

# Special City Council Meeting Agenda

Monday, November 15, 2021, 6:00 p.m.

Remote meeting live streamed on [guelph.ca/live](https://guelph.ca/live)

Changes to the original agenda are noted with an asterisk "\*".

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## Pages

### 1. Notice of Electronic Participation

#### 1.1. City Council

This meeting will be held by Electronic Participation in accordance with City of Guelph Procedural By-law (2021)-20590.

### 2. Call to Order

#### 2.1. O Canada

#### 2.2. Silent Reflection

#### 2.3. First Nations Acknowledgement

#### 2.4. Disclosure of Pecuniary Interest and General Nature Thereof

### 3. Guelph Transit Action Plan – Route Review Recommended Plan - 2021-335

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#### Presentation:

Colleen Clack-Bush, Deputy Chief Administrative Officer, Public Services

Robin Gerus, Manager, Guelph Transit

Andrea Mikkila, Supervisor, Scheduling and Service Planning

Susan Carey, Chair, Transit Advisory Committee

**Recommendation:**

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.
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.

**4. By-laws**

Resolution to adopt the By-laws (Councillor O'Rourke).

**5. Adjournment**

# Staff Report



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To	<b>City Council</b>
Service Area	Public Services
Date	Monday, November 15, 2021
Subject	<b>Guelph Transit Action Plan – Route Review Recommended Plan</b>

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  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 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.
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## Executive Summary

### Purpose of Report

This report presents the recommendations that have resulted from the holistic route review of Guelph Transit as recommended in the [Guelph Transit Business Service Review](#). Attachment 1 outlines the route review process, results, and recommendations in detail, and a high-level summary is provided below.

This report also serves to seek Council direction for the execution of the Transfer Payment Agreement for the Investing in Canada Infrastructure Program (ICIP): Transit Stream as this grant provides a substantial amount of the capital funding required for this project.

To meet the obligations of the ICIP Transfer Payment Agreement, Transit needs to grow the system, increase ridership, and increase modal share. If the Guelph Transit Action Plan is not approved, the City must renegotiate the approved ICIP projects.

## **Key Findings**

Over the course of 20 months, benchmark data was collected, the City's guiding policy documents and plans and industry best practices were reviewed, and multiple phases of engagement with a variety of internal and external stakeholders were conducted. The goal of this review was to create a convenient and reliable transit network that meets the needs of the community today and into the future. This process resulted in the development of three alternatives for the transit network to 2031 and the consolidated and updated Service Guidelines. The preferred alternative is called the Future Ready Plan (Staff Recommended Plan). This plan aims to incorporate the key feedback received from public engagement sessions. The other two plans are called the High Frequency Plan and the 1% Levy Plan.

The Future Ready Plan supports goals under all priorities of the City's Strategic Plan. This plan also increases ridership over 13 years to 10.04 million, which equates to an increase of 4.29 million in ridership by 2034, or approximately a 13% modal share for transit by 2031, as compared to an 11% transit modal share in 2017. This plan increases the rate at which ridership that was lost during the COVID-19 pandemic can be recovered, even offset by ridership that was permanently lost.

Beyond modal share goals, there are many social, environmental, and economic benefits to investment in transit, both direct and indirect. These benefits include providing transit as a mobility service to ensure equitable access to essential destinations; fewer traffic fatalities per capita, particularly for vulnerable road users; and fewer greenhouse gases produced that aids in reducing carbon footprints as well as reducing the risk of disease and premature death related to air pollution.

Additionally, the ongoing Guelph Transportation Master Plan and the Transit Action Plan report were conducted simultaneously and are supportive of each other. The Future Ready Plan aligns with the 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 proposed 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 Transit Action Plan report and is supportive of the recommendations made.

## **Financial Implications**

The Future Ready Plan (Staff Recommended Plan) has estimated operating expenses at implementation of \$17.21 million and projected revenues of \$4.12 million, which has a net cost of \$13.09 million. The estimated annual net operating cost for 2022 and 2023 of the Future Ready Plan is \$1.77 million and \$1.26 million, respectively, which represents a 0.67% property tax levy increase for 2022 and 0.45% 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 has not been approved by Council and is identified in the Strategic Investment that will be presented as part of the 2022 City Budget; \$850,000 is required to fund 100RE annually, which represents 0.32%



property tax levy increase, and \$716,100 is required annually for 10 years to fund City Building, which represents a 0.27% property tax levy increase for 2022.

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

The 1% Levy Plan has estimated operating expenses at implementation of \$17.41 million and projected revenues of \$4.04 million, which has a net cost of \$13.37 million. The High Frequency Plan has estimated operating expenses at implementation of \$22.58 million and projected revenues of \$4.40 million, which has a net cost of \$18.17 million.

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 will be 38% in year one 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](#).

The Future Ready Plan as an outcome of the Route Review is an integral part of overall Transit capital investment. Should the plan not be approved, there will be an impact on the other capital investment projects which will still move forward. Along with The Future Ready Plan the following Transit projects are planned for the next 15 plus 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, the direct capital investment of the Future Ready Plan is only 15% of this amount, or \$37.63 million for the purchase of 26 buses.

The 1% Levy Plan requires the same number of buses while the High Frequency Plan requires 35 buses. The 26 buses are funded through development charges (40%), ICIP 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.

Should the Action Plan recommendations not be approved as part of the multi-year budget, there are five full-time positions and one part-time position that require Council approval in 2022, with a budget impact of \$547,000, which represents 0.21% property tax levy increase. In 2023, four full-time positions would be required, with a budget impact of \$397,000, which represents 0.14% property tax levy increase, three full-time positions in 2024, with a budget impact of \$286,000, which represents 0.09% increase to property tax levy and one position in 2025 with a budget impact of \$134,000, which represents 0.04% increase to property tax.

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# Report

## Introduction

Guelph Transit continuously works on implementing new projects that will help with business operations, many of which have been key milestones in getting to where the Route Review was a feasible project.

In 2010, the Transit Growth Strategy and Plan was completed and provided several guiding principles that are still applicable a decade later. In 2015, the Trapeze scheduling software was implemented. In 2017, a [route realignment](#) was conducted which created Guelph's current transit network – this included introduction of the Route 99 Mainline. This was followed by a RideCo pilot project for [mobility services](#) being implemented in 2018, which was made permanent in August 2020. The [Development Charges Study](#) (DC Study) that identified a target mode share of 13% by 2031 was also completed in 2018. In 2019, the [Guelph Transit Business Service Review](#) was conducted to identify what transit does well and what needs to change. This served as the catalyst for the Route Review, which was initiated in October 2019. Since then, Transit has introduced the [OnYourWay Fare card](#) and [on-demand services](#), all while navigating the unique challenges of a global pandemic.

Guelph Transit aims to be Future Ready beyond 2021 by the implementation of the Action Plan recommendations, which is projected to see the target 2031 ridership levels identified in the DC Study achieved three years earlier. Guelph Transit also aims to be Future Ready through the completion of a transit fare strategy, the Guelph Transit Master Plan, Fleet Electrification, ICIP projects, the new Transit Operations Campus, and the new Clair Maltby transit terminal. These projects will help us to Navigate Our Future beyond 2031.

## Guelph Transit Route Review

The first several months of the Guelph Transit Route Review consisted of gathering benchmark data and compiling industry best practices. Guiding policy documents from the City were then reviewed to identify support and expectations for transit. A major document that guides future transit plans is the Transit Growth Strategy and Plan from 2010. The Transit Growth Strategy recommended a service model with 11 recommendations, with several of the recommendations having already been implemented, and some others are addressed through the results of the Route Review. These recommendations are:

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

Focus groups were conducted with internal departments to identify plans, concerns, and opportunities for the transit network. Case studies were also conducted with comparator transit agencies that had recently gone through route network redesigns. This information provided a clear idea of limitations, opportunities, and items to consider before a concept network was developed.

Public engagement was originally planned for March 2020 to discuss with the public what their needs were for the transit network and how a new network would affect their use of transit. Due to COVID-19, these engagement sessions were postponed until September 2020. The results of this engagement added to the data for use in designing a new network. Direct surveying with employers in Guelph was also conducted to identify business' transit needs.

The main conclusions from this engagement outlined a desire for quicker and more direct service, increased service frequency and hours, service to new growth areas, and managing crowding on buses. Residents have made it clear through participation in various City engagement sessions that frequent and convenient transit is a priority for the community. This feedback acted as the basis for the initial transit network to ensure the community is being provided with what they have asked for.

Guelph Transit had several service guidelines in different City documents as well as unofficial internal standards. These guidelines were consolidated and updated following the first phase of public engagement to ensure customer expectations can be managed as the plan is implemented. The updated Service Guidelines would also be used to support future route monitoring and decision making. These standards are:

- Service Design Standards and Types
  - Family of Services
  - Service Coverage and Bus Stop Placement
  - Bus Stop Amenity Prioritization
- Service Level Targets
  - Passenger Loads
  - Service Hours and Frequency
  - On-Time Performance

- Service Expansion Targets
  - Build-up Targets
- Service Review Targets
  - Review Timelines
  - Financial Performance Review

The remainder of 2020 and into 2021 was used to develop an initial concept network to 2031, guided by all data collected up to that point. A 'family of services,' which defines different route types for different purposes, was created before designing specific routes. The family of services created consists of five route types:

1. Base routes—standard service hours and levels throughout the city
2. Core routes (90s series)—higher service levels on major corridors
3. University routes (50s series)—direct connections from student housing to the University Centre, primarily when University is in session (September – May)
4. Community routes (70s series)—on-demand service or lower-level service for new growth and low demand areas
5. Industrial express routes (100s series)—direct connections from terminals or major locations to employers as needed and funded through corporate partnerships

The initial transit network that was built on community feedback was presented to the public in May 2021 for further feedback. This feedback was considered and incorporated into the presented alternatives to varying extents based on community needs and cost constraints.

## **Alternatives**

Based on public engagement, three alternatives were developed for the transit network to 2031. The preferred alternative is called the Future Ready Plan (Staff Recommended Plan). The other two plans are called the High Frequency Plan and the 1% Levy Plan, which are like the Future Ready Plan but differ in some proposed service levels and/or implementation timelines. All three plans span 10 years and provide improved efficiency and convenience from increased service levels and more direct routes, which will ultimately attract a greater number of riders. 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 is necessary for implementation of any of the planned alternatives. The key characteristics of the plans are as follows.

### **Alternative 1: The Future Ready Plan (Staff Recommended Plan)**

The Future Ready Plan (Staff Recommended Plan) aims to incorporate the key feedback received from public engagement sessions. The plan begins implementation in 2022 and sees most changes in the first seven years (2028) of the 10-year plan, except for extensions to the new Clair Maltby Transit Terminal in 2031. The system moves to a more grid-like structure with higher service levels on major corridors. Sunday service hours are expanded through the implementation of on-demand service outside regular service hours. The resulting estimated 2034 ridership is 10.04 million – an increase of 4.29 million over the life of the plan.

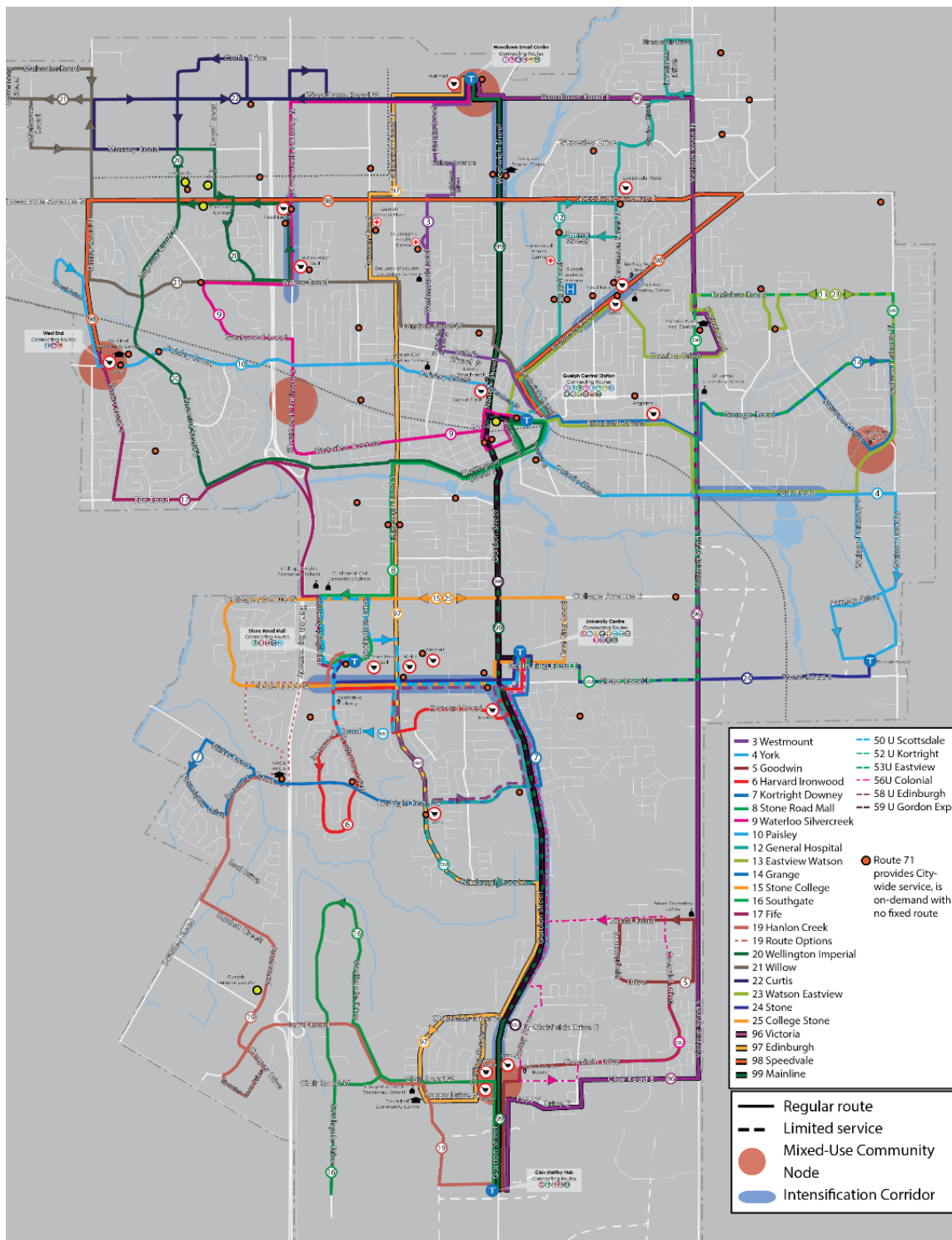
### **Alternative 2: The 1% Levy Plan**

The 1% Levy Plan has the same ultimate route structure as the Future Ready Plan but incorporates minimal feedback from public engagement sessions so changes can be spread more evenly over 10 years to lessen the yearly operating cost impacts. There are also some reduced frequencies. This plan focuses on maintaining the 1% levy mandate as directed by Council at the November 10, 2020 Transit Growth Strategy Workshop. The resulting estimated 2034 ridership is 9.95 million – an increase of 4.21 million over the life of the plan.

### **Alternative 3: The High Frequency Plan**

The High Frequency Plan's added changes are a direct result of fully incorporating feedback from public engagement sessions at a higher cost to implement. This plan has the same implementation timeline and route design as the Future Ready Plan but has increased peak, midday, evening, and/or Saturday service on the final routings of Routes 5, 13, 17, 23, 96, 97, 98, and 99, as well as the extension of Route 17 to the University Centre. The resulting estimated 2034 ridership is 10.35 million – an increase of 4.60 million over the life of the plan.

Full details of each of these plans are outlined in Attachment 1, Section 6.



**Figure 1. Future Ready Plan (Staff Recommended Plan) 2031 transit network.**

## Next Steps

The goal is to begin service implementation in spring 2022. If the Future Ready Plan (Staff Recommended Plan) and budget are approved, staff will move forward with creating a detailed service implementation plan that includes the following activities:

- Testing and confirming the safety and run times of routes.
- Creating a bus stop and infrastructure change plan that details what stops and infrastructure need to be added, altered, and/or removed each year. This plan will also detail when and where bus priority measures will be introduced as per the Transportation Master Plan.
- Creating a communications and promotions plan outlining how changes will be communicated to the public.
- Developing revised route maps and trip schedules for new and changed routes.
- Undertaking implementation activities, like installing new stop assets, purchasing the needed buses, and updating internal and external materials.

Once implementation has started, there will be regular monitoring of routes based on the Transit Service Standards and feedback from the public as well as monitoring the overall plan implementation to adjust the routes and years of implementation as needed.

## **Financial Implications**

Guelph Transit engaged Dillon Consulting to provide ridership and revenue projections for the Transit Action Plan. The 10-year Future Ready Plan has estimated that 2031 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 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 one 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](#).

The 1% Levy Plan costs more than the Future Ready Plan to implement due to inflation of the changes being made later in the plan and the revenue drawbacks associated with deferring changes. 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; thus, this impacts the revenues not being the same in both plans. In the Future Ready Plan, changes are mainly spread out over the first seven years of the 10-year plan in comparison to the 1% Levy Plan being more evenly spread out over 10 years.

The table below depicts the net cost of implementing the Future Ready Plan, the 1% Levy Plan, and the High Frequency Plan.

**Table 1. Net cost of implementation for the Future Ready Plan, 1% Levy Plan, and High Frequency Plan.**

Year	Future Ready	1% Levy	High Frequency
Total	\$13.08M	\$13.37M	\$18.17M

### Indirect Revenue

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

If the Action Plan is not implemented, the pandemic recovery and population growth revenues presented below will not be fully achieved. The revenue from the pandemic recovery and population growth accounts for \$3.31 million. 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 Plan, indirect revenue from pandemic recovery and population growth, provincial funding, and net cost.

**Table 2. Revenue from Future Ready Plan, indirect revenue, and net cost of implementation for each year.**

Year	Operating Cost	Future Ready Revenue	Net Cost	Indirect Revenue
2022	\$1.82 M <sup>1</sup>	\$0.06 M	\$1.77 M	\$1.73 M
2023	\$1.85 M	\$0.60 M	\$1.26 M	\$0.39 M
2024	\$2.16 M	\$0.26 M	\$1.90 M	\$0.32 M
2025	\$2.71 M	\$0.60 M	\$2.12 M	\$0.27 M
2026	\$2.55 M	\$0.31 M	\$2.24 M	\$0.11 M
2027	\$4.19 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	\$0.09 M

<sup>1</sup> The \$1.82 million dollars required in Year 1 includes costs for five operators to achieve the recommendations of the Business Service Review and two Supervisors to meet industry best practices for staffing ratios (\$690,000), as well as seven additional operators and two NUME positions required for the service changes.



<b>Year</b>	<b>Operating Cost</b>	<b>Future Ready Revenue</b>	<b>Net Cost</b>	<b>Indirect Revenue</b>
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	
<b>Total</b>	<b>\$17.21 M</b>	<b>\$4.12 M</b>	<b>\$13.08 M</b>	<b>\$3.31 M</b>

### **Capital Investments**

The Future Ready Plan is estimated to bring in \$0.99 million in new Dedicated Provincial Gas Tax funding over the 10-year plan due to increased ridership, which will help support the growing transit fleet capital replacement costs.

The Future Ready Plan as an outcome of the Route Review is an integral part of overall Transit capital investment. Should the plan not be approved, there will be an impact on the other capital investment projects which will still move forward. Along with The Future Ready Plan the following Transit projects are planned for the next 15 plus 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, the direct capital investment of the Future Ready Plan is only 15% 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% property tax levy increase and \$716,100 is required annually for 10 years to fund City Building, which represents 0.27% property tax levy increase for 2022.

**Table 3. The breakdown of capital funding sources for the 2022-2031 Transit capital investment budget.**

<b>Project Group</b>	<b>2022-2031 Budget</b>	<b>DC</b>	<b>ICIP</b>	<b>PGT</b>	<b>100 RE</b>	<b>CB</b>	<b>IR</b>
Route Review	\$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 Plan requires 26 buses with an expense of \$37.26 million. The 1% Levy Plan requires the same number of buses while the High Frequency Plan requires 35 buses. 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% increase for 2022 and 0.45% for 2023 to fund The Future Ready Plan as well as fund the capital requirements of the plan

A further breakdown of the financial implications can be found in Attachment 1, Section 6.

### **Needed FTEs**

Should the Action Plan recommendations not be approved as part of the multi-year budget, there are still 13 full-time and one part-time positions required between 2022 and 2025. 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 4. Breakdown of full-time employees needed for 2022-2025, the budget, and property tax impact.**

<b>Position</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
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%

## **Consultations**

The Route Review was the result of conducting exhaustive engagement of the community and stakeholders (including the Transit Advisory Committee) in two phases: project launch and concept development. Internal departments were consulted, including the project management team for the Transportation Master Plan as well as the Finance, Corporate Communications, and Fleet departments. Dillon Consulting was also hired to conduct a 10-year ridership and revenue forecast. A comprehensive summary of engagement is included in the Guelph Transit Action Plan report, Appendix A, found in Attachment 1.

## **Strategic Plan Alignment**

The Guelph Transit Action Plan aligns with all priorities of the Strategic Plan but is central to the Navigating our Future priority's goal of improving the safety, efficiency, and connectivity of the whole transportation system by providing

increased frequency and more direct routes. The plan will recover ridership lost during the COVID-19 pandemic and grow ridership beyond pre-pandemic levels. This will aid in increasing the “% change of non-auto mode share” key performance indicator.

Additionally, the plan aligns with the Building our Future priority’s goal of building safe and healthy communities by aiding in reducing healthcare costs associated with air pollution and sedentary lifestyles as well as the Working Together for our Future priority’s goal of maintaining core services by providing transit as an essential mobility service.

The plan also aligns with the Sustaining our Future priority’s goal of mitigating climate change by reducing Guelph’s carbon footprint since transit produces 50 to 95% less greenhouse gases per passenger mile than private vehicles.

Finally, the plan aligns with the Powering our Future priority’s goal of contributing to a connected and sustainable local economy by creating jobs and reducing traffic congestion that results in lost productivity.

## **Attachments**

Attachment-1 Guelph Transit Action Plan Report

Attachment-2 Presentation for Guelph Transit Action Plan

## **Departmental Approval**

Robin Gerus, General Manager, Transit Operations

## **Report Author**

Andrea Mikkila, Supervisor, Planning and Scheduling

Karissa Matson, Transit Development Specialist

## **This report was approved by:**

Robin Gerus

General Manager, Transit Operations

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## **Route Review Recommended Plan 2021-2031**



Accessible format available upon request

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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 has resulted in the Guelph Transit Action Plan presented in this report.

The Guelph Transit Action Plan is a proposed 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 Guelph Transit 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

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 network struggles to attract new riders.

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

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

- **Navigating our future** – the proposed 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 proposed network will not only maintain, but enhance, core services essential to mobility.

### **Network proposal and service guidelines**

The Guelph Transit Action Plan proposes to redesign the current transit network into one of the three proposed network option packages that resulted from the route review and community engagement. These packages are:

- **Package 1: Future Ready Plan (Staff Recommended Plan)** – some routes with increased frequencies and new on-demand Sunday service, implemented primarily over the first 7 years of the 10-year plan.
- **Package 2: 1% Levy Plan** – some routes with increased frequencies and new on-demand Sunday service, with slower implementation over 10 years.
- **Package 3: High Frequency Plan** – more routes with increased frequencies, new on-demand Sunday service, and a route extension, implemented primarily over the first 7 years of the 10-year plan.

All three plans incorporate three interregional transit routes: 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).



Engagement will be conducted prior to introducing these routes to confirm the destinations and implementation order.

Central to a successfully revised network is the creation of Transit Service Guidelines 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 Plan (Staff Recommended 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 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 has not been approved by Council and is identified in the Strategic Investment that will be 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 a 0.27 percent property tax levy increase for 2022.

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 Plan as well as fund the capital requirements of the total 10-year capital investment.

The 1% Levy Plan has estimated operating expenses at implementation of \$17.41 million and projected revenues of \$4.04 million, which has a net cost of \$13.37 million. The High Frequency Plan has estimated operating expenses at implementation of \$22.58 million and projected revenues of \$4.40 million, which has a net cost of \$18.17 million.

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 Plan, interregional transit, and the Conestoga College U-pass.

**Table 1. Net cost to provide Future Ready Plan, 1% Levy Plan, and the High Frequency Plan.**

<b>Year</b>	<b>Future Ready</b>	<b>1% Levy</b>	<b>High Frequency</b>
2022	\$1.77 M	\$1.64 M	\$2.14 M
2023	\$1.26 M	\$0.36 M	\$1.35 M
2024	\$1.90 M	\$1.60 M	\$2.30 M
2025	\$2.12 M	\$1.79 M	\$3.59 M
2026	\$2.24 M	\$2.17 M	\$3.30 M
2027	\$3.36 M	\$2.59 M	\$4.97 M
2028	\$0.80 M	\$1.06 M	\$0.69 M
2029	(\$0.27) M	\$1.13 M	(\$0.33) M
2030	(\$0.23) M	\$0.85 M	(\$0.23) M
2031	\$0.42 M	\$0.49 M	\$0.59 M
2032	(\$0.10) M	(\$0.12) M	(\$0.10) M
2033	(\$0.08) M	(\$0.09) M	(\$0.08) M
2034	(\$0.10) M	(\$0.10) M	(\$0.10) M
<b>Total</b>	<b>\$13.08 M</b>	<b>\$13.37 M</b>	<b>\$18.17 M</b>

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 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](#).

The Future Ready Plan as an outcome of the Route Review is an integral part of overall Transit capital investment. Should the plan not be approved, there will be an impact on the other capital investment projects which will still move forward. Along with The Future Ready Plan the following Transit projects are planned for the next 15 plus 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, the direct capital investment of the Future Ready Plan is only 15 per cent of this amount, or \$37.63 million for the purchase of 26 buses.

The 1% Levy Plan requires the same number of buses while the High Frequency Plan requires 35 buses. The 26 buses are partially funded through development

charges (40%), ICIP subsidies (44%), and the renewal energy fund (16%) in the 10-year capital plan.

Should the Action Plan recommendations not be approved as part of the multi-year budget, there are five full-time positions and one part-time position that require council approval in 2022, with a budget impact of \$547,000, which represents 0.21 percent property tax levy increase. In 2023, four full-time positions would be 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 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 Transit Action Plan outlines the actions the City should take to revitalize its transit network into a convenient, attractive, and efficient transit system that will grow with the City.

The Guelph Transit Action Plan is being provided to the City of Guelph Council for its consideration, selection of a package option, and approval to move forward with implementation.

### **It is recommended:**

- 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.**

# 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 has resulted in the Guelph Transit Action Plan presented in this report.

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 has 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, a transit system can be created that better serves even more residents and continues to grow with Guelph.

The Guelph Transit Action Plan is a proposed 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 Action Plan identifies areas where the current transit system could be improved to better meet the needs of existing riders and to attract new riders. It also identifies how an 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 Action Plan recognizes the current lack of service guidelines and offers new guidelines for standardizing decisions related to stop and infrastructure placement, route types, and service hours.

The main objective of the Guelph Transit 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 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 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 Guidelines for consistent decision-making

## **1.2. Process and timeline**

### **Phase 1: Data collection**

This phase analyzed existing network conditions, existing policy guidelines 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 City 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.

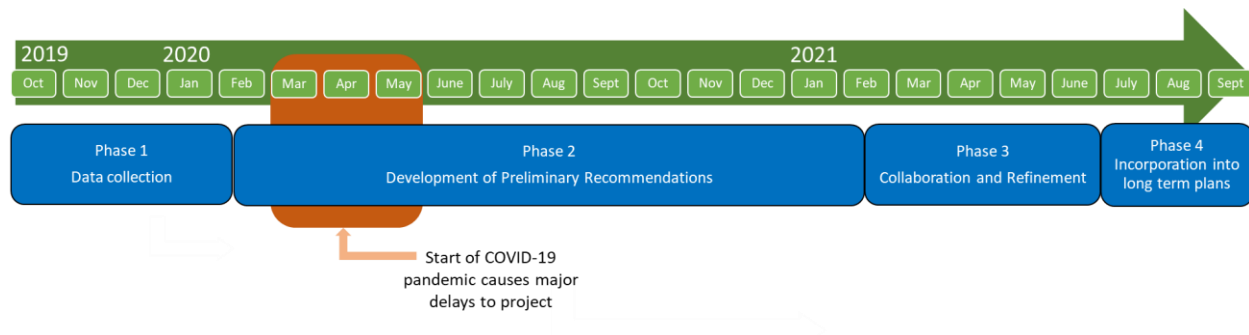
Feedback was received through online communications only due to the ongoing COVID-19 pandemic. These techniques included focus groups, online surveys, online town hall meetings, and open online Q&A forums, along with the opportunity to directly phone and/or email transit planning staff. Wherever feasible,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

To ensure that the Guelph Transit Action Plan meets the needs of the community in the short- and long-term, key City documents have been examined to provide the direction of Guelph's transit goals. The documents include: *A United Vision: Guelph's Community Plan (2018)*; *City's Strategic Plan, 2019-2023*; *Envision Guelph: Guelph Official Plan (2018)*; *Guelph Transportation Master Plan<sup>1</sup> (2020)*; *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 Transit 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

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<sup>1</sup> The Guelph Transportation Master Plan is still in development during Guelph Transit's Route Review. The current preferred alternative of the plan was considered in this report.

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 share<sup>2</sup> 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

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<sup>2</sup> 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 Transit Action Plan report were conducted simultaneously. The Future Ready Plan aligns with the ongoing 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 proposed 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 Transit Action Plan report and is supportive of the recommendations made.

### **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 footnote<sup>3</sup>.

- **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.

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<sup>3</sup> [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 was 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.<sup>4</sup>

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<sup>4</sup> [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.<sup>5</sup>
- 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.<sup>6</sup>
- 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.<sup>7</sup>
  - Air pollution ranks as the top environmental risk factor for premature death and disability in Canada.<sup>8</sup>

## 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.<sup>9</sup>
- Investment in transit has the potential to reduce infrastructure costs associated with road expansions and parking facilities to accommodate private vehicles.<sup>10</sup>
- Transit creates more local jobs, both in the transit industry and in other sectors.<sup>11</sup> It is estimated there is a potential yield of 49,700 jobs per \$1 billion (USD) invested in transit.<sup>12</sup>

## Environmental

- As transit usage increases, air quality improves. Transit produces 50 to 95% less GHGs per passenger mile than private vehicles.<sup>13</sup>
  - 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

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<sup>5</sup> [APTA The Hidden Traffic Safety Solution: Public Transportation](#)

<sup>6</sup> [VPTI Evaluating Public Transportation Health Benefits](#)

<sup>7</sup> [Health impacts of air pollution in Canada](#)

<sup>8</sup> [Health effects of air pollution](#)

<sup>9</sup> [Building Strong Cities Through Investments in Public Transit](#)

<sup>10</sup> [MTO Transit Supportive Guidelines: Parking Management](#)

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

<sup>12</sup> [Economic Impact of Public Transportation Investment](#)

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

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

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

## 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.

<sup>14</sup> [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, 2016<sup>15</sup>**

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.

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<sup>15</sup> [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 these industry best practices that will serve to guide any proposals for this action 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"><li>• "Average" route</li><li>• Operates primarily on arterial roads</li><li>• Basic level of service throughout area</li></ul>	e.g., Route 7
Rapid or Bus Rapid Transit (BRT)	<ul style="list-style-type: none"><li>• Limited stop service</li><li>• Much higher service frequency</li><li>• Use of transit priority measures</li></ul>	No example in Guelph
Express	<ul style="list-style-type: none"><li>• Limited stop service</li><li>• Connect two major locations with few or no stops in between</li></ul>	e.g., Route 59U
Extremely low-density service (also known as peripheral service)	<ul style="list-style-type: none"><li>• Minimal level of service in areas with low use</li><li>• May operate infrequently or only certain times of day</li></ul>	No example in Guelph



**Table 4. Classifications based on population served.**

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

**Table 5. Classifications based on route design.**

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

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

**Table 6. Classifications based on time of day.**

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

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.

Guelph Transit does not currently have a set of Council-adopted standards. The Transit Growth Strategy and Plan (2010) proposed a set of service standards, and these recommendations are used internally on occasion. However, they hold no real weight and are not applied consistently. Furthermore, there are also other guidelines present within the Guelph Transit Business Service Review (2019) and the Guelph Official Plan (2018). These standards are also not consistent from one document to another. The MTO's Transit-Supportive Guidelines likewise provide supporting guidelines for service standards. It is 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 guidelines will be updated in Section 6.

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

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

## 4. Summary of existing transit services

Guelph Transit's conventional service as of January 2020 (pre-pandemic service) is 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 current number of routes and operators is less than January 2020, with the intent to resume full service when the pandemic is over. The current family of service is made up of one spine route, local routes, university express routes, one express route, late night routes, and on-demand service<sup>16</sup>.

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 connect 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 provide service out of the University Centre Loop after conventional service ends (these have also not been in service since March 2020). The Community on-demand service provides service to many key community locations. The industrial on-demand service provides service to the Hanlon Creek Business Park with a stop-to-hub service model.

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

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<sup>16</sup> On-demand service was introduced in May 2021

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

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

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



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

<sup>18</sup> Community Bus North was converted to Community On-Demand in May 2021

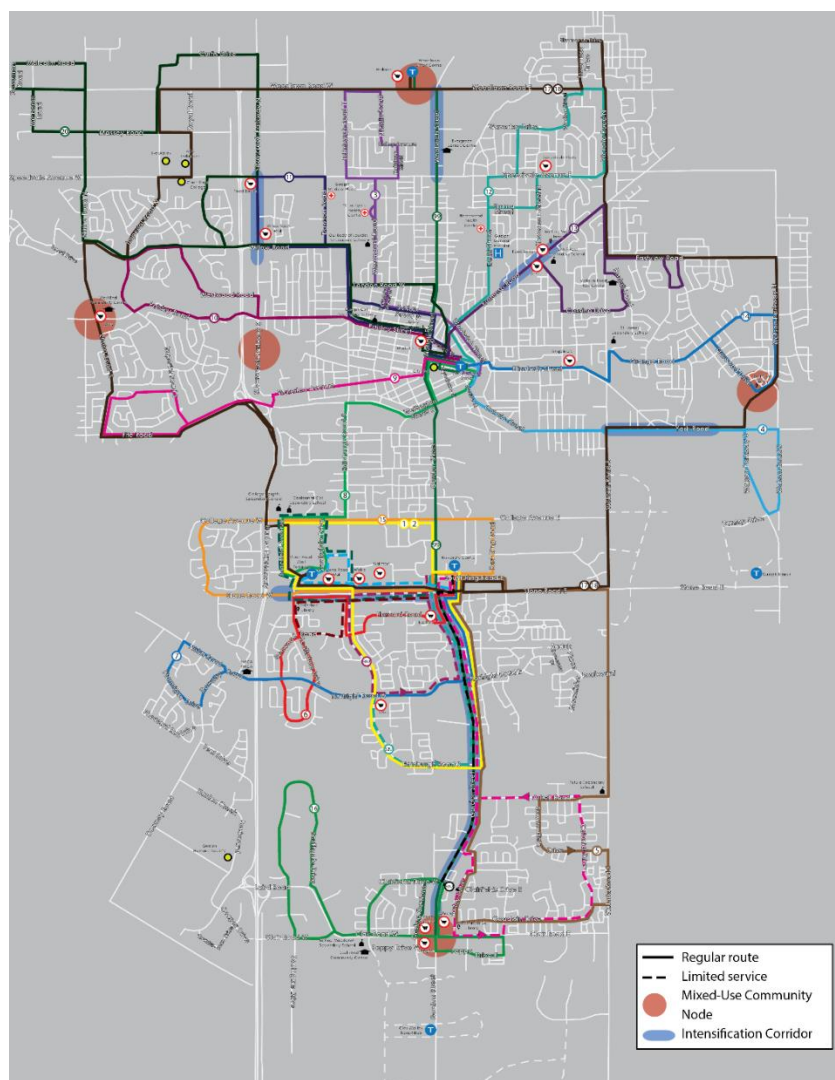
<sup>19</sup> Community Bus South was converted to Community On-Demand in May 2021

<sup>20</sup> Introduced May 2021

<sup>21</sup> Introduced May 2021

## 5. Evaluation of existing transit services

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.



