



Guelph Transit **Future Ready Action Plan**



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Executive summary

Introduction

In 2019, the Guelph Transit Business Service Review was conducted to identify what transit does well and what needs to change. The review recommended that a holistic route review be conducted, which resulted in the Guelph Transit Future Ready Action Plan.

The Guelph Transit Future Ready Action Plan outlines the future transit network that resulted from a comprehensive route review of the existing transit system and from community engagement. It aims to understand the needs of current and future residents to create a transit system that better serves even more residents and continues to grow with Guelph.

The main objective of the Future Ready Action Plan is to create a competitive, convenient, and reliable transit network that meets the needs of today's and tomorrow's customers. The improvements needed to achieve this objective have been outlined through this plan and incorporate best practices in service design and infrastructure that have been tailored to the unique context of Guelph and its residents.

Plan process and timeline

This plan was built on a detailed analysis of the existing service, comparison to similarly sized communities, and public feedback on the existing and initially proposed systems. The following details the streams of information used in creating this plan:

- **Existing network analysis:** Existing network conditions were analyzed using ridership and on-time performance data, and existing policy and industry guidelines were used to assess the network.
- **Peer review:** Guelph's transit system was compared to case studies of transit systems in similarly sized cities that have completed a network redesign to find options that would be transferable.
- **Community priorities:** Feedback was sought in two phases from community leaders, staff, current transit users, and potential future transit users through a range of online techniques. These techniques included focus groups, surveys, town halls, and question and answer forums. The analysis of community priorities included reviewing existing City plans to ensure the recommendations of this plan align with meeting long-term goals and visions.

Key reasons for improvement

Existing network (2021)

Guelph Transit currently provides a high-level of coverage across the City but does not provide quick service in most instances. Many local routes consist of large one-way loops; require transfers downtown, even when this requires a great deal of out-of-direction travel; and express routes are almost non-existent. In short, a

passenger can get almost anywhere in Guelph, but their trip is likely to be significantly longer than someone driving a car to the same location, which is not conducive to attracting new ridership.

Guelph has the advantage of a relatively grid-like street network, which is beneficial to introducing a grid-like transit network with more cross-town routes and routes that completely bypass a hub when appropriate.

Guelph plans and strategies

Additionally, Guelph plans and strategies identify transit as integral to moving throughout the City. The goals of many of these plans aim to increase the transit modal share and get people out of cars, but the existing (2021) network struggles to attract new riders.

Making use of the grid-like system will reduce transfers and make trips more convenient and direct, which will also attract new riders and help to achieve these goals.

Specifically, in terms of the City's Strategic Plan, investing in a better transit system helps to achieve goals under the following pillars:

- **Navigating our future** – the Future Ready Action Plan network will surpass modal share goals and increase safety by reducing traffic related fatalities.
- **Building our future** – an attractive transit network encourages active transportation and reduces sedentary lifestyles.
- **Sustaining our future** – public transit produces 50-95% less greenhouse gases per passenger mile than private vehicles.
- **Powering our future** – increased transit ridership aids in reducing traffic congestion associated with lost productivity and creates local jobs in the transit industry and other sectors.
- **Working together for our future** – the future network will not only maintain, but enhance, core services essential to mobility.

Network proposal and service guidelines

The Guelph Transit Future Ready Action Plan will redesign the current transit network to provide increased frequencies on some routes and new on-demand Sunday service, implemented primarily over the first 7 years of the 10-year plan. This plan will also explore the viability of introducing interregional routes, such as Guelph Central Station to Pinebush Station in Cambridge, Guelph Central Station to Fairview Park Mall in Kitchener, and Guelph Central Station to Aberfoyle. Partnerships with other transit agencies will be explored, and community engagement to confirm funding, destinations, and implementation order prior to presenting these options to Council for approval.

Central to a successfully revised network are the Transit Service Standards for consistency in future decision-making and route monitoring. These guidelines are:

- **Service design standards** – includes specifics of route categorization, service coverage, minimum frequencies, span of service, stop spacing and placement, and bus stop amenity prioritization
- **Service level targets** – defines when service should have increased or decreased frequency, increased or decreased service hours, and modified schedules based on passenger loads and on-time performance.
- **Service expansion targets** – defines when service should be implemented in new areas.
- **Service review targets** – ensures appropriate data are reviewed at regular intervals.

Financial summary

The Future Ready Action Plan has estimated operating expenses at implementation of \$17.21 million and projected revenues of \$4.12 million, which has a net cost of \$13.08 million. The estimated annual net operating cost for 2022 and 2023 of the Future Ready Action Plan is \$1.77 million and \$1.26 million, respectively, which represents a 0.67 percent property tax levy increase for 2022 and 0.45 percent for 2023.

In addition, tax funding is required to support the goal of 100RE by converting all buses to electric over the next 15+ years and the portions of the plan which are considered City Building. This funding was approved by Council as part of the Strategic Investment that was presented at the 2022 City Budget Council meeting. \$850,000 is required to fund 100RE annually, which represents 0.32 percent property tax levy increase, and \$716,100 is required annually for 10 years to fund City Building, which represents a 0.27 percent property tax levy increase for 2022.

The total property tax levy impact needed to fund the Future Ready Action Plan as well as fund the capital requirements of the total 10-year capital investment is a 1.26 percent increase for 2022 and 0.45 percent for 2023.

The operating expenses include fuel, maintenance, and 122 full time equivalent staff, including operators, supervisors, administration support, and fleet staff. The projected revenues include the impacts from the Future Ready Action Plan, interregional transit, and the Conestoga College U-pass.

Table 1. Net cost of the Future Ready Action Plan.

Year	Net cost
2022	\$1.76 M
2023	\$1.26 M
2024	\$1.90 M
2025	\$2.12 M
2026	\$2.24 M
2027	\$3.36 M
2028	\$0.80 M
2029	(\$0.27) M
2030	(\$0.23) M

Year	Net cost
2031	\$0.42 M
2032	(\$0.10) M
2033	(\$0.08) M
2034	(\$0.10) M
Total	\$13.08 M

Guelph Transit's current Revenue to Cost (R/C) ratio is on par with comparator transit agencies at 40%, excluding temporary impacts due to COVID-19. The overall transit R/C ratio is expected to be 38% in year 1 (2022) of the Future Ready Action Plan. R/C ratio is only one measure of transit performance and may be impacted by the upcoming Fare Strategy. It is important to understand that a fluctuating or lower R/C ratio can still be representative of positive performance or change, such as service expansion or capital investment, since services rarely recover new revenues at the same rate as expenses. The approved R/C ratio target is currently set to 40-45%. For this reason, the R/C ratio will be paused until a more comprehensive service metric system can be proposed to Council via the Fare Strategy, as recommended in the [Guelph Transit Business Service Review](#).

The Future Ready Action Plan, as an outcome of the route review, is an integral part of overall Transit capital investment. Along with the Future Ready Action Plan, the following Transit projects are planned for the next 15+ years: construction of a new Transit Operations Campus; construction of a new facility at Guelph Central Station; electrification of the existing, and all future, transit buses; and investment in additional buses to meet continued population growth. The total capital investment required over the next 10 years is \$253.9 million; however, the direct capital investment of the Future Ready Action Plan is only 15 per cent of this amount, or \$37.63 million, for the purchase of 26 buses. The 26 buses are funded through development charges (40%), ICIP subsidies (44%), and the renewal energy fund (16%) in the 10-year capital plan.

There are five full-time positions and one part-time position that council approved for 2022, with a budget impact of \$547,000, which represents 0.21 percent property tax levy increase. In 2023, four full-time positions are required, with a budget impact of \$397,000, which represents 0.14 percent property tax levy increase; three full-time positions in 2024, with a budget impact of \$286,000, which represents 0.09 percent increase to property tax levy; and one position in 2025 with a budget impact of \$134,000, which represents 0.04 percent increase to property tax.

Next steps

The City of Guelph is rapidly changing and growing, with pressure to accommodate a significantly larger population within the next 30 years. A connected and effective transportation system is necessary for meeting the needs of current and future residents, in which a viable transit system is a key component. The existing (2021) transit network is limited in its ability to not only service a growing population, but

to meet the City's strategic goals, such as modal share and sustainability. The Future Ready Action Plan outlines the actions the City will take to revitalize its transit network into a convenient, attractive, and efficient transit system that will grow with the City.

The Guelph Transit Future Ready Action Plan was presented to the City of Guelph Council on November 15, 2022, for review and consideration. The following recommendations were moved by Council.

- 1. That the financial implications resulting from PS-2021-335 titled Guelph Transit Action Plan – Route Review Recommended Plan be referred to the 2022 and 2023 budget deliberations on December 2, 2021.**
- 2. That Council approve staff's recommendation to proceed with the Future Ready Plan (Staff Recommended Plan) as outlined in Attachment 1, to begin implementation in spring 2022, pending budget approval.**
- 3. That Council approve the Guelph Transit Service Guidelines as outlined in Attachment 1, Section 6.1.**
- 4. That the Revenue to Cost (R/C) ratio targets for fare increases from the 2019 Transit Business Service Review be paused until the completion of the upcoming Transit Fare Strategy.**
- 5. That staff execute the Investing in Canada Infrastructure Program (ICIP): Public Transit Stream Transfer Payment Agreement (TPA) with the Province of Ontario in alignment with the above Route Review Recommended Plan.**

An additional motion was moved by Council directing staff on interregional transit, as follows.

- 6. That staff be directed to explore potential partnerships and/or secure grants to help fund interregional transit and report back to City Council with the findings prior to the design and implementation of interregional transit.**

The Guelph Transit Future Ready Action Plan was also approved at budget deliberations on December 2, 2022.

The network revitalization will occur over the next 10 years and began on May 1, 2022.

1. Introduction

In 2019, the Guelph Transit Business Service Review was conducted to identify what transit does well and what needs to change. The review recommended that a holistic route review be conducted, which resulted in the Guelph Transit Future Ready Action Plan.

Guelph Transit is a fundamental part of Guelph's transportation network and plays a key role in moving residents throughout the City to destinations, such as employment and education opportunities, healthcare, shopping, recreation, and entertainment facilities. Prior to the pandemic, Guelph's transit system provided a safe and affordable transportation option for more than 7 million passengers each year. While transit usage slowed during COVID-19, transit remains an important piece of Guelph's transportation system and ridership is not only expected to recover, but grow, post-pandemic. Therefore, by understanding current and future residents' needs through the Future Ready Action Plan, the future transit system will better serve even more residents and continue to grow with Guelph.

The Future Ready Action Plan is the future transit network that resulted from a comprehensive route review of the existing transit system and from community engagement. The route review was undertaken as part of the Guelph Transit Business Service Review recommendations that were approved by City Council in 2019. The Guelph Transit Future Ready Action Plan identifies areas where the current transit system needs to be improved to better meet the needs of existing riders and to attract new riders. It also identifies how the improved transit system will assist in achieving the City's goals, as outlined in documents such as the Strategic Plan and Official Plan. Finally, the Future Ready Action Plan recognizes the lack of consistent service guidelines and implements new guidelines for standardizing decisions related to stop and infrastructure placement, route types, and service hours.

The main objective of the Future Ready Action Plan is to create a competitive, convenient, and reliable transit network that meets the needs of today's and tomorrow's customers. The improvements needed to achieve this objective have been outlined through this plan and incorporate best practices in service design and infrastructure that have been tailored to the unique context of Guelph and its residents.

1.1. Key questions

To help with guiding the outcomes of the Guelph Transit Future Ready Action Plan, the following questions were asked:

- How can Guelph Transit develop a transit system that meets current and future needs of the community from a transportation and quality-of-life perspective?
- What is the optimal route/schedule design for the short- and long-term?
- What route design principles and service guidelines should be employed moving forward?

- What transit infrastructure will be needed to support the transit service plan?
- What other opportunities exist to incentivize transit usage?

The goal was to answer these questions through thorough analysis of the existing (2021) network and current and future community needs. This was completed through:

- Focusing on the unique context of Guelph's location and road network
- Updating the route network and service guidelines to better meet the needs of Guelph residents, both transit and non-transit users, by providing more direct and convenient options
- Providing a "family of services" concept to offer different types of transit services for different needs that are embedded in the new Transit Service Standards for consistent decision-making

1.2. Process and timeline

Phase 1: Data collection

This phase analyzed existing network conditions, existing policy and industry guidelines, internal consultation, initial minor public engagement, and case studies of comparable transit systems. The focus of public engagement during this phase was hearing what the public believes is and is not working with the current network, and what would encourage them to use transit more often. These analyses were used to inform the preliminary recommendations in Phase 2.

For more details on the engagement process and results, see [Appendix A](#).
For more details on the comparative case studies, see [Appendix B](#).

Phase 2: Development of preliminary recommendations

This phase involved the consolidation and updating of service standards for transit and the development of a multi-year action plan for the transit network, based on information gathered in Phase 1.

Phase 3: Collaboration and refinement

This phase brought the preliminary recommendations from Phase 2 to stakeholders for review and input. These stakeholders included community leaders and councillors, the Transit Advisory Committee (TAC), transit staff, existing transit users, and non-transit users. Stakeholders were asked what they liked and did not like about the recommendations and if any other considerations should be made.

Feedback was received through online communications only due to the ongoing COVID-19 pandemic. These techniques included focus groups, online surveys, online town hall meetings, and open online Q&A forums, along with the opportunity to directly phone and/or email transit planning staff. Wherever feasible, stakeholder feedback was incorporated into the recommendations.

For more details on the stakeholder engagement process and results, see [Appendix A](#).

Phase 4: Incorporation into long-term plans

This phase considered and assessed feedback received in Phase 3. Any feedback that could be feasibly incorporated into the plan was. This includes routing modifications, increased frequencies, and extended service hours on routes of concern. Timing, revenue projections, and infrastructure needs were identified during this phase as well.

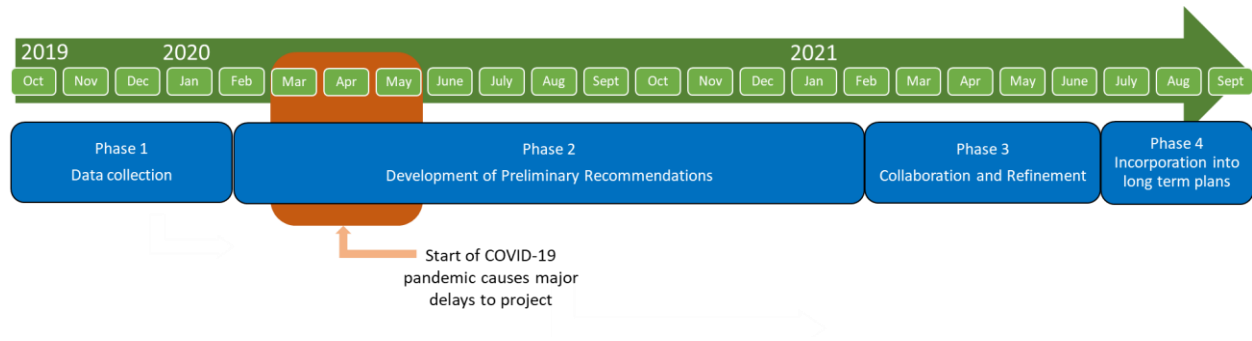


Figure 1. Timeline of route review process

2. Transit and the City of Guelph: Aligning to City plans and strategies

Key City documents were examined to provide the direction of Guelph's transit goals to meet the needs of the community in the short- and long-term. The documents examined include: *A United Vision: Guelph's Community Plan (2018)*; *City's Strategic Plan, 2019-2023*; *Envision Guelph: Guelph Official Plan (2018)*; *Guelph Transportation Master Plan¹ (2022)*; *Guelph Transit Growth Strategy and Plan and Mobility Services Review (2010)*; *Guelph Transit Business Service Review (2019)*; and *Development Charge Background Study Technical Appendix (2018)*. The impact of each of these documents on the Future Ready Action Plan are outlined below.

2.1. Alignment with plans & strategies

A United Vision: Guelph's Community Plan (2018)

The Community Plan lays the foundation for Guelph's community vision and values. Through consultation, the plan identified six broad themes:

- We are home
- We protect our environment
- We create value
- We feel well
- We play and explore
- We move around freely

The final theme of "We move around freely" is central to the community's transportation network. Within the vision of this theme, it is stated that, "Transit is a priority – it's frequent, it's affordable and it can get us to work and to neighbouring communities. ... Increased use of transit and active transportation routes help address the traffic congestion that can follow rapid growth." The strategic direction of this theme is to ensure that transit is available to all, inclusive of ability and exceptionality, and is well-connected.

City's Strategic Plan, 2019-2023

The Strategic Plan establishes the areas of focus over the coming years that reflect community goals. The Strategic Plan identifies six key pillars:

- **Powering our future** – an economy that empowers us
- **Sustaining our future** – an environment that sustains us
- **Navigating our future** – a transportation network that connects us
- **Working together for our future** – a modern government that works with us
- **Building our future** – a community that supports us

¹ The Guelph Transportation Master Plan was still in development during Guelph Transit's route review. The Future Ready Action Plan aligns with the preferred, and now approved, alternative.

All staff initiatives must now identify how the project aligns with one or more of these pillars. Transit is central to the pillar of “Navigating our future.” This pillar seeks to “foster easy, accessible movement through trails, paths, roads and corridors to tie the community together and connect Guelph’s economy with other regions.” It pursues “attractive, affordable and reasonable transportation options for everyone” and improved local transportation connectivity. Essentially, the Guelph Strategic Plan’s pillar of “Navigating our future” advocates for a transportation network that is safe, multimodal, connected, and efficient. This plan will contribute to achieving the key performance indicator of increasing the “Per cent change of non-auto mode share” under this pillar.

Envision Guelph: Guelph Official Plan (2018)

The Official Plan is prepared for the City of Guelph in accordance with the Ontario Planning Act, Growth Plan for the Greater Golden Horseshoe, and Provincial Policy Statement. It establishes a vision, guiding principles, strategic goals, objectives, and policies for Guelph; promotes long-term community sustainability and public interest in the future development of the city; and guides decision-making and community building to 2031.

Several sections within the Official Plan specifically identify policies related to transit. **Section 5.1.1(j) identifies a modal share² increase for transit to 15% by 2031.** This target is supported by key guiding principles for transit service design as identified in the plan. These guiding principles are:

- Downtown will be maintained and strengthened as the heart of the community and will be the preferred location for major transit infrastructure including a major transit station.
- Place priority on increasing the capacity of existing transit systems to support identified Intensification Corridors.
- Expand transit services to areas that have achieved, or are planned to achieve, transit-supportive residential and employment densities.
- Identified Community Mixed-Use Nodes will be planned and designed to be well served by transit.
- Ensuring that bus stops are provided at regular intervals, generally within 400 metres of every residence and business.
- Maintaining efficient transit service through improvements to travel time, reliability, overall routes, and regularity of service.
- Arterial roads are meant to accommodate a high level of transit service.
- Regional Parks are accessible by public transit.
- A variety of land uses are served by a transit route.

Overall, the Official Plan specifies that the Downtown, Intensification Corridors, Community Mixed-Use Nodes, arterial roads, Regional Parks, and higher density mixed-use areas will be the priority locations for transit service. In addition, areas

² Modal share is the number of trips completed by different modes of transportation: car, transit, walking, cycling. Transit’s modal share as of 2019 was approximately 11%. This number has decreased due to the COVID-19 pandemic.

with existing service will also be the focus of improvements. Lastly, transit is intended to be highly accessible for all.

Guelph Transportation Master Plan (2020)

The Guelph Transportation Master Plan and the Guelph Transit Future Ready Action Plan were conducted simultaneously. The Future Ready Action Plan aligns with the recently approved Transportation Master Plan's values of being safe, equitable, complete, sustainable, affordable, and supportive of land use through creating a more connected route network with increased service frequency. These changes, paired with the transit priority measures in the Transportation Master Plan, work together to achieve a Quality Transit Network. The Transportation Master Plan project team has reviewed the Future Action Ready Plan and is supportive.

Guelph Transit Growth Strategy and Plan and Mobility Services Review (2010)

A review of Guelph Transit was conducted by Dillon Consulting from 2009-2010. The final report for the review outlined existing conventional and mobility services, an assessment of market potential and potential of various corridors for implementation of higher order transit, and a long-term vision, which integrates overall recommendations for moving forward. This report provides excellent historical data and concepts that may still be relevant to Guelph a decade later. The vision outlined in the Transit Growth Strategy stated, **"Guelph Transit is the preferred transportation mode for the residents, employees and visitors of Guelph over the single occupant vehicle."**

Through the review, a service model was recommended by Dillon Consulting, with 11 recommendations, and a set of design and performance standards were proposed. Several of the 11 recommendations for the service model were implemented following the report. The 11 recommendations were:

- 1. Structure all routes on a 15/30/60-minute clock face schedule**
- 2. Focus on Gordon/Norfolk/Woolwich as a Primary Transit Spine, especially between Downtown and the University**
 - The 99 Mainline was introduced in 2017 to accomplish this recommendation and has been extremely successful
- 3. Continue to focus on the Downtown and place greater focus on the University Centre for South End Trips**
 - The University Centre has become a secondary hub since this was recommended
- 4. Ensure good transit connections to other existing/emerging nodes**
- 5. Design 30-minute routes linking areas of the city to Downtown and the University and design a Gordon transit spine service**
 - This model has been implemented in part
- 6. Design two-way fixed routes for service to peripheral areas**
- 7. Identify opportunities to pilot a zone bus service**
- 8. Develop customized industrial special services**
- 9. Implement a GO Premium Shuttle as a trial service**

- This was implemented but discontinued in 2019 due to very low usage
- 10. Modify and expand the Community Bus**
- The model proposed for the Community Bus by Dillon was partially implemented
 - The Community Bus was converted to an on-demand service in May 2021
- 11. Implement major service changes in conjunction with the opening of VIA/Carden terminal**
- Many route adjustments have been implemented since the opening of the downtown terminal

As mentioned, Dillon Consulting also proposed a set of design and performance standards. Each standard is outlined below. For in-depth descriptions of each of these standards, see the link in the footnote³.

- **Coverage/Walking distance** to bus stops
- **Days and Hours of Service** based on passengers per route hour
- **Service Frequency** based on passengers per route hour
- **Route Directness** related to travel time, distance of deviations, and number of transfers
- **Stop Spacing** based on land use
- **Bus Shelter/Bus Stop Ratio and Location Warrants**
- **Vehicle Accessibility**
- **On-Time Performance** related to timed transfers, schedule adherence, and time-of-day
- **Passenger Loading** based on seating capacity
- **Introduction of New Service** related to new growth areas and growth rates of new routes
- **Complaint/Compliment Ratio**
- **Accident Rate**
- **Number of Incidents of Vandalism**
- **Service Utilization** based on passenger boardings by time-of-day
- **Financial Performance**

Guelph Transit Business Service Review, 2019

The Guelph Transit Business Service Review was conducted to identify what transit does well and what needs to change. It studies the effectiveness and efficiency of transit to make services the best for the City and its citizens, while supporting long-term financial sustainability. 12 recommendations were made resulting from the Business Service Review. These recommendations and their status are outlined below:

- **Service standards**
 1. Set a funding and fare pricing policy based on a revenue-to-cost performance range.

³ [Guelph Transit Growth Strategy and Plan and Mobility Services Review](#)

- This performance range was identified as a revenue-to-cost ratio of 40-45%. If the ratio were below 40%, a fare increase would be required. The ratio remained above 40% prior to the COVID-19 pandemic. The pandemic has presented unique revenue challenges that continue to be reviewed.
- **Service expansion and growth**
 - 2. Expand and rebrand the Community Bus service.
 - Due to COVID-19, the expansion of the Community Bus did not occur. However, the Community Bus was converted to an on-demand service in May 2021 to provide service to a greater range of locations.
 - 3. Conduct an operational route review, looking at both holistic system changes as well as individual route modifications.
 - This report represents the completion of this recommendation.
 - 4. Develop a Guelph Transit strategic plan within the context of the Transportation Master Plan, to provide direction for conventional, mobility, and specialized transit service to 2040.
 - This report serves as the first step in the development of this plan.
- **Service reduction**
 - 5. Discontinue morning shuttle service (pilot project) to Guelph Central Station.
 - This shuttle was discontinued in early 2019.
- **Service administration**
 - 6. Review and renew the CoFare contract.
 - 7. Develop an operator recertification program to support service reliability, safety, and consistency.
 - 8. Implement staffing adjustments to increase capacity for return to work, wellness, recruitment, and retention challenges, and to support the efficient and effective management and administration of core business.
 - 9. Improve reporting methods related to vehicle maintenance.
- **Technology growth**
 - 10. Implement the new fare box program with the capability for reusable tap and go passes (smart cards).
 - The OnYourWay fare card was implemented in 2020.
 - 11. Develop a pilot program to test the service gains (improved scheduling and increased capacity) from Intelligent On-Demand Transit software with the Mobility Service and assess feasibility for low-density and low utilization applications.
 - RideCo was retained for Mobility Services in 2018. RideCo was also used to implement two on-demand services: Community On-Demand and Hanlon Industrial On-Demand.

- **Service reliability**

12. Stabilize the workforce levels to ensure the sustainable provision of current levels of service and the reduction of overtime, through a base staffing increase of 19 drivers, to be phased in over six years.
 - This recommendation was well underway prior to the COVID-19 pandemic. However, due to the pandemic, layoffs and temporary service reductions occurred, which are still being recovered as the pandemic ends.

Development Charges Background Study Technical Appendix, 2018

The Development Charges Background Study was completed by Watson & Associates Economists Ltd. for the City of Guelph to meet statutory requirements and to set out policies underlying the proposed by-law. As part of this study, a comprehensive forecast for transit servicing needs was conducted by Dillon Consulting and was provided as a technical appendix. Through population growth forecasts, and current and existing conditions, the appendix outlines a ten-year conventional transit ridership forecast and ten-year conventional fleet capital plan. The key findings and recommendations were as follows:

- 2017 transit modal share was 11%
- A target of 13% is a realistic transit modal share goal to 2031, which equates to 9.19 million annual ridership
 - Ridership as of 2019 was approximately 7 million
- A target spare bus ratio of 20% is recommended, which would be implemented through the purchase of 51 additional buses by 2031

2.2. The case to support transit investment

Guelph plans and strategies identify transit as integral to moving throughout the City. The goals of many of these plans aim to increase the transit modal share and get people out of cars.

Beyond this, there are many social, environmental, and economic benefits to investment in transit, both direct and indirect, that also align with the pillars of the Strategic Plan. Some of these benefits are as follows.

Equity

- Transit is an essential service that provides a basic level of mobility to those that cannot drive due to physical, economic, or social constraints.
- Transit provides access to essential destinations, like employment, healthcare, education, and other services. Many employers in Guelph depend on transit service for their employees.
 - Investment in transit allows for better coverage of the city to ensure everyone has suitable access, particularly for those who rely on transit as their primary mode of transportation.⁴

⁴ [Achieving Healthy Communities Through Transit Equity](#)

Health and safety

- As transit travel increases, generally, per capita traffic fatality rates decrease, particularly for the most vulnerable road users (e.g., pedestrians and cyclists). As well, transit passengers have a significantly lower traffic fatality rate than automobile occupants.⁵
- Transit usage reduces sedentary lifestyles that are linked to many diseases, such as heart disease and diabetes. Transit users, on average, walk approximately 5-15 minutes more per day than non-transit users. It is recommended that the average adult walk 22 minutes per day to achieve the appropriate amount of physical activity.⁶
- Transit usage reduces the number of greenhouse gas (GHG) producing vehicles on the road that are harmful to human health. This indirectly reduces the cost of healthcare due to the reduction in air pollution related chronic diseases.
 - Air pollution is a leading cause of premature death in Canada and is linked to the increased risk of developing heart and lung diseases as well as an increased risk of strokes.⁷
 - Air pollution ranks as the top environmental risk factor for premature death and disability in Canada.⁸

Economic

- Increased transit ridership aids in reducing traffic congestion and long commutes that are associated with billions of dollars lost in productivity in Canada each year.⁹
- Investment in transit has the potential to reduce infrastructure costs associated with road expansions and parking facilities to accommodate private vehicles.¹⁰
- Transit creates more local jobs, both in the transit industry and in other sectors.¹¹ It is estimated there is a potential yield of 49,700 jobs per \$1 billion (USD) invested in transit.¹²

Environmental

- As transit usage increases, air quality improves. Transit produces 50 to 95% less GHGs (greenhouse gas) per passenger mile than private vehicles.¹³
 - Private vehicles are the largest contributor to a household's carbon footprint and changing from a 2 car to 1 car household has potential to reduce a

⁵ [APTA The Hidden Traffic Safety Solution: Public Transportation](#)

⁶ [VPTI Evaluating Public Transportation Health Benefits](#)

⁷ [Health impacts of air pollution in Canada](#)

⁸ [Health effects of air pollution](#)

⁹ [Building Strong Cities Through Investments in Public Transit](#)

¹⁰ [MTO Transit Supportive Guidelines: Parking Management](#)

¹¹ [Backgrounder: A Plan to Permanently Fund Public Transit and Support Economic Recovery](#)

¹² [Economic Impact of Public Transportation Investment](#)

¹³ [APTA Public Transportation: Benefits for the 21st Century](#)

household's carbon footprint by 30%. This also reduces non-renewable fuel dependency.¹⁴

Strategic Plan Alignment

The following table outlines the specific pillars and goals of the Strategic Plan that each of these benefits aligns with.

Table 2. How the benefits of transit investment align with the Strategic Plan pillars and goals.

Benefit	Pillar	Goal
Equity – essential mobility service	<ul style="list-style-type: none"> • Navigating our future • Working together for our future • Building our future 	<ul style="list-style-type: none"> • Provide attractive, affordable, and reasonable transportation options for everyone • Maintaining our delivery of core services • Maintain existing community assets and secure new ones
Health and safety – reduced traffic fatalities and reduced disease related to sedentary lifestyles and air pollution	<ul style="list-style-type: none"> • Navigating our future • Building our future 	<ul style="list-style-type: none"> • Improving the safety, efficiency, and connectivity of the whole transportation system • Continue to build strong, vibrant, safe, and healthy communities that foster resilience in the people who live here
Economic – Reduced traffic congestion and more jobs	<ul style="list-style-type: none"> • Powering our future 	<ul style="list-style-type: none"> • Contribute to a sustainable, creative, and smart local economy that is connected to regional and global markets and supports shared prosperity for everyone
Environmental – fewer GHG emissions and smaller carbon footprints	<ul style="list-style-type: none"> • Sustaining our future 	<ul style="list-style-type: none"> • Mitigate climate change by reducing Guelph's carbon footprint

2.3. Guelph's changing population

Guelph is among the top 20 fastest growing cities in Ontario. As per the Province's updated Growth Plan targets, Guelph must accommodate a population of 203,000 and 116,000 jobs by 2051. This represents an increase of around 70,000 residents from the 2016 census population of 131,794. The expected population in 2031 is 169,000.

¹⁴ [Environmental benefits of public transit](#)

A major challenge of rapid growth is increased congestion of the transportation system. One of the best solutions to accommodating increased travel demand is improving the public transit system.

Statistics from Census, 2016¹⁵

In 2016, 17.2% of the population was aged 0 to 14, which is a group that has limited mobility as they are unable to drive. An additional 14.6% of the population was aged 65 and over, which also contains a portion of the population that may have limited mobility due to the loss of the ability to drive. Of the remaining 68.2% of the population aged 15 to 64, the single largest age group was those aged 20 to 24, who are also likely university students. This is a group that may have a lower income and may not be able to afford a private vehicle. With exceptions, these age groups primarily move through the city independently by walking, cycling, and/or by taking transit.

While the average after-tax income of Guelph residents was \$39,429, 20.9% of the population could be described as having a low-income status. Specifically, the prevalence of low income based on low-income measure, after-tax (LIM-AT) was 11.1% and based on low-income cut-off, after-tax (LICO-AT) was 7.4%. With this, the unemployment rate was 6.1%. These groups may be unable to afford a private vehicle and are more likely to rely on other modes of transportation.

Of the 70% of Guelph's population that is in the labour force, 69% regularly commute to work within Guelph. Due to this, 71% of employed residents commute for less than 30 minutes to work; however, 77% of the labour force still commutes by driving a vehicle while only 7% take public transit. As many commuting trips are occurring within Guelph, there is plenty of opportunity to shift some of these trips from private vehicles to public transit with improvements to the existing network to better meet the needs of employed residents.

¹⁵ [Guelph \(City\) Census Profile, 2016 Census](#)

3. Policy and design framework

3.1. Industry best practices

Every transit agency and city are different, but there are several common characteristics of successful transit systems that have been identified by many sources. This section provides an overview of the industry best practices that guided this plan.

Factors that influence transit ridership directly and indirectly include availability of transit, variety of transit modes, quality and reliability of transit service, transit fares, regional employment, city population and distribution, cost of car ownership, and city demographics. Some of these factors are outside of the control of a transit agency, but those that are within the agency's control can greatly increase transit usage. A successful transit system also closely monitors the performance of each of these factors.

Variety of transit modes

There are numerous types of transit modes based on the number of stops, service frequency, population served, and route design. A variety of transit modes allows for various types of travel to be completed. Some routes travel quickly between two major trip generators while some routes stop often and take less direct paths to serve more areas. This is often referred to as a "family of services." A needs assessment of the transit service areas is crucial to defining the correct type from the family of services. An overview of common route classifications is outlined below in Tables 3 to 6:

Table 3. Classifications based on number of stops or service frequency.

Classification	Details	Example
Local service (also known as base, regular, core, etc.)	<ul style="list-style-type: none">• "Average" route• Operates primarily on arterial roads• Basic level of service throughout area	e.g., Route 7
Rapid or Bus Rapid Transit (BRT)	<ul style="list-style-type: none">• Limited stop service• Much higher service frequency• Use of transit priority measures	No example in Guelph
Express	<ul style="list-style-type: none">• Limited stop service• Connect two major locations with few or no stops in between	e.g., Route 59U
Extremely low-density service (also known as peripheral service)	<ul style="list-style-type: none">• Minimal level of service in areas with low use• May operate infrequently or only certain times of day	No example in Guelph

Table 4. Classifications based on population served.

Classification	Details	Example
Commuter/work-based service	<ul style="list-style-type: none"> • Direct service to an employment centre • May or may not be available to the public 	<ul style="list-style-type: none"> • e.g., Route 16
Community-based service	<ul style="list-style-type: none"> • Serves a specific community or area, typically for transit-dependent populations like seniors • May provide access to facilities marketed toward those populations 	<ul style="list-style-type: none"> • e.g., Community Bus
Student-based service		<ul style="list-style-type: none"> • e.g., Route 50U
Special event service		<ul style="list-style-type: none"> • e.g., Homecoming service
Regional service		<ul style="list-style-type: none"> • No example in Guelph

Table 5. Classifications based on route design.

Classification	Details	Example
Radial (also known as trunk, spine, backbone)	<ul style="list-style-type: none"> • Provides service to the Central Business District (CBD) • Frequent stops • Slow travel speeds 	<ul style="list-style-type: none"> • e.g., Route 99
Cross-town	<ul style="list-style-type: none"> • Like Radial but does not serve CBD • Instead intersects with Radial routes 	<ul style="list-style-type: none"> • e.g., Route 17/18
Circulator (also known as loop)	<ul style="list-style-type: none"> • Minimal level of service in areas with low use • May operate infrequently or only certain times of day 	<ul style="list-style-type: none"> • No example in Guelph

Classification	Details	Example
Feeders or shuttle	<ul style="list-style-type: none"> • Service in higher density or higher demand areas that feed to other routes in the system, an activity centre, or another mode of transportation • Direct as possible and short route 	<ul style="list-style-type: none"> • e.g., Route 59U
Regional		<ul style="list-style-type: none"> • No example in Guelph

Table 6. Classifications based on time of day.

Classification	Details	Example
Peak period	<ul style="list-style-type: none"> • Approximately 3 hours in the morning and 3 hours in the afternoon with a greater level of service for commuters 	<ul style="list-style-type: none"> • e.g., Route 10
Non-peak	<ul style="list-style-type: none"> • Times in between peak periods 	<ul style="list-style-type: none"> • e.g., Route 10
Night	<ul style="list-style-type: none"> • Service extended beyond regular service hours 	<ul style="list-style-type: none"> • e.g., West Hanlon Kortright Loop

All examples provided are full-service levels prior to service reductions due to COVID-19.

Source: USF Center for Urban Transportation Research

To determine which of the above route types is appropriate in a location, the following characteristics must be considered:

- Population density
- Employment density
- Household income
- Minimum levels of development
- Walking distance
- Vehicle kilometres per capita
- Revenue hours per capita
- Availability of park-and-ride facilities
- Spacing between routes
- Trip generators
- Geographical conditions
- Roadway conditions
- Stop locations

Quality and reliability of transit service

Poor quality and low reliability of transit service is not an attractive transportation choice. It is therefore important that transit services are not only designed on the

above characteristics but maintain a high level of service delivery and reliability. Characteristics that are typically monitored for quality and reliability include:

- Percent on-time
- Minutes early/late
- Ratio of transit travel time to auto time
- Number of transfers
- Number of standees
- Duration of standee time
- Span of service
- Bus stop amenities (e.g., sidewalks, shelters, real-time information, etc.)
- Vehicle cleanliness

Transit fares

Although the focus of this report is on route design, there are initiatives outside route design that are crucial to the success of a transit network. One of these initiatives is considerations of transit fares. A fare increase will not have a significant impact on transit-dependent riders' demand but can have a significant impact on discretionary riders' demand. That is not to say the dependent riders will not be affected, but their demand is considered inelastic – that is, the price of transit will not change their choice of transportation as they are not choice riders. Conversely, where riders are discretionary, the price of transit can influence their transportation choice. In total, all else being equal, a 3% increase in fare prices will reduce ridership by 1%. Therefore, it is important to have a fare strategy that attracts choice riders and assists dependent riders, while recovering the desired revenue for funding service.

