling Plan (2021) also proposes a future in-boulevard multi-use path facility along the Gibb Street-Olive Avenue extension, which will become part of Durham Region's Primary Cycling Network. Existing and proposed cycling facilities within the M.T.S.A. are illustrated in **Map 2-6**.

MAP 2-5: EXISTING PEDESTRIAN FACILITIES



MAP 2-6: EXISTING AND PROPOSED ACTIVE TRANSPORTATION NETWORK



2.2.4 PUBLIC TRANSIT NETWORK

The M.T.S.A. has both Regional and Local public transit service, illustrated in **Map 2-7**. Durham Regional Transit (D.R.T.) provides local public transit within Oshawa. There are currently three local routes and one high frequency rapid bus route (PULSE) that service the M.T.S.A. and provide nearby connections to the Downtown and Lakeridge Health Oshawa to the north of the M.T.S.A., Harmony Terminal to the east, the waterfront and communities to the south, and the Oshawa Central Terminal to the west of the M.T.S.A.

Local routes operate along Ritson Road South (Local Route 407 - Ritson) and Olive Avenue/Gibb Street (Local Route 410 Olive-Harmony and Local Route 423). PULSE Route 901 Simcoe operates along Simcoe Street South and forms part of Durham Region's Rapid Transit Spine Network. According to DRT's 2022-2027 Service Strategy, PULSE 901 Simcoe is one of the transit systems highest performing routes and supports a high level of service, connecting the M.T.S.A. to several major destinations including downtown Oshawa, the Lakeridge Health medical area, the Durham College/Ontario Tech University north campus. PULSE bus service also operates in the Downtown just north of the M.T.S.A. along King Street and Bond Street, and south of the M.T.S.A. along Bloor Street East.

Table 2-2 lists the existing transit service frequency within the study area as of September 2022. Local bus routes typically operate every 30 minutes, and Route 423 operates only during weekday morning and afternoon peak periods. PULSE routes operate every 10 minutes during peak and midday periods, and every 15 to 30 minutes during weekday evenings and on weekends.

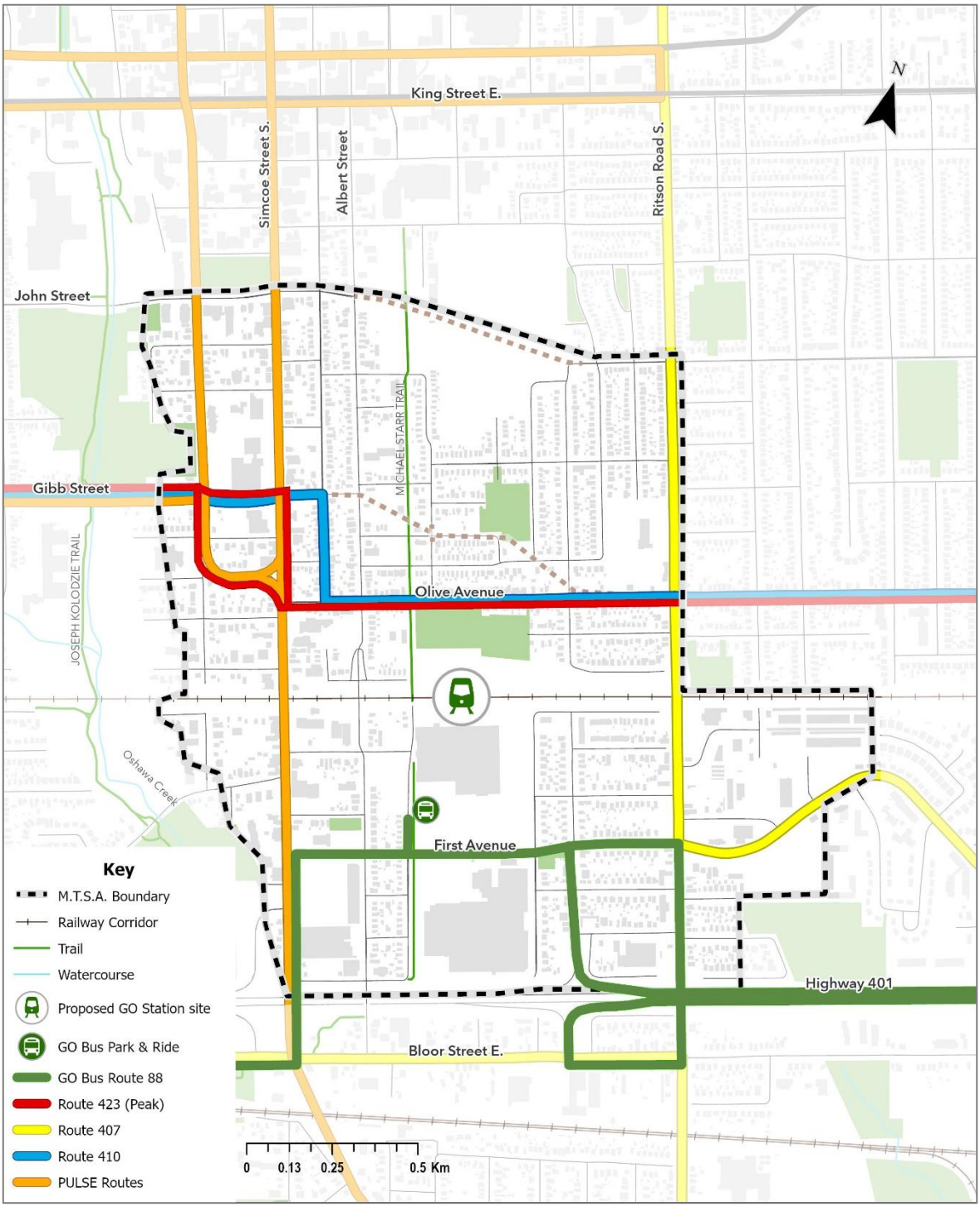
TABLE 2-2: DURHAM REGIONAL TRANSIT ROUTE FREQUENCY WITHIN THE M.T.S.A. (SEPTEMBER 2022)

Route	Route Type	Weekday			Weekend	
		Peak (Start-9A.M., 4P.M.-7P.M.)	Midday (9AM-4P.M.)	Evening (After 7P.M.)	Daytime (Start-7P.M.)	Evening (After 7PM)
407 Ritson	Local	30 min	30 min	30 min	30 min	30 min
410 Olive-Harmony	Local	30 min	30 min	30 min	30 min	30 min
Route 423	Local	30 min	-	-	-	-
PULSE 901 Simcoe	Rapid	10 min	10 min	15-30 min	15 min	15-30 min

The study area is also served by GO Bus Route 88 from the GO Park & Ride located at First Avenue and Front Street. This GO Bus route offers weekday hourly morning peak service (5:45AM – 8:15AM) to Durham College Oshawa GO Station, which provides bus and rail connections to Whitby, Ajax, Pickering, and Toronto, and hourly afternoon peak service (4:50PM - 6:50PM) to Peterborough, terminating at Trent University's Peterborough Campus. There is no weekend GO Bus service to Peterborough.

There are currently plans for a future rapid transit corridor along Simcoe Street South, however, the type of technology (bus rapid transit versus light rail) and the south terminus point have not yet been defined. The north terminus will be the RIOCAN Commercial Centre at Simcoe Street North and Winchester Road, just south of Highway 407 East.

MAP 2-7: TRANSIT ROUTES



2.3 Mobility Network Characteristics

2.3.1 TRAVEL MODE CHOICE AND MODE SHARE

Oshawa residents predominantly travel by car. According to the City's Integrated Transportation Master Plan (2015), 73% of P.M. peak period trips were made by auto driver, 18% were auto passengers, 6% were made by transit, and only 3% by walking or cycling.

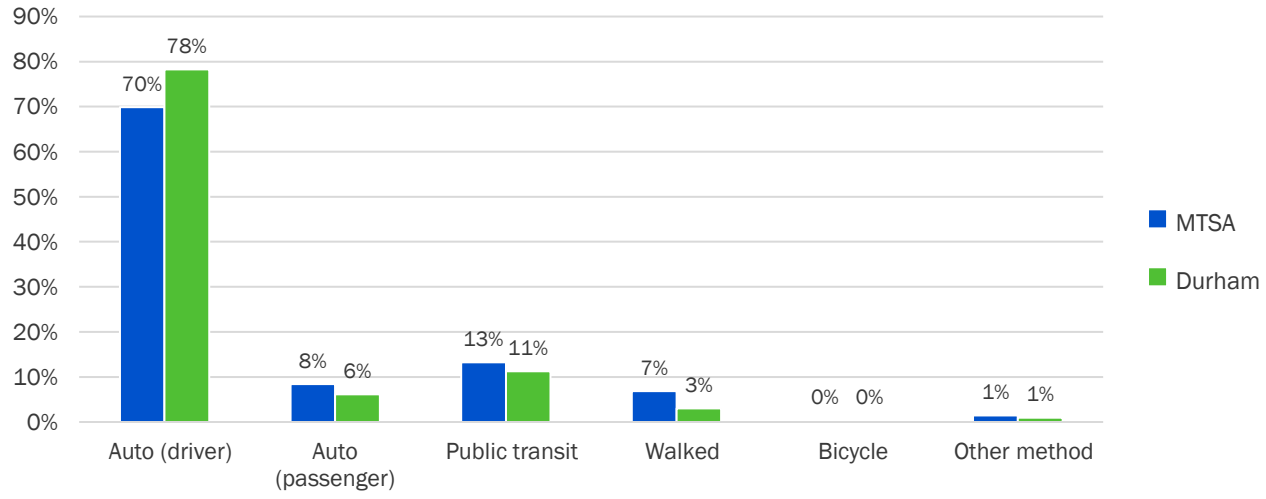
Mode Choice

Using data collected from the 2016 Census "Journey to work" (**Figure 2-3**), the transportation mode choice to commute to work for resident's within and adjacent to the M.T.S.A[1] was examined. Like the rest of Oshawa, resident's within or surrounding the M.T.S.A. opt for taking private vehicles when commuting to work, with 70% as a driver and 8% as a passenger.

Only 28% of commuters travel to work by sustainable modes of transportation – walking, cycling, carpooling, and public transit. More specifically, 13% of residents use public transit to travel to work, whereas 11% of Durham Region residents choose this mode. Similarly, 7% of commuters in and around the M.T.S.A. choose walking to travel to work, compared to 3% of Durham Region's commuters. For both the M.T.S.A. and Durham Region as a whole, only 1% of commuters travel by bike to work. The data shows that residents opt for more sustainable transportation modes to travel to work than trips in the City of Oshawa are above Regional averages.

It is important to note that this data does not measure the number of trips made by each mode, but the resident's choice in transportation mode to travel to work.

FIGURE 2-3: MODE CHOICE OF RESIDENTS WITHIN AND SURROUNDING THE M.T.S.A. AND DURHAM REGION



Target Mode Share for the M.T.S.A. (2031)

Durham's Transportation Master Plan (2017) established a 42% sustainable mode share target of peak trips by 2031 for transportation hubs like the M.T.S.A. **Table 2-3** outlines Durham Region's Target 2031 Mode Share for transportation hubs.

[1] Incorporates residents within aggregate dissemination areas 35182002, 35180032, and 35180035.

TABLE 2-3: TARGET MODAL SPLIT FOR THE M.T.S.A. (2031)

Mode of Transport	M.T.S.A. 2031 Mode Share Target[2]
Walk & Cycle	10%
Transit	20%
Auto Passenger	12%
Auto Driver	58%
Other (school bus, taxi, motorcycle)	N/A
Sustainable Modes Total	42%

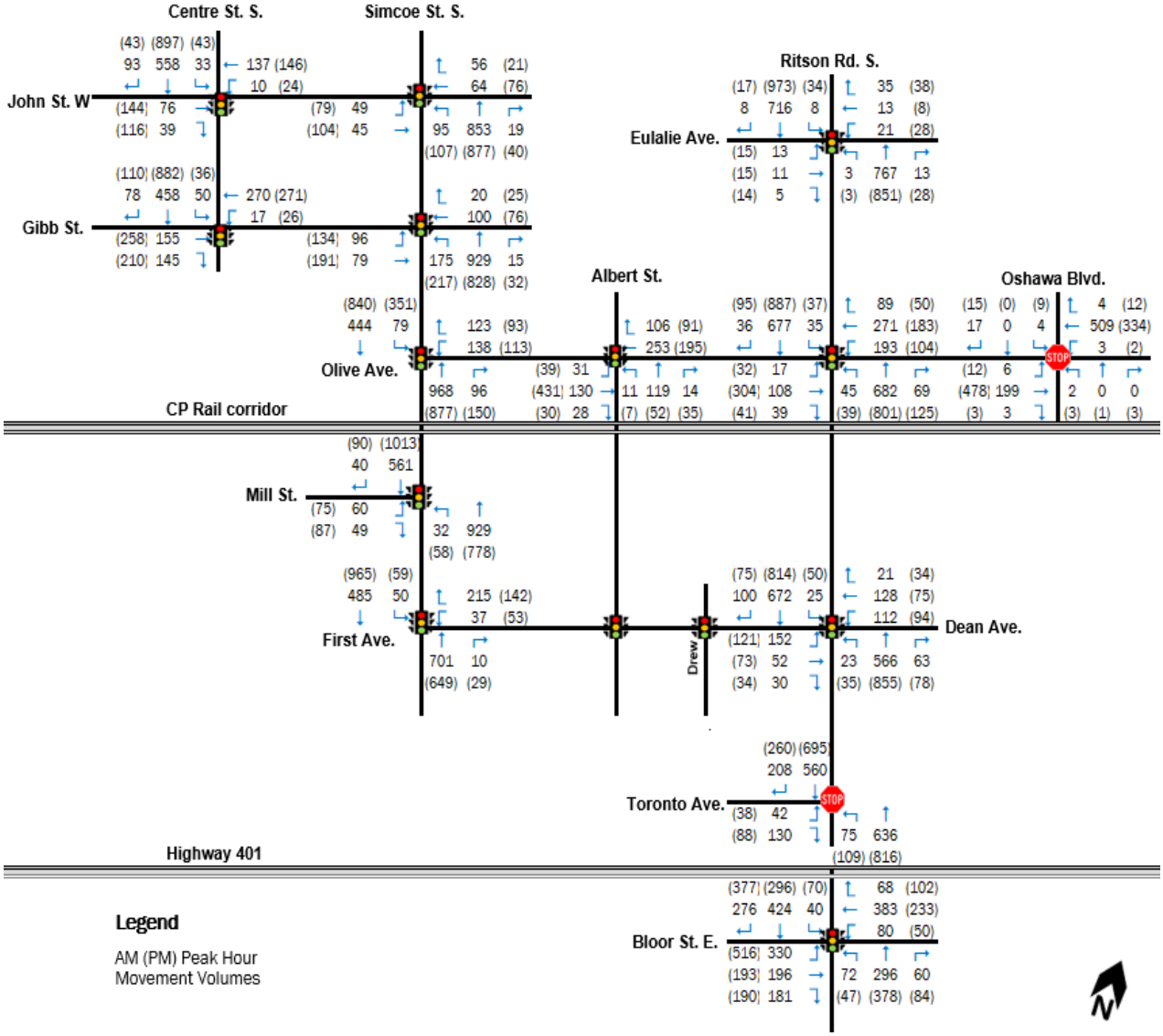
2.3.2 VEHICLE TRAFFIC VOLUMES

Vehicle traffic volumes from across the M.T.S.A. were collected between 2016-2019 for one hour of the A.M. peak period and one hour of the P.M. peak period and obtained from the City. Data was balanced to account for growth to 2019 for comparison and illustrated in **Figure 2-4**. More recent traffic data was collected during the pandemic (2020-2021) outside of lock-down periods but this was determined not suitable for use in this analysis due to irregular travel behaviours. Volumes were steadily increasing up to 2019, and a significant decline in volume was observed in 2020 due to the COVID-19 pandemic. Volumes in 2021 did not recover to pre-COVID-19 conditions therefore pre-pandemic traffic volumes would provide the most conservative results.

Within the study area, vehicle traffic data was available for 11 of 13 signalized intersections and one stop-sign controlled intersection at Toronto Avenue/Ritson Road South. Data was not available for the two signalized intersections at Albert Street/First Avenue and Drew Street/McNaughton Avenue. Data adjacent to the study area was examined at the signalized intersection of Ritson Road South/Bloor Street East to the south, and a stop-sign controlled intersection at Olive Avenue and Oshawa Boulevard South.

[2] Mode share targets for transportation hubs were established in the Durham Transportation Master Plan (2017)

FIGURE 2-4: VEHICLE MOVEMENT VOLUMES



2.4 Multimodal Operations

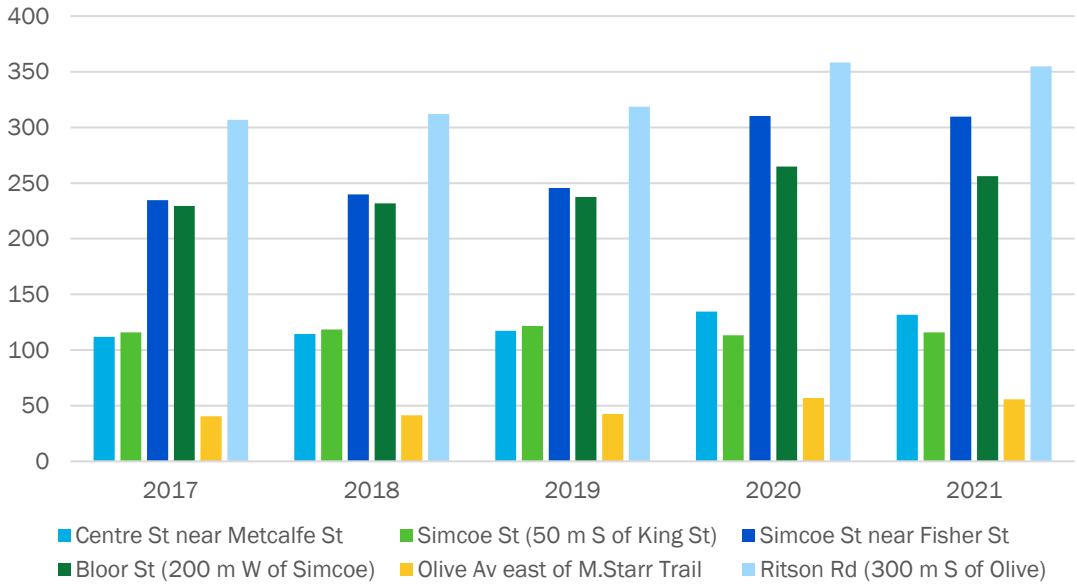
2.4.1 ACTIVE TRANSPORTATION OPERATIONS REVIEW

Cycling volumes and collision data was obtained from the City of Oshawa and examined.

2.4.1.1 Cyclist Volumes

Cyclist counts consisted of bi-directional daily on-road cyclist volumes collected between July or August of 2017 to 2021 for a one-week period along six corridors within or adjacent to the M.T.S.A. These volumes were converted to a daily average for each year and are presented in **Figure 2-5**.

FIGURE 2-5: DAILY AVERAGE CYCLIST VOLUMES

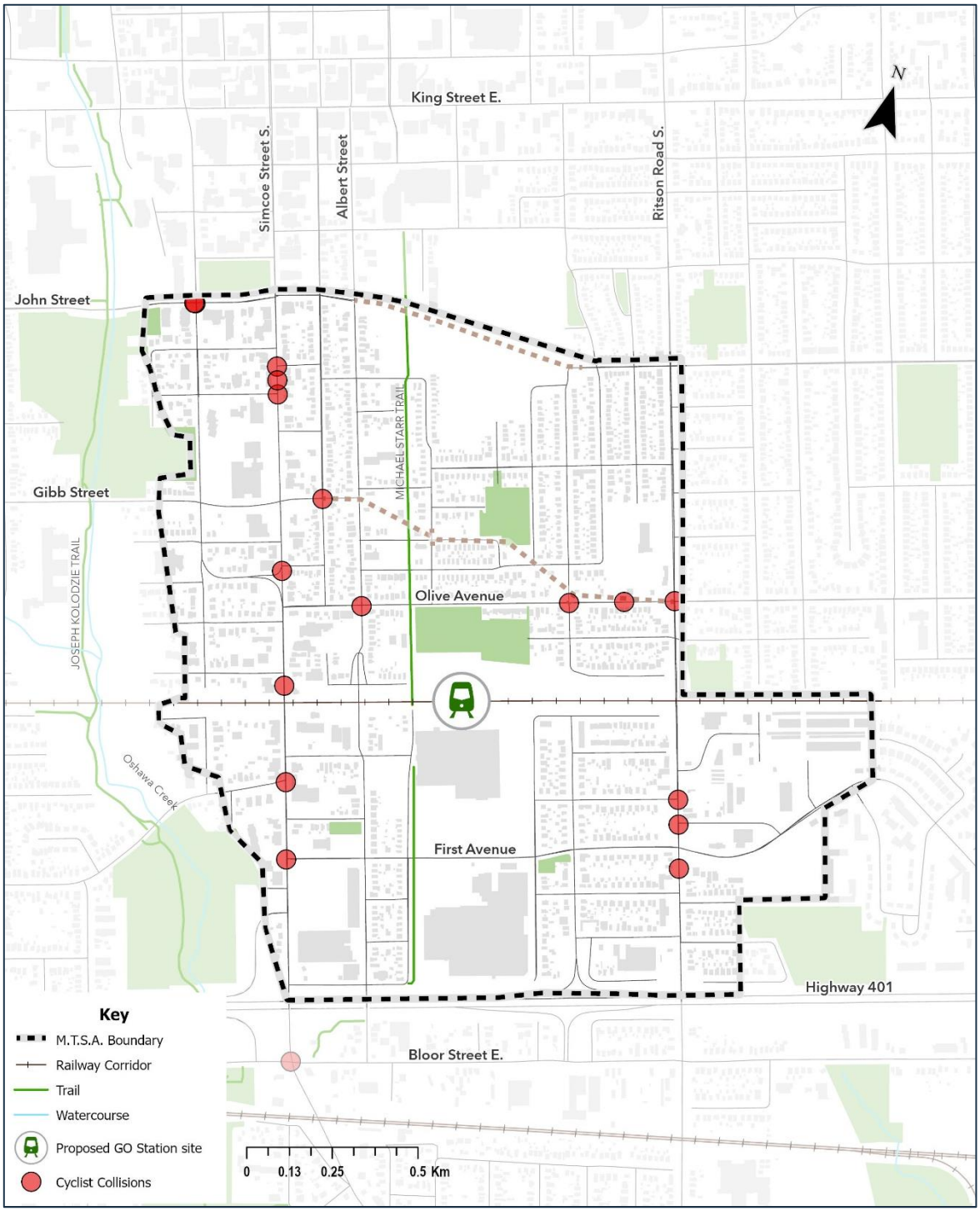


The results illustrate that the major arterial roads of Ritson Road South, Simcoe Street South, and Bloor Street East experience the highest cyclist volumes. Notably, Simcoe Street South experiences considerably higher volumes near Fisher Street opposed to near King Street within the Downtown Oshawa core. Cyclist volumes have increased at all locations between 2017 to 2021, the only exception being Simcoe Street South near King Street which experienced zero growth from 2017 to 2021. Cumulatively, cyclist volumes have increased 18% from 2017 to 2021, with Olive Avenue experiencing the highest growth at 38%.