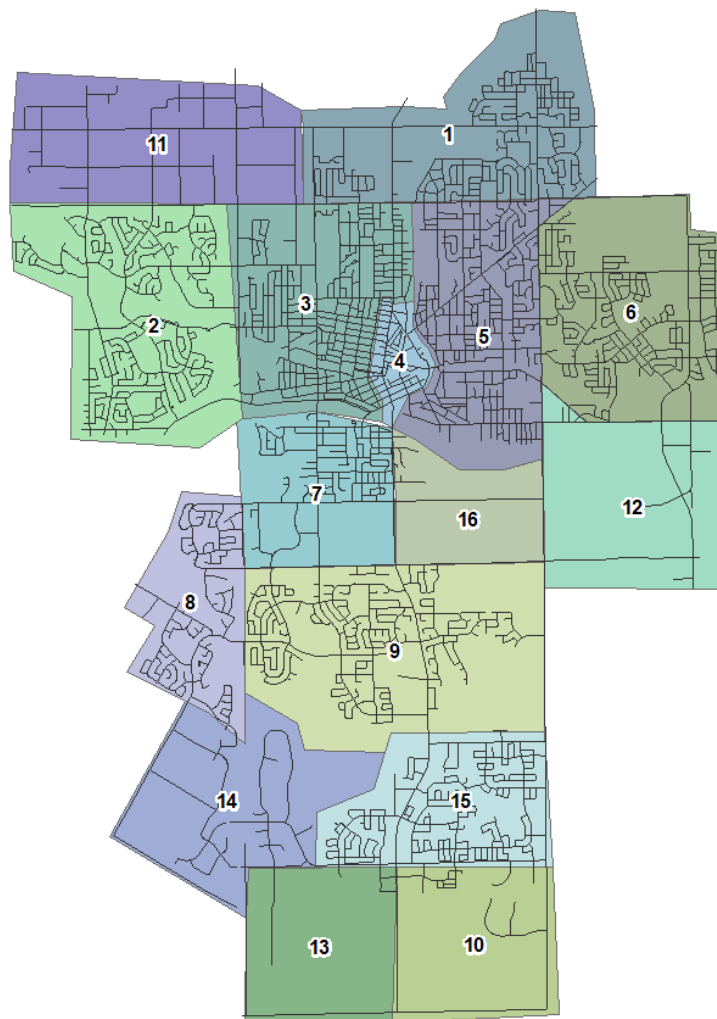
**Figure 2. Guelph Transit existing route network (January 2020).**

### 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.**

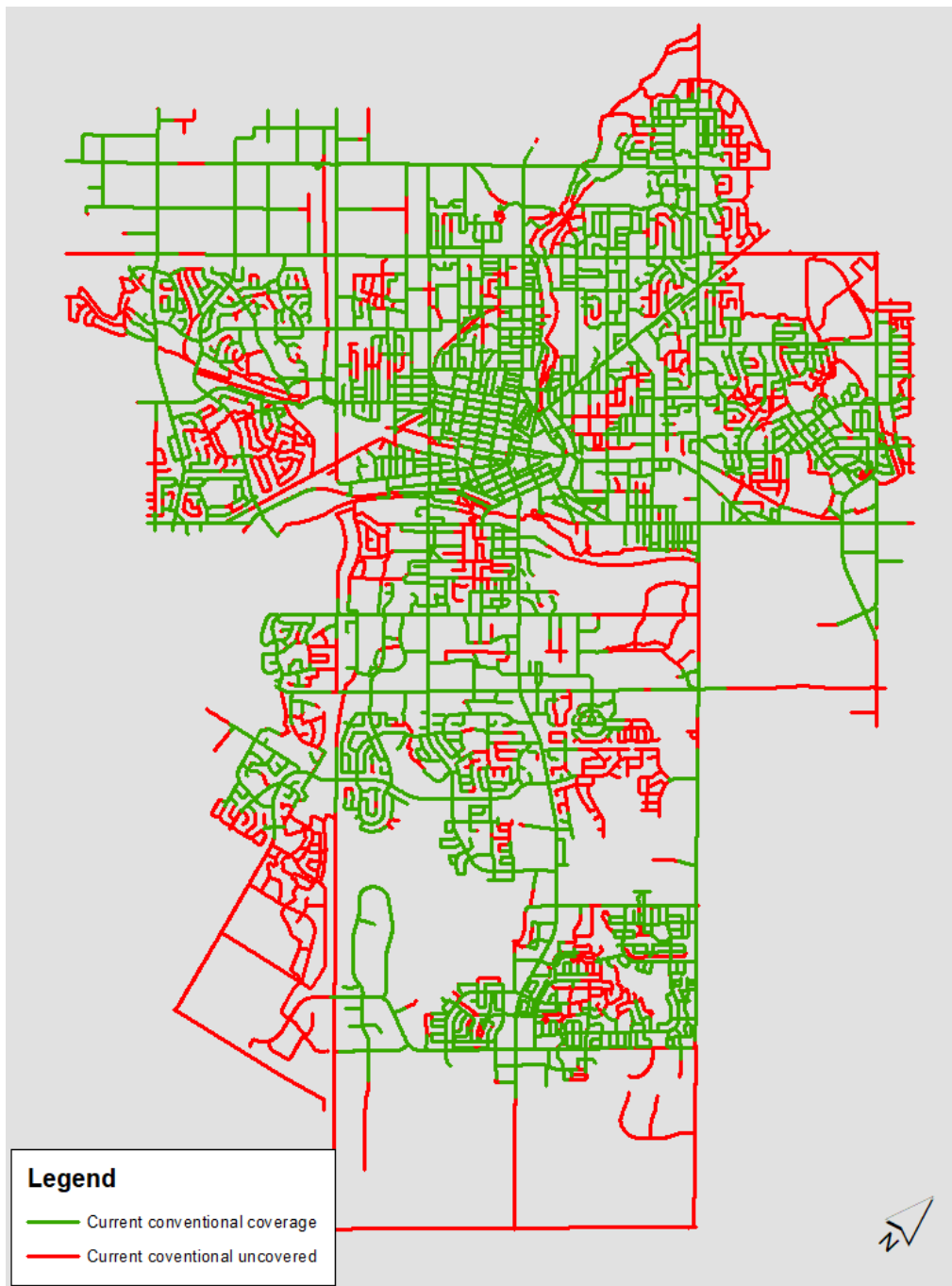
Transit staff identified key destinations within each district that residents are likely travelling to and then determined how residents would get to these destinations using the current and proposed transit network. Specifically, transit staff determined how many buses/transfers are needed to get to 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 current 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**

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 currently within 400 metres of a conventional route bus stop (green) and those that are more than 400 metres from a bus stop (red).**

### **Trip directness**

Guelph Transit currently 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 a 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 current network. A 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 for implementation in 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 proposed service types and standards, route network, and implementation strategy to 2031.

### 6.1. Guelph Transit Service Guidelines

#### 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 the Guelph Transit Network, which allows for a variety of route types that are tailored to different purposes. More information on each route type is provided in Table 8. 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) are currently proposed but would be pursued following approval of this plan and 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"><li>• Provide service 7 days a week, year-round</li><li>• 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</li><li>• Operate a minimum of every 30 minutes from the start of service to 10:00 p.m.</li><li>• Ensure bus stops are placed at regular intervals</li></ul>

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"> <li>• Provide service 7 days a week, year-round</li> <li>• 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</li> <li>• 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</li> <li>• Ensure bus stops are placed at regular intervals</li> </ul>
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"> <li>• Offer on-demand and/or limited service in areas without access to other transit routes</li> <li>• Base hours and frequency based on demand</li> </ul>
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"> <li>• Provide service and frequency based on demand</li> <li>• Offer direct service to employment areas</li> </ul>
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"> <li>• Provide service on weekdays, from September to May</li> <li>• Provide service and frequency based on demand</li> <li>• Ensure bus stops are placed at regular intervals, with some sections of the routes operating as an express where there is duplication of service</li> </ul>

### 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.**

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

<b>Service Hours</b>	<b>Target</b>
Decrease in service hours	Where a <b>minimum of 5 passengers per hour</b> 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 passenger per revenue hour targets for base routes are achieved, as outlined in Table 11.

### **Service review targets**

The previous guidelines require that the appropriate data are 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

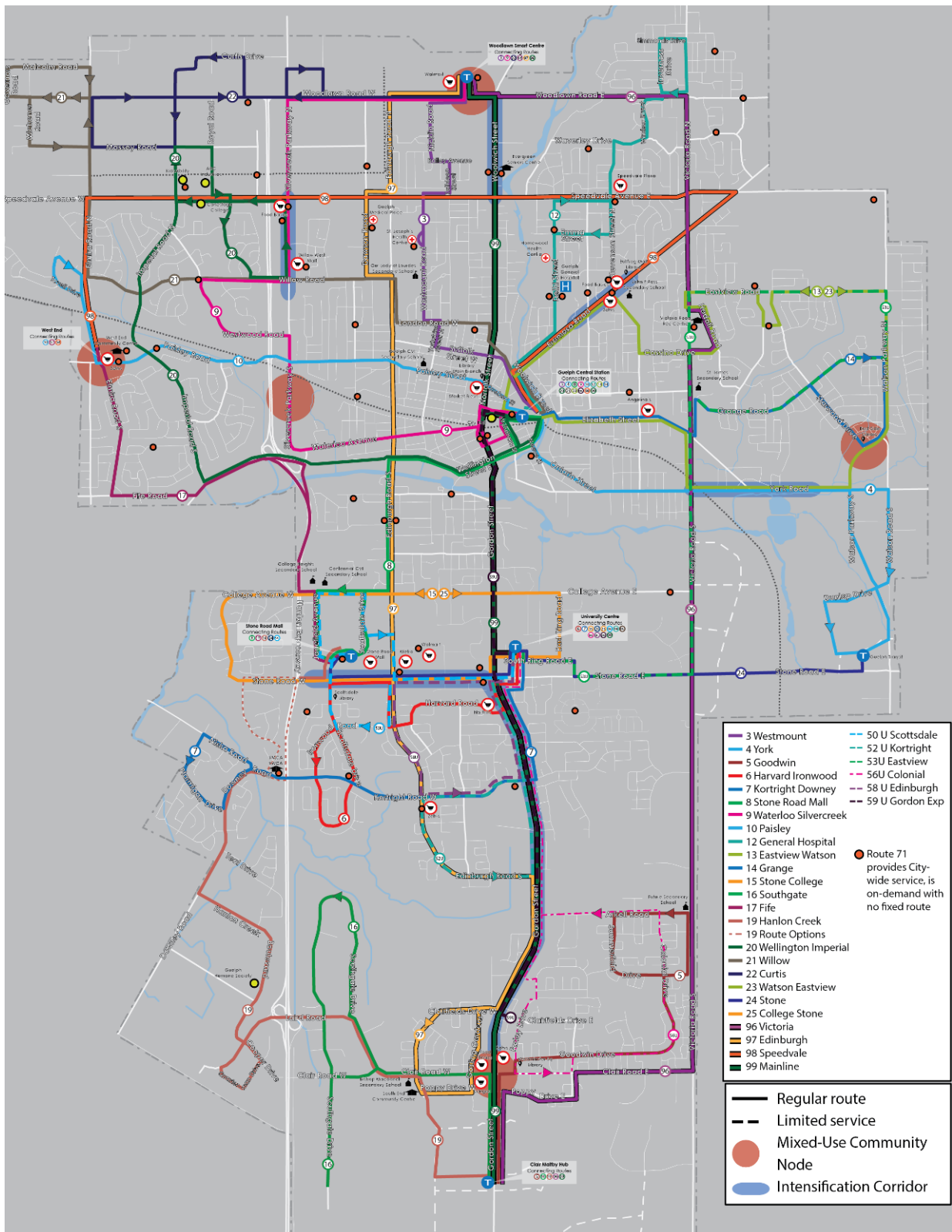
### **Financial performance reviews**

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 Proposed revised system (2031)**

The following page shows the recommended 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. 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 proposed route network (2031).**

**Table 13. Network-wide route restructuring (2031 network)<sup>22</sup>.**

<b>Route</b>	<b>Route Type and Structure</b>	<b>Details</b>
3 Westmount	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>• Retains much of existing routing while extending to Woodlawn Smart Centre</li> <li>• 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</li> <li>• Provides better north end connections at Woodlawn Smart Centre</li> </ul>
4 York	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing while extending to the new Guelph Transit Operations Campus</li> <li>• Services the east end with stops at Guelph Central Station, along York Road, and the Guelph Transit Operations Campus</li> <li>• Possible interlining with Route 10</li> </ul>
5 Goodwin	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Routing modified to serve the south end neighbourhood and provide a connection to the Clair Maltby Transit Terminal</li> <li>• Services the south end with stops at the Clair Maltby Transit Terminal, Clair/Gordon, and the future secondary school at Arkell/Victoria</li> </ul>
6 Harvard Ironwood	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Services the University, No Frills at Gordon/Harvard, Harvard Rd, and the Ironwood/Scottsdale neighbourhood</li> </ul>
7 Kortright Downey	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Services the University, Zehrs at Edinburgh/Kortright, the YMCA at Downey/Hanlon, and the Niska/Ptarmigan neighbourhood</li> </ul>
8 Stone Road Mall	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Services Guelph Central Station, Wellington St, Edinburgh Rd, College Heights/CCVI, and Stone Road Mall</li> </ul>

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<sup>22</sup> See

<b>Route</b>	<b>Route Type and Structure</b>	<b>Details</b>
9 Waterloo Silvercreek	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>• Introduces new routing that maintains existing Route 9 routing along Waterloo Ave but now services Silvercreek Pkwy and connects to the Woodlawn Smart Centre</li> <li>• Services Guelph Central Station, Silvercreek Pkwy strip (including Willow West Mall and Food Basics), and Woodlawn Smart Centre</li> <li>• Provides better north end connections at Woodlawn Smart Centre</li> </ul>
10 Paisley	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing Route 10 routing on Paisley while extending service to the west end stores and Tovell Dr neighbourhood</li> <li>• Services the west end with stops at Guelph Central Station, GCVI, West End Community Centre, Zehrs plaza and Costco, and Tovell Dr neighbourhood</li> </ul>
12 General Hospital	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Services Guelph Central Station, Guelph General Hospital, Homewood Health Centre, Speedvale Plaza, and the northeast end neighbourhood</li> </ul>
13 Eastview Watson	<ul style="list-style-type: none"> <li>• Base route</li> <li>• One way loop (paired with Route 23 running in opposite direction)</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Paired with Route 23 running in the opposite direction to provide better service to the east end</li> <li>• 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</li> </ul>
14 Grange	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Services Guelph Central Station, Elizabeth St, Angelino's, St James SS, Grange Rd, Watson Pkwy, East Side Library, Starwood Dr, and east end neighbourhood</li> </ul>

<b>Route</b>	<b>Route Type and Structure</b>	<b>Details</b>
15 Stone College	<ul style="list-style-type: none"> <li>• Base route</li> <li>• One way loop (paired with Route 25 running in opposite direction)</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Paired with Route 25 running in the opposite direction to provide better service</li> <li>• Services University Centre, Stone Rd corridor, Metro/Walmart, Stone Road Mall, College Ave W, College Heights/CCVI, and East Ring Rd</li> </ul>
16 Southgate	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with one-way sections</li> </ul>	<ul style="list-style-type: none"> <li>• Modified old Route 16 Southgate routing to replace Hanlon On-Demand on east side of Hanlon</li> <li>• Services Clair Maltby Transit Terminal, Clair/Gordon mixed-use node, Bishop Macdonell SS, Southgate Dr and Clair Rd W</li> </ul>
17 Fife	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service (paired with Route 98)</li> </ul>	<ul style="list-style-type: none"> <li>• Retains west portion of existing Route 17</li> <li>• Continues as Route 98 at Elmira Rd and Paisley Rd for better service in the northwest</li> <li>• 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<sup>23</sup></li> </ul>
19 Hanlon Creek	<ul style="list-style-type: none"> <li>• Base route with routing options</li> <li>• Two-way service with a one-way loop</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 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<sup>24</sup></li> </ul>
20 Wellington Imperial	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with two one-way loops</li> </ul>	<ul style="list-style-type: none"> <li>• Introduces new routing that maintains portion of existing Route 20 along Marksam Road</li> <li>• 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</li> </ul>

<sup>23</sup> See Future Expansion Options for routing options

<sup>24</sup> See Future Expansion Options for routing options



<b>Route</b>	<b>Route Type and Structure</b>	<b>Details</b>
21 Willow	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with two one-way loops</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Provides more direct routing from northwest industrial area to downtown</li> <li>• Services Guelph Central Station, Our Lady of Lourdes SS, Willow West Mall, and the northwest industrial area</li> </ul>
22 Curtis	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service with three one-way loops</li> </ul>	<ul style="list-style-type: none"> <li>• New route that takes over a portion of existing Route 20 along Massey Rd, Imperial Rd, and Curtis Dr</li> <li>• Provides more direct routing to northwest industrial area from Woodlawn Smart Centre</li> <li>• Services Woodlawn Smart Centre and northwest industrial area</li> </ul>
23 Watson Eastview	<ul style="list-style-type: none"> <li>• Base route</li> <li>• One way loop (paired with Route 13 running in opposite direction)</li> </ul>	<ul style="list-style-type: none"> <li>• Introduces new route that runs in the opposite direction of the Route 13 to provide better service to the east end</li> <li>• 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</li> </ul>
24 Stone	<ul style="list-style-type: none"> <li>• Base route</li> <li>• Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>• New route that provides bi-directional service along Stone Rd</li> <li>• Services Stone Road Mall, Metro/Walmart, Stone Rd corridor, the University Centre, and Guelph Operations campus</li> </ul>
25 College Stone	<ul style="list-style-type: none"> <li>• Base route</li> <li>• One way loop (paired with Route 15 running in opposite direction)</li> </ul>	<ul style="list-style-type: none"> <li>• Introduces new route that runs in the opposite direction of the Route 15 to provide better service</li> <li>• Services University Centre, East Ring Rd, College Heights/CCVI, College Ave W, Stone Road Mall, Metro/Walmart, and Stone Rd corridor</li> </ul>
50U Scottsdale	<ul style="list-style-type: none"> <li>• University route</li> <li>• Two-way service with a one-way loop</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Services University Centre, Stone Rd corridor, Scottsdale Library, Stone Road Mall, and Metro/Walmart</li> </ul>

<b>Route</b>	<b>Route Type and Structure</b>	<b>Details</b>
52U Kortright	<ul style="list-style-type: none"> <li>• University route</li> <li>• Two-way service with a one-way loop</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Services the University Centre, Gordon St, Kortright Rd, Zehrs at Kortright/Edinburgh, and Edinburgh Rd</li> </ul>
53U Eastview	<ul style="list-style-type: none"> <li>• University route</li> <li>• Two-way service with a one-way loop</li> </ul>	<ul style="list-style-type: none"> <li>• New route that provides service from the east end to the University during peak hours</li> <li>• Services the University Centre, Stone Rd, Victoria Rd, St James SS, Victoria Rd Rec Centre, Eastview Rd, Watson Pkwy, and Grange Rd</li> </ul>
56U Colonial	<ul style="list-style-type: none"> <li>• University route</li> <li>• Two-way service with a one-way loop</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing but now runs all year</li> <li>• Services the University Centre, Gordon St, Farley Dr, Westminster Square Library, Clair Rd, Goodwin Dr, Colonial Dr, and Arkell Rd</li> </ul>
58U Edinburgh	<ul style="list-style-type: none"> <li>• University route</li> <li>• Two-way service with a one-way loop</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing</li> <li>• Services the University Centre, Stone Rd, Metro/Walmart, Edinburgh Rd, Zehrs at Kortright/Edinburgh, Kortright Rd, and Gordon St</li> </ul>
59U Gordon Express	<ul style="list-style-type: none"> <li>• University route</li> <li>• Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>• Retains existing routing but is now extended to Guelph Central Station</li> <li>• Services Guelph Central Station, the University Centre, and Gordon St</li> </ul>
71 Community On-Demand	<ul style="list-style-type: none"> <li>• Community on-demand route</li> <li>• No fixed routing</li> </ul>	<ul style="list-style-type: none"> <li>• No fixed routing</li> <li>• 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</li> </ul>
96 Victoria	<ul style="list-style-type: none"> <li>• Core route</li> <li>• Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>• New route that provides direct service from the north end to the south end via Victoria Rd</li> <li>• 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</li> </ul>

Route	Route Type and Structure	Details
97 Edinburgh	<ul style="list-style-type: none"> <li>Core route</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>New route that provides direct service from the north end to the south end via Edinburgh Rd</li> <li>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</li> </ul>
98 Speedvale	<ul style="list-style-type: none"> <li>Core route</li> <li>Two-way service (paired with Route 17)</li> </ul>	<ul style="list-style-type: none"> <li>New route that provides direct service from the east end to the west end via Speedvale Ave</li> <li>Continues as Route 17 at Elmira Rd and Paisley Rd to also provide direct connection to Stone Road Mall</li> <li>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</li> </ul>
99 Mainline	<ul style="list-style-type: none"> <li>Core route</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Retains existing routing that provides direct service from the north end to the south end with extension to Clair Maltby Transit Terminal</li> <li>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</li> </ul>

### 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 Plan (2031).**

## Future expansion options

An initial plan was presented for public feedback in May/June 2021. Several options have been developed for a final proposed transit network using the feedback received by the community. The feedback has been incorporated to varying degrees depending on available resources and potential cost. All 3 options below 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. The precise routing, implementation timing, and destinations will be confirmed through engagement closer to each route's implementation year. Full financial and resource summaries for each plan are provided in the Financial implications section.

**Table 14. Expected increases in ridership from the interregional transit routes.**

Year	Ridership increases from service changes
1	-
2	-
3	-
4	20,792
5	45,192
6	59,103
7	45,005
8	17,702
9	23,367
10	-
Total increase	211,161

## Package 1: Future Ready Plan (Staff Recommended Plan)

This package 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 15. Expected total ridership for each year of the Future Ready Plan (Staff Recommended 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

<b>Year</b>	<b>Total ridership</b>	<b>Ridership increases from service changes</b>
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 16. Proposed service hours of package 1.**

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	3 Westmount	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	4 York	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	5 Goodwin	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	6 Harvard Ironwood	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes a.m. and p.m. peak hours Monday to Friday</li> <li>• Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday</li> </ul>
Base	7 Kortright Downey	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes a.m. and p.m. peak hours Monday to Friday</li> <li>• Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday</li> </ul>
Base	8 Stone Road Mall	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	9 Waterloo Silvercreek	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	10 Paisley	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	12 General Hospital	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	13 Eastview Watson	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	14 Grange	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	15 Stone College	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	16 Southgate	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	17 Fife	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	19 Hanlon Creek	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	20 Wellington-Imperial	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	21 Willow	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	22 Curtis	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	23 Watson Eastview	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	24 Stone	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	25 College Stone	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
University Express	50U Scottsdale	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:00 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 15 minutes Monday to Friday</li> </ul>
University Express	52U Kortright	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:20 a.m. to 5:50 p.m. Monday to Friday</li> <li>• Every 30 minutes during peak times Monday to Friday</li> </ul>
University Express	56U Colonial	<ul style="list-style-type: none"> <li>• Year-long</li> <li>• 7:15 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes weekday evenings after 6 p.m.</li> </ul>
University Express	58U Edinburgh	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:20 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 20 minutes Monday to Friday</li> </ul>
University Express	59U Gordon Express	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:00 a.m. to 7:00 p.m. Monday to Friday</li> <li>• Every 15 minutes Monday to Friday</li> </ul>
Core	96 Victoria	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	97 Edinburgh	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	98 Speedvale	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>



Service Type	Route(s)	Service Summary
Core	99 Mainline	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 9 minutes during peak times Monday to Friday</li> <li>• Every 10 minutes during midday Monday to Friday</li> <li>• Every 15 minutes during evenings Monday to Friday</li> <li>• Every 15 to 30 minutes Saturday and Sunday</li> </ul>
On-Demand	Community Bus On-Demand	<ul style="list-style-type: none"> <li>• 8:30 a.m. to 4:30 p.m. Monday to Sunday with additional hours as needed</li> <li>• No fixed schedule</li> </ul>

### Package 2: 1% Levy Plan

This package is the same as package 1 but has a slower implementation schedule that returns to applying changes over the full 10 years. These changes will result in 110,112 new service hours and 2,180,499 new kilometres. This will require 26 additional buses and 100 additional operators. By 2034, there is expected to be an increase of 4.21 million in ridership. For details on the years of implementation for this plan, see [Appendix E](#).

**Table 17. Expected increases in ridership for each year of the 1% Levy Plan.**

Year	Total ridership	Ridership increases from service changes
1	5,739,232	30,904
2	6,289,050	41,315
3	6,857,016	75,863
4	7,376,917	73,461
5	7,921,300	145,903
6	8,291,699	131,730
7	8,506,327	49,468
8	9,226,720	293,907
9	9,411,729	19,712
10	9,631,022	36,200
11	9,756,758	61,625
12	9,847,434	44,431
13	9,946,110	48,351
Total increase	4,206,878	1,095,658

**Table 18. Proposed service hours of package 2.**

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	3 Westmount	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	4 York	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	5 Goodwin	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	6 Harvard Ironwood	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes a.m. and p.m. peak hours Monday to Friday</li> <li>• Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday</li> </ul>
Base	7 Kortright Downey	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes a.m. and p.m. peak hours Monday to Friday</li> <li>• Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday</li> </ul>
Base	8 Stone Road Mall	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	9 Waterloo Silvercreek	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	10 Paisley	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	12 General Hospital	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	13 Eastview Watson	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	14 Grange	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	15 Stone College	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	16 Southgate	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	17 Fife	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	19 Hanlon Creek	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	20 Wellington-Imperial	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	21 Willow	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	22 Curtis	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	23 Watson Eastview	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	24 Stone	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	25 College Stone	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
University Express	50U Scottsdale	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:00 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 15 minutes Monday to Friday</li> </ul>
University Express	52U Kortright	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:20 a.m. to 5:50 p.m. Monday to Friday</li> <li>• Every 30 minutes during peak times Monday to Friday</li> </ul>
University Express	56U Colonial	<ul style="list-style-type: none"> <li>• Year-long</li> <li>• 7:15 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes weekday evenings after 6 p.m.</li> </ul>
University Express	58U Edinburgh	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:20 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 20 minutes Monday to Friday</li> </ul>
University Express	59U Gordon Express	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:00 a.m. to 7:00 p.m. Monday to Friday</li> <li>• Every 15 minutes Monday to Friday</li> </ul>
Core	96 Victoria	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	97 Edinburgh	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	98 Speedvale	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	99 Mainline	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 7:15 a.m. to 10:15 p.m. Sundays</li> <li>• Every 9 minutes during peak times Monday to Friday</li> <li>• Every 10 minutes during midday Monday to Friday</li> <li>• Every 15 minutes during evenings Monday to Friday</li> <li>• Every 15 to 30 minutes Saturday and Sunday</li> </ul>

Service Type	Route(s)	Service Summary
On-Demand	Community Bus On-Demand	<ul style="list-style-type: none"> <li>8:30 a.m. to 4:30 p.m. Monday to Sunday with additional hours as needed</li> <li>No fixed schedule</li> </ul>

### Package 3: High Frequency Plan

This package will implement the proposed changes introduced in package 1, plus additional increases in peak and midday frequencies to 15 minutes, additional increases in off-peak frequencies to 20 minutes, and the extension of Route 17 from Stone Road Mall to the University Centre. This package results in 154,010 new service hours and 3,035,645 new kilometres, requiring 35 additional buses and 131 additional operators. By 2034, there is expected to be an increase of 4.60 million in ridership. For details on the years of implementation for this plan, see [Appendix E](#).

**Table 19. Expected increases in ridership for each year of the Convenient Frequency Plan.**

Year	Total ridership	Ridership increases from service changes
1	5,750,640	37,218
2	6,378,713	86,112
3	6,998,869	107,392
4	7,786,757	221,892
5	8,137,409	50,123
6	8,955,176	367,984
7	9,497,161	222,343
8	9,737,491	48,684
9	9,877,943	1,942
10	10,054,058	20,042
11	10,160,194	52,006
12	10,243,183	40,665
13	10,346,929	50,836
Total increase	4,596,289	1,307,239

**Table 20. Proposed service hours of package 3.**

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

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	4 York	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	5 Goodwin	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturdays, and Sundays</li> </ul>
Base	6 Harvard Ironwood	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes a.m. and p.m. peak hours Monday to Friday</li> <li>• Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday</li> </ul>
Base	7 Kortright Downey	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes a.m. and p.m. peak hours Monday to Friday</li> <li>• Every 30 minutes Weekday Midday, Evenings, Saturday, and Sunday</li> </ul>
Base	8 Stone Road Mall	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	9 Waterloo Silvercreek	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	10 Paisley	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	12 General Hospital	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
Base	13 Eastview Watson	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	14 Grange	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	15 Stone College	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	16 Southgate	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	17 Fife	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 15 minutes until 6 p.m. Monday to Friday</li> <li>• Every 20 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	19 Hanlon Creek	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	20 Wellington-Imperial	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	21 Willow	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	22 Curtis	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
Base	23 Watson Eastview	<ul style="list-style-type: none"> <li>• Every 20 minutes until 6 p.m. Monday to Friday</li> <li>• Every 30 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Base	24 Stone	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 20 minutes until 6 p.m. Monday to Saturday</li> <li>• Every 30 minutes Weekday Evenings, Saturday Evenings and Sunday</li> </ul>
Base	25 College Stone	<ul style="list-style-type: none"> <li>• 5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>• 9:15 a.m. to 6:45 p.m. Sundays</li> <li>• Every 30 minutes Monday to Sunday</li> </ul>
University Express	50U Scottsdale	<ul style="list-style-type: none"> <li>• September to May only</li> <li>• 7:00 a.m. to 9:00 p.m. Monday to Friday</li> <li>• Every 15 minutes Monday to Friday</li> </ul>

<b>Service Type</b>	<b>Route(s)</b>	<b>Service Summary</b>
University Express	52U Kortright	<ul style="list-style-type: none"> <li>September to May only</li> <li>7:20 a.m. to 5:50 p.m. Monday to Friday</li> <li>Every 30 minutes during peak times Monday to Friday</li> </ul>
University Express	56U Colonial	<ul style="list-style-type: none"> <li>Year-long</li> <li>7:15 a.m. to 9:00 p.m. Monday to Friday</li> <li>Every 20 minutes until 6 p.m. Monday to Friday</li> <li>Every 30 minutes weekday evenings after 6 p.m.</li> </ul>
University Express	58U Edinburgh	<ul style="list-style-type: none"> <li>September to May only</li> <li>7:20 a.m. to 9:00 p.m. Monday to Friday</li> <li>Every 20 minutes Monday to Friday</li> </ul>
University Express	59U Gordon Express	<ul style="list-style-type: none"> <li>September to May only</li> <li>7:00 a.m. to 7:00 p.m. Monday to Friday</li> <li>Every 15 minutes Monday to Friday</li> </ul>
Core	96 Victoria	<ul style="list-style-type: none"> <li>5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>7:15 a.m. to 10:15 p.m. Sundays</li> <li>Every 15 minutes until 6 p.m. Monday to Friday</li> <li>Every 20 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	97 Edinburgh	<ul style="list-style-type: none"> <li>5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>7:15 a.m. to 10:15 p.m. Sundays</li> <li>Every 15 minutes until 6 p.m. Monday to Friday</li> <li>Every 20 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	98 Speedvale	<ul style="list-style-type: none"> <li>5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>7:15 a.m. to 10:15 p.m. Sundays</li> <li>Every 15 minutes until 6 p.m. Monday to Friday</li> <li>Every 20 minutes Weekday Evenings, Saturday, and Sunday</li> </ul>
Core	99 Mainline	<ul style="list-style-type: none"> <li>5:45 a.m. to 12:15 a.m. Monday to Saturday</li> <li>7:15 a.m. to 10:15 p.m. Sundays</li> <li>Every 9 minutes during peak times Monday to Friday</li> <li>Every 10 minutes during midday Monday to Friday</li> <li>Every 15 minutes during evenings Monday to Friday</li> <li>Every 15 minutes Saturday and Sunday</li> </ul>
On-Demand	Community Bus On-Demand	<ul style="list-style-type: none"> <li>8:30 a.m. to 4:30 p.m. Monday to Sunday with additional hours as needed</li> <li>No fixed schedule</li> </ul>



## Financial implications

Guelph Transit retained Dillon Consulting to provide ridership and revenue projections for the proposed networks that resulted from the route review. From this, staff have identified the financial implications for each of the 3 plan options.

### Net Cost

Guelph Transit engaged Dillon Consulting to provide ridership and revenue projections for the Transit Action Plan. The Future Ready Plan has estimated 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 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](#).

The 1% Levy Plan costs more than the Future Ready Plan due to inflation of the changes being made later in the plan and the revenue drawbacks associated with deferring changes affecting opportunity costs. 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; thus, this impacts the revenues not being the same in both plans. In the Future Ready Plan, changes are mainly spread out over 7 years in comparison to the 1% Levy Plan being spread out over 10 years.

The table below depicts the net cost of implementing the Future Ready Plan, the 1% Levy Plan, and the High Frequency Plan.

**Table 21. Net cost of implementation for each year of the Future Ready Plan, 1% Levy Plan, and the High Frequency Plan.**

Year	Future Ready	1% Levy	High Frequency
2022	\$1.77 M	\$1.64M	\$2.14M
2023	\$1.26 M	\$0.36M	\$1.35M

<b>Year</b>	<b>Future Ready</b>	<b>1% Levy</b>	<b>High Frequency</b>
2024	\$1.90 M	\$1.60 M	\$2.30 M
2025	\$2.12 M	\$1.79 M	\$3.59 M
2026	\$2.24 M	\$2.17 M	\$3.30 M
2027	\$3.36 M	\$2.59 M	\$4.97 M
2028	\$0.80 M	\$1.06 M	\$0.69 M
2029	(\$0.27) M	\$1.13 M	(\$0.27) M
2030	(\$0.23) M	\$0.85 M	(\$0.23) M
2031	\$0.42 M	\$0.49 M	\$0.63 M
2032	(\$0.10) M	(\$0.12) M	(\$0.10) M
2033	(\$0.08) M	(\$0.09) M	(\$0.08) M
2034	(\$0.10) M	(\$0.10) M	(\$0.10) M
<b>Total</b>	<b>\$13.08 M</b>	<b>\$13.37 M</b>	<b>\$18.17 M</b>

The table below provides the operating expenses, revenues, and net cost to implement the Future Ready 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 22. Annual expenses, revenues, and net costs of implementation for each year of the Future Ready Plan (Staff Recommended Plan).**

<b>Year</b>	<b>Operating Cost</b>	<b>Future Ready Revenue</b>	<b>Net Cost</b>
2022	\$1.82 M <sup>25</sup>	\$0.06 M	\$1.77 M
2023	\$1.85 M	\$0.60 M	\$1.26 M
2024	\$2.16 M	\$0.26 M	\$1.90 M
2025	\$2.71 M	\$0.60 M	\$2.12 M
2026	\$2.55 M	\$0.31 M	\$2.24 M
2027	\$4.19 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
<b>Total</b>	<b>\$17.21 M</b>	<b>\$4.12 M</b>	<b>\$13.08 M</b>

<sup>25</sup> 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.

The table below provides the operating expenses, revenues, and net cost to implement the 1% Levy Plan.

**Table 23. Annual expenses, revenues, and net costs of implementation for each year of the 1% Levy Plan.**

<b>Year</b>	<b>Expense</b>	<b>Revenue</b>	<b>Net Cost</b>
2022	\$1.69 M	\$0.05 M	\$1.64 M
2023	\$0.88 M	\$0.53 M	\$0.36 M
2024	\$1.85 M	\$0.25 M	\$1.60 M
2025	\$2.19 M	\$0.40 M	\$1.79 M
2026	\$2.72 M	\$0.55 M	\$2.17 M
2027	\$3.11 M	\$0.52 M	\$2.59 M
2028	\$1.40 M	\$0.33 M	\$1.06 M
2029	\$1.86 M	\$0.73 M	\$1.13 M
2030	\$1.13 M	\$0.27 M	\$0.85 M
2031	\$0.59 M	\$0.10 M	\$0.49 M
2032		\$0.12 M	(\$0.12) M
2033		\$0.09 M	(\$0.09) M
2034		\$0.10 M	(\$0.10) M
<b>Total</b>	<b>\$17.41 M</b>	<b>\$4.04 M</b>	<b>\$13.37 M</b>

The table below provides the operating expenses, revenues, and net cost to implement the High Frequency Plan.

**Table 24. Annual expenses, revenues, and net costs of implementation for each year of the High Frequency Plan.**

<b>Year</b>	<b>Expense</b>	<b>Revenue</b>	<b>Net Cost</b>
2022	\$2.20 M	\$0.06 M	\$2.14 M
2023	\$1.95 M	\$0.60 M	\$1.35 M
2024	\$2.60 M	\$0.30 M	\$2.30 M
2025	\$4.23 M	\$0.64 M	\$3.59 M
2026	\$3.67 M	\$0.38 M	\$3.30 M
2027	\$5.90 M	\$0.93 M	\$4.97 M
2028	\$1.33 M	\$0.65 M	\$0.69 M
2029	\$0.00 M	\$0.27 M	(\$0.27) M
2030	\$0.00 M	\$0.23 M	(\$0.23) M
2031	\$0.69 M	\$0.06 M	\$0.63 M
2032		\$0.10 M	(\$0.10) M
2033		\$0.08 M	(\$0.08) M
2034		\$0.10 M	(\$0.10) M
<b>Total</b>	<b>\$22.58 M</b>	<b>\$4.21 M</b>	<b>\$18.17 M</b>

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

If the Action Plan is not implemented, the pandemic recovery and population growth revenues presented below will 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 Plan, indirect revenue from pandemic recovery and population growth, and net cost.

**Table 25. Operating cost, revenue, and net cost of implementation for the Future Ready Plan.**

<b>Year</b>	<b>Operating Cost</b>	<b>Future Ready Revenue</b>	<b>Net Cost</b>	<b>Indirect Revenue</b>
2022	\$1.82 M <sup>26</sup>	\$0.06 M	\$1.77 M	\$1.73 M
2023	\$1.85 M	\$0.60 M	\$1.26 M	\$0.39 M
2024	\$2.16 M	\$0.26 M	\$1.90 M	\$0.32 M
2025	\$2.71 M	\$0.60 M	\$2.12 M	\$0.27 M
2026	\$2.55 M	\$0.31 M	\$2.24 M	\$0.11 M
2027	\$4.19 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	\$0.09 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	
<b>Total</b>	<b>\$17.21 M</b>	<b>\$4.12 M</b>	<b>\$13.08 M</b>	<b>\$3.31 M</b>

## Capital Investments

The Future Ready 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 Plan as an outcome of the Route Review is an integral part of overall Transit capital investment. Should the plan not be approved, there will be an impact on the other capital investment projects which will still move forward. Along

<sup>26</sup> 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 NUME positions required for the service changes.

with The Future Ready Plan the following Transit projects are planned for the next 15 plus 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, the direct capital investment of the Future Ready 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 26. The breakdown of capital funding sources for the 2022-2031 Transit capital investment budget.**

<b>Project Group</b>	<b>2022-2031 Budget</b>	<b>DC</b>	<b>ICIP</b>	<b>PGT</b>	<b>100 RE</b>	<b>CB</b>	<b>IR</b>
Route Review	\$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

<b>Project Group</b>	<b>2022-2031 Budget</b>	<b>DC</b>	<b>ICIP</b>	<b>PGT</b>	<b>100 RE</b>	<b>CB</b>	<b>IR</b>
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 Plan requires 26 buses with an expense of \$37.26 million. The 1% Levy Plan requires the same number of buses while the High Frequency Plan requires 35 buses. 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 Plan as well as fund the capital requirements of the total 10-year capital investment.

**Table 27. Number of buses required and cost for each year of the Future Ready Plan (Staff Recommended Plan).**

<b>Year</b>	<b>Buses</b>	<b>Cost</b>
2022	4	\$5.52 M
2023	2	\$2.76 M
2024	5	\$7.04 M
2025	4	\$5.74 M
2026	7	\$10.24 M
2027	4	\$5.91 M
2028	0	0
2029	0	0
2030	0	0
2031	0	0
Total	26	\$37.26 M

### **Needed FTEs**

The Future Ready Plan and the 1% Levy Plan each require 122 full time employees while the High Frequency Plan requires 159. 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 for each plan.

**Table 28. Annual breakdown of full-time employees for each plan.**

<b>Year</b>	<b>Future Ready Plan</b>	<b>1% Levy Plan</b>	<b>High Frequency Plan</b>
2022	17	15	18
2023	13	7	17
2024	16	12	19

<b>Year</b>	<b>Future Ready Plan</b>	<b>1% Levy Plan</b>	<b>High Frequency Plan</b>
2025	21	18	32
2026	17	21	24
2027	25	19	37
2028	12	10	9
2029	0	11	0
2030	0	7	1
2031	1	2	2
Total	122	122	159

Should the Action Plan recommendations not be approved as part of the multi-year budget, there are still 13 full-time and one part-time positions required between 2022 and 2025. 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 29. Breakdown of full-time employees needed for 2022-2025, the budget, and property tax impact.**

<b>Position</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
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%

### **Proposed network trips & transfers analysis**

In comparison to the current network, the proposed 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 proposed 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

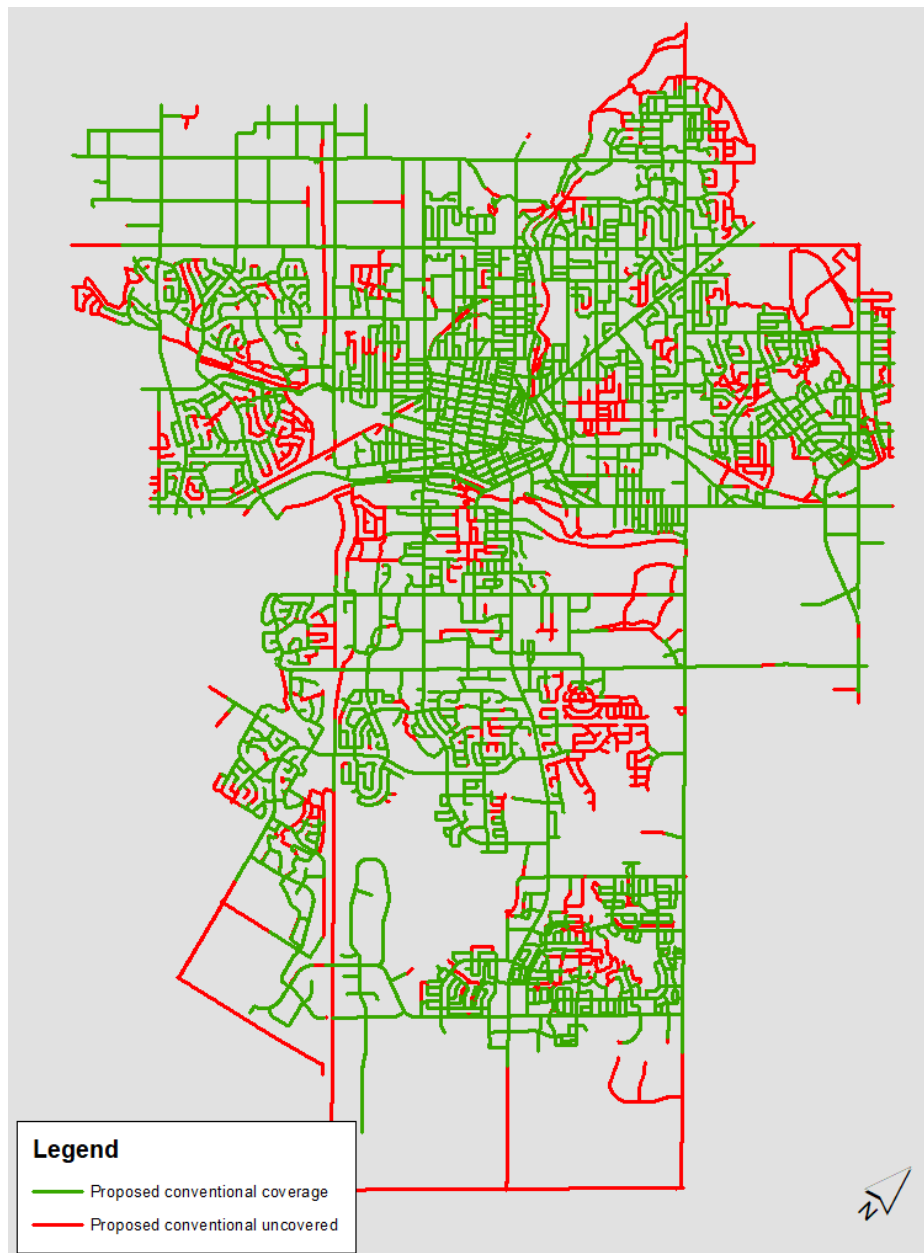
trips. The proposed network also offers more routing options for 86.12% of trips than the current network.