Many transit agencies offer a variety of fare options that benefit frequent transit users or lower-income users. At this time, Guelph Transit's cash fare is the same for everyone using the bus, but there are discounts associated with purchasing tickets or monthly passes, and for youth, seniors, members of the affordable bus pass program, and University of Guelph students (U-pass/Semester Pass). Also, children under 5 ride free. Other fare structures that Guelph does not currently employ include Student, Corporate Passes, Zonal, Premium, Child (different from Youth), and free rides for other specific groups. A Guelph Transit Fare Strategy will be completed as part of the Guelph Transit Master Plan.

Other transit-supportive initiatives

There are other complementary incentives or disincentives to transit service and fare strategies. Examples include:

- Transit priority measures (e.g., signals, queue-jump lanes, and separated rights-of-way)
- Parking and transportation demand management strategies (e.g., limiting long-term parking in the downtown, increasing parking prices, and offering bike racks at transit hubs)
- Campus and school transport management programs
- Transit-oriented development
- Highly available user information and marketing

These initiatives make transit a more competitive option for transportation through providing benefits to transit over private vehicles.

3.2. Transit service standards

Transit service standards are a set of guidelines that transit agencies use to design and maintain their transit network. These include coverage and walking distance standards, route utilization levels, bus stop spacing and placement, days and hours of service, and on-time performance. Service standards allow for a consistent application of route implementation and monitoring, so the transit system maintains suitable service levels and grows as appropriate.

Prior to this plan, Guelph Transit did not have a set of Council-adopted standards. The Transit Growth Strategy and Plan (2010) proposed a set of service standards, and these recommendations were used internally on occasion. However, they held no real weight and were not applied consistently. Furthermore, there were also other guidelines present within the Guelph Transit Business Service Review (2019) and the Guelph Official Plan (2018). These standards were also not consistent from one document to another. The MTO's Transit-Supportive Guidelines likewise provide supporting guidelines for service standards. As part of the Future Ready Action Plan, it was important to reconcile all existing guidelines into one location, with one standard, and to receive Council adoption.

The MTO's Transit Supportive Guidelines in relation to several of the listed service standards mentioned are outlined below. Guelph Transit's council-approved Service Standards are in Section 6.1 and are based on the industry standards discussed in this section.

Table 7. MTO's Transit Supportive Guidelines that relate to Guelph Transit's Service Guidelines.

Term	Guidelines
Coverage/Walking Distance	<ul style="list-style-type: none">• Within a 5–10-minute walk (400-800m) of the corridor based on level of service• People are generally willing to walk 400m to a bus stop and 800m to a rapid transit station• New communities should have 90% of people/jobs within 400m of a stop
Bus Stop Spacing	<ul style="list-style-type: none">• Local bus stops are between 200 to 250m apart• Express bus stops are greater than 250m apart
Bus Shelter Prioritization	<ul style="list-style-type: none">• Prioritized when 2 routes meet or where there is a high volume of boardings

Term	Guidelines
Stop Placement	<ul style="list-style-type: none"> • Located at points where local roads intersect with collectors and arterials • Located at highly visible locations along well-travelled routes with supportive adjacent development • Located nearside intersection to accommodate high volume of pedestrians near a crosswalk • Located far side of intersection to reduce interference with high volume of turning vehicles and frequent bus service

4. Summary of existing transit services

Guelph Transit's conventional service as of January 2020 (pre-pandemic service) was made up of 35 routes, operated by 62 forty-foot buses, and 182 transit operators. Due to temporary service reductions caused by COVID-19, the number of routes and operators from March 2020 to April 2022 was less than that of January 2020. Full service resumed on May 1, 2022, when the implementation of the Future Ready Action Plan began. The family of service prior to this plan was made up of one spine route, local routes, university express routes, one express route, late night routes, and on-demand service¹⁶.

Based on this network, the spine route serves as the main route of the system. The local routes provide a basic level of service throughout the city during standard operating hours. University express routes only operate when the University of Guelph is in session and connects students to the University Centre Loop. There is only one express route that provides extra, direct service from Downtown to Stone Road Mall (which has not been in operation since March 2020). The Late-Night routes only operate when the University of Guelph is in session and provides service out of the University Centre Loop after conventional service ends (these were not in service from March 2020-February 2022). The Community On-Demand service provides service to many key community locations. The industrial on-demand service provided service to the Hanlon Creek Business Park with a stop-to-hub service model (which operated from May 2021-May 2022).

A summary profile of each route is outlined below (pre-COVID service levels, unless otherwise stated). For the purpose of this summary, routes that have been converted to on-demand service are outlined as both the on-demand service and previous conventional service.

Table 8. Existing network structure (January 2020).

Service Type	Routes	Service Summary
Spine Route	99 Mainline	<ul style="list-style-type: none">• 5:45 a.m. to 12:15 a.m. Monday to Saturday• 9:15 a.m. to 6:45 p.m. Sunday and holidays• Every 10 minutes Monday to Friday• Every 15 minutes south of Downtown Saturday and Sunday• Every 30 minutes north of Downtown Saturday and Sunday
Local	1 Edinburgh College	<ul style="list-style-type: none">• 5:45 a.m. to 12:15 a.m. Monday to Saturday• 9:15 a.m. to 6:45 p.m. Sunday and holidays• Every 30 minutes Monday to Sunday
Local	2 College Edinburgh	<ul style="list-style-type: none">• 5:45 a.m. to 12:15 a.m. Monday to Saturday• 9:15 a.m. to 6:45 p.m. Sunday and holidays• Every 30 minutes Monday to Sunday

¹⁶ On-demand service was introduced in May 2021

Service Type	Routes	Service Summary
Local	3 Westmount	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes until 6 p.m. Monday to Friday • Every 30 minutes weekday evenings, Saturday, and Sunday
Local	4 York	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	5 Goodwin	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes until 6 p.m. Monday to Friday • Every 30 minutes weekday evenings, Saturday, and Sunday
Local	6 Harvard Ironwood	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes in a.m. and p.m. rush hours Monday to Friday • Every 30 minutes weekday midday and evenings, Saturday, and Sunday
Local	7 Kortright Downey	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes in a.m. and p.m. rush hours Monday to Friday • Every 30 minutes weekday midday and evenings, Saturday, and Sunday
Local	8 Stone Road Mall	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	9 Waterloo	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	10 Imperial	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes in a.m. and p.m. rush hours Monday to Friday • Every 30 minutes weekday midday and evenings, Saturday, and Sunday
Local	11 Willow West	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	12 General Hospital	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes in a.m. and p.m. rush hours Monday to Friday • Every 30 minutes weekday midday and evenings, Saturday, and Sunday

Service Type	Routes	Service Summary
Local	13 Victoria Road Recreation Centre	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 20 minutes in a.m. and p.m. rush hours Monday to Friday • Every 30 minutes weekday midday and evenings, Saturday, and Sunday
Local	14 Grange	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	15 University College	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local ¹⁷	16 Southgate	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	17 Woodlawn Watson	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	18 Woodlawn Watson	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
Local	20 Northwest Industrial	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sunday and holidays • Every 30 minutes Monday to Sunday
University Express	50U Stone	<ul style="list-style-type: none"> • September to April only • 8:00 a.m. to 10:30 p.m. Monday to Friday • Every 20 minutes Monday to Friday
University Express	51U Janefield	<ul style="list-style-type: none"> • September to April only • 8:00 a.m. to 6:15 p.m. Monday to Friday • Every 30 minutes Monday to Friday
University Express	52U Kortright	<ul style="list-style-type: none"> • September to April only • 7:20 a.m. to 10:40 a.m. and 1:20 p.m. to 6:10 p.m. Monday to Friday • Every 30 minutes Monday to Friday
University Express	56U Colonial	<ul style="list-style-type: none"> • September to April only • 7:15 a.m. to 12:30 a.m. Monday to Friday • Every 30 minutes Monday to Friday
University Express	57U Ironwood	<ul style="list-style-type: none"> • September to April only • 7:20 a.m. to 10:20 p.m. Monday to Friday • Every 20 minutes Monday to Friday
University Express	58U Edinburgh	<ul style="list-style-type: none"> • September to April only • 7:20 a.m. to 10:20 p.m. Monday to Friday • Every 20 minutes Monday to Friday

¹⁷ Route 16 Southgate was converted to an on-demand route in May 2021. See on-demand routes on the following pages.

Service Type	Routes	Service Summary
University Express	59U Gordon	<ul style="list-style-type: none"> September to April only 8:00 a.m. to 11:00 a.m. and 4:00 p.m. to 7:00 p.m. Monday to Friday Every 20 minutes Monday to Friday
Express	40 Stone Road Mall Express	<ul style="list-style-type: none"> 2:30 p.m. to 6:00 p.m. Monday to Friday Every 30 minutes Monday to Friday
Late Night	Downtown Shuttle	<ul style="list-style-type: none"> September to April only 1:00 a.m. to 3:15 a.m. Thursday to Saturday Every 30 minutes Thursday to Saturday
Late Night	West Hanlon Kortright Loop	<ul style="list-style-type: none"> September to April only 1:00 a.m. to 3:30 a.m. Tuesday to Saturday Every 30 minutes Thursday to Saturday Every 60 minutes Tuesday and Wednesday
Late Night	Victoria Clair Loop	<ul style="list-style-type: none"> September to April only 1:00 a.m. to 3:30 a.m. Tuesday to Saturday Every 30 minutes Thursday to Saturday Every 60 minutes Tuesday and Wednesday
Late Night	Gordon Edinburgh Loop	<ul style="list-style-type: none"> September to April only 1:00 a.m. to 3:30 a.m. Tuesday to Saturday Every 30 minutes Tuesday to Saturday
Late Night	Magic Bus	<ul style="list-style-type: none"> September to April only 6:00 p.m. to 12:30 a.m. Sunday only Every 30 minutes Sunday only
Community ¹⁸	Community Bus North	<ul style="list-style-type: none"> 8:30 a.m. to 4:30 p.m. Monday to Saturday Every 60 minutes Monday to Saturday
Community ¹⁹	Community Bus South	<ul style="list-style-type: none"> 8:30 a.m. to 4:30 p.m. Monday to Saturday Every 60 minutes Monday to Saturday
On-Demand ²⁰	Community On-Demand	<ul style="list-style-type: none"> 8:30 a.m. to 4:30 p.m. Monday to Saturday No fixed schedule
On-Demand ²¹	Hanlon Industrial On-Demand	<ul style="list-style-type: none"> 5:45 a.m. to 12:15 a.m. Monday to Saturday 9:15 a.m. to 6:45 p.m. Sunday and holidays Returns to Gordon and Clair intersection to make connections to Route 99

¹⁸ Community Bus North was converted to Community On-Demand in May 2021

¹⁹ Community Bus South was converted to Community On-Demand in May 2021

²⁰ Introduced May 2021

²¹ Introduced May 2021 and replaced by conventional routes 16 and 19 in May 2022

5. Evaluation of existing transit services

Based on the January 2020 network, Guelph Transit provides a high-level of coverage to the City but does not provide quick service in most instances. Many local routes consist of large one-way loops; require transfers downtown, even when this requires a great deal of out-of-direction travel; and express routes are almost non-existent. This is particularly true in areas that are relatively close to each other on the periphery of the City. In short, a passenger can get almost anywhere in Guelph, but their trip is likely to be significantly longer than someone driving a car to the same location. This is not conducive to attracting new ridership.

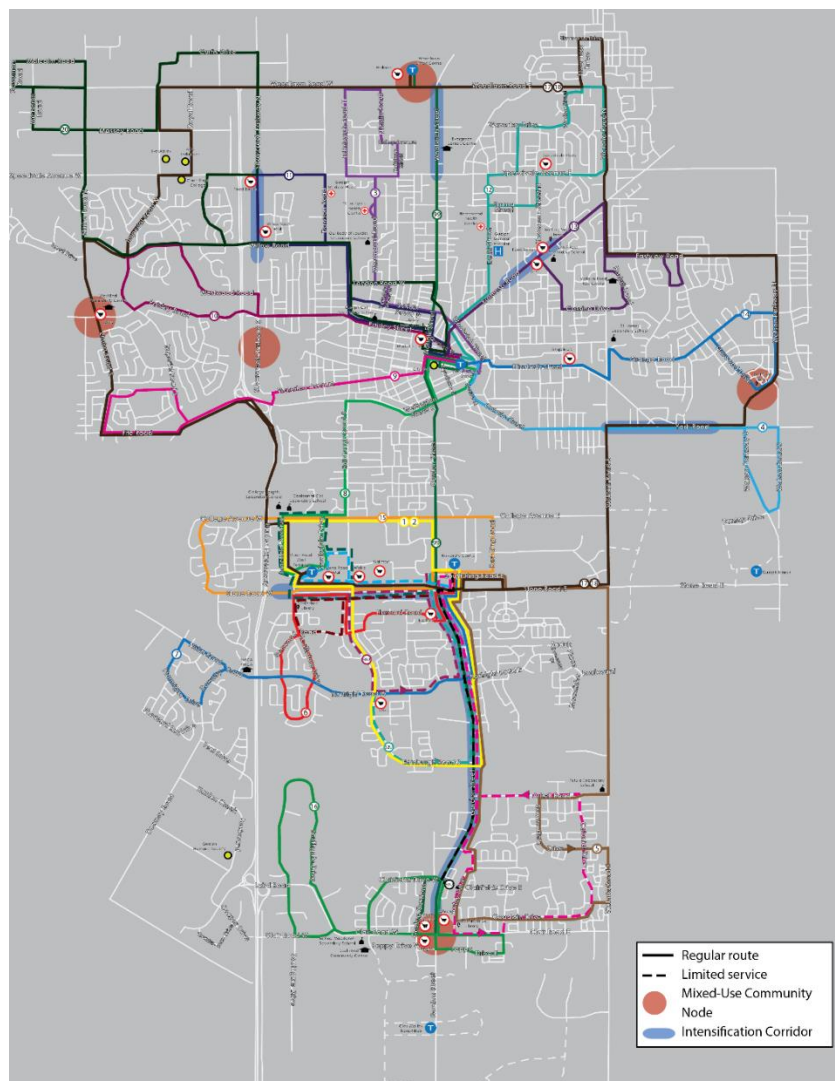


Figure 2. Guelph Transit existing route network (January 2020).

5.1. Existing service issues & opportunities

Trips and transfers analysis

Anonymous cell phone location data was obtained from a company called Streetlight, which is the same data used in analyses for the Transportation Master

Plan. It identifies the general trip patterns of Guelph residents using origin-destination pairs. This data splits the city into 16 districts, and for each district, it identifies which other districts residents travel to the most.

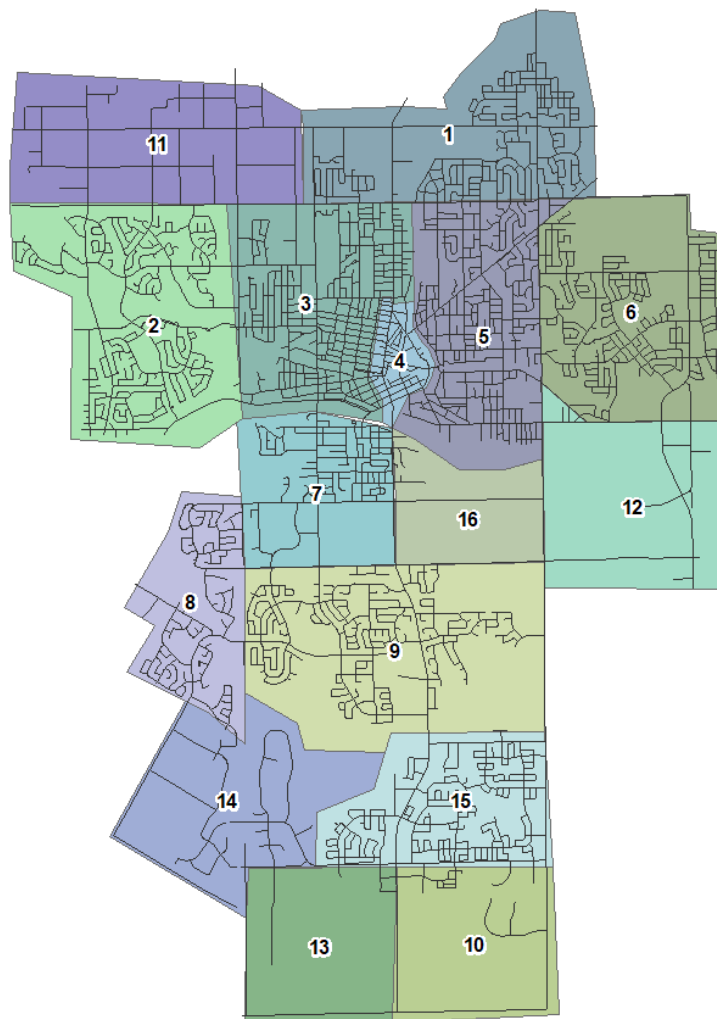


Figure 3. City of Guelph districts for travel analysis.

Transit staff identified key destinations within each district that residents are likely travelling to and then determined how residents would get to these destinations using the current and Future Ready Action Plan transit network. Specifically, transit staff determined how many buses/transfers are needed to get to key destinations and how many routing options are available. For details on the analysis methodology for both networks, see [Appendix C](#).

The results of the 2020 network analysis found that 85.77% of trips to key destinations can be made by taking 1-2 buses, of which 71.17% of trips can be made by taking 1 bus. This means almost 20% of trips require at least one transfer to be completed. Residents are looking for a quick and convenient trip, which transfers can slow down, particularly if the buses' schedules do not align well. This can be frustrating for users and could deter potential users from making their trip

via transit. Additionally, only 64.77% of trips offer 5 or more routing options for residents to get to their destinations. The remaining 35% of trips with fewer than 5 routing options can be problematic for residents if their desired route has low frequency and/or is facing operational issues, such as delays or cancellations.

Coverage

With the pre-Future Ready Action Plan network, Guelph Transit covers most of the City within 400m of a transit stop, with some exceptions. The Hanlon Creek Business Park is currently solely serviced by on-demand transit and could benefit from fixed route service. There are also other areas outside a 400m walk that cannot be reasonably serviced by conventional transit. These areas may benefit from alternative service delivery models, such as on-demand transit.

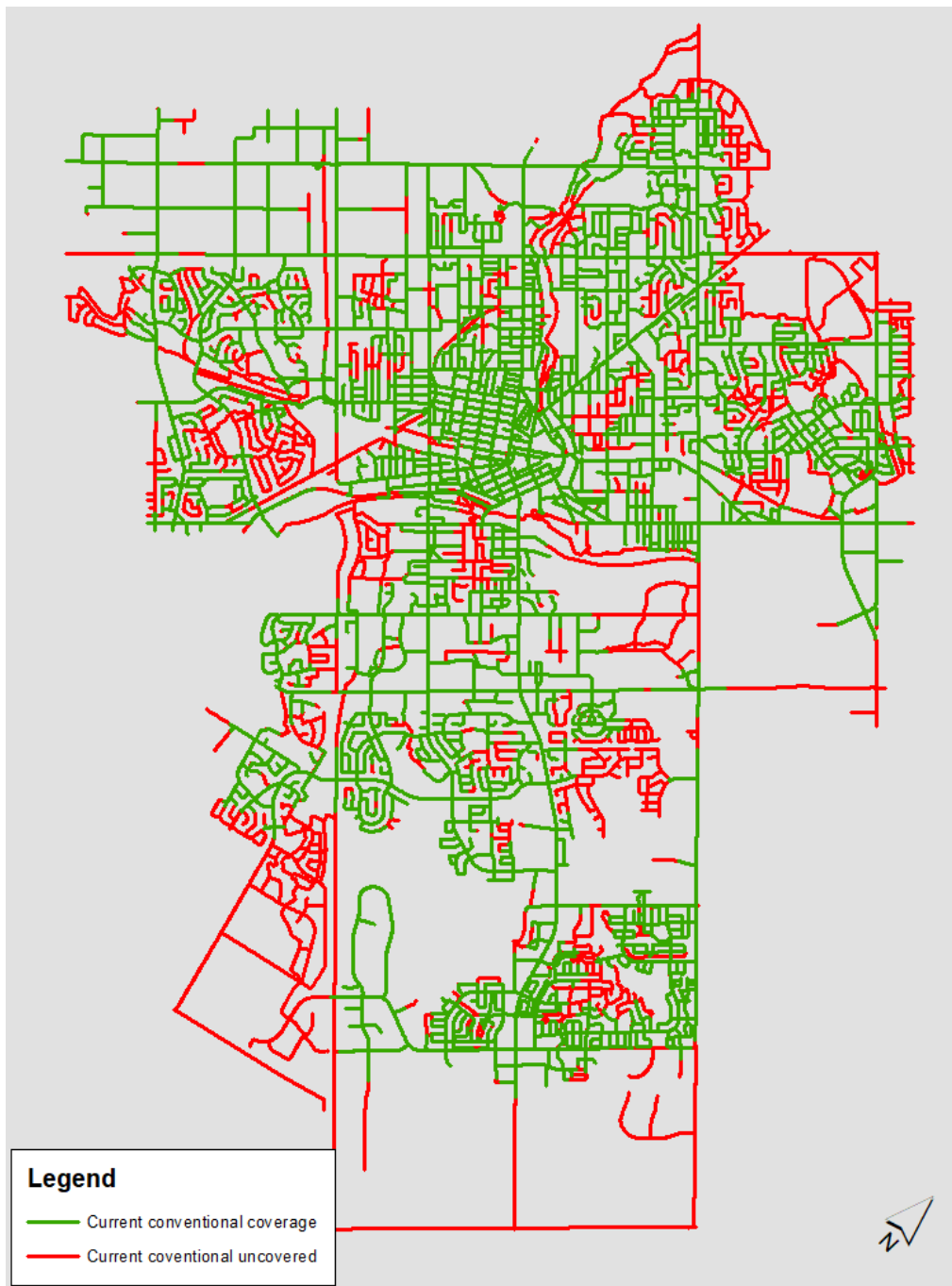


Figure 4. Areas that are within 400 metres of a conventional route bus stop (green) and those that are more than 400 metres from a bus stop (red), based on the January 2020 transit network.

Trip directness

With the pre-Future Ready Action Plan system, Guelph Transit operates primarily as a radial network, with most trips beginning or ending at Guelph Central Station or the University Centre. In addition to the challenges outlined above related to the number of required transfers, the radial model also adds significant additional travel time to trips by requiring travel to a hub. Guelph has the benefit of a relatively grid-

like street network, which is conducive to introducing the Future Ready Action Plan's grid-like transit network with more cross-town routes and routes that completely bypass a hub when appropriate.

COVID-19

The COVID-19 pandemic has disrupted business for all transit agencies. Ridership during the pandemic is greatly reduced, and some ridership will never be recovered, even once the pandemic is over. However, this is an excellent time to refurbish the transit network. The Future Ready Action Plan's new and improved system will allow for greater ridership recovery in the long-term and the opportunity for new ridership.

Conestoga College U-Pass

The Guelph Conestoga College campus is considering a U-Pass for its students, with implementation pending for 2023. If this is ratified by students, a Conestoga College U-Pass would open an additional revenue stream for Guelph Transit, and more frequent transit could be provided to the campus in a timelier manner.

6. System-wide service proposals

The following section outlines the service types and standards, route network, and implementation strategy from 2022 to 2031.

6.1. Guelph Transit Service Standards

Service design standards and types

Service design standards define route categorization as part of a family of services, service coverage (maximum walking distances), minimum frequencies and span of service, stop spacing and placement, and bus stop amenity prioritization (e.g., shelters, benches, concrete pads, etc.).

Family of services

A family of services has been created for Guelph Transit's future network, which allows for a variety of route types that are tailored to different purposes. More information on each route type is provided in the table below. The system is proposing:

- 21 base routes, numbered 3 to 25,
- 4 core routes, referred to as the 90 series,
- 6 university routes, referred to as the 50 series,
- 1 community on-demand route, Route 71, and
- No industrial express routes (100 series) were proposed but will be pursued as part of the plan approval and will be funded by a corporate pass program or other partnerships with employers.

Table 9. Family of services.

Route Type	Details
Base Routes	<p>Base routes provide localized services, typically beginning and/or ending at a hub location.</p> <p>Guelph Transit's base network will:</p> <ul style="list-style-type: none">• Provide service 7 days a week, year-round• Provide all-day service, generally within the standard service hours of 5:45 a.m. to 12:15 a.m. Monday to Saturday and 9:15 a.m. to 6:45 p.m. Sundays and Holidays• Operate a minimum of every 30 minutes from the start of service to 10:00 p.m.• Ensure bus stops are placed at regular intervals

Route Type	Details
Core Routes	<p>Core routes provide major connections across town along major corridors, with the goal of having more frequent service on these key corridors.</p> <p>Guelph Transit's core network will:</p> <ul style="list-style-type: none"> • Provide service 7 days a week, year-round • Provide all-day service, generally within the standard service hours of 5:45 a.m. to 12:15 a.m. Monday to Saturday and 7:15 a.m. to 10:15 p.m. Sundays and Holidays • Operate a minimum of every 30 minutes from the start of service to 10:00 p.m., with the goal of providing more frequent service wherever possible • Ensure bus stops are placed at regular intervals
Community Routes	<p>Community routes provide service in areas with low demand and/or new growth areas that have not yet achieved transit-supportive densities.</p> <p>Guelph Transit's Community network will:</p> <ul style="list-style-type: none"> • Offer on-demand and/or limited service in areas without access to other transit routes • Base hours and frequency based on demand
Industrial Express Routes	<p>Industrial Express routes provide additional service to employment areas. This may occur through extra trips during peak shift changes and/or as an alternative route connecting a major hub to employment locations.</p> <p>Guelph Transit's Industrial Express network will:</p> <ul style="list-style-type: none"> • Provide service and frequency based on demand • Offer direct service to employment areas
University Routes	<p>University Routes provide direct service from student housing locations to the University Centre.</p> <p>Guelph Transit's University network will, at minimum:</p> <ul style="list-style-type: none"> • Provide service on weekdays, from September to May • Provide service and frequency based on demand • Ensure bus stops are placed at regular intervals, with some sections of the routes operating as an express where there is duplication of service

Service coverage and bus stop placement

- **Service coverage:** The targeted service coverage is 90% of people and jobs within 400 metres of a bus stop.
- **Bus stop spacing:** Base routes will have bus stops placed an average distance of 250 metres apart along the route, with spacing no less than 150 metres.
- **Bus stop placement:** New bus stops will not be placed in front of front-lotted homes. Where there is a high volume of right-turning vehicles and/or frequent bus service (better than 20-minutes), bus stops should be placed on the far side of the intersection whenever possible. Bus stops will be placed in

locations with adequate right-of-way to install stop amenities, such as shelters and benches, whenever possible.

Bus stop amenity prioritization

When allotting budgets for new bus stop amenities (e.g., shelters, concrete pads, etc.), the below criteria will be used in the following order to prioritize locations for these improvements:

1. There is currently not a pad or shelter.
2. There is a sidewalk and curb.
3. There is sufficient space in the right-of-way to install the amenity.
4. Stops with higher passenger boardings.
5. There is an accessibility concern or accessibility request at the stop location.
6. When considering a shelter at a stop, in addition to the above, it should meet one or more of the following criteria:
 - a. There is an average minimum of 20 boardings per weekday
 - b. There are poor microclimate conditions such as wind tunnels or a lack of other shelter sources
 - c. The stop is located near a key community location.
7. When considering a bench at a stop, in addition to criteria 1 to 5, it should have an average minimum of 10 boardings per weekday.
8. There is already a pad installed to accommodate a shelter.
9. The existing amenity is in poor condition.
10. There has been a public request for an amenity.

Service level targets

Service level targets define when service should be modified through increased or decreased frequency, increased or decreased service hours, and modifying schedules through the analysis of passenger loads and on-time performance.

Passenger loads

Load factor is the amount of a vehicle's seated capacity occupied by passengers, expressed as a percentage. A load factor of 100% indicates all seats are occupied with no standing passengers. A load factor less than 100% indicates there are unoccupied seats in a vehicle. A load factor greater than 100% indicates all seats are occupied and there are standing passengers. A Guelph Transit vehicle has a seated capacity of 45 passengers. The next feasible board period is defined as the period when all requirements of the Union Collective Agreement can be met, and resources are made available.

Table 10. Passenger load targets.

Time of Day	Target
Peak Periods	Where the load factor is 150 per cent or greater of the seated capacity, additional trips will be provided to bring the load factor below 150 per cent by the next feasible board period.

Time of Day	Target
Off-Peak Periods	Where the load factor is 100 per cent or greater of the seated capacity, additional trips will be provided to bring the load factor below 100 per cent by the next feasible board period.

Service hours and frequency

Passengers per revenue hour is a measure of the average number of passengers when a route is in service and is used to evaluate when frequencies should be adjusted. Guelph Transit's base frequencies are a minimum of every 30 minutes from start of service to 10 p.m. Passengers per revenue hour targets are used to evaluate what service frequency should be provided on a route-by-route basis. Guelph Transit's service hours are generally from 5:45 a.m. to 12:15 a.m. Monday to Saturday and 9:15 a.m. to 6:45 p.m. Sundays and holidays. Passengers per revenue hour targets for the first and/or last hour of service are used to evaluate when service hours should be provided on a route-by-route basis.

Table 11. Frequency adjustment targets.

Time of Day	Target
Peak Periods	Where the average passenger per revenue hour is equal to 30 or greater during a peak period, service frequency should be increased by the next feasible board period, except for Community routes. Where the average passenger per revenue hour is less than or equal to 10 during a peak period, service frequency should be decreased by the next feasible board period, except for Community routes.
Off-Peak Periods	Where the average passenger per revenue hour is equal to 22 or greater during an off-peak period, service frequency should be increased by the next feasible board period, except for Community routes. Where the average passenger per revenue hour is less than or equal to 7 during an off-peak period, service frequency should be decreased by the next feasible board period, except for Community routes.

Table 12. Service hour adjustment targets.

Service Hours	Target
Increase in service hours	Where a minimum of 7 passengers per hour is achieved for the first or last hour of service, an additional hour of service will be added to the beginning or end of service by the next feasible board period.

Service Hours	Target
Decrease in service hours	Where a minimum of 5 passengers per hour is not achieved for the first or last hour of service, an hour of service will be removed from the beginning or end of service, or the service will be modified by the next feasible board period, except for Community routes.

On-time performance targets

Recovery time is when a route is in service but is not driving or picking up passengers. Recovery time allows for fluctuations in schedule adherence if a route falls behind schedule and provides opportunities to make transfers at hubs.

Timing points are stops along a route where the vehicle aims to reach at a scheduled time. These are spaced approximately 5 minutes apart on average. Other stops in between timing points do not have guaranteed scheduled times.

Cycle time is the time it takes to drive a route, including layover and recovery time.

All base routes are designed to travel at an average operating speed of 23 kilometres per hour. This speed includes when the vehicle is not in motion.

All routes are designed to have a targeted recovery time of 10% or 4 minutes of every 30 minutes of cycle time. For example, a 30-minute route would have a recovery time of 3-4 minutes, and a 60-minute route would have a recovery time of 6-8 minutes.

1. A bus will arrive at timing points between 30 seconds early to 3 minutes late 85% of the time
2. A bus will arrive at timing points between 1 minute early and 5 minutes late 93% of the time.
3. A bus will never depart a timing point more than 1 minute early.
4. Where these targets are not met, it will be determined if the cause is due to inappropriate cycle times, if timing points need to be adjusted within the existing cycle time, or if it is due to driver error
5. Where cycle time or timing points are the issue, the cycle time will be adjusted to reflect reality by the next feasible board period

Service expansion targets

Service expansion targets define when service should be implemented in new areas. Where areas are outside a 400-metre walk, an existing route may be extended, or a new community route may be implemented to provide service.

Build-up targets

- When a density of 22 units per hectare or 50 residents and jobs per hectare is achieved, service will be provided to the area through route extensions or a community route.

- A community route will be converted to a base route when the minimum target of 15 passengers per revenue hour per vehicle are achieved for the majority of service hours.

Service review targets

The previous guidelines require that the appropriate data be reviewed at regular intervals. It is also important to gauge the financial performance of the transit system.

Review timelines

- Ridership per route will have daily and weekly reports created
- Frequency and service hour targets will be reviewed annually or when a request is made for review, whichever is more frequent
- On-time performance and load factors will have daily and weekly reports created monthly for review

Financial performance reviews

All financial performance metrics will be reviewed annually and will be compared with comparator Transit Agencies identified in the Transit Business Service Review with the target of being on par with these other agencies. These agencies are Barrie Transit, Brantford Transit, Burlington Transit, Cornwall Transit, GOVA (Greater Sudbury), Kingston Transit, Oakville Transit, St. Catharines Transit, Thunder Bay Transit, and Transit Windsor. The metrics to be evaluated are:

- Cost effectiveness:
 - Operating cost per passenger
- Cost efficiency:
 - Net cost per total vehicle hour
 - Revenue to Cost (R/C) ratio

6.2 Approved revised system (2031)

The below map shows the approved Future Ready Action Plan 2031 route network. This is the final network; however, there are interim routes and changes that occur prior to 2031. More information on individual routes and implementation are outlined in the following sections. All implementation timelines are subject to change due to unforeseen circumstances. Holiday service will be provided as on-demand service except for core routes that will run on a reduced schedule from 9:15 a.m. to 6:45 p.m. This will allow for greater flexibility on holidays than is currently offered by hourly schedules.

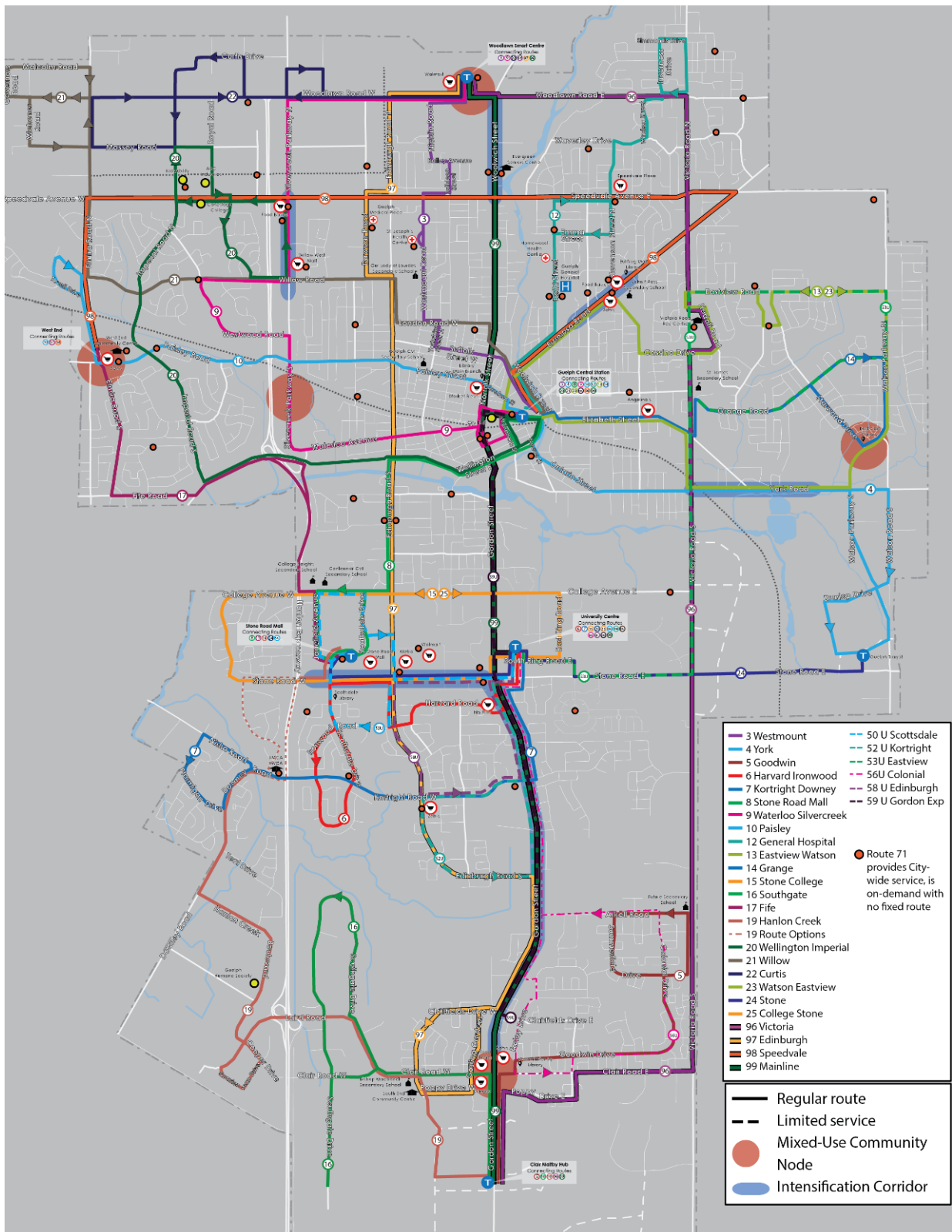


Figure 5. Guelph Transit future route network (2031).