2.4.1.2 Collisions Involving Cyclists

A total of 20 collisions involving cyclists occurred within the study area from 2017 to 2021. The majority (85%) of these collisions occurred at intersections, specifically on the arterial roads of Simcoe Street South (eight collisions), Ritson Road South (four collisions), and Olive Avenue (four collisions). Cyclist collision locations have been mapped below in **Map 2-8**. Higher collision frequencies on Simcoe Street South and Ritson Road South are expected due to the higher cyclist volumes on these roads; however, Olive Avenue has a relatively lower cyclist volume, suggesting potential cyclist safety issues on the road. All collisions involved a cyclist and a motor vehicle, with the majority (60%) resulting in non-fatal injuries. The data does not indicate which road user sustained the injury, however given the vulnerability of cyclists, it is expected that they receive the majority of the injuries. In terms of collision type, angle (nine collisions) and turning movement (eight collisions) accounted for the most collisions, consistent with the high rate of collisions occurring at intersections.

MAP 2-8: COLLISIONS INVOLVING CYCLISTS



2.4.2 PUBLIC TRANSIT RIDERSHIP

Ridership data that was obtained from Durham Regional Transit.

Table 2-4 presents the total boardings and alightings for the local bus spots within the M.T.S.A. Data was collected in September for both 2019 and 2022. There has been a decline in local bus route ridership within the M.T.S.A. since 2019. This may be a result of working from home trends, impacts of the COVID-19 pandemic, and several local route changes that have occurred since 2019.

TABLE 2-4 AVERAGE BOARDINGS AND ALIGHTINGS AT LOCAL TRANSIT STOPS IN THE M.T.S.A.

	Total Boardings	Total Alightings	Average Daily Boardings	Average Daily Alightings
2019	7,987	4,949	499	309
2022	7,087	4,257	472	284
Change 2019-2022	-900	-692	-27	-26
% Change 2019-2022	-11.27%	-13.98%	-5.35%	-8.25%

Average daily ridership of the transit routes that travel throughout the M.T.S.A. corridors was examined to determine the most frequently used routes and the corridors with the most ridership (**Table 2-5**).

The Simcoe Street South corridor experiences significantly more daily transit ridership than the other corridors within the M.T.S.A. as a result of rapid transit route PULSE 901 Simcoe servicing the corridor. This route connects the M.T.S.A. with several major destinations including Downtown Oshawa, Oshawa Centre Terminal, and Ontario Tech University/Durham College North Campus. According to DRT's 2022-2027 Service Strategy, PULSE 901 is one of the highest-performing routes in the whole system and supports a high level of service.

Route 410 Olive which operates along the Olive Avenue corridor experiences the most daily ridership of the local rotes which operate within the M.T.S.A., followed by Route 407 Ritson and Route 423 (operates only during peak periods). However, the average daily ridership of routes along the Olive Avenue corridor exceeds that of the Ritson Corridor, as seen in the table below.

TABLE 2-5 AVERAGE DAILY BOARDINGS OF TRANSIT ROUTES ALONG THE CORRIDORS (2022)

Route	Corridor		
	Ritson Road	Simcoe Street	Olive Avenue
Route 407 Ritson	819	-	-
Route 410 Olive	-	-	1,052
Route 423	-	-	258
PULSE 901 Simcoe	-	7,704	-
Total Average Daily Boardings 2022	819	7,704	1,310

2.4.3 TRAFFIC DEMAND AND OPERATIONS

2.4.3.1 Level of Service

A Level of Service (L.O.S.) analysis of signalized intersections was completed to understand the service quality and traffic flow to determine the average delay experienced by drivers along the M.T.S.A.'s main corridors.

Data used in the L.O.S. analysis was collected from across the M.T.S.A. between 2016-2019 and balanced to 2019 volumes to account for growth. More recent traffic operation data was collected during the pandemic (2020-2021) but was deemed not suitable for use for this analysis due to irregular travel behaviours. Volumes were steadily increasing

up to 2019, and a significant decline in volume was observed in 2020 due to the COVID-19 pandemic. Volumes in 2021 did not recover to pre-COVID-19 conditions, therefore, pre-pandemic traffic volumes would provide the most conservative results.

L.O.S. scores for motor vehicles are defined as:

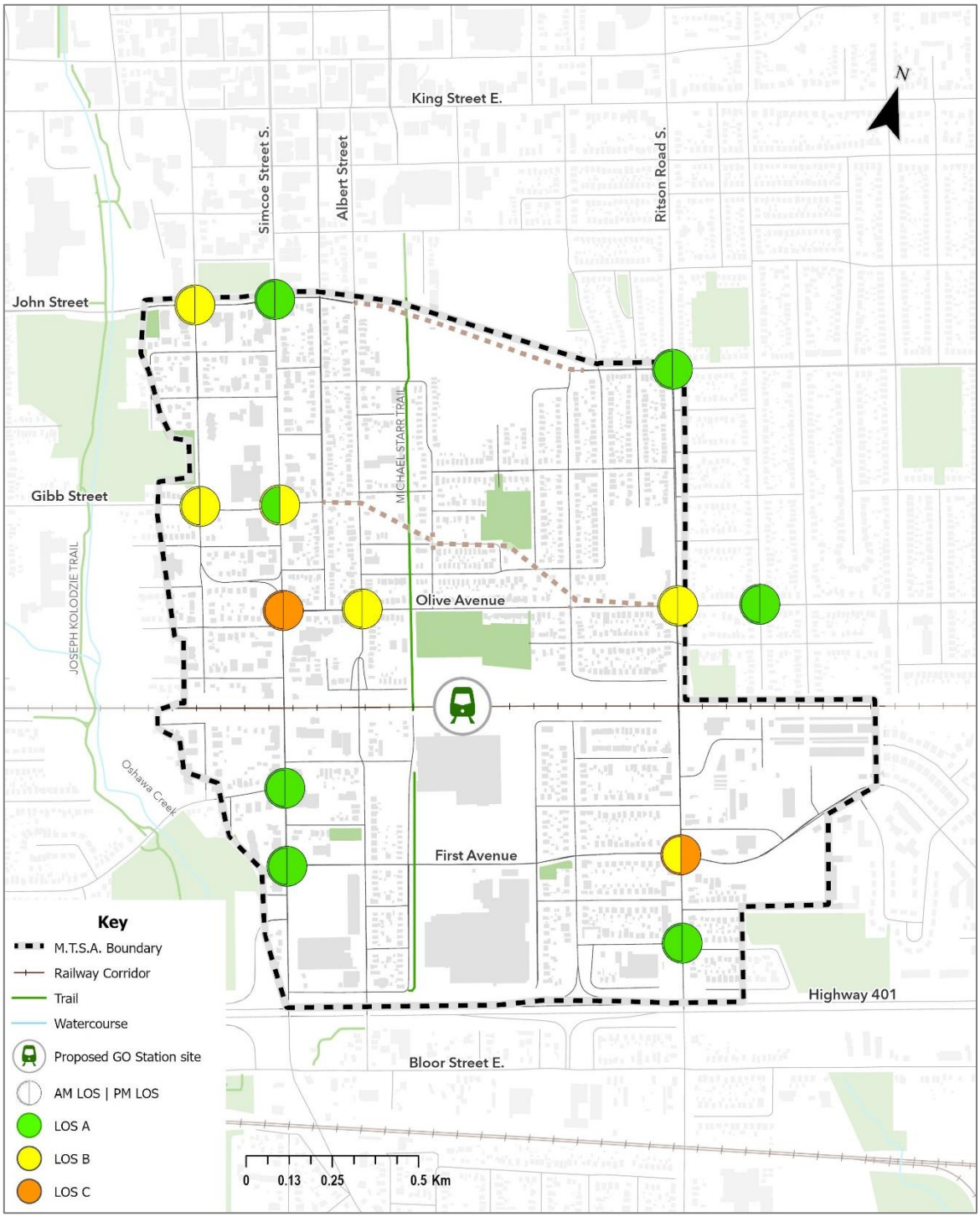
- L.O.S. A: Free-flow traffic with individual users unaffected by others in the traffic stream.
- L.O.S. B: Stable traffic flow with a high degree of freedom but with some influence from other users.
- L.O.S. C: Restricted flow that remains stable but with significant influence with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level.
- L.O.S. D: High-density flow in which speed and freedom to maneuver are severely restricted while the comfort and convenience of driving have declined even though flow remains stable.
- L.O.S. E: Unstable flow at or close capacity levels with poor levels of comfort and convenience.
- L.O.S. F: Forced traffic flow in which the amount of traffic approaching a point exceeds the amount that can be served.

The analysis looked at both morning (A.M.) and afternoon (P.M.) L.O.S. scores. As **Map 2-9** shows, no intersections within the M.T.S.A. had a level of service beneath an L.O.S. of C, meaning that there is relatively good traffic flow and little delay throughout the study area. Intersections that experienced the greatest delays (L.O.S. of C) in the study area are as follows:

- Simcoe Street South/Olive Avenue; and,
- Ritson Road South/McNaughton Avenue and Dean Avenue (in the P.M.).

The full Synchro reports are provided in **Appendix A**.

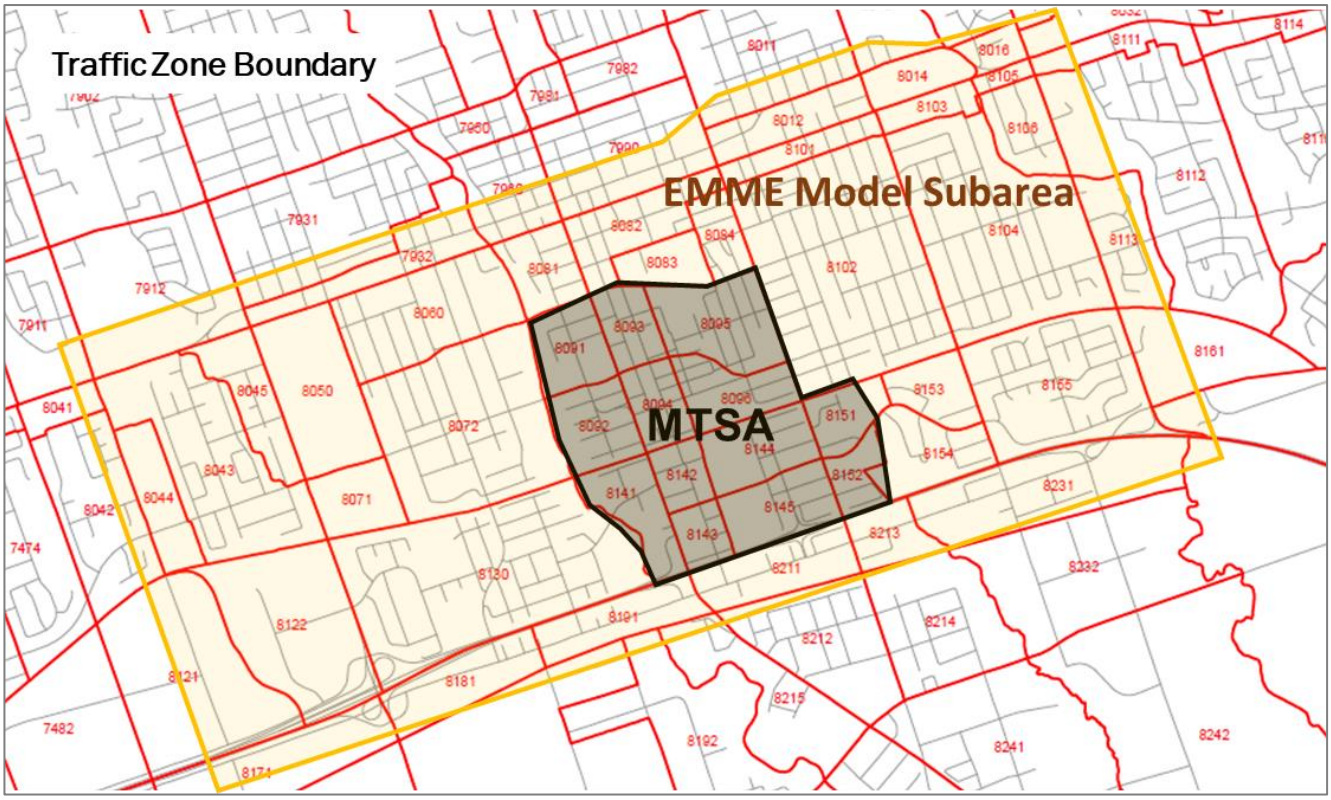
MAP 2-9: LEVEL OF SERVICE



2.4.3.2 EMME Model

A sub-area was extracted from the Durham Regional Transportation Planning Model (EMME) model. **Figure 2-6** below illustrates the defined subarea boundary and the traffic zone system, which were determined by the Region.

FIGURE 2-6: SUBAREA EMME MODEL

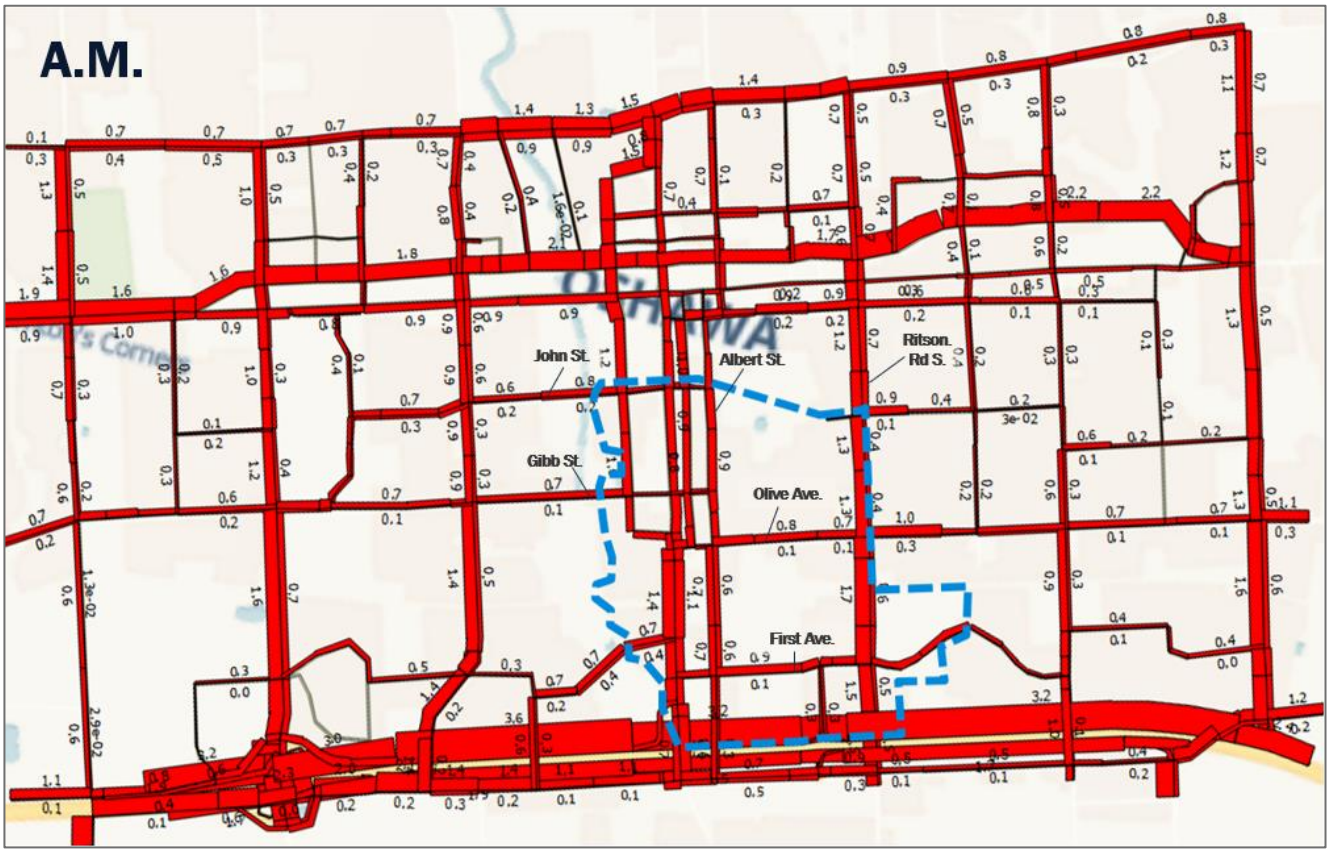


The base scenario of Durham Region's EMME model represents 2016 traffic conditions. The 2016 A.M. and P.M. peak subarea models were provided to the Integrated M.T.S.A. Study team for review of the existing conditions.

Figures 2-7 and **2-8** below present the base model link volumes and volume/capacity (V/C) ratios for the 2016 A.M. and P.M. peak period conditions. Within the M.T.S.A, Simcoe Street South, and Ritson Road South are the busiest corridors that carry most of the north-south traffic, while the east-west traffic is assigned mostly to the major corridors outside of the M.T.S.A., e.g., Highway 401 and King Street. The east-west connections within the M.T.S.A, e.g., John Street, Olive Avenue, First Avenue, are not as busy compared to the north-south routes.

It should be noted that the transportation planning model is a demand forecast model that estimates the travel pattern and travel demand for a specific time frame. It does not consider the capacity constraints on the supply side, therefore, some of the EMME model output link volumes are shown over capacity, mainly on freeways and major arterials which are the more attractive commuter routes for drivers.

FIGURE 2-7: A.M. AND P.M. PEAK V/C RATIO EXISTING CAPACITY



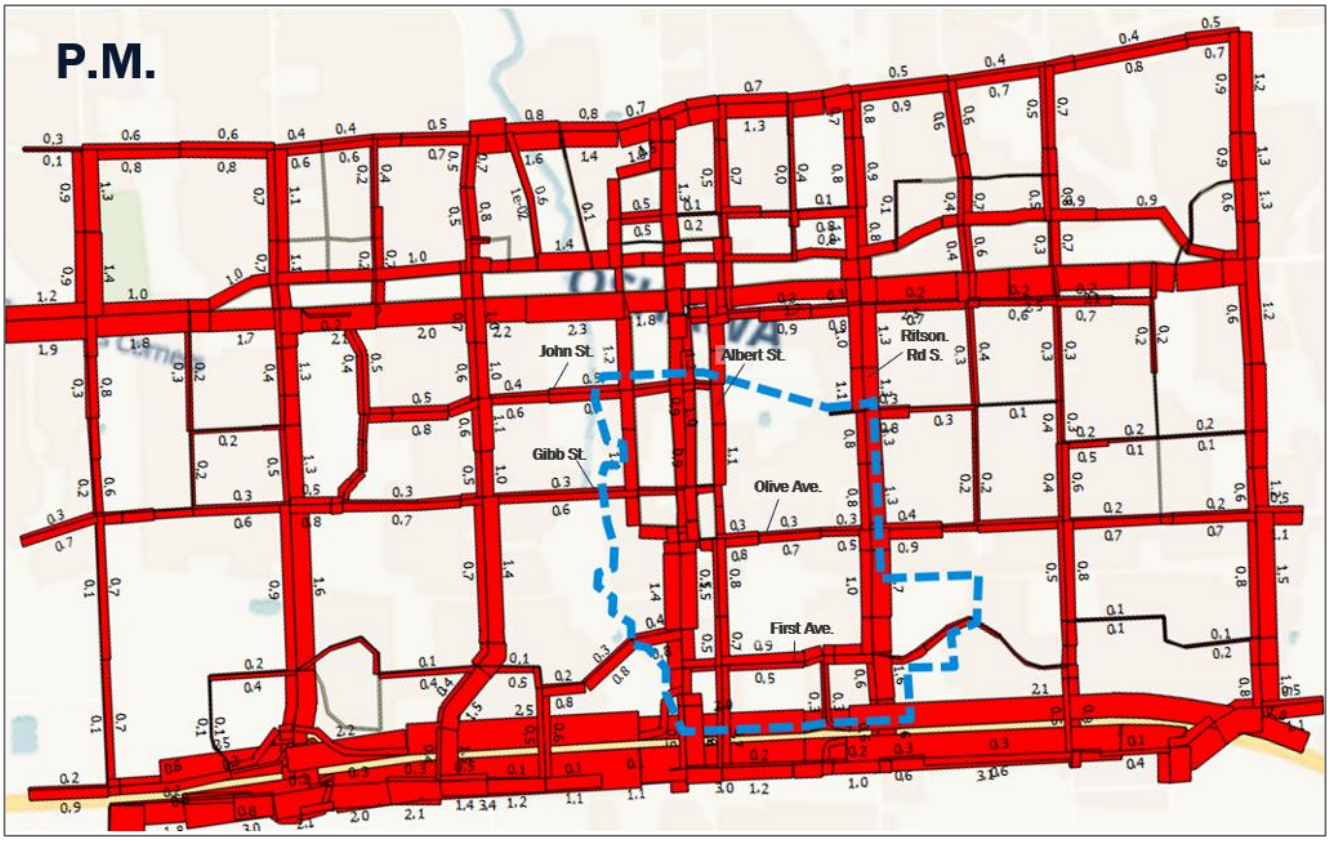
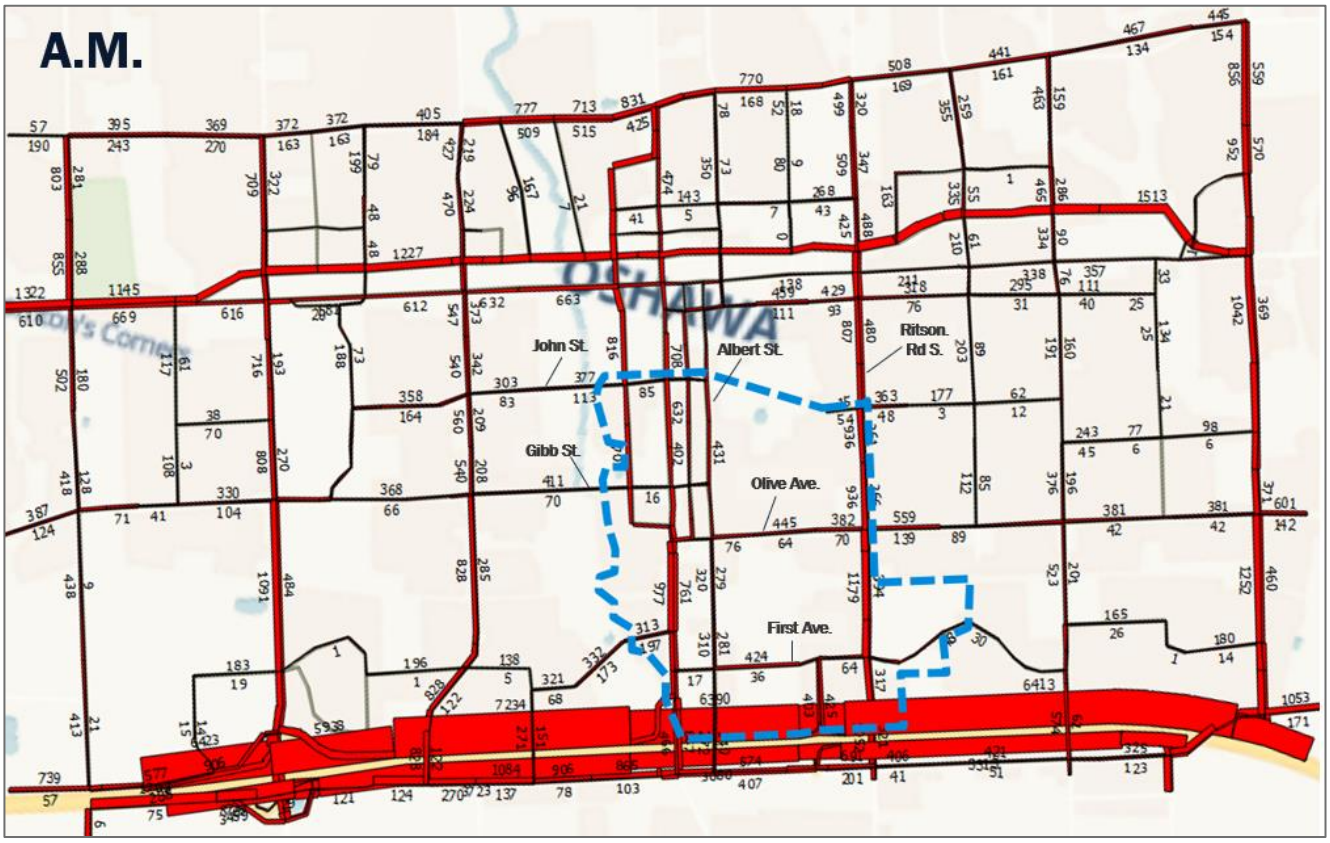
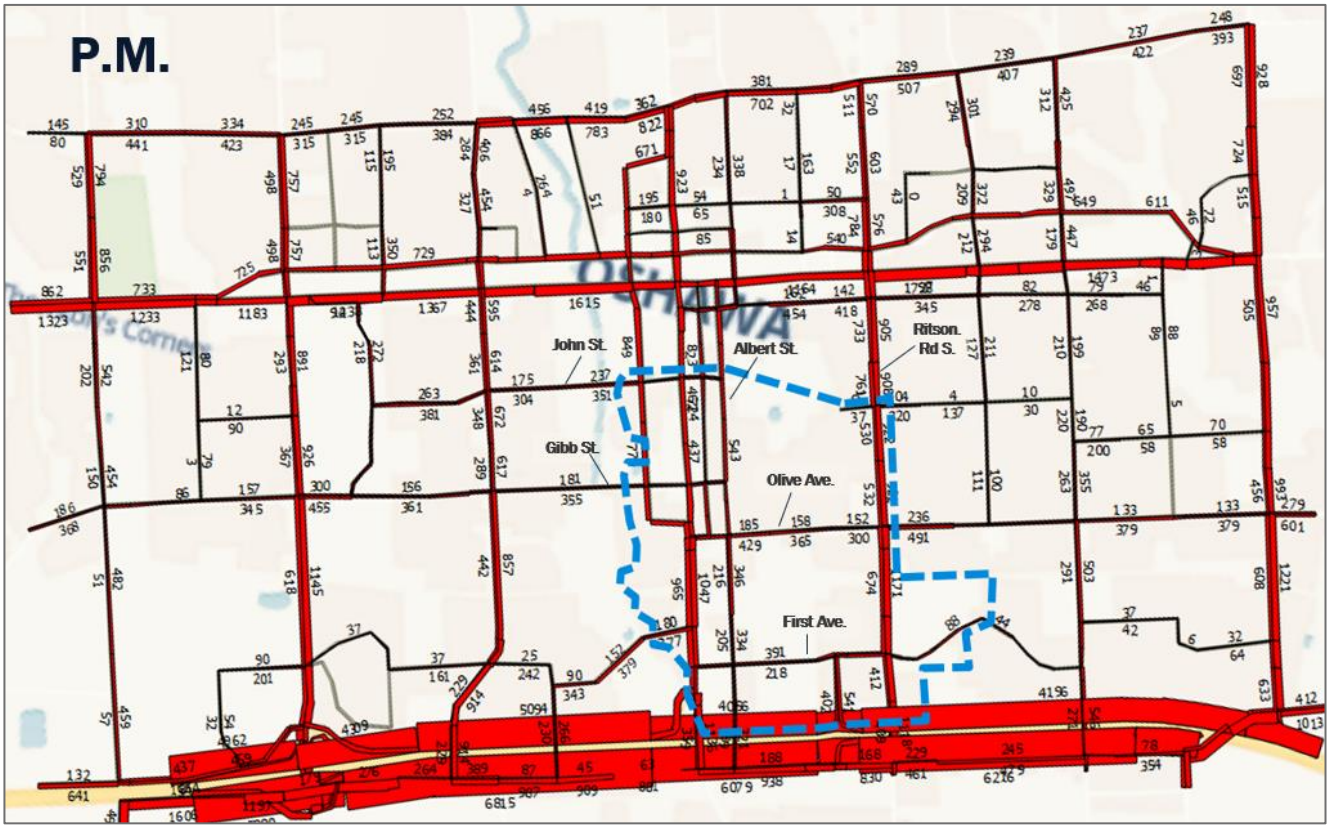