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 current network.

### **Proposed coverage**

While the existing transit system covers most of the City within 400m of a transit stop, the proposed plans offer even more coverage than before. In particular, the Route 16 Southgate and Route 19 Hanlon Creek provide much needed fixed routing in the Hanlon Creek Business Park that is only serviced by on-demand transit with the current network. Additionally, the non-serviced areas in the proposed network will be considered for on-demand transit stops.





**Figure 7. Areas that are proposed to be 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 proposed Future Ready Plan (Staff Recommended 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. Ridership has 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 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 would be purchased by 2027 in the Future Ready 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 proposed 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. The year and order of improvements assumes the Future Ready Plan has been selected. 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 any of the planned alternatives.

### **7.1 Infrastructure implementation schedule**

#### **Year 1**

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

#### **Year 2**

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 at this time 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.**

Alternatively, it may be possible to pursue an agreement with property owners on Southgate Drive to use their property as a turnaround point instead of expanding the cul-de-sac at this time.

### **Year 3**

The only infrastructure required in year 3 is new stops, concrete pads, and shelters.

### **Year 4**

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**

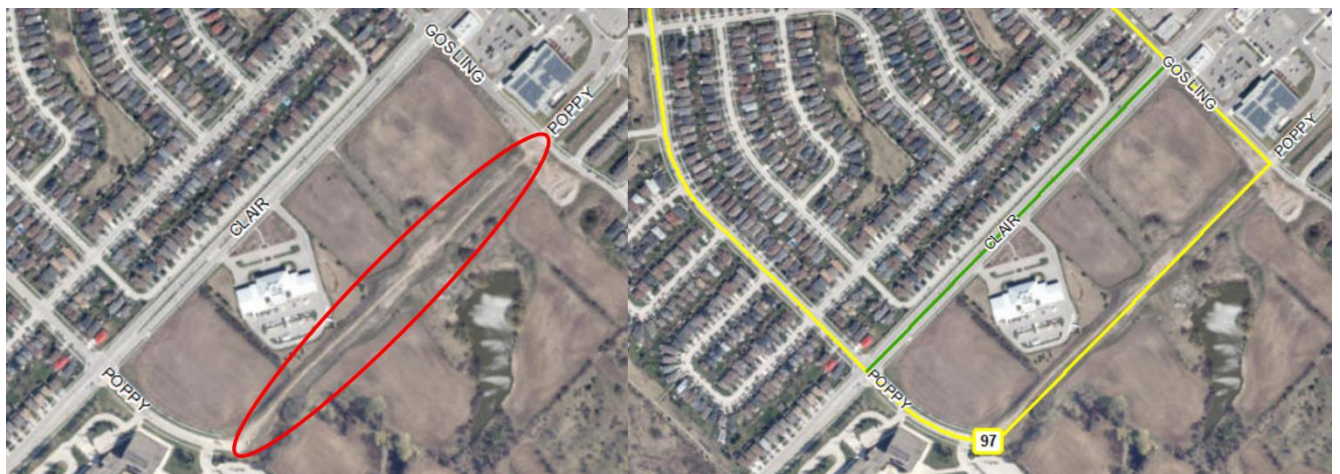
Aside from new stops, pads, and shelters, the implementation of several routes depends on the completion of additional infrastructure projects.

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 proposed 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 proposed 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 proposed 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**

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**

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

### **Year 8**

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

### **Year 9**

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

### **Year 10**

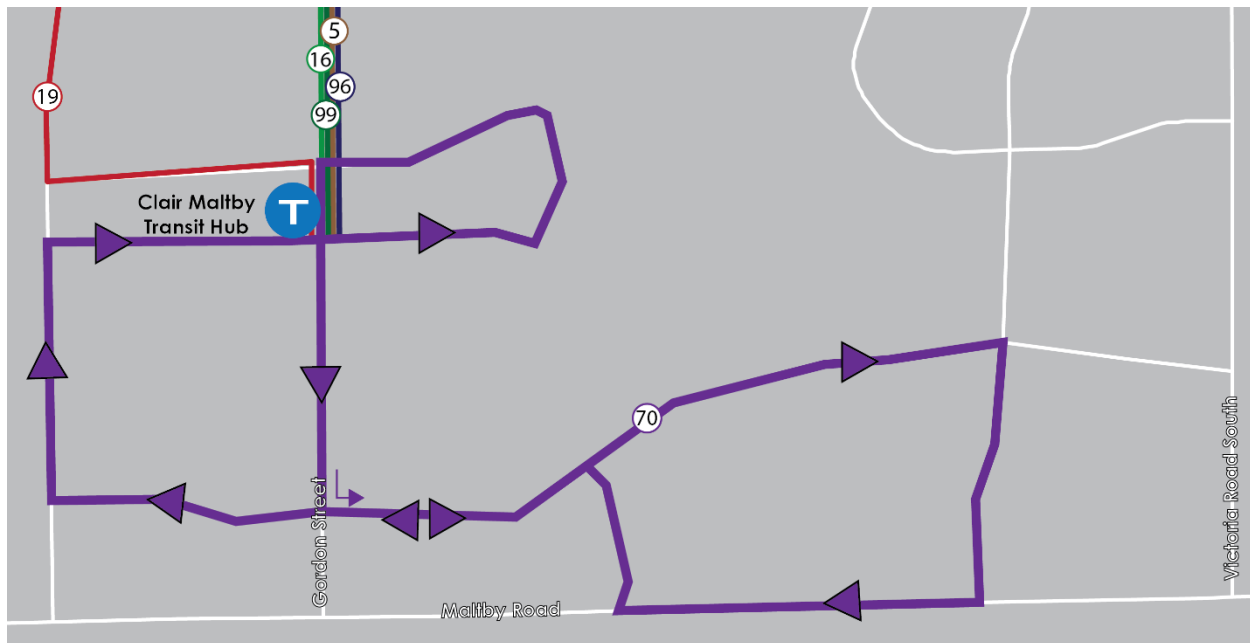
The Clair Maltby Transit Terminal is set to be completed in year 10. Five routes (routes 5, 16, 19, 96, and 99) will be extended to the hub in year 10 as well as the routing of Route 97 Edinburgh will be altered. If the terminal is not completed by this time, these routes will remain unchanged until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

## **7.2 Additional infrastructure**

Beyond the required infrastructure for implementing this plan, the updated Transportation Master Plan will provide recommendations on locations for transit priority measures. While this plan is currently in progress and data collection is ongoing, these measures will assist in expediting transit trips and ensuring on-time performance. Therefore, the resulting recommendations are an important piece to this plan. When possible, the recommended transit priority measures will be implemented to support the Guelph Transit Action Plan.

## 8. Looking to the future

While the proposed Transit 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

The Guelph Transit Action Plan is being provided to the City of Guelph Council for its consideration, selection of a package option, and approval to move forward with implementation.

**It is recommended:**

- 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.**

## **9.1 Service implementation steps**

If approved, the goal is to begin service implementation in 2022. 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 Guidelines. An annual service review will be conducted, along with 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 overall 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 Transit Action Plan outlines the actions the City should 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 a proposed future transit network that aims 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.

## 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](https://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](https://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**

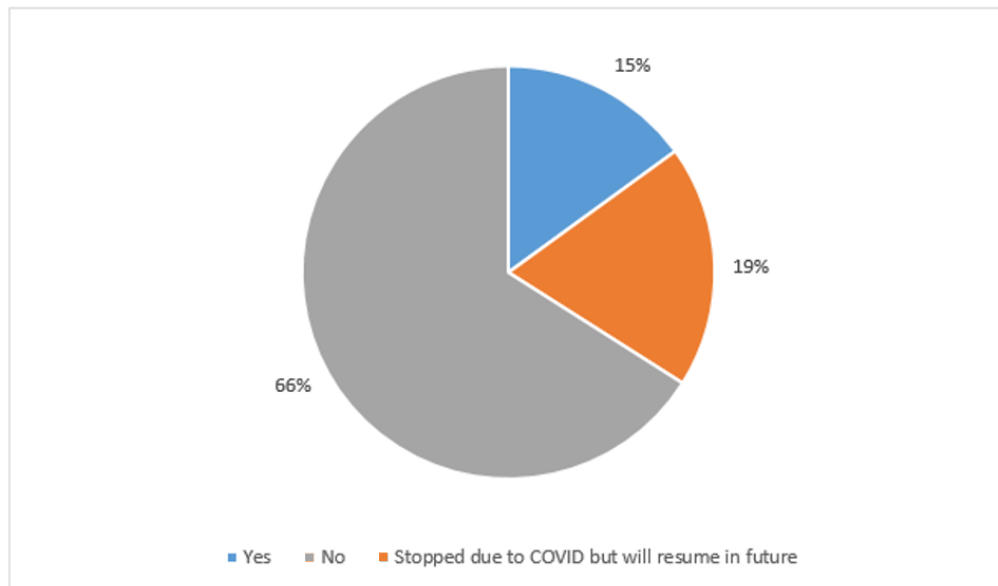
#### **Respondents**

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

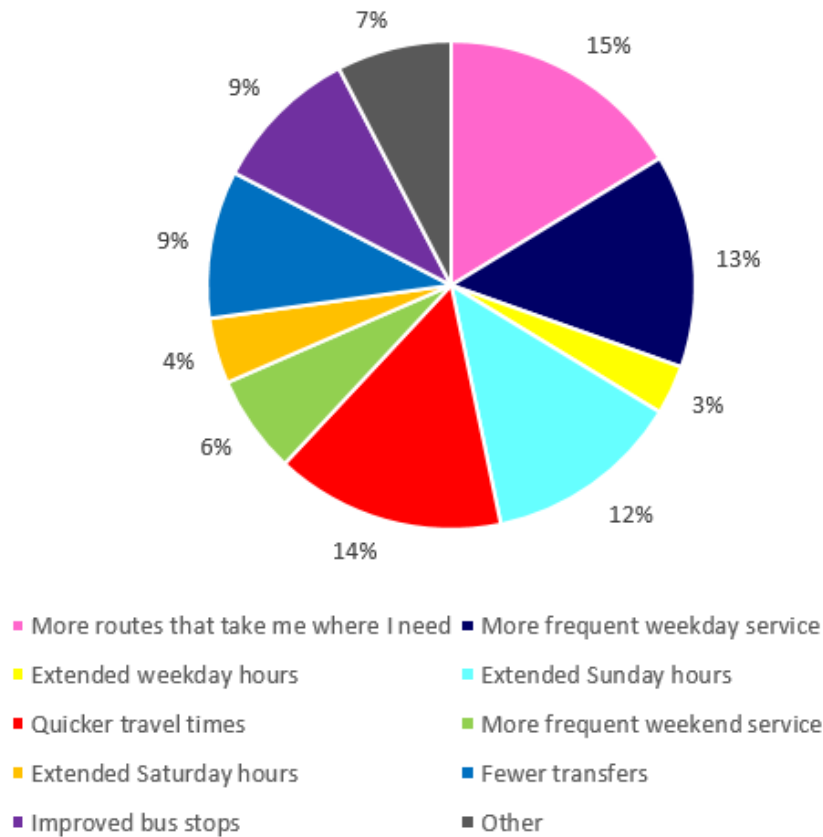
responses for a second question on Twitter. All results were combined. The following provides the results of these methods.

### **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

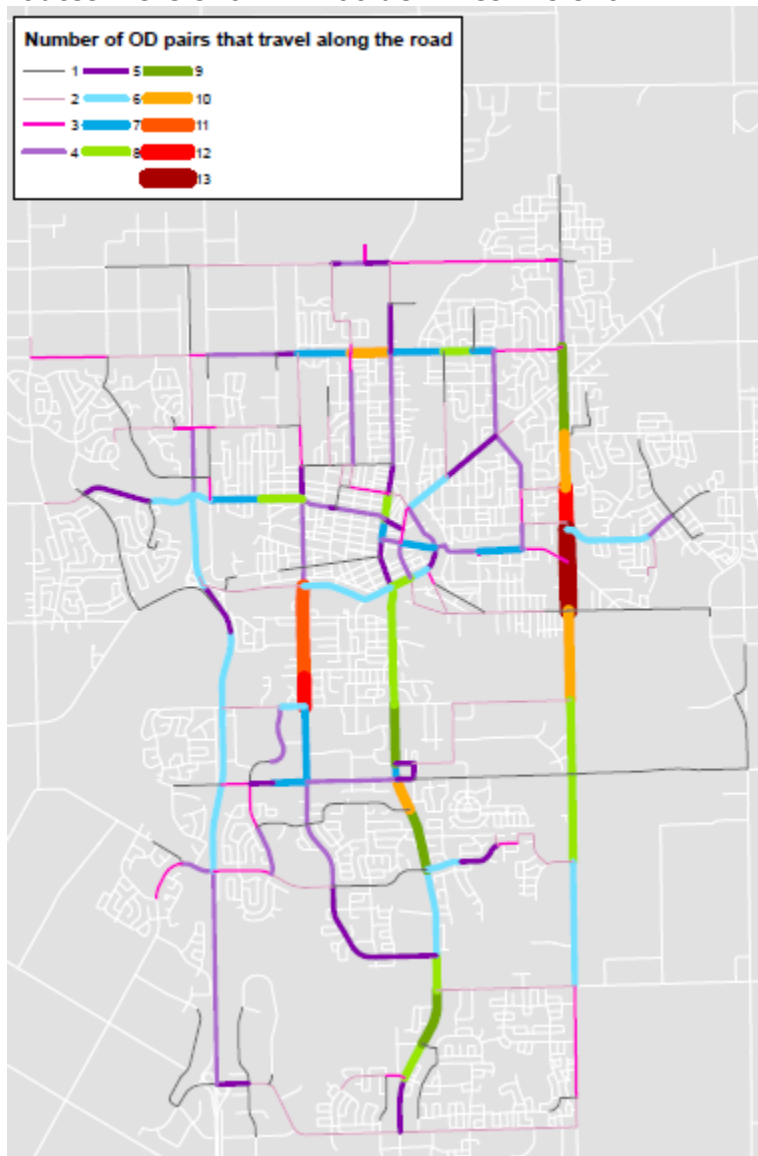
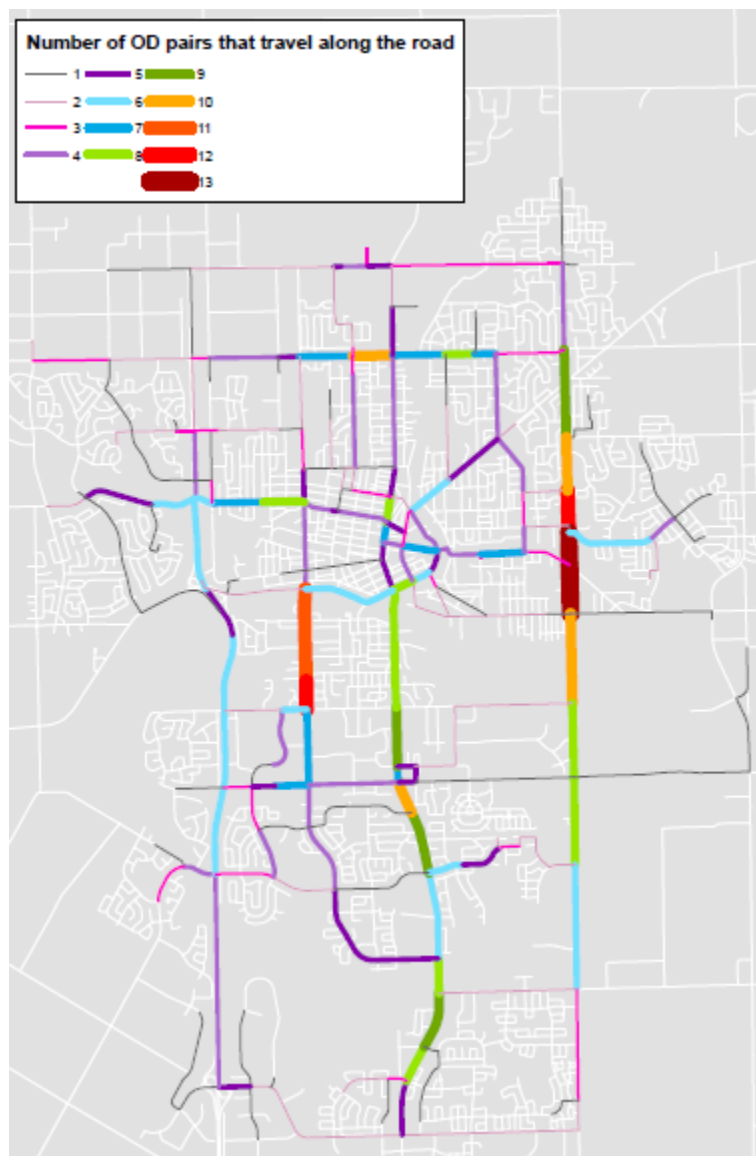


Figure **16**, there are several trips that would be completed using Victoria Road, Edinburgh Road, Speedvale Avenue, Gordon Street, Stone Road, and Paisley Road.



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

## **4.2 Phase 2 engagement**

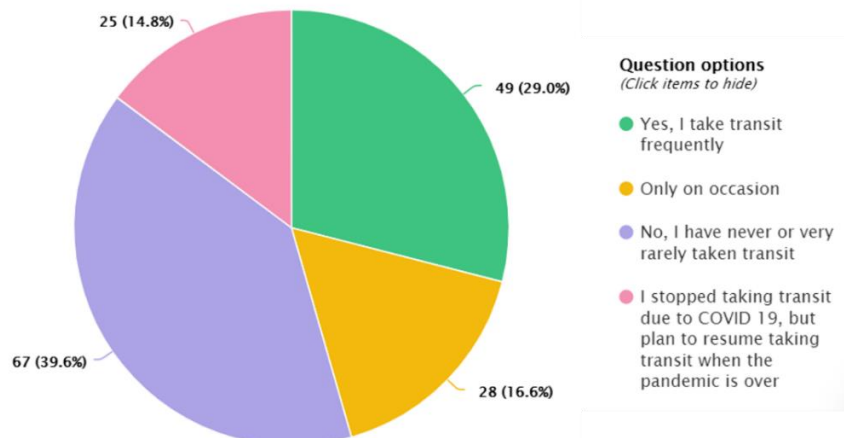
### **Respondents**

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 proposed concepts. The following provides highlights of responses from these methods.

### **Survey responses**

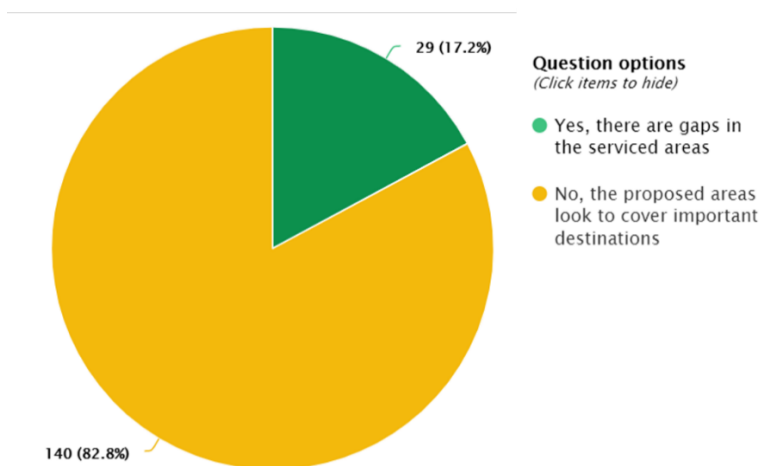
Of those that responded to the survey, approximately 60% are transit customers who regularly or on occasion take transit, including those who stopped taking transit due to the pandemic but will resume post-pandemic. The remaining 40% are assumed to be non-transit customers as they never, or very rarely,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

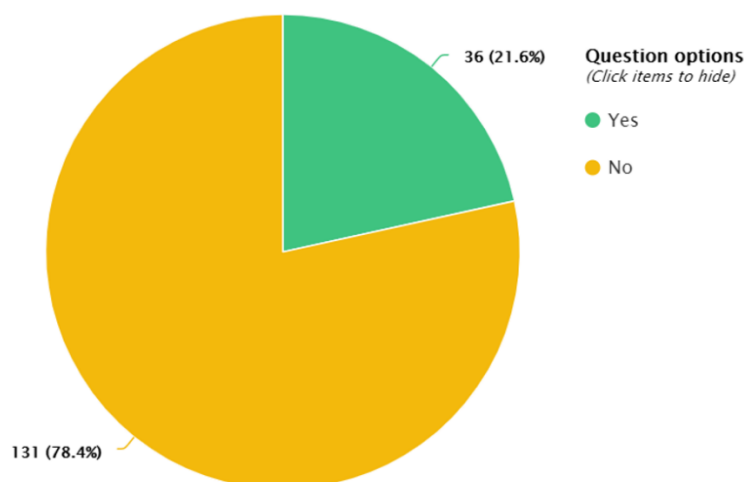


**Figure 18. Are there any areas not serviced by a bus within 400-metres of where you or others you know may wish to travel?**

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

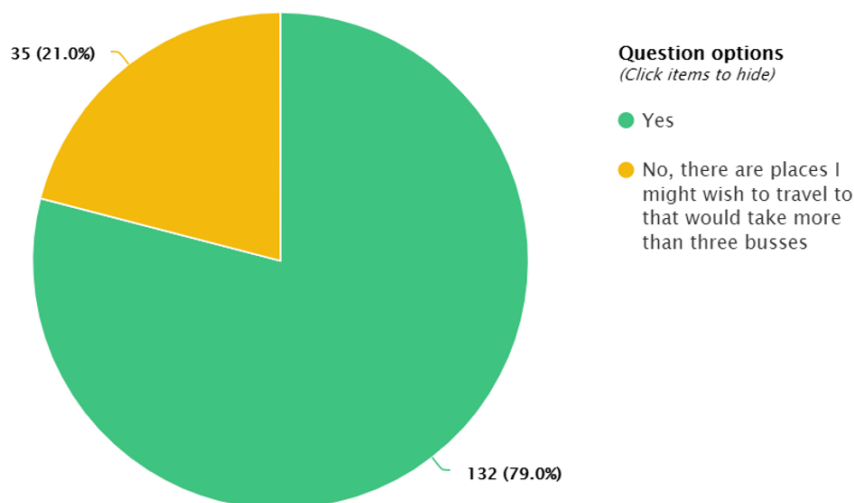


morning/evening service, better than 30-minute frequencies, and service that better connects with GO trains and buses in the evenings.



**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)

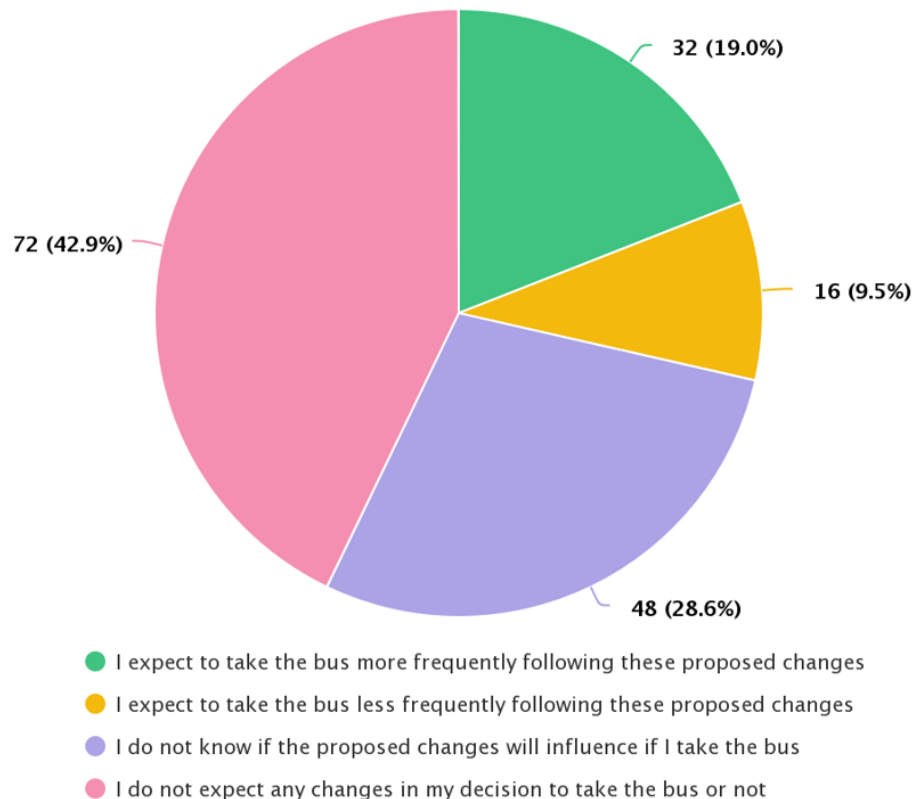
Others that were mentioned as opposed to routes include:

- 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?**

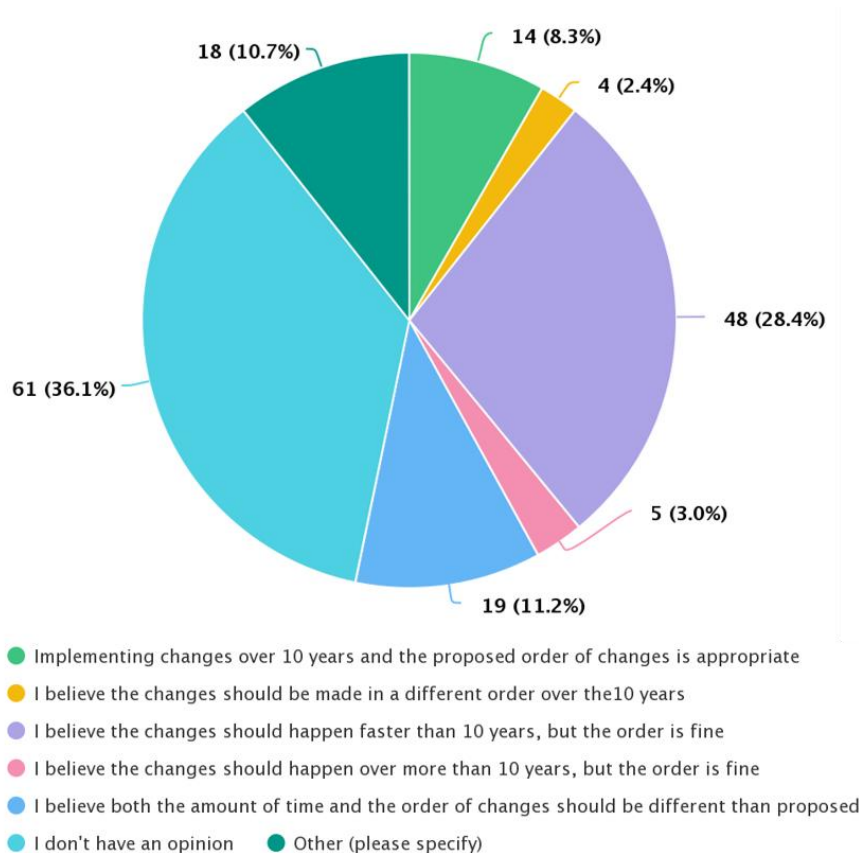
When asked, “Are you interested in any changes to the timing or order of implementing the proposed transit system?” 36.1% of respondents did not have an opinion and 8.3% agreed with the proposed order and timing.

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.

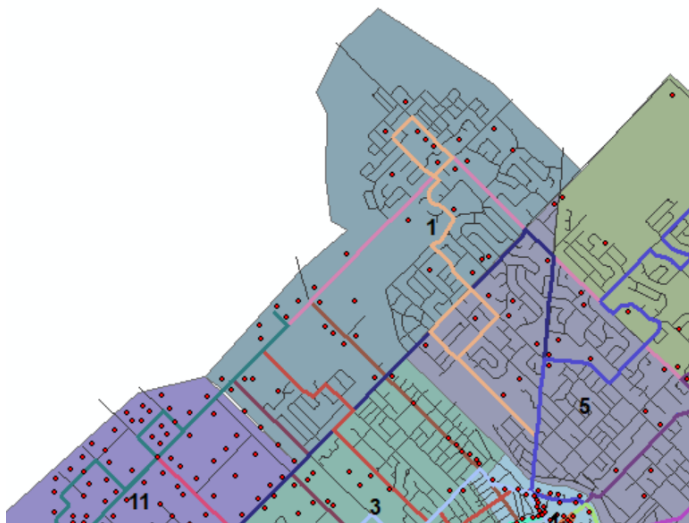
As year 1 of the plan is 2021, the next steps will be to continue following and monitoring the implementation of the plan to tweak as needed.

## **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 and proposed 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 proposed 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 30. District 1 to district 1 current relationship.**

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

**Table 31. District 1 to district 2 current relationship.**

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

## Proposed network

**Table 32. District 1 to district 1 proposed relationship.**

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

**Table 33. District 1 to district 2 proposed relationship.**

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

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

## 2. Network comparison

After the analysis was conducted for every trip in every district for the current and proposed 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 proposed network offers more options for a trip than before. This comparison clearly illustrates the positive impact the proposed network would have on residents' ability to conveniently take transit.

From this analysis, and as depicted in tables 19 and 20, 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 proposed 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 proposed network will increase this to 86.12% of trips.

**Table 34. Number of trips that can be made using different numbers of buses with the current network.**

<b>Number of buses needed to make a trip</b>	<b>Number of trips that can be made to key destinations</b>	<b>Percentage of trips that can be made to key destinations</b>
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 35. Number of trips that can be made using different numbers of buses with the proposed network.**

<b>Number of buses needed to make a trip</b>	<b>Number of trips that can be made to key destinations</b>	<b>Percentage of trips that can be made to key destinations</b>
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 proposed 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 (Table 21). The proposed network will also increase the number of trips to key destinations that have 5 or more routing options by 26.33% (Table 22).

**Table 36. Direct comparison of current to proposed network on how many routing options are available to make a trip.**

<b>More routing options</b>	<b>Same number of routing options</b>	<b>Fewer routing options</b>
86.12%	6.41%	7.47%

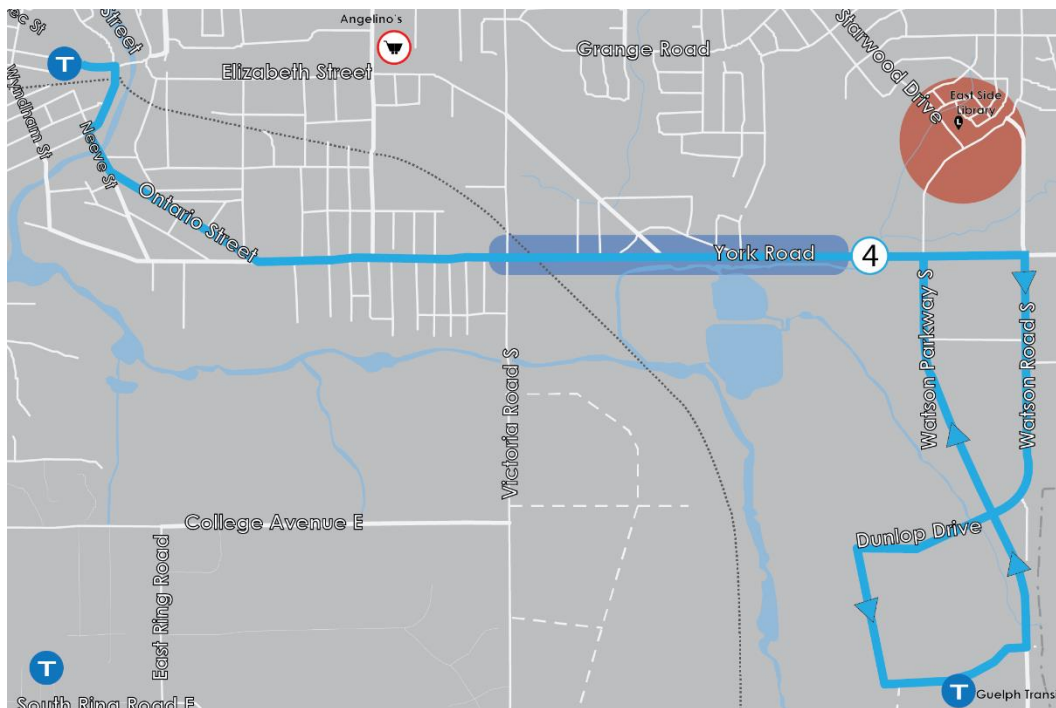
**Table 37. The percentage of trips to key destinations that offer 5 or more routing options.**

<b>Current network</b>	<b>Proposed network</b>
64.77%	91.10%

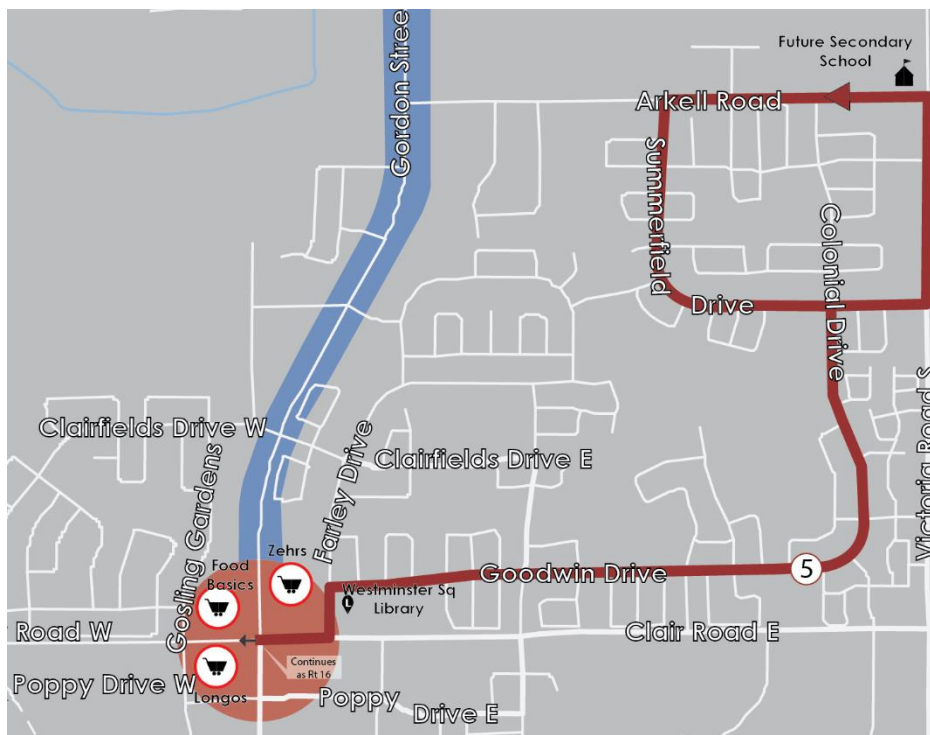
## Appendix D: Proposed individual route maps



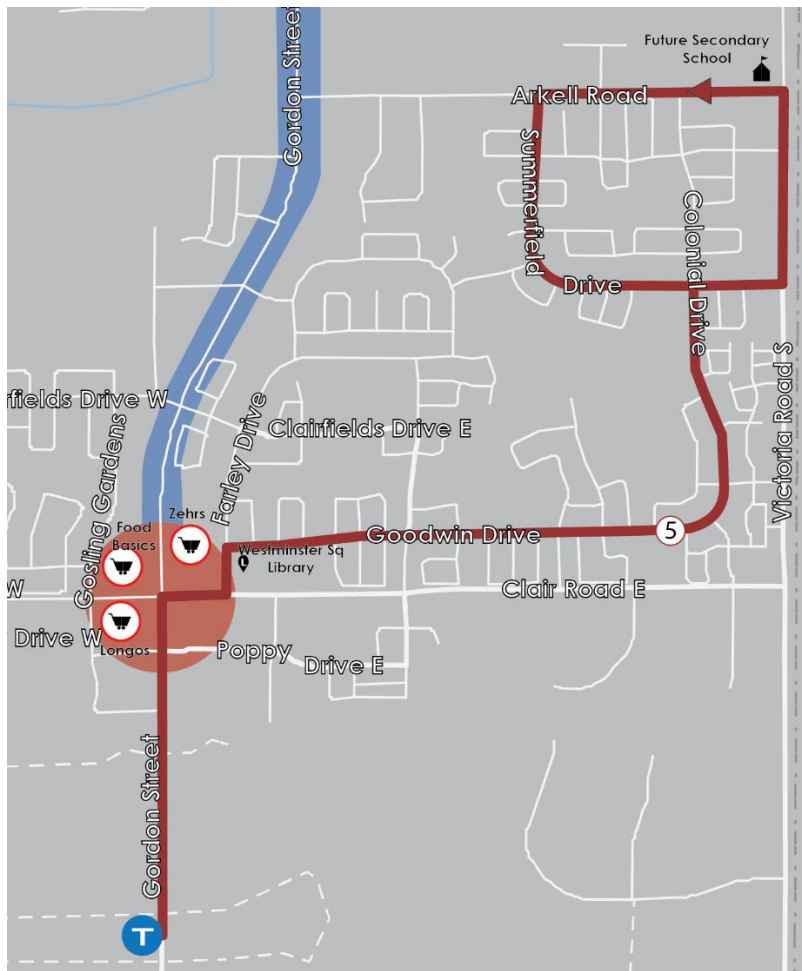
Figure 24. Proposed Route 3 Westmount starting in year 2.