Table 13. Network-wide route restructuring (2031 network).

Route	Route Type and Structure	Details
3 Westmount	<ul style="list-style-type: none"> • Base route • Two-way service 	<ul style="list-style-type: none"> • Retains much of existing routing while extending to Woodlawn Smart Centre • Services the north end with stops at Guelph Central Station, Our Lady of Lourdes Secondary School, St. Joseph's Health Centre, and Woodlawn Smart Centre • Provides better north end connections at Woodlawn Smart Centre
4 York	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing routing while extending to the new Guelph Transit Operations Campus • Services the east end with stops at Guelph Central Station, along York Road, and the Guelph Transit Operations Campus • Possible interlining with Route 10
5 Goodwin	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Routing modified to serve the south end neighbourhood and provide a connection to the Clair Maltby Transit Terminal • Services the south end with stops at the Clair Maltby Transit Terminal, Clair/Gordon, and the future secondary school at Arkell/Victoria
6 Harvard Ironwood	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing routing • Services the University, No Frills at Gordon/Harvard, Harvard Rd, and the Ironwood/Scottsdale neighbourhood
7 Kortright Downey	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing routing • Services the University, Zehrs at Edinburgh/Kortright, the YMCA at Downey/Hanlon, and the Niska/Ptarmigan neighbourhood
8 Stone Road Mall	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing routing • Services Guelph Central Station, Wellington St, Edinburgh Rd, College Heights/CCVI, and Stone Road Mall
9 Waterloo Silvercreek	<ul style="list-style-type: none"> • Base route • Two-way service 	<ul style="list-style-type: none"> • Introduces new routing that maintains existing Route 9 routing along Waterloo Ave but now services Silvercreek Pkwy and connects to the Woodlawn Smart Centre • Services Guelph Central Station, Silvercreek Pkwy strip (including Willow West Mall and Food Basics), and Woodlawn Smart Centre • Provides better north end connections at Woodlawn Smart Centre

Route	Route Type and Structure	Details
10 Paisley	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing Route 10 routing on Paisley while extending service to the west end stores and Tovell Dr neighbourhood • Services the west end with stops at Guelph Central Station, GCVI, West End Community Centre, Zehrs plaza and Costco, and Tovell Dr neighbourhood
12 General Hospital	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing Route 12 routing on Delhi while modifying the routing to provide bi-directional service on Metcalfe, Waverley, Windsor, and Woodlawn and extending the route to cover Inverness/Simmonds/Victoria neighbourhood • Services Guelph Central Station, Guelph General Hospital, Homewood Health Centre, Speedvale Plaza, and the northeast end neighbourhood
13 Eastview Watson	<ul style="list-style-type: none"> • Base route • One way loop (paired with Route 23 running in opposite direction) 	<ul style="list-style-type: none"> • Introduces new routing that maintains existing Route 13 routing along Eramosa Rd, Cassino Ave, and Eastview Rd but now services Watson Pkwy, York Rd, Victoria Rd, and Elizabeth St • Paired with Route 23 running in the opposite direction to provide better service to the east end • Services Guelph Central Station, Bullfrog Mall Zehrs/Food Basics, John F Ross SS, Victoria Road Rec Centre, East End Library, east end neighbourhoods, and Angelino's
14 Grange	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Retains existing routing • Services Guelph Central Station, Elizabeth St, Angelino's, St James SS, Grange Rd, Watson Pkwy, East Side Library, Starwood Dr, and east end neighbourhood
15 Stone College	<ul style="list-style-type: none"> • Base route • One way loop (paired with Route 25 running in opposite direction) 	<ul style="list-style-type: none"> • Retains existing routing • Paired with Route 25 running in the opposite direction to provide better service • Services University Centre, Stone Rd corridor, Metro/Walmart, Stone Road Mall, College Ave W, College Heights/CCVI, and East Ring Rd
16 Southgate	<ul style="list-style-type: none"> • Base route • Two-way service with one-way sections 	<ul style="list-style-type: none"> • Modified old Route 16 Southgate routing to replace Hanlon On-Demand on east side of Hanlon • Services Clair Maltby Transit Terminal, Clair/Gordon mixed-use node, Bishop Macdonell SS, Southgate Dr and Clair Rd W

Route	Route Type and Structure	Details
17 Fife	<ul style="list-style-type: none"> • Base route • Two-way service (paired with Route 98) 	<ul style="list-style-type: none"> • Retains west portion of existing Route 17 • Continues as Route 98 at Elmira Rd and Paisley Rd for better service in the northwest • Services West End Community Centre, Zehrs, Costco, Elmira Rd, Fife Rd, College Heights/CCVI, Janefield Ave, Stone Road Mall and, possibly, Stone Rd Corridor, and the UC
19 Hanlon Creek	<ul style="list-style-type: none"> • Base route with routing options • Two-way service with a one-way loop 	<ul style="list-style-type: none"> • New route to replace Hanlon On-demand to service the Hanlon Business Park and provide the south end with more service to Stone Road Mall • Services Clair Maltby Transit Terminal, South End Community Centre, Bishop Macdonell SS, Laird Rd, Quarterman Dr, Hanlon Creek Blvd, Downey Rd, YMCA, (possibly) Woodland Glen, and Stone Road Mall
20 Wellington Imperial	<ul style="list-style-type: none"> • Base route • Two-way service with two one-way loops 	<ul style="list-style-type: none"> • Introduces new routing that maintains portion of existing Route 20 along Marksam Road • Services Guelph Central Station, Wellington St, Imperial Rd, KidsAbility, businesses in the northwest, Marksam Rd, Willow West Mall, Silvercreek Pkwy, Food Basics, Speedvale Ave, and Conestoga College
21 Willow	<ul style="list-style-type: none"> • Base route • Two-way service with two one-way loops 	<ul style="list-style-type: none"> • New route that takes over a portion of existing Route 20 along London Rd, Edinburgh Rd, Willow Rd, Elmira Rd, Woodlawn Rd, Governors Rd, Malcolm Rd, Michener Rd, and Massey Rd • Provides more direct routing from northwest industrial area to downtown • Services Guelph Central Station, Our Lady of Lourdes SS, Willow West Mall, and the northwest industrial area
22 Curtis	<ul style="list-style-type: none"> • Base route • Two-way service with three one-way loops 	<ul style="list-style-type: none"> • New route that takes over a portion of existing Route 20 along Massey Rd, Imperial Rd, and Curtis Dr • Provides more direct routing to northwest industrial area from Woodlawn Smart Centre • Services Woodlawn Smart Centre and northwest industrial area

Route	Route Type and Structure	Details
23 Watson Eastview	<ul style="list-style-type: none"> • Base route • One way loop (paired with Route 13 running in opposite direction) 	<ul style="list-style-type: none"> • Introduces new route that runs in the opposite direction of the Route 13 to provide better service to the east end • Services Guelph Central Station, Angelino's, east end neighbourhoods, East End Library, Victoria Road Rec Centre, John F Ross SS, and Bullfrog Mall Zehrs/Food Basics
24 Stone	<ul style="list-style-type: none"> • Base route • Two-way service 	<ul style="list-style-type: none"> • New route that provides bi-directional service along Stone Rd • Services Stone Road Mall, Metro/Walmart, Stone Rd corridor, the University Centre, and Guelph Operations campus
25 College Stone	<ul style="list-style-type: none"> • Base route • One way loop (paired with Route 15 running in opposite direction) 	<ul style="list-style-type: none"> • Introduces new route that runs in the opposite direction of the Route 15 to provide better service • Services University Centre, East Ring Rd, College Heights/CCVI, College Ave W, Stone Road Mall, Metro/Walmart, and Stone Rd corridor
50U Scottsdale	<ul style="list-style-type: none"> • University route • Two-way service with a one-way loop 	<ul style="list-style-type: none"> • Route introduced in September 2021 that combines the previous Route 50, 51, and 57 by running along Stone Rd, Edinburgh Rd, Ironwood Rd, and Scottsdale Dr • Services University Centre, Stone Rd corridor, Scottsdale Library, Stone Road Mall, and Metro/Walmart
52U Kortright	<ul style="list-style-type: none"> • University route • Two-way service with a one-way loop 	<ul style="list-style-type: none"> • Retains existing routing • Services the University Centre, Gordon St, Kortright Rd, Zehrs at Kortright/Edinburgh, and Edinburgh Rd
53U Eastview	<ul style="list-style-type: none"> • University route • Two-way service with a one-way loop 	<ul style="list-style-type: none"> • New route that provides service from the east end to the University during peak hours • Services the University Centre, Stone Rd, Victoria Rd, St James SS, Victoria Rd Rec Centre, Eastview Rd, Watson Pkwy, and Grange Rd
56U Colonial	<ul style="list-style-type: none"> • University route • Two-way service with a one-way loop 	<ul style="list-style-type: none"> • Retains existing routing but now runs all year • Services the University Centre, Gordon St, Farley Dr, Westminster Square Library, Clair Rd, Goodwin Dr, Colonial Dr, and Arkell Rd

Route	Route Type and Structure	Details
58U Edinburgh	<ul style="list-style-type: none"> • University route • Two-way service with a one-way loop 	<ul style="list-style-type: none"> • Retains existing routing • Services the University Centre, Stone Rd, Metro/Walmart, Edinburgh Rd, Zehrs at Kortright/Edinburgh, Kortright Rd, and Gordon St
59U Gordon Express	<ul style="list-style-type: none"> • University route • Two-way service 	<ul style="list-style-type: none"> • Retains existing routing but is now extended to Guelph Central Station • Services Guelph Central Station, the University Centre, and Gordon St
71 Community On-Demand	<ul style="list-style-type: none"> • Community on-demand route • No fixed routing 	<ul style="list-style-type: none"> • No fixed routing • New on-demand stops added to areas that cannot be serviced by a conventional route, such as on Teal Dr, MacAlister Blvd, Eastview Park, and the northeast neighbourhoods
96 Victoria	<ul style="list-style-type: none"> • Core route • Two-way service 	<ul style="list-style-type: none"> • New route that provides direct service from the north end to the south end via Victoria Rd • Services Woodlawn Smart Centre, Woodlawn Rd, Victoria Rd, Victoria Rd Rec Centre, St James SS, Future Secondary School, Clair Rd, Poppy Dr, Gordon St, and the Clair Maltby Transit Terminal
97 Edinburgh	<ul style="list-style-type: none"> • Core route • Two-way service 	<ul style="list-style-type: none"> • New route that provides direct service from the north end to the south end via Edinburgh Rd • Services Woodlawn Smart Centre, Edinburgh Rd, Dawson Rd, Guelph Medical Place, Our Lady of Lourdes SS, Stone Rd Mall, Metro/Walmart, Zehrs at Kortright/Edinburgh, Gordon St, Clairfields Dr, Bishop Macdonell SS, South End Community Centre, Poppy Dr, Longo's/Food Basics at Clair/Gordon, and Gosling Gardens

Route	Route Type and Structure	Details
98 Speedvale	<ul style="list-style-type: none"> Core route Two-way service (paired with Route 17) 	<ul style="list-style-type: none"> New route that provides direct service from the east end to the west end via Speedvale Ave Continues as Route 17 at Elmira Rd and Paisley Rd to also provide direct connection to Stone Road Mall Services Guelph Central Station, Woolwich St, Eramosa Rd, Bullfrog Mall/Zehrs/Food Basics, John F Ross SS, Speedvale Rd, Speedvale Plaza, Food Basics at Speedvale/Silvercreek, Conestoga College, Elmira Rd, West End Community Centre, Costco, and Zehrs at Elmira/Paisley
99 Mainline	<ul style="list-style-type: none"> Core route Two-way service 	<ul style="list-style-type: none"> Retains existing routing that provides direct service from the north end to the south end with extension to Clair Maltby Transit Terminal Services Woodlawn Smart Centre, Woolwich St, Evergreen Seniors Centre, Norfolk Street, Library Main Branch, Market Fresh, Guelph Central Station, Gordon St, the University Centre, Food Basics/Zehrs/Longo's at Clair/Gordon, and Clair Maltby Transit Terminal

Network comparison

As shown in the map below, minimal conventional coverage will be removed and where it is, on-demand stops will be provided. On-demand stops will also be provided in areas where it is difficult to provide conventional service.

New conventional coverage will be provided to the outer edges of the city in the east, south, and west ends. In the east, new coverage will be provided at the Speedvale Avenue and Eramosa Road intersection as well as to the new Transit operations campus at the Stone Road East and Watson Parkway South intersection. In the south, new coverage will be provided along Clair Road East, to the Hanlon Business Park, and to the proposed Clair Maltby neighbourhood, including the south end transit terminal. In the west, new coverage will be provided on Downey Road, Woodland Glen Drive, Imperial Road South, Paisley Road, Tovell Drive, Willow Road, and Speedvale Avenue West.



Figure 6. Transit network changes with the Future Ready Action Plan (2031).

Future expansion

An initial plan was presented for public feedback in May/June 2021. Several options were developed for a final proposed transit network using the feedback received by

the community. Of these options, Council approved the Future Ready Action Plan in November 2021.

Future Ready Action Plan

This plan will provide some routes with increased frequencies and new on-demand Sunday service, resulting in 110,938 new service hours and 2,170,171 new kilometres. This will require 26 additional buses and 100 additional operators. By 2034, there is expected to be an increase of 4.29 million in ridership. For details on the years of implementation for this plan, see [Appendix E](#).

Table 14. Expected total ridership for each year of the Future Ready Action Plan.

Year	Total ridership	Ridership increases from service changes
1	5,747,732	35,609
2	6,375,550	85,972
3	6,955,016	85,242
4	7,691,117	194,009
5	7,970,000	12,223
6	8,678,799	310,438
7	9,212,827	218,142
8	9,449,920	46,999
9	9,588,529	991
10	9,761,022	18,188
11	9,862,487	49,718
12	9,941,800	38,863
13	10,041,255	48,733
Total increase	4,293,524	1,145,125

Table 15. Service hours of Future Ready Action Plan.

Service Type	Route(s)	Service Summary
Base	3 Westmount	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Friday • Every 30 minutes Weekday Evenings, Saturday, and Sunday
Base	4 York	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Saturday • Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday
Base	5 Goodwin	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday

Service Type	Route(s)	Service Summary
Base	6 Harvard Ironwood	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes a.m. and p.m. peak hours Monday to Friday • Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday
Base	7 Kortright Downey	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes a.m. and p.m. peak hours Monday to Friday • Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday
Base	8 Stone Road Mall	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Saturday • Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday
Base	9 Waterloo Silvercreek	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	10 Paisley	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Saturday • Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday
Base	12 General Hospital	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Friday • Every 30 minutes Weekday Evenings, Saturday, and Sunday
Base	13 Eastview Watson	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	14 Grange	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	15 Stone College	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	16 Southgate	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday

Service Type	Route(s)	Service Summary
Base	17 Fife	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Saturday • Every 30 minutes Weekday Evenings, Saturday, and Sunday
Base	19 Hanlon Creek	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	20 Wellington-Imperial	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	21 Willow	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	22 Curtis	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	23 Watson Eastview	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
Base	24 Stone	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 20 minutes until 6 p.m. Monday to Saturday • Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday
Base	25 College Stone	<ul style="list-style-type: none"> • 5:45 a.m. to 12:15 a.m. Monday to Saturday • 9:15 a.m. to 6:45 p.m. Sundays • Every 30 minutes Monday to Sunday
University Express	50U Scottsdale	<ul style="list-style-type: none"> • September to May only • 7:00 a.m. to 9:00 p.m. Monday to Friday • Every 15 minutes Monday to Friday
University Express	52U Kortright	<ul style="list-style-type: none"> • September to May only • 7:20 a.m. to 5:50 p.m. Monday to Friday • Every 30 minutes during peak times Monday to Friday
University Express	56U Colonial	<ul style="list-style-type: none"> • Year-long • 7:15 a.m. to 9:00 p.m. Monday to Friday • Every 20 minutes until 6 p.m. Monday to Friday • Every 30 minutes weekday evenings after 6 p.m.
University Express	58U Edinburgh	<ul style="list-style-type: none"> • September to May only • 7:20 a.m. to 9:00 p.m. Monday to Friday • Every 20 minutes Monday to Friday

Service Type	Route(s)	Service Summary
University Express	59U Gordon Express	<ul style="list-style-type: none"> September to May only 7:00 a.m. to 7:00 p.m. Monday to Friday Every 15 minutes Monday to Friday
Core	96 Victoria	<ul style="list-style-type: none"> 5:45 a.m. to 12:15 a.m. Monday to Saturday 7:15 a.m. to 10:15 p.m. Sundays Every 20 minutes until 6 p.m. Monday to Friday Every 30 minutes Weekday Evenings, Saturday, and Sunday
Core	97 Edinburgh	<ul style="list-style-type: none"> 5:45 a.m. to 12:15 a.m. Monday to Saturday 7:15 a.m. to 10:15 p.m. Sundays Every 20 minutes until 6 p.m. Monday to Friday Every 30 minutes Weekday Evenings, Saturday, and Sunday
Core	98 Speedvale	<ul style="list-style-type: none"> 5:45 a.m. to 12:15 a.m. Monday to Saturday 7:15 a.m. to 10:15 p.m. Sundays Every 20 minutes until 6 p.m. Monday to Friday Every 30 minutes Weekday Evenings, Saturday, and Sunday
Core	99 Mainline	<ul style="list-style-type: none"> 5:45 a.m. to 12:15 a.m. Monday to Saturday 7:15 a.m. to 10:15 p.m. Sundays Every 9 minutes during peak times Monday to Friday Every 10 minutes during midday Monday to Friday Every 15 minutes during evenings Monday to Friday Every 15 to 30 minutes Saturday and Sunday
On-Demand	Community Bus On-Demand	<ul style="list-style-type: none"> 8:30 a.m. to 4:30 p.m. Monday to Sunday with additional hours as needed No fixed schedule

The approved plan will also potentially incorporate 3 interregional transit routes in 2025, 2026, and 2027: Guelph Central Station to Pinebush Station in Cambridge (2025), Guelph Central Station to Fairview Park Mall in Kitchener (2026), and Guelph Central Station to Aberfoyle (2027). The interregional transit routes are expected to increase ridership by 0.2 million. Partnerships with other transit agencies will be explored, and the precise routing, implementation timing, and destinations will be confirmed through public engagement and presented to Council for approval prior to implementation.

Table 16. Expected increases in ridership from the interregional transit routes.

Year	Ridership increases from service changes
1	-
2	-

Year	Ridership increases from service changes
3	-
4	20,792
5	45,192
6	59,103
7	45,005
8	17,702
9	23,367
10	-
Total increase	211,161

Financial implications

Guelph Transit retained Dillon Consulting to provide ridership and revenue projections for the three network plan options that resulted from the route review. From this, staff identified the financial implications for the Future Ready Action Plan.

Net Cost

The Future Ready Action Plan estimates that 2034 operating expenses will increase by \$17.21 million and revenues by \$4.12 million, which leaves a net budget increase of \$13.08 million. The financial impacts include 2% annual inflation increases for both expenses and revenues.

The operating expenses include fuel, maintenance, and 122 full time equivalent staff including operators, supervisors, admin support, and fleet staff. The projected revenues include the impacts from the Future Ready Action Plan, interregional transit, and potential Conestoga College U-pass.

Guelph Transit's R/C ratio is on par with comparator transit agencies at 40%, excluding temporary impacts due to COVID-19. The overall transit R/C ratio will be 38% in year 1 if the Future Ready Plan is approved. R/C ratio is only one measure of transit performance and may be impacted by the upcoming Fare Strategy. It is important to understand that a fluctuating or lower R/C ratio can still be representative of positive performance or change, such as service expansion or capital investment, since services rarely recover new revenues at the same rate as expenses. The approved R/C ratio target is currently set to 40-45%. For this reason, staff are recommending pausing this ratio until a more comprehensive service metric system can be proposed to Council, as approved in the [Guelph Transit Business Service Review](#).

Table 18. Net cost of implementation for each year of the Future Ready Action Plan.

Year	Future Ready Action Plan
2022	\$1.76 M
2023	\$1.26 M
2024	\$1.90 M

Year	Future Ready Action Plan
2025	\$2.12 M
2026	\$2.24 M
2027	\$3.36 M
2028	\$0.80 M
2029	(\$0.27) M
2030	(\$0.23) M
2031	\$0.42 M
2032	(\$0.10) M
2033	(\$0.08) M
2034	(\$0.10) M
Total	\$13.08 M

The table below provides the operating expenses, revenues, and net cost to implement the Future Ready Action Plan. In years 2029 and 2030, there are no operating expenses, but there are revenues, as ridership increases are not immediately realized when route changes are implemented. It may take several years before the full ridership of a route is achieved.

Table 17. Annual expenses, revenues, and net costs of implementation for each year of the Future Ready Action Plan.

Year	Operating Cost	Revenue	Net Cost
2022	\$1.82 M ²²	\$0.06 M	\$1.76 M
2023	\$1.85 M	\$0.59 M	\$1.26 M
2024	\$2.16 M	\$0.26 M	\$1.90 M
2025	\$2.71 M	\$0.59 M	\$2.12 M
2026	\$2.55 M	\$0.31 M	\$2.24 M
2027	\$4.20 M	\$0.83 M	\$3.36 M
2028	\$1.44 M	\$0.64 M	\$0.80 M
2029	\$0.00 M	\$0.27 M	(\$0.27) M
2030	\$0.00 M	\$0.23 M	(\$0.23) M
2031	\$0.48 M	\$0.06 M	\$0.42 M
2032		\$0.10 M	(\$0.10) M
2033		\$0.08 M	(\$0.08) M
2034		\$0.10 M	(\$0.10) M
Total	\$17.21 M	\$4.12 M	\$13.08 M

Indirect Revenue

In addition to the direct revenue from the route review plans, there is indirect revenue from the pandemic recovery and population growth. Due to COVID-19, there was a significant decrease in ridership and revenue, some of which will be

²² The \$1.82 million dollars required in Year 1 includes costs for 5 operators to achieve the recommendations of the Business Service Review and 2 Supervisors to meet industry best practices for staffing ratios (\$690,000), as well as 7 additional operators and 2 NUNE positions required for the service changes.

permanently lost due to some riders switching modes and/or switching to working from home. The Future Ready Action Plan supports faster pandemic revenue recovery and additional ridership from population growth over the 10-year plan.

If the Future Ready Action Plan were not implemented, the pandemic recovery and population growth revenues presented below would not be fully achieved. The revenue from the pandemic recovery and population growth accounts for \$3.31 million dollars. The revenue related to pandemic recovery continues to be included in Transit Services' budget and is managed annually through budget monitoring and overall year-end position.

The table below shows the revenue from the Future Ready Action Plan, indirect revenue from pandemic recovery and population growth, and net cost.

Table 20. Operating cost, revenue, and net cost of implementation for the Future Ready Action Plan.

Year	Operating Cost	Revenue	Net Cost	Indirect Revenue
2022	\$1.82 M ²³	\$0.06 M	\$1.76 M	\$1.73 M
2023	\$1.85 M	\$0.59 M	\$1.26 M	\$0.39 M
2024	\$2.16 M	\$0.26 M	\$1.90 M	\$0.32 M
2025	\$2.71 M	\$0.59 M	\$2.12 M	\$0.27 M
2026	\$2.55 M	\$0.31 M	\$2.24 M	\$0.12 M
2027	\$4.20 M	\$0.83 M	\$3.36 M	\$0.10 M
2028	\$1.44 M	\$0.64 M	\$0.80 M	\$0.10 M
2029	\$0.00 M	\$0.27 M	(\$0.27) M	\$0.10 M
2030	\$0.00 M	\$0.23 M	(\$0.23) M	\$0.09 M
2031	\$0.48 M	\$0.06 M	\$0.42 M	\$0.09 M
2032		\$0.10 M	(\$0.10) M	
2033		\$0.08 M	(\$0.08) M	
2034		\$0.10 M	(\$0.10) M	
Total	\$17.21 M	\$4.12 M	\$13.08 M	\$3.31 M

Capital Investments

The Future Ready Action Plan is estimated to bring in \$0.99 million in new Dedicated Provincial Gas Tax funding over the life of the plan due to increased ridership, which will help support the growing transit fleet capital replacement costs.

The Future Ready Action Plan, as an outcome of the route review, is an integral part of overall Transit capital investment. Along with The Future Ready Action Plan, the following Transit projects are planned for the next 15+ years: construction of a new Transit Operations Campus, construction of a new facility at Guelph Central

²³ The \$1.82 million dollars required in Year 1 includes costs for 5 operators to achieve the recommendations of the Business Service Review and 2 Supervisors to meet industry best practices for staffing ratios (\$690,000), as well as 7 additional operators and 2 NUNE positions required for the service changes.

Station, electrification of the existing, and all future, transit buses and investment in additional buses to meet continued population growth. The total capital investment required over the next 10 years is \$253.9 million, the direct capital investment of the Future Ready Action Plan is only 15 per cent of this amount, or \$37.63 million for the purchase of 26 buses.

The capital funding sources include Development Charges (DCs), ICIP – Public Transit grants (ICIP), Provincial Gas Tax (PGT), tax funding from 100 Renewable Energy Reserve Fund (100RE), City Building Reserve Fund (CB), and Infrastructure Renewal Reserve Fund (IR). The DCs have been identified in the 2018 DC Background Study and are being collected to fund the system growth portion of the plan. The ICIP projects have been approved but final Transfer Payment Agreement completion is still pending and requires Council approval of this plan and direction to enter into the agreements. The PGT amounts are assumed to be consistent with 2021 amounts. The tax funding that is required is to support the goal of 100RE by converting all buses to electric over the next 15 plus years and the portions of the plan which are considered City Building. This funding has not been approved by Council and is identified in the budget request presented as part of the 2022 City Budget; \$850,000 is required to fund 100RE annually, which represents 0.32 percent property tax levy increase and \$716,100 is required annually for 10 years to fund City Building, which represents 0.27 percent property tax levy increase for 2022.

Table 21. The breakdown of capital funding sources for the 2022-2031 Transit capital investment budget.

Project Group	2022-2031 Budget	DC	ICIP	PGT	100 RE	CB	IR
Future Ready Action Plan	\$37.263 M	\$14.905 M	\$16.395 M	\$0.00 M	\$5.963 M	\$0.00 M	\$0.00 M
Transit Operations Facility	\$91.625 M	\$34.958 M	\$34.671 M	\$0.335 M	\$0.00 M	\$0.00 M	\$21.661 M
Bus Replacement	\$101.611 M	\$0.00 M	\$22.021 M	\$33.659 M	\$39.002 M	\$0.00 M	\$6.929 M
Guelph Central Station	\$7.76 M	\$0.00 M	\$4.95 M	\$0.00 M	\$0.00 M	\$2.31 M	\$0.500 M
Clair Maltby Station	\$5.00 M	\$5.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M
Equipment	\$5.94 M	\$0.050 M	\$0.00 M	\$0.00 M	\$0.00 M	\$4.508 M	\$1.382 M
Mobility	\$4.709 M	\$0.998 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$3.711 M
Total	\$253.908 M	\$55.911 M	\$78.037 M	\$33.994 M	\$44.965 M	\$6.818 M	\$34.183 M

The 10-year Future Ready Action Plan requires 26 buses with an expense of \$37.26 million. The 26 buses are funded through development charges (40%), subsidies (44%), and the 100 RE Reserve Fund (16%) in the 10-year capital plan. As noted above, there is a shortfall in 100 RE funding which requires a tax increase to cover.

The total property tax levy impact would be 1.26 percent increase for 2022 and 0.45 percent for 2023 to fund The Future Ready Action Plan as well as fund the capital requirements of the total 10-year capital investment.

Table 18. Number of buses required and cost for each year of the Future Ready Action Plan.

Year	Buses	Cost
2022	4	\$5.51 M
2023	2	\$2.76 M
2024	5	\$7.04 M
2025	4	\$5.74 M
2026	7	\$10.24 M
2027	4	\$5.97 M
2028	0	0
2029	0	0
2030	0	0
2031	0	0
Total	26	\$37.26 M

Needed FTEs

The Future Ready Action Plan requires 122 new full-time employees. This includes operators, supervisors, clerical support, mechanics, bus cleaners, and other NUME staff, such as a Project Manager of Planning, an intern, a trainer, an afternoon supervisor, and an assistant manager. The table below shows the annual breakdown of full-time employees needed.

Table 19. Annual breakdown of full-time employees needed for each year of the Future Ready Action Plan.

Year	FTEs
2022	17
2023	13
2024	16
2025	21
2026	17
2027	25
2028	12
2029	0
2030	0
2031	1
Total	122

The 2019 council-approved Service Review had a recommendation to stabilize the workforce to ensure the sustainable provision of current levels of service through base staffing increases by increasing the total number of operators by 19. Based on Transit best practices of operator to supervisor ratio, Transit requires one full-time supervisor in 2022 and one in 2023. In 2022, Guelph Transit requires a transit planner position that is responsible for studying, designing, evaluating, and implementing long-term strategies both for the Transit department and other City departments in relation to transit. This position is essential to ensure Guelph Transit is in alignment with all corporate strategies and plans. In 2025, a dedicated Trainer is required to provide licensing for Transit operators and on-going recertification. This position would be responsible for Transit's safety program, which includes audits, investigations, training, and development, and having a dedicated employee ensures safety is made a priority.

Table 20. Breakdown of full-time employees needed for 2022-2025, the budget, and property tax impact.

Position	2022	2023	2024	2025
Operator	3	3	3	0
Supervisor	1	1	0	0
Transit planner	1	0	0	0
Trainer	0	0	0	1
Clerical support	0.40	0	0	0
Total	5.40	4	3	1
Budget	\$547,000	\$397,000	\$286,000	\$134,000
Property Tax Impact	0.21%	0.14%	0.09%	0.04%

Future network trips & transfers analysis

In comparison to the January 2020 network, the future network analysis found that 93.24% of trips can be made by taking 1-2 buses, of which 86.12% can be made by taking 1 bus, meaning the future network offers a 7.47% increase in trips that can be made taking only 1-2 buses. Similarly, 91.10% of trips in the future network offer 5 or more routing options, which is an increase of 26.33% from the current network, and better frequencies will allow for quicker and more convenient trips. The future network also offers more routing options for 86.12% of trips than the current network.

These improvements will make Guelph Transit a more attractive mode of transportation for residents as it will offer fewer transfers, more direct trips, better frequencies, and more routing options than the existing network.

Future coverage

While the existing transit system covers most of the City within 400m of a transit stop, the Action Plan offers even more coverage than before. In particular, the Route 16 Southgate and Route 19 Hanlon Creek provide much needed fixed routing in the Hanlon Industrial Park and Hanlon Creek Business Park that is only serviced

by on-demand transit with the pre-Future Ready Action Plan network. Additionally, the non-serviced areas in the future network will be considered for on-demand transit stops.

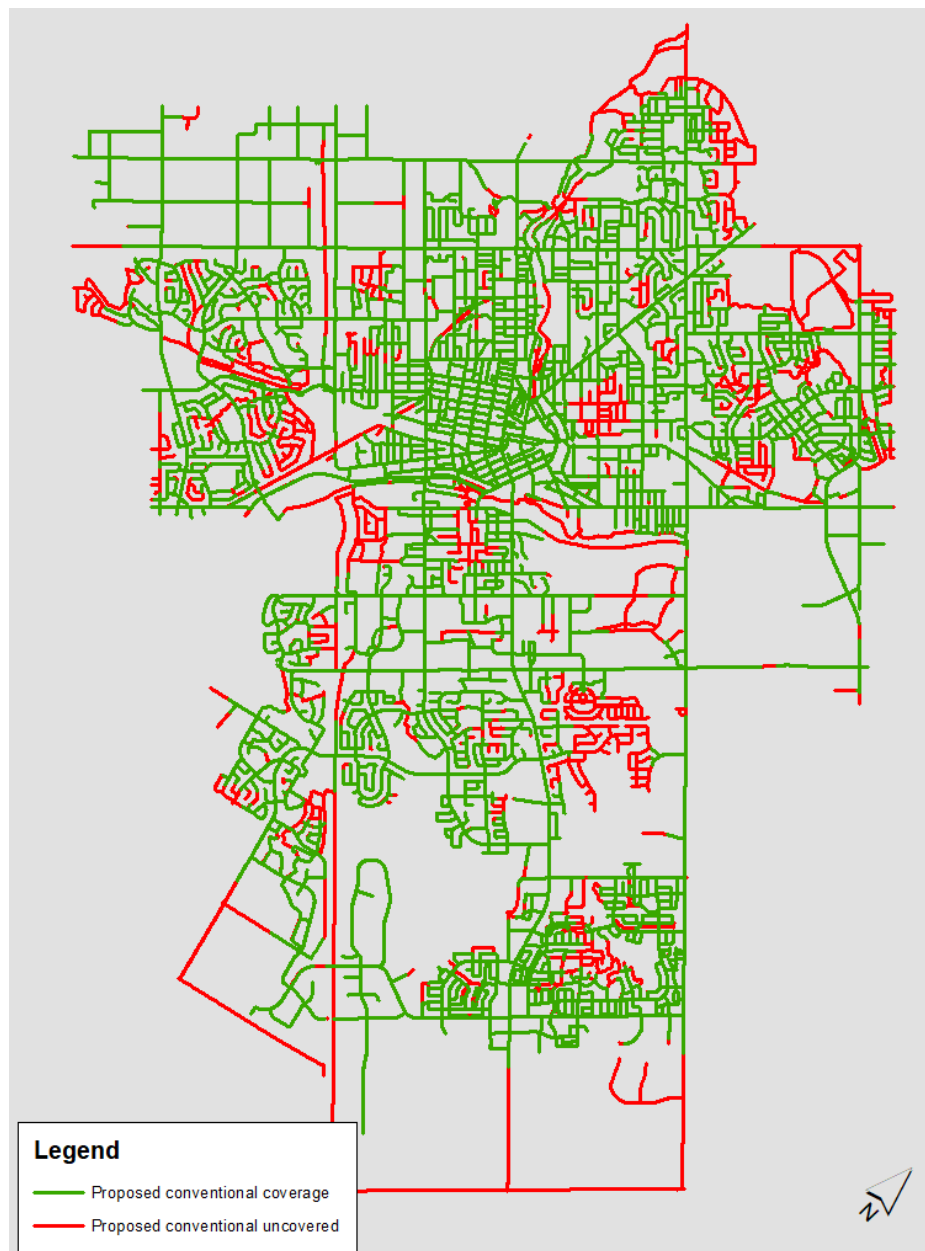


Figure 7. Areas of the future network within 400 metres of a conventional route bus stop (green) and those that are more than 400 metres from a bus stop (red).

Ridership and modal share

The COVID-19 pandemic has disrupted business for all transit agencies and presented additional challenges to achieving the City's medium and long-term strategic goals. The Future Ready Action Plan allows Guelph Transit to not only reach these goals but surpass them in some instances. It was estimated that transit

ridership in Guelph declined about 80% in 2020. As businesses have reopened, university students have returned, and some higher service levels have been reinstated, Guelph Transit has seen significant ridership increases. In late 2021, ridership had shown to be about 60% higher than the equivalent time period in 2020. This number will only grow over time as more businesses open and COVID-19 case numbers decline. However, some ridership will never be recovered even once the pandemic is over since some riders switched modes during the pandemic and will not return to transit. With this being said, this plan will recover some ridership lost during the COVID-19 pandemic and grow ridership beyond pre-pandemic levels. The only way to recover ridership is to attract new riders with improved service. This will aid in increasing the “Per cent change of non-auto mode share” key performance indicator under the Navigating our Future pillar of the Strategic Plan.

The 2018 Development Charges (DC) Study estimated that to achieve a 13% transit modal share by 2031, it would equate to an annual ridership of 9.19 million. The Future Ready Action Plan exceeds this number, achieving 9.76 million in annual ridership by 2031. A smaller fleet is also required by the end of the DC Study period ending in 2027. The purchase of 30 buses was proposed by 2027 in the DC Study, whereas only 26 buses will be purchased by 2027 in the Future Ready Action Plan. These 26 buses would also provide sufficient capacity to at least 2031. The updated DC Study will provide a better estimate of the required post-period bus requirements.

7. Infrastructure needs

To ensure the successful implementation of the Future Ready Action Plan network, there are infrastructure needs that must be met each year.

Every year of the plan will require new stops, in which each new stop needs, at minimum, a pole, blade sign, and infopost box before a routing change can be implemented. Some stops will receive concrete pads and shelters when they are introduced, while some will be deferred to later years. A complete list of necessary stop adjustments can be provided upon request.