FIGURE 2-8: A.M. AND P.M. PEAK LINK VOLUMES



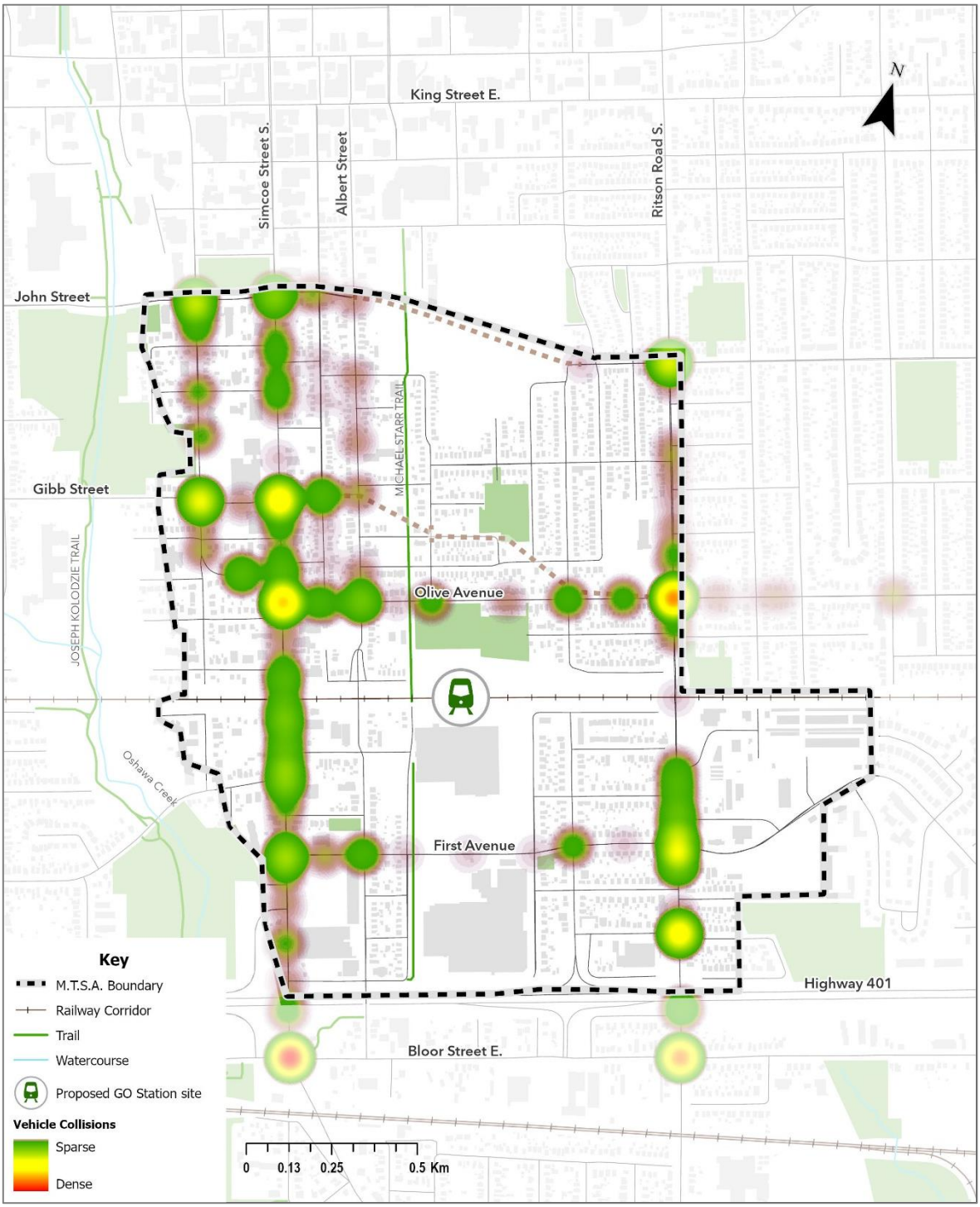


2.4.3.3 Vehicle Collisions

Identifying collision trends is key to establishing effective strategies in reducing the number and severity of collisions in alignment with Durham's Vision Zero goals. Vehicle collision data within the study area from 2017 to September 2022 was obtained for analysis, from which key observations have been identified. These observations will inform the design of a transportation road network that prioritizes safety for all road users. **Map 2-10** below provides a heat map of collision locations.

Within the M.T.S.A a total of 790 collisions from 2017-2022, with the majority (74%) resulting only in property damage. Non-fatal injury (25%) and non-reportable (1%) accounted for the remaining collisions. Notably, there were zero fatalities from collisions in the last five years. The majority (80%) of collisions occurred at intersections, with the arterial roads of Simcoe Street South and Ritson Road South experiencing the highest frequency of collisions, a trend that is expected due to the higher vehicle volumes on these roads. Among the intersection collisions, nearly three quarters (73%) occurred at signalized intersections. The collision types vary, with turning movement (29%), rear end (21%), and angle (13%), being the most common. Collisions occurred most often after the morning peak period and between 1:00 P.M. to 3:00 P.M. Collisions generally occurred more often during the winter months, and also saw a rise in June during the late spring. Before the COVID-19 pandemic, collisions had been steadily rising from 2017 to 2019, however collisions dropped during 2020 and 2021. This drop in collisions is believed to be a result of decreased traffic caused by COVID-19 restrictions. Preliminary 2022 data, however, suggests that collision frequency is returning to pre-pandemic trends, with collisions in 2022 being on pace to surpass 2021.

MAP 2-10: VEHICLE COLLISIONS WITHIN THE M.T.S.A. (2017-2022)



2.5 Summary of Existing Transportation Network Findings

Based on the existing transportation conditions analysis, the following highlights several observations and findings that should be taken into consideration as the Integrated M.T.S.A. Study progresses:

Established Existing Road Network: The existing road network is made up of established arterial, collector, and local roads. They typically have a bi-directional flow, with the exception of Simcoe Street South and Albert Street which flow in a northbound direction north of Olive Avenue, and Centre Street and Celina Street which flow southbound north of Olive Avenue. However, it is recognized that opportunities for expanding the road network in the study area are very limited due to existing development and constrained rights-of-way, with the exception of the planned Gibb-Olive widening and realignment project. Since opportunities to increase road capacity are limited, the established road network will be optimized before adding new infrastructure, and it will be critical to maximize the use of non-auto travel modes, particularly for residents and workers in the area, to maintain acceptable levels of service with the desired future densities.

Infrastructure Barriers: The C.P. Rail corridor limits connectivity between north and south portions of the study area. However, it provides a centrally located transit hub and there are opportunities to create cohesion between the north and south portions by enhancing existing crossings and adding new crossings. Highway 401 creates a disconnect between the neighbourhoods to the south of the M.T.S.A. The current crossings are not pedestrian friendly, with minimal buffer/separation between pedestrians and high-speed moving traffic. There are limited opportunities to provide additional connections across Highway 401 without significant capital expenditure, which limits the connectivity to the proposed GO Station for those to the south.

Road Operations: The current existing road network operates at an acceptable or better level of service during peak periods. With the future density and development of the area, there will be a drastic increase in traffic volumes within the study area which will impact the L.O.S. Simcoe Street South and Ritson Road South are the busiest corridors in the study area and carry north-south traffic, whereas the east-west roads do not have as much volume. Major east-west corridors are general located outside of the M.T.S.A. Measures to reduce traffic volumes and shift mode share through transit-supportive development and travel demand management strategies will assist in mitigating future traffic demands. Collisions in the M.T.S.A. most often occur at signalized intersections and often are a result of a turning movement or rear-end. No collision fatalities have been recorded since 2017. Further measures will be taken to reduce the number and severity of collisions and achieve Durham's Vision Zero goals.

Public Transit and Active Transportation: The study area is currently serviced by DRT PULSE routes and local bus routes which connect the study area to key destinations within the City, Durham Region, and beyond. The current transit service provides a solid base for the M.T.S.A. as of now, which will be enhanced through additional routes and transit priority measures as the area develops. The M.T.S.A. also has an established pedestrian network of sidewalks and crosswalks, including a dedicated crossing of the C.P. Rail tracks at the end of Front Street. The multi-modal network consists of two existing multi-use trails serving the area, with additional on-road and off-road trails planned to provide greater connectivity. The future GO station will be a major trip generator within the M.T.S.A. and will require an enhanced multimodal first-mile/last-mile mobility zone around the station providing safe, convenient and direct connectivity to jobs, homes, and higher-order transit for residents and those that work and move throughout the M.T.S.A.

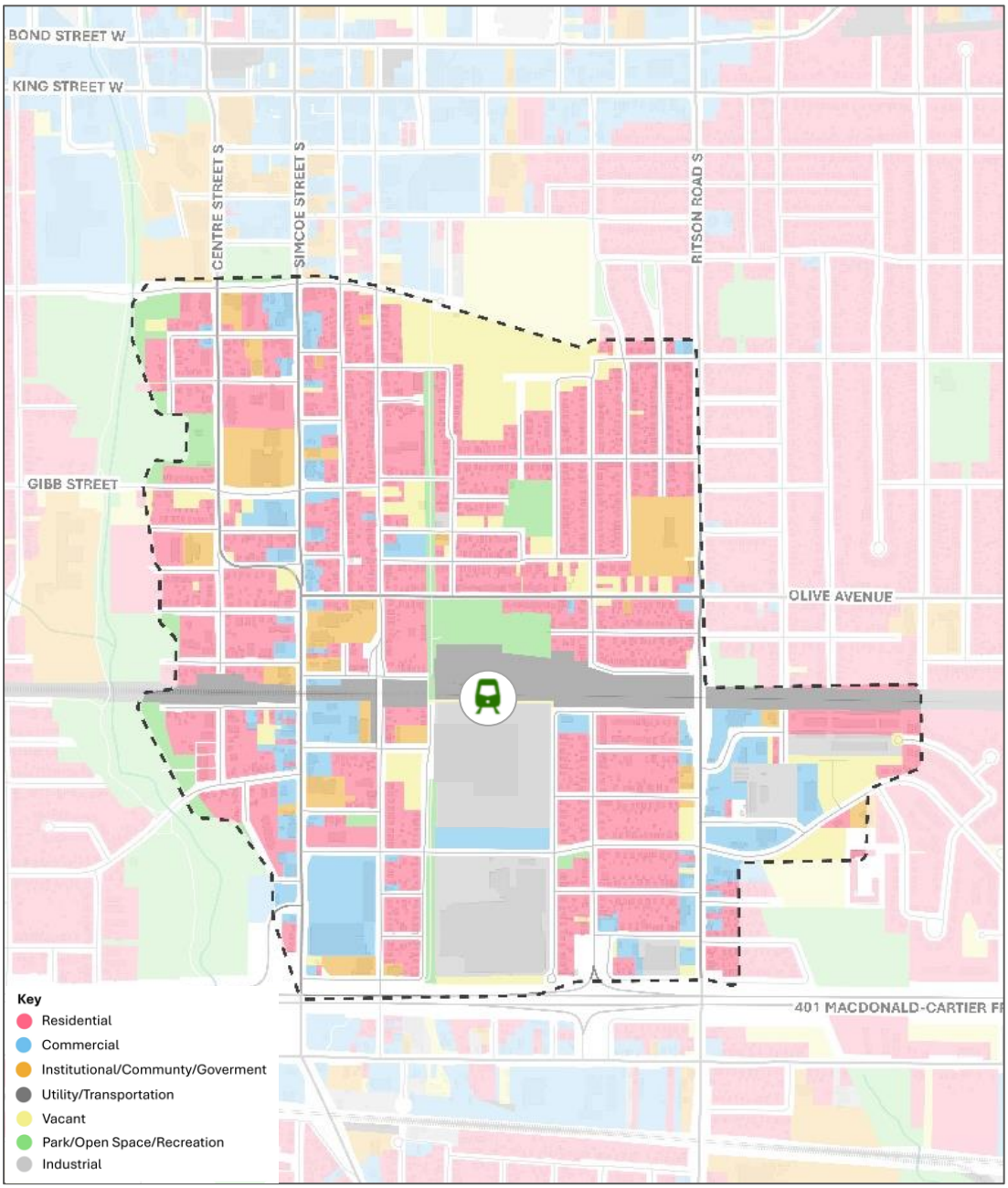
3. Land Use & Sustainable Development

3.1 Land Use Analysis

3.1.1 EXISTING LAND USES

The M.T.S.A. presently depicts a diverse collection of existing land uses (**Map 3-1**). Internal blocks are largely made up of residential uses, while commercial uses are concentrated along Simcoe Street South and Ritson Road South. Two significant blocks for industrial uses are embedded in the centre of the neighbourhood. This unusual condition is coupled by the C.P. Rail corridor which bisects the community into north and south halves. There are few connections between the rail corridor and across the industrial core in the community. Open space is also very fragmented. Established institutional uses are also part of the neighbourhood fabric. Despite the array of land uses found, the physical state of many of these uses does not resemble a mixed-use community. Many of these the buildings and uses are now vacant properties, demolished or in a state of disrepair. Land use planning should be examined through a block-by-block basis in order to measure the legitimacy of active land uses and current usage.

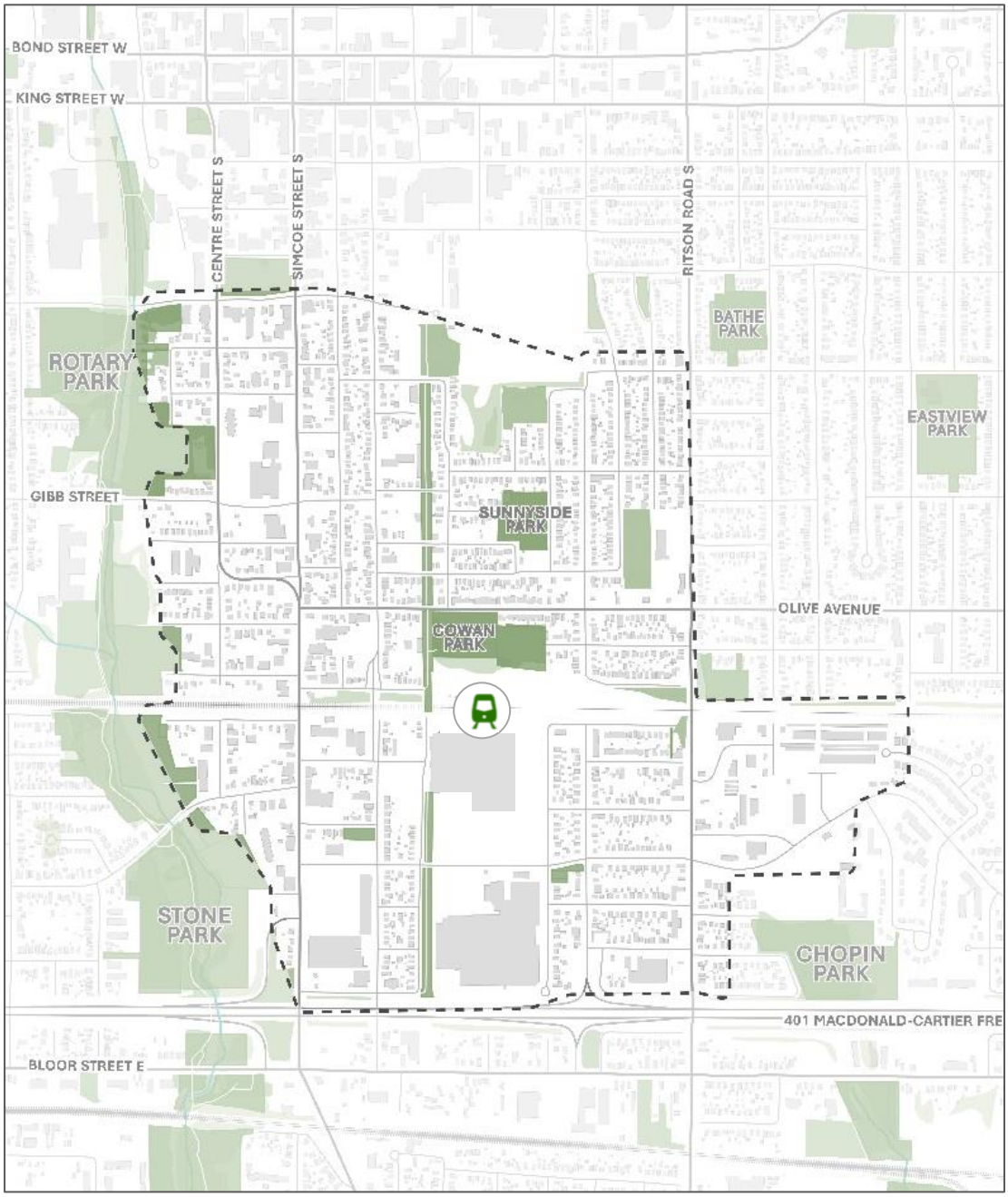
MAP 3-1: EXISTING LAND USE



3.1.1 PARKS AND OPEN SPACE

The M.T.S.A. boundaries reveal a significant parks and open space deficiency (**Map 3-2**). Currently only two relatively modest parks (approx. 3.0 ha) constitute the usable parkland within the neighbourhood. Centrally located, Cowan Park provides a playground, parking, and manicured lawn fields. Sunnyside Park provides a single sports field, trail connections, a playground, and parking. Sunnyside also has a vacant structure that used to operate as a community centre and neighbourhood association building. The M.T.S.A. is bounded to the west by the parks and open space network along the Oshawa Creek, including Storie and Rotary Park. Rotary Park is currently under redevelopment. The southern portion of the M.T.S.A. is not serviced by any parkland, impeded from the aforementioned parks by the C.P. Rail corridor. One of the most important connections will continue to be the Michael Starr multi-use trail, which connects north/south linking the Albert Street Bridge over Highway 401, across the rail tracks (at grade) and up to the edge of Downtown Oshawa. This connection can act as an important active transportation link to the heart of the M.T.S.A., bridging the Downtown to new development, and creating a linkage to features further south, including the Lake Ontario shoreline at the foot of Simcoe Street and the Oshawa Creek watershed.

MAP 3-2: PARKS AND OPEN SPACE



Through Bill 109 and revisions in parkland dedication, it will be important to assess the appropriate footprint for parks and open space to service this growing community. Parks and open space will be one of several metrics that will constitute a complete community and support T.O.D. for the M.T.S.A. The City will need to determine how much of this overall area of parkland for the future M.T.S.A. is municipally owned and operated, and how much can be prescribed as publicly accessible through private development. A balance of public and private open space will help achieve the requirements for the M.T.S.A. under Bill 109.