**Figure 25. Proposed Route 4 York starting in year 6.**



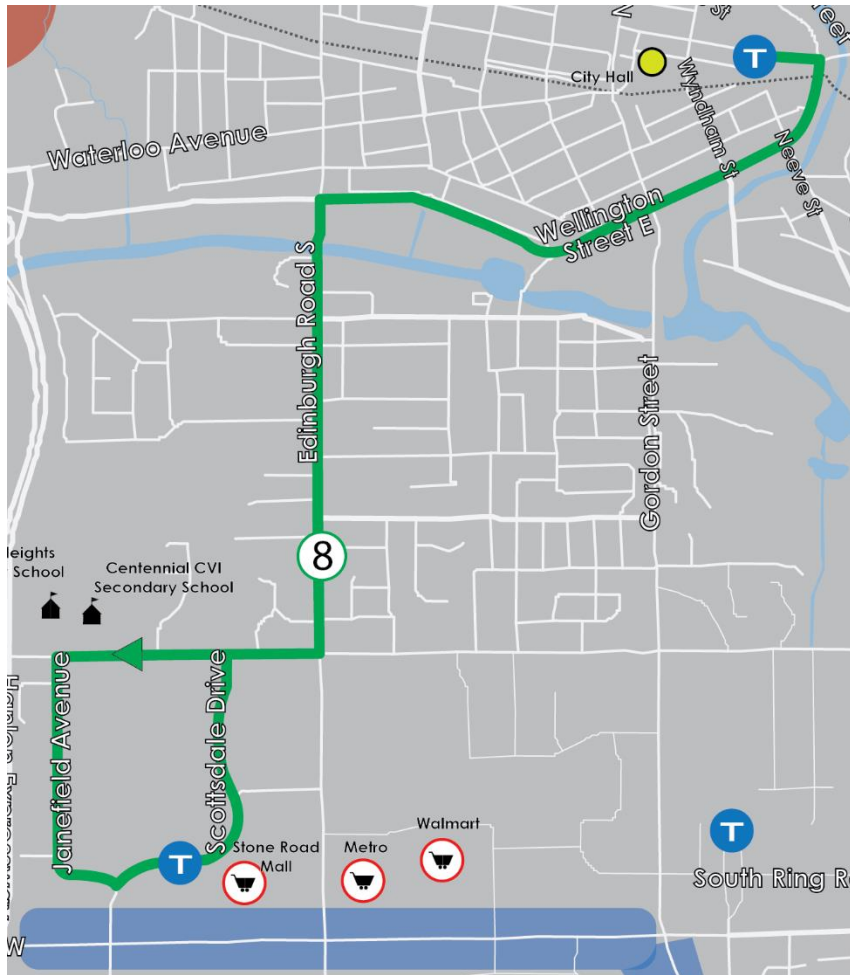
**Figure 26. Proposed Route 5 Goodwin from year 6 to year 9.**



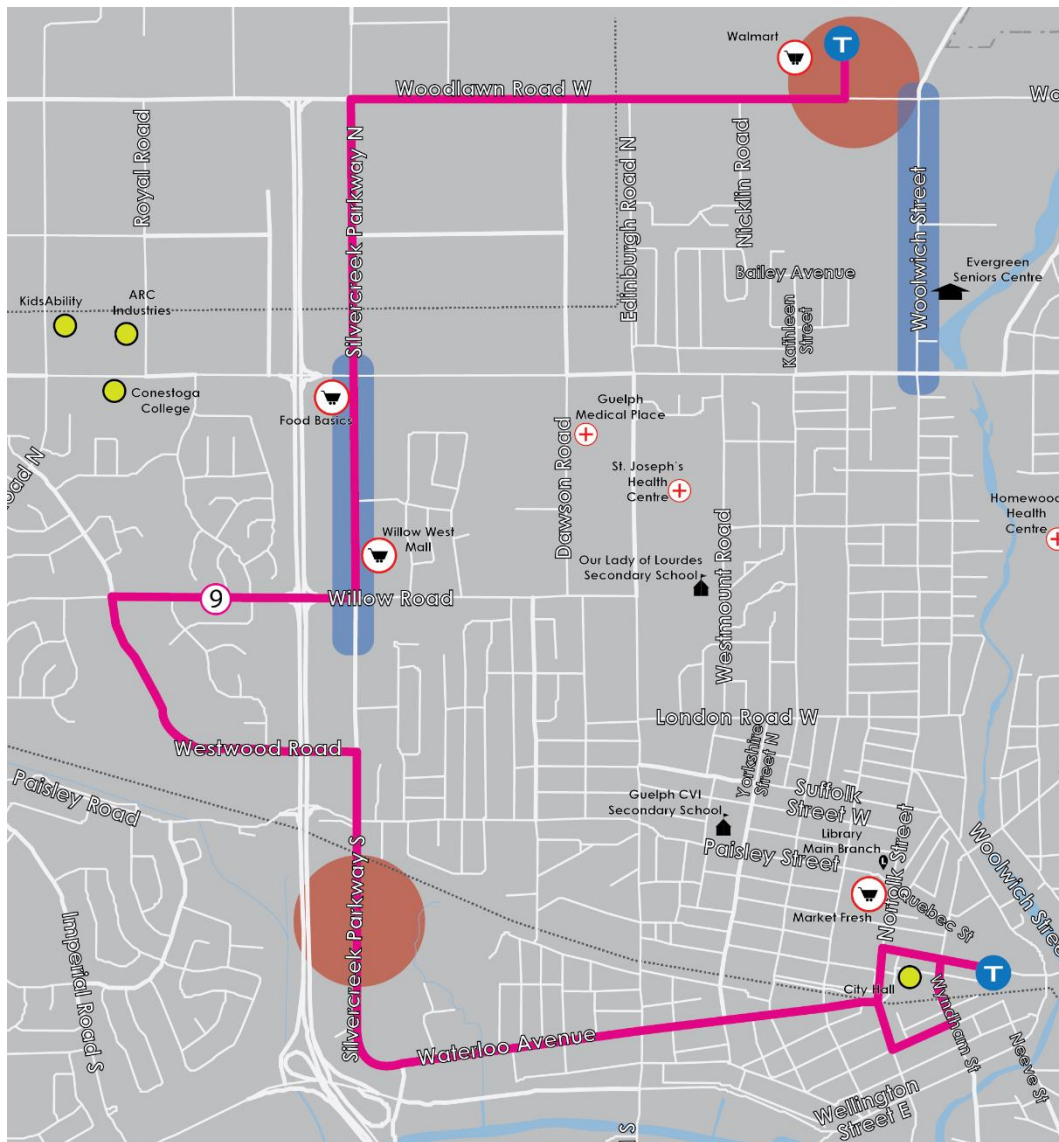
**Figure 27. Proposed Route 5 Goodwin extension starting in year 10.**



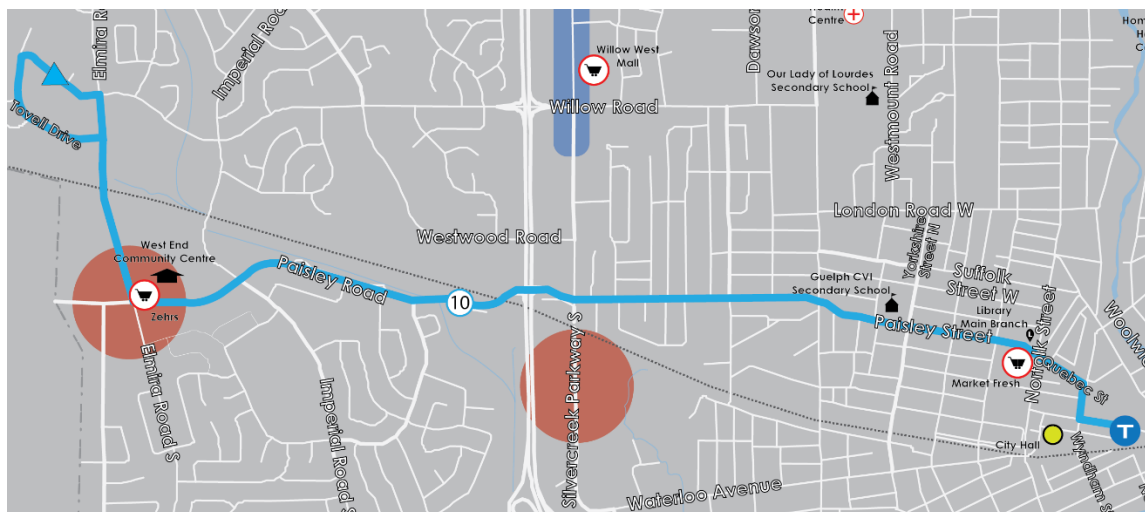




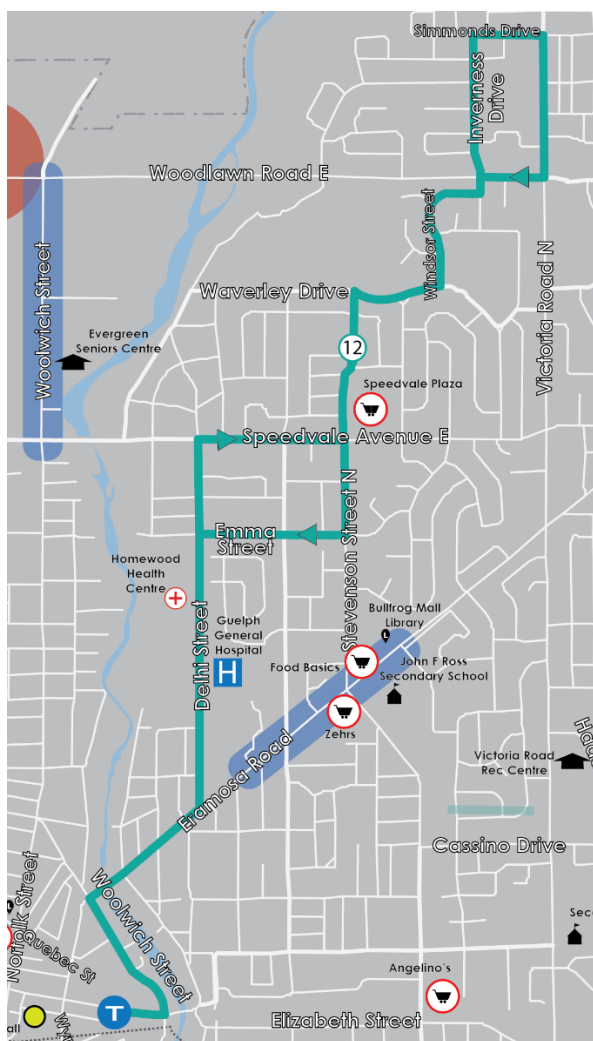
**Figure 30. Route 8 Stone Road Mall to maintain current routing.**



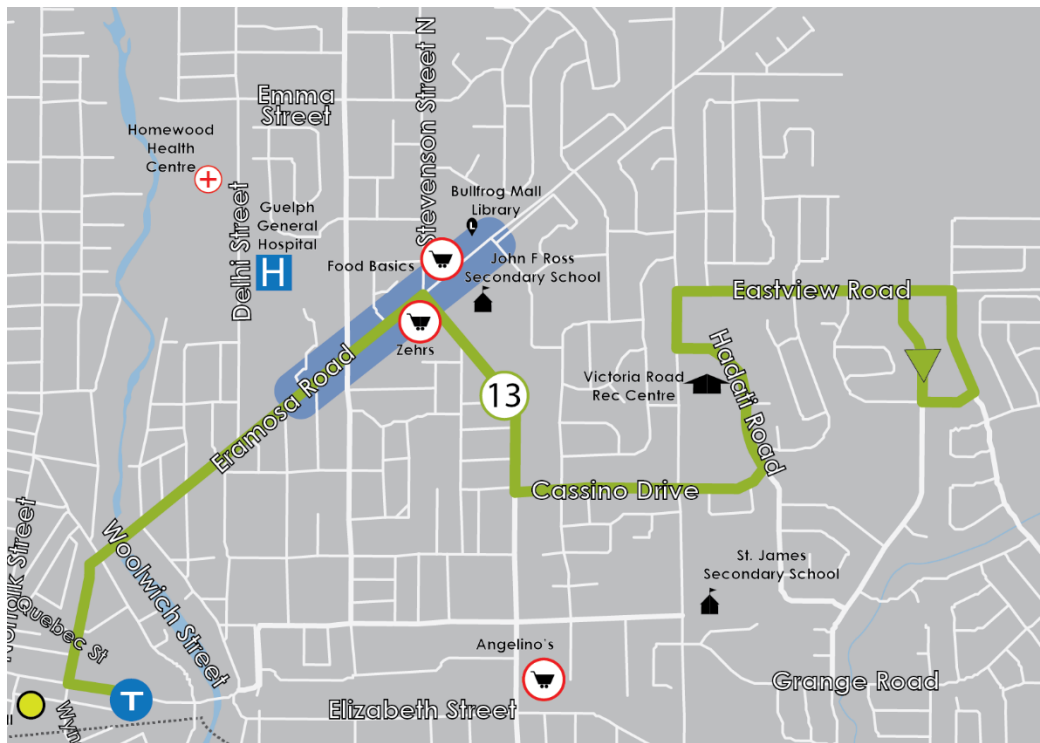
**Figure 31. Proposed Route 9 Waterloo Silvercreek starting in year 5.**



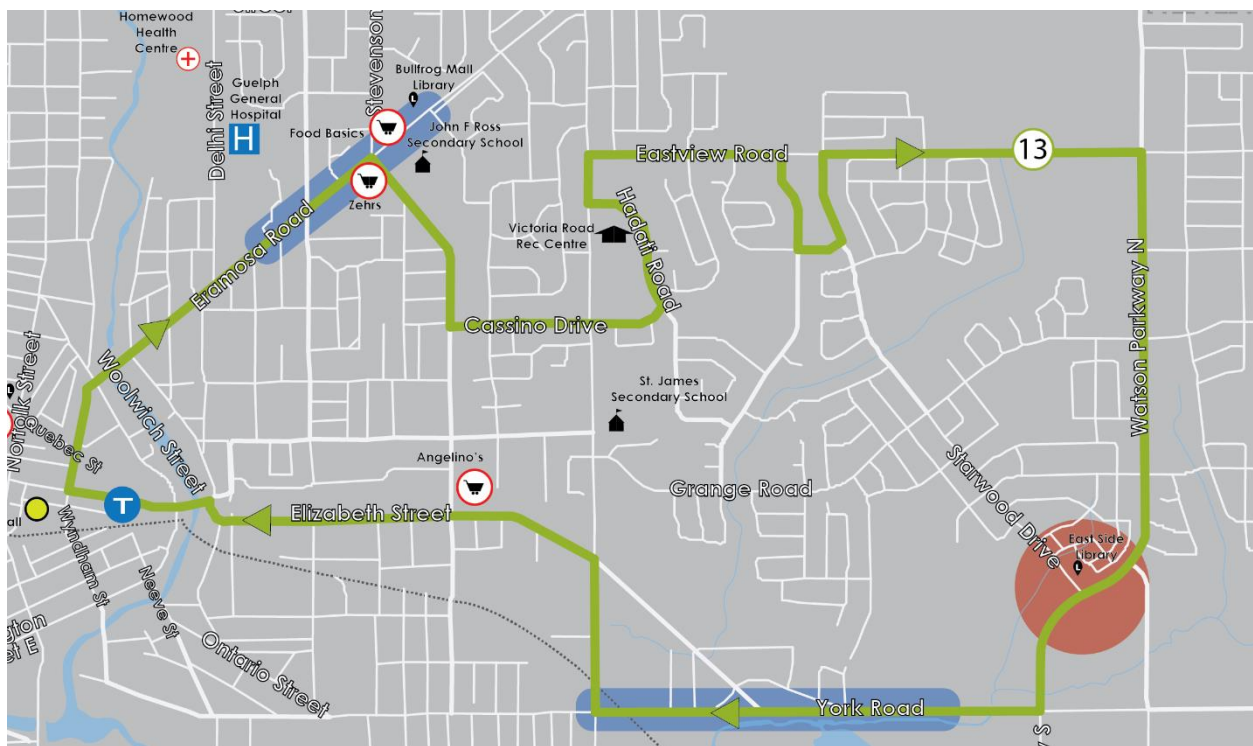
**Figure 32. Proposed Route 10 Paisley starting in year 5.**



**Figure 33. Proposed Route 12 General Hospital starting in year 3.**

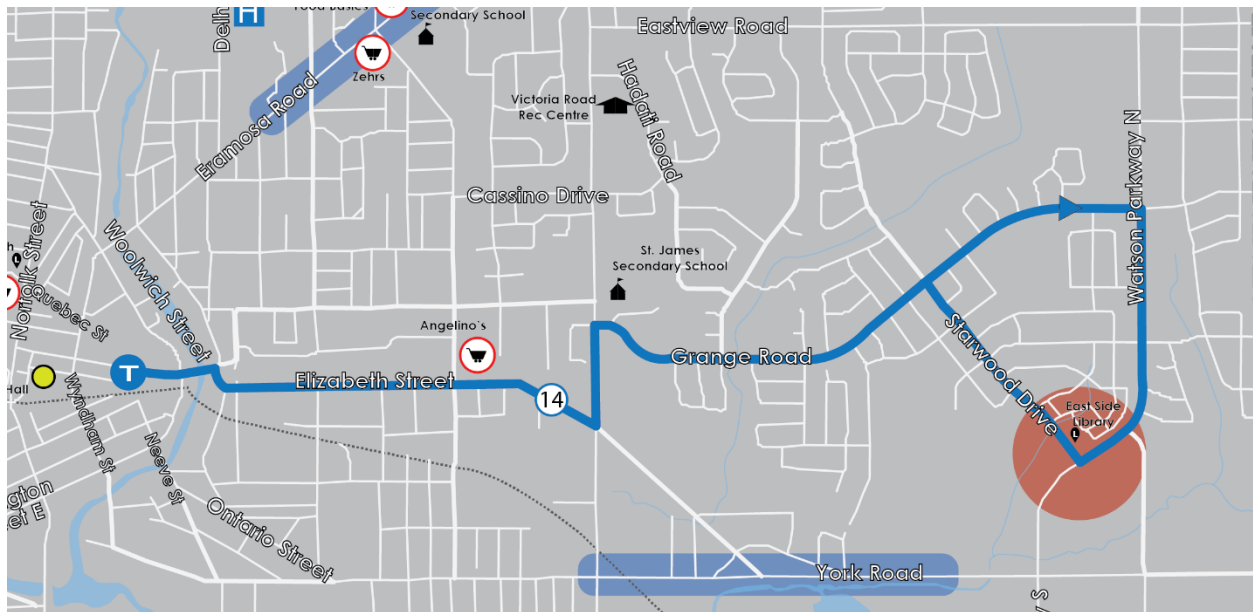


**Figure 34. Proposed Route 13 Victoria Rd Rec Centre from year 3 to year 5.**



**Figure 35. Proposed Route 13 Eastview Watson starting in year 6.**

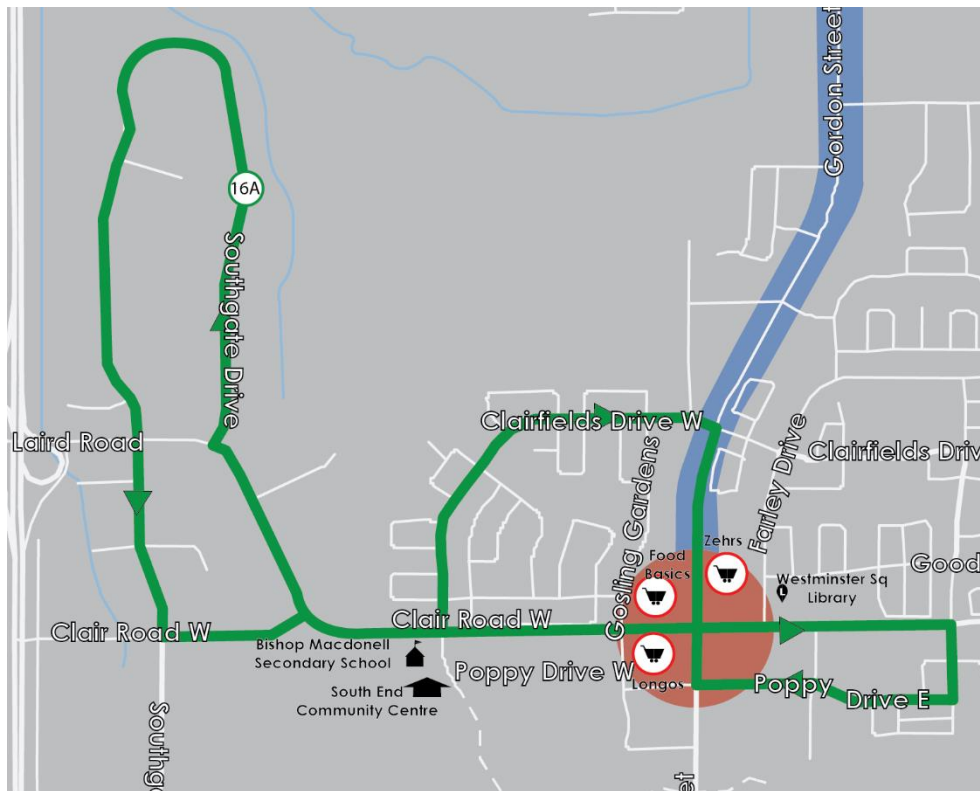




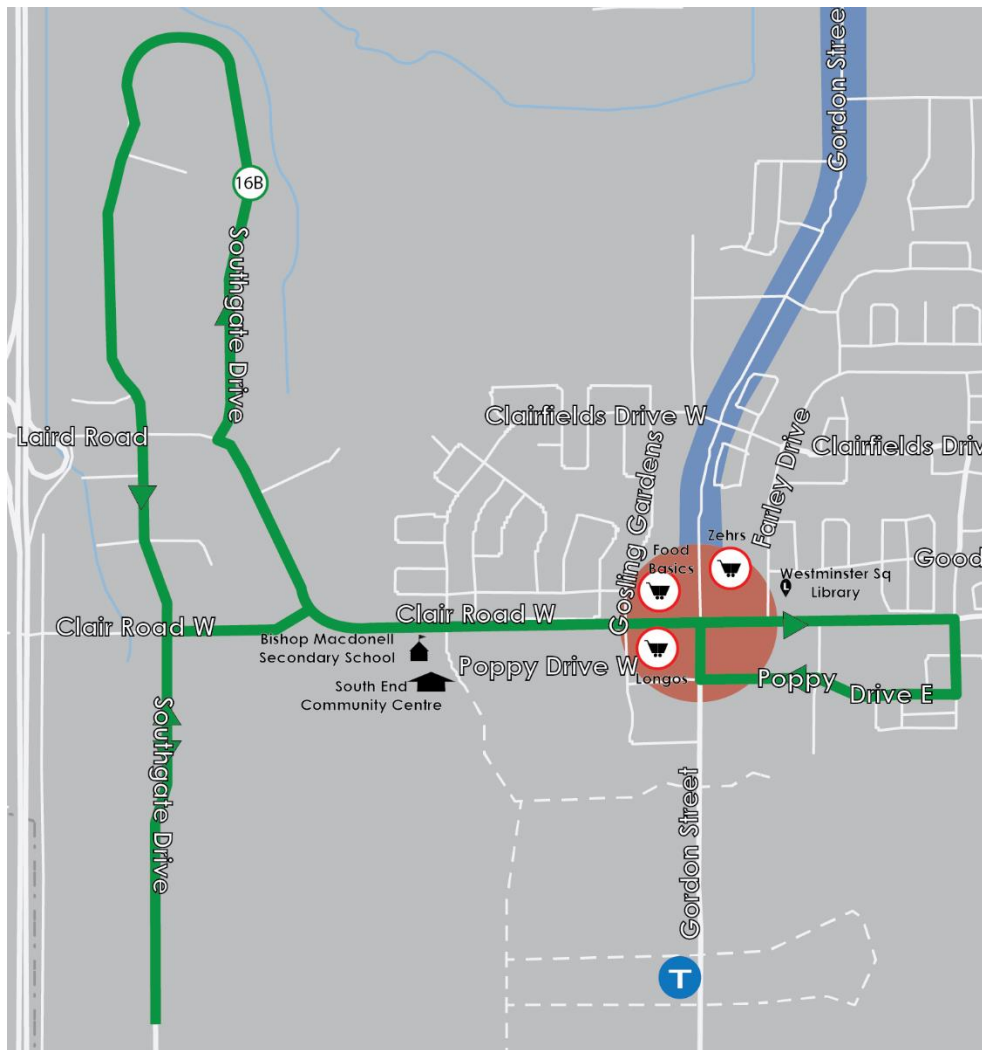
**Figure 36. Route 14 Grange to maintain current routing.**



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

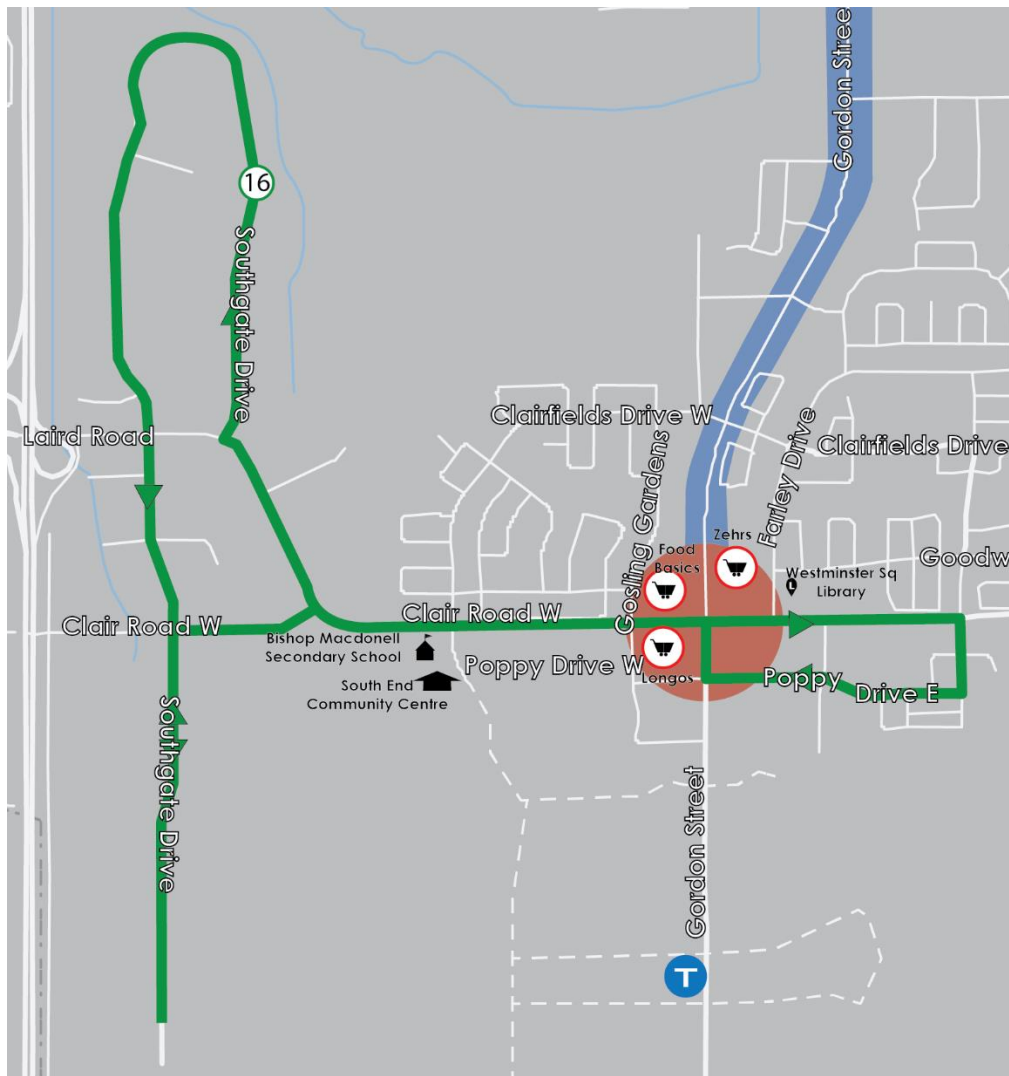


**Figure 38. Proposed Route 16A Southgate via Clairfields from year 2 to year 4.**

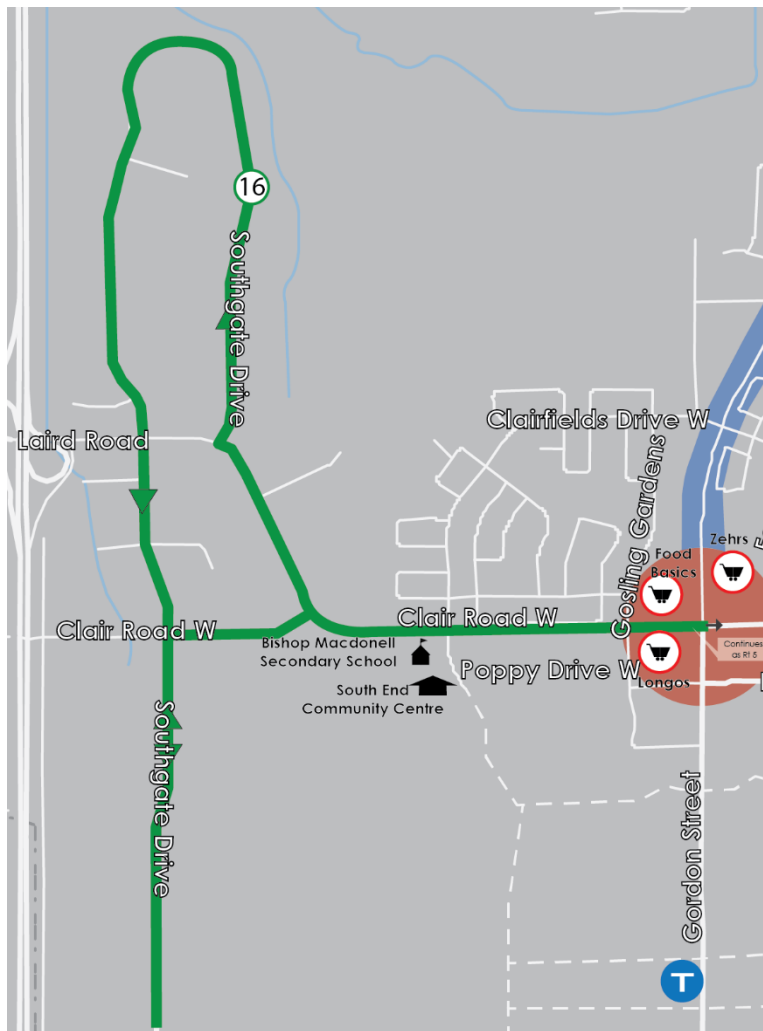


**Figure 39. Proposed Route 16B Southgate via Clair year 2 to year 4.**

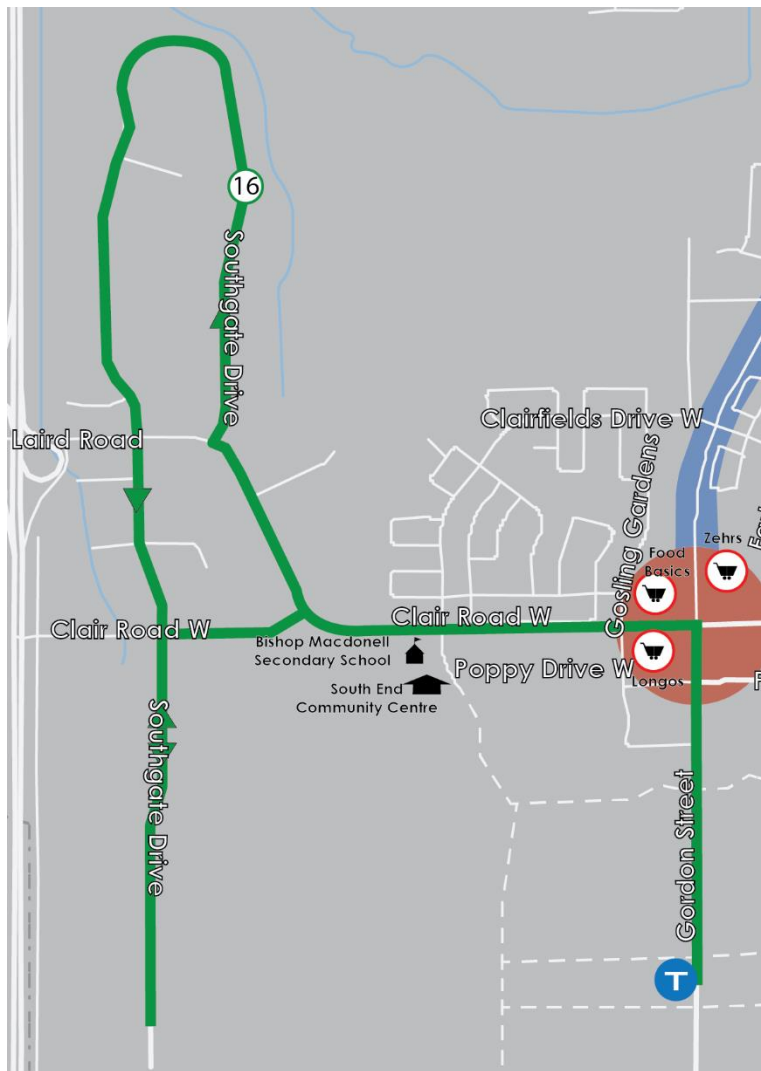




**Figure 40. Proposed Route 16 Southgate in year 5.**

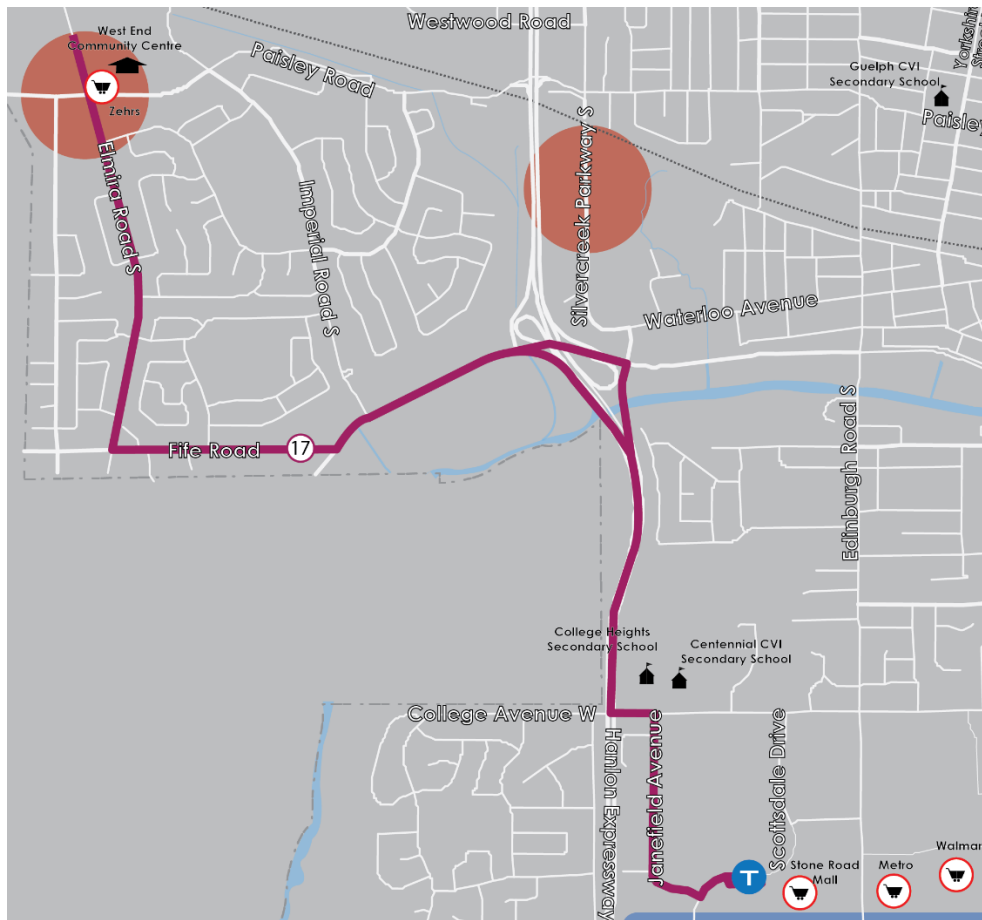


**Figure 41. Proposed Route 16 Southgate from year 6 to year 9.**

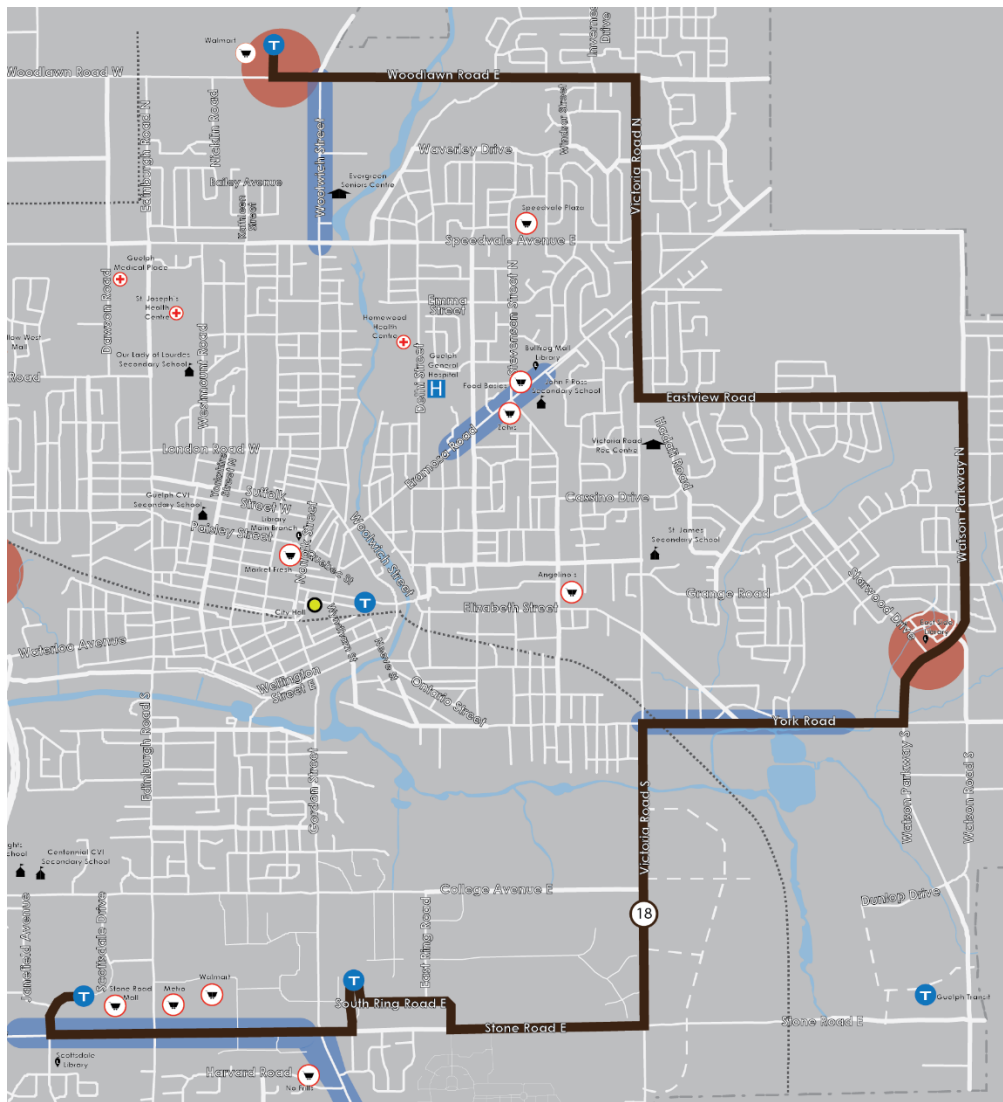


**Figure 42. Proposed Route 16 Southgate extension starting in year 10.**





**Figure 44. Proposed Route 17 Fife starting in year 4 to replace Route 17 Woodlawn Watson.**

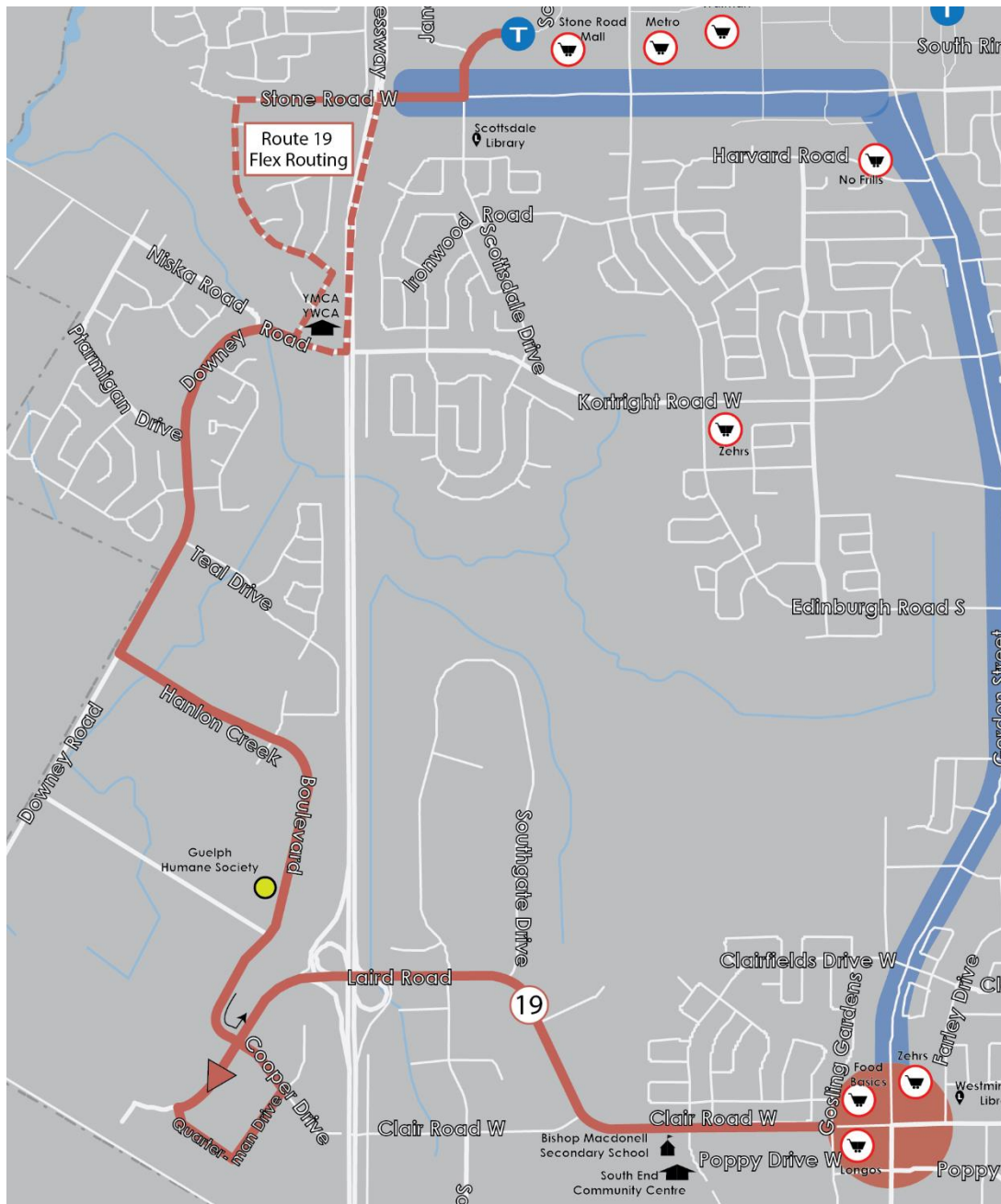


**Figure 45. Proposed Route 18 Watson Woodlawn from year 4 to year 5. To be discontinued and replaced by Route 96 Victoria starting in year 6.**