In addition, several routes cannot be implemented until additional projects are completed, unless an alternative is provided. These projects, both internal and external to Guelph Transit, are outlined below. Furthermore, with the directive of electrifying the Transit fleet, and with the increased number of buses in the fleet, the construction of the new Operations Campus on Dunlop is necessary for implementation of the plan.

7.1 Infrastructure implementation schedule

Year 1 (2022)

The only infrastructure required in year 1 is new stops, concrete pads, and shelters.

Year 2 (2023)

In addition to new stops, Transit will require the expansion of the cul-de-sac at the end of Southgate Drive to provide a sufficient turn radius for the implementation of Route 16 Southgate. As is, the cul-de-sac does not provide the adequate space needed for the turnaround that is part of this route. The exact cost has not been determined and will be subject to a feasibility study prior to construction to ensure all engineering requirements are met. It is estimated that the cost of this expansion would be covered by yearly stop improvement budgets.



Figure 8. Cul-de-sac on Southgate Drive.

Year 3 (2024)

The only infrastructure required in year 3 is new stops, concrete pads, and shelters. The implementation of Route 98 Speedvale is dependent on the completion of construction on Speedvale Avenue. If the construction is not completed by year 3, a modified version of the route will run temporarily.

Year 4 (2025)

The only infrastructure required in year 4 is new stops, concrete pads, and shelters. As Route 22 Curtis is designed to account for the new Highway 6 extension to the new Highway 7, no changes will be required to accommodate this route in the future.

Year 5 (2026)

Aside from new stops, pads, and shelters, the implementation of several routes depends on the completion of additional infrastructure projects.

Route 9 Waterloo Silvercreek is dependent on the connection of Silvercreek Parkway North with Silvercreek Parkway South. If this connection is not completed by year 5, Route 9 will take an alternate route until the connection is built, travelling along Waterloo Avenue to Wellington Street West to Hanlon Parkway to Paisley Road to continue along Silvercreek Parkway North.



Figure 9. Red circle identifying where Silvercreek Pkwy needs to be connected to operate Route 9 (left), the future approved routing in pink, and the temporary alternative routing in green (right).

Route 97 Edinburgh is dependent on the completed construction of Poppy Drive West as a turnaround point. If this road is not constructed by year 5, Route 97 will take an alternate route until the connection is built, travelling along Clair Road West instead.

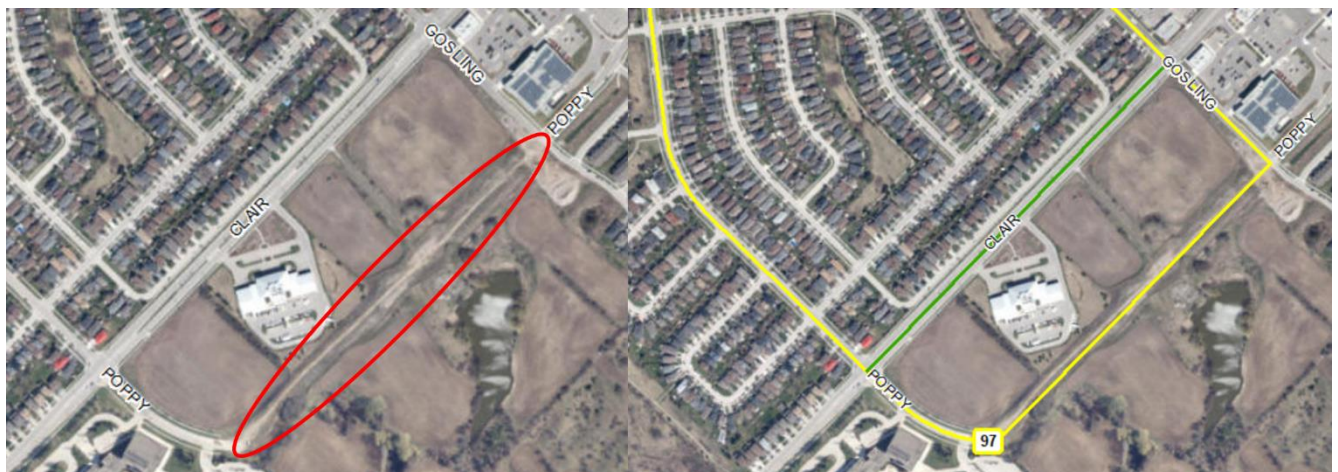


Figure 10. Red oval identifying where Poppy Dr W needs to be constructed to operate Route 97 (left), the future approved routing in yellow, and the temporary alternative routing in green (right).

Woodlawn Smart Centres is set to become a larger hub as part of the Future Ready Action Plan with six routes (routes 3, 9, 22, 96, 97, and 98) designed to start and end at this location. The existing infrastructure at Woodlawn Smart Centres consists of 4 platforms and will need to be increased to a minimum of 6 platforms to accommodate this plan. Discussions are required with Smart Centres to determine the plans for increasing the number of platforms.



Figure 11. Where the existing platforms at Woodlawn Smart Centres are located.

Year 6 (2027)

Aside from new stops, pads, and shelters, the implementation of Route 4 York and Route 24 Stone depends on the construction of the new Transit Operations campus. Both routes will service this location, in which Route 24 will use the campus as a turnaround point. If this road is not constructed by year 6, the Route 4 extension will be deferred, but the hours will still be expanded to interline with Route 10 Paisley. Additionally, it is critical that Route 24 be introduced in year 6 to ensure service on Stone Road between the University Centre and Victoria Road is not lost when Route 96 is introduced. As such, alternative routing for Route 24 to turnaround would be established, possibly travelling along Watson Parkway South to Watson Road South to Taggart Street to Watson Parkway South to get back to Stone Road East.



Figure 12. Red circle identifying where the Transit Operations campus is to be built (left) that Route 24, in blue, is designed to turnaround at as well as the alternative temporary routing in green (right).

Year 7 (2028)

The only infrastructure required in year 7 is new stops and concrete pads.

Year 8 (2029)

Year 8 will be used to catch up on existing bus stops needing concrete pads and shelters.

Year 9 (2030)

Year 9 will be used to catch up on existing bus stops needing concrete pads and shelters.

Year 10 (2031)

The Clair Maltby Transit Terminal is set to be completed in year 10. Five routes (routes 5, 16, 19, 96, and 99) will be extended to the hub in year 10 as well as the routing of Route 97 Edinburgh will be altered. If the terminal is not completed by this time, these routes will remain unchanged until it is constructed.

7.2 Additional infrastructure

Beyond the required infrastructure for implementing this plan, the updated Transportation Master Plan provides recommendations on locations for transit priority measures. These measures will assist in expediting transit trips and ensuring on-time performance and are, therefore, an important piece of this plan. When possible, the recommended transit priority measures will be implemented to support the Guelph Transit Future Ready Action Plan.

8. Looking to the future

While the Future Ready Action Plan goes to 2031, the goal of creating a connected, efficient, and convenient service does not end there. Beyond 2031, Guelph Transit

will continue to expand and modify service where there is demand to continue meeting the needs of residents. This includes adding frequency to busy routes, expanding the on-demand service, and introducing new routes to service growing areas of the community. An example of this is the new community route, Route 70 Maltby, which will be implemented once the Clair Maltby neighbourhood has been constructed to provide transit service to future residents of this area. This route will be transitioned to a conventional route when the demand warrants it.

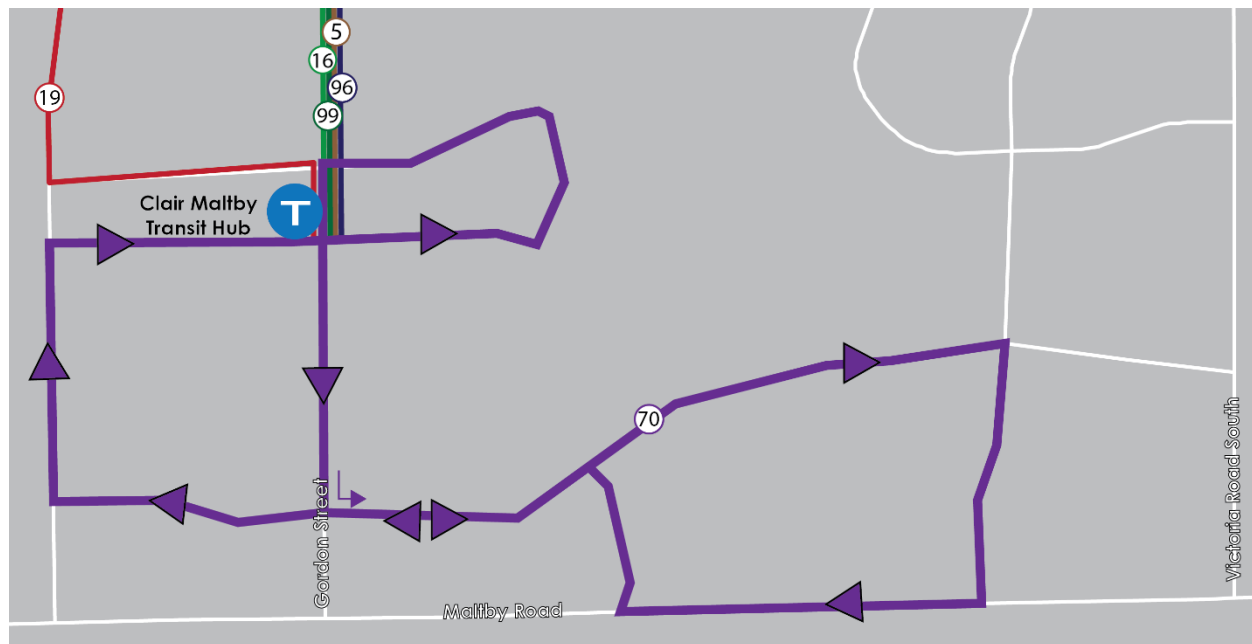


Figure 13. Future Route 70 Maltby to introduce when the Clair Maltby neighbourhood is built up.

Numerous projects outside the Action Plan will be implemented over the next several years to improve operations and to meet goals of the Strategic Plan. These include a comprehensive Fare Strategy and the Guelph Transit Master Plan, electrification of the fleet, and numerous special projects funded by the Investing in Canada Infrastructure Program (ICIP).

Additionally, Guelph Transit will continue to keep up with emerging transit technologies to obtain the best data for route monitoring and decision-making and to keep the system updated and attractive to customers.

9. Next steps

Guelph City Council moved the following recommendations in November 2021.

- 1. That the financial implications resulting from PS2021-335 titled Guelph Transit Action Plan – Route Review Recommended Plan be referred to the 2022 and 2023 budget deliberations on December 2, 2021.**

2. That Council approve staff's recommendation to proceed with the Future Ready Plan (Staff Recommended Plan) as outlined in Attachment 1, to begin implementation in spring 2022, pending budget approval.
3. That Council approve the Guelph Transit Service Guidelines as outlined in Attachment 1, Section 6.
4. That the R/C ratio targets for fare increases from the 2019 Transit Business Service Review be paused until the completion of the upcoming Transit Fare Strategy.
5. That staff execute the Investing in Canada Infrastructure Program (ICIP): Public Transit Stream Transfer Payment Agreement (TPA) with the Province of Ontario in alignment with the above Route Review Recommended Plan.

An additional motion was moved by Council directing staff on interregional transit, as follows.

6. That staff be directed to explore potential partnerships and/or secure grants to help fund interregional transit and report back to City Council with the findings prior to the design and implementation of interregional transit.

The Guelph Transit Future Ready Action Plan was also approved at budget deliberations on December 2, 2022.

As such, the network revitalization will occur over the next 10 years and began May 1, 2022.

9.1 Service implementation steps

The next steps towards service implementation will be to create a detailed service implementation plan that includes:

- Testing and confirming the safety and run times of routes.
 - Much of this has already been completed.
- Creating a bus stop and infrastructure change plan that details what stops and infrastructure need to be added, altered, and/or removed each year.
- Creating a communications and promotions plan outlining how changes will be communicated to public.
- Developing revised route maps and trip schedules for new and changed routes.
- Undertaking implementation activities including:
 - Installing new stop assets and infrastructure each year,
 - Purchasing the needed buses and hiring operators for each year,
 - Updating internal materials for transit staff, and
 - Updating external materials for the website and social media.

9.2 Route monitoring process

Once the implementation of the new transit network has begun, Transit staff will be closely monitoring service performance. The success of implemented routes will be

monitored and modified using the available Automatic Passenger Counter (APC) and fare box data and guided by the Transit Service Standards. A larger annual service review will be conducted, along with regular monthly reviews and reviews at the request of the public.

Staff will be continuing to collect public feedback on an ongoing basis to ensure the plan stays relevant and small-scale items, like stop placement, can be modified to make the system as efficient and convenient as possible.

The plan implementation will also be monitored to ensure the plan stays on track or is modified for a faster or slower implementation if required by uncontrollable factors, such as COVID-19 or delayed construction.

9.3 Conclusions

The City of Guelph is rapidly changing and growing, with pressure to accommodate a significantly larger population within the next 30 years. A connected and effective transportation system is necessary for meeting the needs of current and future residents, in which a viable transit system is a key component. The existing transit network is limited in its ability to not only service a growing population, but to meet the City's strategic goals, such as modal share and sustainability. The Future Ready Action Plan outlines the actions the City will take to revitalize its transit network into a convenient, attractive, and efficient transit system that will grow with the City.

Appendix A: Engagement results summary

1. Introduction

Guelph Transit undertook a comprehensive review of the City of Guelph's Transit System to assess what works well and where improvements are needed. The outcome of this review resulted in an initial future transit network that aimed to provide more direct and convenient service to better meet the needs of current and future Guelph residents. This proposed network was presented to the public to gather feedback from residents and later was refined to create the Future Ready Action Plan.

2. Purpose and scope

The objective of the first phase of the engagement campaign was to obtain feedback from Guelph residents and other stakeholders on how they see the transit network in the future.

The objective of the second phase of the public engagement campaign was to obtain feedback from Guelph residents on the proposed future network, including how the plan will meet, or will not meet, residents' needs, what they see as improvements and as problems, and if there was anything missed or not considered in the review.

3. Method

3.1 Phase 1 method

The first phase of engagement involved internal and external consultation. Throughout 2020, internal focus groups were held with the Economic Development, Planning, Transportation, and Engineering departments. Focus groups were also conducted with the Transit Advisory Committee (TAC) and with bus operators and transit supervisors. Surveys were conducted with major employers in Guelph on their transit needs. Random mailings were sent to 555 households in Guelph requesting residents complete a survey online, by mail, or by phone. The survey was open between September 14 and September 25, 2020, on haveyoursay.guelph.ca. Closed answer questions were also periodically posted on the City of Guelph Facebook and Twitter pages for one day at a time that mirrored the survey questions between September 14 and September 25, 2020. In-person pop-ups were initially planned for public engagement in March 2020 but were cancelled due to COVID-19.

3.2 Phase 2 method

The public engagement campaign for the proposed future network ran from May 25 to June 20, 2021, and used haveyoursay.guelph.ca as the main source for gathering feedback. While limited to virtual methods of public engagement due to

the ongoing COVID-19 pandemic, various methods through this website were used in gathering feedback with the goal of reaching a wide range of citizens to ensure community representation. The following describes each element of the website that was open for gathering public feedback.

Transit network survey

A survey was created to understand citizens' concerns and opinions on the proposed transit network's routing, service hours, and timing of implementation. The survey was available online on the web page for the duration of the public engagement campaign. Citizens had the option to call to take the survey via phone as well. These responses were used in the refinement of the network concept.

Question and answer page

A FAQs page of commonly anticipated questions with answers was uploaded to the route review web page. In the case a question could not be answered via the FAQs page, a page was available for the public to ask questions on where we could provide a public answer. These responses were used in the refinement of the network concept.

Live town halls

Two live virtual town halls were held on the evenings of June 8th and June 16th, 2021, to inform citizens of the proposed changes and to collect and respond to feedback. A presentation was given followed by an open question and answer period for all attendees. All questions and comments were recorded and used in the refinement of the network concept.

Additional input

A phone number and email address were made public for citizens to contact if they had specific questions and/or comments about the proposed network. These responses were recorded and used in the refinement of the network concept.

3.3 Phase 2 supporting advertising, media, and promotion

The public engagement campaign was promoted through a variety of methods, including:

- News releases
- Advertising on local radio stations
- Promotion on the City's and Transit's Facebook feeds
- Posters at Guelph Central Station
- Door hangers in areas where there will be new service
- Email correspondence with the University of Guelph to promote the campaign to staff and students

4. Results

4.1 Phase 1 engagement

Respondents

The public engagement campaign for phase 1 resulted in 11 responses from employers, 38 responses from the mail out, 197 responses for one question on

Twitter, 297 responses for the same question on Facebook, and an additional 45 responses for a second question on Twitter. All results were combined. The following provides the results of these methods.

Survey responses

The mail-out survey for residents asked 3 questions. One of these questions was also asked on Facebook, and 2 of these questions were asked on Twitter.

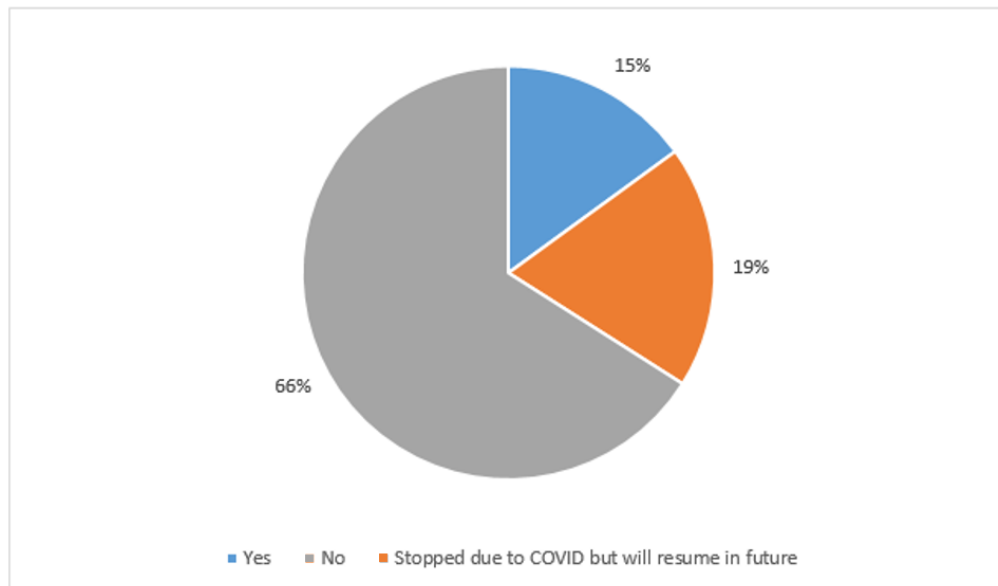


Figure 14. Do you currently use Guelph Transit to get around Guelph?

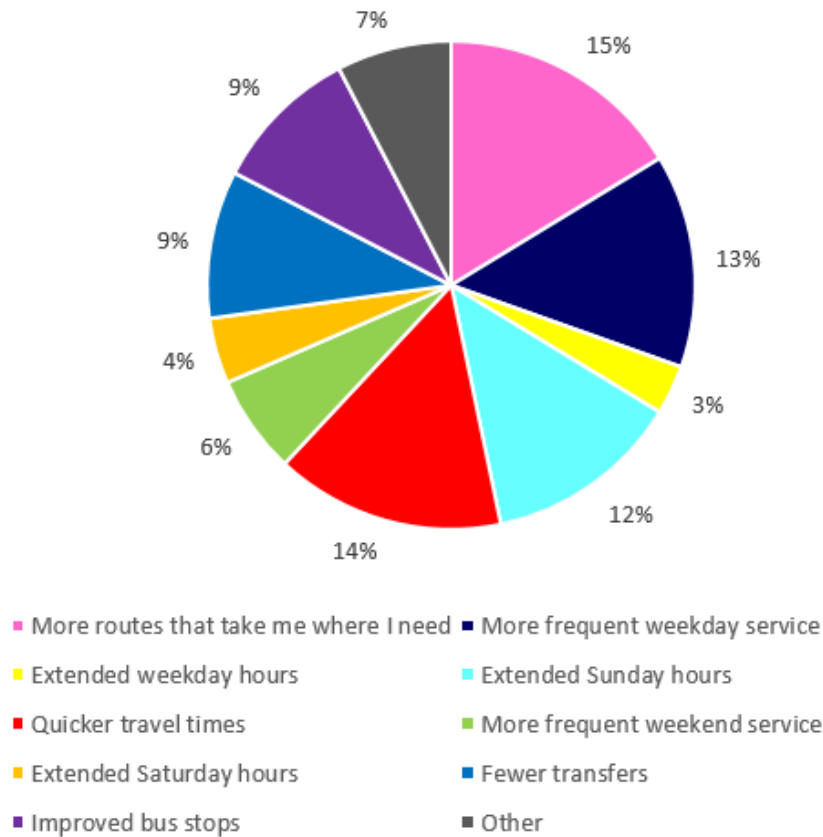


Figure 15. What would encourage you to take transit more often or over another mode of transportation?

Lastly, respondents were asked to identify trips that they would like to complete using transit, even if not currently possible. More than 60 unique origin-destination pairs were identified by respondents.

The shortest route to travel between these locations was drawn, and overlapping routes were shown in bolder lines. As shown in

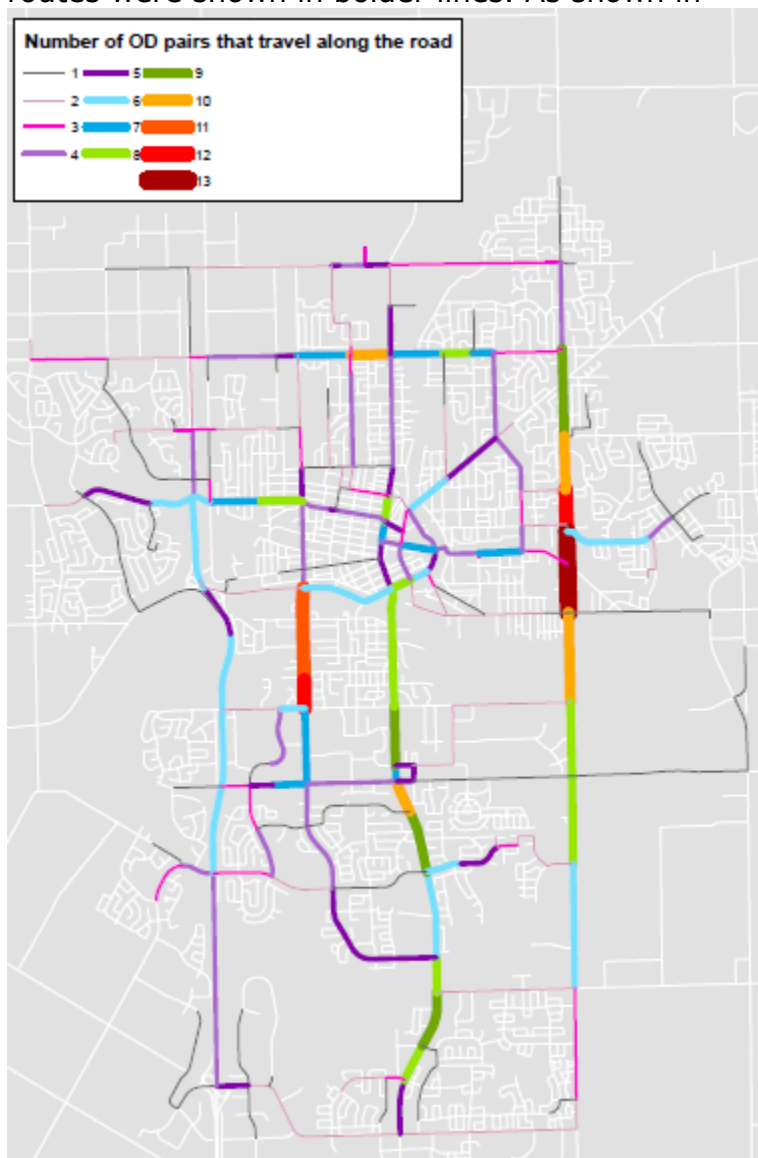


Figure 16, there are several trips that would be completed using Victoria Road, Edinburgh Road, Speedvale Avenue, Gordon Street, Stone Road, and Paisley Road.

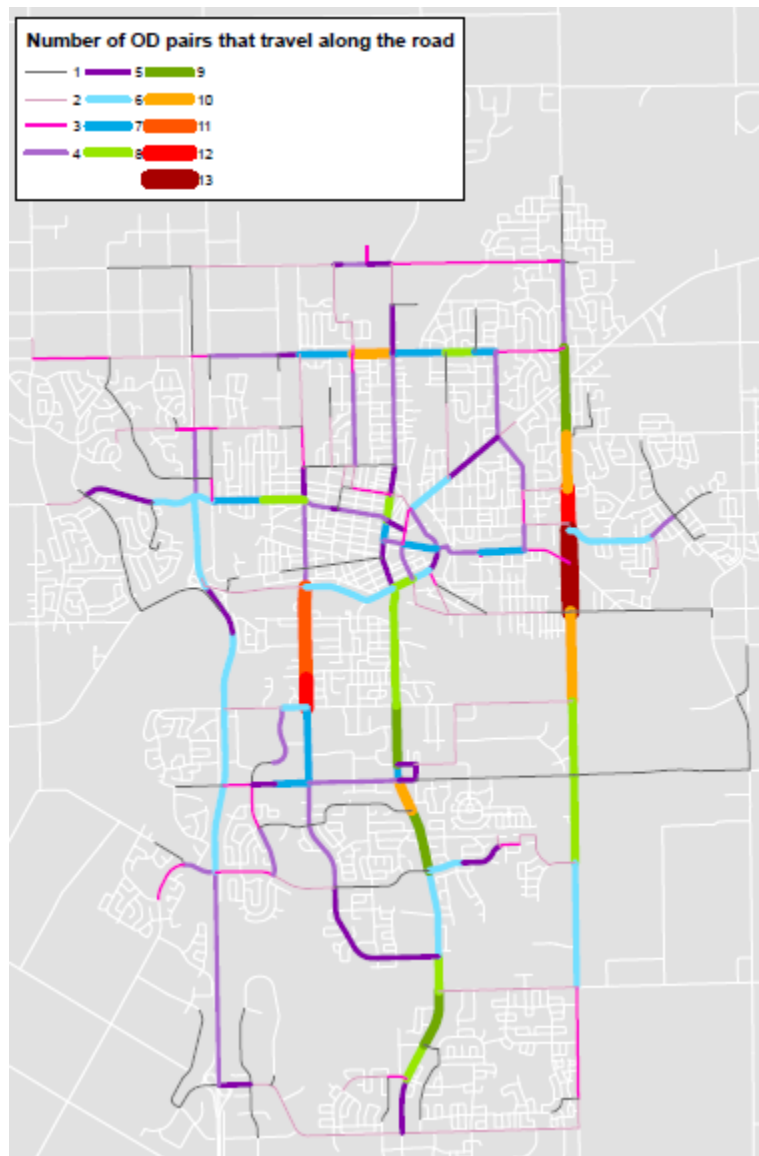


Figure 16. Map of respondents' desired trips using transit.

4.2 Phase 2 engagement

Respondents

The public engagement campaign resulted in 169 survey responses, 25+ town hall participants, and 7 email responses. The detailed results from all methods were key in refining the route concepts. The following provides highlights of responses from these methods.

Survey responses

Of those that responded to the survey, approximately 60% are transit customers who regularly or on occasion take transit, including those who stopped taking transit due to the pandemic but will resume post-pandemic. The remaining 40% are assumed to be non-transit customers as they never, or very rarely, take transit.

Obtaining feedback from a range of transit users is important in understanding the community needs and how to encourage non-transit customers to take transit.

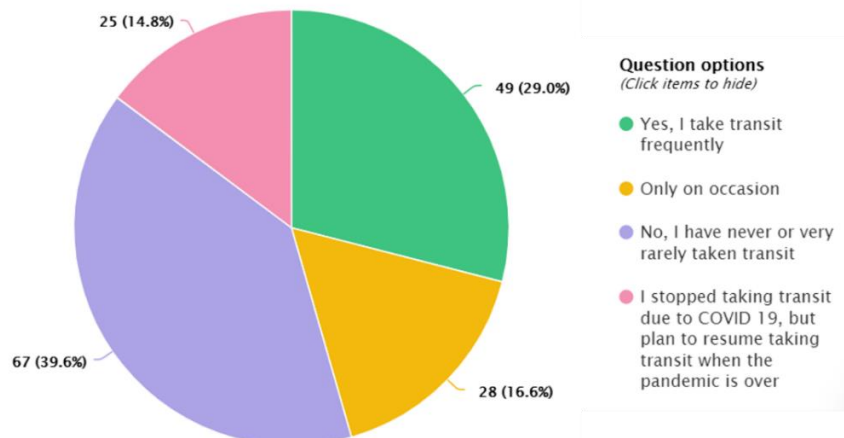


Figure 17. Do you currently use Guelph Transit to get around the city?

Respondents were asked, “Are there any areas not serviced by a bus within 400-metres of where you or others you know may wish to travel?” Approximately 83% said, “No, the proposed areas look to cover important destinations,” while the remaining 17% said, “Yes, there are gaps in the serviced areas.” Of those who said there were gaps, the most common locations stated includes Speedvale Avenue at Eramosa Road, the northeast end of the city, the east end to the University of Guelph, Guelph Lake Sports Field, Alma Street, the Arboretum, Macalister Boulevard, and Stephanie Drive.

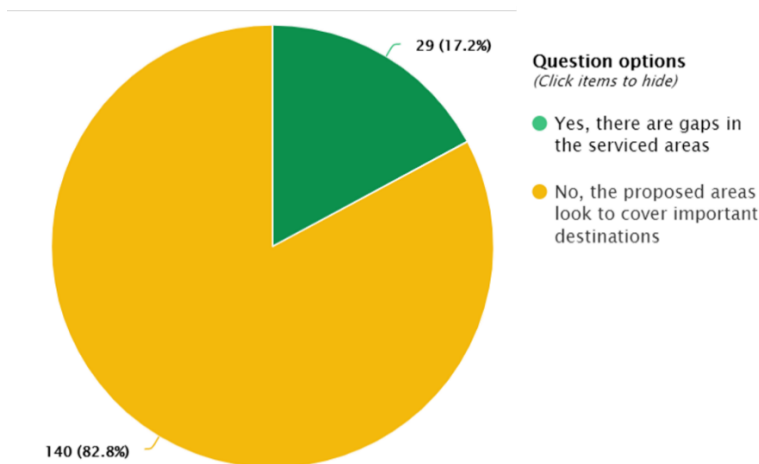


Figure 18. Are there any areas not serviced by a bus within 400-metres of where you or others you know may wish to travel?

In response to the question, “Are there places you wish to travel within Guelph that are not serviced on the days or times you would wish to travel there?” approximately 78% of respondents said, “No.” Of the 22% that said “Yes,” the most common responses included needing longer Sunday service, longer

morning/evening service, better than 30-minute frequencies, and service that better connects with GO trains and buses in the evenings.

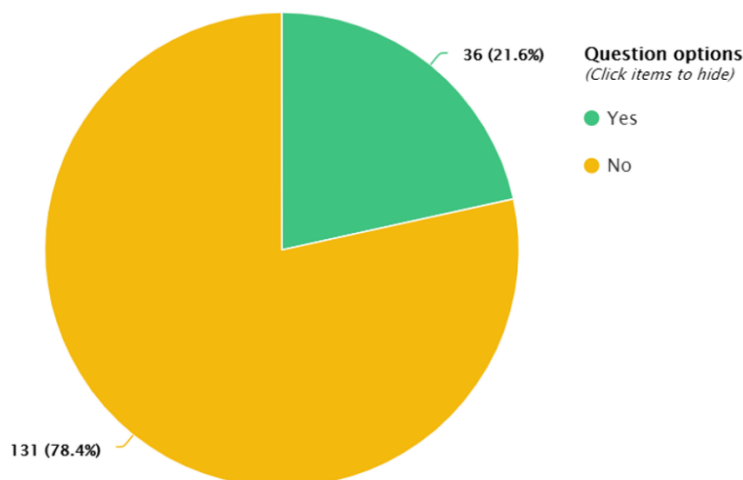


Figure 19. Are there places you wish to travel within Guelph that are not serviced on the days or times you would wish to travel there?

When asked, "Are the places you might wish to travel to reachable by taking three or fewer buses (2 or fewer transfers)?" 79% of respondents said, "Yes." Of the remaining 21% that said, "No, there are places I might wish to travel to that would take more than three busses," there were not enough details on origins and destinations provided by respondents to use this information in refining the network concept.

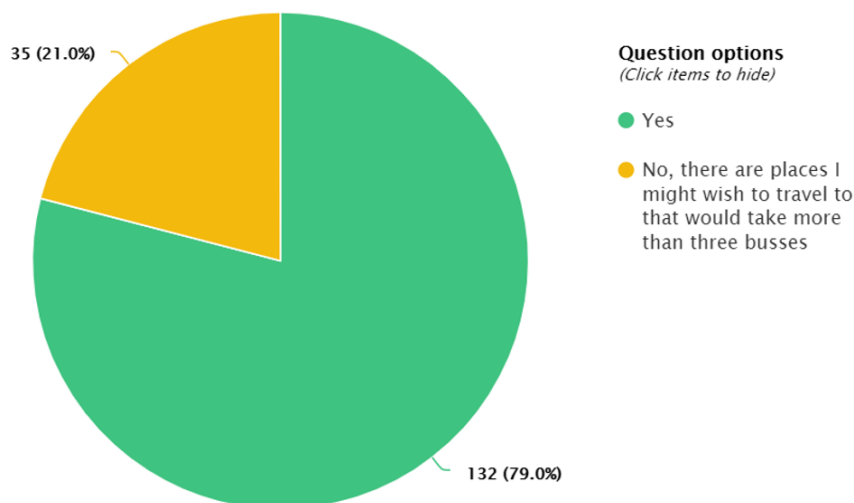


Figure 20. Are the places you might wish to travel to reachable by taking three or fewer buses (2 or fewer transfers)?

After reviewing the route maps and interactive map, respondents were asked, "Are there any proposed routes you are strongly in favour of?" The most favoured routes were:

- Route 96 Victoria
- Route 97 Edinburgh
- Route 98 Speedvale
- Route 99 Mainline
- Route 3 Westmount
- Route 12 General Hospital
- Route 13/23 Eastview Watson/ Watson Eastview
- Route 16 Southgate
- Route 19 Hanlon Creek
- Route 20 Wellington Imperial

Others that were mentioned as favoured routes include:

- Route 8 Stone Road Mall
- Route 9 Waterloo Silvercreek
- Route 10 Paisley
- Route 14 Grange
- Route 15/25 Stone College/ College Stone
- Route 24 Stone
- Route 50U Scottsdale
- Route 59U Gordon Express

The key reasoning provided by respondents as to why these routes are favoured is because they will provide better connections between desired destinations, they have more direct routing, and they have better frequency.

Respondents were then asked, "Are there any proposed routes you are strongly opposed to?" The most opposed to routes were:

- Route 7 Kortright Downey (specifically on Sweeney Drive to Zaduk Place to Macalister Boulevard)
- Route 19 Hanlon Creek (specifically on Teal Drive)

Others that were mentioned as opposed to routes include:

- Route 6 Ironwood
- Route 9 Waterloo Silvercreek
- Route 12 General Hospital
- Route 20 Wellington Imperial
- Route 99 Mainline
- On-Demand Bus

The key reasoning provided by respondents as to why they are opposed to these routes is due to increased traffic and noise in their neighbourhoods, underutilization of specific routes, less direct service to desired destinations, and decreased evening frequency.

In response to the question, "Will the proposed changes influence if you will take the bus?" 71.5% said they do not know if the proposed changes will influence them to take the bus or they do not expect any changes in their decision to take the bus. 19% of respondents said they expect to take the bus more frequently, which was

commonly due to the proposed network having better frequency, providing more routing options, and/or making it easier to get to places with more direct service and fewer transfers. The remaining 9.5% said they expect to take the bus less frequently due to their regular trips now taking longer, having to make more transfers, and/or not having enough frequency.