3.1.2 COMMUNITY SERVICES AND FACILITIES

Community services and facilities (**Map 3-3**) are also significantly deficient for the M.T.S.A. and surrounding areas. The lack of schools, daycares, and community centres shows that the neighbourhood's current demographics are older and does not resemble to the original single-family model as the area was originally planned for. Instead, there is a growing footprint of affordable housing in the community. Affordable housing has really developed on an ad hoc bases with infill and adaptive reuse occurring upon an as needed bases. Places of worship are also well represented, however with the national trend of lowering congregations[3] would suggest that many of these sites are either not operating or only partially operating. The surrounding context also shows a substantive deficiency in most community services, with the exception of the Downtown situated north of the M.S.T.A.

Therefore, it is critically important that new development and intensification within the M.T.S.A. and surrounding areas be planned and designed to provide a mix of uses, that can also address the lack of specific amenities to create a complete community.

3.1.3 MOVEMENT AND CONNECTIVITY

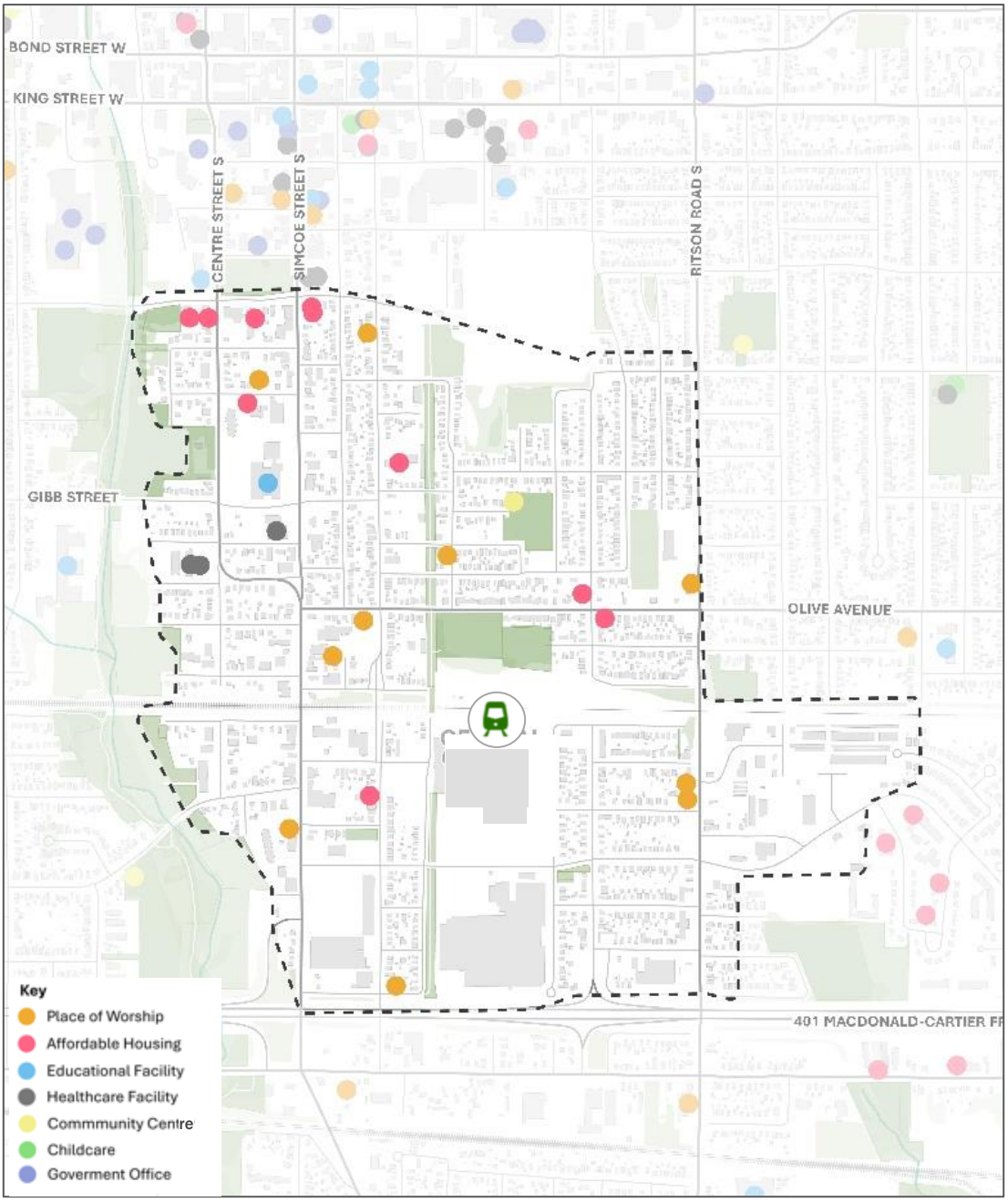
As previously outlined, the C.P. Rail line currently bisects the community, essentially creating a north and south precinct within the M.T.S.A (**Map 3-4**). There is an approximate 1.1 km stretch of uncrossable rail between the Michael Starr multi-use trail and Ritson Road South for pedestrians, and 1.6 km stretch between Simcoe Street South and Ritson Road South for a municipal road connection. The design and planning of the M.T.S.A. can help to bridge the gap and create much needed porosity to stitch the community together.

Beyond the rail, the general grid network of streets provides good internal circulation with direct connections to the east and north. The western boundary is made up of the Oshawa Creek valley providing only a few connections across. The south is bounded by Highway 401, and only provides three linkages to the neighbourhoods south of the M.T.S.A. at Simcoe Street South, Albert Street, and Ritson Road South. In general, the aging road infrastructure does require renewal, which would allow for a reconsideration of the block structure. Streetscapes should be redesigned to prioritize the anticipated modal split within a transit-oriented community. The potential realignment of Gibb Street and Olive Avenue will become important connections to bring people into the Central Oshawa GO Station from surrounding arterial roads and neighbourhoods.

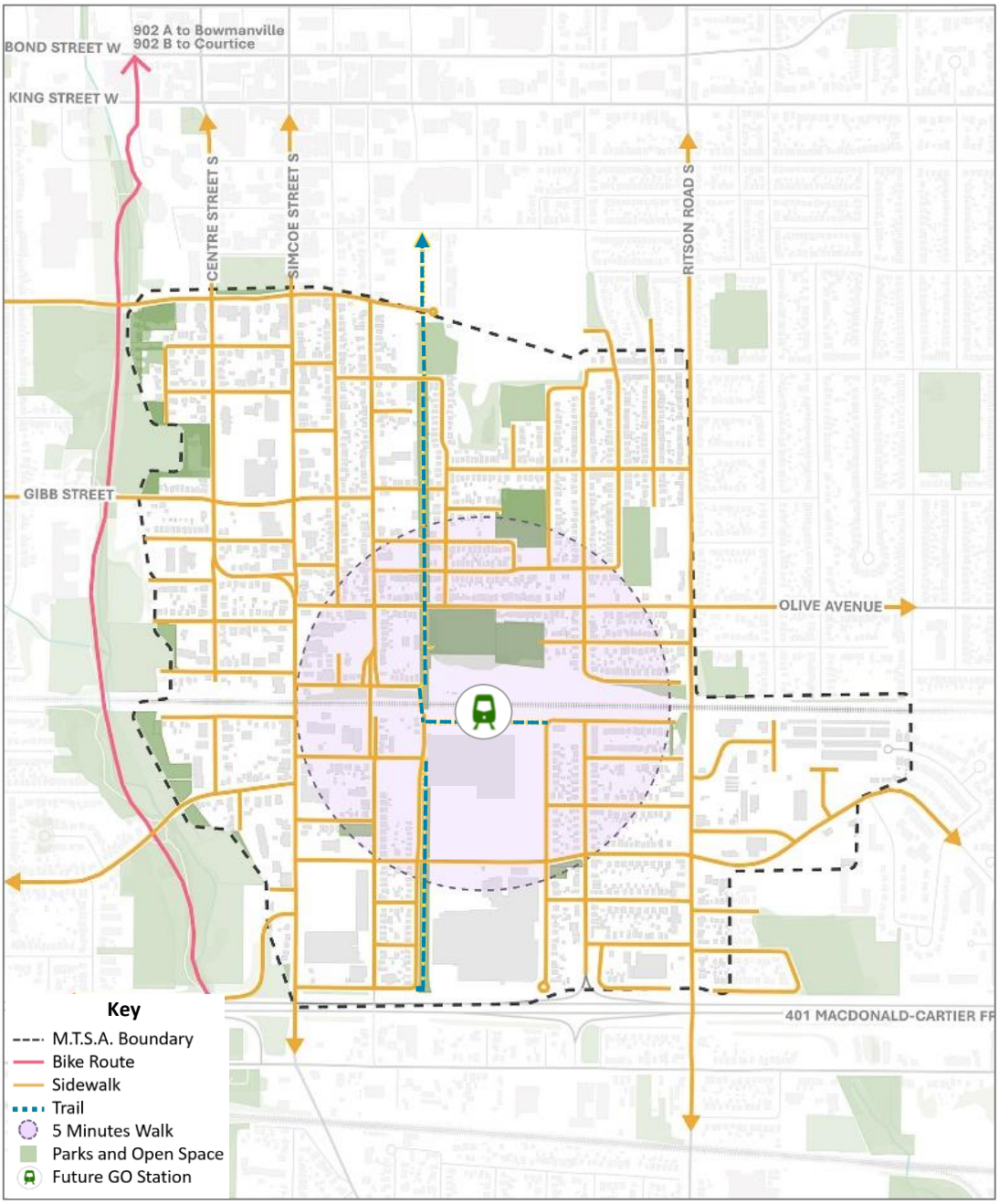
Currently the most prominent active transportation connection is the Michael Starr multi-use trail, which essentially follows Front Street to the south of the tracks and continues through the neighbourhood north of the tracks to Bruce Street, within the heart of the M.T.S.A. The trail also reconnects beyond Lviv Boulevard and the Albert Street bridge, south of Highway 401, connecting to Simcoe Street South. The Joseph Kolodzie Trail supports north-south connections along the edge of the study area through the Oshawa Creek valley and parks network. These are important connection between the City's Lake Ontario waterfront, the M.T.S.A. and the Downtown. Currently this is the only real active transportation connection through Central Oshawa. The M.T.S.A. must address the need to create a hierarchy of active transportation connections through a redesign of municipal streets, parkland, and other corridors.

[3] Allen, B. (2019). *From sacred to secular: Canada set to lose 9,000 churches, warns national heritage group*. CBC.

MAP 3-3: COMMUNITY SERVICES AND FACILITIES



MAP 3-4: MOVEMENT AND CONNECTIVITY



3.1.4 TRANSIT ASSETS

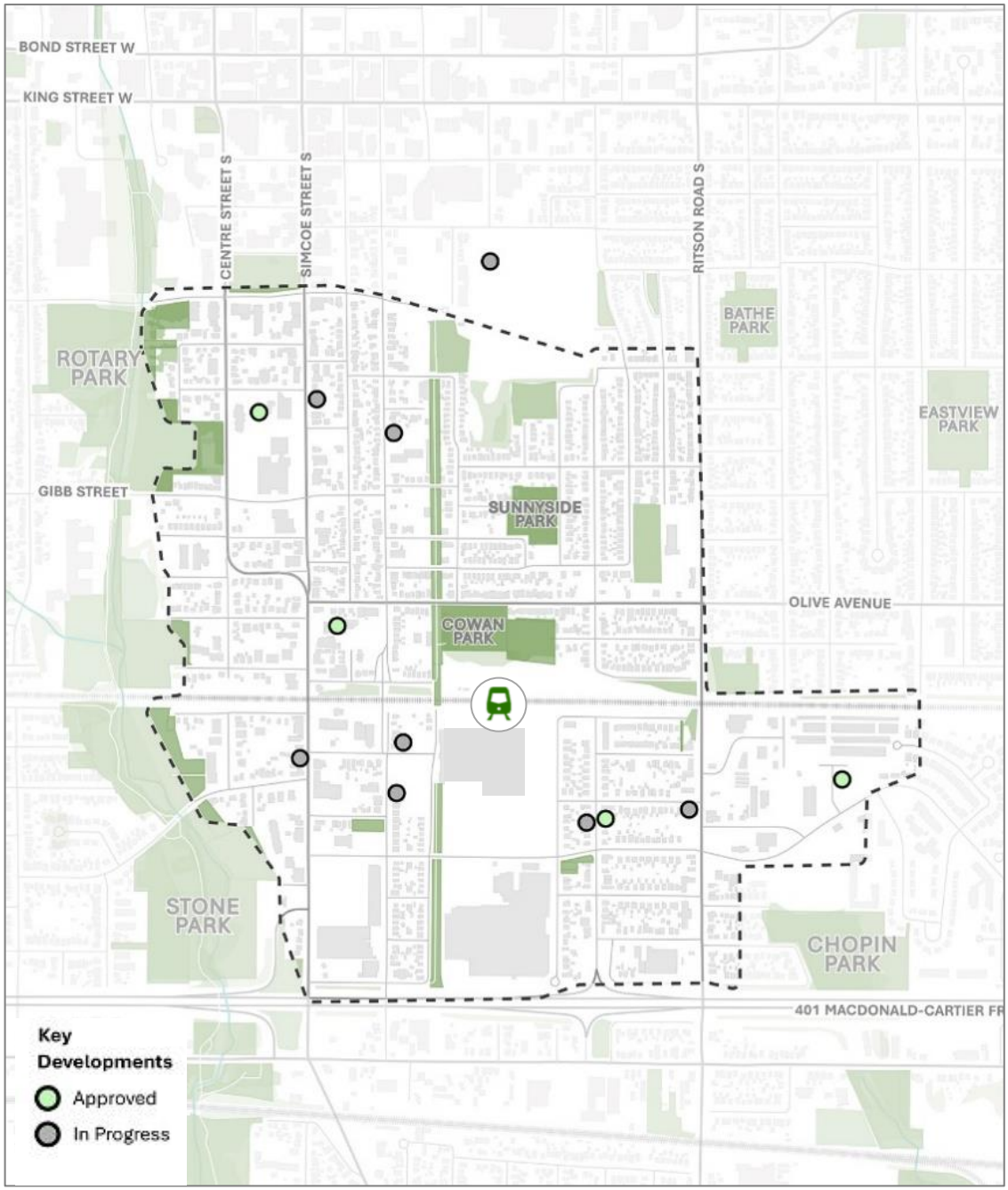
As discussed in the Transportation Assessment (**Section 2**), the M.T.S.A. is serviced by regional, rapid, and local transit options (**Map 2-7**), which operate on a regular- schedule (**Table 2-2**). As could be expected, many of the transit services are centered upon arterial roads, including Simcoe Street South and Ritson Road South. These connections help re-emphasize the importance of north-south connections. In terms of servicing the existing community these connections are well suited to the peripheral areas of M.T.S.A., with only Olive Avenue providing transit through internal streets.

Central Oshawa GO Station and Simcoe Street Rapid Transit investments will bring a heightened level of service to the area, which in turn will increase residential and employment opportunities. As density will be forecasted to significantly increase over time, the current internal transit network will require realignment to meet the growing demands. The M.T.S.A., and specifically the GO Station, will provide a logical transit hub that will serve as a link between local and Regional destinations.

3.1.5 CURRENT DEVELOPMENT ACTIVITY

Currently, there are approximately 20 development applications at varying stages of approval within the Integrated M.T.S.A. Study boundaries (**Map 3-5**, 8 applications are in pre-application and cannot be shown due to confidentiality). Many of these applications are for minor provision for additional units, with a few sites that are seeking approval of more strategic infill and residential development. This is an encouraging sign, as there represents a desire to see more intensification in parts of the City that are already readily serviced by municipal infrastructure. The challenge is that the growth provided by current model of development will not meet the objectives of Region and Province in reaching density targets. In order to truly achieve these objectives in a coordinated way, approving departments at the City and Region will need to adjust its approach to development within and surrounding the M.T.S.A. Considering the timelines of this study, it would be prudent for major development applications to in the area to pause, until the findings of this study identify an agreeable people-to-jobs population target that can be measured to the full extent of developable land, and to ensure that plans that deliver the required transportation infrastructure are in place.

MAP 3-5: CURRENT DEVELOPMENT ACTIVITY IN THE M.T.S.A.



3.2 Built Form Character

In general, the built form character in the M.T.S.A. is an eclectic and aging mixture. There are few buildings of heritage significance, and very little architectural stock of unique character or value worthy of protection. Large sections of the internal blocks are developed with single family residential, ranging in typology. There are however specific buildings that provide an architectural identity to the community and should be carefully considered as part of the potential redevelopment of the M.T.S.A. In particular, St. George Ukrainian Catholic Church and Ritson Public School are of note. Given the diversity of built form, it is important for the public and stakeholders to assist in determining what assets require protection, preservation, or acknowledgement through the initial consultation process.

Investigations of integrating built form character have also been part of this analysis. Given the materiality and architectural typologies, there are important best practices which provide solutions to built form integration, either for individual buildings or at an urban block scale. The following examples provide best practices on how built form character can be maintained in areas experiencing intensification and integration of contemporary architecture.

The Gore Block Mixed Use Development (**Figure 3-1**) overlooks Gore Park in Downtown Hamilton. The project is one of Hamilton's unique adaptive reuse projects which maintains historic façade of the original Downtown main street. The mixed-use development brings new life through adaptive reuse, additional density, and height through a highly sensitive infill design. The additional floors are setback from the heritage facades in order to reduce the impact of contemporary architectural additions, particularly from the streetscape and public spaces. This example shows how specific built form heritage or valued assets can be integrated into more intensive uses while continuing to maintain the original character and scale at the street.

FIGURE 3-1: BUILDING PRESERVATION – GORE BLOCK MIXED USE DEVELOPMENT, DOWNTOWN HAMILTON

Image Source: DPAI

The Mirvish Redevelopment (**Figure 3-2**) in the Annex Community in Toronto is an urban renewal of the original Honest Ed's department store. The large retail space was sold to mixed use residential development. Situated at Bathurst Station, this high-density project provides a mix of housing types with the preservation of the original buildings on Markham Street. The approach is to revitalize the streetwall and maintain a human scale to the project with setbacks to higher density buildings and integration of heights through the urban block.

FIGURE 3-2: URBAN BLOCK PRESERVATION – MIRVISH REDEVELOPMENT, TORONTO

Image Source: Henriquez Partners Architects

3.3 Planning Policy Framework

The following policy framework review builds upon Section 2.1 Policy Context, which is centered on municipal guiding policy for the M.T.S.A. These policies help to establish a wider understanding of the intent of M.T.S.A. within the overall planning framework of Durham Region and how these builds upon the wider objectives at a provincial level.

3.3.1 PLANNING ACT (1990, AMENDED 2022)

The Planning Act is a comprehensive piece of legislation that guides land use planning throughout the Province of Ontario. It sets rules for how land uses are controlled and by whom, and enshrines Provincial policy, plans, and other guiding policies into law. Recent amendments to the Planning Act included the addition of Major Transit Station Areas (M.T.S.A.s), amendments which preceded the identification of the M.T.S.A.

Under the Planning Act, M.T.S.A.s must be incorporated into the local municipality's Official Plan, and/or the Official Plans of both lower- and upper-tier municipalities. Policies related to M.T.S.A.s must identify the minimum number of residents and jobs per hectare that are planned to be accommodated within the area, identify the authorized uses of land in the area, and identify minimum densities for individual developments that occur within the area.

Beyond these specific targets that must be included, the Planning Act also includes provisions for additional regulations and policy tools that can be employed within M.T.S.A.s. For example, inclusionary zoning is permitted to be included in M.T.S.A.s under the Planning Act provided the regulating municipality's Official Plan authorizes such a use. Additionally, development within M.T.S.A.s is exempted from appeal rules that govern most other forms of development approvals in Ontario.

3.3.2 PROVINCIAL POLICY STATEMENT (2021)

The Provincial Policy Statement (P.P.S.) provides policy direction on matters of provincial interest related to land use planning and development and sets the foundation upon which all policy regulating development and land use in Ontario must conform. The P.P.S. gains its authority from Section 3(1) of the Planning Act, which outlines the process for establishing the P.P.S. and scope of what the P.P.S. can regulate. The P.P.S. covers a broad spectrum of land use and development areas of concern, including employment lands, public spaces, efficient land use patterns, resource management, and, directly relevant to the Integrated M.T.S.A. Study, building strong and healthy communities around transportation systems and infrastructure.

3.3.2.1 Transportation Infrastructure

Transportation infrastructure falls under the "Building Strong Healthy Communities" section of the P.P.S. In this section policy is outlined that promotes strong, livable, healthy, and resilient communities, protecting the environment and public health and safety, and facilitating economic growth. Relating directly to transportation infrastructure, the PPS expects municipalities to adopt land use patterns, densities, and mixes of uses around transit that minimizes the length and number of vehicle trips required by supporting current and future use of transit and active transportation. Importantly, the PPS also forbids allowing development in planned corridors, such as Oshawa's M.T.S.A., that could negatively affect the use of designated areas for the purposes for which they have been planned.

3.3.3 PROVINCIAL GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE (2020)

The Provincial Growth Plan for the Greater Golden Horseshoe recognizes transit as a primary consideration for major transportation investments and uses M.T.S.A.s to align transit with strategic growth areas in the province. According to the Growth Plan, M.T.S.A.'s are defined as "areas including and around any existing or planned higher order transit station or stop within a settlement area" and is "the area within an approximate 500 to 800 metre radius of a transit station, representing about a 10-minute walk".

Section 2.2.4 of the Growth Plan provides policies for Transit Corridors and Station Areas in Ontario, and states that all M.T.S.A.s "will be planned and designed to be transit supportive and to achieve multimodal access to stations and connections to nearby major trip generators". This means integrating transit service by providing connections to local and Regional transit services, supporting active transportation through infrastructure and facilities, and creating commuter pick-up/drop-off areas.

The Growth Plan also provides guidance on appropriate land uses around M.T.S.A.s, which should include a "diverse mix of uses, including additional residential units and affordable housing, to support existing and planned transit service levels" and opposes land uses or built form that will" adversely affect the achievement of transit-supportive densities". The Growth Plan also the encourages alternative development standards, such as reduced parking standards, and supports collaboration between public and private sectors to produce the greatest benefit for the area.

3.3.4 GREENBELT PLAN (2005, AMENDED 2017)

The Greenbelt Plan was implemented by The Greenbelt Act, 2005 and Ontario Regulation 59/05, and has been amended several times since 2005 to expand or reallocate the scope and range of lands protected by its policies. The Greenbelt Plan works in tandem with the Growth Plan, Niagara Escarpment Plan, and the Oak Ridges Moraine Conservation Plan to establish a land use planning framework for the Greater Golden Horseshoe. The intention of this planning framework is to identify where urbanization should and should not occur, and to provide for the permanent protection of the agricultural land base and the ecological and hydrological features, areas, and functions occurring throughout this area.

3.3.4.1 Urban River Valleys

Under some of the most recent major changes to the Greenbelt Plan in 2017, Urban River Valleys (URVs) have been designated for protection where publicly owned. In the case of Oshawa, this includes the Oshawa Creek to the west of the M.T.S.A. Urban River Valleys expand and integrate the Greenbelt into the broader Southern Ontario landscape, including some of its most urbanized areas. By fostering these connections and protecting them for future generations, they will provide recreational, cultural, and tourist amenities and infrastructure in addition to the important ecosystem services they provide to urban areas.