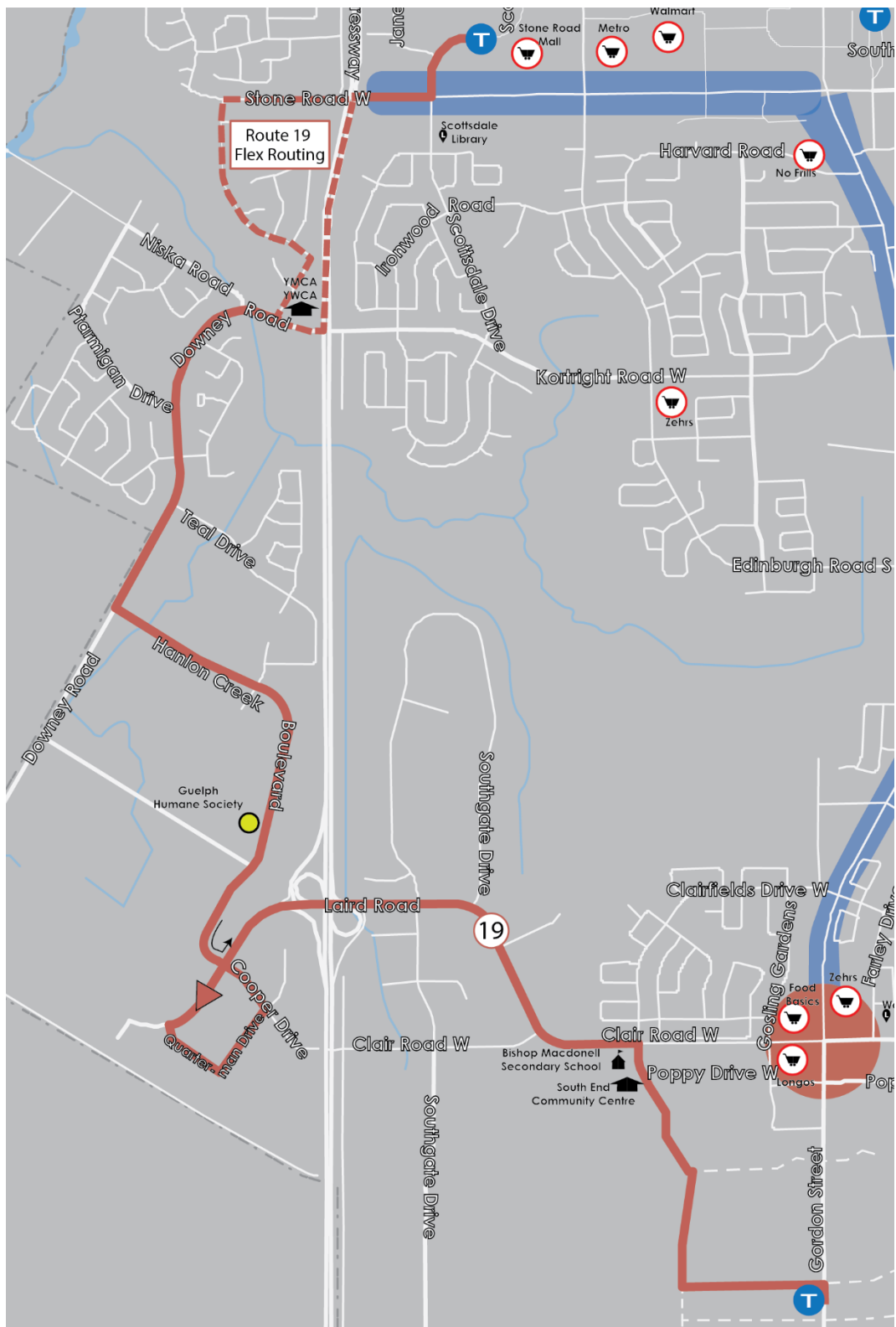
**Figure 46. Proposed Route 19 Hanlon Creek in year 1.**



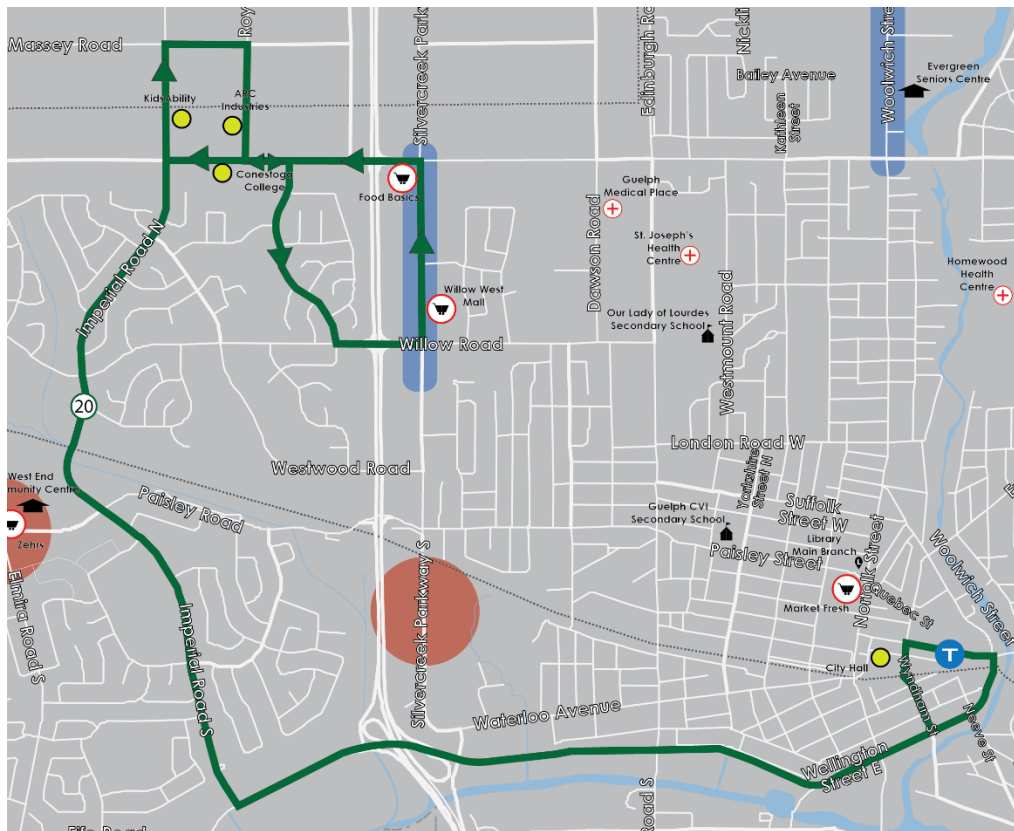


**Figure 47. Proposed Route 19 Hanlon Creek modification from year 2 to year 9.**

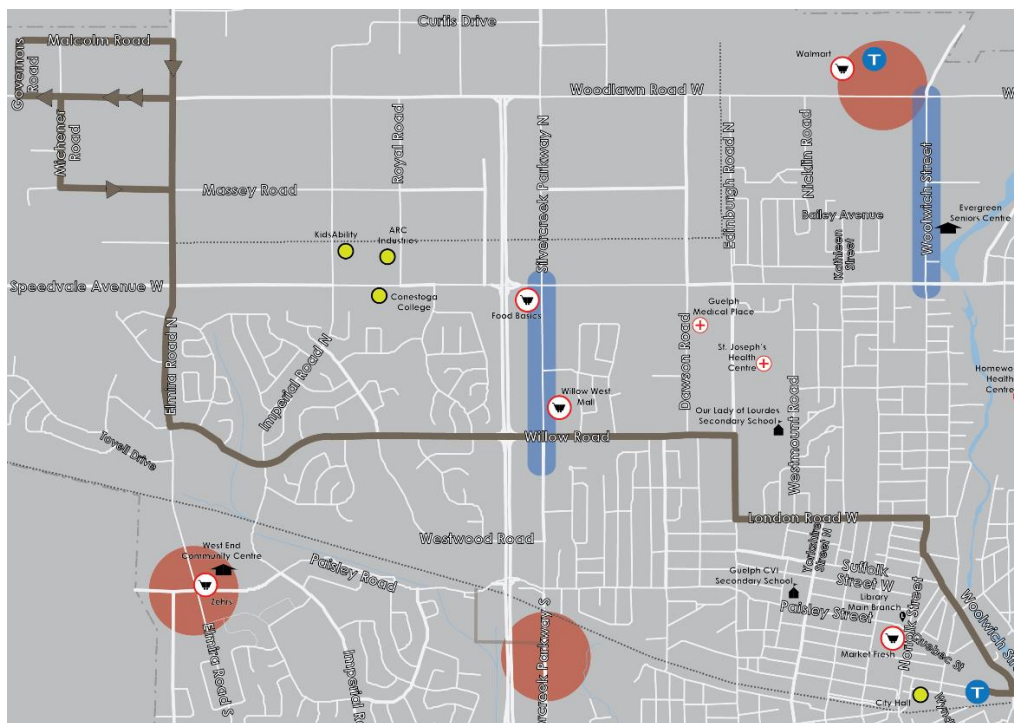




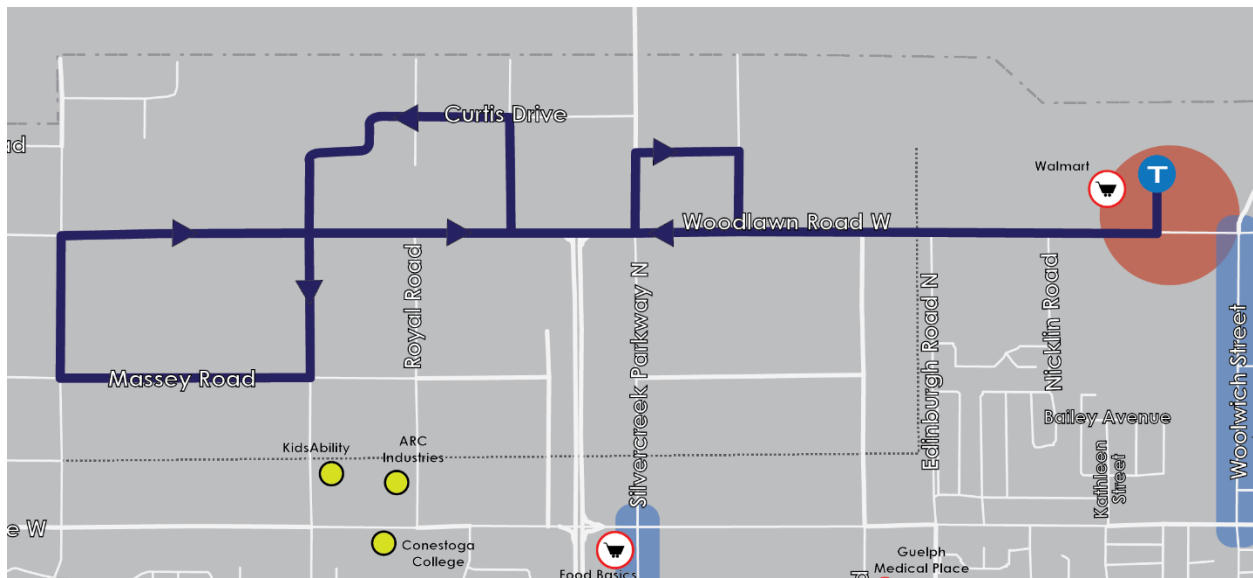
**Figure 48. Proposed Route 19 Hanlon Creek extension starting in year 10.**



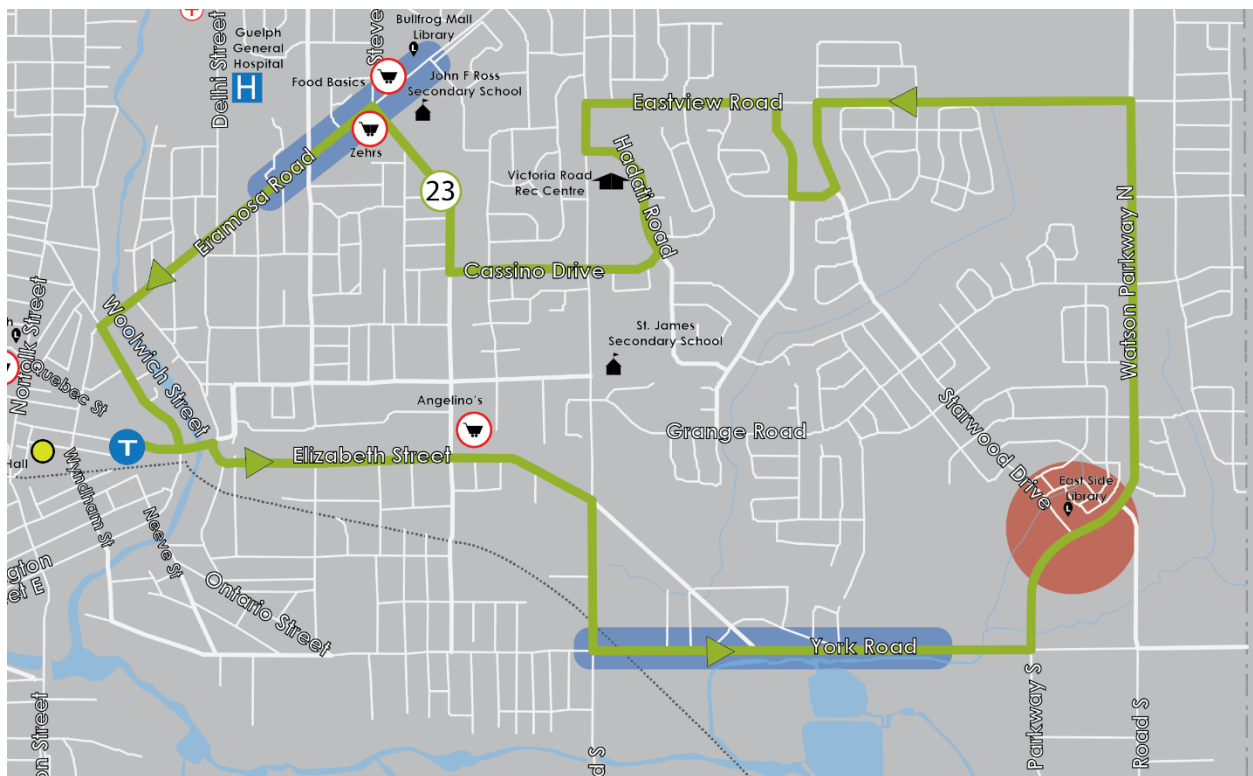
**Figure 49. Proposed Route 20 Wellington Imperial starting in year 4.**



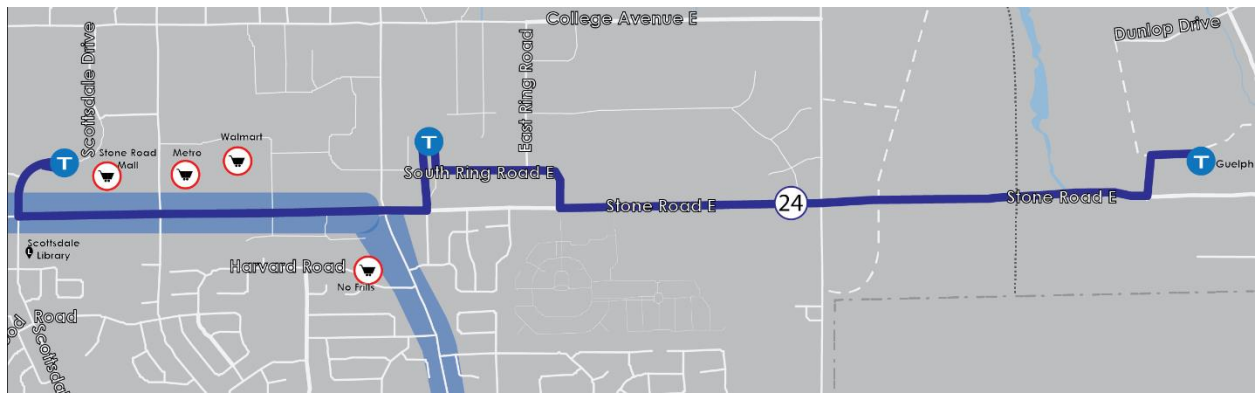
**Figure 50. Proposed Route 21 Willow starting in year 4.**



**Figure 51. Proposed Route 22 Curtis starting in year 4.**



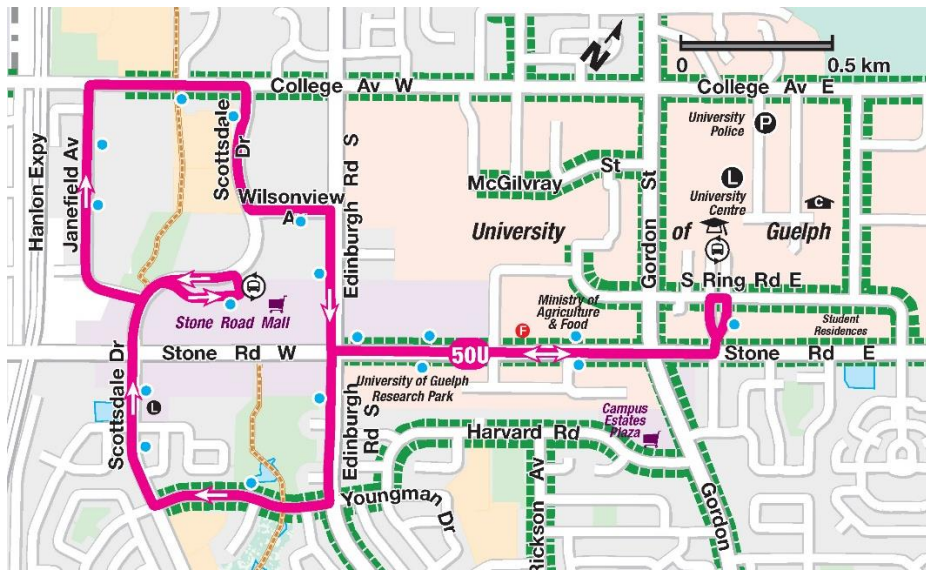
**Figure 52. Proposed Route 23 Watson Eastview starting in year 6.**



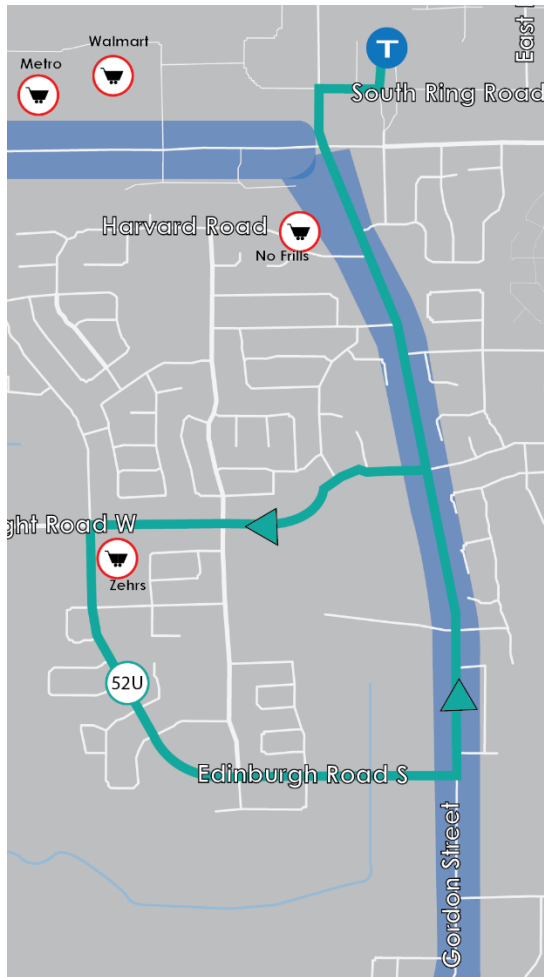
**Figure 53. Proposed Route 24 Stone starting in year 6.**



**Figure 54. Proposed Route 25 College Stone starting in year 7.**

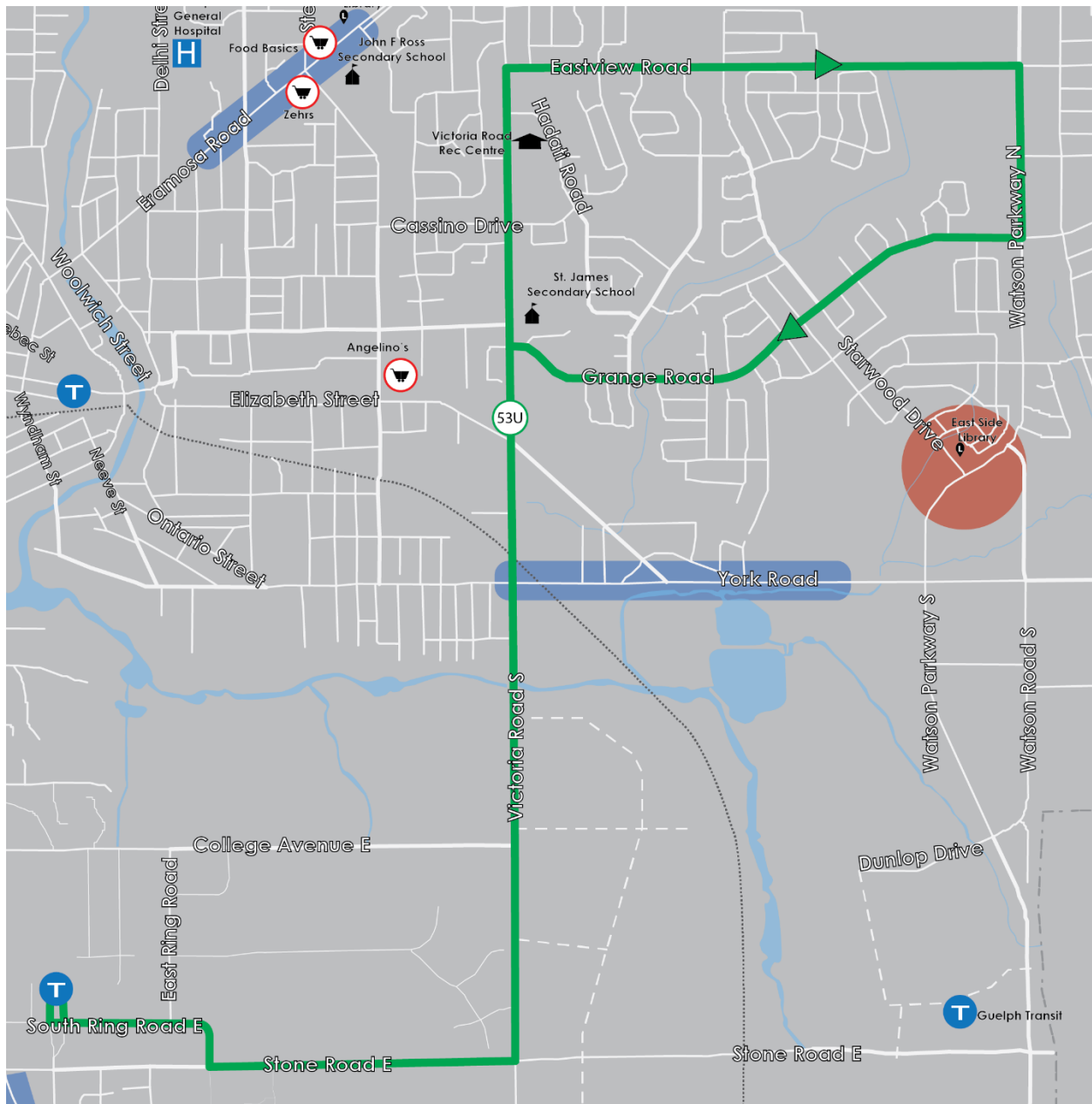


**Figure 55. Route 50U Scottsdale to maintain current routing introduced in September 2021.**



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

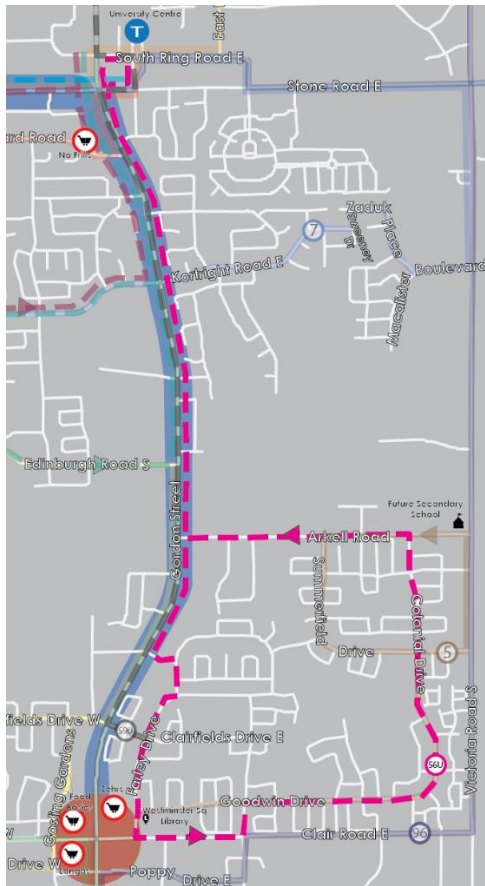




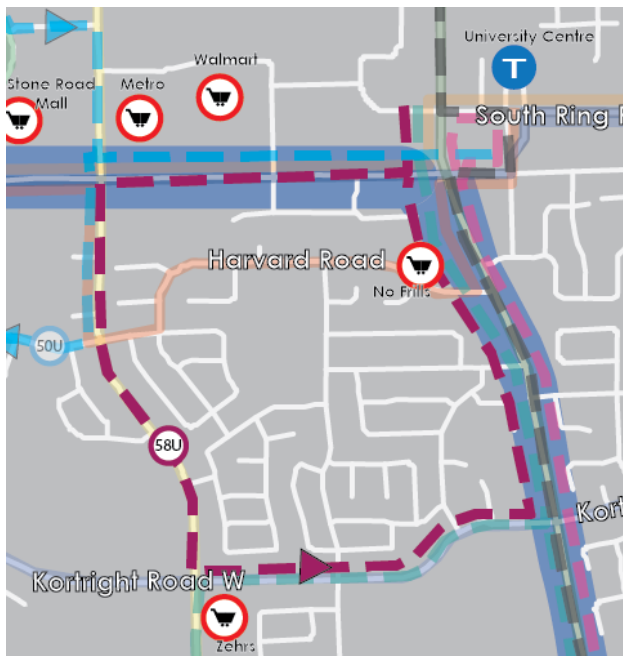
**Figure 57. Proposed Route 53U Eastview starting in year 6.**



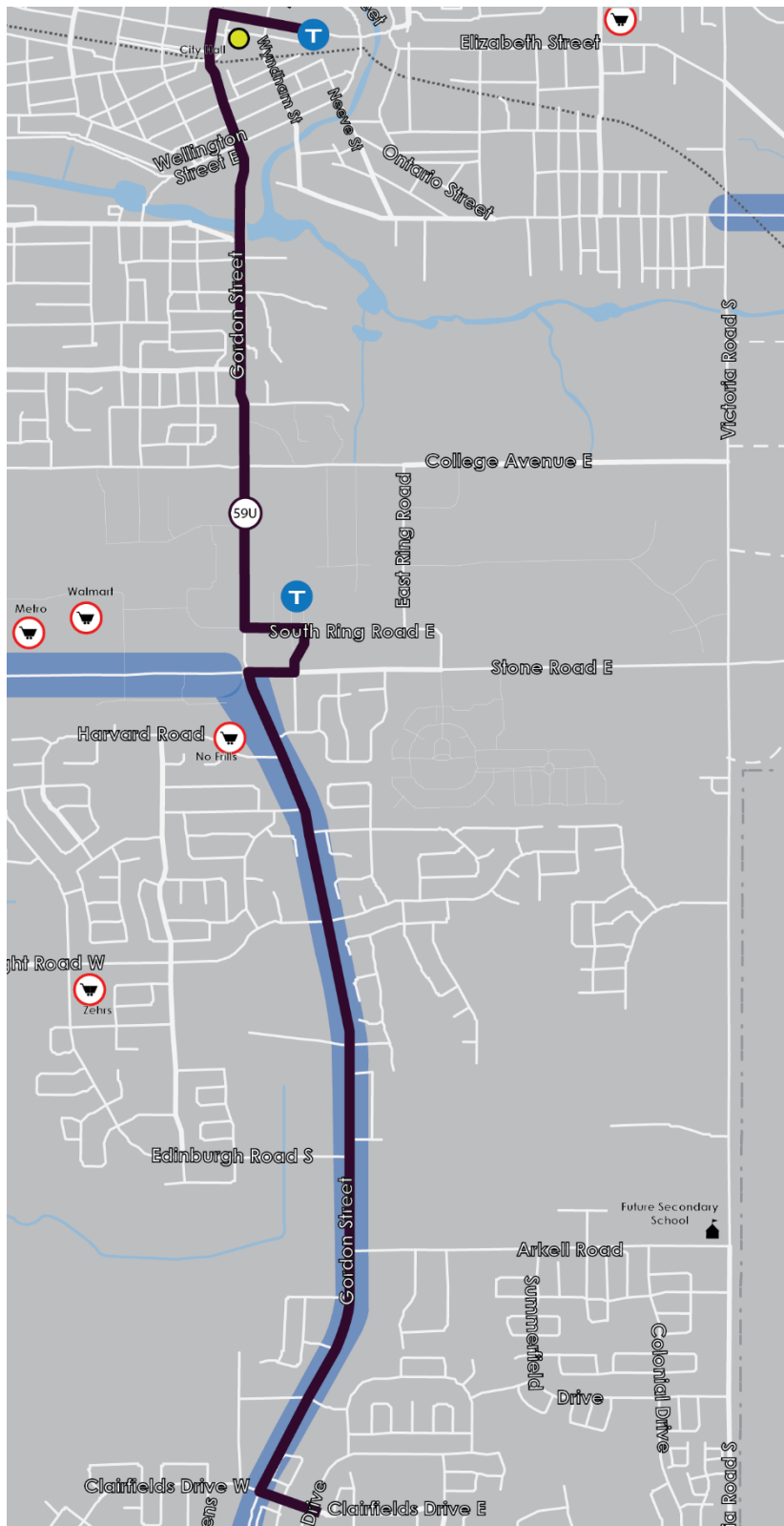




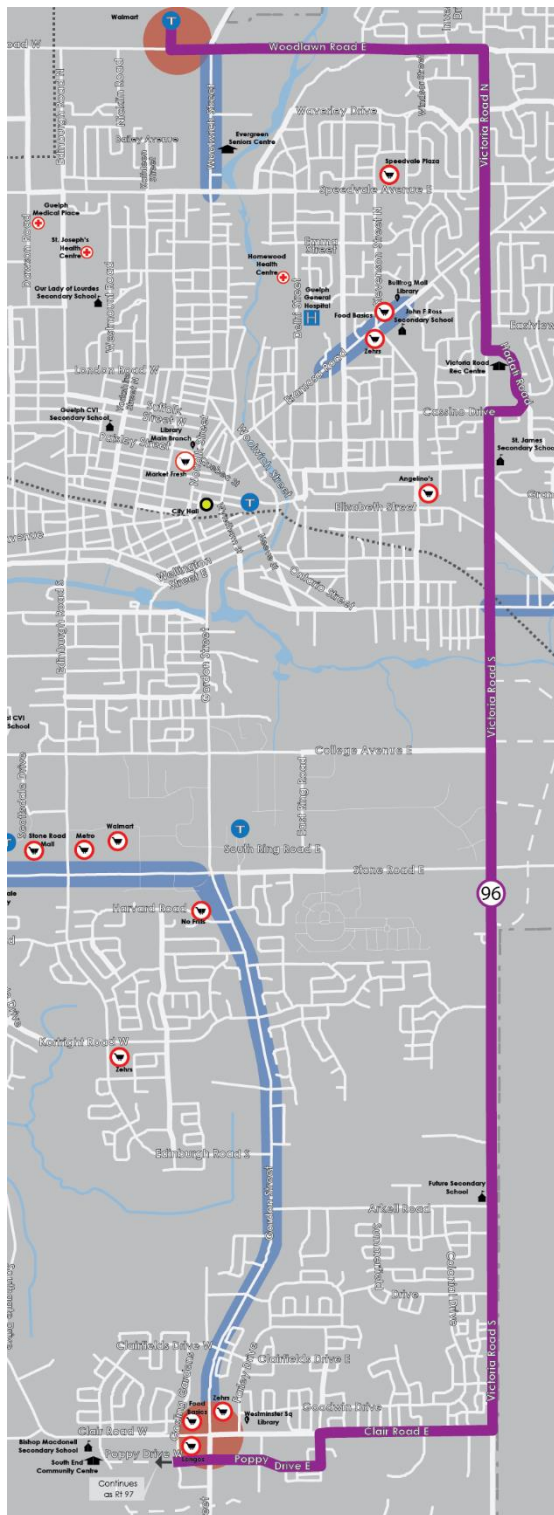
**Figure 59. Route 56U Colonial to maintain current routing.**



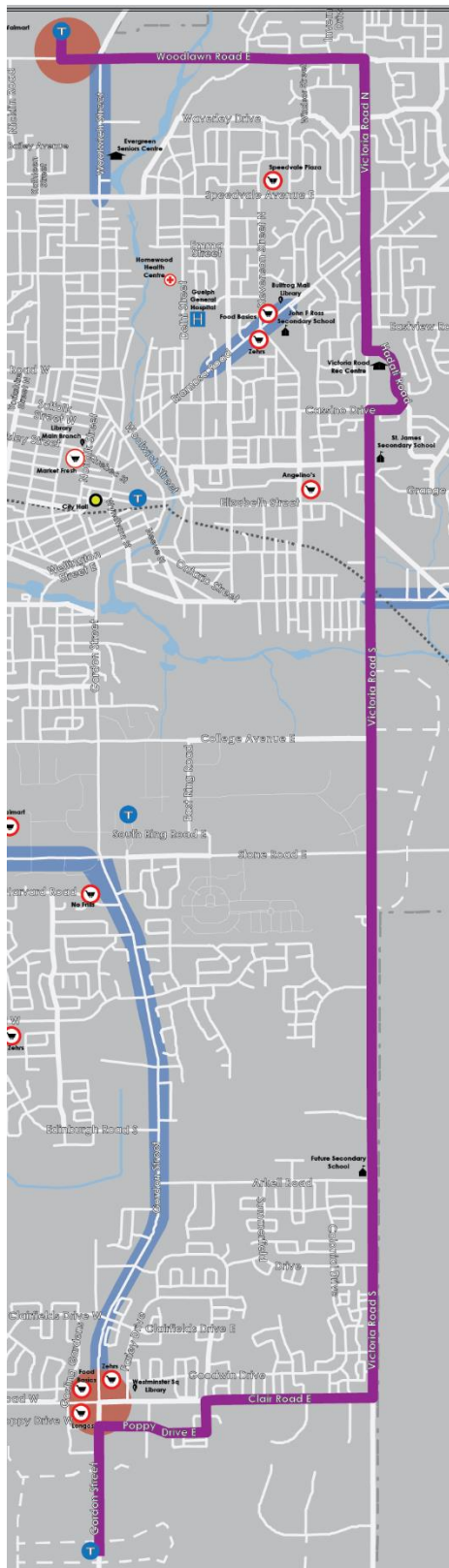
**Figure 60. Route 58U Edinburgh to maintain current routing.**