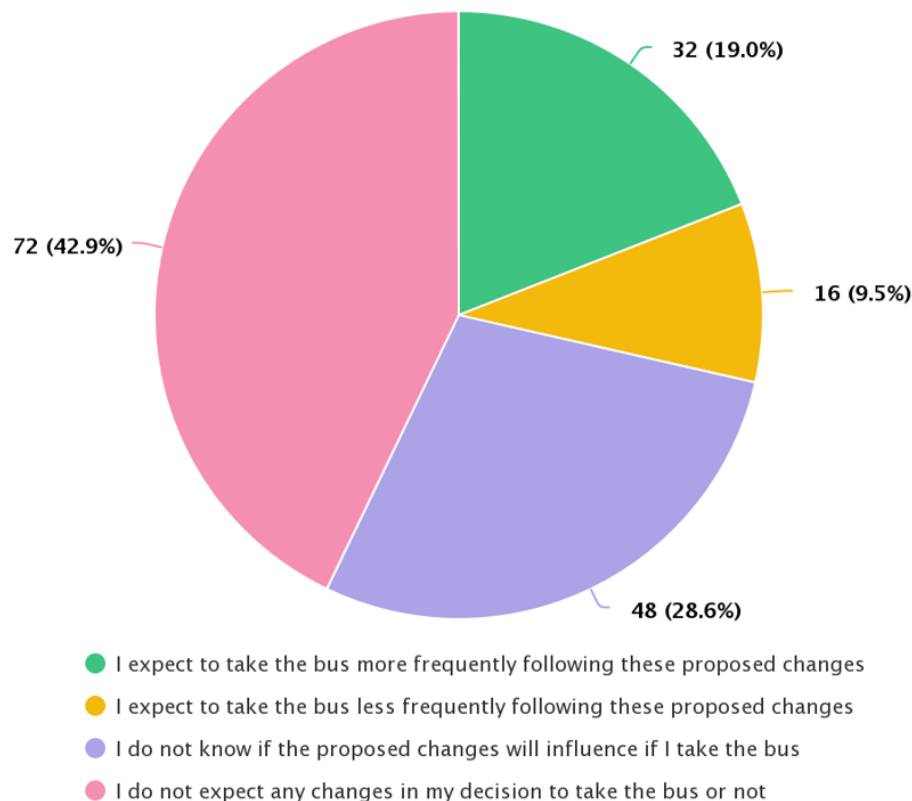


Figure 21. Will the proposed changes influence if you will take the bus?

When asked, “Are you interested in any changes to the timing or order of implementing the proposed transit system?” 36.1% of respondents did not have an opinion and 8.3% agreed with the proposed order and timing.

28.4% said the order is fine, but the plan should be implemented in less than 10 years. These respondents commonly expressed concerns that 10 years was too long, and a 2–7-year plan was more appropriate, with 5 years being the most requested. In comparison, 3.0% said that the order is fine, but the plan should be implemented in more than 10 years. These respondents expressed concerns with having buses in their neighbourhoods and suggested prolonging the implementation to a 20-year plan.

An additional 11.2% of respondents said the amount of time and order should be different. There was a range of reasoning provided, including the need to speed up the implementation of core routes, 10 years being too long for implementation, and concerns over having buses in certain neighbourhoods. 2.4% wanted the order of

implementation to be different over 10 years in which only one respondent provided details requesting that Route 12 be implemented sooner.

The remaining 10.7% selected “other” and explained their selection. These respondents had a range of reasoning, such as expressing frustrations over how confusing these changes will be, concerns over implementing routes on Kortright Road East and Teal Drive, and concerns over lack of frequency and Sunday service hours in the proposed plans.

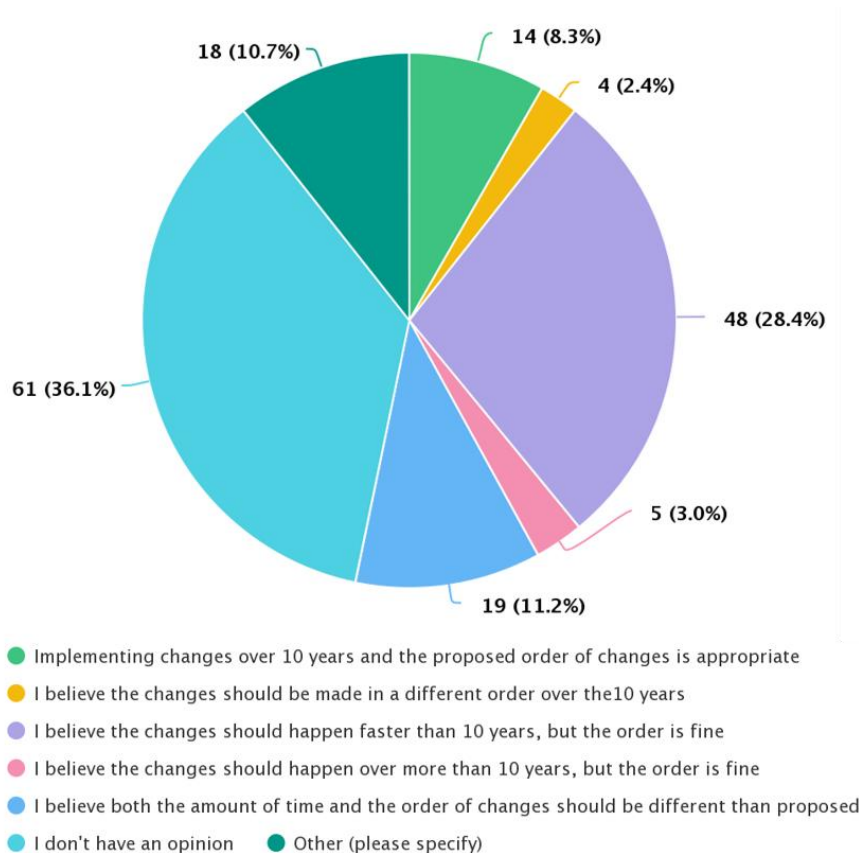


Figure 22. Are you interested in any changes to the timing or order of implementing the proposed transit system?

Email responses

In addition to the survey, email responses were received by citizens with concerns on specific aspects of the proposed plan. These concerns included:

- The removal of service from Marksam Road
- The introduction of service on Teal Drive
- The continuation of service along Ironwood Road
- The introduction of service on Kortright Road East, Sweeney Drive, Zaduk Place, and MacAlister Boulevard
- The need for route frequencies better than 30 minutes
- The lack of connection with GO Transit service, particularly in the evenings

Town hall questions/feedback

After the information was presented at both town halls, a variety of questions and comments came up that were organized into the following categories: routing, direct trip connections, service times, implementation timing, connecting to the Transportation Master Plan, consultation efforts, infrastructure and assets, and transfers.

Routing

- Concerns over the Route 7 Kortright Downey extension onto Kortright Road East, Sweeney Drive, Zaduk Place, and Macalister Boulevard
- Concerns over the new Route 19 Hanlon Creek introduction onto Teal Drive
- Concerns over Route 20 Northwest Industrial and Route 22 Curtis as separate routes rather than one large industrial route

Connections

- Ensuring connections with Community Living Guelph Wellington at Speedvale Avenue and Royal Road
- Interlining routes to eliminate additional transfers
- Interest in an east-west crosstown route running through downtown
- Improving connections with GO Transit
- Eliminating one-way loops and having more bidirectional service

Service times

- Concerns over Route 19 Hanlon Creek not servicing night shift changes
- Concerns over limited Sunday service hours

Implementation timing

- Expediting the timeline of splitting the current Route 20 into 3 routes
- Shortening of the plan to 6-9 years instead of 10 years

Connecting to the Transportation Master Plan

- Concerns over the effect of new routes on existing traffic calming measures
- Providing more details on the connection with the Transportation Master Plan
- Encouraging non-riders to take transit

Consultation efforts

- Ensuring consultation of major employers
- Ensuring consultation of university students

Infrastructure & assets

- Using transit priority measures
- Electrifying vehicles
- Ensuring appropriate stop spacing

Transfers

- Increasing transfer time
- Changing transfers to QR codes from bar codes
- Providing opportunities for mid-route transfers

4.3 Phase 2 changes from feedback

Based on the feedback received, the proposed network was reassessed and refined to better meet the needs of the public and address areas of concern. The following are the resulting updates:

- Route 20 Wellington Imperial modified to include Marksam Road and loop back to connect to Conestoga College
- Route 22 Curtis expanded to cover more of the northwest industrial employment area
- Route 7 Kortright Downey to be maintained as is, with no service expansions as initially proposed on Kortright Road East or Pheasant Run
 - This will reduce travel times along Route 7 to the university as well
- Route 19 Hanlon Creek modified as to not service Teal Drive and instead continue along Downey Road, Kortright Road, the Hanlon Parkway, and Stone Road to end at Stone Road Mall
 - There is the possibility to service Woodland Glen via flex routing
- Route 98 Speedvale modified to service the Speedvale Ave at Eramosa Road intersection to provide more options to the northeast neighbourhoods
- Route 56U Colonial modified to run year-round instead of only from September to May to ensure regular service to the University from the south end
- Introduce new Route 53U Eastview to provide direct service from the east end to the university during peak hours
- Provide new on-demand stops in areas that do not have a stop within 400 metres
 - These stops include College Avenue at the Arboretum, Eastview Park, and Macalister Boulevard
- Increased frequency and longer Sunday service hours provided through the various package options presented

Appendix B: Comparative transit network case studies

Questionnaires were sent to transit agencies of cities with similar sizes, with similar situations, and with recent major changes to their transit networks. The following details the responses that were received from these agencies.

1. Burlington Transit

As of 2016, the City of Burlington had a population of 183,314 and, much like Guelph, continues to rapidly grow. Burlington Transit began to analyze their network for areas of improvement in May 2018 after needing to initially redesign some routes to move from the north side to the south side of the Burlington GO bus loop for operational purposes. There was also a desire to increase ridership, which a more efficient and convenient network would spur.

The analysis consisted of evaluating each route based on three main criteria: level of ridership, productivity, and how much of the route's alignment overlapped with another route. This analysis resulted in the following key priorities for the redesigned network:

- Reduce route duplication
- Move to a grid network structure
- Improve travel time through more direct routes that follow Burlington's arterial roads
- Eliminate poorly performing routes

The implementation of the redesigned network started in September 2019. Prior to COVID-19, there was an increase in ridership once the new network started and has generally been successful. There was some initial push back from customers who had to switch routes because of the change and frequency is still not at the desired levels due to resource constraints.

The next steps will be to build up the frequency of the grid network as resources become available and to explore alternative service delivery for areas and periods of low demand.

2. Kingston Transit

The City of Kingston had a population of 123,798 in 2016 and is expected to continually grow over the coming decades. The network redesign project was initiated by Council in 2010 after receiving many complaints that the existing transit system was not reliable enough and did not provide frequent enough service. Council set an aggressive modal split target of 15% of trips by transit and 20% of trips by active transportation by 2034.

The review began in 2010 but is an ongoing process. Staff aimed to start the redesign with small changes to stay within the existing budget and then build a larger base network over time. The analysis consisted of assessing current routes and where gaps existed. The results of the initial analysis identified the following:

- There was a clear gap across the top of the City's east-west corridor
- There were gaps in servicing low income and high needs areas
- The current network was very fragmented

The first express route was introduced in 2013, running every 30 minutes, 7 days a week. The positive response to this indicated the network needed to be redesigned to reflect this model.

A larger analysis was conducted to create a vision based on the identified needs of the population from public feedback, origin-destination data, and socio-economic factors of different geographic areas within the city. A base network was developed in collaboration with the University of Waterloo that resulted in a system of direct express routes, with limited stops and high frequency, supported by local routes.

As a result of these redesigns and continuous support from Council, ridership has drastically increased, and every main artery has a guaranteed frequency of at least every 15 minutes (pre-COVID).

The next steps will be to further increase frequency on the newest express routes and to implement transit priority infrastructure to expedite transit trips.

3. GOVA (Greater Sudbury) Transit

In 2016, the City of Sudbury had a population of 161,531 and continues to see growth, albeit slower than Guelph. The route review that was conducted by GOVA Transit, formerly Greater Sudbury Transit, was long overdue and only became possible with funding from the federal government's Public Transit Infrastructure Fund program. Prior to this, the system had been expected to expand to new areas without additional cycle time and was not feasible with the given resources.

Prior to conducting the review, the following key priorities were identified:

- Make the service easier to understand, more direct, and more reliable
- Improve the frequency of services
- Improve the coordination of services to outlying areas
- Implement a more integrated approach to accessible service
- Implement complementing infrastructure, fare, customer information, and policy improvements
- Ensure extensive public engagement, including operators

The route review began in May 2017 with initial public feedback, followed by the analysis of the existing network by transit staff and consultants. A plan was developed based on the feedback and analysis; then more public feedback was sought to help further refine the plan to meet customers' needs. A finalized budget and plan were completed and presented to council in early 2019.

There has been an overall positive response to the action plan and network redesign from the public. GOVA Transit has seen an increase in ridership (pre-COVID) and on time performance, and staff continue to monitor and tweak routes as needed.

The next steps will be to implement on demand service and explore possible future changes, such as a BRT line and fleet electrification.

4. Transit Windsor

The City of Windsor had a population of 217,188 in 2016 and continues to rapidly grow, much like Guelph. Transit Windsor had not created a Transit Master Plan since 2006 and the transit system itself had remained relatively the same since 1979, while the city itself had not. Funding from the federal government's Public Transit Infrastructure Fund program and the Investing in Canada Infrastructure Program allowed the complete redesign of the transit system.

The service delivery review was an 18-month project that relied on consultants to conduct two rounds of public engagement: the first to gather initial feedback on the

existing transit system and the second to gather feedback on the proposed routes and service levels. The analysis of the existing network was also conducted by the consultant, followed by the creation of the proposed network, using the public feedback, origin-destination data, and ridership data.

The new Transit Master Plan was completed and approved by council in late 2019. It consists of an 8-year plan that would begin the majority of route change implementation in year 3 after hiring the needed staff and purchasing equipment to prepare for providing expanded service.

As year 1 of the plan is 2021, the next steps will be to continue following and monitoring the implementation of the plan to tweak as needed.

Appendix C: Trips and transfers analysis

1. Analysis methodology

For every district, an analysis of routing options for common trips was conducted for the current (2020) and future (2031) networks. An example taken from the district 1 analyses is outlined below to illustrate the methodology used. The full analyses are available upon request.

1.1 Analysis methodology example District 1

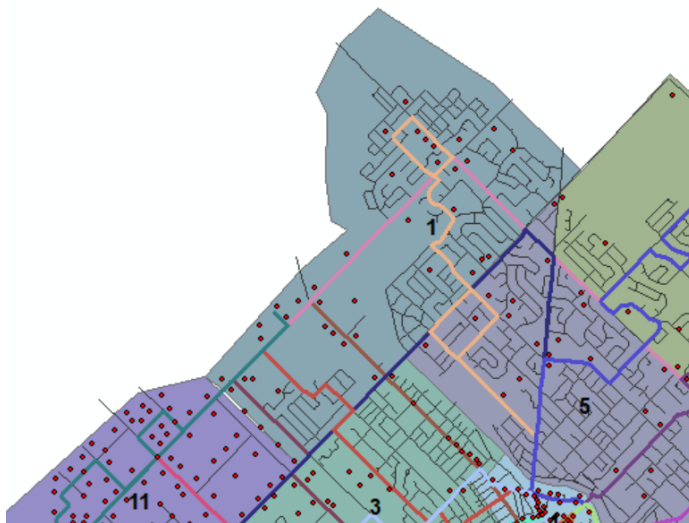


Figure 23. District 1 and future routes.

Trip Length

- 9.7% of trips <2.5km
- 54.4% of trips 2.5-7.5km
- 12.3% of trips 7.5-15 km
- 18.6% of trips 15-30km
- 5% of trips >30km

Details

- 26% of trips stay within district
- Key districts as destinations: 1, 2, 3, 4, 5, 6, 11

Current network**Table 21. District 1 to district 1 current relationship.**

Destination	Number of Buses	Route Options
Woodlawn Smart Centre	1 or 2	<ul style="list-style-type: none">• 17/18;• 99;• 3 to 17;• 12 to 18
Home Depot	1 or 2	<ul style="list-style-type: none">• 17/18;• 99;• 3 to 17;• 12 to 18
Canadian Tire	1 or 2	<ul style="list-style-type: none">• 17/18;• 99;• 3 to 17;• 12 to 18
Tim Horton's	1 or 2	<ul style="list-style-type: none">• 12;• 17/18;• 17/18 to 12
Speedvale Centre Plaza	1 or 2	<ul style="list-style-type: none">• 12;• 17/18 to 12

Table 22. District 1 to district 2 current relationship.

Destination	Number of Buses	Route Options
Costco	1 or 2	<ul style="list-style-type: none">• 18;• 3, 12, or 99 to 18
Zehrs Plaza	1 or 2	<ul style="list-style-type: none">• 18;• 3, 12, or 99 to 18
West End Rec Centre	1 or 2	<ul style="list-style-type: none">• 18;• 3, 12, or 99 to 18
Conestoga College	1 or 2	<ul style="list-style-type: none">• 18;• 3, 12, or 99 to 18

Future network

Table 23. District 1 to district 1 future relationship.

Destination	Number of Buses	Route Options
Woodlawn Smart Centre	1 or 2	<ul style="list-style-type: none"> • 96; • 97; • 99; • 3; • 9; • 22; • 12-96; • 98 to 3, 9, 96, 97, or 99
Home Depot	1 or 2	<ul style="list-style-type: none"> • 96; • 97; • 99; • 3; • 9; • 22; • 12-96; • 98 to 3, 9, 96, 97, or 99
Canadian Tire	1 or 2	<ul style="list-style-type: none"> • 96; • 97; • 99; • 3; • 9; • 22; • 12-96; • 98 to 3, 9, 96, 97, or 99
Tim Horton's	1 or 2	<ul style="list-style-type: none"> • 96; • 12; • 3, 9, 12, 97, 98, or 99 to 96; • 98 to 12
Speedvale Centre Plaza	1 or 2	<ul style="list-style-type: none"> • 98; • 12; • 96 to 12; • 3, 9, 22, 97 or 99 to 98

Table 24. District 1 to district 2 future relationship.

Destination	Number of Buses	Route Options
Costco	1 or 2	<ul style="list-style-type: none"> • 98; • 3, 9, 12, 96, 97, or 99 to 10 or 98
Zehrs Plaza	1 or 2	<ul style="list-style-type: none"> • 98; • 3, 9, 12, 96, 97, or 99 to 10 or 98

Destination	Number of Buses	Route Options
West End Rec Centre	1 or 2	<ul style="list-style-type: none"> • 98; • 3, 9, 12, 96, 97, or 99 to 10 or 98
Conestoga College	1 or 2	<ul style="list-style-type: none"> • 98; • 22 to 20; • 3, 9, 12, 96, 97, or 99 to 98

2. Network comparison

After the analysis was conducted for every trip in every district for the current and future network, the results were compared in terms of the number of buses needed to make a trip, the number of routing options available, and whether the future network offers more options for a trip than before. This comparison clearly illustrates the positive impact the future network would have on residents' ability to conveniently take transit.

From this analysis, and as depicted in the tables below, the current network allows for 85.77% of trips to key destinations to be made by taking 1 or 2 buses (0 or 1 transfers) while the future network increases this to 93.24%. With this, it is possible to make 71.17% of trips by taking only 1 bus (0 transfers) currently, but the future network will increase this to 86.12% of trips.

Table 25. Number of trips that can be made using different numbers of buses with the current network.

Number of buses needed to make a trip	Number of trips that can be made to key destinations	Percentage of trips that can be made to key destinations
0 (no possible trips)	6	2.14%
1	40	14.23%
2	41	14.59%
3	1	0.36%
1 to 2	160	56.94%
1 to 3	5	1.78%
2 to 3	28	9.96%
Total	281	100.00%

Table 26. Number of trips that can be made using different numbers of buses with the future network.

Number of buses needed to make a trip	Number of trips that can be made to key destinations	Percentage of trips that can be made to key destinations
0 (no possible trips)	0	0.00%
1	13	4.63%
2	20	7.12%
3	0	0.00%
1 to 2	229	81.49%
1 to 3	6	2.14%
2 to 3	13	4.63%
Total	281	100.00%

Additionally, the future network provides 86.12% more routing options for trips to key destinations than the current network. This is while maintaining the same number of options for 6.41% of trips and only having fewer options than before for 7.47% of trips. The future network will also increase the number of trips to key destinations that have 5 or more routing options by 26.33%.

Table 27. Direct comparison of current to future network on how many routing options are available to make a trip.

More routing options	Same number of routing options	Fewer routing options
86.12%	6.41%	7.47%

Table 28. The percentage of trips to key destinations that offer 5 or more routing options.

Current network	Future network
64.77%	91.10%

Appendix D: Future individual route maps

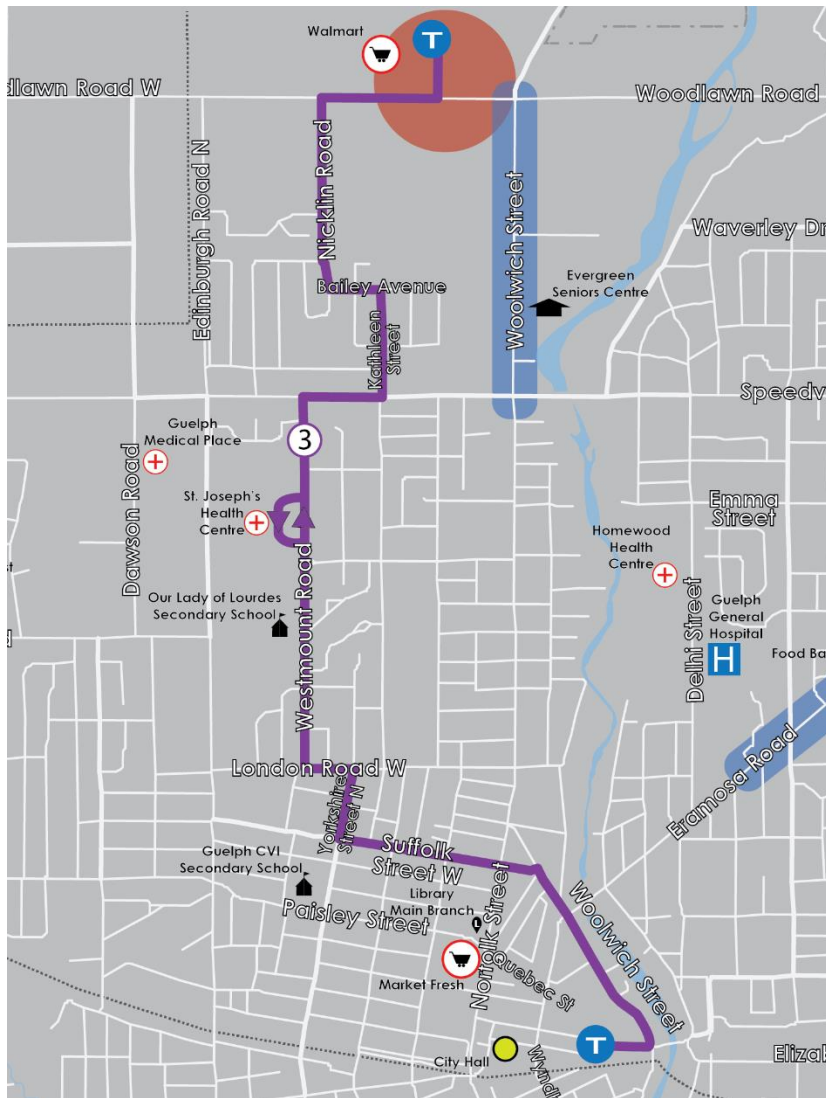


Figure 24. Route 3 Westmount starting in 2023.

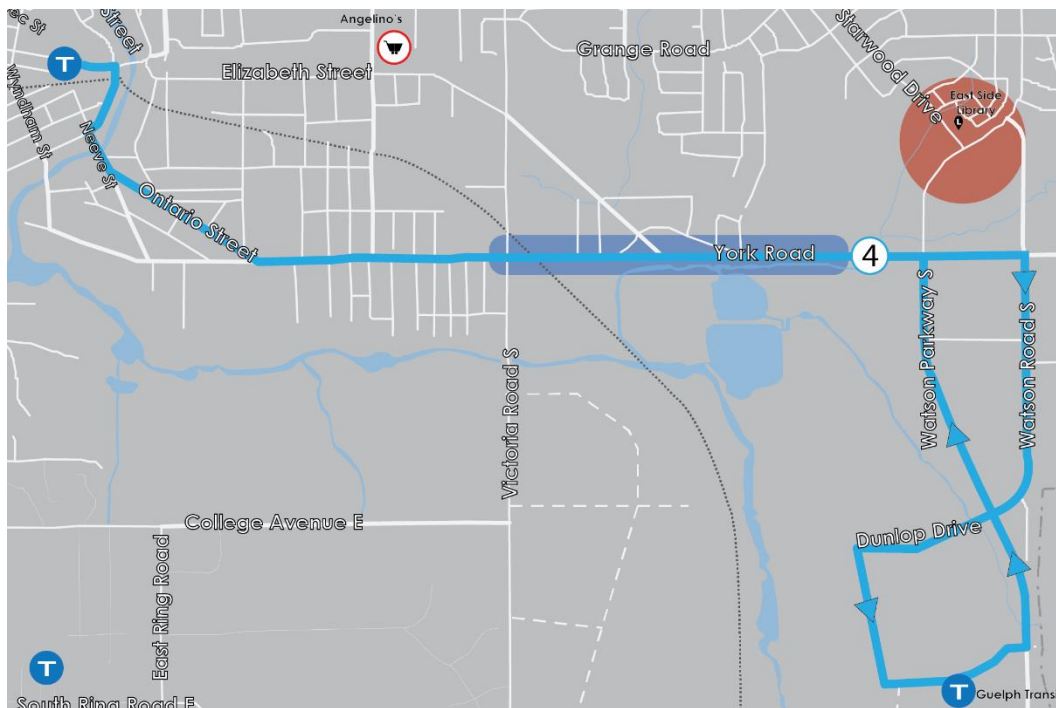


Figure 25. Route 4 York starting in year 2027.

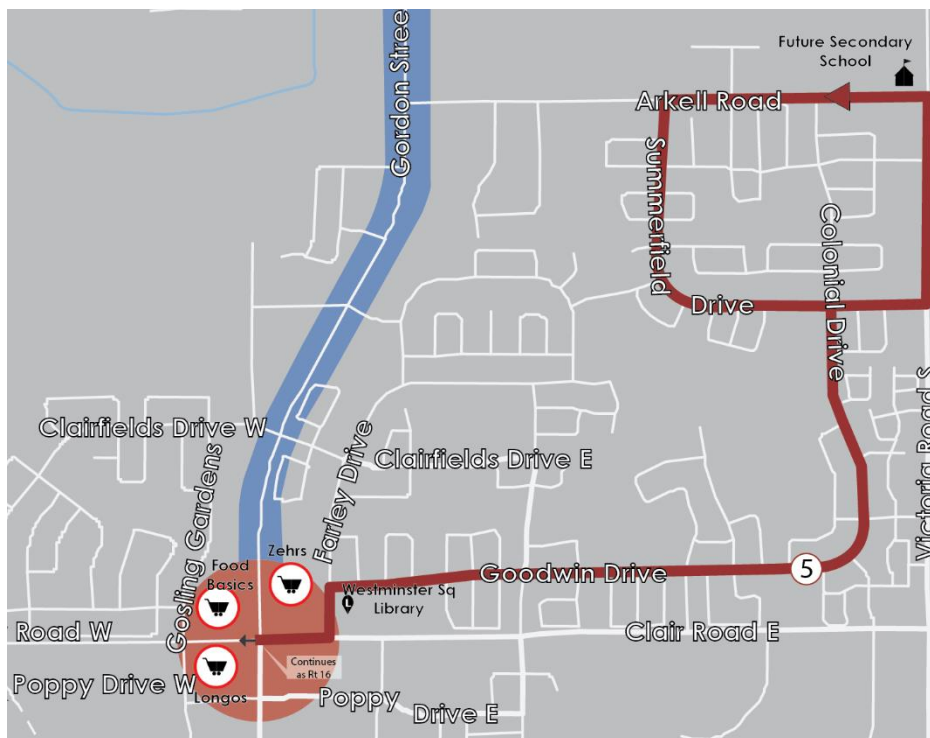


Figure 26. Route 5 Goodwin from 2027 to 2030.

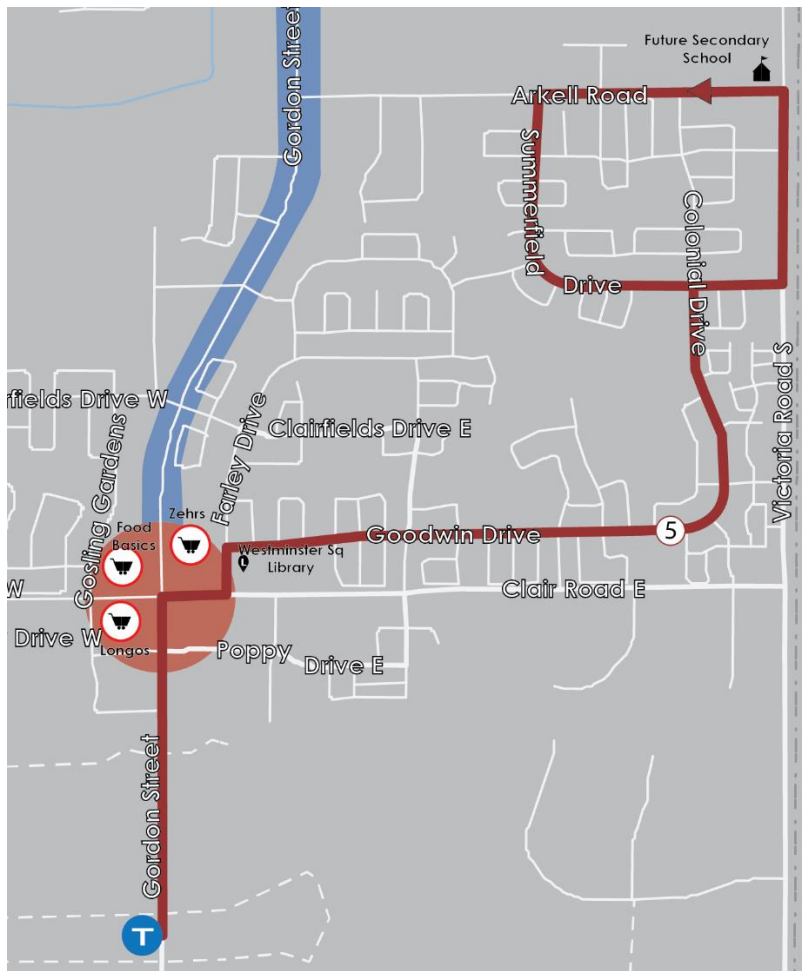


Figure 27. Route 5 Goodwin extension starting in 2031.

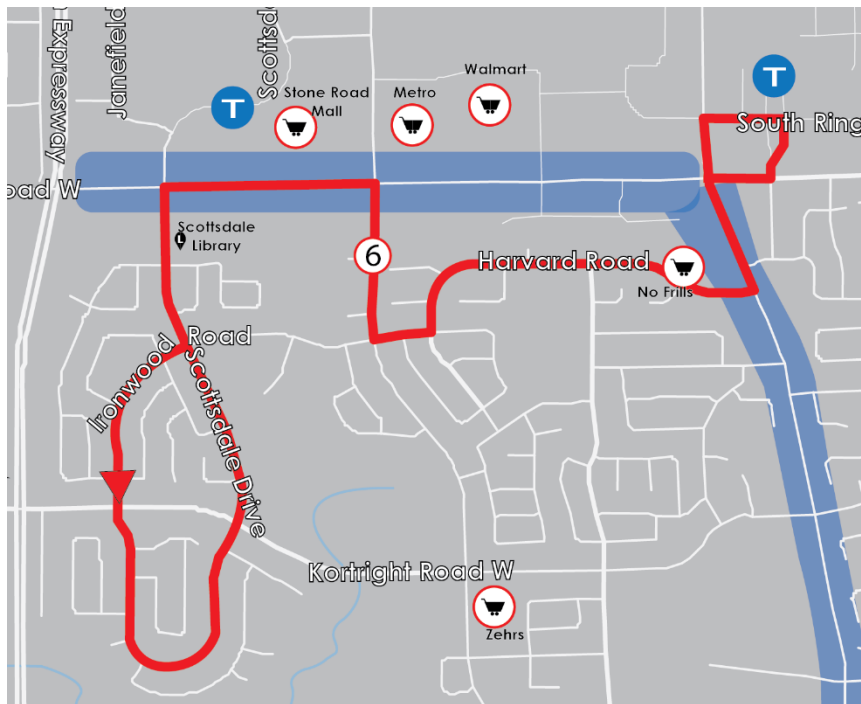


Figure 28. Route 6 Harvard Ironwood to maintain current routing.



Figure 29. Route 7 Kortright Downey to maintain current routing.

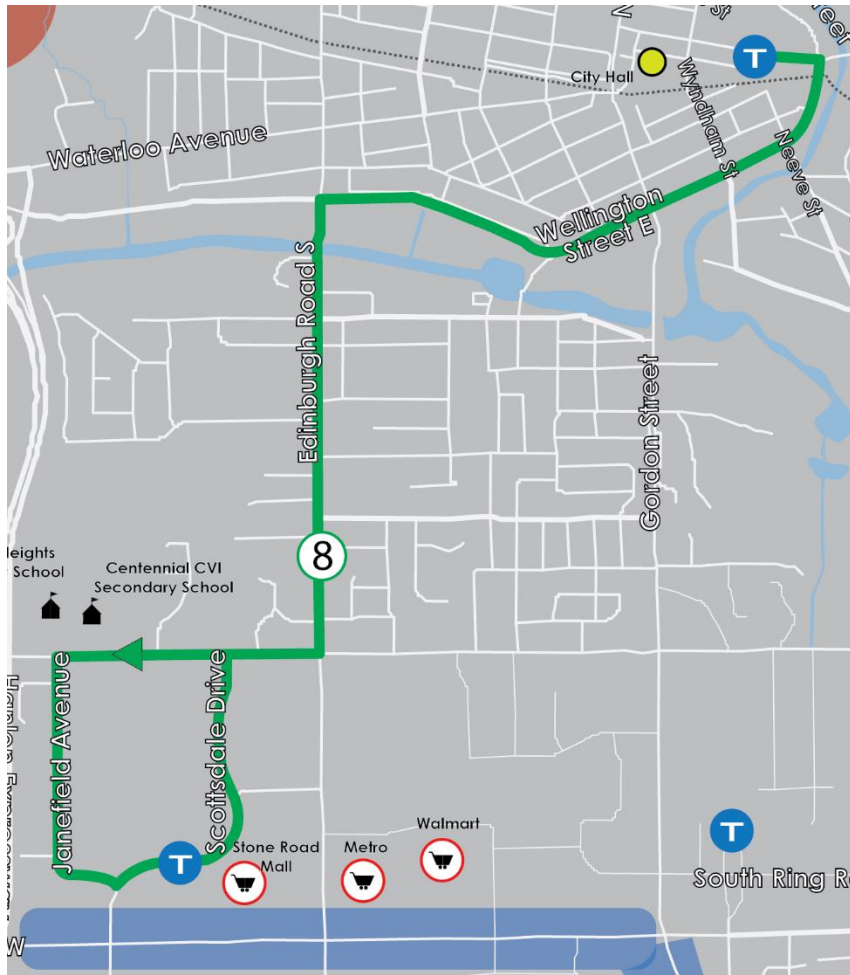


Figure 30. Route 8 Stone Road Mall to maintain current routing.

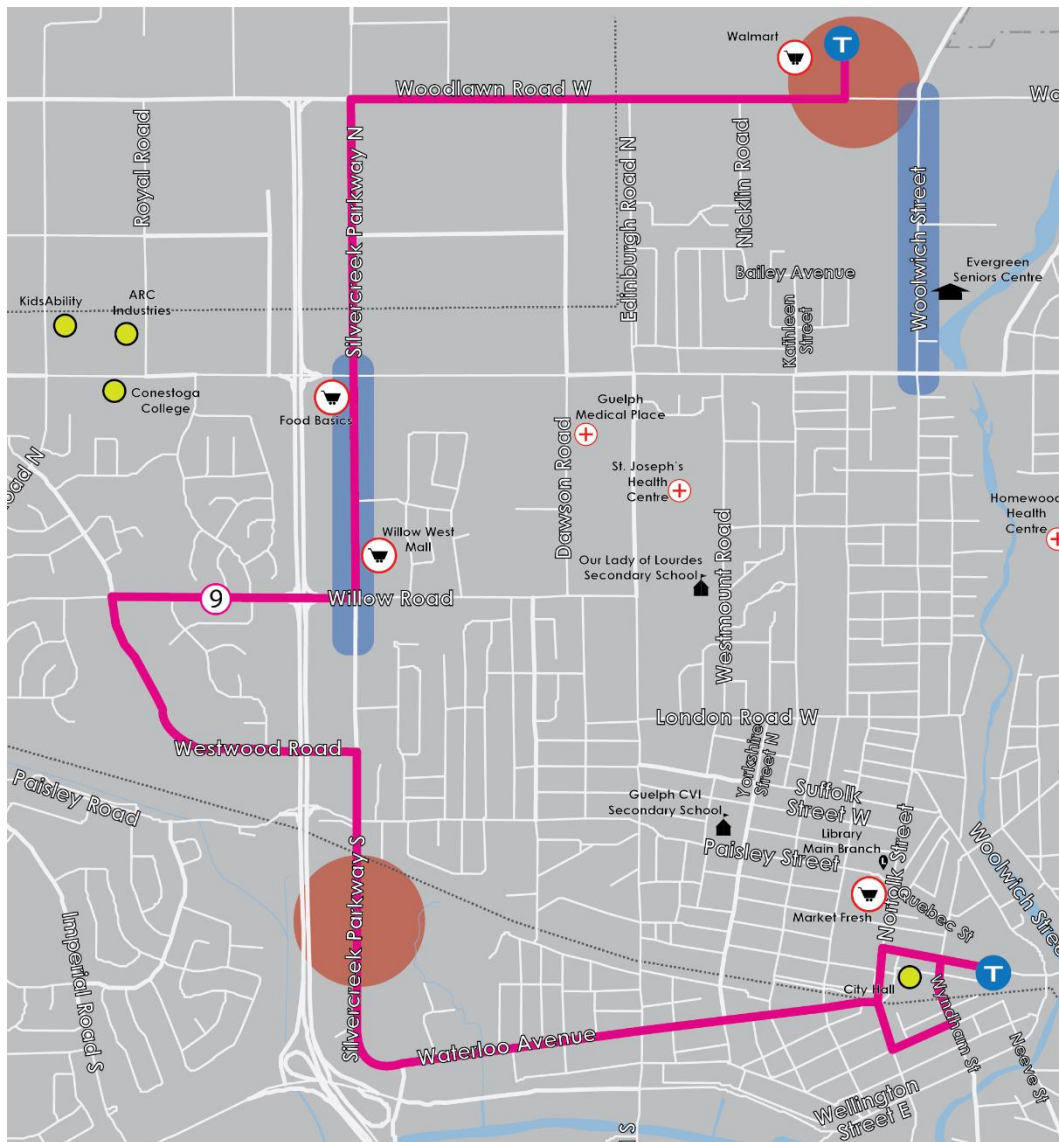


Figure 31. Route 9 Waterloo Silvercreek starting in 2026.