Oshawa Creek is designated as an Urban River Valley under Section 6 of the Greenbelt Plan, which outlines how External Connection and Parkland, Open Space, and Trails policies apply to publicly owned lands within the designation. These policies establish a framework for maintaining and expanding the supply of publicly accessible parkland, open space, and trails, and prohibit development that encroaches into these areas or compromises their function. Importantly, the idea of enhancing and improving connectivity within and to these resources is captured by the Greenbelt Plan. In the case of Oshawa Creek this means consideration should be given to ensuring clear and easy access from the M.T.S.A. is provided to the creek, and that trails and pathway infrastructure within the creek valley are maintained and enhanced as demand and use of the Urban River Valley increases with nearby population density.

3.4 Sustainability Principles & Criteria

Sustainability is an important consideration in the long-term success of any planning policy but is particularly relevant when planning for high-order transit-oriented development. The City of Oshawa defines sustainability in its 2020-2023 Strategic Plan as "meeting the needs of the present without compromising the ability of future generations to meet their own needs," and strategically approaching the M.T.S.A. through this lens will result in a future that provides the best possible economic, social, environmental returns to the City and Durham Region.

This analysis provides an overview of the relevant sustainability policies that regulate the M.T.S.A., followed by a brief discussion of best practices from across G.T.H.A. and Canada when embedding sustainability into major transit-adjacent developments. Following this, a proposed approach and sustainability guiding principles are outlined for the M.T.S.A.

3.4.1 CONTEXT

3.4.1.1 City of Oshawa

In the City of Oshawa's 2020-2023 Strategic Plan, sustainability sits at the heart of their interconnected five strategic goals. Under this framework a sustainable Oshawa is achieved through environmental responsibility, cultural vitality, accountable leadership, economic prosperity and financial stewardship, and social equity.

Reflecting Council's priorities as outlined through the Strategic Plan, it is important that the Integrated M.T.S.A. Study directly responds to each of these components of sustainability. This means fostering conditions that will support mixed-use, transit-supportive, multimodal, economically diverse, attractive, safe, and healthy neighbourhoods around the M.T.S.A. (Policy 4.1 – Wise Land Use), promote active, healthy lifestyles and communities (Policy 4.3), and minimize environmental impact of new development (Policy 4.5).

The City of Oshawa's Official Plan (O.O.P.) speaks directly to the M.T.S.A., generally referring to it as the Central Oshawa Transportation Hub. Under the O.O.P. this area is to develop into a focal point of activity, interest, and identity for residents, providing a concentration of well-designed, compact, and intensive urban development. The M.T.S.A. will function in a complementary fashion to the downtown core, with major office, retail, business, personal and administrative services, residential, institutional, recreational, cultural, and entertainment uses all included within this area.

Although the term "sustainability" is not explicitly used in describing the M.T.S.A., the articulated target densities (75 residential units per hectare) and target FSR of 2.5 directly speak to a form of urban development that is fundamentally more sustainable than low-density development which is highly prevalent in Oshawa. More broadly, the Official Plan does include policy that directly states long-term sustainability is a requirement when planning for transportation hubs and commuter stations in the City, creating a clear directive for these considerations in the M.T.S.A.

3.4.1.2 Durham Region

The City of Oshawa is a lower-tier municipality within the broader upper-tier Regional Municipality of Durham. As the Regional level planning authority, Durham's ongoing "Envision Durham" Municipal Comprehensive Review exercise and the established M.T.S.A. policies help provide direction for how sustainability should be incorporated into the M.T.S.A. Importantly, as Regional policy, the outputs of Envision Durham will supersede the City of Oshawa's Official Plan.

On a broad level, the Durham Region views the Central Oshawa M.T.S.A. as an opportunity to promote sustainable transportation and housing options in the Region. From an environmental perspective, this is an opportunity to reduce pollution, energy consumption, and the costs of automobile dependency to both individuals and the Region. From a social and economic perspective, Durham Region sees the M.T.S.A. as an opportunity to increase diversity of housing choice, create new economic clusters of businesses and employment, and foster stronger, more integrated communities.

The Regional Official Plan Amendment #186 for delineating the Central Oshawa "Protected Major Transit Station Area" (P.M.T.S.A.) is currently with the Provincial Government awaiting their approval. Once approved, the Amendment will be incorporated into the new Regional Official Plan through the Envision Durham Municipal Comprehensive Review (Envision Durham).

The Envision Durham provides detailed rules and regulations for M.T.S.A.s. Of particular relevance to sustainability are the policies that direct a higher proportion of people and jobs per hectare than originally prescribed through Oshawa's Official Plan. Under Envision Durham, this number is increased from 75 residential units per hectare to the new minimum density of 150 people and jobs per hectare established by the Province. In addition to this important shift in anticipated density, the policies for M.T.S.A.s also recommend the adoption of alternative development standards to support sustainability and transit-oriented development. These include the reduction of minimum parking requirements and introduction of parking maximums.

Ultimately, Durham Region's policies for M.T.S.A.s represent the prioritization of strong urban design and built form, an integrated parks and trails system, and mobility and active transportation investments that collectively result in a more economically and environmentally sustainable community. While Envision Durham does not delve deeply into matters of social sustainability, it is clear that the Region recognizes the transformative potential of M.T.S.A.s and their resultant requirement for a unique and responsive policy context relative to the rest of the Region.

3.4.2 BEST PRACTICES

Across Canada municipalities are master-planning new communities that leverage investment in higher-order transit. These transit-oriented developments provide a range of different contexts and perspectives that Oshawa can learn from. By identifying what ideas have helped promote sustainability in each of these best practice projects, the City can ensure these elements are directly embedded into decision-making for the Integrated M.T.S.A. Study moving forward.

LeBreton Flats, Ottawa, ON

The 'Building LeBreton' project (**Figure 3-3**) in LeBreton Flats, directly west of downtown Ottawa, is perhaps one of the most transit-supportive communities in Canada. Benefitting from substantial rapid transit bus service to destinations east, west, north, and south of the area, direct active modes connections to and from the downtown core, and two light rail transit (L.R.T.) stations (including a hub station connecting Ottawa's two L.R.T. lines), LeBreton Flats is well positioned to leverage its context into one of the most sustainable communities in Canada. Recognizing this opportunity, the LeBreton Flats Master Concept Plan contains an entire Sustainability Strategy.

FIGURE 3-3: LEBRETON FLATS, OTTAWA, ON

While Oshawa is different from LeBreton Flats in that it is not a part of the national capital, the Sustainability Strategy still provides clear insight into contemporary understandings of what sustainability can mean for transit-oriented communities. In particular, one of the most important lessons from this strategy is that sustainability and sustainability targets and guidelines are dynamic. When approaching development that will unfold over longer timelines it is imperative that flexibility be incorporated directly into sustainability goals, appreciating that the expectations of buildings and communities will change with time. For example, while zero-carbon communities would have been unheard of 20 years ago in Ontario, this ambitious goal is now becoming increasingly common. As such, Oshawa should aspire to set broad ambitions for its sustainability targets rather than rigid, inflexible goals.

Exhibition Lands, Edmonton, AB

The Edmonton Exhibition Lands (**Figure 3-4**) are the former home of the Edmonton Oilers hockey team and present site of the City's largest annual festival, K-Days. Recognizing the changing nature of exhibition spaces and mass events, coupled with a desire to better utilize adjacent L.R.T. infrastructure, Edmonton's Council prepared the Edmonton Exhibition Lands Planning Framework to identify best use for these lands. Within the approved Planning Framework, a clear direction for sustainability and innovation was embedded, and is already yielding results. Today the EXPO Centre

on the site is home to Canada's largest rooftop solar array, and other investments in green infrastructure and energy will occur as the master plan unfolds.

FIGURE 3-4: EXHIBITION LANDS, EDMONTON, AB

One of the strongest lessons Oshawa can learn from Edmonton's Exhibition Lands is its commitment to sustainability measures. The planning framework was evaluated against specific metrics as it developed to ensure it achieved baseline targets once fully built out. These metrics included:

- Population per Hectare;
- Low-Rise to High-Rise Development Ratio;
- Population within 400m of parkland;
- Population within 400m of transit service; and,
- Retained Natural Area Features (street trees, etc.)

These criteria can be right-sized for Oshawa's specific context, but as the Integrated M.T.S.A. Study is being developed, they can provide a useful measuring stick against which to evaluate the performance of the study area against specific sustainability metrics.

Mission Waterfront, Mission, BC

FIGURE 3-5: MISSION WATERFRONT, MISSION, BC

The Mission Waterfront Revitalization Master Plan (W.R.M.P.) (**Figure 3-5**) never uses the specific term sustainability, the notions of social, economic, and environmental sustainability are intentionally incorporated directly into the W.R.M.P. As a brownfield redevelopment plan adjacent to high-order transit and the existing City of Mission's downtown core, the W.R.M.P. saw this site as a strategic opportunity for the existing downtown core to reach over top of the West Coast Express Station and extend into the new Waterfront District. Simultaneous to this, new, high-density development adjacent to the station and the new main street would help provide a catalyzing critical population to help reinvigorate the struggling downtown while supporting the new district's businesses as well.

Mission's approach to their station-area development was very intentional in how it directly addressed and connected to its downtown core. By leveraging the opportunity to create a complete community on the waterfront while maintaining the existing social capital invested in downtown, the Waterfront became a complementary addition to the City instead of a competing one.

Oshawa can learn much from Mission's approach to integrating its downtown core with the M.T.S.A. By providing ample opportunity for connectivity and cross-pollination of businesses and residents alike between the two districts the M.T.S.A. can serve to increase the sustainability and long-term durability of existing social, cultural, and economic investments in Downtown while still fostering a new, high-quality addition to the City's overall constellation of hubs.

3.4.3 PROPOSED SUSTAINABILITY APPROACH

Major Transit Station Areas are, by their very nature, primed to already become more sustainable than most urban developments in Canada. These areas leverage strategic investments in high-order transit to increase densities, reduce overall dependency on automobiles, and provide high-return developments that generate higher residential and commercial property taxes, spurring on local investment and further economic growth. However, there are still strategic approaches and guiding principles that should be adopted to ensure Oshawa maximizes the transformative potential of the M.T.S.A. As previously discussed, there are three main factors that influence the overall sustainability of transit-oriented development areas: parks & open space, active transportation connectivity and built form.

These can in turn be incorporated into guiding principles:

1. Prioritize High-Quality Parks & Open Space

With increased population and employment densities comes greater requirement for high-quality parks and open spaces. Distinct neighbourhoods within the broader M.T.S.A. should each be provided their own dedicated local park spaces, while attention should be given to maximizing privately-owned public spaces where appropriate as well.

2. Provide a Comprehensive Active Transportation Network

As a new secondary hub in Oshawa's urban fabric, it is critically important that residents and visitors alike are able to easily get to and from the M.T.S.A. via active modes. Given its proximity to the existing Downtown, there exists tremendous opportunity for the success of the M.T.S.A. to have a synergistic impact and benefit on the Downtown. Ensuring the two areas are linked to one another through a safe, comfortable, and intuitive active transportation connection is paramount to effectively leveraging high-order transit investment into broader economic development for the City.

3. Ensure a Human-Scaled Built Form

As one of Oshawa's densest, most populous community hubs, the M.T.S.A. must emphasize urban design in creating a place built specifically for people, not cars. This means more right-of-way space dedicated to active modes, safe and efficient connections to parks, open spaces, community amenities, and the GO Rail station itself, and building designs and land use typologies that foster active, engaging streets no matter where in the community you are.

These guiding principles present three broad areas of focus but are inextricably linked in their implementation. For example, parks and open space can facilitate effective and efficient active transportation network conduits, and human-scaled built form can incorporate pocket parks and other such smaller spaces for residents to enjoy. Successfully incorporating these three principles into the overall M.T.S.A. will ultimately improve the community's overall cohesion with the rest of Oshawa, create a comfortable experience for residents and visitors alike, support public safety, make for an attractive community, and function efficiently for all users. To this end, the M.T.S.A.'s master planning should consider evaluating critical decisions against the following criteria:

- Cohesion with Oshawa – A cohesive M.T.S.A. is one that is seamlessly integrated within the urban fabric of the rest of Oshawa, allowing residents and visitors to easily get from point A to B, and the M.T.S.A. to feel as though it has always been a part of the City's makeup. Key origins and destinations, such as Downtown, major parks, and the lakefront, should all be linked as a cohesive whole to the M.T.S.A. so that all can be easily navigated to and from by all active modes, creating a thoughtful and intentionally connected City. Successfully implemented, this will lead to social, economic, and environmental sustainability as residents are able to easily travel throughout Oshawa to its main attractions, support local businesses throughout the City, and make mobility choices that are better for personal and environmental health.
- Utility for Users – Trips within, to, and from the M.T.S.A. should be able to be completed quickly and with minimal physical effort. It is important that unnecessary detours are avoided, that routes to and from major destinations are logical and efficient, and that active modes are a competitive alternative to other forms of transportation. Doing so will benefit the environmental sustainability of the M.T.S.A. and foster a network of active modes options that will over time expand into neighbouring areas and throughout the City, creating longer-term positive impacts for all of Oshawa.
- Safety and Inclusion – Safety and comfort are key aspects to creating a desirable place where people want to be. Unsafe conditions, such as those that contradict the principles and best practices of Crime Prevention Through Environmental Design, can diminish public opinions and support for longer-term studies such as full build-out of

the M.T.S.A. regardless of whether they relate to parks and public space, the active transportation network, or the overall "look and feel" of the community's built form. Actively working to counteract these conditions through built-form, park space design, and active modes network is important for ensuring the Integrated M.T.S.A. Study is seen as a successful, socially sustainable place where residents and visitors are safe and secure as they go about their daily lives.

- **Attractiveness** – While attractiveness is subjective, there are certain design and built-form considerations that, when employed appropriately, can contribute to creating a distinct sense of place that is attractive and desirable for visitors and residents. Ensuring buildings and streets are people-centred and scaled, that open spaces with greenery are prevalent throughout, and that the negative impacts of congestion and automobile traffic are mitigated can all contribute to a more positive, enjoyable, and attractive public realm. Ensuring the M.T.S.A. achieves an overall degree of attractiveness that inspires further private investment in the area is critical for ensuring its long-term sustainability.

By appropriately addressing the built form of future development, incorporating strategically sited and programmed parks and open spaces, and co-developing a strong and logical active and multi-modal transportation network around the M.T.S.A., the City will set itself up for long-term success in this area that will yield considerable returns for the municipality long after the initial transit investment. Each of these areas work in concert with each other to create a compelling and desirable location for new residents and businesses to set up and will also foster integration between the M.T.S.A. and rest of Oshawa, particularly Downtown. Collectively these impacts will foster economic, social, and environmental sustainability at the core of the M.T.S.A., creating a benchmark for sustainability and positive development that will benefit the City for years to come.

3.5 Targets for Central Oshawa - Planning for a Different Urban Condition

Many communities throughout the G.T.A. have embarked on a path to progressively plan for intensification around higher-order transit. In many ways, M.T.S.A.s throughout Durham Region have consistent planning objectives, however, what is different for each M.T.S.A. are the population targets which help to dictate the impacts to the physical environment. Setting up these targets is both a quantitative and qualitative exercise, which should always be based upon contextual realities. Where M.T.S.A.s have been able to present a dynamic approach to planning, is through determining the right mix of residential vs employment population and the balance of architectural typologies to accommodate this growth. Measured against the contextual limitations, planning of this density can be better aligned to spatial conditions to meet local objectives. Granular elements, such as public realm, will help to stitch the evolving condition into a new urban condition, which is deeply rooted in contextual reality. Therefore, it is the objective the Integrated M.T.S.A. Study to determine the appropriate density target and distribution, along with the urban scale planning and design to create a consensus building vision.

The Growth Plan for the Greater Golden Horseshoe and Envision Durham have determined an ambitious population target for the Integrated M.T.S.A. Study Currently the expectation is that there will a combined 150 people and jobs per hectare for the precinct. Furthermore, the Region's investment in Rapid Transit along Simcoe Street can also suggest that the M.T.S.A. and surrounding areas could support potentially higher targets. Central Oshawa is also an existing serviced area of the City, and therefore its redevelopment would assist in protection of greenfield and agricultural lands. With the existing densities in the M.T.S.A. in the range of 25-40 people per hectare, it is vitally important to recognize the magnitude of this potential transformation to the current urban condition. Based upon best practices and public/stakeholder engagement, Phase 2 of this study will test and determine the appropriate density targets for people and jobs. This will be achieved through analytical data and 3D modelling to visually create options of the urban scale impacts to the M.T.S.A. and urban context.

3.6 Summary of Existing Land Use and Sustainable Development Findings

Addressing Deficiency of Services: The Integrated M.T.S.A. Study presents a unique opportunity to address socio-demographic deficiencies in the services expected by residents. Schools, parks and open space, community facilities and ancillary facilities are severely lacking in the existing neighbourhood. The M.T.S.A. brings an opportunity to inject new life into a part of the City with great potential for renewal.

Bridging Bisecting Infrastructure: Although the GO Rail service extension will become the impetus of the Integrated M.T.S.A. Study, the rail line currently acts as great divide between the community and its assets. The M.T.S.A. and GO Station provides an unprecedented opportunity to connect the north and south sides of the study area. This will help create cohesion between the community. Infrastructure to connect locally and regionally is critical to the success of Central Oshawa.

Serving a Wider Purpose: The M.T.S.A. will have much wider impacts than that on the immediate context. It has the potential to serve a much wider population, and a Regional context. Therefore, it is important that connections and volumes of mobility are addressed through planning and design of the M.T.S.A. and GO Station.

Targeting: As outlined in previous sections, establishing targets to attainable goals for residential and employment are critical to the success of the Integrated M.T.S.A. Study. Throughout Phase 2, it will become a focus to establish the best target for population growth within the M.T.S.A.

Making a Better Oshawa: Integrated M.T.S.A. Study is not focused solely on achieving the goals of Queens Park, however, is about achieving the objectives of the City of Oshawa and its residents. Therefore, this Study needs to be crafted for Oshawa and serve its changing needs. This will include a heightened sensitivity to socio-economic and demographic realities of the existing context, and how phased change can evoke an important chapter of urban renewal in Oshawa.

Gateway Opportunity: Let us envision the presence of the M.T.S.A. as a catalyst for change! Through the M.T.S.A.'s presence along major corridors, like Highway 401, there is an opportunity to see development as a noticeable connection between districts. With strategic planning and design, the M.T.S.A. can act as one of the most prominent features upon entering Oshawa, further reinforcing the City as a destination between its historic Downtown and waterfront parks. It is the M.T.S.A. that will draw people further into the community and act as a significant gateway into the City. Let's build it!

4. Commercial Analysis

4.1 Purpose of Commercial Analysis

The following section evaluates the M.T.S.A. and broader Main Central Area from a retail/service commercial market, office market and hotel market perspective. This analysis seeks to understand the population from which existing and potential future/new commercial facilities in this location are likely to derive most of their sales volume, as well as the current retail function and need for commercial uses within the M.T.S.A. and the area's relationship with other major commercial destinations and nodes throughout Oshawa. Its findings will assist in determining commercial opportunities within the M.T.S.A. and the full extent to which the M.T.S.A. (and/or other areas of the City of Oshawa) currently attracts inflow visitation from a broader geographic area, which will inform general traffic flows, volumes, and travel patterns within the area and surrounding community.

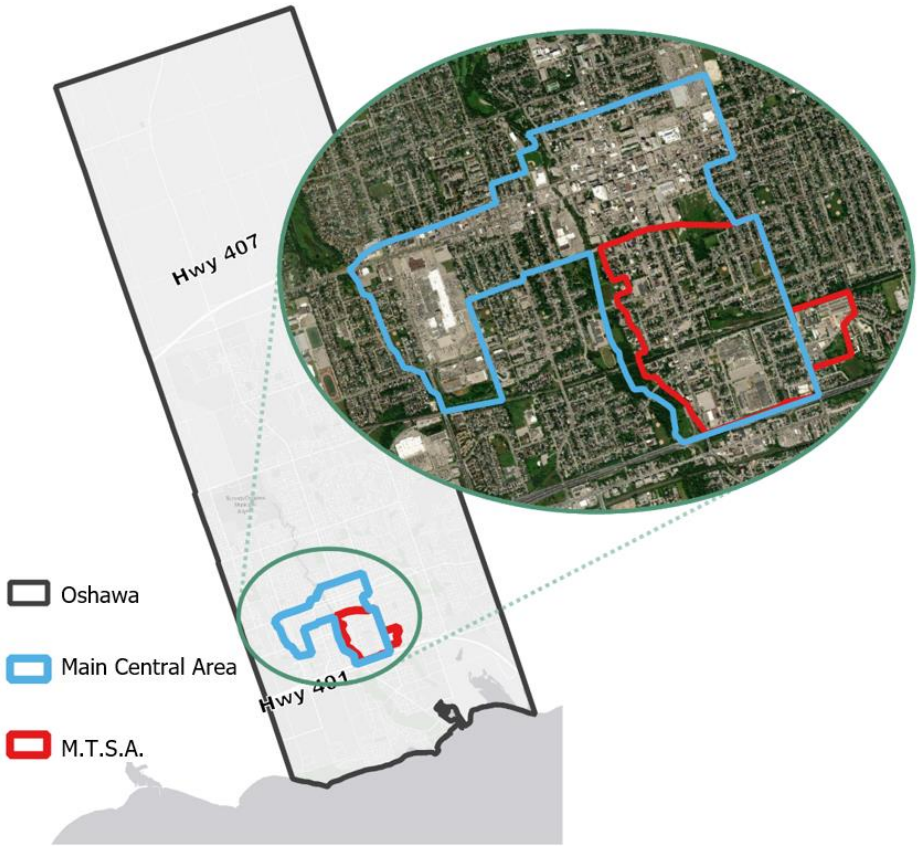
4.2 Study Areas

In addition to Regional and city-wide market conditions, much of the commercial analysis focuses on two key geographies:

- Oshawa's Main Central Area, which encompasses most of the major commercial concentrations in the City, including the Downtown Oshawa Urban Growth Centre, a large planned commercial Centre (i.e., the Oshawa Centre Super Regional mall) and several planned commercial strips; and,
- The proposed Central Oshawa GO Station Major Transit Station Area, which is located in the southeast portion of the Main Central Area. Where possible, the demand assessment is focused on this secondary and more localized area to best understand the optimal commercial function of the M.T.S.A.