**Figure 61. Proposed Route 59U Gordon Express starting in year 7.**



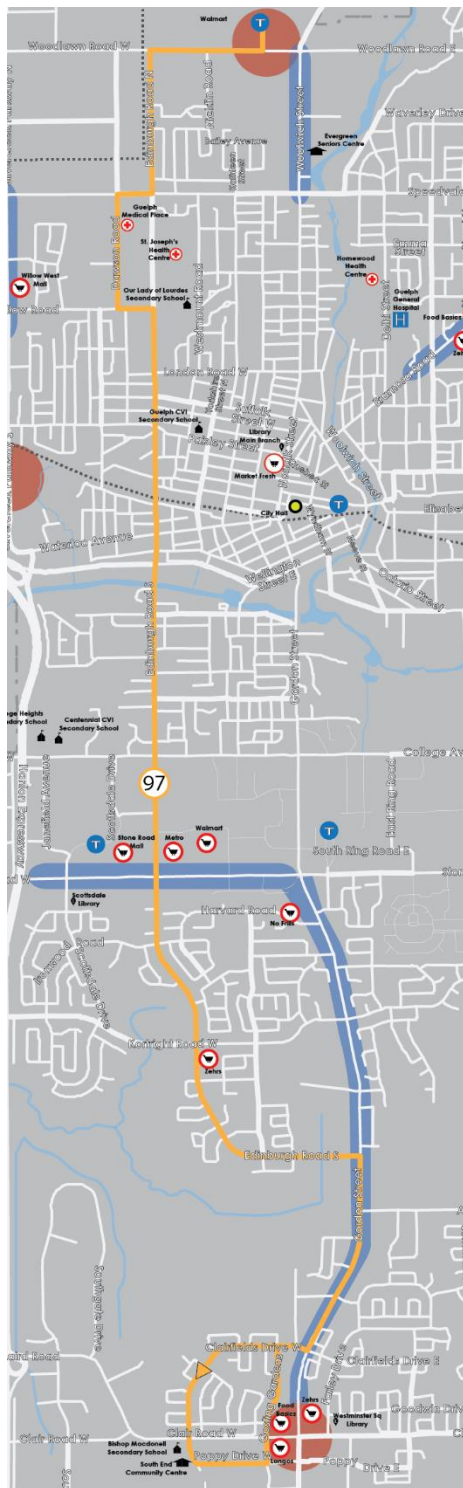
**Figure 62. Proposed Route 96 Victoria from year 6 to year 9.**



**Figure 63. Proposed Route 96 Victoria extension starting in year 10.**

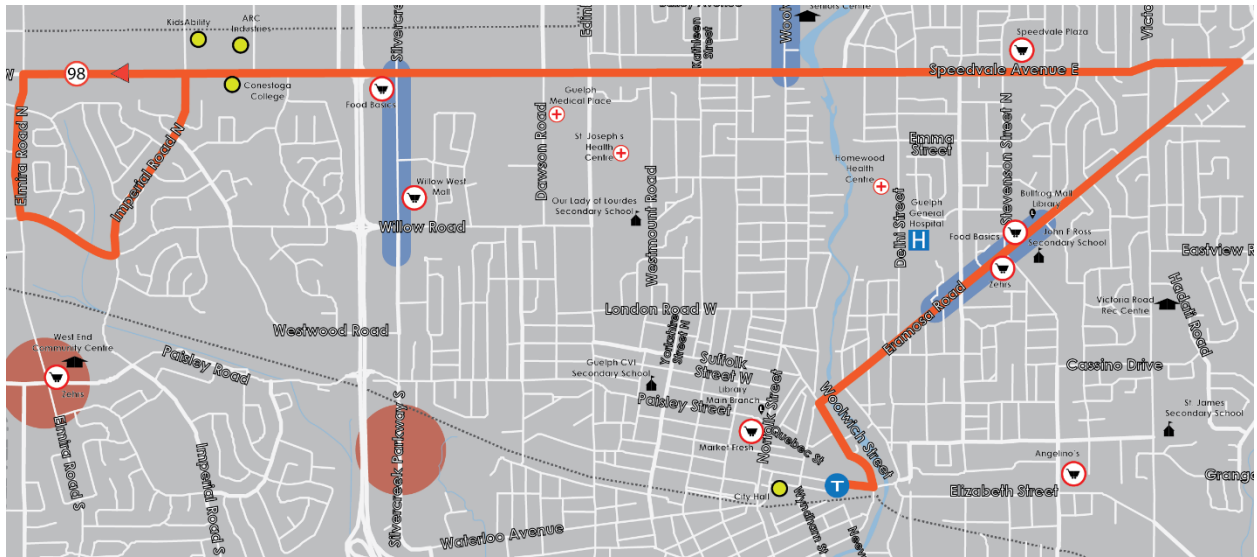


**Figure 64. Proposed Route 97 Edinburgh from year 5 to year 9.**

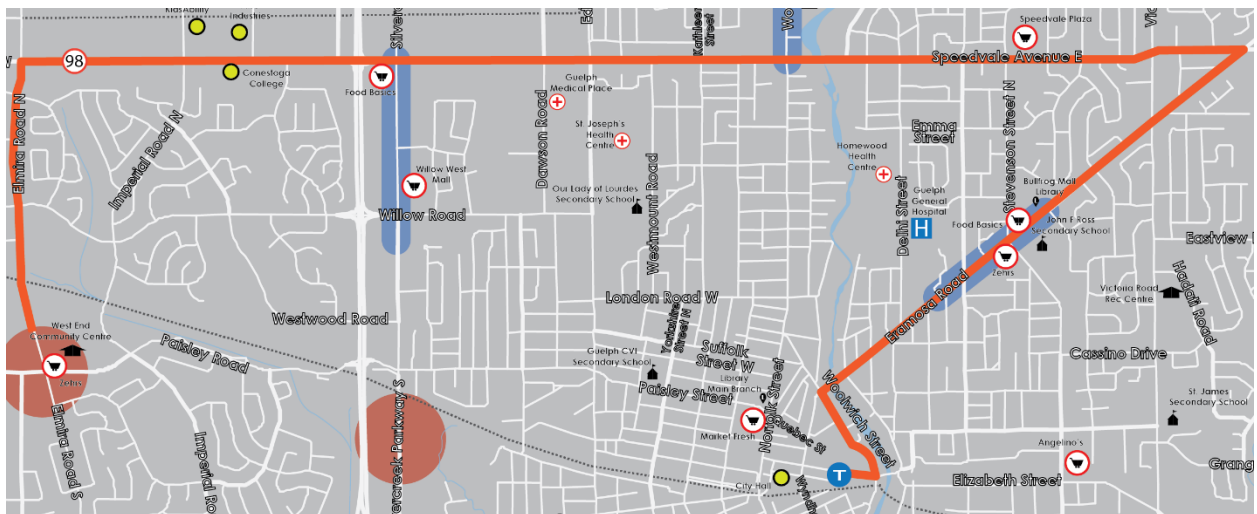


**Figure 65. Proposed Route 97 Edinburgh extension starting in year 10.**

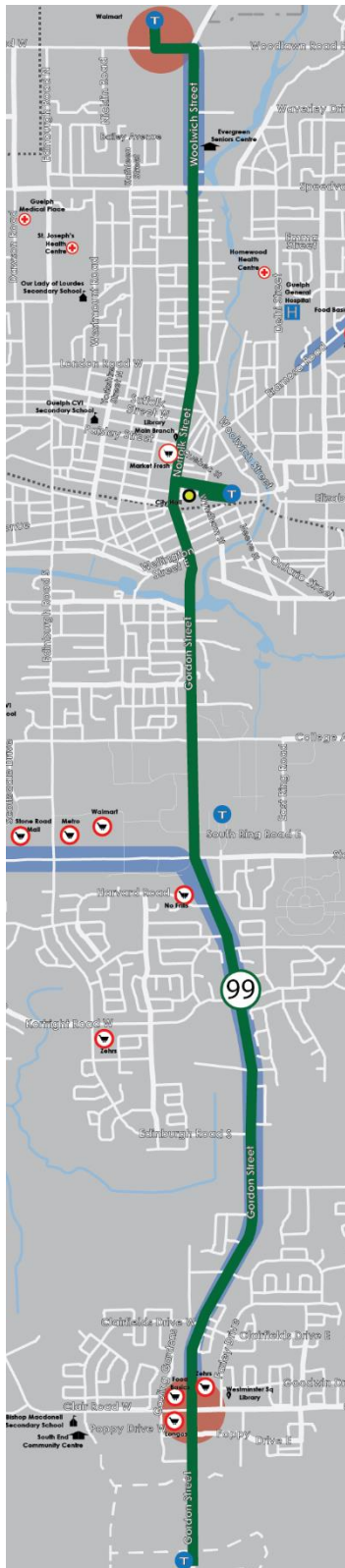




**Figure 66. Proposed Route 98 Speedvale in year 3 to replace Route 54 Speedvale West.**



**Figure 67. Proposed Route 98 Speedvale extension starting in year 4.**



**Figure 68. Route 99 Mainline to maintain current routing, with an extension to Clair Maltby Transit Terminal in year 10.**



# Appendix E: Year-by-year plan implementation

## 1. Package 1: Future Ready Plan (Staff Recommended Plan)

Package 1 will require an additional 100 operators and 26 buses.

### Year 1

Year 1 will have the following changes:

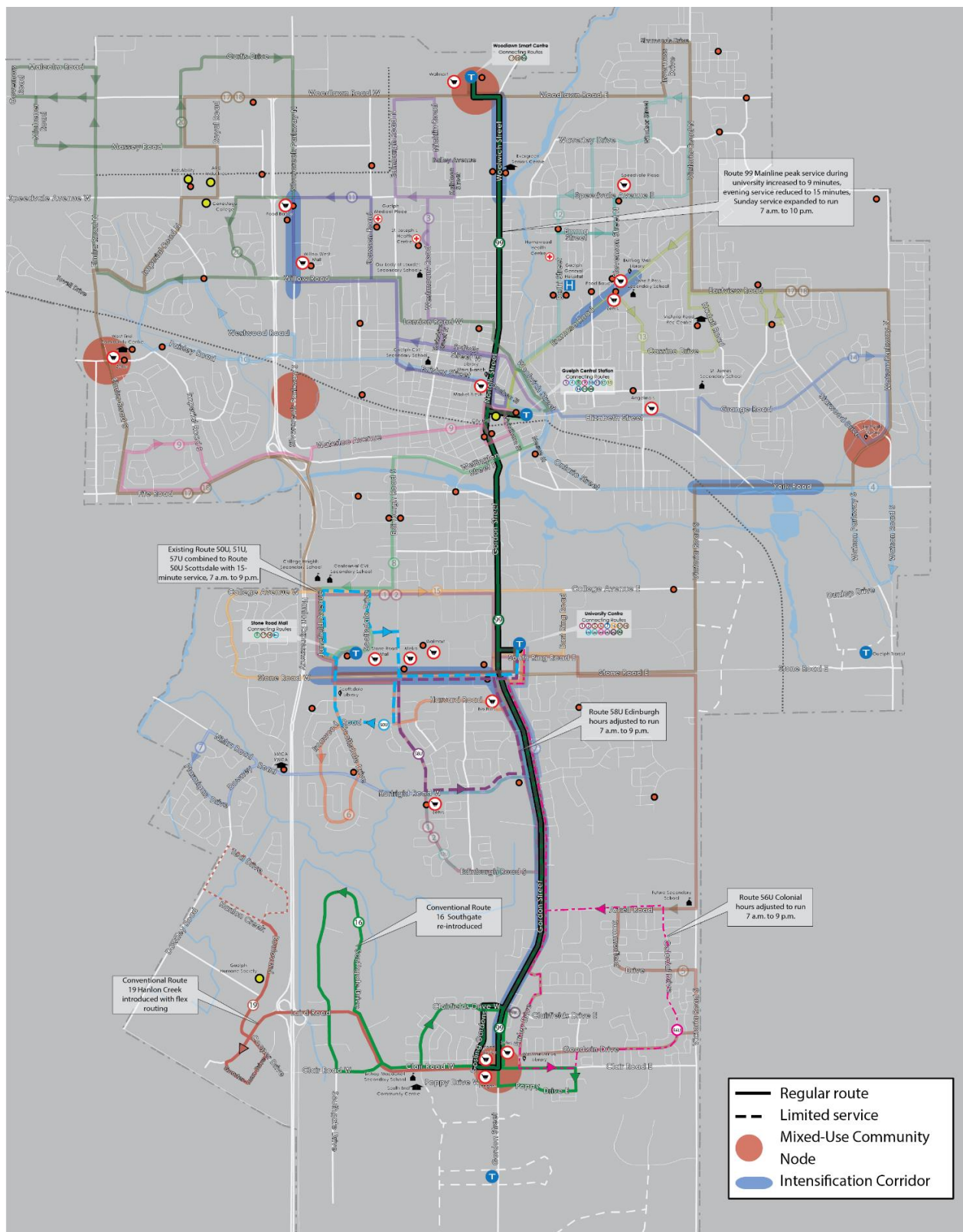
- Introduce Route 19 Hanlon Creek with routing options on north loop
- Reinstate conventional Route 16 Southgate
- Cancel Route 40 Scottsdale Express
- Merge Route 50U Stone, 51U Janefield, and Route 57U Ironwood into new Route 50U Scottsdale
- Change Route 56U Colonial service hours to 7:15 a.m. to 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 38. Service hours and frequency of adjusted routes Year 1.**

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 Plan (Staff Recommended Plan) year 1 network map.**

## 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

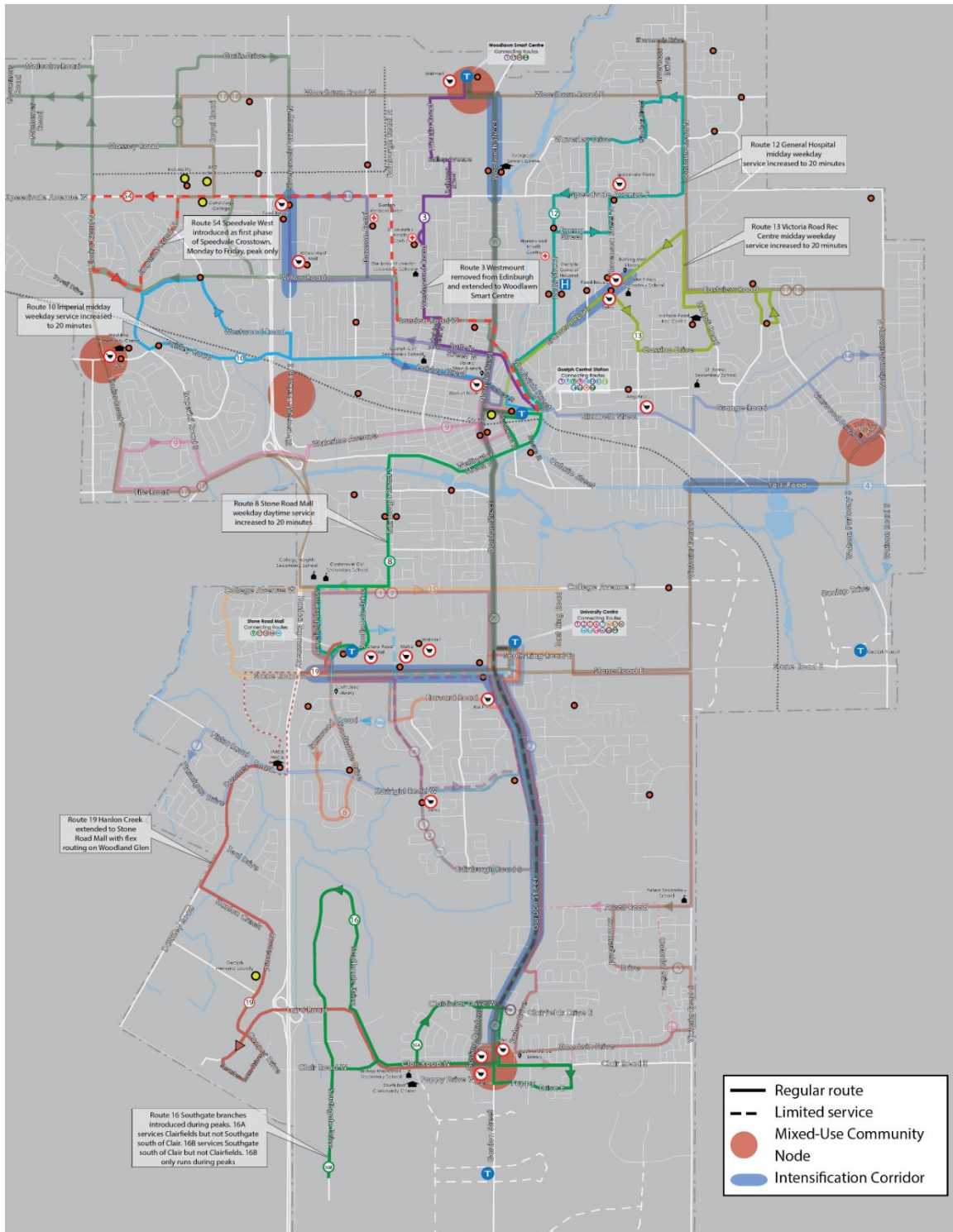
To support these changes, year 2 will have an increase of:

- 12 operators
- 4 buses
- 274,868 kilometres

**Table 39. Service hours and frequency of adjusted routes Year 2.**

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 Plan (Staff Recommended Plan) year 2 network map.**

### 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

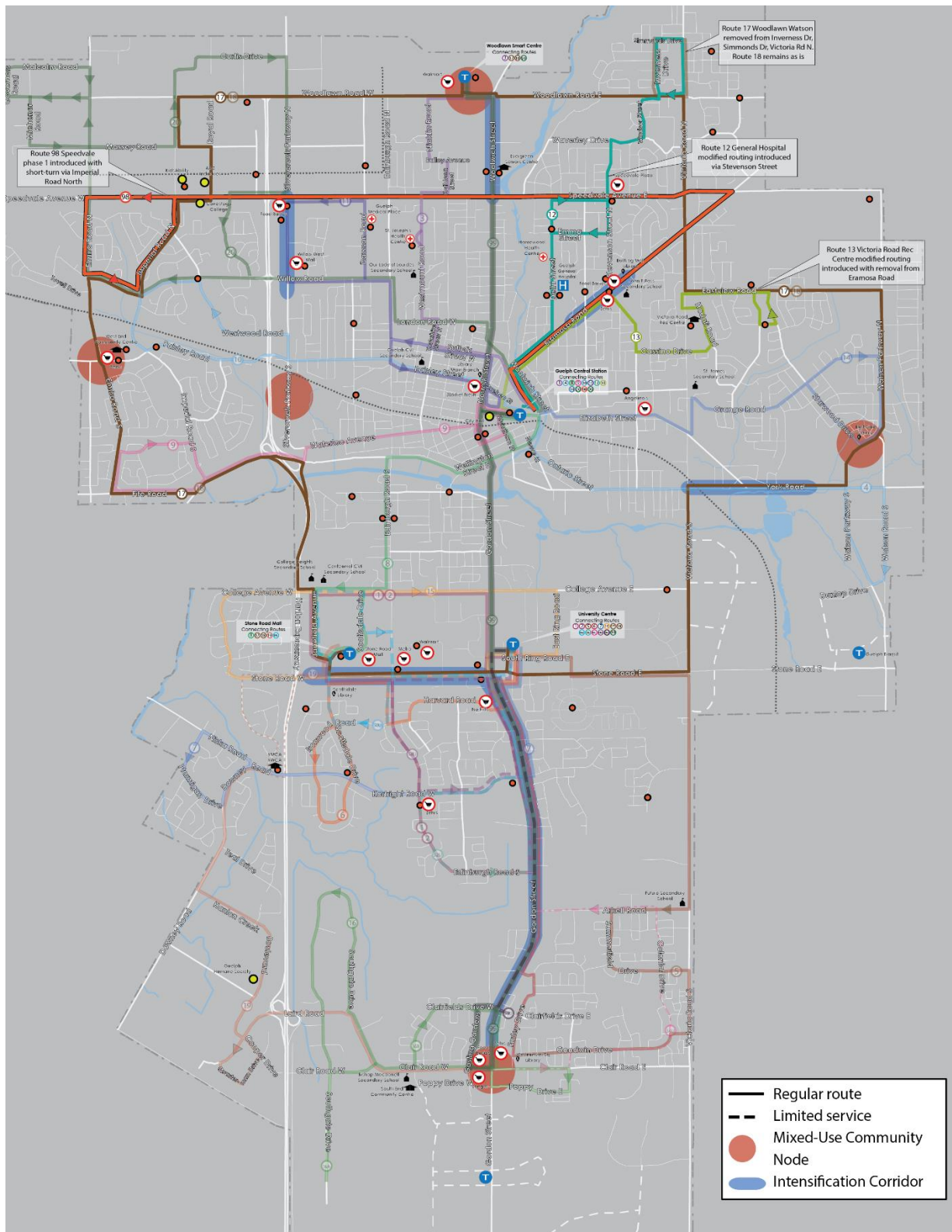
To support these changes, year 3 will have an increase of:

- 12 operators
- 5 buses
- 372,424 kilometres

**Table 40. Service hours and frequency of adjusted routes Year 3.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 Plan (Staff Recommended Plan) year 3 network map.**

## Year 4

Year 4 will have the following changes:

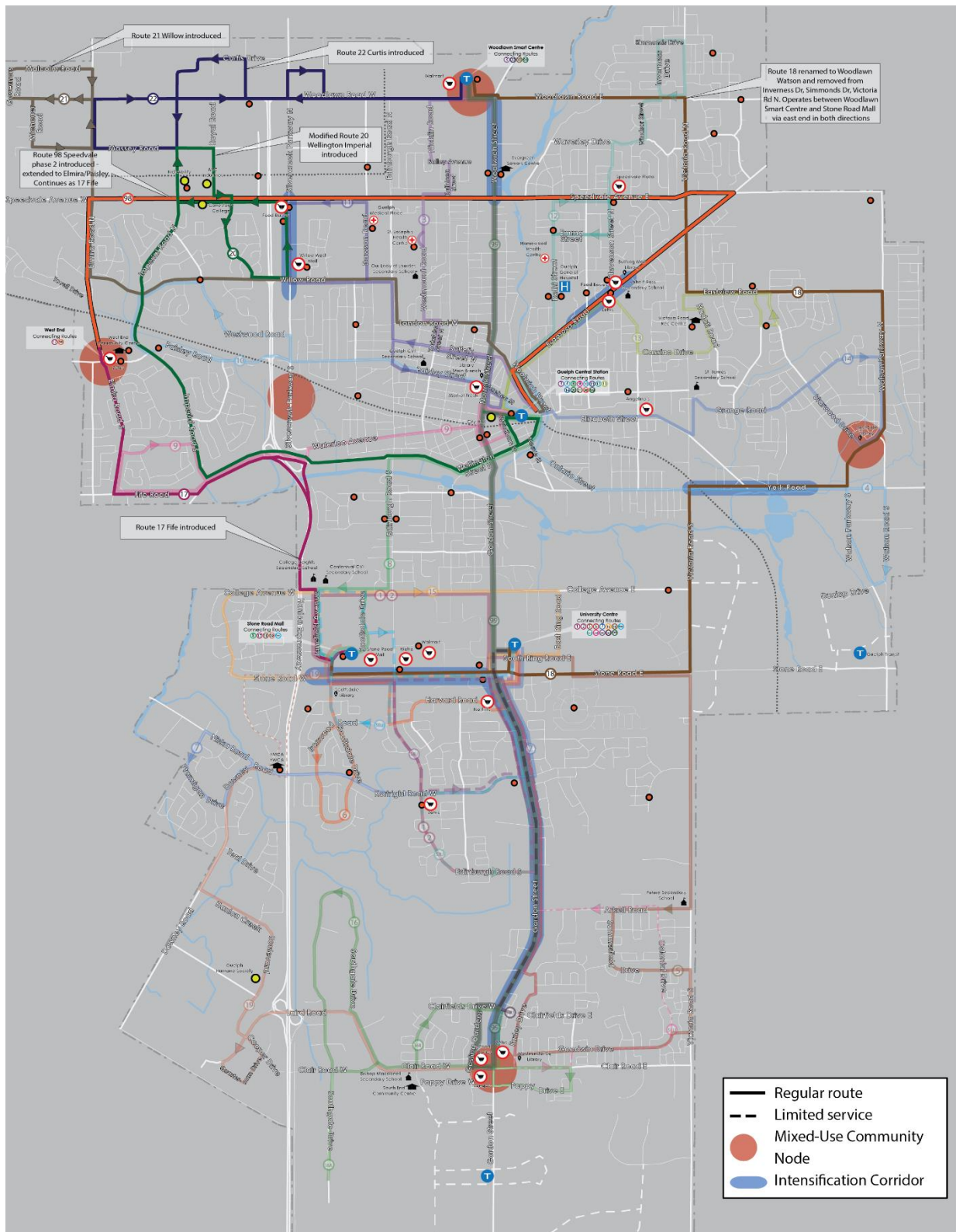
- Split Route 17/18 Woodlawn Watson into new Route 17 Fife and modified Route 18 Watson Woodlawn
- Introduce new Route 20 Wellington Imperial
- Introduce new Route 21 Willow
- Introduce new Route 22 Curtis
- Extend Route 98 Speedvale to West End Recreation Centre and interline with Route 17 Fife
- Introduce 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 41. Service hours and frequency of adjusted routes Year 4.**

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 Plan (Staff Recommended Plan) year 4 network map.**



## Year 5

Year 5 will have the following changes:

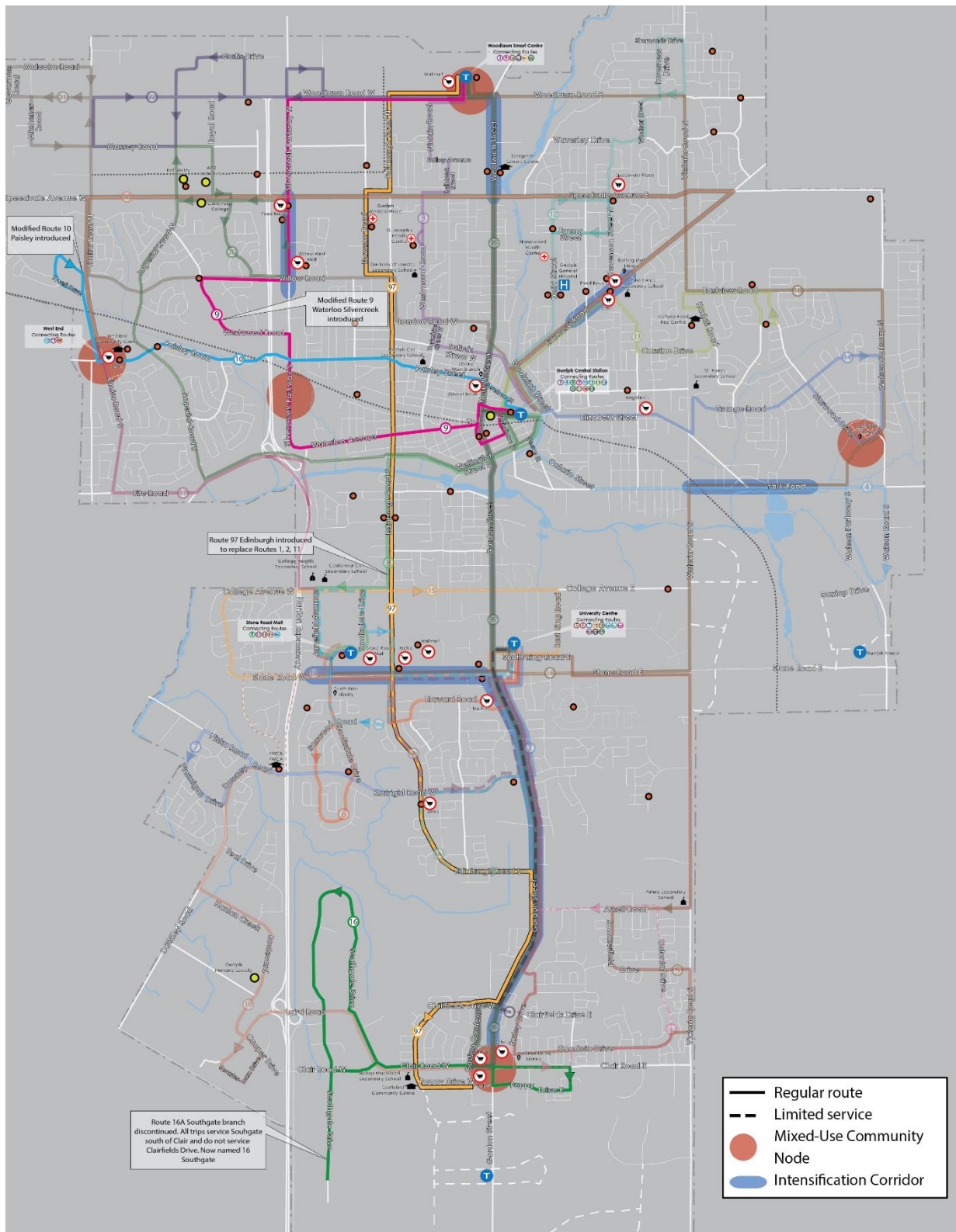
- Cancel Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West
- Introduce new Route 97 Edinburgh that replaces Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West
- Introduce new routing for Route 9 Waterloo Silvercreek
- Introduce new routing for 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 42. Service hours and frequency of adjusted routes Year 5.**

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 Plan (Staff Recommended Plan) year 5 network map.**

## 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

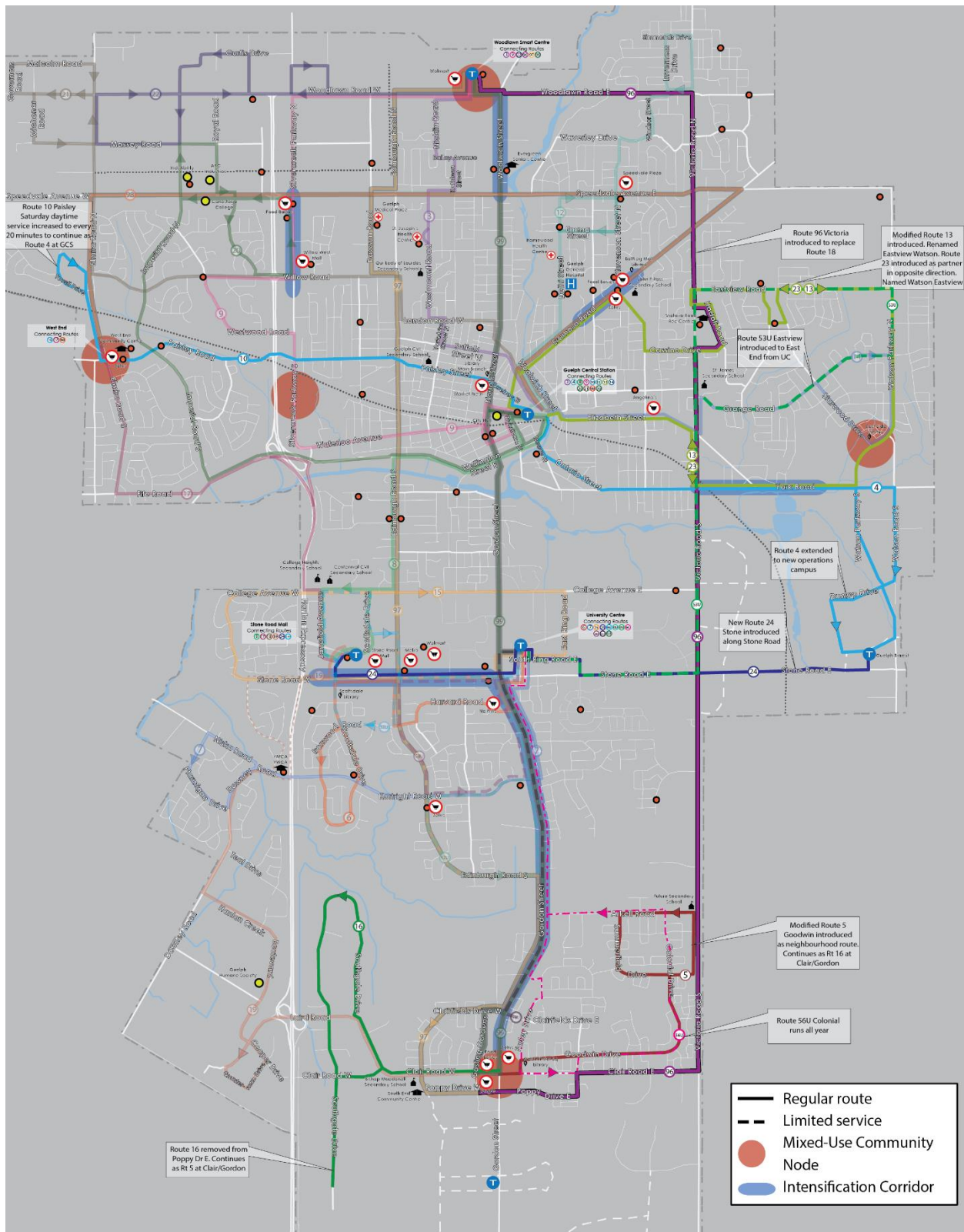
To support these changes, year 6 will have an increase of:

- 22 operators
- 4 buses
- 567,604 kilometres

**Table 43. Service hours and frequency of adjusted routes Year 6.**

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

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 Plan (Staff Recommended Plan) year 6 network map.**

## 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

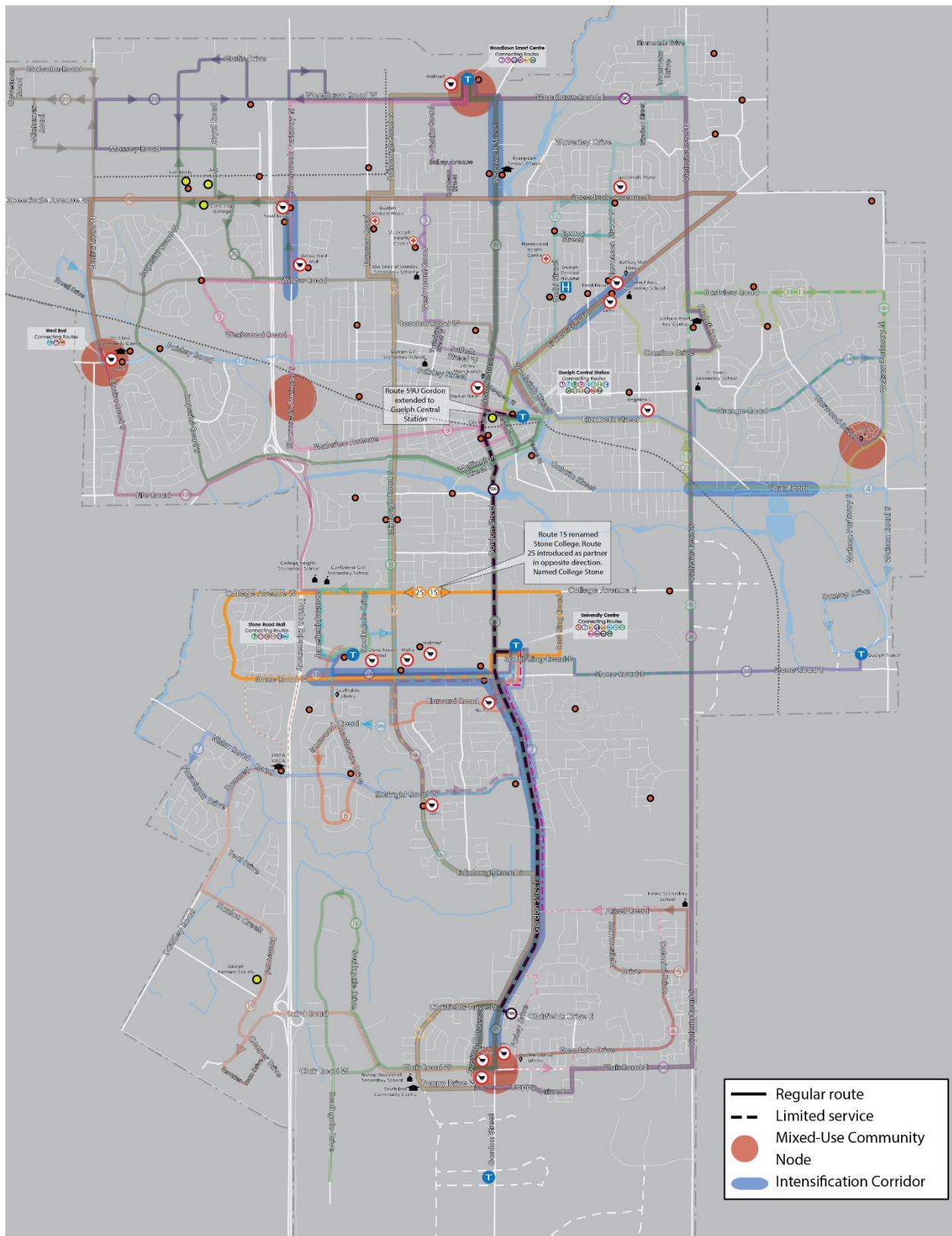
To support these changes, year 7 will have an increase of:

- 9 operators
- 0 buses
- 217,428 kilometres

**Table 44. Service hours and frequency of adjusted routes Year 7.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 Plan (Staff Recommended Plan) year 7 network map.**

## Year 8

Year 8 will have no changes.

## Year 9

Year 9 will have no changes.