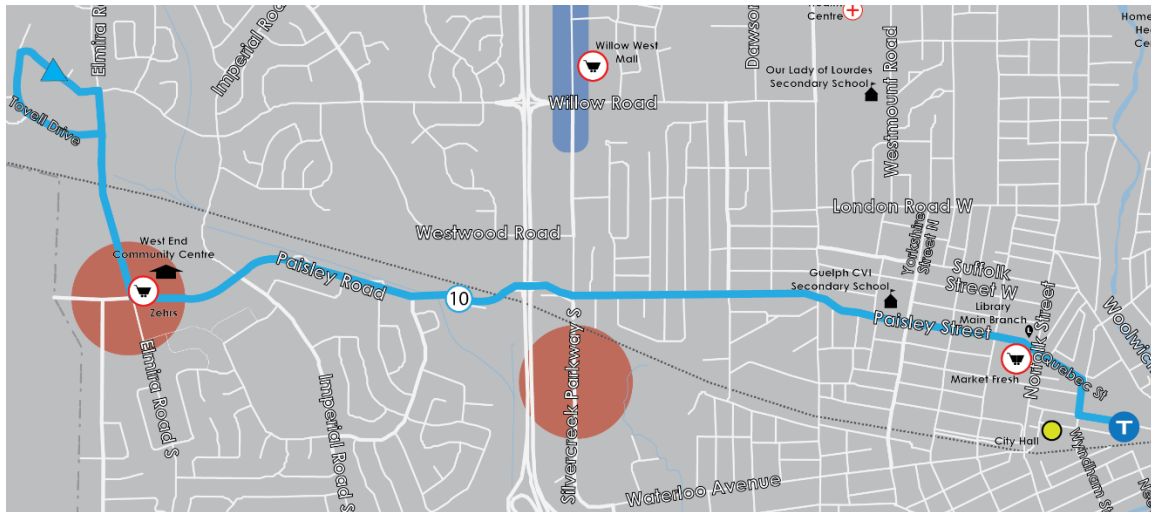


Figure 32. Route 10 Paisley starting in 2026.



Figure 33. Route 12 General Hospital starting in 2024.

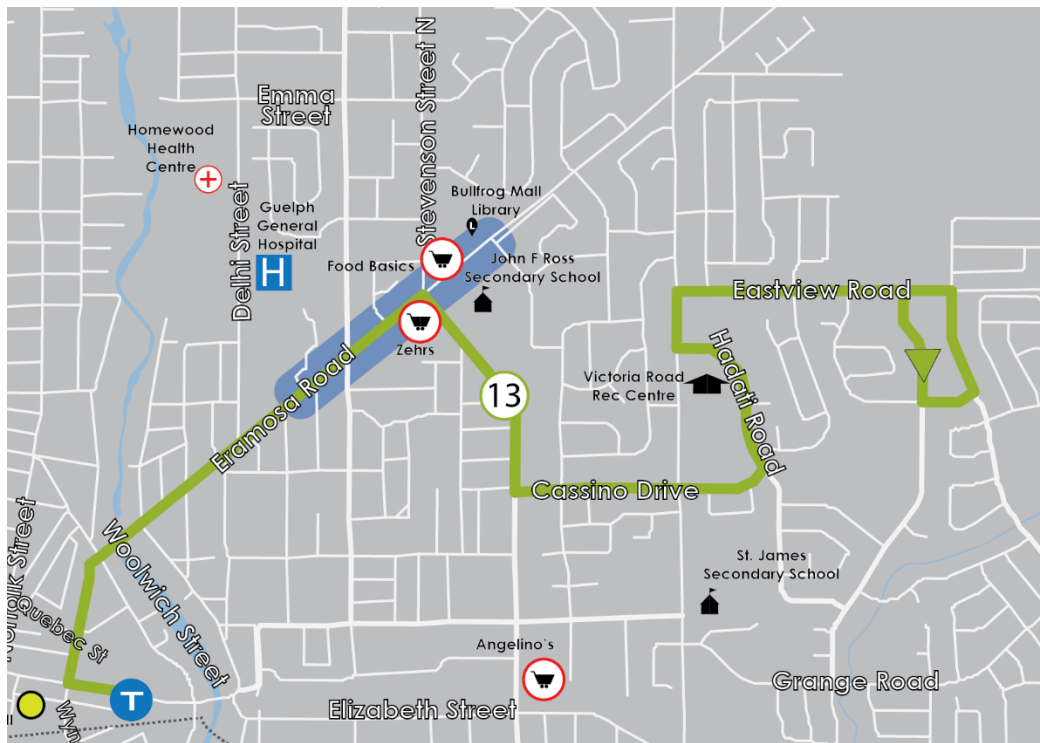


Figure 34. Route 13 Victoria Rd Rec Centre from 2024 to 2026.



Figure 35. Route 13 Eastview Watson starting in 2027.

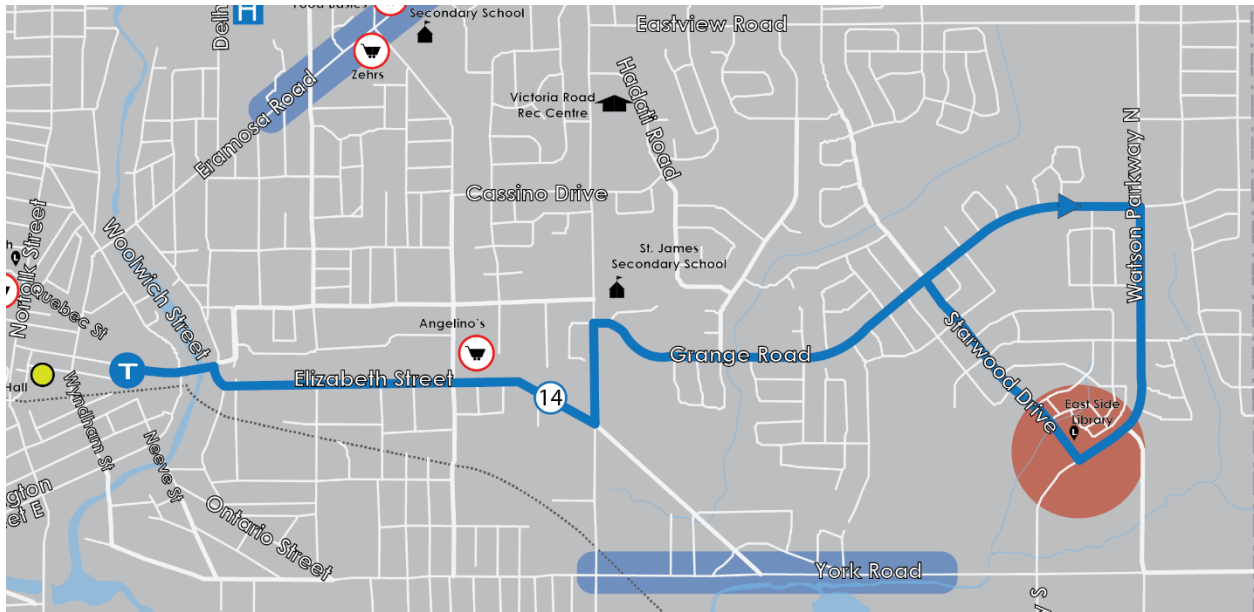


Figure 36. Route 14 Grange to maintain current routing.



Figure 37. Route 15 Stone College to maintain current routing.

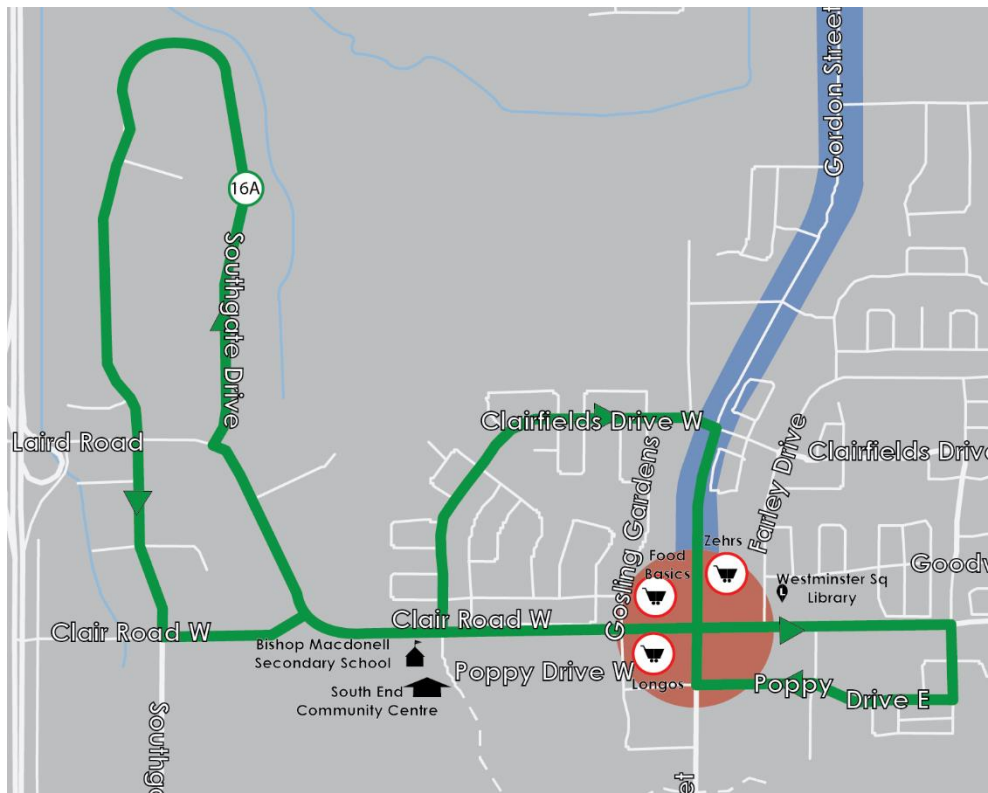


Figure 38. Route 16A Southgate via Clairfields from 2023 to 2025.

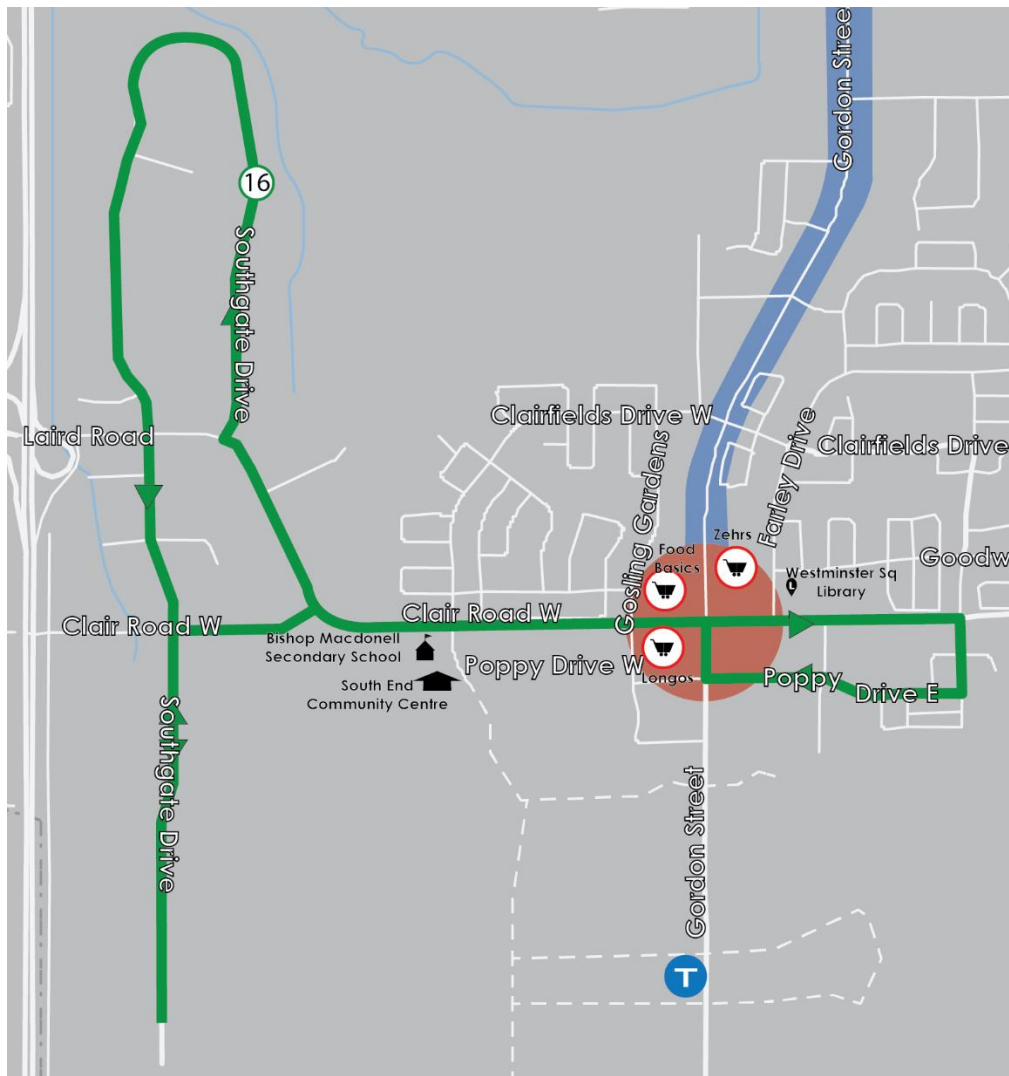


Figure 40. Route 16 Southgate in 2026.

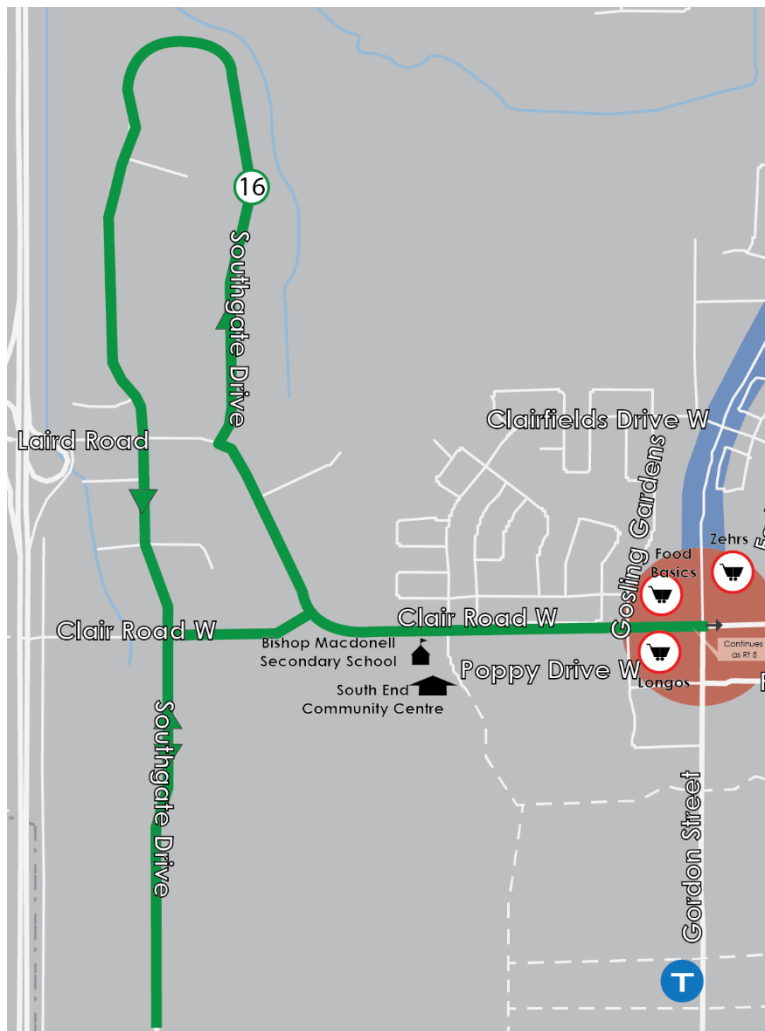


Figure 41. Route 16 Southgate from 2027 to 2030.

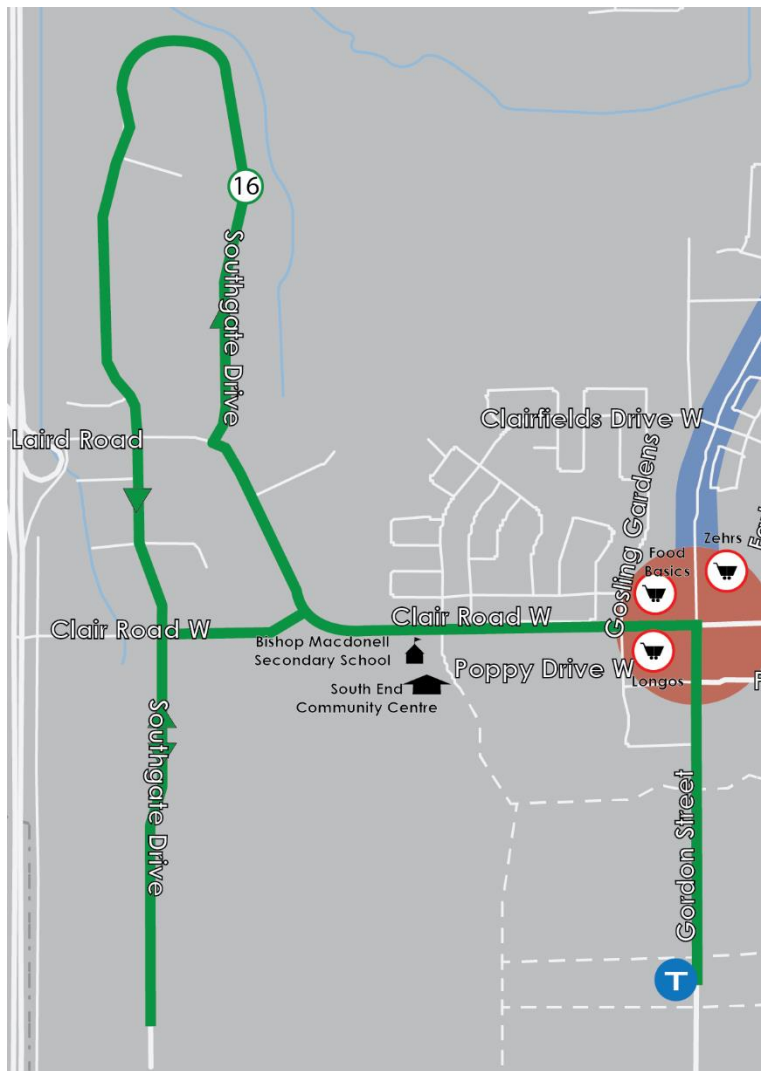


Figure 42. Route 16 Southgate extension starting in 2031.

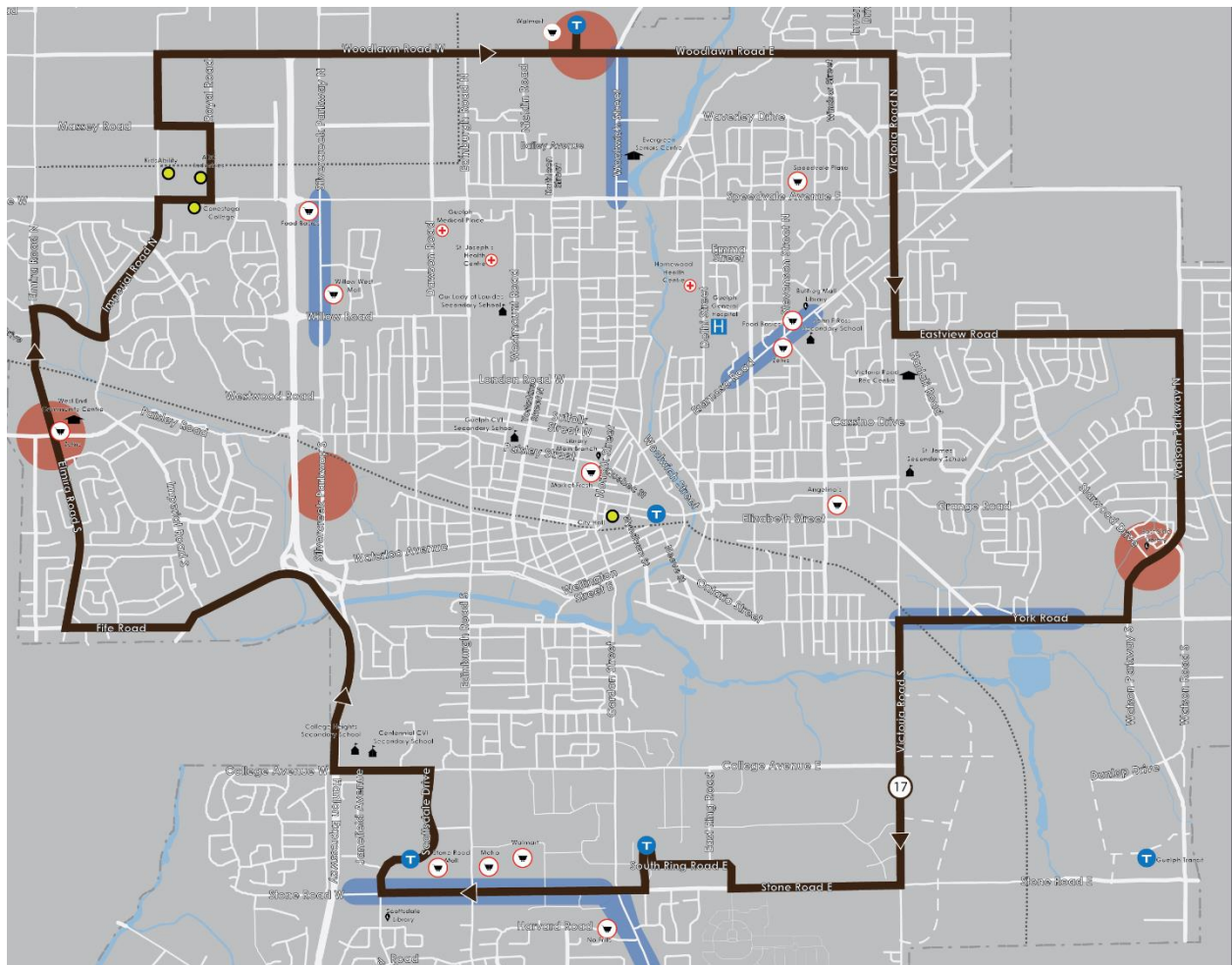


Figure 43. Route 17 Woodlawn Watson in 2024.

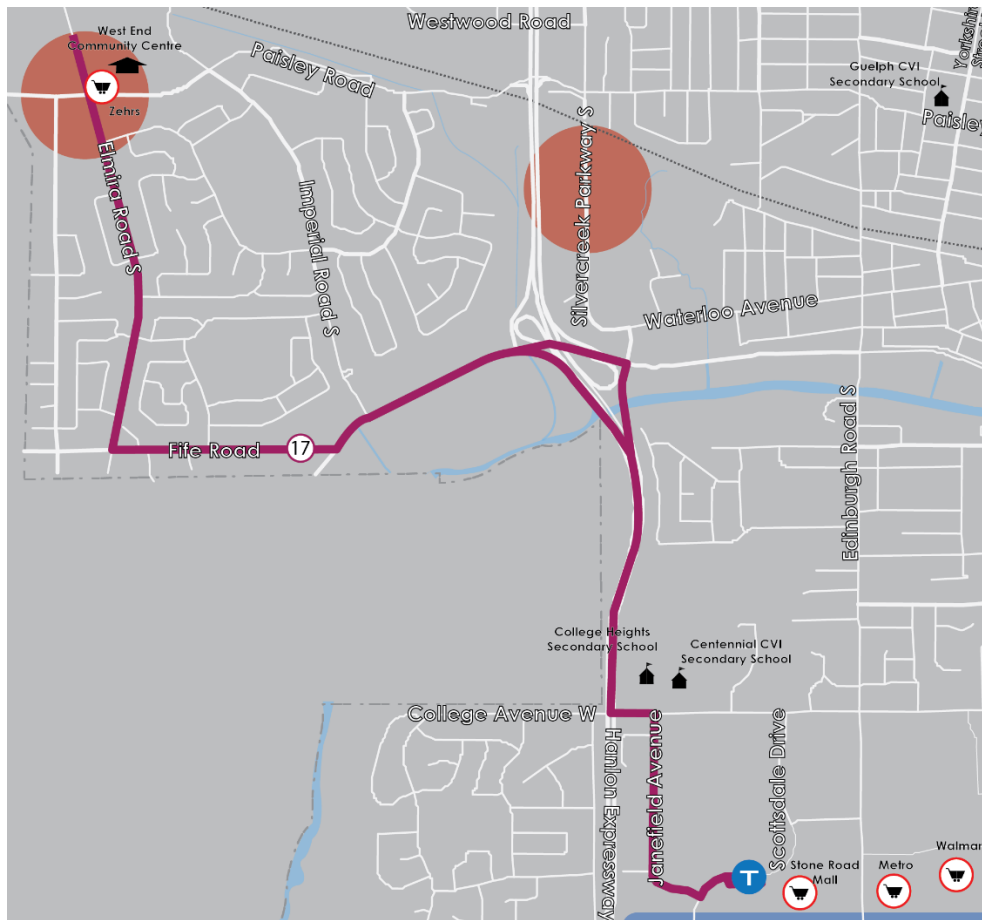


Figure 44. Route 17 Fife starting in 2025 to replace Route 17 Woodlawn Watson.

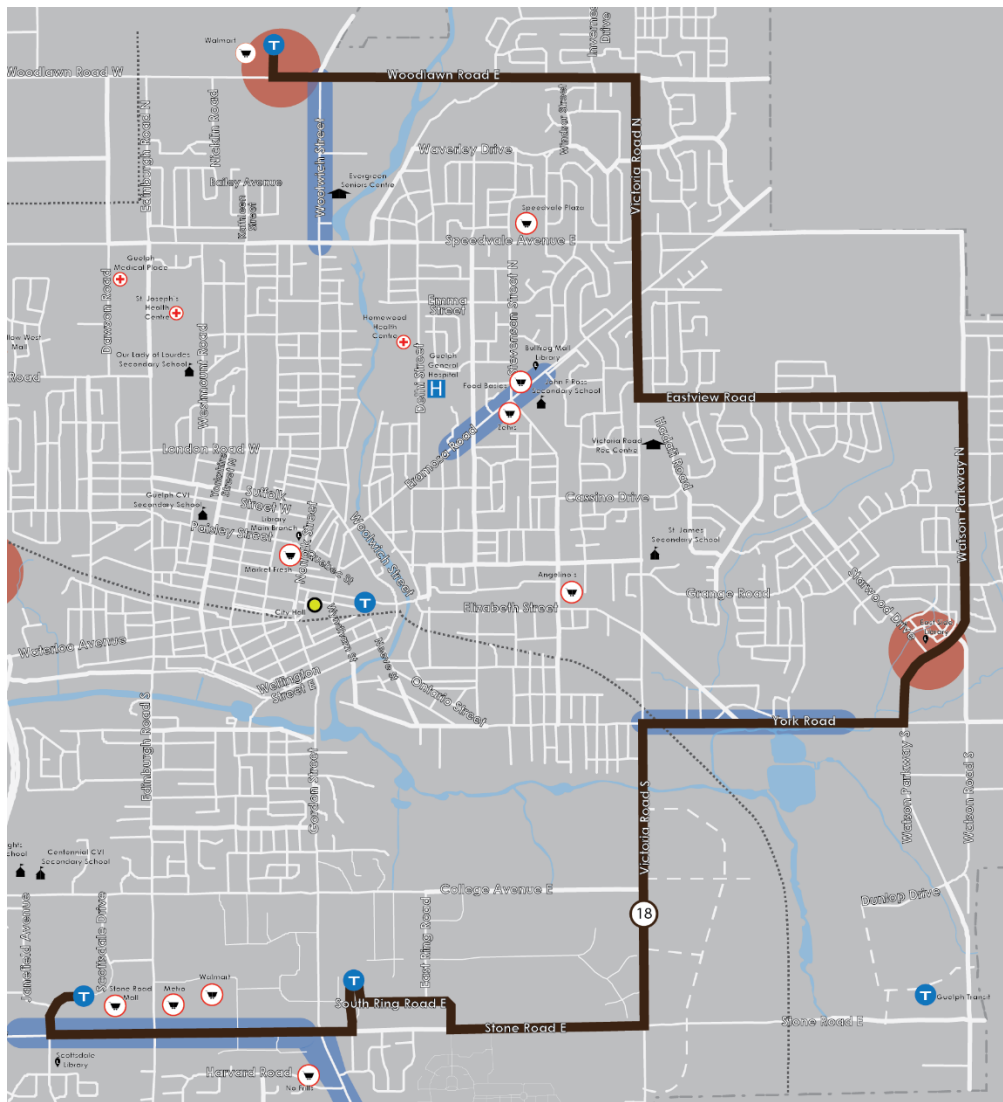


Figure 45. Route 18 Watson Woodlawn from 2025 to 2026. To be discontinued and replaced by Route 96 Victoria starting in 2027.



Figure 46. Route 19 Hanlon Creek in 2022.

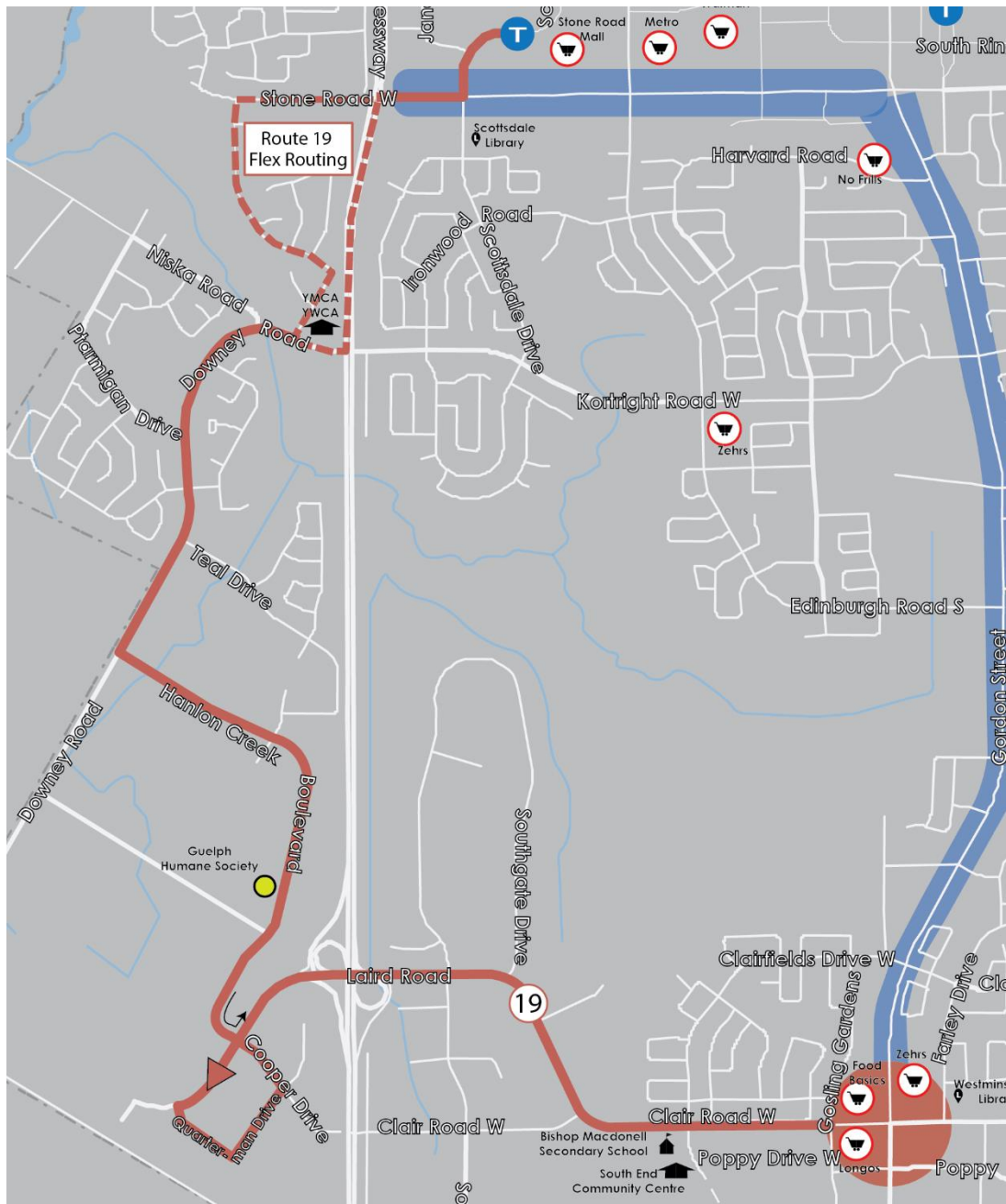


Figure 47. Route 19 Hanlon Creek modification from 2023 to 2030.