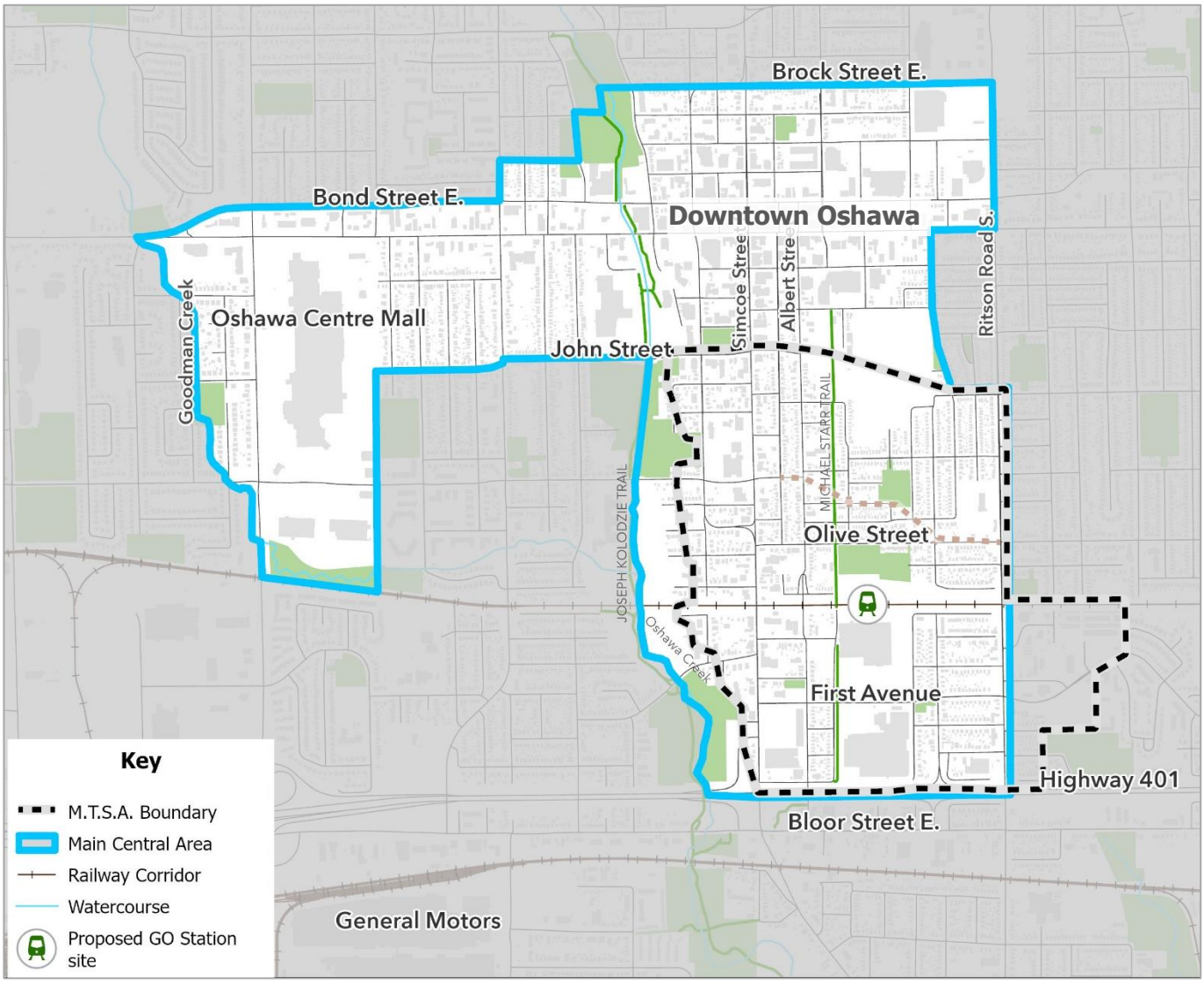
Map 4-1 illustrates the location of both the Main Central Area and the M.T.S.A. within Oshawa, and Map 4-2 provides a more detailed view of the Main Central Area and M.T.S.A.

MAP 4-1: CONTEXTUAL LOCATION OF THE MAIN CENTRAL AREA AND M.T.S.A.



Source: Parcel, based on ESRI base map. Main Central Area and M.T.S.A. boundaries for illustration only.

MAP 4-2: MAIN CENTRAL AREA AND M.T.S.A.



Source: Parcel, based on an ESRI base map. Main Central Area boundaries for illustration only.

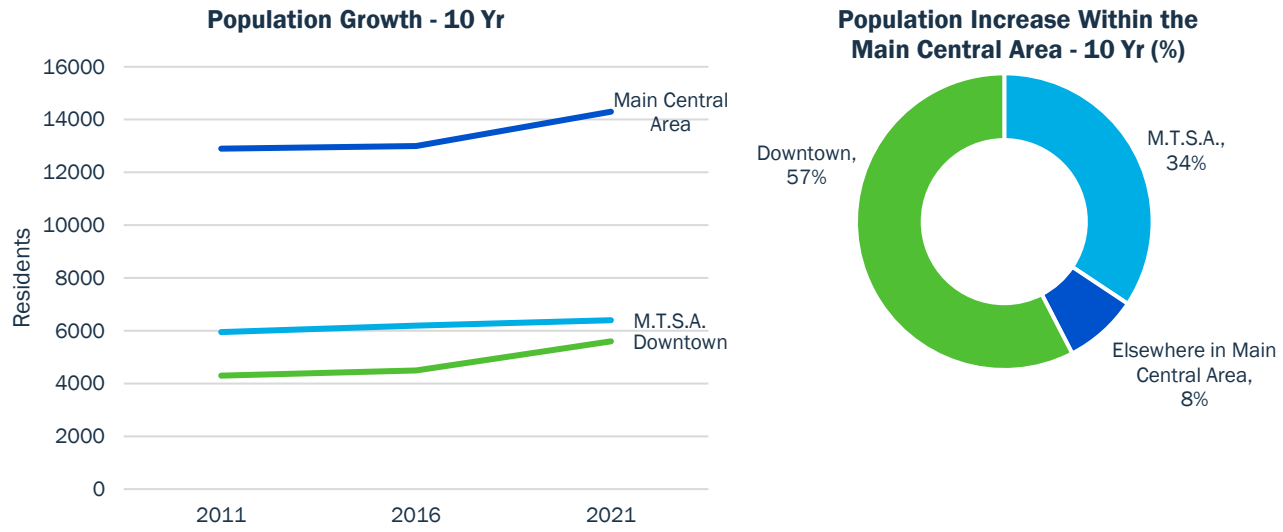
4.3 Market Profile

4.3.1 HISTORICAL POPULATION GROWTH

Figure 4-1 illustrates the residential population growth and distributions of growth in the Main Central Area over the last 10-year period.

Between 2011 and 2021, the Main Central Area's residential population grew by approximately 1,580 residents. The M.T.S.A. accounted for one-third (34%) of this growth, whereas the population of Downtown Oshawa Urban Growth Centre accounted for 57% of this growth. Over the last 5 years, Downtown has seen a sharper increase in population increase than the M.T.S.A. which remained fairly stable.

FIGURE 4-1: HISTORICAL POPULATION GROWTH (2011-2021)

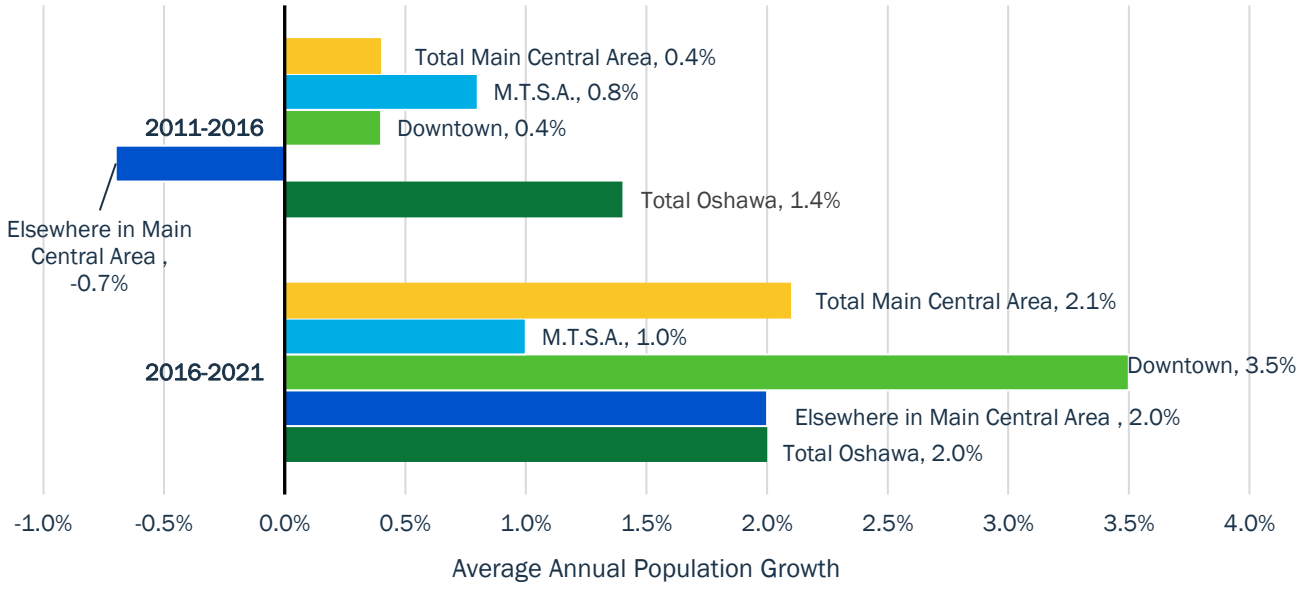


Source: Parcel, based on Census Dissemination Areas data (Statistics Canada) adjusted for net undercount. Portions of some Dissemination Areas which fall outside of each respective geography's delineated boundaries have been included in these estimates.

As shown in **Figure 4-2**, annual growth in the Main Central Area and all its sub-areas lagged broader averages for the City over the first half of the period. During the second half, however, the Main Central Area has more recently fallen closer in line with the City-wide average rate of growth.

Only the M.T.S.A. area within the Main Central Area continued to lag the City during the second half of the identified period, which is unsurprising given the substantial amount of stable, low density residential neighbourhoods that currently comprise this area.

FIGURE 4-2: AVERAGE ANNUAL POPULATION GROWTH



Source: Parcel, based on Statistics Canada Census data, adjusted for net undercount.

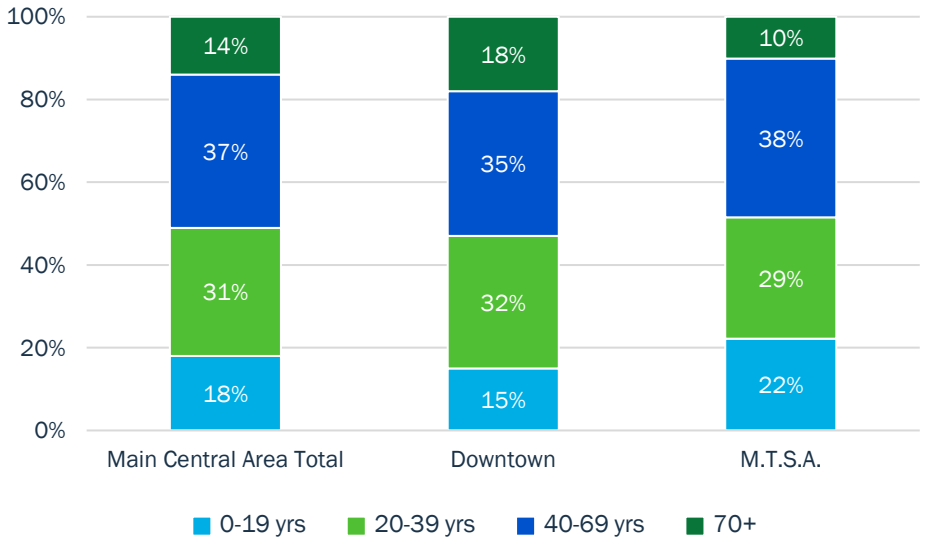
4.3.2 AGE COHORTS

Compared to the City as a whole, the Main Central Area is home to:

- A lesser proportion of kids and youths;
- More young adults in their 20s and 30s;
- A similar proportion of middle-aged residents (40s, 50s, and 60s); and,
- A slightly higher proportion of seniors over 70 years of age.

Error! Reference source not found. **Figure 4-3** compares Downtown Oshawa and the M.T.S.A.'s population by age cohort to the broader Main Central Area.

FIGURE 4-3: POPULATION BY AGE COHORT

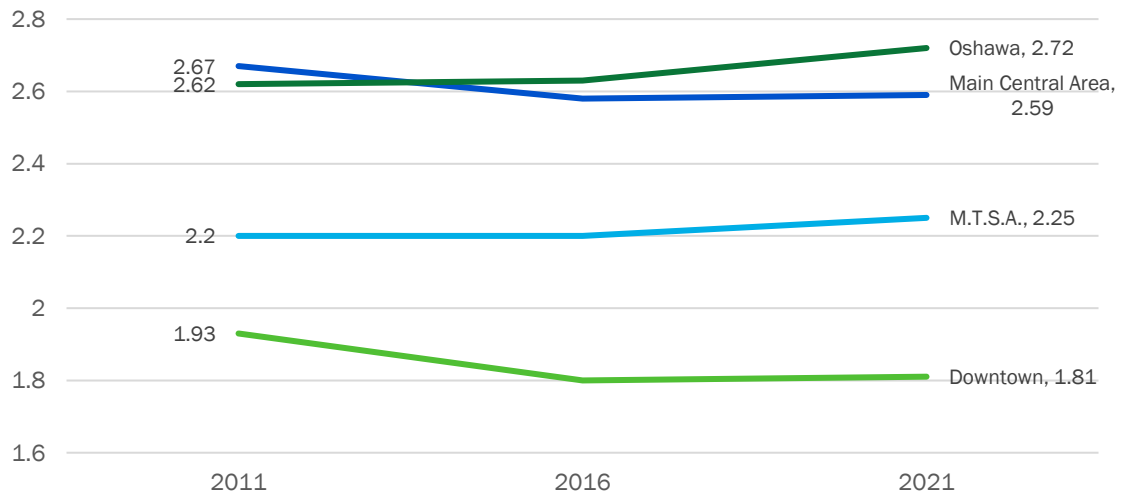


Source: Parcel, based on Statistics Canada Census data.

4.3.3 PERSONS PER UNIT

As illustrated in **Figure 4-4**, the broader Main Central Area has historically exhibited a similar measure of persons per unit (P.P.U.) to the City overall. However, Main Central Area P.P.U.'s have generally declined over the latest 10-year period, whereas the city-wide P.P.U.'s have been on an upward trend. P.P.U.'s in the Downtown are well below the City average and have declined since 2011 to some 1.81 P.P.U., which is consistent with other predominantly apartment-based neighbourhoods. Historically, the M.T.S.A. P.P.U.'s have landed somewhere between the City and the Downtown at 2.25 P.P.U., as of the 2021 Census. Communities with lower P.P.U.'s often also have lower household incomes as there are fewer residents per household earning an income.

FIGURE 4-4: PERSONS PER UNIT



Source: Parcel, based on Statistics Canada Census data.

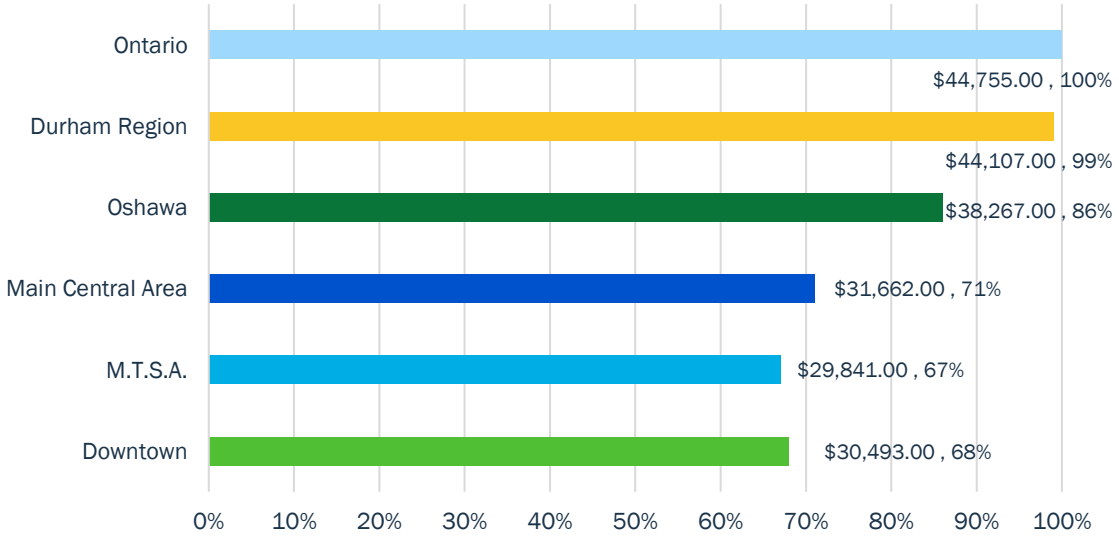
4.3.4 AVERAGE INCOME PER CAPITA

Unlike average household income, average income per capita calculates the average income per resident within an area and is relied upon to quantify market potential in many retail/service commercial market demand analyses. Based on recently published data from the 2021 Census, the average income per capita of the province was $44,755 in 2020.

Figure 4-5 compares the average income per capita of the Region, the City and the Main Central Area to the provincial average. While the Region is on par with the Province, Oshawa falls well below the provincial average. Furthermore, the Main Central Area at just 71% of the provincial average is well below the Province and the City. Within the Main Central Area, the M.T.S.A. falls even further behind at just 67% of the provincial average or $28,841 per capita.

The average income per capita of Main Central Area and M.T.S.A. residents will factor into the more detailed retail/service commercial analysis to be completed as part of subsequent phases of this study.

FIGURE 4-5: AVERAGE INCOME PER CAPITA (2020)



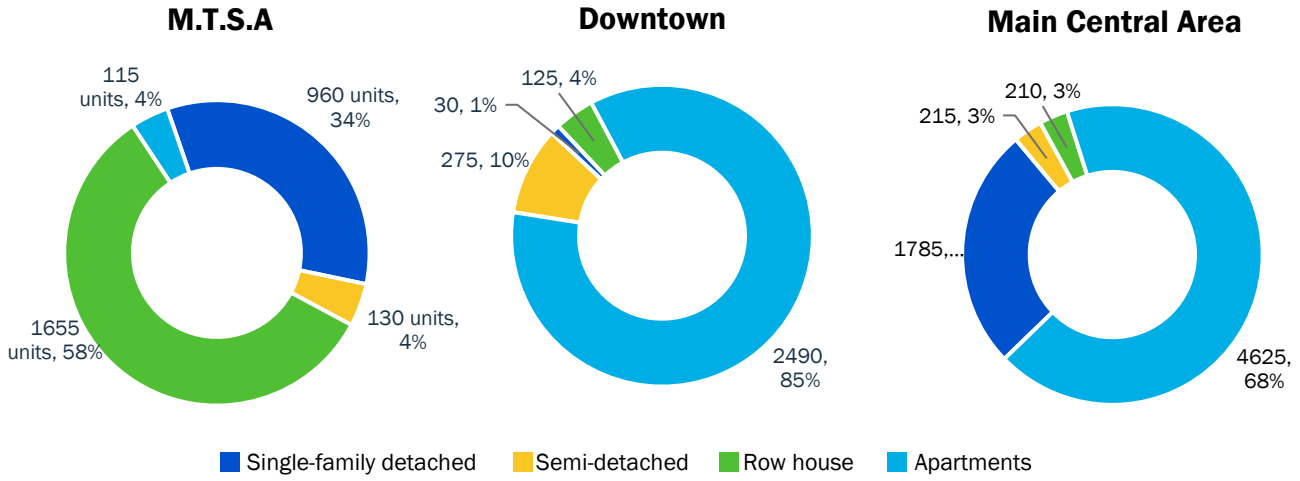
Source: Parcel, based on 2020 income data published in the Statistics Canada 2021 Census.

4.3.5 OTHER DEMOGRAPHICS

4.3.5.1 Census Dwellings

Mirroring the household income and P.P.U. information above, the Main Central Area is comprised of a relatively high proportion of apartment units, which account for approximately two thirds (68%) of the housing stock in the area (**Figure 4-6**). Unsurprisingly, the Downtown reinforces this average as mostly apartments, whereas the M.T.S.A. includes a more significant supply of lower density, ground-oriented housing in addition to apartments (i.e., approximately one third accounted for by single family homes, plus some semi-detached and rowhouses).

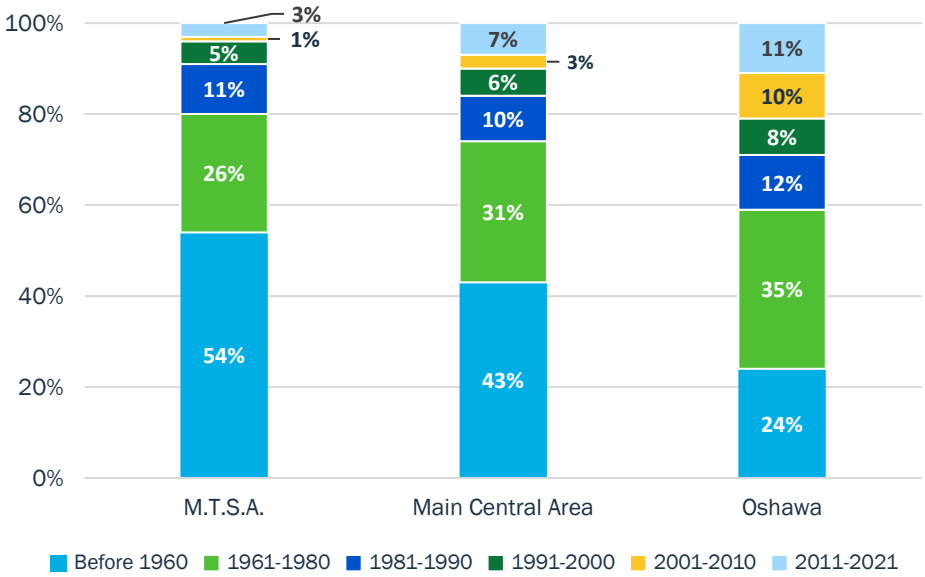
FIGURE 4-6: EXISTING DWELLINGS BY TYPE



Source: Parcel, based on Statistic Canada 2021 Census.

Figure 4-7 provides the year of construction of dwellings in the Main Central Area and M.T.S.A. As shown, nearly half of existing dwellings across the Main Central Area and more than half of the existing dwellings across the M.T.S.A. were constructed before 1960. By comparison, approximately half of the City's dwellings were constructed before 1960 while nearly one quarter were constructed in the 2000s.

FIGURE 4-7: PERIOD OF CONSTRUCTION OF DWELLINGS

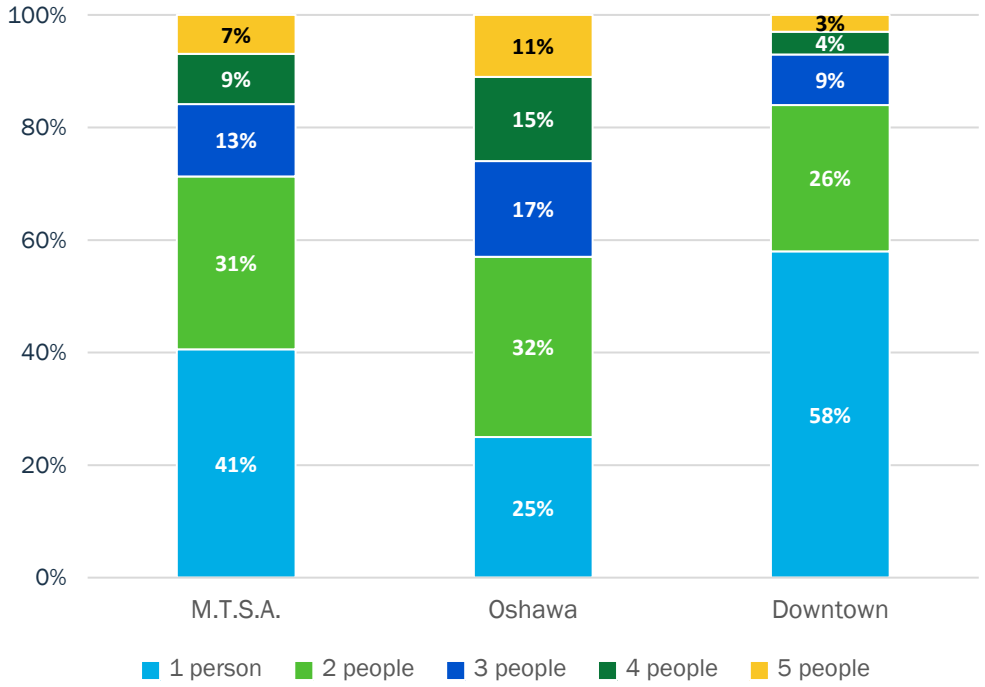


Source: Parcel, based on Statistics Canada 2021 Census data.