## 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

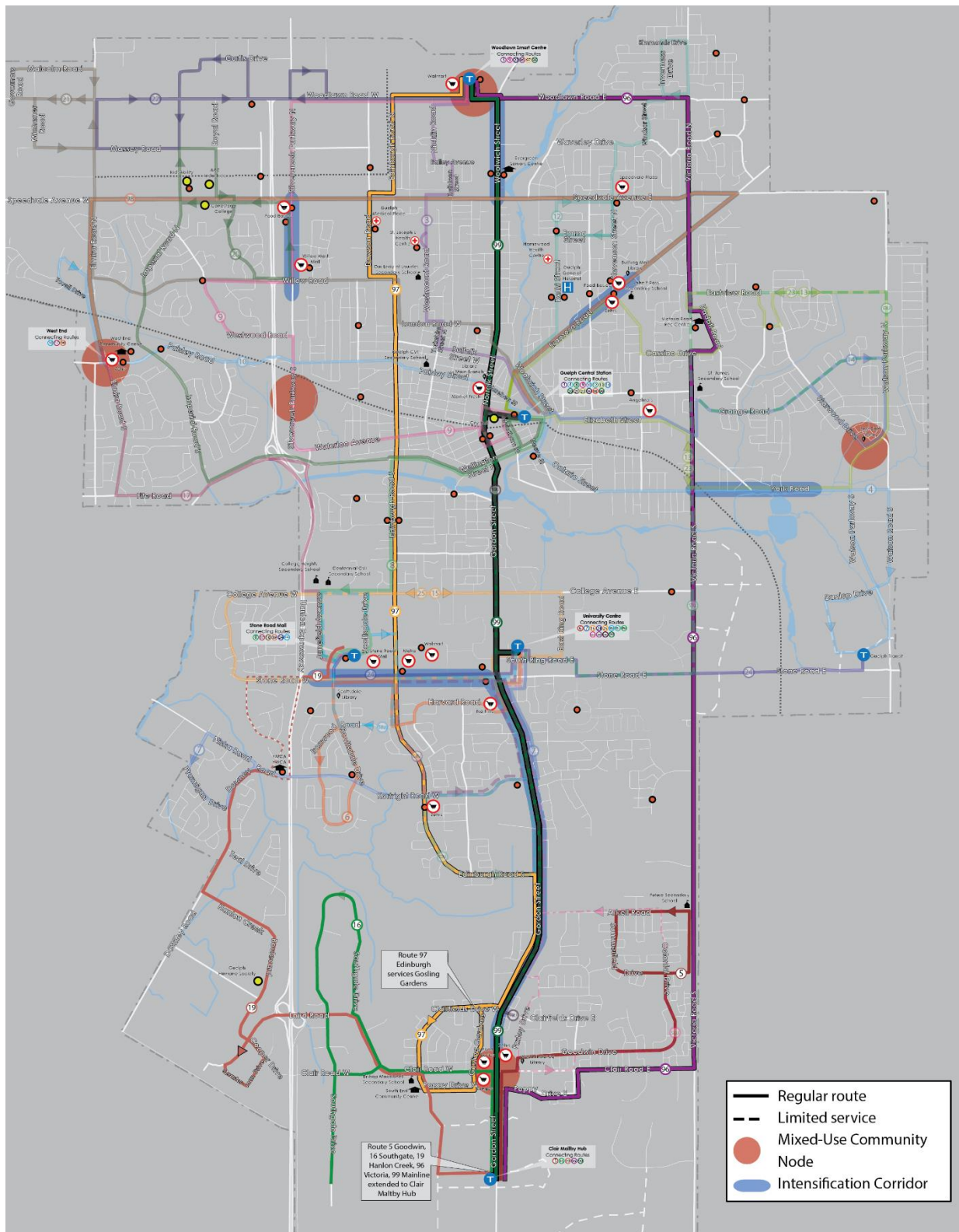
To support these changes, year 7 will have an increase of:

- 0 operators
- 0 buses
- 145,683 kilometres

**Table 45. Service hours and frequency of adjusted routes Year 10**

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





**Figure 76. Future Ready Plan (Staff Recommended Plan) year 10 (2031) network map.**

## 2. Package 2: 1% Levy Plan

Package 2 will require an additional 100 operators and 26 buses.

### Year 1

Year 1 will have the following changes:

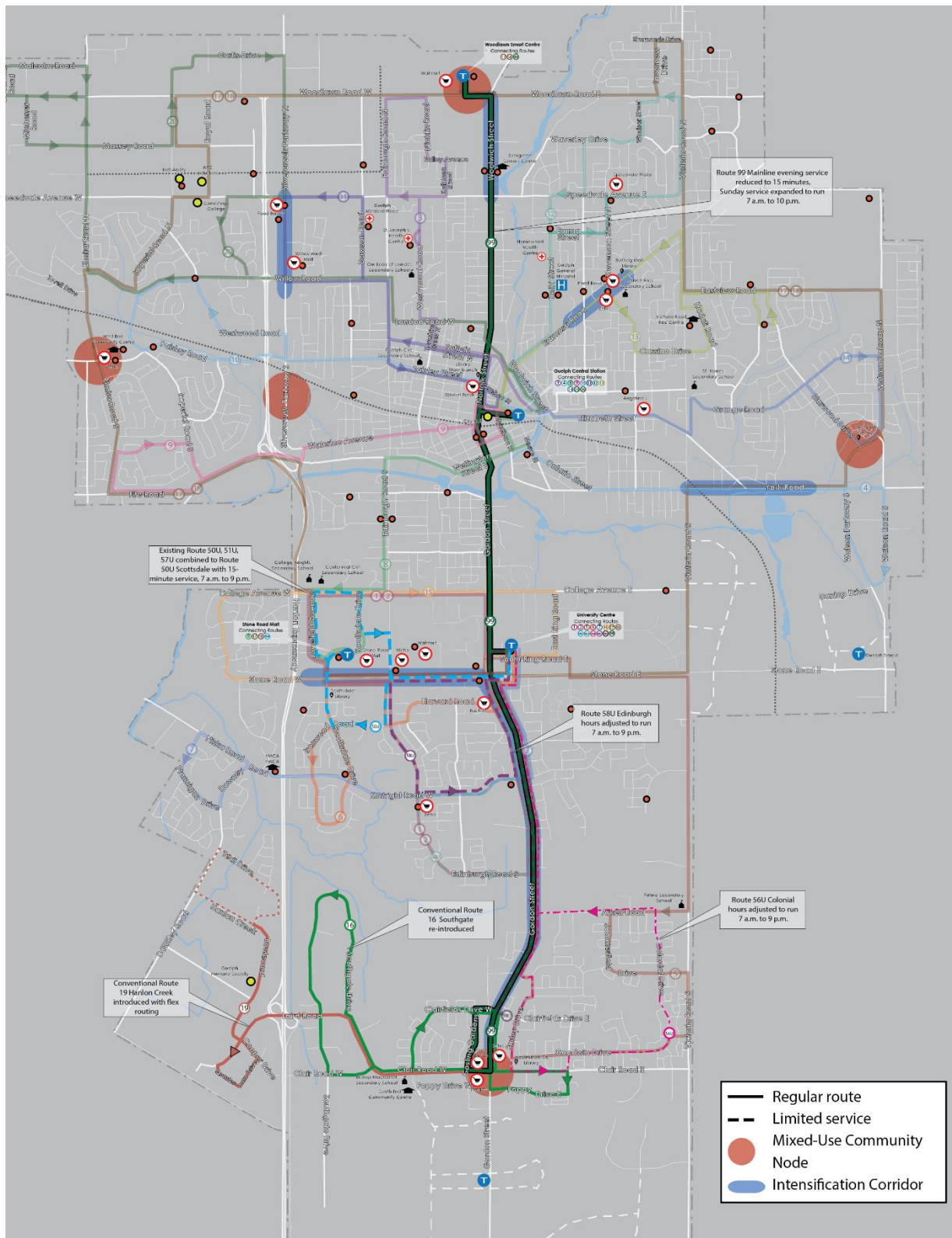
- Introduce Route 19 Hanlon Creek
- Cancel Route 40 Scottsdale Express
- Merge Route 50U Stone, 51U Janefield, and Route 57U Ironwood into new Route 50U Scottsdale
- Change Route 56U Colonial service hours to 7:15 a.m. to 9:00 p.m.
- Change Route 58U Edinburgh service hours to 7:20 a.m. to 9:00 p.m.
- Change Route 99 Mainline cycle to 90 minutes, all day, all year long
- 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:

- 11 operators
- 3 buses
- 115,077 kilometres

**Table 46. Service hours and frequency of adjusted routes Year 1.**

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 10 minutes weekdays 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 77. 1% Levy Plan year 1 network map.**

## Year 2

Year 2 will have the following changes:

- Introduce new routing for Route 3 Westmount
- 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
- Increase Route 99 Mainline frequency to every 9 minutes during peak service hours from September to May
- 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

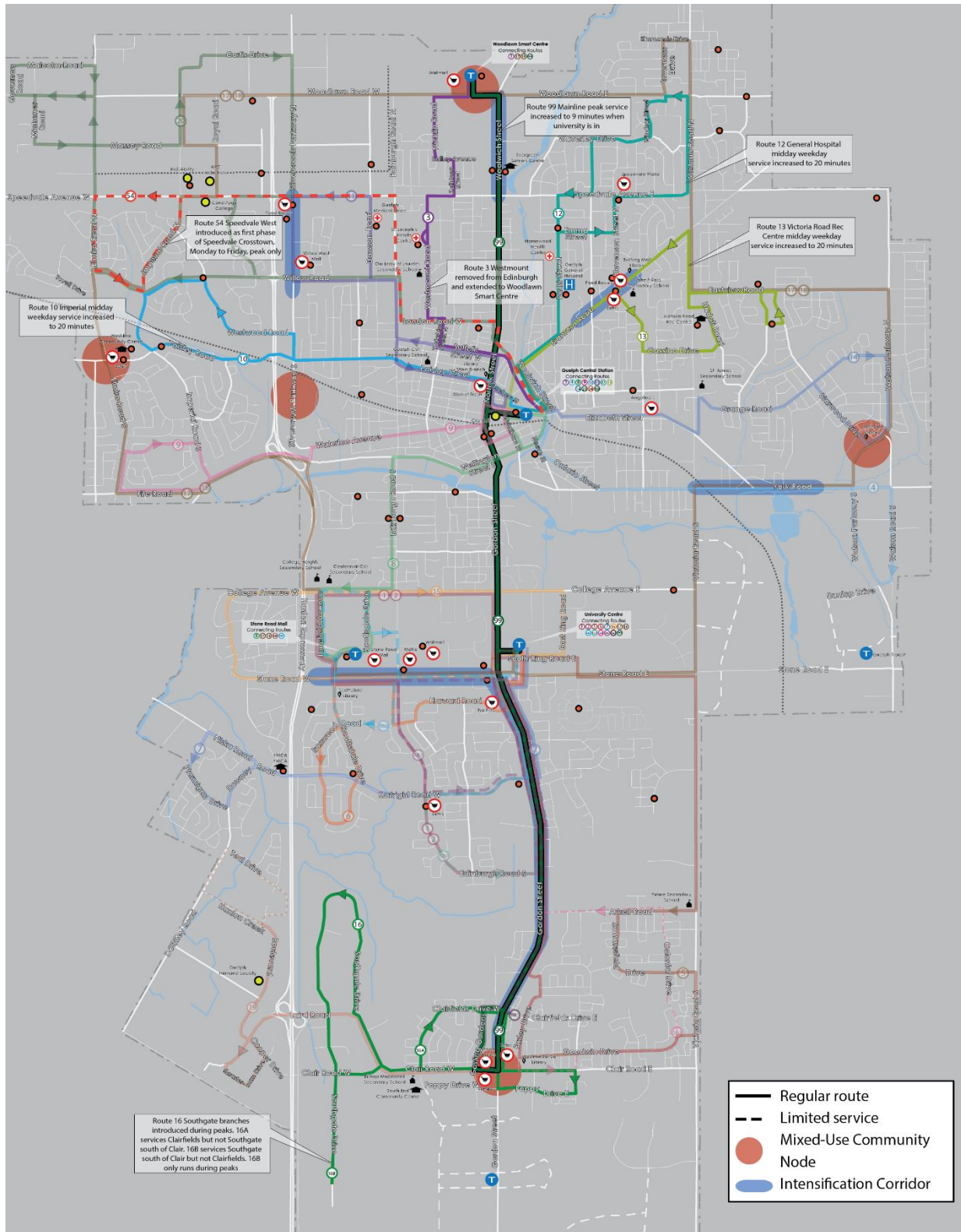
To support these changes, year 2 will have an increase of:

- 5 operators
- 2 buses
- 121,445 kilometres

**Table 47. Service hours and frequency of adjusted routes Year 2.**

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
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
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)
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 78. 1% Levy Plan year 2 network map.**

### Year 3

Year 3 will have the following changes:

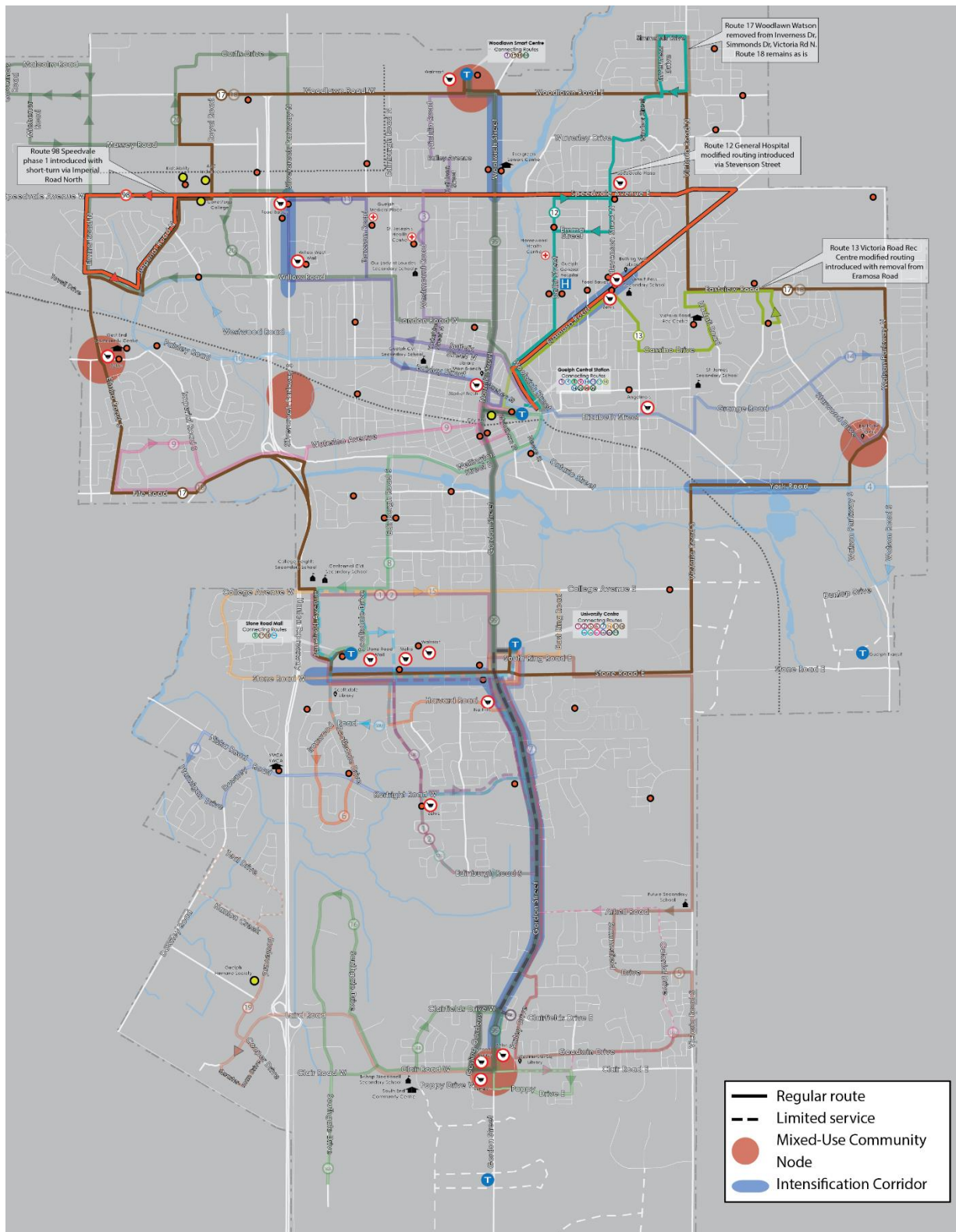
- Introduce new routing for Route 12 General Hospital
- Introduce new routing for Route 13 Victoria Road Recreation Centre
- Introduce modified routing for Route 17 Woodlawn Watson
- Introduce new Route 98 Speedvale with 30-minute Saturday service

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

- 11 operators
- 1 bus
- 350,460 kilometres

**Table 48. Service hours and frequency of adjusted routes Year 3.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 till 6 p.m.; every 30 minutes after 6 p.m. and weekends



**Figure 79. 1% Levy Plan year 3 network map.**

## Year 4

Year 4 will have the following changes:

- Extend Route 19 Hanlon Creek to Stone Road Mall
- Increase Route 8 Stone Road Mall daytime weekday and Saturday service to every 20 minutes
- Introduction of interregional transit from Guelph Central Station to Pinebush Station in Cambridge

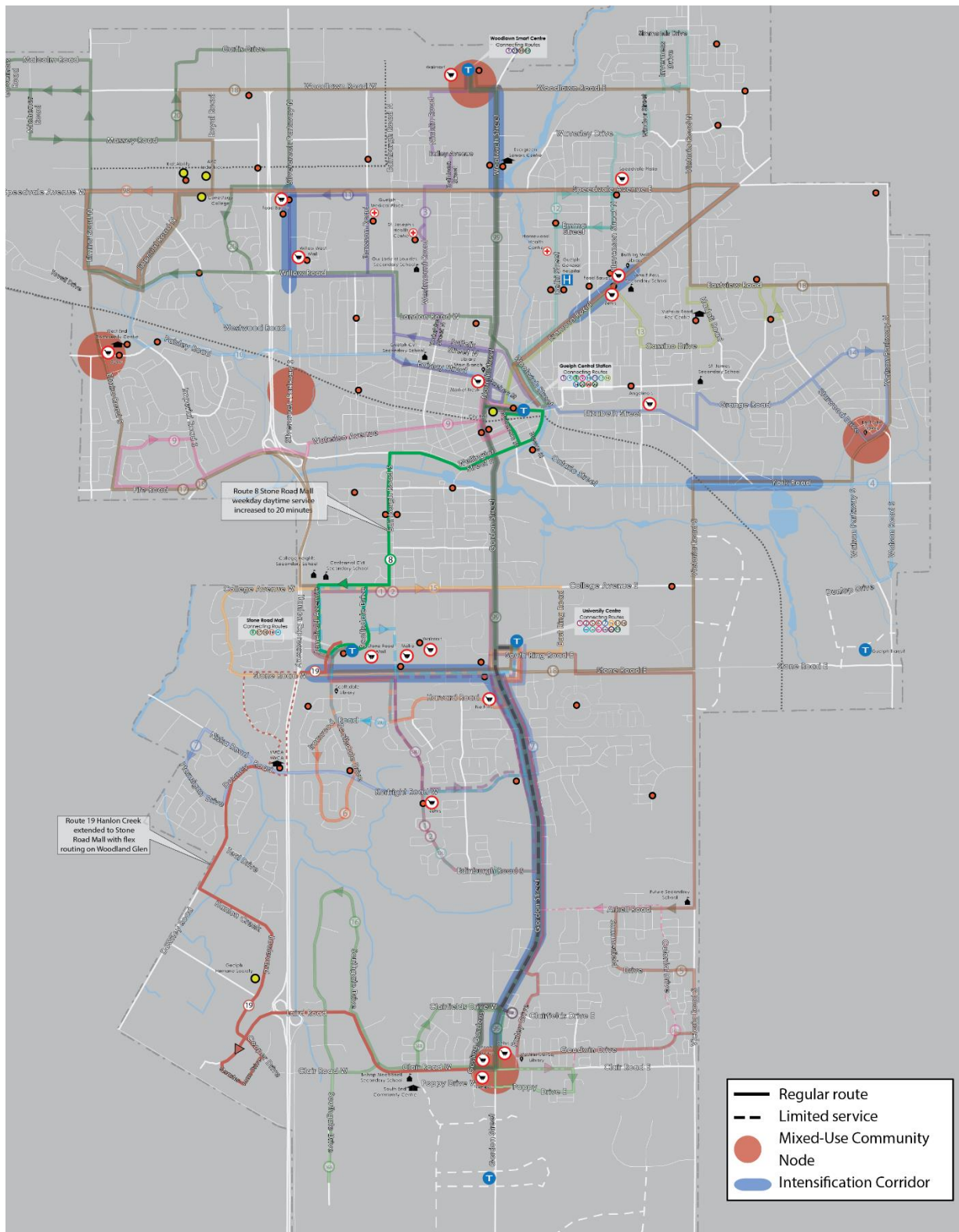
To support these changes, year 4 will have an increase of:

- 14 operators
- 6 buses
- 131,129 kilometres

**Table 49. Service hours and frequency of adjusted routes Year 4.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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
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
Interregional (GCS to Pinebush)	To be determined through public engagement	To be determined through public engagement





**Figure 80. 1% Levy Plan year 4 network map.**

## Year 5

Year 5 will have the following changes:

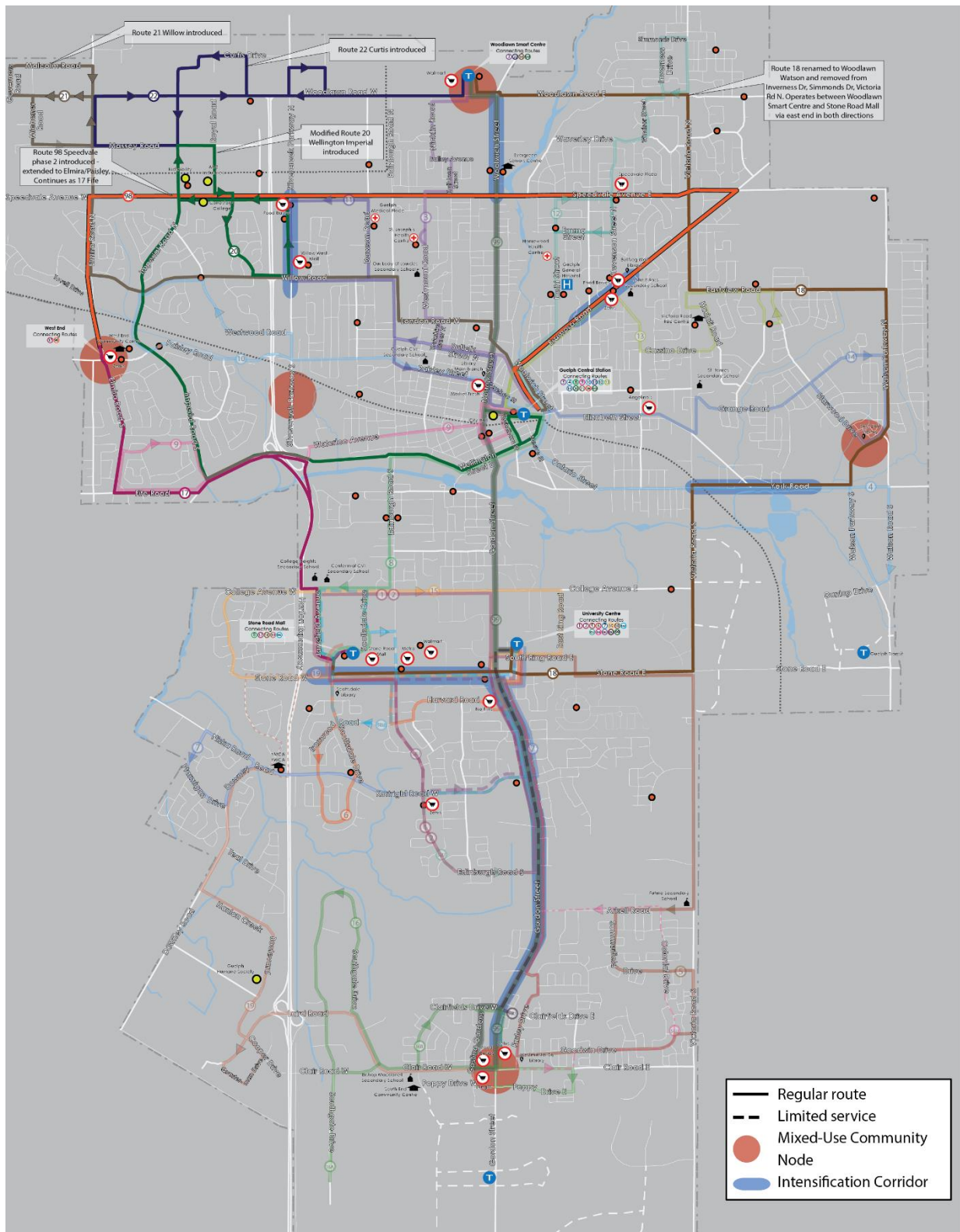
- Split Route 17/18 Woodlawn Watson into new Route 17 Fife and modified Route 18 Watson Woodlawn
- Introduce new Route 20 Wellington Imperial
- Introduce new Route 21 Willow
- Introduce new Route 22 Curtis
- Extend Route 98 Speedvale to West End Recreation Centre and interline with Route 17 Fife
- Introduce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

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

- 17 operators
- 5 buses
- 195,564 kilometres

**Table 50. Service hours and frequency of adjusted routes Year 5.**

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 till 6 p.m.; every 30 minutes after 6 p.m. and weekends
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 till 6 p.m.; every 30 minutes after 6 p.m. and weekends
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 Fairview Mall)	To be determined through public engagement	To be determined through public engagement



**Figure 81. 1% Levy Plan year 5 network map.**

## Year 6

Year 6 will have the following changes:

- Modify Route 56U Colonial service schedule to run year round
- Introduce new Route 24 Stone
- Extend Route 4 York to new Transit Operations campus
- Introduction of interregional transit from Guelph Central Station to Aberfoyle

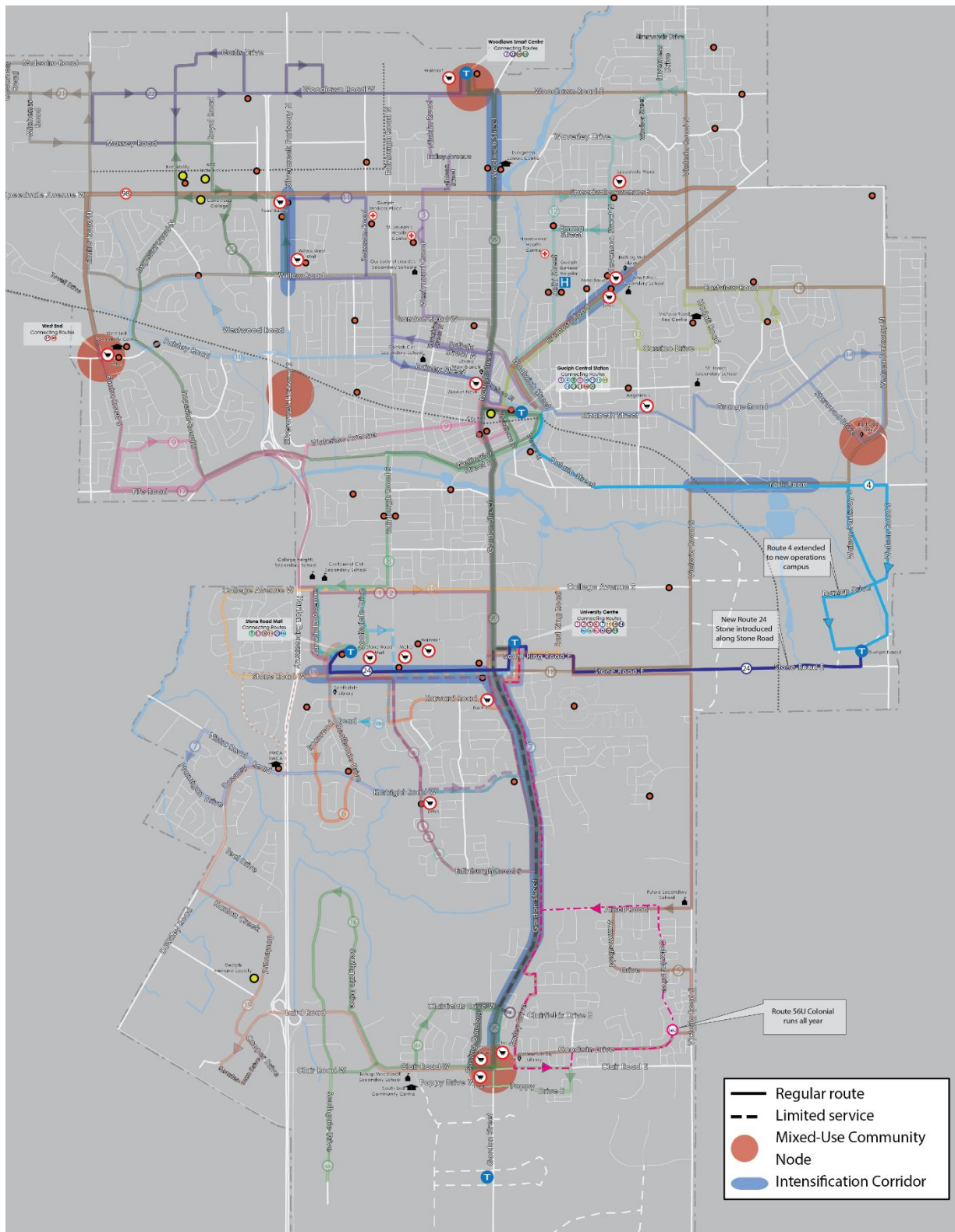
To support these changes, year 6 will have an increase of:

- 17 operators
- 3 buses
- 366,140 kilometres

**Table 51. Service hours and frequency of adjusted routes Year 6.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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
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
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.
Interregional (GCS to Aberfoyle)	To be determined through public engagement	To be determined through public engagement





## Year 7

Year 7 will have the following changes:

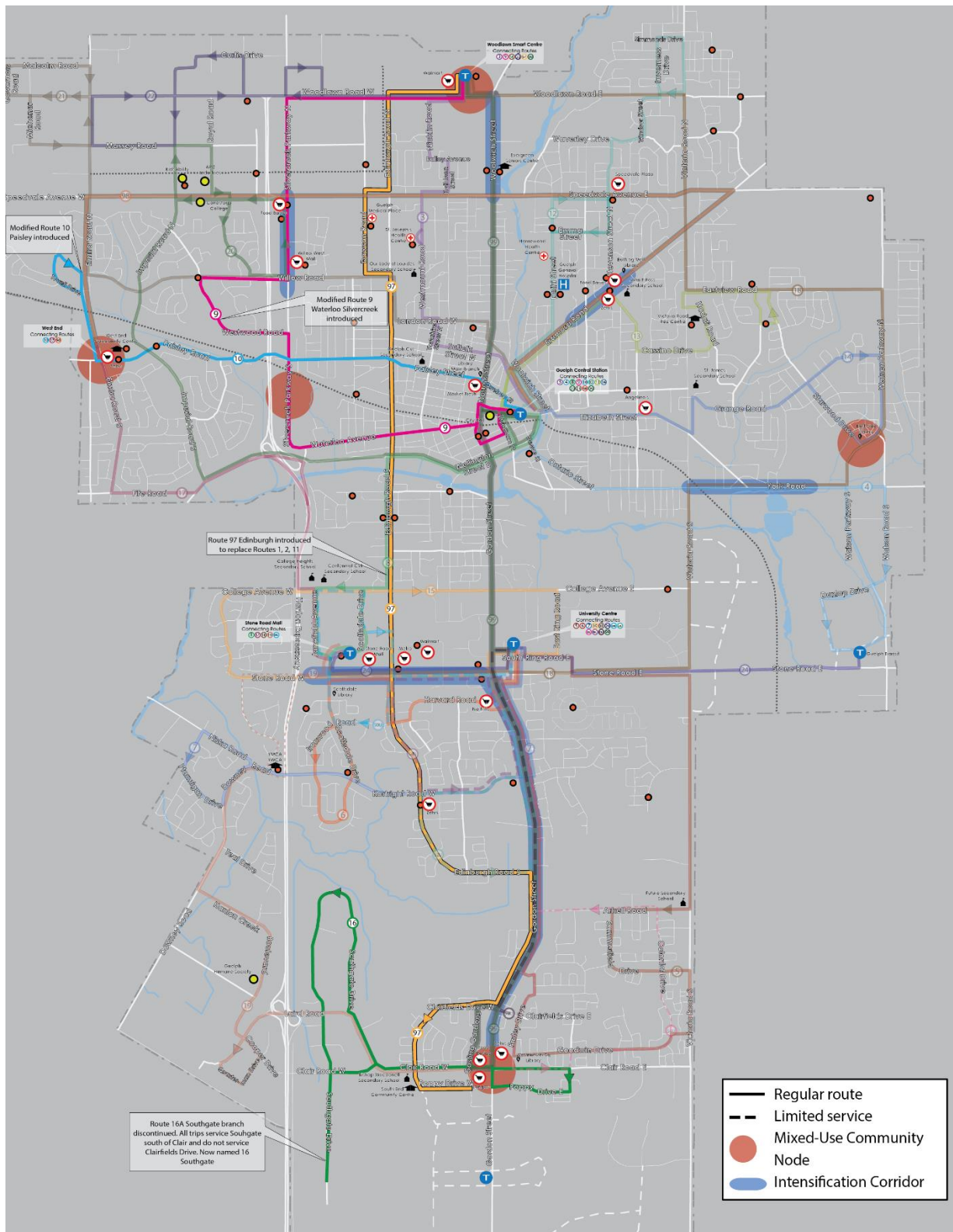
- Cancel Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West
- Introduce new Route 97 Edinburgh, with 30-minute Saturday service, that replaces Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West
- Introduce new routing for Route 9 Waterloo Silvercreek
- 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

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

- 8 operators
- 3 buses
- 255,925 kilometres

**Table 52. Service hours and frequency of adjusted routes Year 7.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 till 6 p.m.; every 30 minutes after 6 p.m. and weekends



**Figure 83. 1% Levy Plan year 7 network map.**

## Year 8

Year 8 will have the following changes:

- Convert Route 5 Goodwin into a neighbourhood route
- 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, with 30-minute Saturday service, to replace Route 18 Watson Woodlawn
- Introduce new Route 53U Eastview
- Rename Route 15 University College to Route 15 Stone College
- Introduce new Route 25 College Stone that is paired with Route 15 Stone College

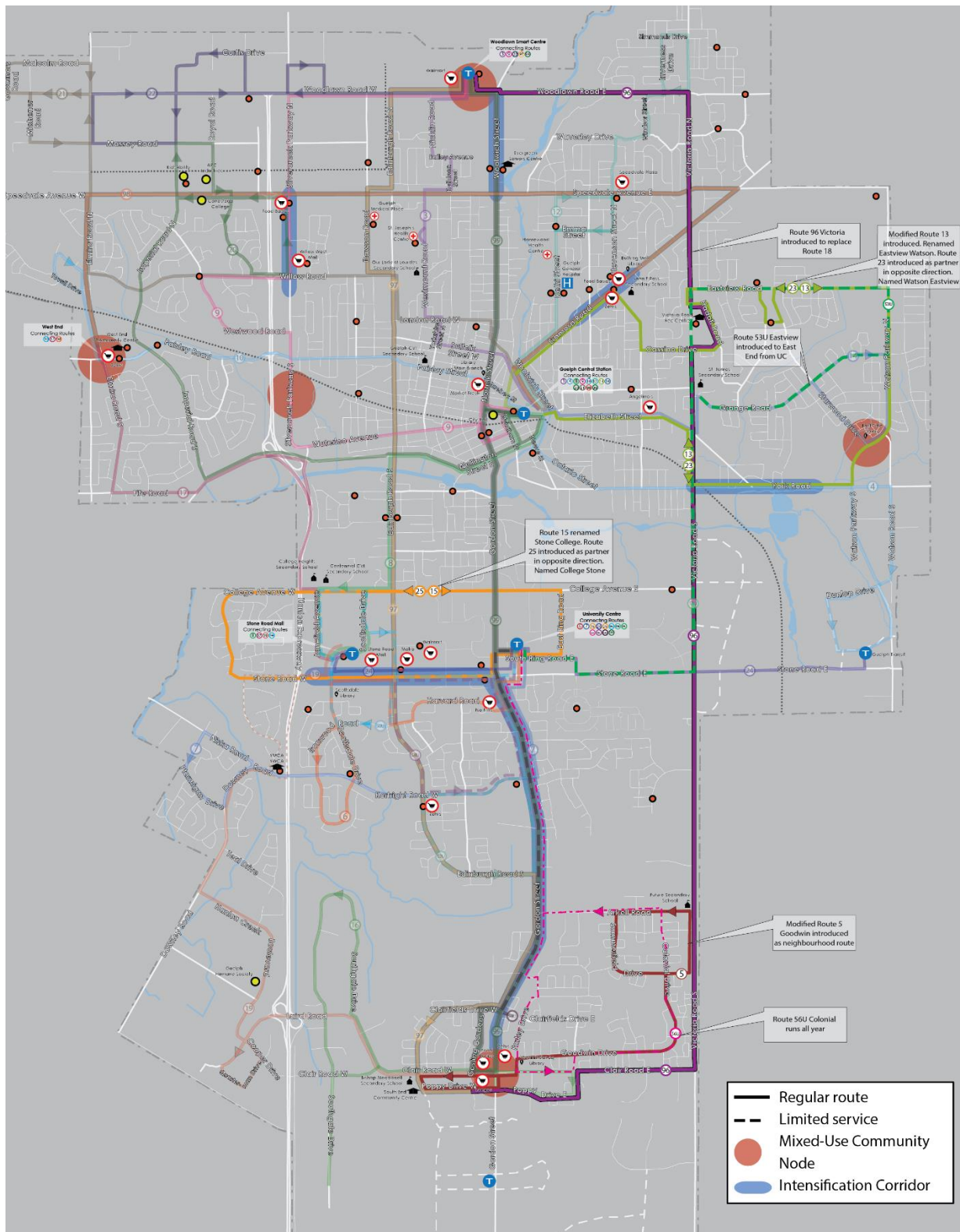
To support these changes, year 8 will have an increase of:

- 10 operators
- 3 buses
- 296,759 kilometres

**Table 53. Service hours and frequency of adjusted routes Year 8.**

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
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
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
53U	6:30 a.m. to 10 a.m. and 2 p.m. to 6 p.m. Mon-Fri (Sept-May)	Every 20 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





**Figure 84. 1% Levy Plan year 8 network map.**

## Year 9

Year 9 will have the following changes:

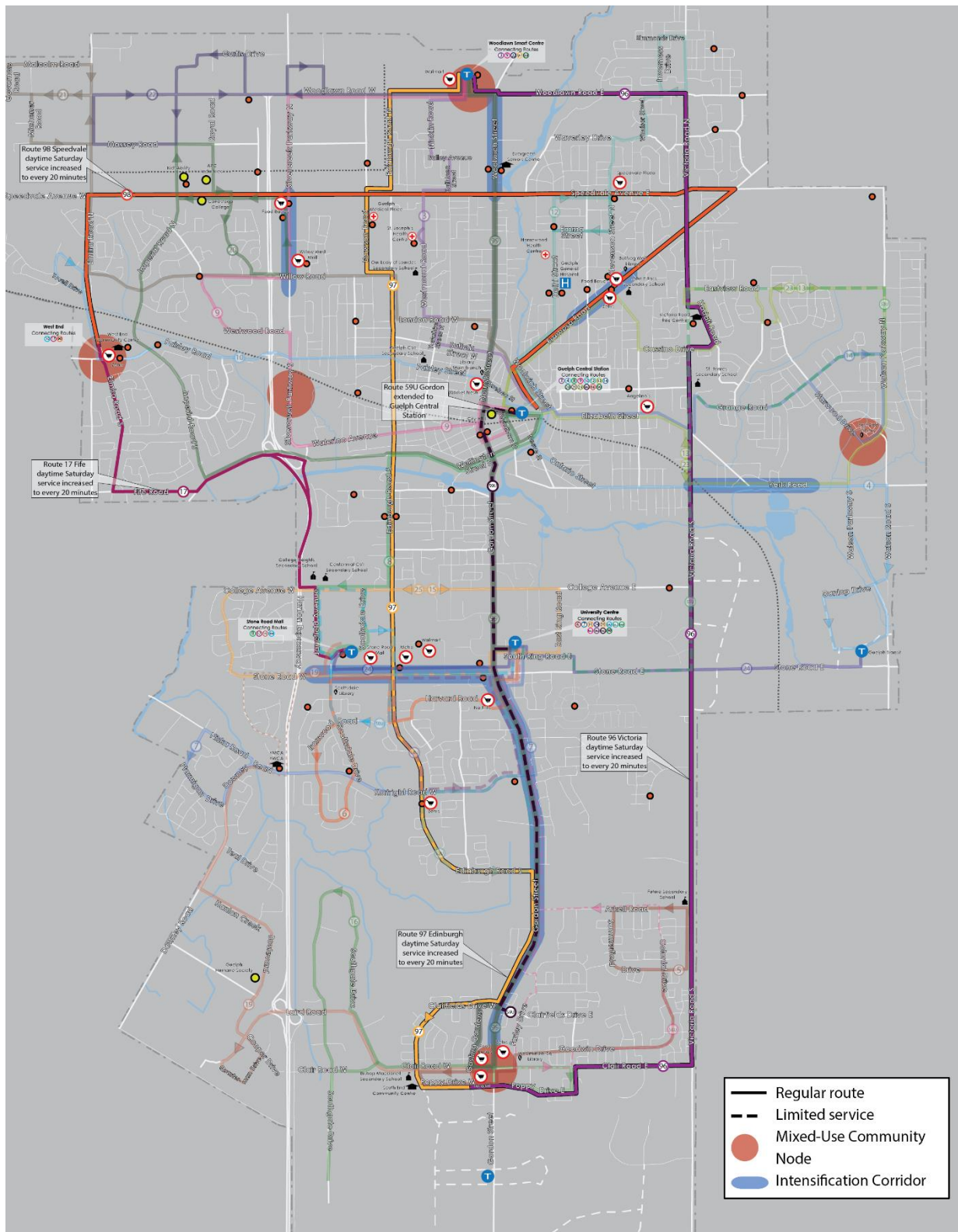
- Extend Route 59U Gordon Express to downtown
- Increase Route 96 Victoria daytime Saturday service to 20 minutes
- Increase Route 97 Edinburgh daytime Saturday service to 20 minutes
- Increase Route 98 Speedvale daytime Saturday service to 20 minutes
- Increase Route 17 Fife daytime Saturday service to 20 minutes

To support these changes, year 9 will have an increase of:

- 6 operators
- 0 buses
- 202,143 kilometres

**Table 54. Service hours and frequency of adjusted routes Year 9.**

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
59U	7 a.m. to 7 p.m. Mon-Fri (Sept-May)	Every 15 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
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 85. 1% Levy Plan year 9 network map.**

## 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

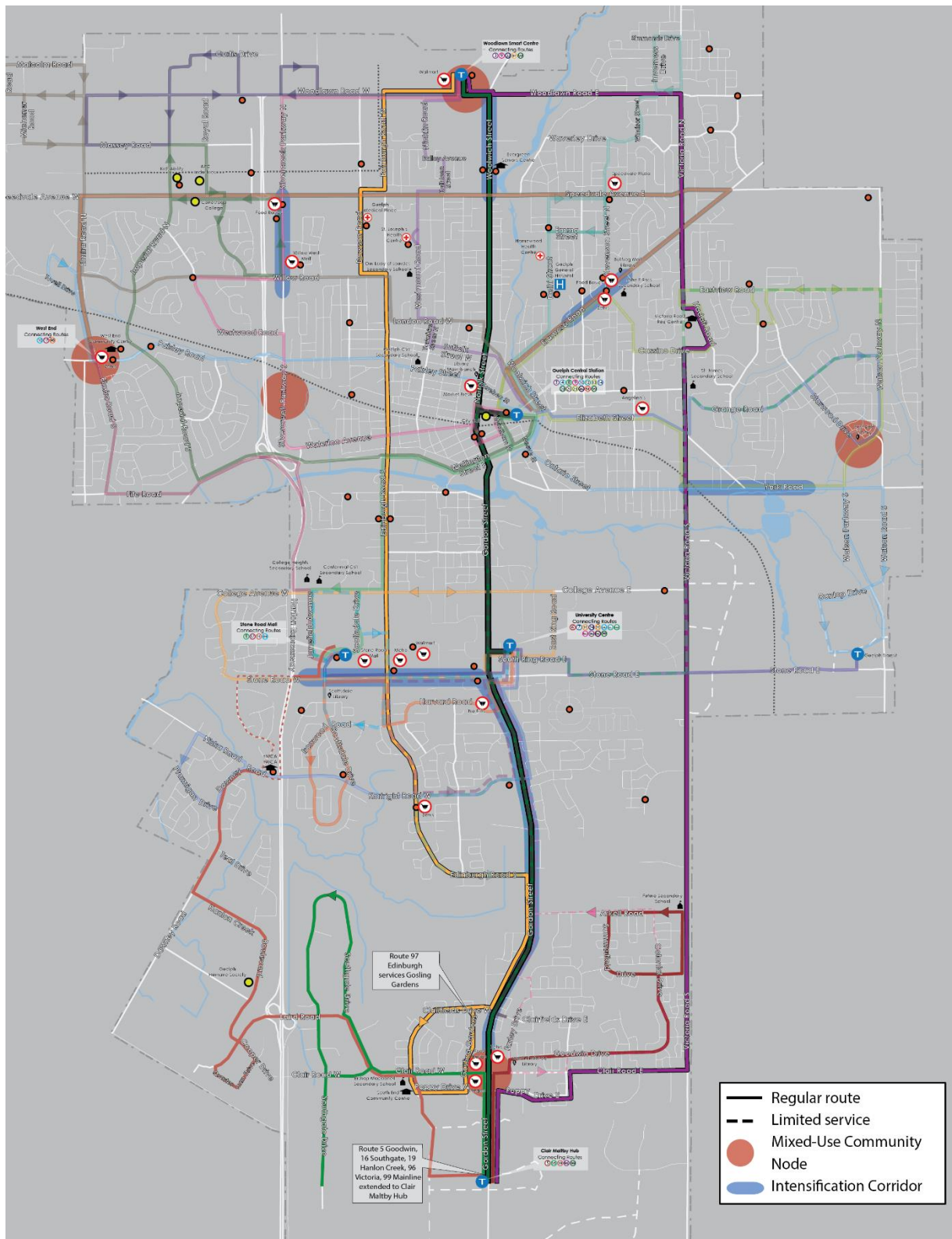
To support these changes, year 7 will have an increase of:

- 1 operator
- 0 buses
- 145,683 kilometres

**Table 55. Service hours and frequency of adjusted routes Year 10.**

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





**Figure 86. 1% Levy Plan year 10 (2031) network map.**

### 3. Package 3: High Frequency Plan

Package 3 will require an additional 131 operators and 35 buses.