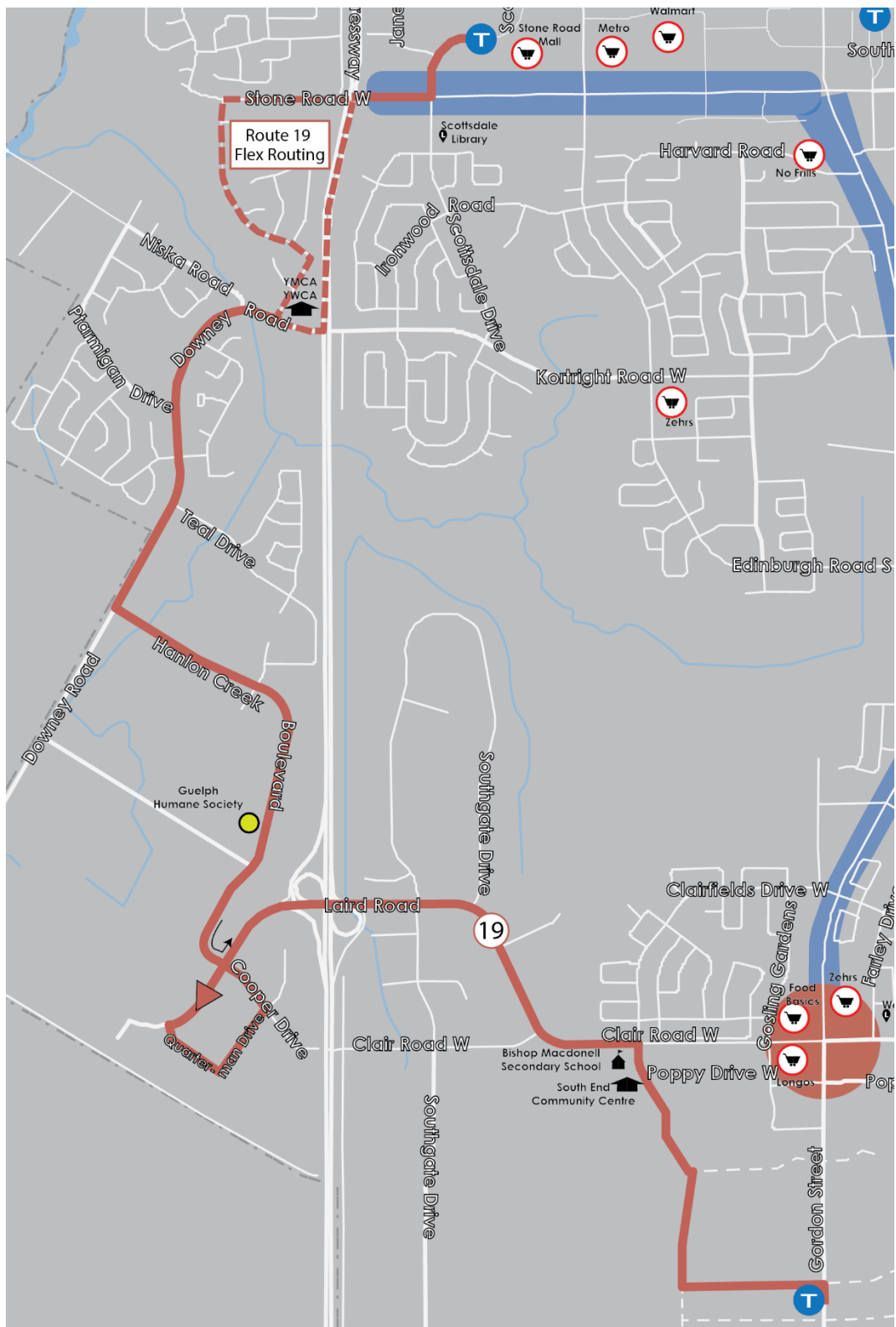
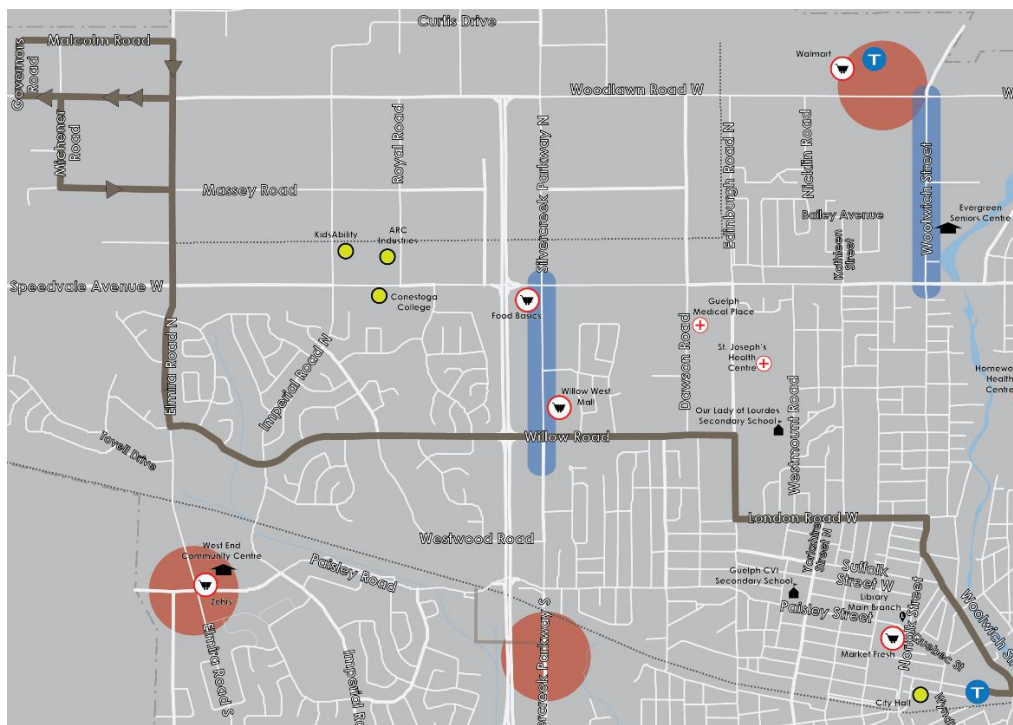
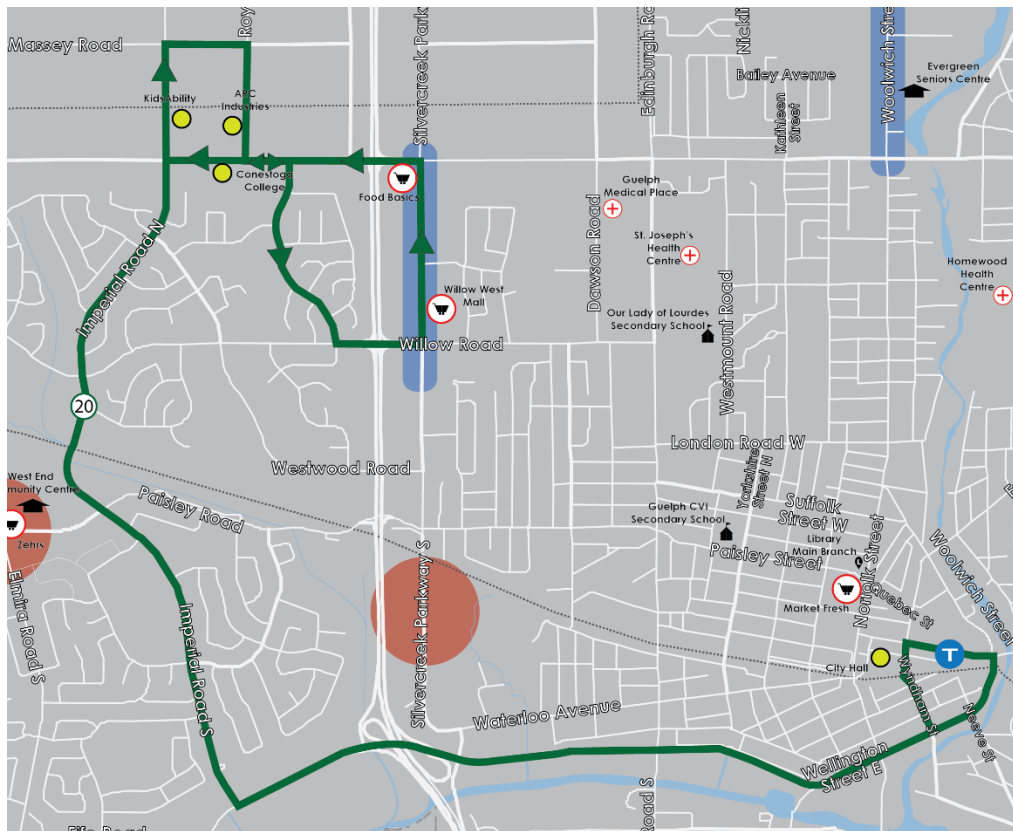


Figure 48. Route 19 Hanlon Creek extension starting in 2031.



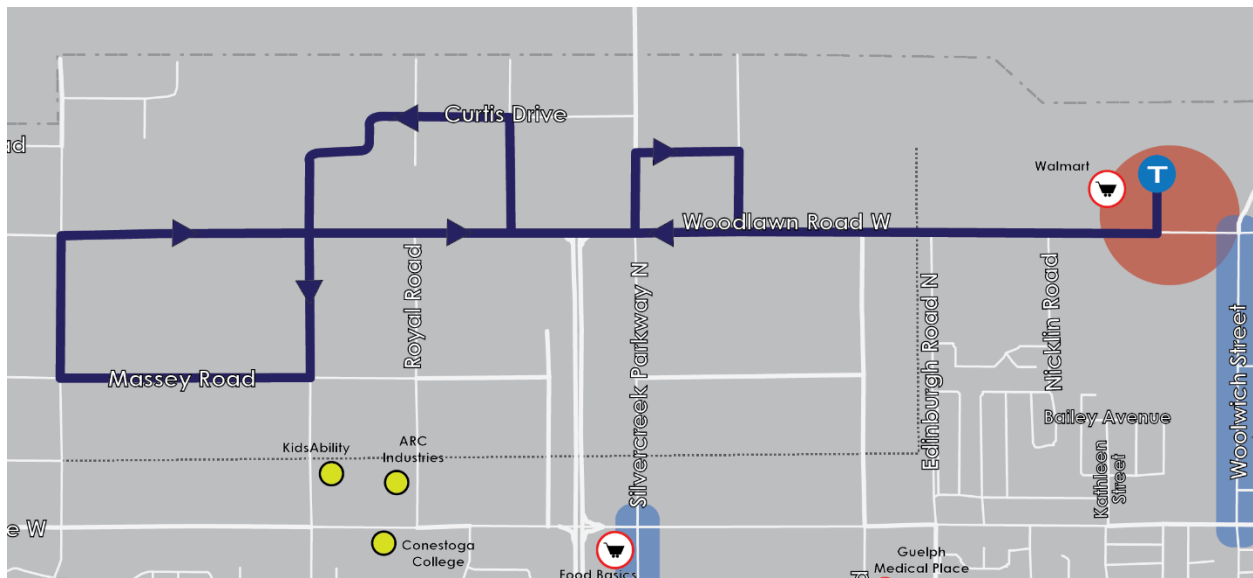


Figure 51. Route 22 Curtis starting in 2025.

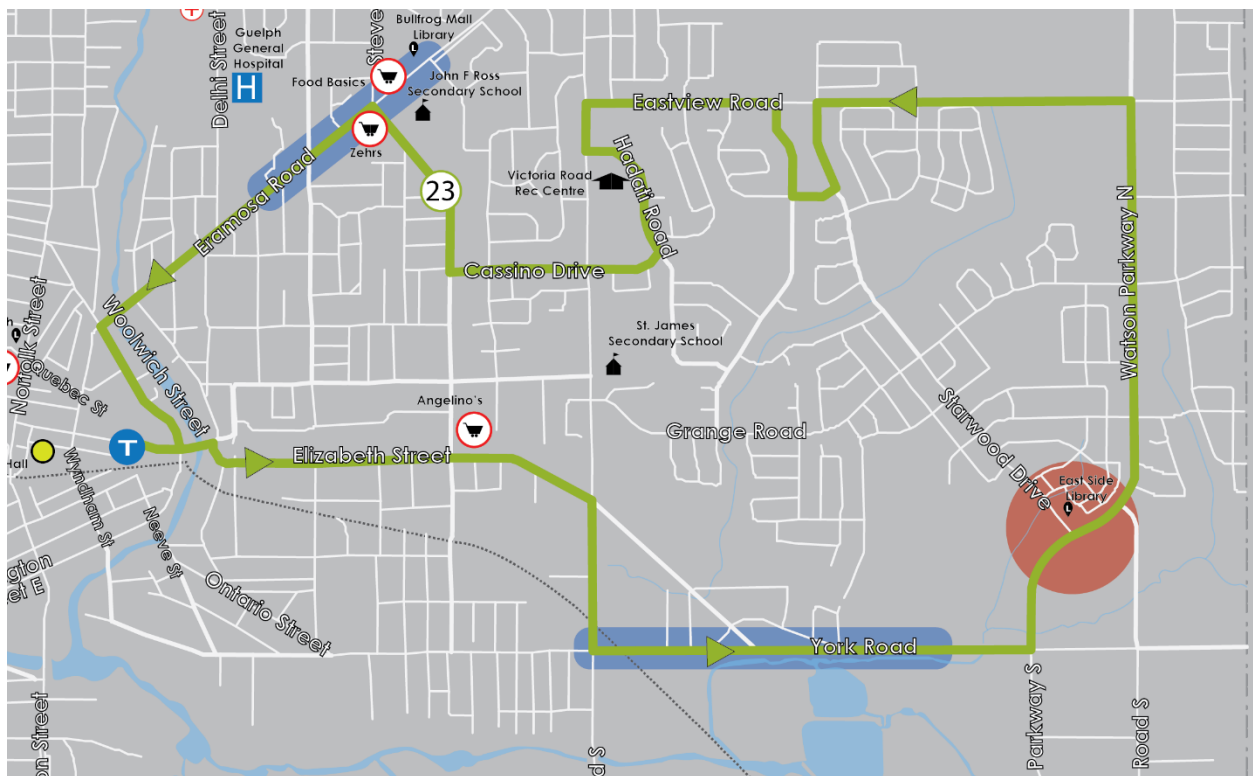


Figure 52. Route 23 Watson Eastview starting in 2027.

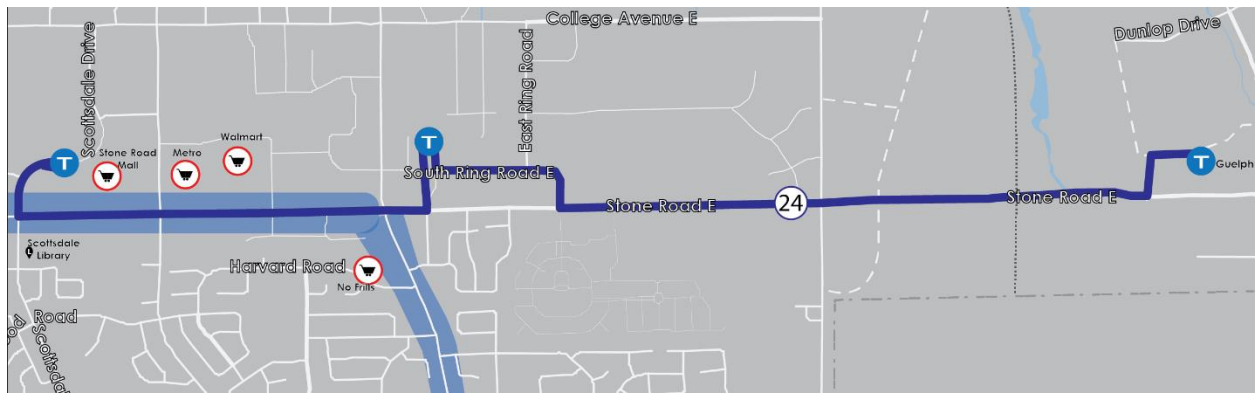


Figure 53. Route 24 Stone starting in 2027.

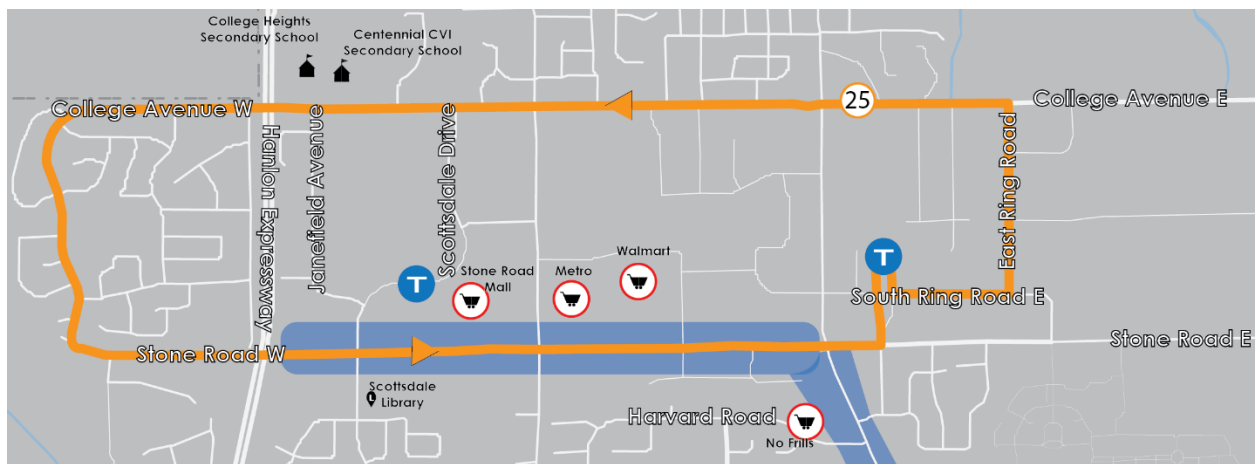


Figure 54. Route 25 College Stone starting in 2028.

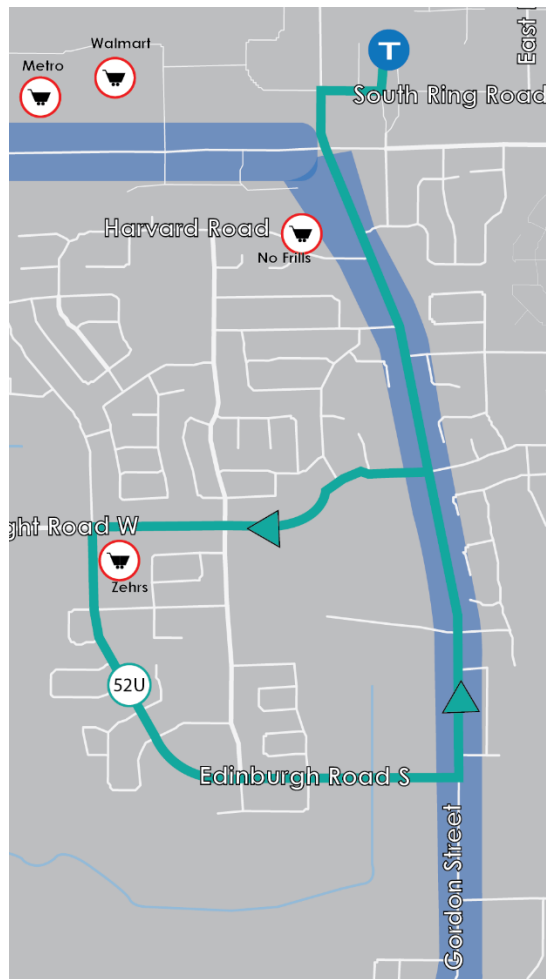


Figure 56. Route 52U Kortright to maintain current routing.

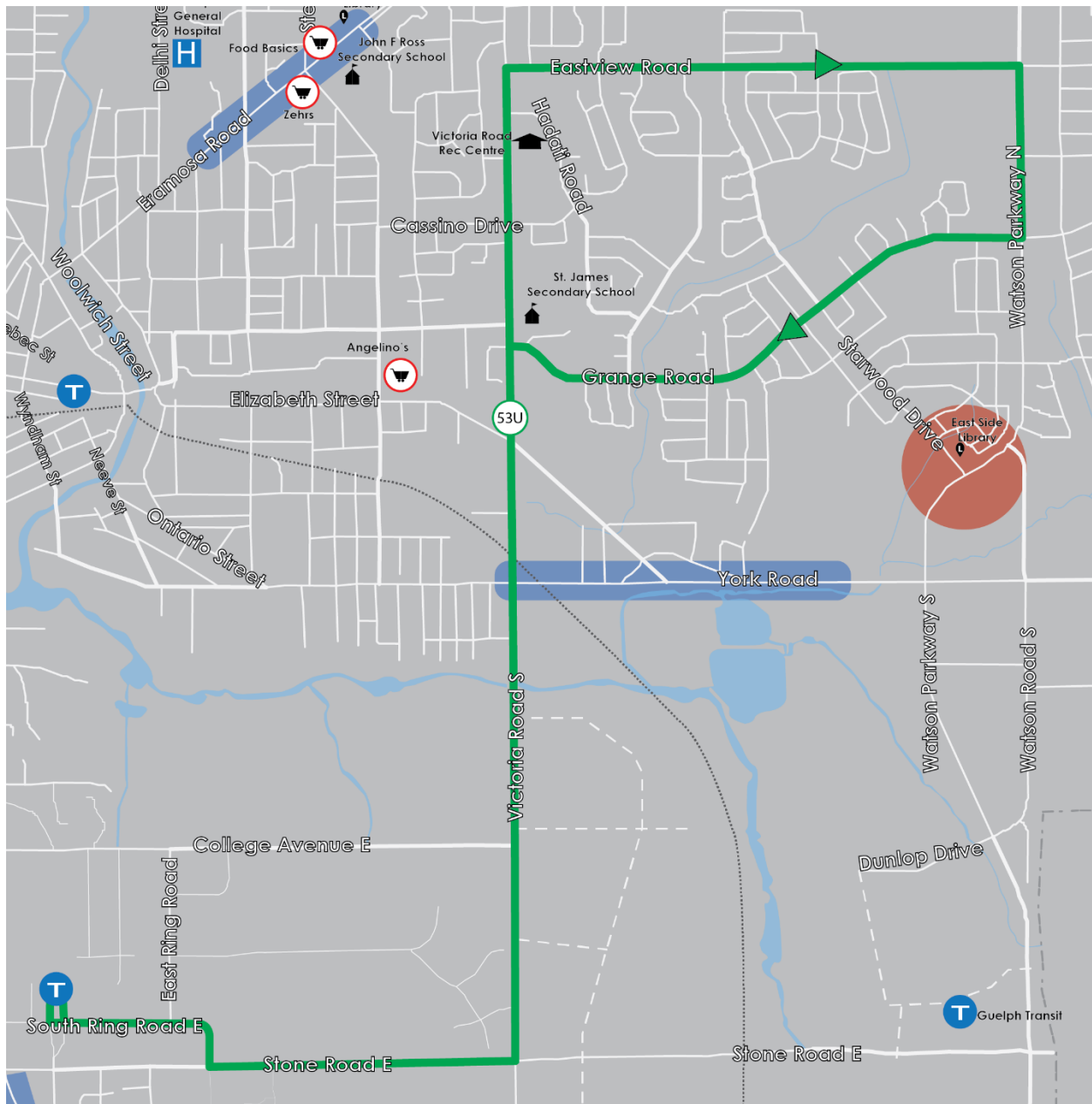


Figure 57. Route 53U Eastview starting in 2027.

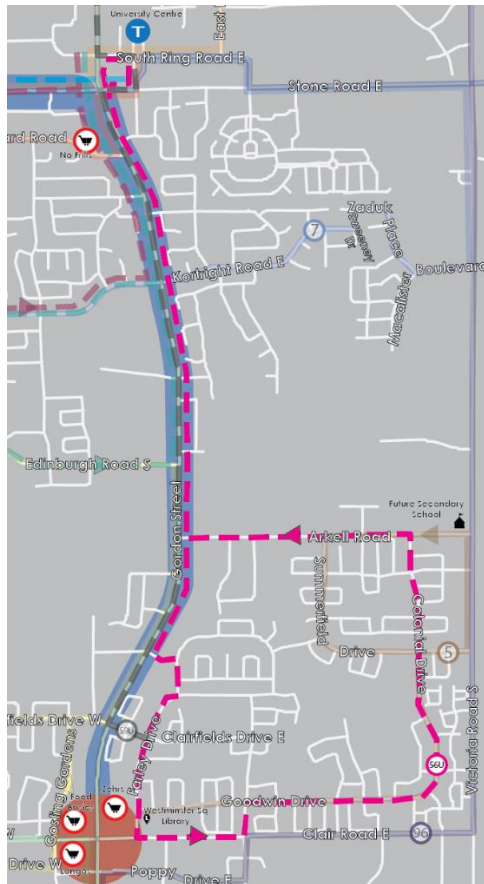


Figure 59. Route 56U Colonial to maintain current routing.

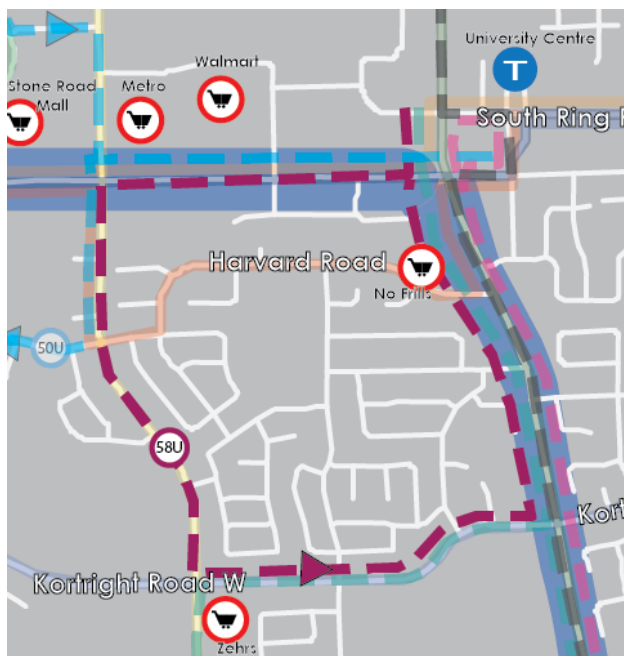


Figure 60. Route 58U Edinburgh to maintain current routing.

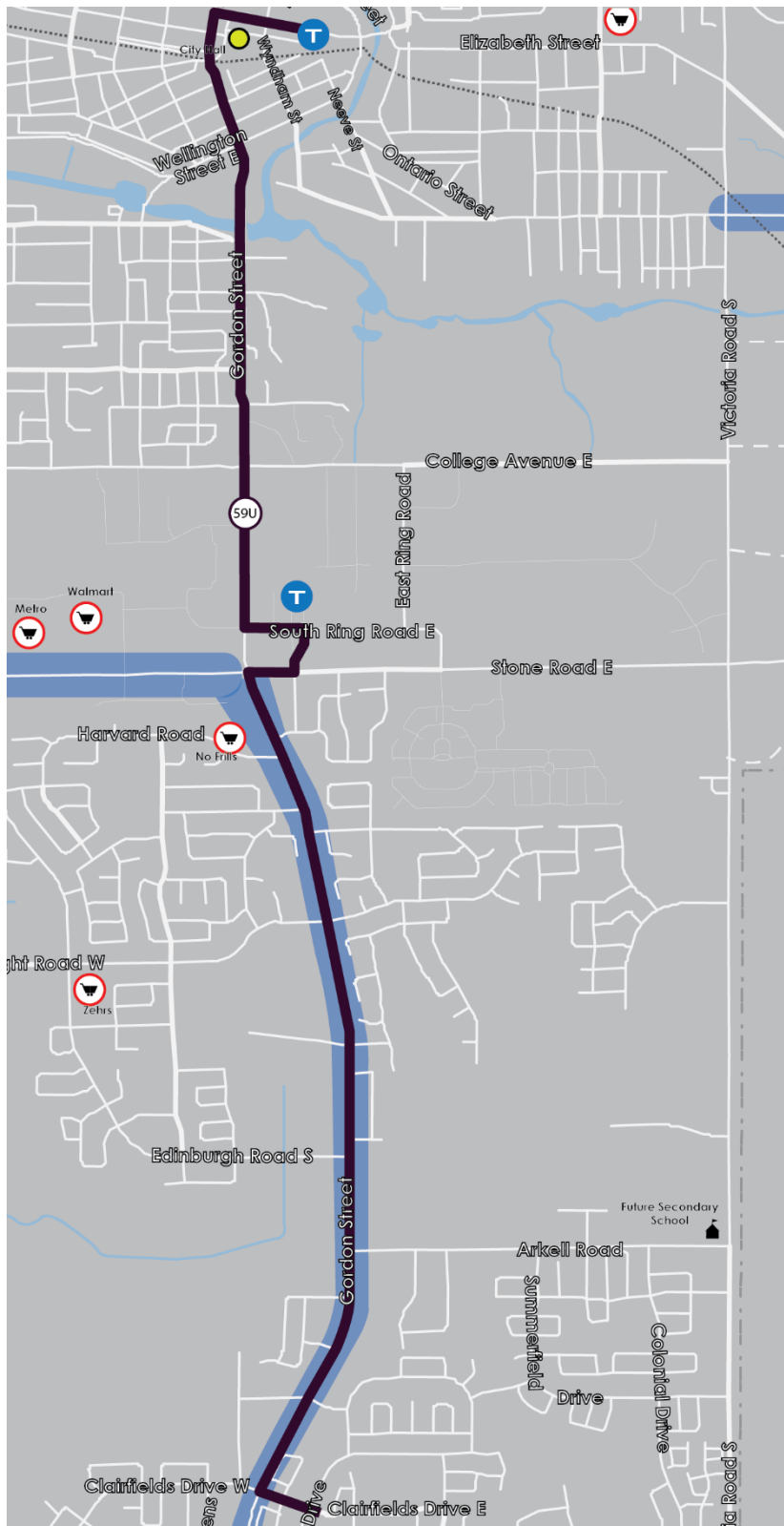


Figure 61. Route 59U Gordon Express starting in 2028.

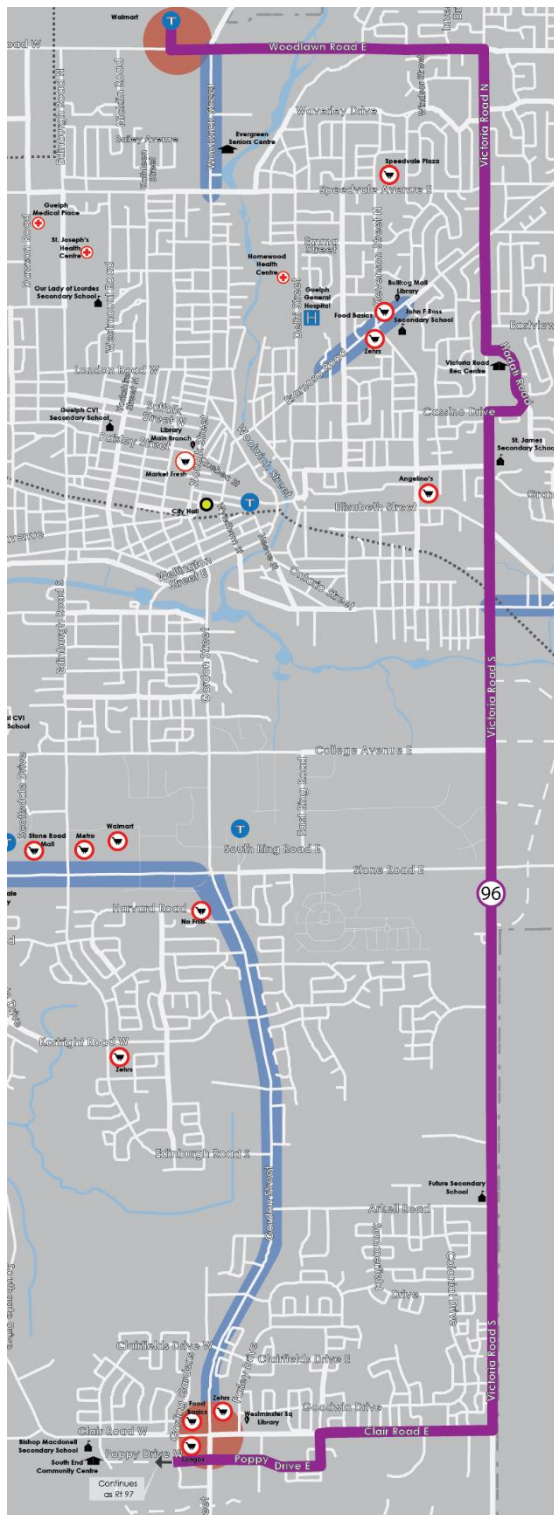


Figure 62. Route 96 Victoria from 2027 to 2030.

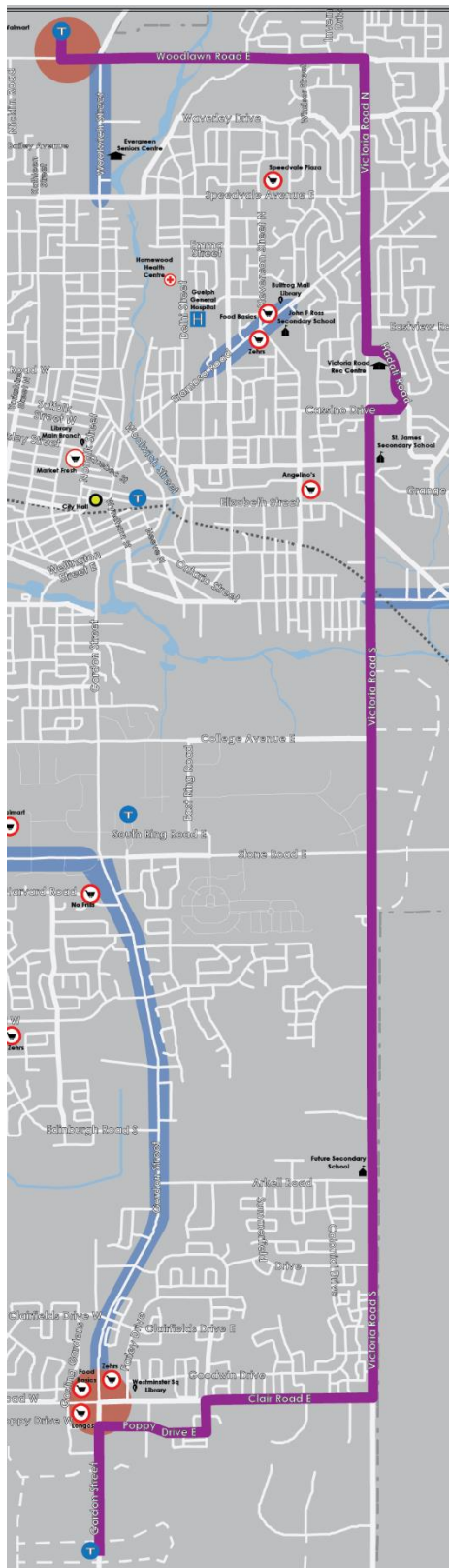


Figure 63. Route 96 Victoria extension starting in 2031.



Figure 64. Route 97 Edinburgh from 2026 to 2030.

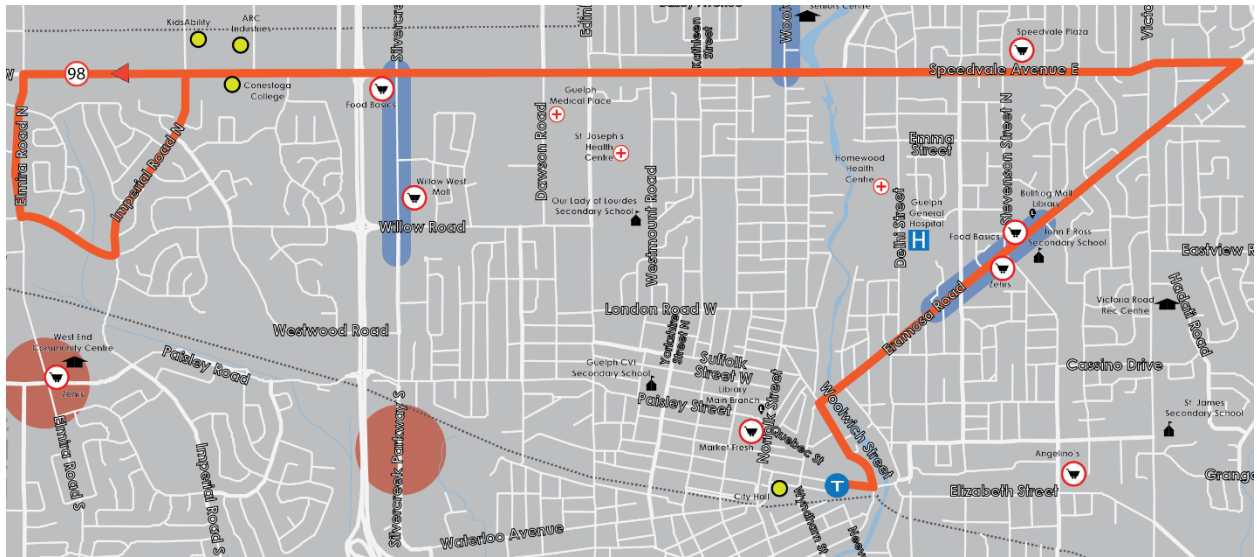


Figure 66. Route 98 Speedvale in 2024 to replace Route 54 Speedvale West.

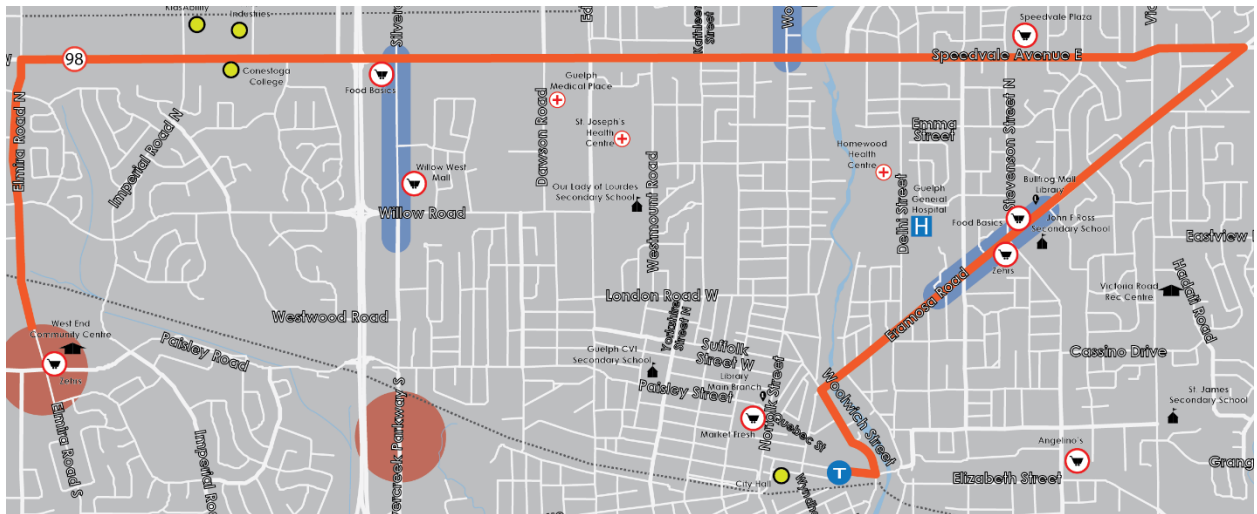


Figure 67. Route 98 Speedvale extension starting in 2025.