4.3.5.2 Census Households

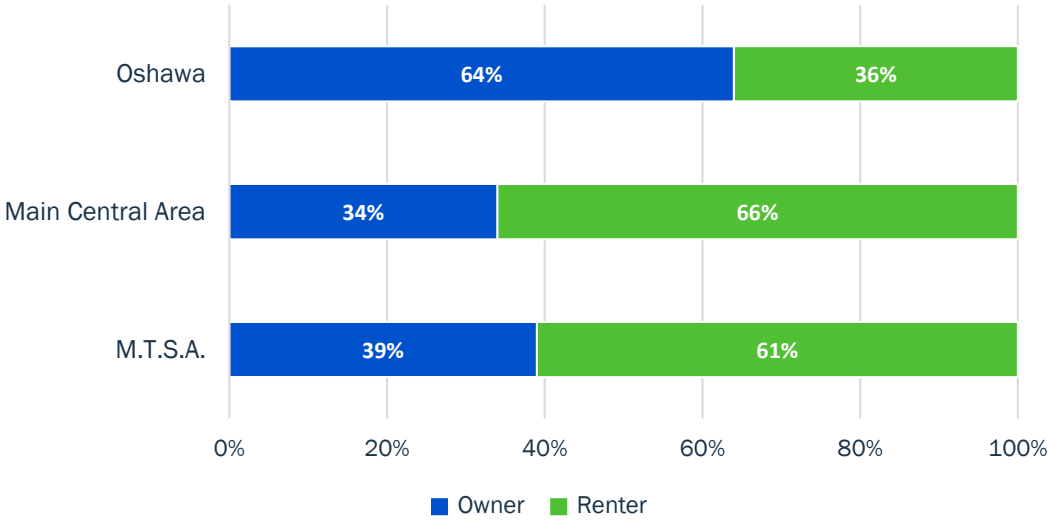
Figures 4-8 and **4-9** present household size distribution within the M.T.S.A., Oshawa, and the Downtown. Both the M.T.S.A. and the Downtown currently have a much higher proportion of one-person households than the City-wide distribution. Given that apartment and renter-occupied units make up a much larger proportion of the housing stock, especially in the Downtown, this is expected.

FIGURE 4-8: SIZE OF HOUSEHOLDS



Source: Parcel, based on Statistics Canada 2021 Census data.

FIGURE 4-9: HOUSEHOLD OWNERSHIP



Source: Parcel, based on Statistics Canada 2021 Census data.

4.3.6 DEVELOPMENT PIPELINE

At the time of this research, there were approximately 98 new residential units under construction and 2,800 new residential units under application in the M.T.S.A., based on development application data provided by the City. Furthermore, the City's economic development department website highlights an additional 821 apartment units in the Downtown development pipeline.

Map 4-3 below illustrates the location of the proposed and under construction development applications reviewed. In addition to the residential units in the M.T.S.A. development pipeline, just 488 square feet (45 square metres) of non-residential space in the form of ground floor retail/service space is contemplated, however, proposed decreases in non-residential space elsewhere in the M.T.S.A. is expected to result in an overall decrease in non-residential space. Based on the persons per unit (P.P.U.) assumptions in the City of Oshawa Development Charges Background Study (2019), these new units could accommodate some 5,265 new residents within the M.T.S.A.

We also note that pre-application consultations have identified the potential for some 5,985 additional units and 64,045 square feet (5,950 square metres) of non-residential space across the M.T.S.A., however, these development concepts can—and likely will—evolve from pre-application consultation to formal application to the City. These additional units could accommodate a further 10,525 new residents.

MAP 4-3: DEVELOPMENT PIPELINE

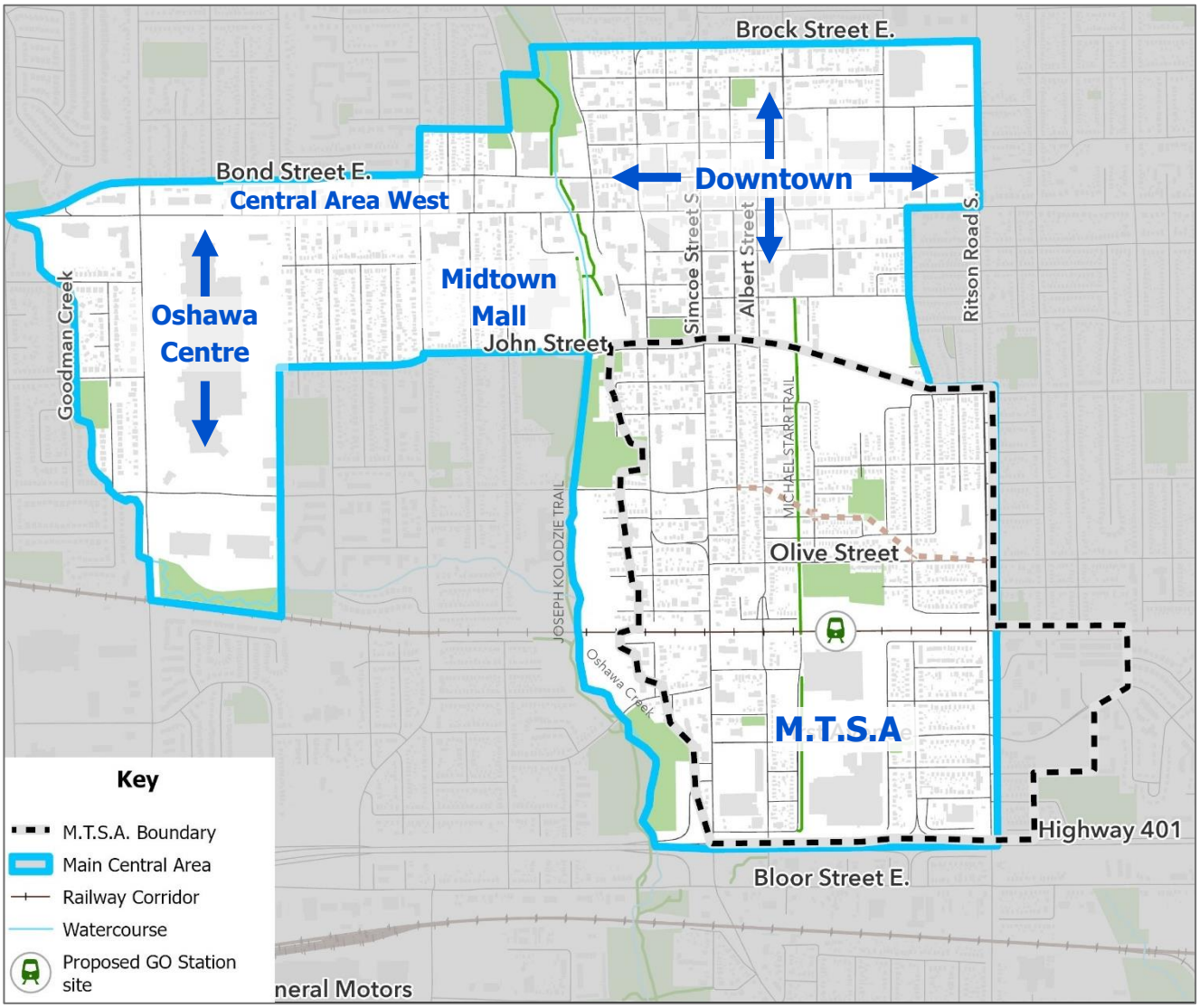
Source: Parcel, based on information provided by the City of Oshawa. For the purpose of this analysis, 135 Bruce Street has been included in its entirety, despite the site being bisected by the northern boundary of the M.T.S.A.

4.4 Retail and Service Commercial Uses

4.4.1 INVENTORY

The Main Central Area is made up of several retail/service nodes (**Map 4-4**) that are home to nearly 3.3 million square feet of retail/service commercial space, including some 156,000 square feet of space located along Ritson Road South (i.e., the Oshawa Gateway community shopping centre located just beyond the northern boundary of the Main Central Area, north of the Costco) just north of the Main Central Area.

MAP 4-4: RETAIL/SERVICE NODES WITHIN THE MAIN CENTRAL AREA

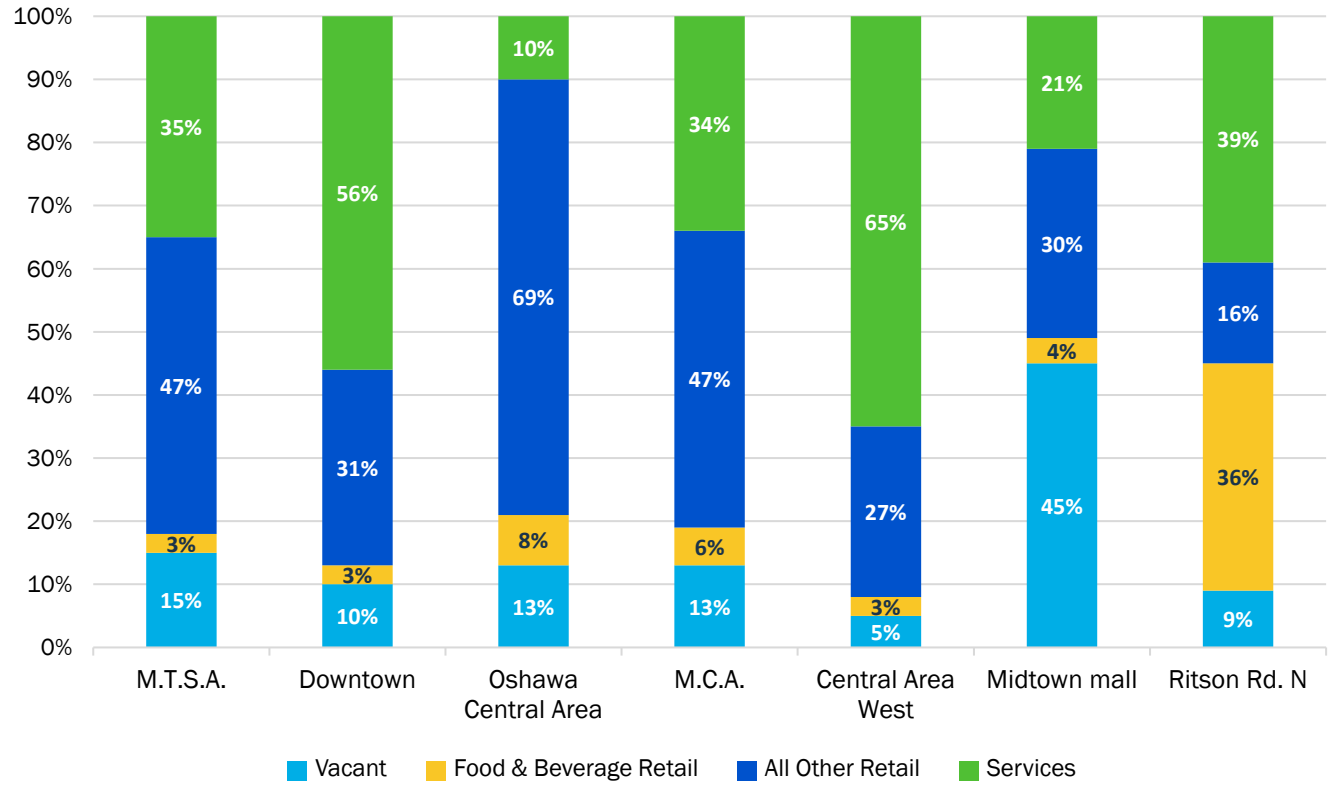


The M.T.S.A. includes approximately 258,000 square feet, or less than 8% of the retail/service space in the Main Central Area. The existing retail/service structure of the M.T.S.A. is very local-serving in nature, compared to the more community-serving Downtown or Regional-serving Oshawa Centre mall.

The composition of existing space by major retail/service "store" type (i.e., food and beverage, other retail, services, etc.) is further illustrated in **Figure 4-10** highlighting the different commercial functions of each of these nodes.

This figure also demonstrates that vacancy rates in many of the sub-areas that comprise the Main Central Area are currently higher than what is typically classified as "healthy" or balanced levels, typically falling in the range of approximately 4% to 6% for this type of space. Of note, the total vacancy rate across the entire Main Central Area — again including space along Ritson Road North—is more than double this benchmark at some 13%. As shown, this is driven primarily by relatively significant vacancies in the Downtown, Oshawa Centre, Midtown Mall, among other locations identified.

FIGURE 4-10: EXISTING RETAIL/SERVICE COMMERCIAL SPACE



4.4.2 MARKET CONDITIONS

The City of Oshawa is home to over one quarter of the Region's existing retail/service space; however, this represents just 3% of the retail/service space across the Greater Toronto Area.

4.4.2.1 Net Rents

Historically, average net rental rates of retail/service space in the City have been closely tied to the Regional average, albeit falling slightly below this benchmark. Since 2015, net rental rates in both the City and the Region have remained well below the G.T.A. average. As of the third quarter of 2022, the average retail/service net rental rate in the City was some 5% below the Regional average and some 38% below the G.T.A. average of approximately $28.00 per square foot.

4.4.2.2 Vacancy

The COVID-19 pandemic appears to have had a greater effect on the City of Oshawa retail/service vacancy rates than the Region and the G.T.A., increasing from below 2% to 3.6%. Over the same time period the Durham Region and G.T.A. averages decreased slightly to 1.9% and 1.7%, respectively.

Oshawa's rise in vacant retail/service space since 2020 is likely, in part, due to the inopportune timing of the completion of some 68,000 square feet of new space during the pandemic. CoStar, a leading commercial real estate information and analytics provider, estimates that this new space is approximately 20% vacant.

4.4.2.3 Absorption

Absorption activity across the Region is not insignificant each quarter with nearly 290,000 square feet being the largest positive quarter since 2015 and just over -141,000 square feet being the largest negative quarter. Over the same period, Oshawa has typically accounted for a relatively small portion of the net absorption in the Region, both positive and negative.

4.4.2.4 Under Construction Retail/Service Space

CoStar is currently tracking more than 2.2 million square feet of retail/service space under construction across the G.T.A. Approximately 267,000 square feet of this space is located in Durham Region (12%), of which 112,000 square feet is located in Oshawa, representing 42% of the under-construction space in Durham Region and 5% of the under-construction space across the G.T.A.

4.4.2.5 Proposed Retail/Service Space

CoStar is currently tracking more than 11.8 million square feet of proposed retail/service space across the G.T.A. Approximately 856,000 square feet of this space is in Durham Region (7%), of which 333,000 square feet is located in Oshawa, representing 39% of the proposed retail/service space in Durham Region and 3% of the proposed space across the G.T.A.

A snapshot of current and historical retail/service market conditions across the G.T.A., the Region and the City is included in **Appendix B**.

4.4.3 RETAIL INDUSTRY TRENDS

The retail sector is facing a range of significant changes, from continued growth in e-commerce and shortened delivery timelines, to shifts in merchandise/service offerings, as well as other ongoing responses to the COVID-19 pandemic. With all of these factors contributing to a relatively profound impact on the planning and delivery of new "bricks-and-mortar" retail spaces in new real estate developments, the following summary is intended to highlight selected trends that are anticipated to be relevant to future planning efforts relating to the M.T.S.A.

4.4.3.1 Blurring of Merchandise Categories

Including establishments able to capitalize on recent changes in shopping preferences resulting from the COVID-19 pandemic, a notable subset of chain retailers have effectively reinforced their position as convenient, "one-stop shops" for an increasingly full range of merchandise. At the same time, smaller, main-street and often independent retailers are also finding new ways to tackle affordability and expand their offerings to meet the demands of premium rental rates and other operating costs.

Some notable examples include:

- Traditional "big-box" general merchandise retailers such as Wal-Mart, Costco, Real Canadian Superstore and Canadian Tire—in addition to medium-sized tenants such as Dollarama and Giant Tiger—have all leveraged an opportunity to position themselves as a singular source for a full range of typical consumer-grade products.
- Similarly, retailers such as Shoppers Drug Mart—now affiliated with Loblaw Companies Ltd.—and establishments like London Drugs in Western Canada have now started to offer a more diverse collection of goods such as groceries, electronics, home furnishings/electronics, which deviate significantly from their traditional or original core offering of drugstore products (e.g., pharmacy, personal care, etc.).
- In an effort to provide a unique offering to local consumers, as well as make ends meet financially, many smaller and mid-sized urban commercial tenants have explored opportunities to broaden their product offerings, including "store-within-a-store" formats and other discernable merchandise mixing that deviate from typical norms (e.g., coffee shops or cafés by day/bars by night, etc.).
- Leveraging obvious co-location benefits and enhancing opportunities for "cross-shopping", some commercial districts—such as downtowns or business improvement areas—are starting to form partnerships with other nearby retailers or service providers (e.g., bars serving food or snacks from nearby food stores, restaurants proudly utilizing products from nearby food stores, breweries, wineries, etc.).

As a function of all of the above, retailers of all sizes and prominence (chains and independents) have created significant overlap between what were traditionally distinct store categories. While this has resulted in some retail nodes or establishments competing for the same customers (or commercial tenants), it has effectively resulted in a "right-sizing" of commercial activities in many areas that is able to more efficiently service a given customer base.

4.4.3.2 Deepening Market Segmentation

As communities across Southwestern Ontario continue to grow rapidly, the retail sector has become increasingly segmented, reinforcing the distinctions between predominantly urban and suburban built form contexts, often resulting in a distinct subset of retail "winners" and "losers". As a more general observation, the most successful commercial formats as of late have included:

- Major Regional and Super-Regional shopping centres (e.g., traditional enclosed shopping centres and/or large format, open-air plazas) which have been able to withstand the challenges posed throughout the retail sector in recent years and anchored by a wide selection of national and international retailers. These typically include higher-end, luxury shopping destinations focused on fashion and design, as well as some lower-performing community-scaled shopping centres that are now seeking to reposition their properties as new high-density mixed-use communities.
- Local-serving, grocery anchored corridors and districts able to find success in meeting the day-to-day needs of residents and employees (e.g., local-serving, community-based retail clusters typically located in either established, stable residential neighbourhoods and/or master planned new communities or secondary plan areas contemplating significant intensification and redevelopment).
- Traditional street-facing, fine-grained commercial strips or "main streets" that often have less clearly defined commercial and community functions. These areas typically include vibrant, animated, and trendy shopping and/or entertainment districts or more fledgling new commercial nodes competing to establish a unique identity and—in effect—a unique customer base. They are not focused exclusively on retail, but rather a broader experience capable of attracting visitation from a much larger geographic area.

4.4.3.3 Growth in E-Commerce

Among the most profound shifts in shopping patterns over the last decade has been the growth of e-commerce (online shopping) activities, which has caused a fundamental change in the way that retail/service commercial providers do business. The convenience of shopping from home, the ability to easily comparison shop for products/prices and in many cases to be offered same-day delivery has obvious appeal to consumers.

That said, it is important to recognize the following key factors at the outset of this discussion:

- Although there is a general view and characterization in the media that this form of convenience shopping has come directly at the expense of traditional brick and mortar retailers (i.e., as households redirect an increasing proportion of their overall retail spending to these channels), the effects are: (a) largely overstated; and (b) have not been felt equally across all store categories.
- For better or worse, the true impacts of online shopping are not currently well understood, based on a general lack of available (and reliable) data to properly evaluate the magnitude of these types of shopping activities. There is a significant "grey" area when it comes to capturing expenditures at omni-channel retailers with both physical and online presences (e.g., how these sales are reported to Statistics Canada, inconsistent treatment of online orders picked up in-store/delivered directly to a residence via a nearby store, etc.).
- It remains to be seen whether the impact of COVID-19 will ultimately represent a more permanent shift in shopping patterns or—at least in part—simply borne out of necessity vs. actual consumer preferences. In-person shopping, dining and other service-provisions continues to be both a necessary occurrence, as well as a desirable leisure-based activity for many.

The Magnitude of Growth is calculated by the total percentage of sales being redirected to e-commerce has been steadily increasing. That said, excluding "online-only" retail formats such as Amazon, the overall share is not as pronounced as many think, albeit also likely skewed by the underlying quality of this dataset and uncertainty in how these sales are being reported.

There is obvious variation in the level of e-commerce penetration across traditional market segments that involve material consumer products that are not necessarily customizable, do not benefit from substitution/testing, and are relatively easy to ship (e.g., electronics, sporting goods, and to a certain extent clothing). Many retailers in these categories have shifted to more of a centralized "showroom" format in major shopping districts where consumers can browse for products but ultimately purchasing online. This limits the extent to which many traditional retailers will now locate in secondary or tertiary locations — even in major urban centres — instead limiting their physical store presence to a few selected locations.

4.4.3.4 Chains vs. Independents

"Main street" commercial environments and other neighbourhood-based commercial nodes are evolving in the face of new challenges of affordability and development pressures for predominantly residential mixed-use developments. This has led to a mixing of traditional "mom and pop" type commercial establishments that have historically lined these streets with the introduction of new chain retailers and basic neighbourhood anchors that are often required to keep pace with growing populations in key intensification areas (e.g., chain supermarkets, drugstores, financial institutions, etc.). These national and multi-national retailers also tend to be the most stable, thereby appearing favourable to lenders and improving the financial feasibility of new developments.

This dynamic necessitates an appropriate balancing of both independent and chain retailers to foster a complete commercial environment capable of supporting all levels of the commercial hierarchy. It is important to include elements of both, without the "pendulum" swinging too far in either direction on the spectrum.

4.4.3.5 Experiential & Non-Traditional Retail

Although issues of affordability, online shopping growth, and other changes in the retail sector will undoubtedly continue to challenge the feasibility of developing new retail/service commercial uses in the future, it is likely that these factors will not entirely replace in-person shopping experiences for all store types. Large segments of the population still view shopping as an enjoyable, social event and the composition of a given commercial area can contribute to the unique identity of a neighbourhood. Similarly, retail uses serve an important community hub function, providing a place for gathering and shared experience.

Experiential Retail: As e-commerce continues to account for an increasingly significant proportion of overall consumer expenditures, the total share is likely to "max out" or taper off. Consequently, it remains to be seen what composition of retailers will continue to:

- Operate as usual ("status quo");
- Seek a significant reduction in their physical store footprints and/or presence in certain markets; and/or,
- Establish an appropriate balance of selected retail locations that serve as a place for physical browsing, entertainment and gathering (i.e., "experiential retailing"). Similarly, many are likely to establish flagship "showroom" type functions of varying sizes and neighbourhood contexts augmented by a robust online presence.

Cultural, Entertainment & Recreation Facilities: Matching the ongoing shift above to more of an experiential, services-based direction for retail/service commercial spaces, it is also increasingly common for growing neighbourhoods to accommodate a range of non-traditional retail formats and unique commercial offerings that can help to differentiate them from the crowd and ultimately deviate from typical development patterns. This includes seasonal markets, pop-up shops and other temporary/semi-permanent retail spaces, as well as the integration of a whole new subset of ground floor programming focused more on community, institutional and/or cultural spaces (e.g., daycares, social organizations, etc.).

4.4.3.6 Influence of COVID-19

The longer-term effects of the COVID-19 pandemic cannot be fully known at this time. Generally speaking, it is likely that while the pandemic has undoubtedly resulted in material changes in the retail sector and accelerated its evolution, it is nonetheless important to recognize that most of these changes continue to be a function of pre-existing conditions.

With this in mind, many of the foregoing trends have been developing for some time and the pandemic simply catalyzed these changes, albeit seemingly "overnight".

4.5 Office Commercial Uses

4.5.1 MARKET CONDITIONS

The City of Oshawa is home to nearly half of the Region's existing office space, however, this represents just 1% of the office space across the G.T.A. It does not—in and of itself—represent a major concentration of major office activity in the context of the broader Regional market.

4.5.1.1 Net Rents

Historically, average net rental rates of office space in the City have been closely tied to the Regional average, albeit slightly below. Since 2015, net rental rates in both the City and the Region have fallen well below the G.T.A. average. As of the third quarter of 2022, the average office net rental rate in the City was some 12% below the Regional average and some 35% below the G.T.A. average of approximately $20.00 per square foot.

4.5.1.2 Vacancy

Unlike the G.T.A.-wide average, the COVID-19 pandemic appears to have had a lesser effect on Durham Region and City of Oshawa office vacancy rates, with both remaining relative flat at below 2% vacancy during the early days of the pandemic, and the Durham Region only recently surpassing 2% vacancy while the City remained well below. Over the same period, the G.T.A. average vacancy has doubled to 8%.

There are a few reasons why office vacancy has remained stable and low:

- The 10 largest tenants of office space in the City account for more than 66% of the tenant space, tracked by CoStar.
- These tenants are made up of government agencies and long-established companies, and include Durham Region Courthouse, Ontario Ministry of Finance, General Motors, the City of Oshawa, Durham Children's Aid Society, Minacs, Canada Revenue Agency, Durham Regional Police, Bell, and the Canadian Mental Health Association.
- These tenants are extremely stable and long-term focused, and although the pandemic surely changed the way they use their space in the short-term, they are less likely to shut down or relinquish space.

4.5.1.3 Absorption

Absorption activity across the Region is relatively limited each quarter with just over 80,000 square feet being the largest positive quarter since 2015 and just over -60,000 square feet being the largest negative quarter. Over the same period, Oshawa has typically accounted for a large portion of the net absorption in the Region, both positive and negative. This is to be expected given that nearly half of the Region's office space is located in the City.

A snapshot of current and historical office market conditions across the G.T.A., the Region and the City is included in Appendix B.

4.5.2 POTENTIAL NEW SUPPLY

4.5.2.1 Under Construction Office Space

CoStar is currently tracking nearly 14.5 million square feet of office space under construction across the G.T.A. None of this space is in Durham Region or the City of Oshawa.

4.5.2.2 Proposed Office Space

CoStar is currently tracking more than 44.6 million square feet of proposed office space across the G.T.A. Some 358,000 square feet of this space is located in Durham Region (less than 1%), of which only 50,000 square feet is located in Oshawa.

4.6 Hotel Uses

4.6.1 MARKET CONDITIONS

CoStar is currently tracking 9 hotels with 713 rooms across the City of Oshawa. **Map 4-6** shows the location of these hotels and number of rooms. These rooms represent 35% of the Region's approximately 1,300 hotel room supply, or just 1% of the hotel rooms across the G.T.A. Three of the existing hotels are in the Main Central Area, including one motel within the M.T.S.A.[4]. All the existing hotels can be found in proximity to Highway 401.

MAP 4-5: EXISTING HOTELS AND HOTEL ROOMS

Source: Parcel, based on CoStar Realty Data Inc.

The hotel sector uses industry-specific metrics to track performance; occupancy, average daily rate (A.D.R.) and revenue per available room (RevPAR). Given that reliable data can be hard to come by below the Regional level, the following focuses on market conditions across Durham Region, benchmarked to the G.T.A.

4.6.1.1 Occupancy

Perhaps the strongest indicator of demand for hotel rooms, occupancy, is simply the number of rooms rented (i.e., the demand) compared to the total number of rooms available (i.e., the supply). Before the Covid-19 pandemic, hotel occupancy had been steadily on the rise across the G.T.A. and the Region. Over this period, the Region also closed the gap to the G.T.A. average, pulling nearly in line with the G.T.A. right before the start of the pandemic.

Historically, hotels in the Region have achieved occupancy levels slightly below the G.T.A. average, however, during the Covid-19 pandemic the dip in occupancy experienced in the Region was less pronounced than that of the G.T.A. Since fall 2020, hotel in Durham Region have achieved higher average occupancy than the G.T.A., however, the gap is narrowing as the G.T.A. average occupancy continues to rise.

4.6.1.2 Average Daily Rate (A.D.R.)

Average Daily Rate (A.D.R.) is another measure of consumer demand. It measures the average rate paid for sold rooms and is calculated by dividing total room revenue by the total number of rooms sold. Similar to occupancy, the G.T.A.'s

[4] It is recognized that this motel is in poor state of repair and is currently for sale.

A.D.R. rose steadily leading up to the pandemic, while the rise in Durham Region's hotel occupancy was a little more modest.

Durham Region—like other suburban Regions surrounding the City of Toronto—has historically achieved an average A.D.R. below the G.T.A. average and the gap was widening leading up to the start of the pandemic. Because Durham Region's A.D.R. was already on the low end with the biggest discount to the G.T.A. average, the dip caused by the pandemic was once again less pronounced than the G.T.A. overall as room rates could only go so low.

As of fall 2022, both the G.T.A. and Durham Region have surpassed pre-pandemic A.D.R.s, with the Durham Region average representing a discount of approximately 71%.

4.6.1.3 Revenue per Available Room (RevPAR)

Revenue per available room (RevPAR) is a measure of hotel performance which combines the previous two metrics; occupancy and A.D.R. RevPAR is calculated by dividing the total number of available rooms into the total room revenue, this metric can also be calculated by multiplying the A.D.R. and occupancy.

Historically, the Durham Region average RevPAR has been well below the G.T.A., hovering around 60% of the G.T.A.'s average for many years. This was due to a lower A.D.R. and lower occupancy. However, during the pandemic Durham Region's RevPAR suddenly surpassed the G.T.A. due to a much smaller decline in A.D.R. and higher occupancy during the pandemic. Now, well on the road to recovery, the Region's RevPAR is approximately 80% of the G.T.A.s with a potential for further decline in the future.

Downtown Toronto vs. Suburban G.T.A.

Within the G.T.A., Toronto is the clear driver of the hotel market metrics, including average occupancy, A.D.R. and RevPAR. All other suburban G.T.A. Regional municipalities—Halton, Peel, York, and Durham—achieve lower performance levels than Toronto and the G.T.A.-wide average. For example, **Table 4-1** details the 12-month A.D.R. across the G.T.A. as of September 2022. As shown, even among the tighter range of the suburban municipalities, Durham Region is the lowest.

TABLE 4-1: A.D.R. ACROSS THE G.T.A.

Region	12-Mth A.D.R.	% of G.T.A. Average
G.T.A. Average	$186	N/A
Toronto	$ 224	120%
York	$ 147	79%
Peel	$ 144	78%
Halton	$ 137	74%
Durham	$ 132	71%

4.7 Summary of Existing Commercial Analysis Findings

Based on current and anticipated future market conditions for retail/service, office and hotel uses, it will be important to establish an appropriate balance in planning for future commercial/non-residential spaces within the M.T.S.A. Through future phases of the Integrated M.T.S.A. Study, this could not only inform the establishment of reasonable population and jobs ratios, but also ensure that an appropriate supply of new commercial space is established to keep pace with future growth and increased demand without compromising the health of existing commercial nodes throughout the broader Oshawa community.

To that end, the following highlights several preliminary market observations and findings that should be taken into consideration as the study progresses:

- Heightened retail/service vacancies in both the Downtown and Oshawa Centre suggest that there is a need to be mindful of the health of existing commercial area(s) as the community continues to grow.

- Further to above, there will be a need—and distinct opportunity—to balance the following key municipal objectives:
  - Leveraging future growth to reinforce the ultimate quality and vibrancy of Downtown commercial activities; and,
  - Seeking to establish appropriate service levels in the M.T.S.A. as it continues to grow (i.e., including more local-serving commercial uses).
- Recent trends in the retail industry reinforce the following commercial space planning dynamics:
  - A reduced need or pressure for a significant expansion of commercial activity to achieve reasonable service levels for populations in new predominantly residential developments; and,
  - New opportunities to establish mutually supportive relationships among/between local commercial establishments at existing and proposed retail nodes nearby rather than introduce unnecessary sources of competition/market saturation.
  - Less need to recreate or duplicate Regional-serving, destination-focused commercial functions that already exist at key shopping nodes throughout the community (e.g., malls, large format centres, the Downtown, etc.).
- Based on research collected to date, focusing on "right-sizing" the future commercial component in the M.T.S.A. as a supportive and complementary use rather than a key driver of change is recommended. This will be informed by the results of the market demand assessment to follow as part of subsequent phases of the study.
- Expectations will need to be tempered for any meaningful amount of higher order employment activity, thereby requiring the City and consulting team to establish realistic (i.e., "achievable") residential/non-residential space ratios.
- To achieve reasonable service levels within the future M.T.S.A. community, neighbourhood-scale and fine-grained retail in new developments could be accommodated through more flexible land use policy.

5. Conclusion/Next Steps

This report was prepared to summarize the existing conditions assessment which was completed by the study team as part of the first phase of the Integrated M.T.S.A Study. The existing transportation system assessment observed a network which included a well-established existing road network. This road network generally operated at acceptable levels of service and could be leveraged as a solid base for future growth. The assessment identified existing transit and active transportation networks, both of which have plans for expansion in the future. However, the transportation network was dominated by the personal automobile. Most importantly, this transportation system assessment observed that the C.P. Rail corridor was a significant infrastructure barrier and divided the north and south portions of the study are. Providing connections across this barrier and creating opportunities for cohesion between the north and south portions of the study area will be a priority of this study.

As shown in the existing land use and sustainable development assessment the study area can be a gateway of sorts for Oshawa and improving the overall quality of life for City of Oshawa residents. To do so, this study must ensure that through redevelopment the deficiency of services is addressed through along with targeted population growth. To be most successful, the area should have impacts on a wider context than the immediate area. The commercial analysis found as growth occurs in this area through redevelopment it will be important to establish an appropriate balance in the planning for future commercial/non-residential spaces with the M.T.S.A. The study area has a target population and jobs ratio and must ensure that the appropriate supply of new commercial space is established to keep up with future growth and increased demand without compromising the health of existing commercial nodes throughout the broader Oshawa community.

To conclude Stage 1 of this study, the finding of the existing conditions assessment will be presented at Public Information Centre #1 in early 2023 for review and comment by stakeholders and members of the public.

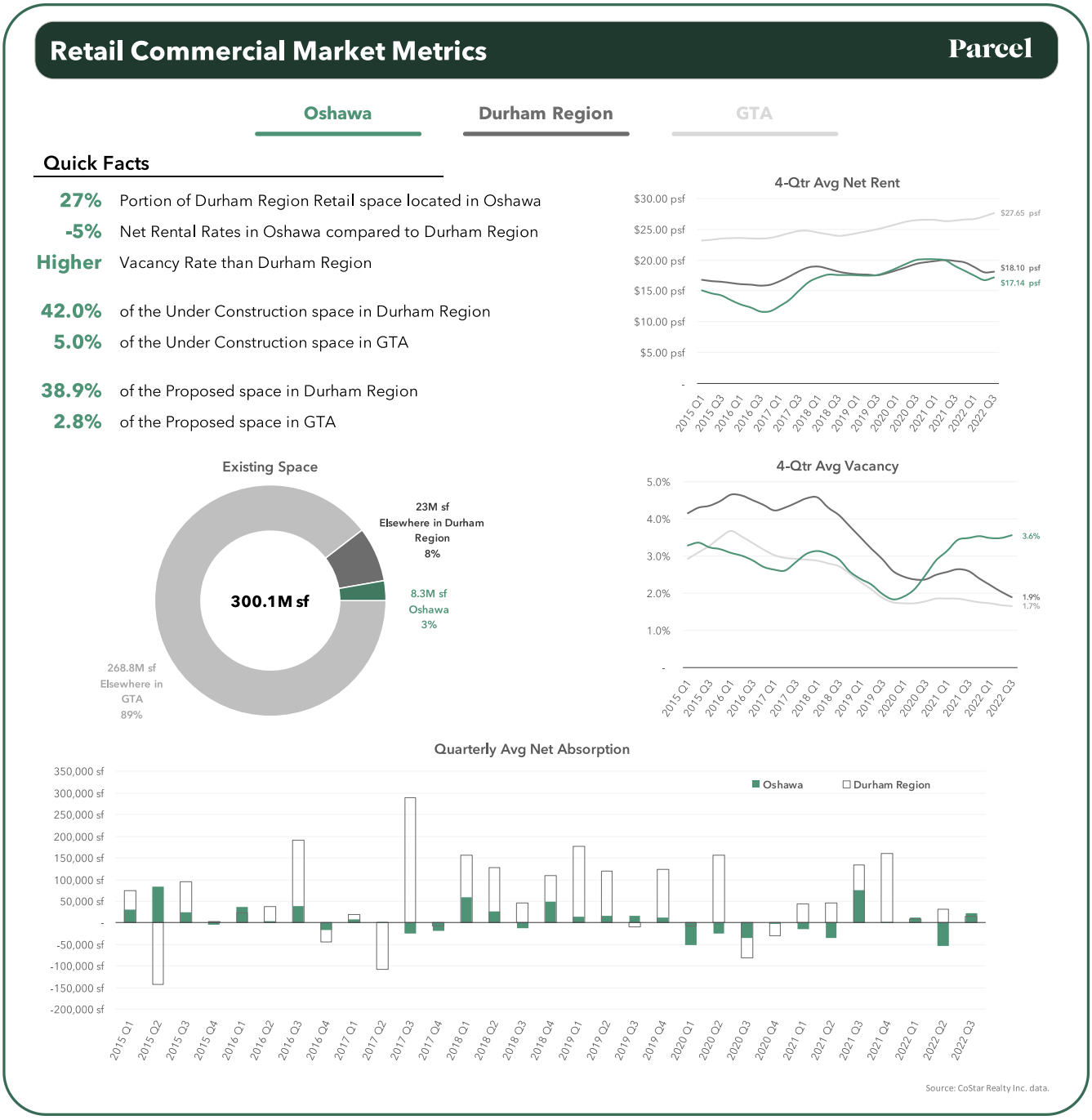
APPENDIX A:

A.M. and P.M. Synchro Report

APPENDIX B:

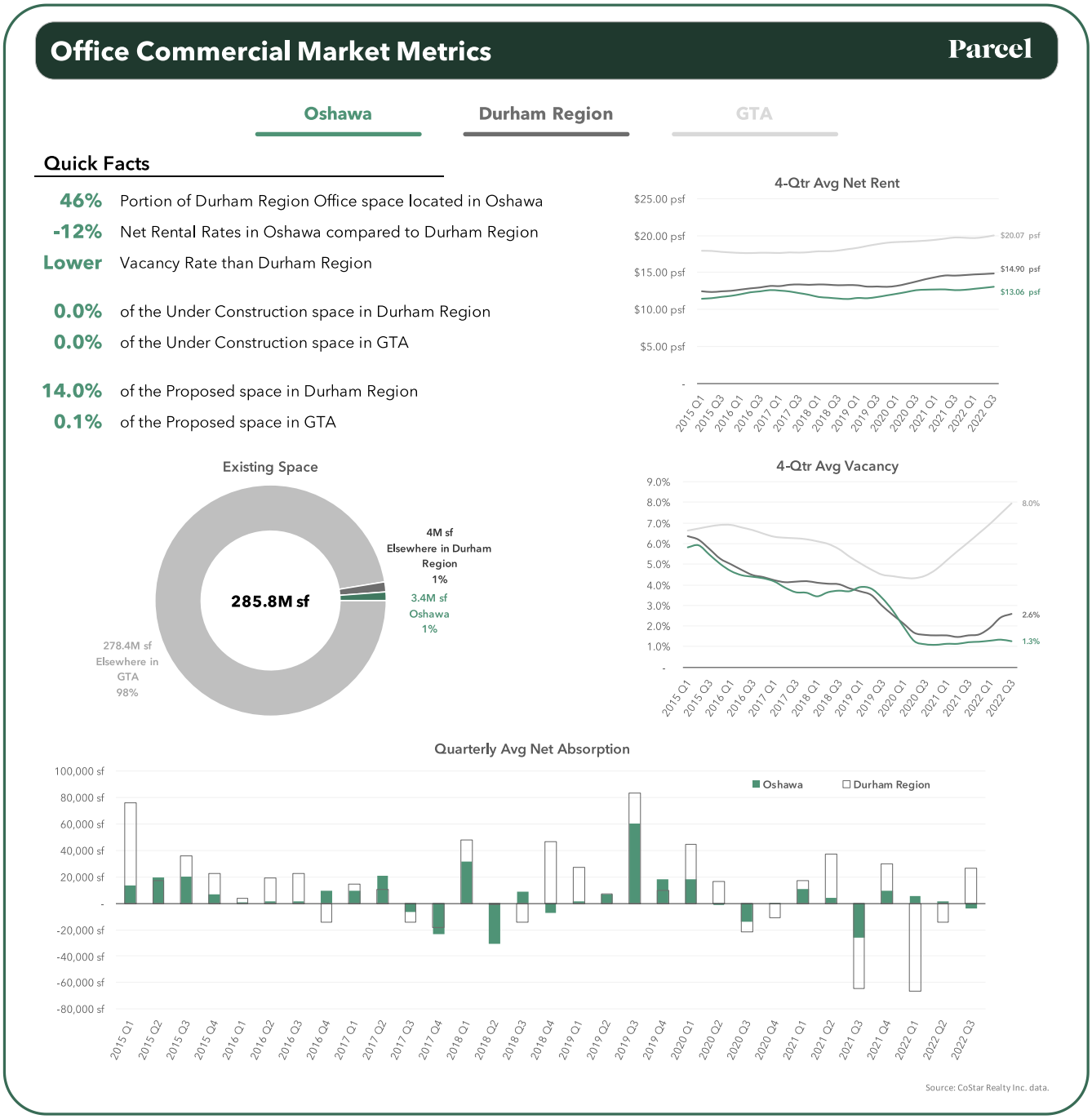
Commercial Market Snapshot

APPENDIX FIGURE 1: RETAIL MARKET SNAPSHOT



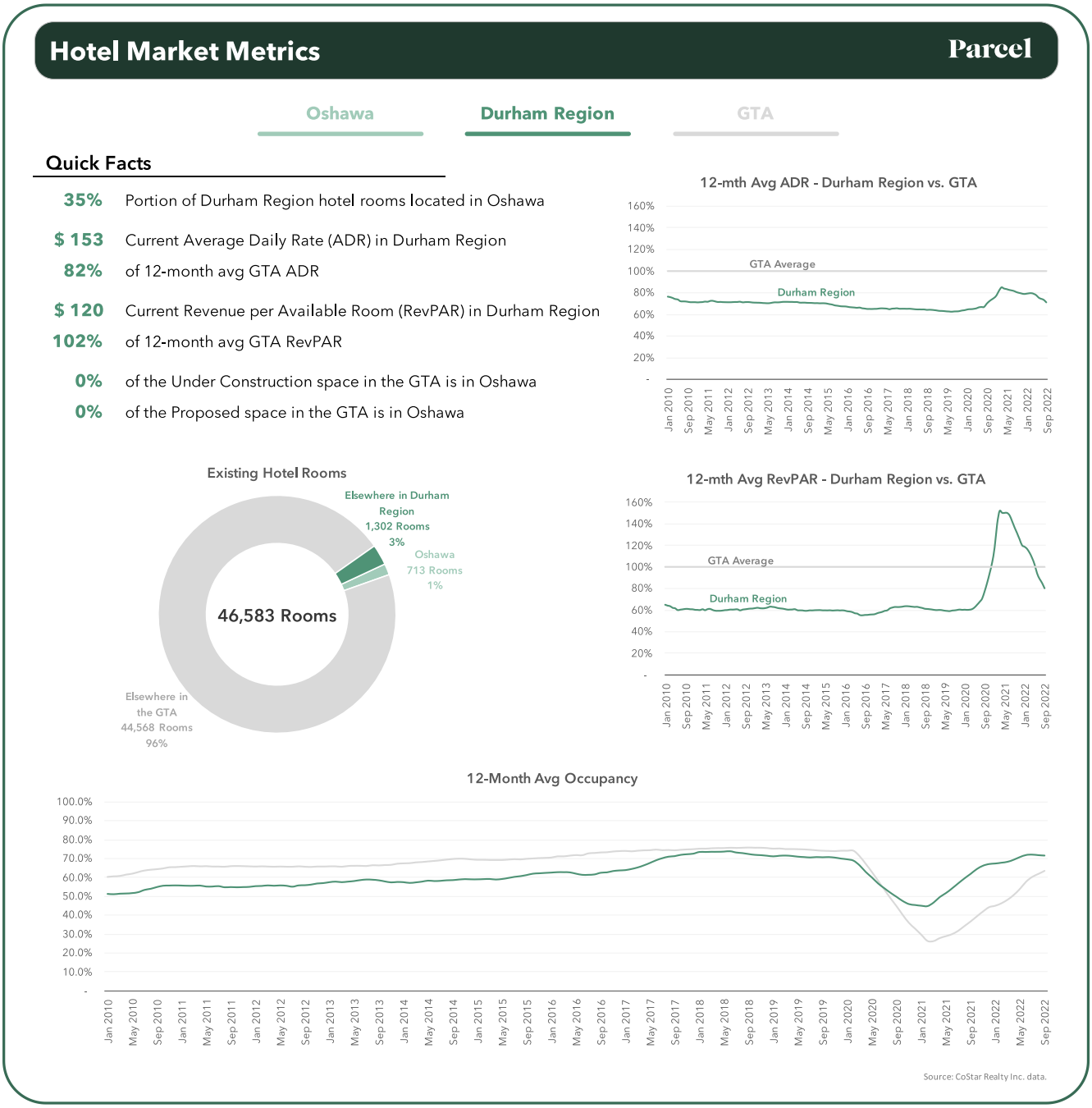
Source: Parcel, based on CoStar Realty Inc. data.

APPENDIX FIGURE 2: OFFICE MARKET SNAPSHOT



Source: Parcel, based on CoStar Realty Inc. data.

APPENDIX FIGURE 3: HOTEL MARKEY SNAPSHOT



Source: Parcel, based on CoStar Realty Inc. data.