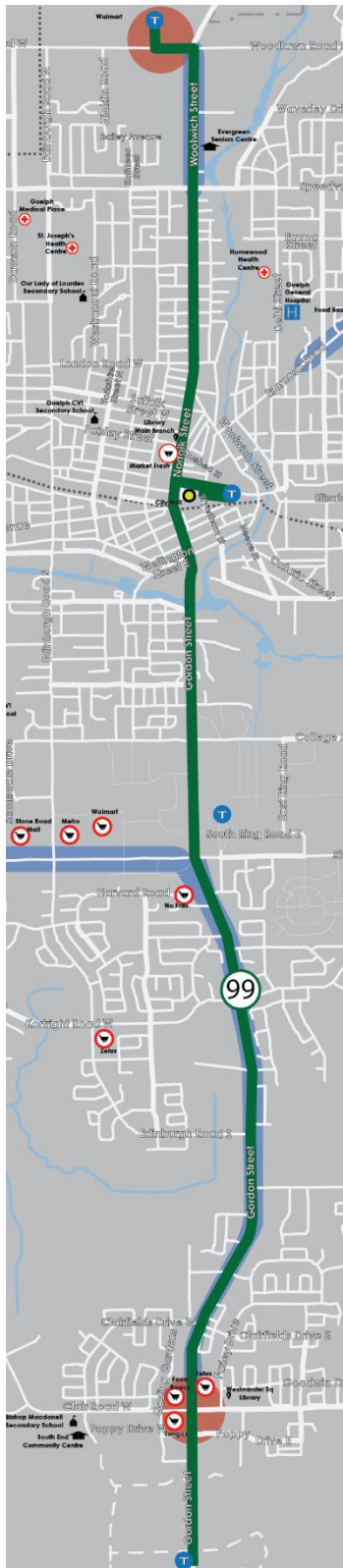


Figure 68. Route 99 Mainline to maintain current routing, with an extension to Clair Maltby Transit Terminal in 2031.

Appendix E: Year-by-year plan implementation

The implementation timelines are subject to change due to uncontrollable factors, such as COVID-19 and delayed construction.

Future Ready Action Plan

The Future Ready Action Plan will require an additional 100 operators and 26 buses.

2022 – Year 1

Year 1 will have the following changes:

- Introduce Route 19 Hanlon Creek with routing options on north loop
- Reinstate conventional Route 16 Southgate
- Cancel Route 40 Scottsdale Express
- Merge Route 50U Stone, 51U Janefield, and Route 57U Ironwood into new Route 50U Scottsdale
- Change Route 56U Colonial service hours to 7:15 a.m. to 9:00 p.m.
- Change Route 58U Edinburgh service hours to 7:20 a.m. to 9:00 p.m.
- Change Route 99 Mainline cycle to 90 minutes, every day, all year long
- Increase Route 99 Mainline frequency to every 9 minutes during peak service hours from September to May
- Extend Route 99 Mainline Sunday service hours
- Reduce Route 99 Mainline evening service frequency to every 15 minutes

To support these changes, year 1 will have an increase of:

- 12 operators
- 2 buses
- 135,637 kilometres

Table 29. Service hours and frequency of adjusted routes in 2022.

Route	Service Hours	Service Frequency
19	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes Mon-Sun
50U	7 a.m. to 9 p.m. Mon-Fri (Sept-May)	Every 15 minutes Mon-Fri
56U	7:15 a.m. to 9:00 p.m. Mon-Fri (Sept-May)	Every 20 minutes till 6 p.m.; every 30 minutes after 6 p.m.
58U	7:20 a.m. to 9:00 p.m. Mon-Fri (Sept-May)	Every 20 minutes Mon-Fri
99	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 9 minutes weekday morning and afternoon peaks; every 10 minutes weekday midday and evening till 10 p.m.; every 15 minutes after 10 p.m. & on weekends in south end; every 30 minutes in north end on weekends

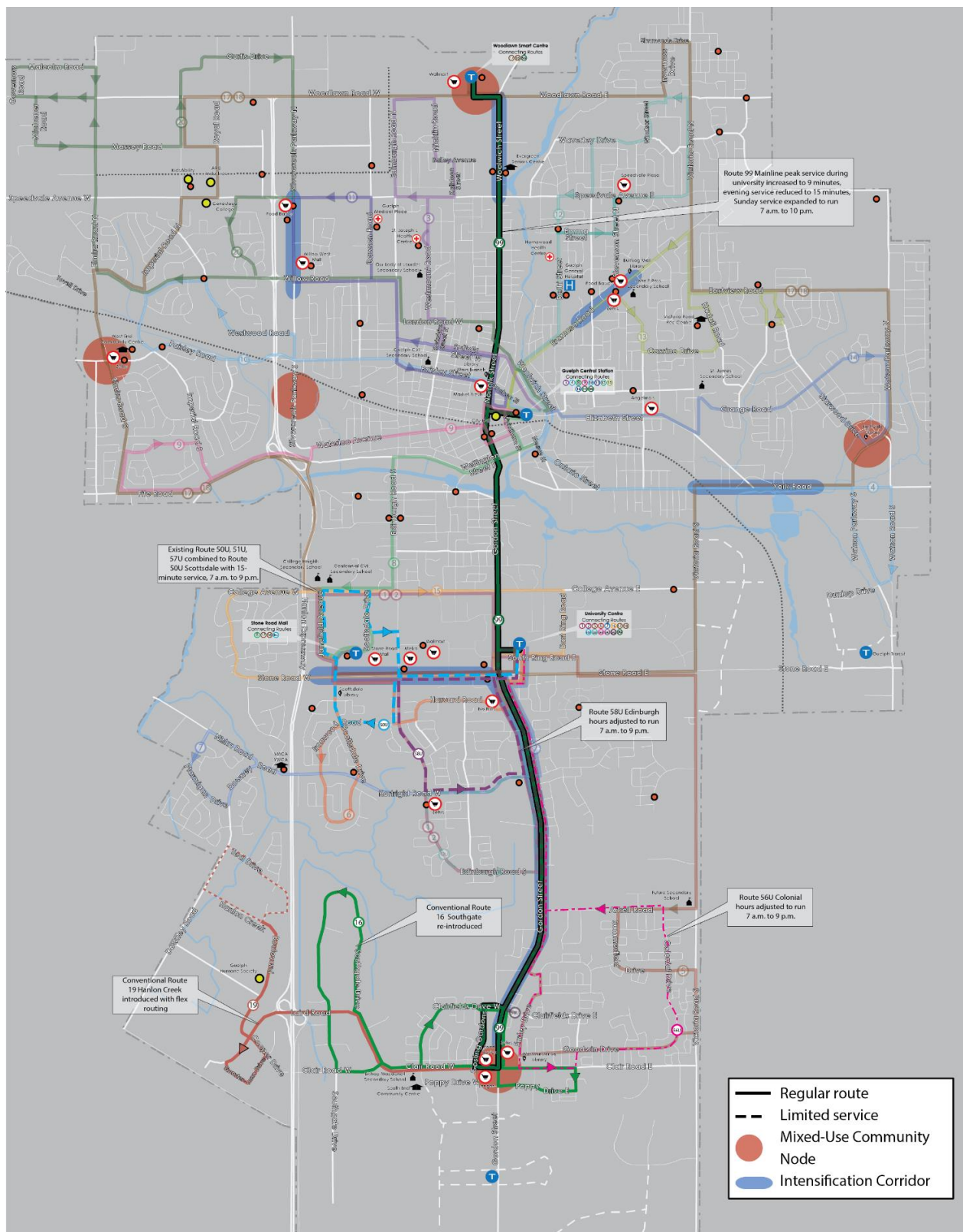


Figure 69. Future Ready Action Plan 2022 network map.

2023 – Year 2

Year 2 will have the following changes:

- Introduce new routing for Route 3 Westmount
- Increase Route 8 Stone Road Mall daytime weekday and Saturday service to every 20 minutes
- Extend Route 19 Hanlon Creek to Stone Road Mall with routing options along Woodland Glen
- Increase Route 10 Imperial midday service to every 20 minutes
- Increase Route 12 General Hospital midday service to every 20 minutes
- Increase Route 13 Victoria Road Recreation Centre midday service to every 20 minutes
- Introduce Route 54 Speedvale West until Route 98 Speedvale can be introduced in year 3
- Reintroduce Route 16 Southgate as two branches: 16A via Clairfields and 16B via Clair

To support these changes, year 2 will have an increase of:

- 12 operators
- 4 buses
- 274,868 kilometres

Table 30. Service hours and frequency of adjusted routes in 2023.

Route	Service Hours	Service Frequency
3	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
8	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
10	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
12	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
13	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
16A	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 60 minutes during weekday shift changes; every 30 minutes all other times
16B	Morning and Afternoon weekday shift changes – 7 hours (to be determined through consultation)	Every 60 minutes during weekday shift changes
19	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes Mon-Sun

Route	Service Hours	Service Frequency
54	7 a.m. to 10 a.m. and 2 p.m. to 6 p.m. Mon-Fri	Every 20 minutes Mon-Fri (peaks only)

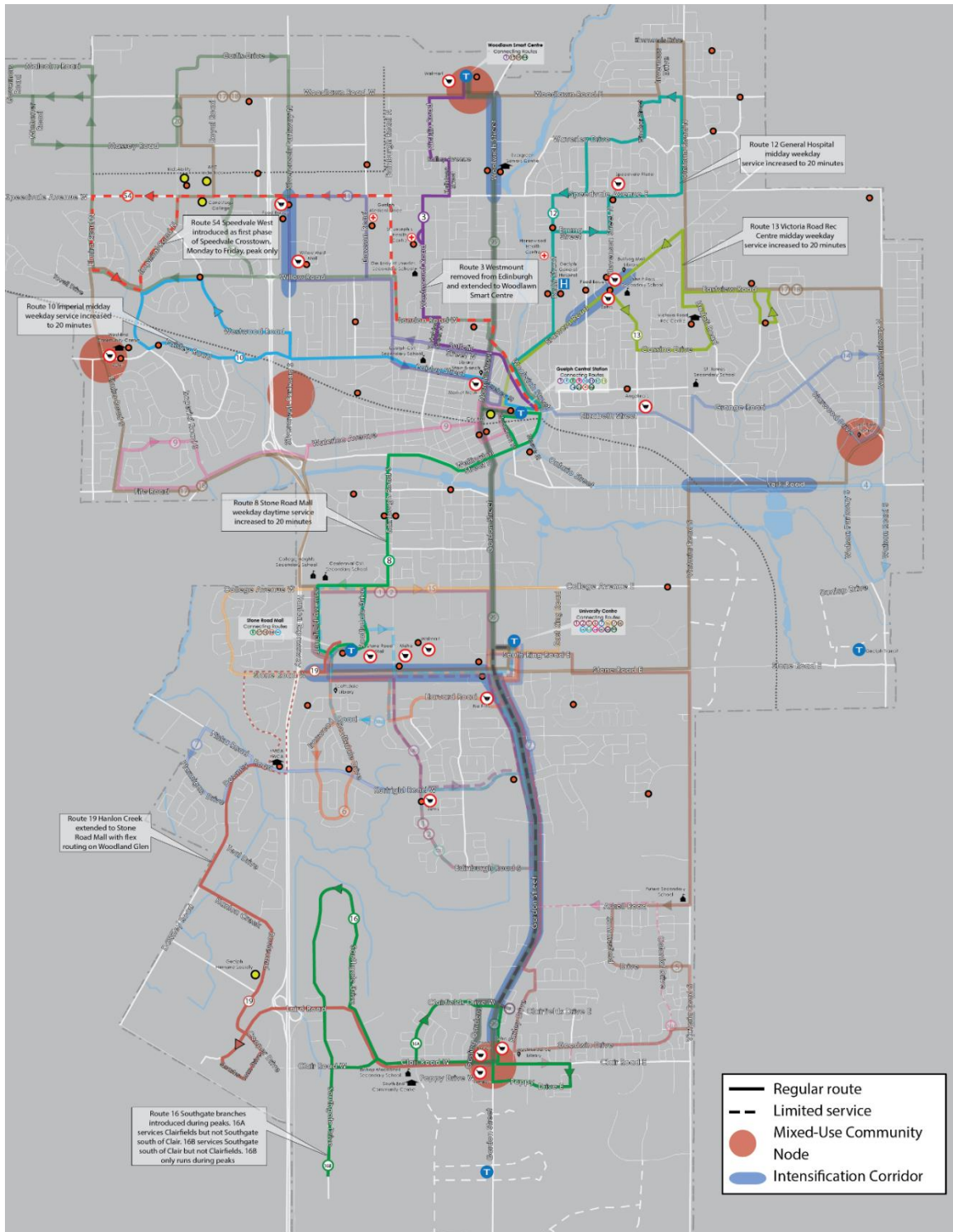


Figure 70. Future Ready Action Plan 2023 network map.

2024 – Year 3

Year 3 will have the following changes:

- Introduce new routing for Route 12 General Hospital
- Introduce new routing for Route 13 Victoria Road Recreation Centre
- Introduce modified routing for Route 17 Woodlawn Watson removed from Inverness Drive area
- Introduce new Route 98 Speedvale Phase 1

To support these changes, year 3 will have an increase of:

- 12 operators
- 5 buses
- 372,424 kilometres

Table 31. Service hours and frequency of adjusted routes in 2024.

Route	Service Hours	Service Frequency
12	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
13	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
17	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
98	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays

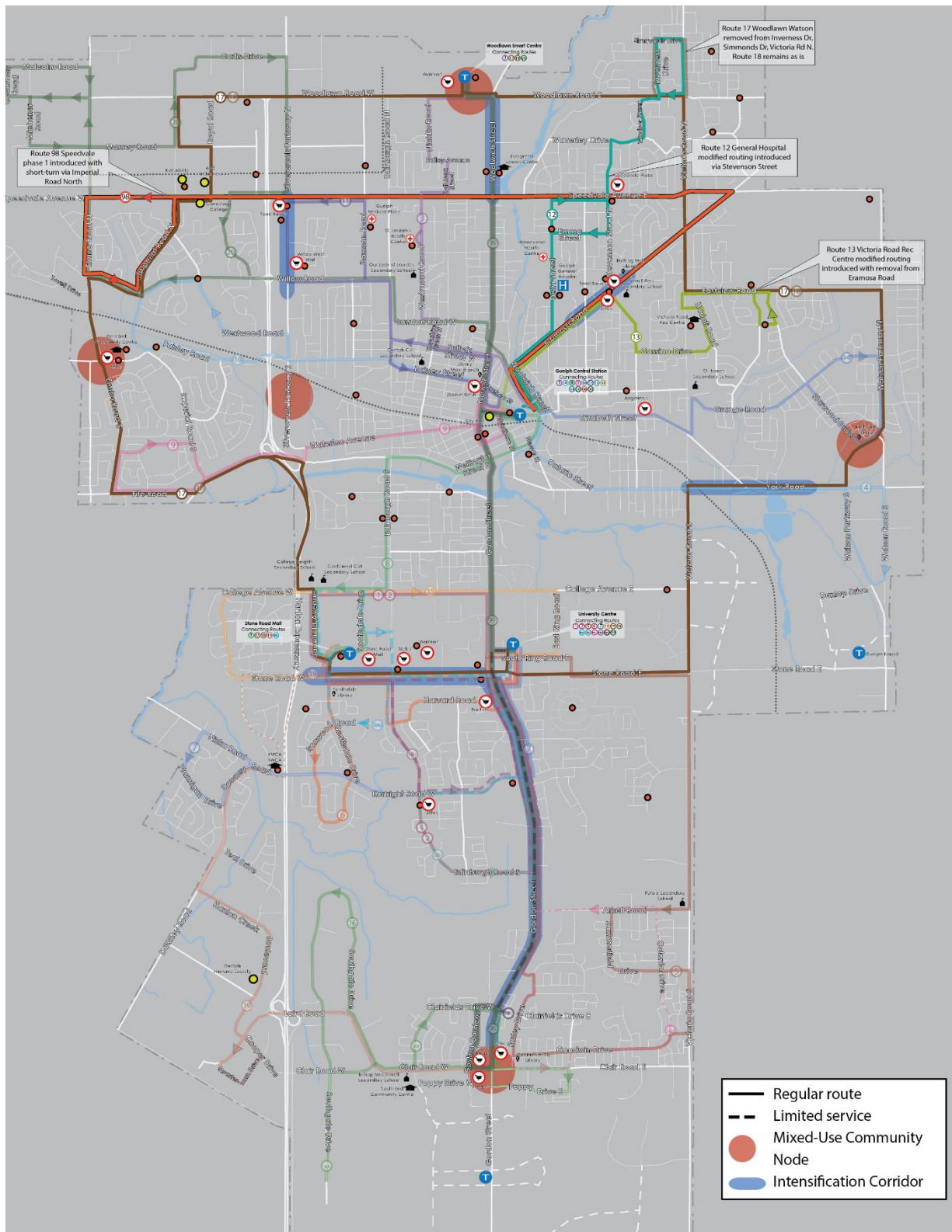


Figure 71. Future Ready Action Plan 2024 network map.

2025 – Year 4

Year 4 will have the following changes:

- Split Route 17/18 Woodlawn Watson into new Route 17 Fife and modified Route 18 Watson Woodlawn
- Introduce new Route 20 Wellington Imperial
- Introduce new Route 21 Willow
- Introduce new Route 22 Curtis
- Extend Route 98 Speedvale to West End Recreation Centre and interline with Route 17 Fife
- Introduce on-demand Sunday service from 7:15 a.m. to 10:15 p.m.
- Introduction of interregional transit from Guelph Central Station to Pinebush Station in Cambridge

To support these changes, year 4 will have an increase of:

- 18 operators
- 4 buses
- 180,591 kilometres

Table 32. Service hours and frequency of adjusted routes in 2025.

Route	Service Hours	Service Frequency
17	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
18	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
20	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
21	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
22	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
98	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
On-demand (Sunday)	7:15 a.m. to 9:15 a.m. and 6:45 p.m. to 10:15 p.m. Sundays	No fixed schedule
Interregional (GCS to Pinebush)	To be determined through public engagement	To be determined through public engagement

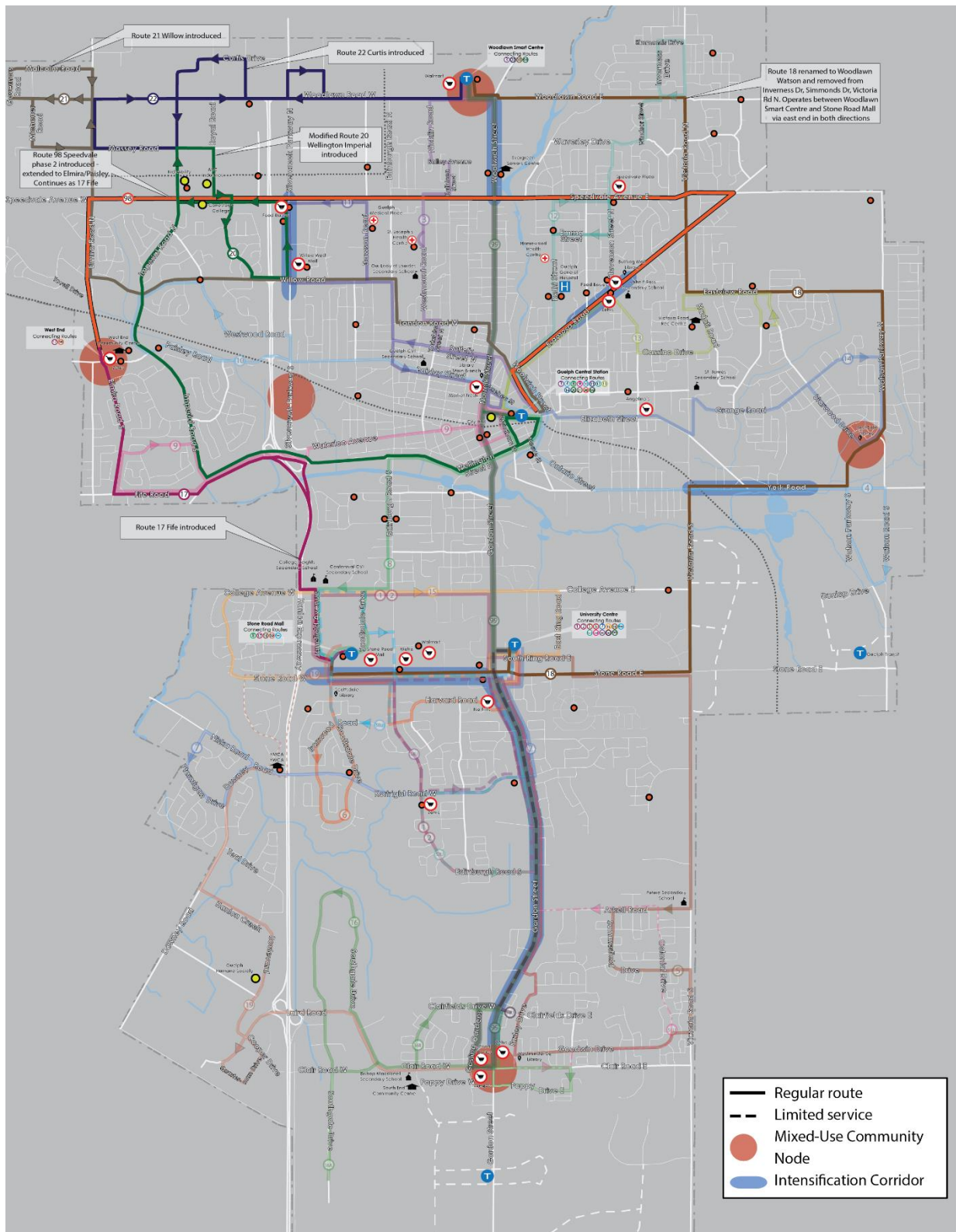


Figure 72. Future Ready Action Plan 2025 network map.

2026 – Year 5

Year 5 will have the following changes:

- Cancel Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West
- Introduce new Route 97 Edinburgh that replaces Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West
- Introduce new routing for Route 9 Waterloo Silvercreek
- Introduce new routing for Route 10 Imperial and rename to Route 10 Paisley
- Cancel Route 16A Southgate via Clairfields and convert Route 16B Southgate via Clair into the only branch of Route 16 Southgate
- Introduction of interregional transit from Guelph Central Station to Fairview Park Mall in Kitchener

To support these changes, year 5 will have an increase of:

- 15 operators
- 7 buses
- 275,935 kilometres

Table 33. Service hours and frequency of adjusted routes in 2026.

Route	Service Hours	Service Frequency
9	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
10	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays till 6 p.m.; every 30 minutes after 6 p.m. and weekends
16	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
97	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
Interregional (GCS to Fairview Mall)	To be determined through public engagement	To be determined through public engagement

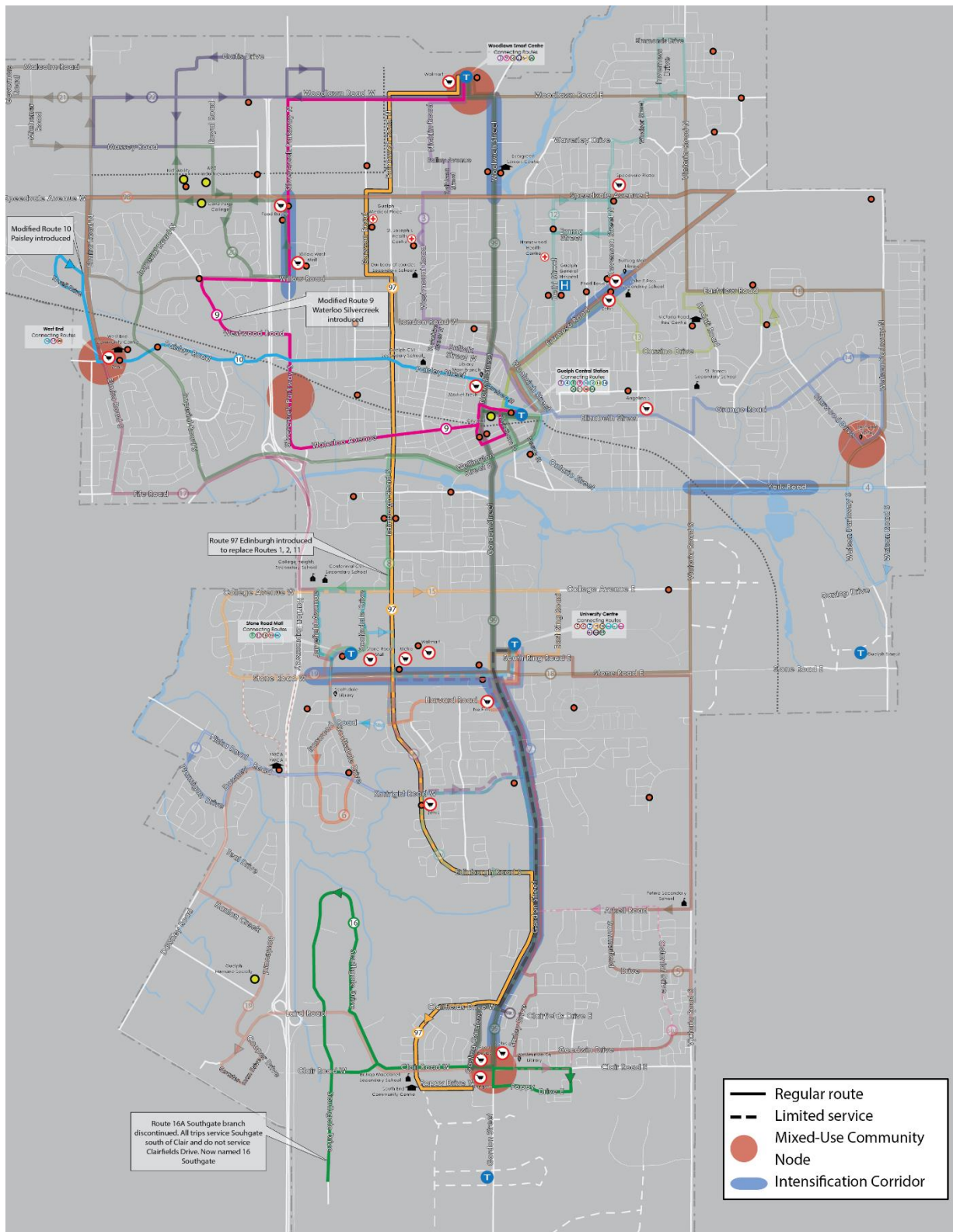


Figure 73. Future Ready Action Plan 2026 network map.

2027 – Year 6

Year 6 will have the following changes:

- Convert Route 5 Goodwin into a neighbourhood route and interline with Route 16 Southgate at Clair/Gordon
- Remove Route 16 Southgate from Poppy Dr to interline with Route 5 Goodwin at Clair/Gordon
- Introduce new routing for Route 13 Victoria Road Recreation Centre and rename to Route 13 Eastview Watson
- Introduce new Route 23 Watson Eastview that is paired and interlined with Route 13 Eastview Watson
- Cancel Route 18 Watson Woodlawn
- Introduce new Route 96 Victoria to replace Route 18 Watson Woodlawn
- Introduce new Route 24 Stone
- Introduce new Route 53U Eastview
- Modify Route 56U Colonial service schedule to run year round
- Increase Route 10 Paisley Saturday service to run every 20 minutes
- Interline Route 10 Paisley with Route 4 York
- Extend Route 4 York to new Transit Operations campus
- Introduction of interregional transit from Guelph Central Station to Aberfoyle

To support these changes, year 6 will have an increase of:

- 22 operators
- 4 buses
- 567,604 kilometres

Table 34. Service hours and frequency of adjusted routes in 2027.

Route	Service Hours	Service Frequency
4	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
5	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
10	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
13/23	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
16	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
24	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays

Route	Service Hours	Service Frequency
53U	6:30 a.m. to 10 a.m. and 2 p.m. to 6 p.m. Mon-Fri (Sept-May)	Every 20 minutes
56U	7:15 a.m. to 9:00 p.m. Mon-Fri (year-long)	Every 20 minutes till 6 p.m.; every 30 minutes after 6 p.m.
96	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
Interregional (GCS to Aberfoyle)	To be determined through public engagement	To be determined through public engagement

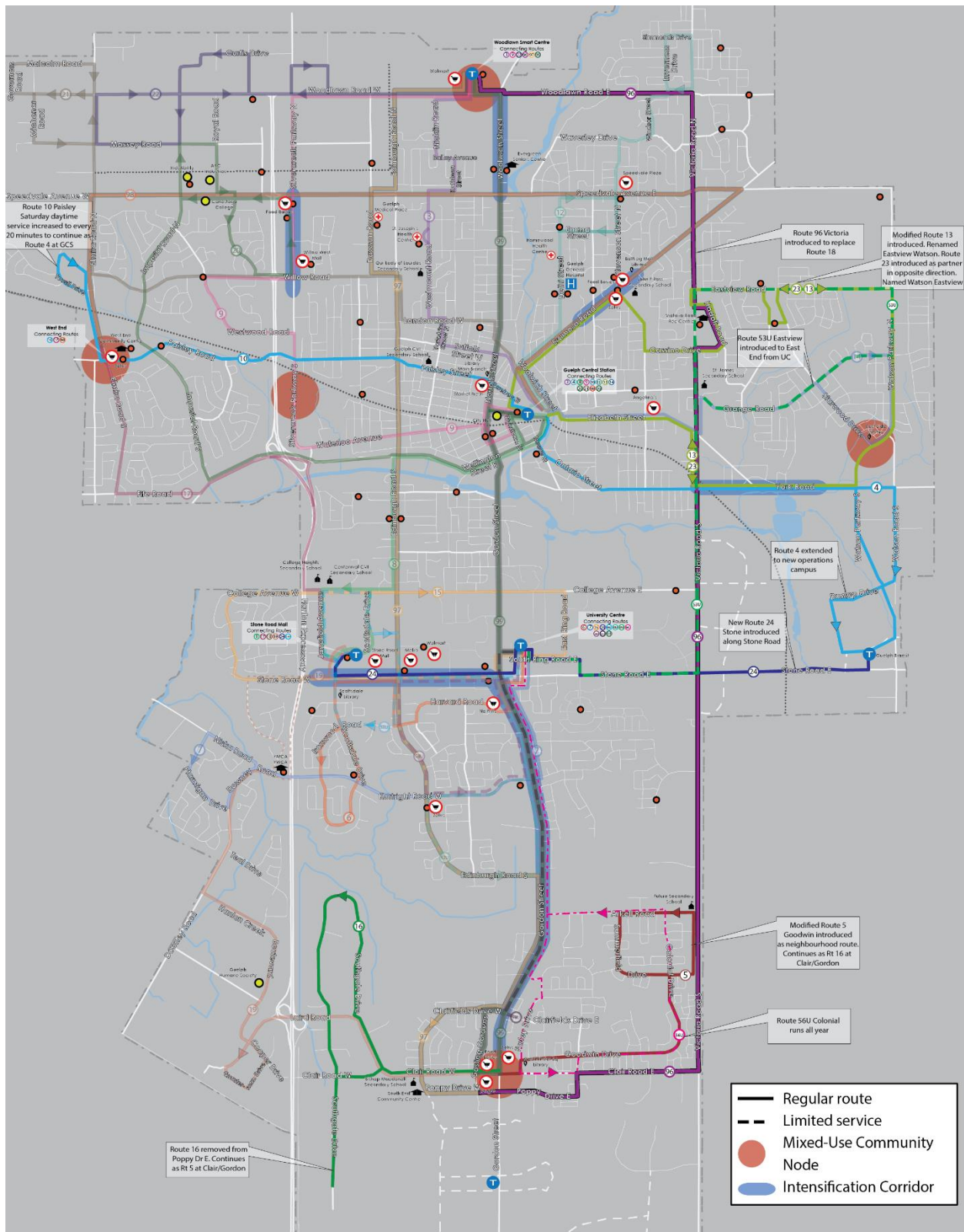


Figure 74. Future Ready Action Plan 2027 network map.

2028 – Year 7

Year 7 will have the following changes:

- Extend Route 59U Gordon Express to downtown
- Rename Route 15 University College to Route 15 Stone College
- Introduce new Route 25 College Stone that is paired with Route 15 Stone College

To support these changes, year 7 will have an increase of:

- 9 operators
- 0 buses
- 217,428 kilometres

Table 35. Service hours and frequency of adjusted routes in 2028.

Route	Service Hours	Service Frequency
25	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
59U	7 a.m. to 7 p.m. Mon-Fri (Sept-May)	Every 15 minutes

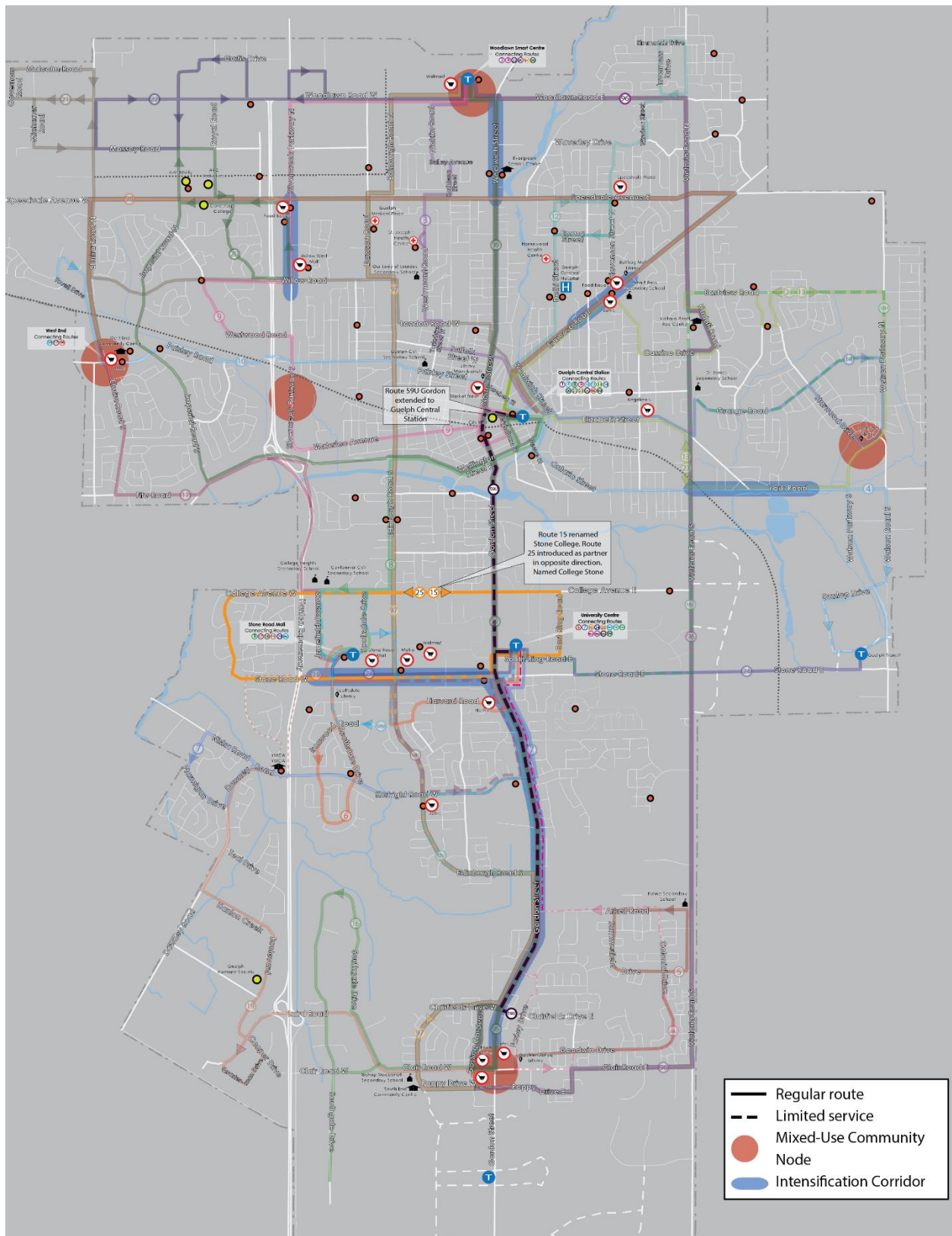


Figure 75. Future Ready Action Plan 2028 network map.

2029 – Year 8

Year 8 will have no changes.

2030 – Year 9

Year 9 will have no changes.

2031 – Year 10

Year 10 will have the following changes:

- Extend Route 5 Goodwin to the Clair Maltby Transit Terminal
- Extend Route 16 Southgate to the Clair Maltby Transit Terminal
- Extend Route 19 Hanlon Creek to the Clair Maltby Transit Terminal
- Extend Route 96 Victoria to the Clair Maltby Transit Terminal
- Extend Route 99 Mainline to the Clair Maltby Transit Terminal
- Modify Route 97 Edinburgh routing to service Gosling Gardens

To support these changes, year 10 will have an increase of:

- 0 operators
- 0 buses
- 145,683 kilometres

Table 36. Service hours and frequency of adjusted routes in 2031.

Route	Service Hours	Service Frequency
5	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
16	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
19	5:45 a.m. to 12:15 a.m. Mon-Sat; 9:15 a.m. to 6:45 p.m. Sun	Every 30 minutes
96	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
97	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 20 minutes weekdays and Saturdays till 6 p.m.; every 30 minutes after 6 p.m. and Sundays
99	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 9 minutes weekday morning and afternoon peaks; every 10 minutes weekday midday and evening till 10 p.m.; every 15 minutes after 10 p.m. & on weekends in south end; every 30 minutes in north end on weekends