#### Year 1

Year 1 will have the following changes:

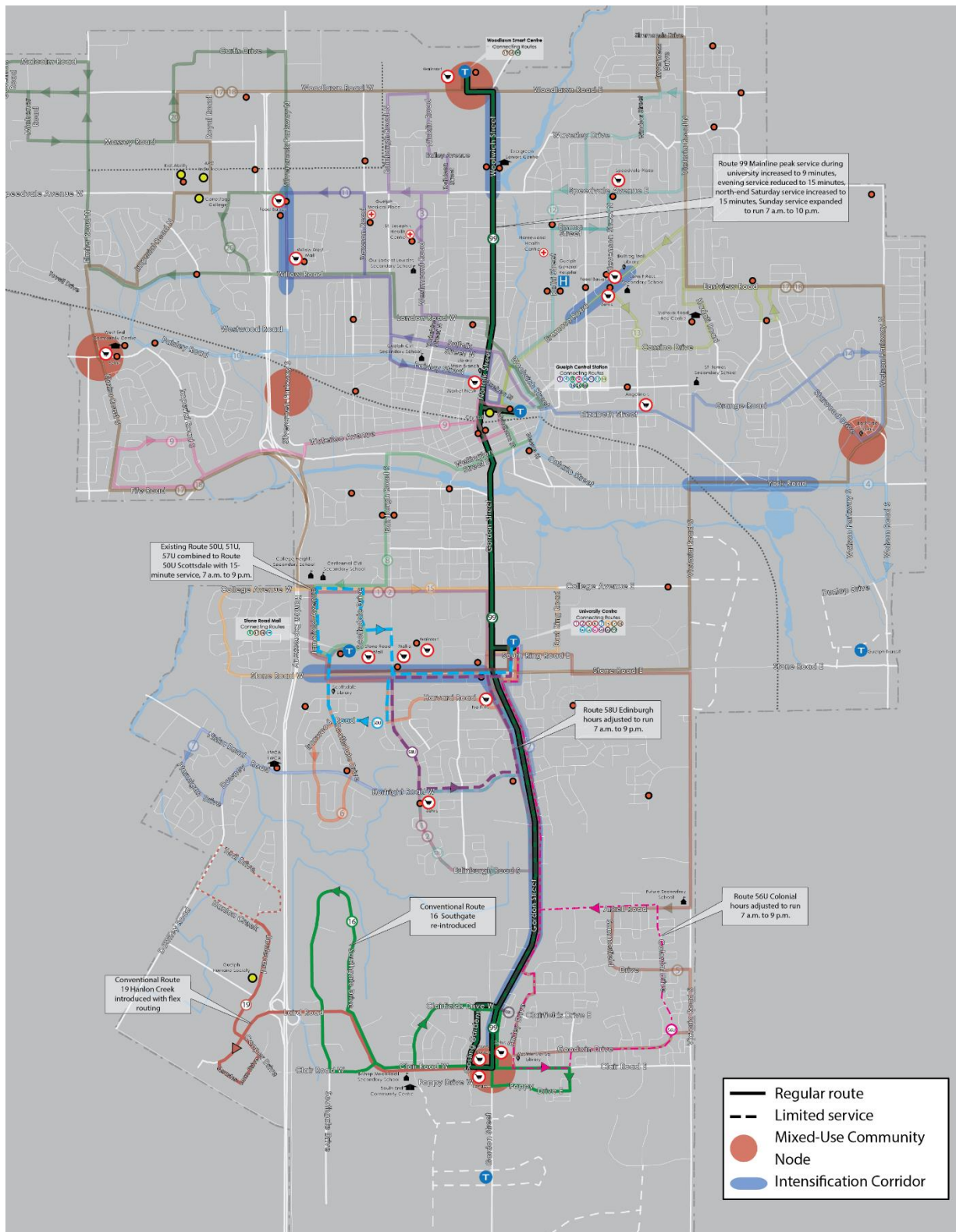
- Introduce Route 19 Hanlon Creek
- Cancel Route 40 Scottsdale Express
- Merge Route 50U Stone, 51U Janefield, and Route 57U Ironwood into new Route 50U Scottsdale
- Change Route 56U Colonial service hours to 7:15 a.m. to 9:00 p.m.
- Change Route 58U Edinburgh service hours to 7:20 a.m. to 9:00 p.m.
- Change Route 99 Mainline cycle to 90 minutes, every day, all year long
- Increase Route 99 Mainline Saturday service to every 15 minutes in the north end
- 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:

- 13 operators
- 2 buses
- 221,146 kilometres

**Table 56. Service hours and frequency of adjusted routes Year 1.**

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



**Figure 87. High Frequency Plan year 1 network map.**

## 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
- 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

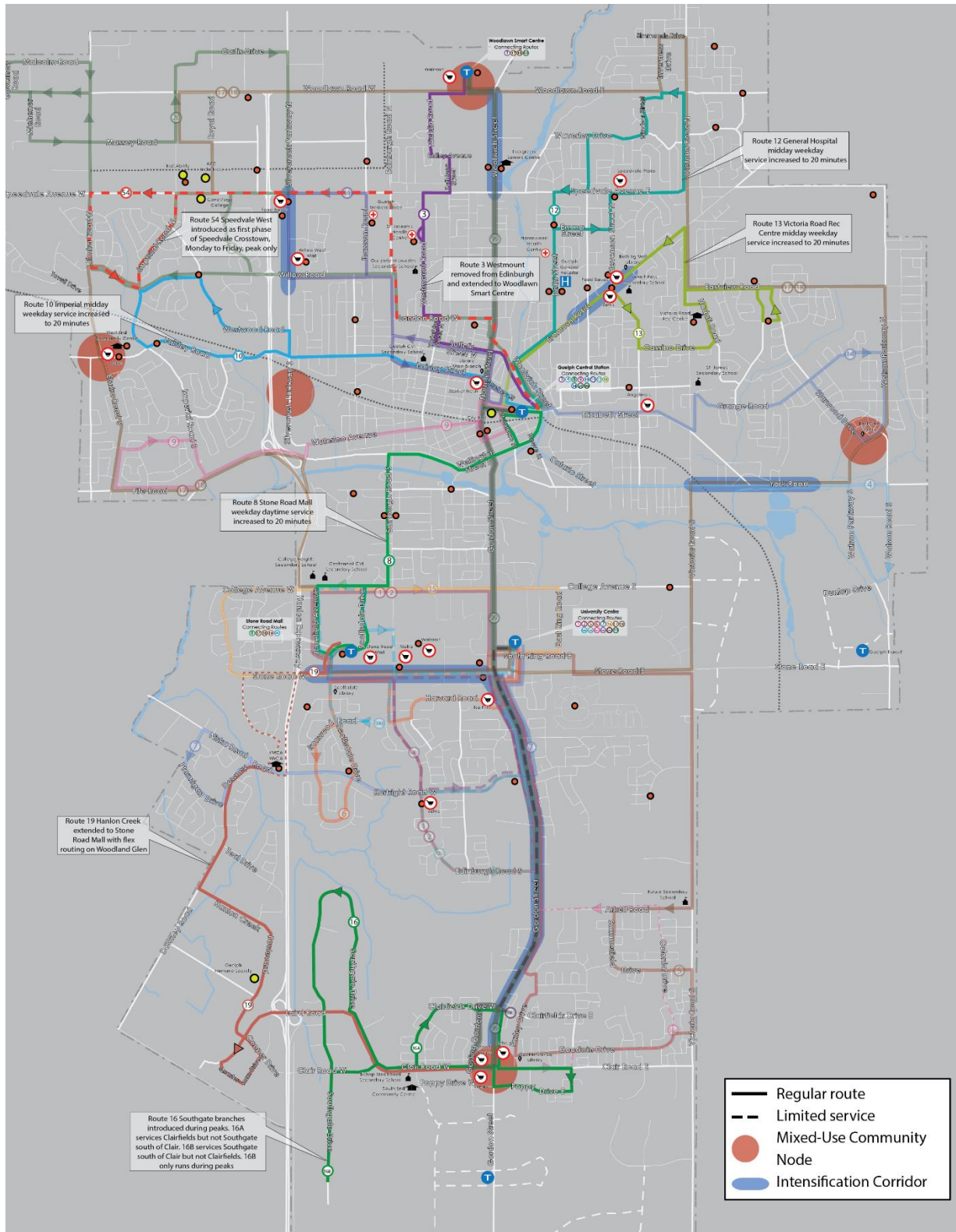
To support these changes, year 2 will have an increase of:

- 13 operators
- 5 buses
- 274,868 kilometres

**Table 57. Service hours and frequency of adjusted routes Year 2.**

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
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 88. High Frequency Plan year 2 network map.**

### Year 3

Year 3 will have the following changes:

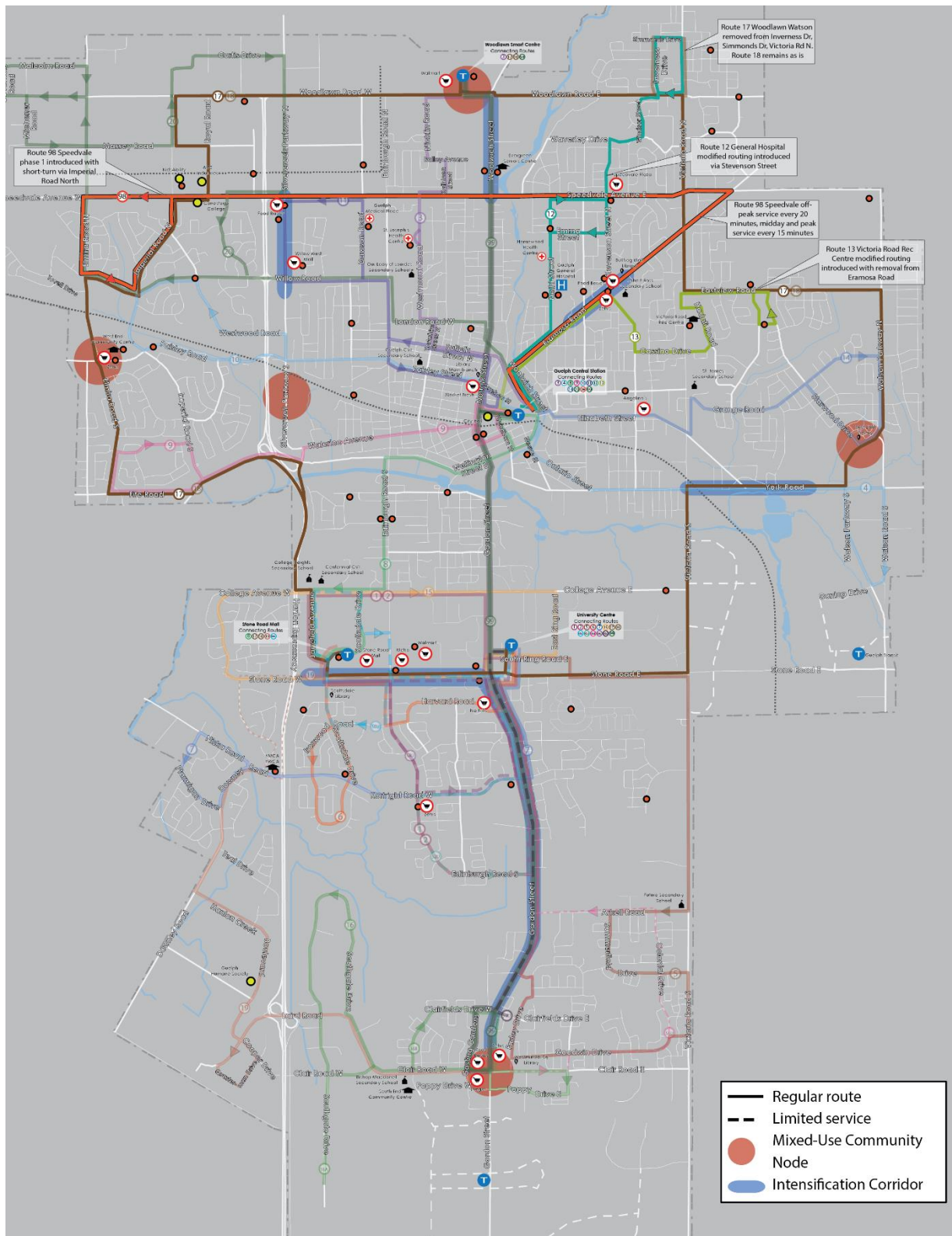
- Introduce new routing for Route 12 General Hospital
- Introduce new routing for Route 13 Victoria Road Recreation Centre
- Introduce modified routing for Route 17 Woodlawn Watson
- Introduce new Route 98 Speedvale with increased service of every 20 minutes off peak and every 15 minutes during a.m. peak, midday, and p.m. peak periods

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

- 15 operators
- 7 buses
- 443,504 kilometres

**Table 58. Service hours and frequency of adjusted routes Year 3.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends



**Figure 89. High Frequency Plan year 3 network map.**

## Year 4

Year 4 will have the following changes:

- Split Route 17/18 Woodlawn Watson into new Route 17 Fife that is extended to Stone Road Mall 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

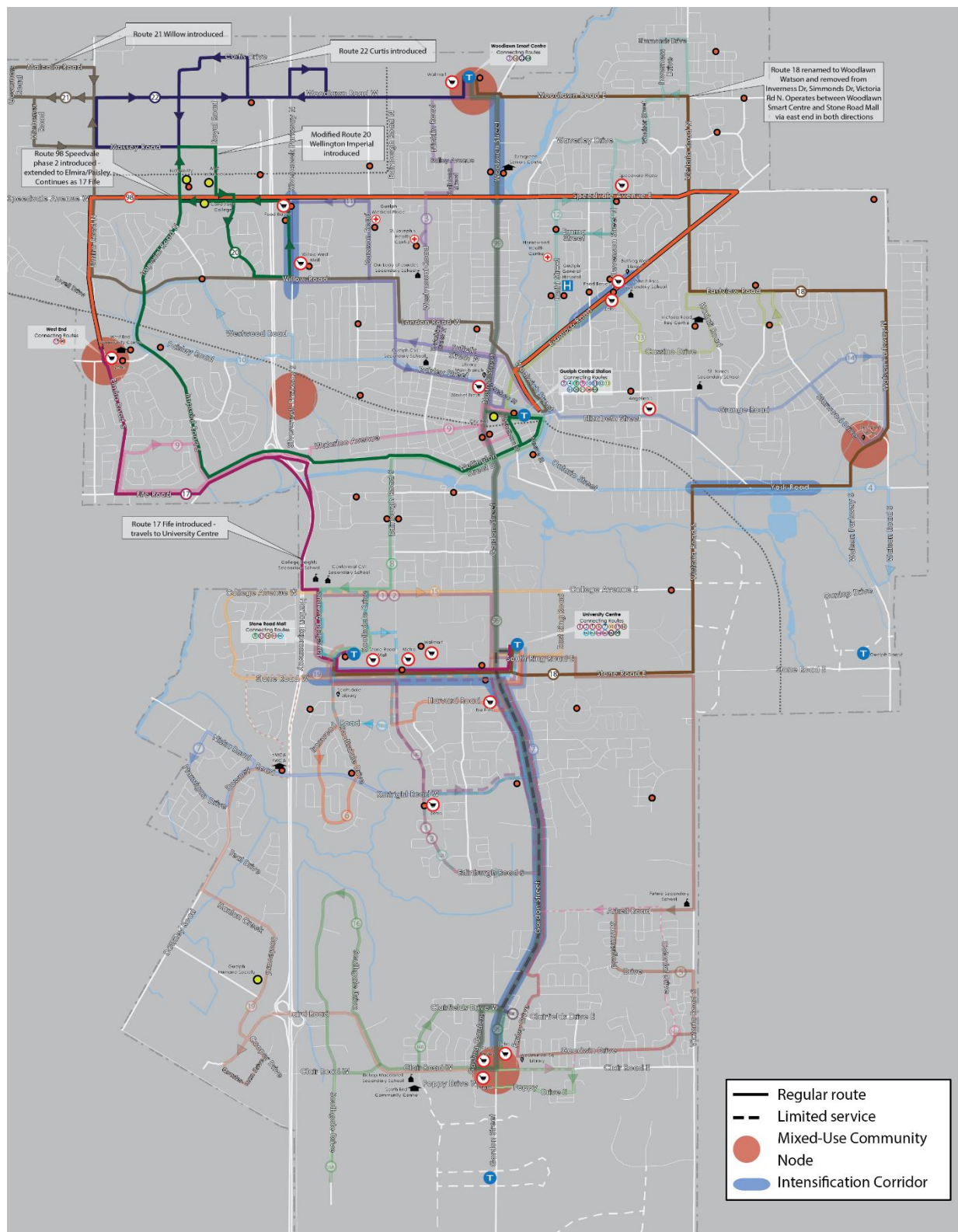
To support these changes, year 4 will have an increase of:

- 27 operators
- 6 buses
- 413,992 kilometres

**Table 59. Service hours and frequency of adjusted routes Year 4.**

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 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends
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 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends
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





## Year 5

Year 5 will have the following changes:

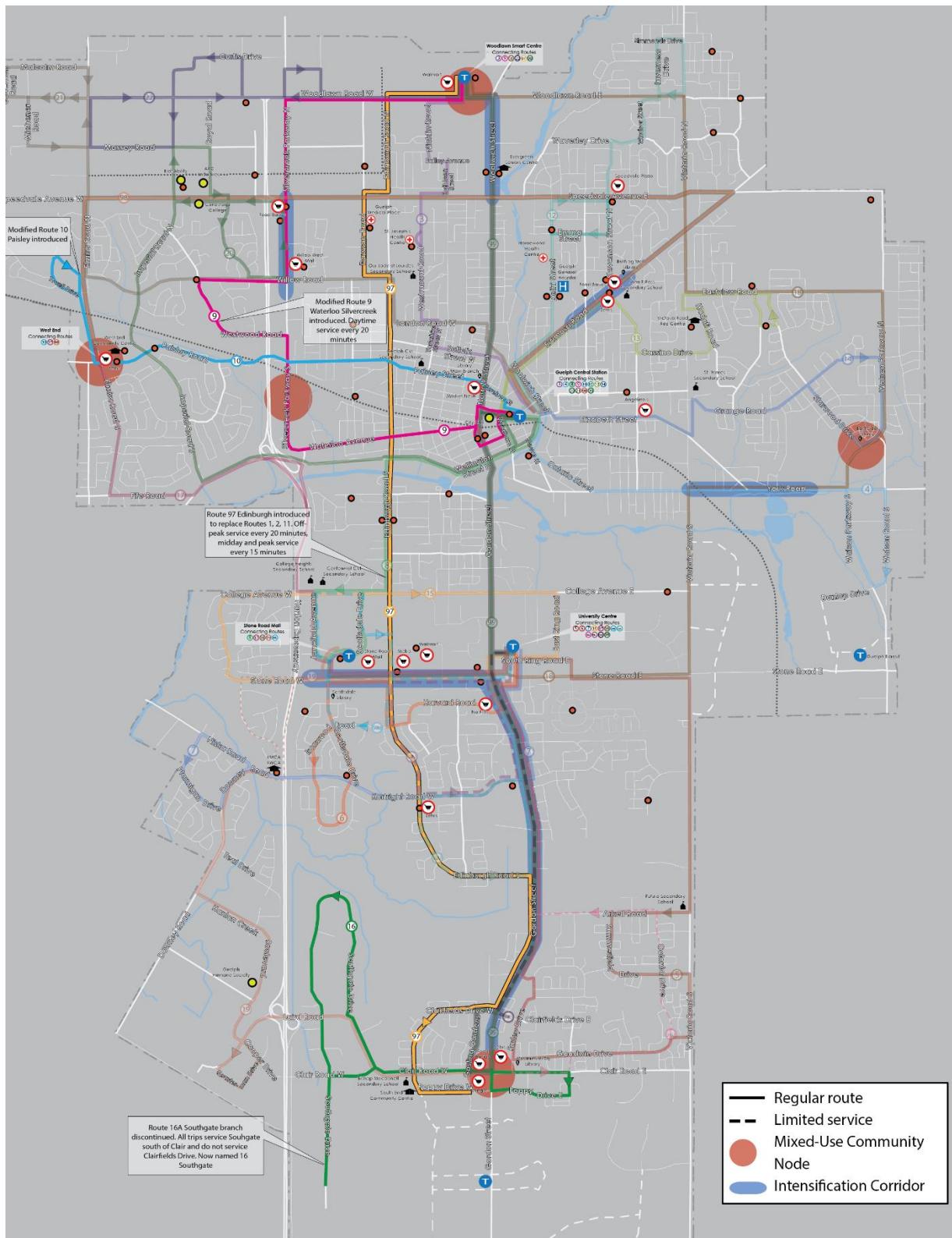
- Cancel Route 1 Edinburgh College, Route 2 College Edinburgh, and Route 11 Willow West and replace with new Route 97 Edinburgh
- Introduce new Route 97 Edinburgh with increased service of every 20 minutes off peak and every 15 minutes during a.m. peak, midday, and p.m. peak periods
- Introduce new routing 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:

- 21 operators
- 11 buses
- 450,652 kilometres

**Table 60. Service hours and frequency of adjusted routes Year 5.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends
Interregional (GCS to Fairview Mall)	To be determined through public engagement	To be determined through public engagement



**Figure 91. High Frequency Plan year 5 network map.**

## Year 6

Year 6 will have the following changes:

- Convert Route 5 Goodwin into a neighbourhood route with increased daytime service of 20 minutes
- Introduce new routing for Route 13 Victoria Road Recreation Centre, with increased daytime service of 20 minutes, and rename to Route 13 Eastview Watson
- Introduce new Route 23 Watson Eastview, with increased daytime service of 20 minutes, that is paired and interlined with Route 13 Eastview Watson
- Cancel Route 18 Watson Woodlawn
- Introduce new Route 96 Victoria with increased service of every 20 minutes off peak and every 15 minutes during a.m. peak, midday, and p.m. peak periods
- 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:

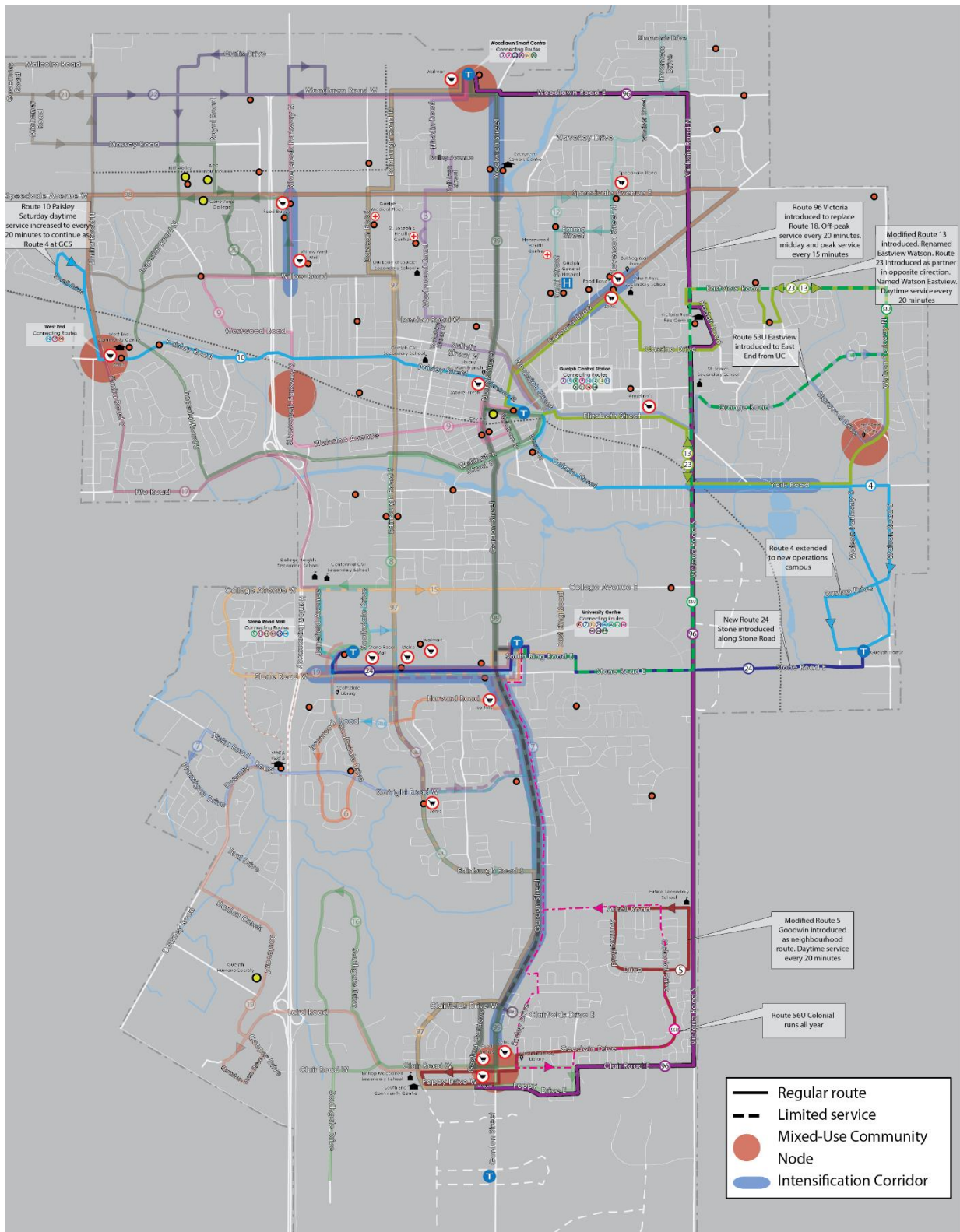
- 33 operators
- 4 buses
- 837,846 kilometres

**Table 61. Service hours and frequency of adjusted routes Year 6.**

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 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 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 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
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



<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends
Interregional (GCS to Aberfoyle)	To be determined through public engagement	To be determined through public engagement



**Figure 92. High Frequency Plan year 6 network map.**

## Year 7

Year 7 will have the following changes:

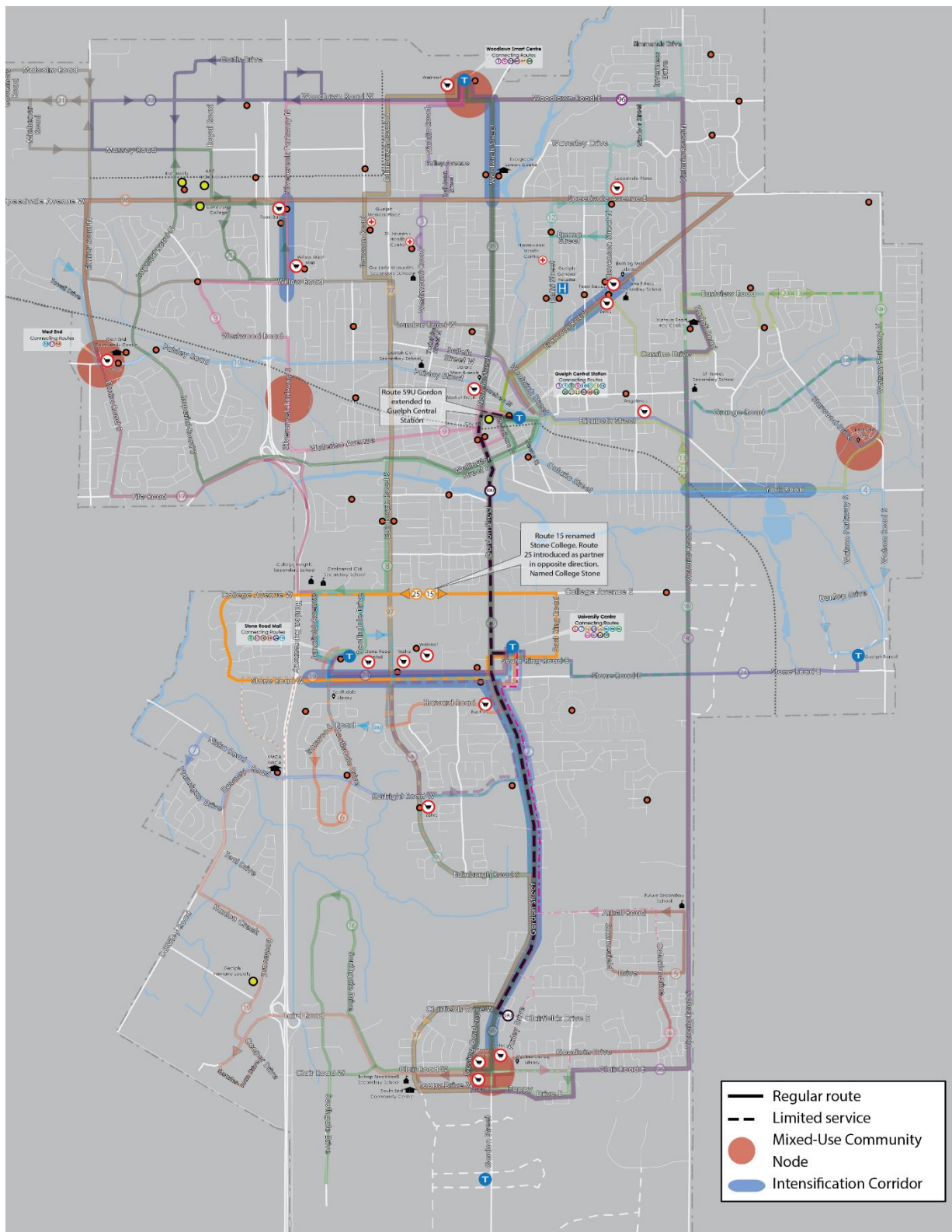
- Extend Route 59U Gordon Express to downtown
- Rename Route 15 University College to Route 15 Stone College
- Introduce new Route 25 College Stone that is paired with Route 15 Stone College

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

- 8 operators
- 0 buses
- 217,428 kilometres

**Table 62. Service hours and frequency of adjusted routes Year 7.**

<b>Route</b>	<b>Service Hours</b>	<b>Service Frequency</b>
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 93. High Frequency Plan year 7 network map.**

## Year 8

Year 8 will have no changes.

## Year 9

Year 9 will have no changes.

## 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

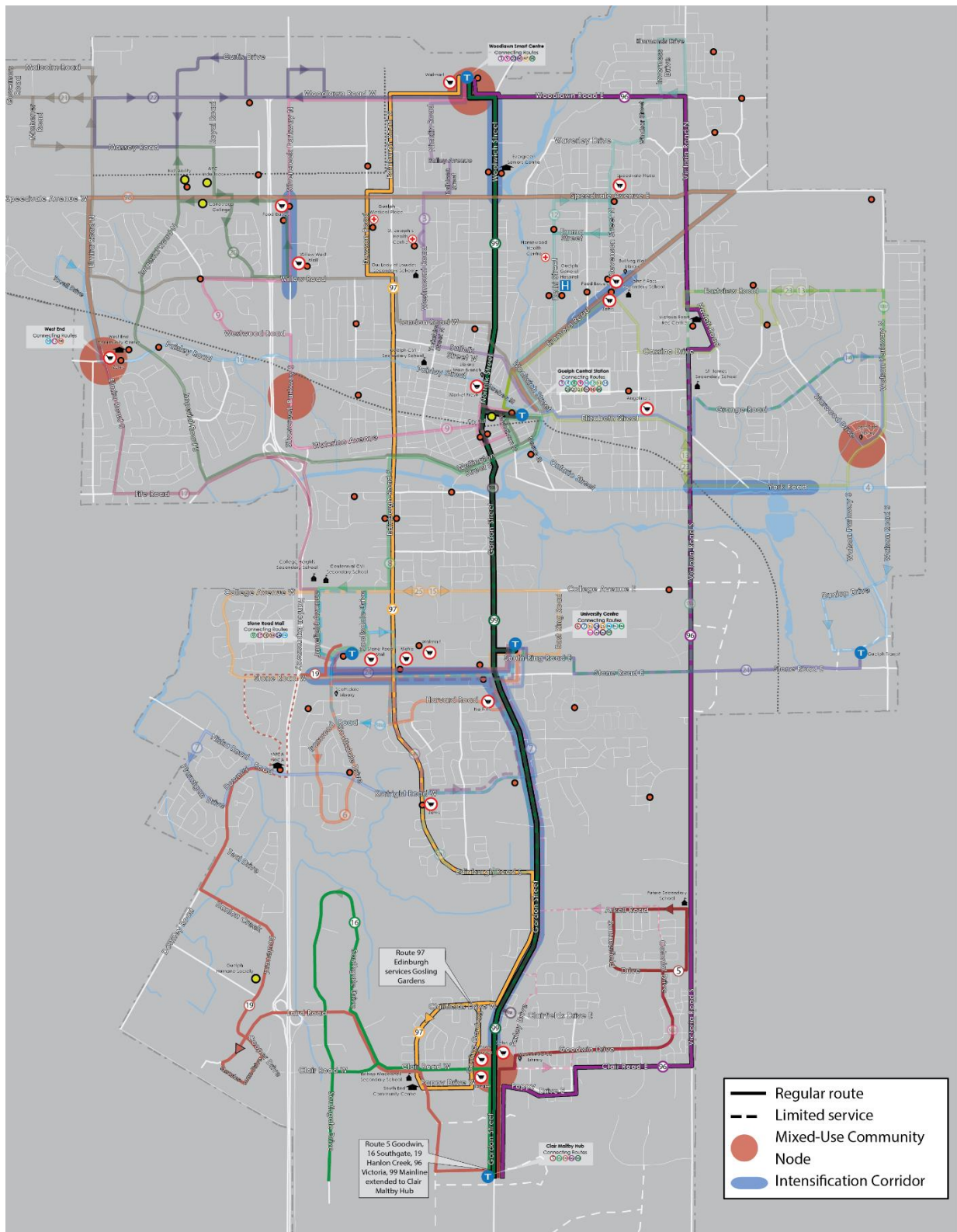
To support these changes, year 7 will have an increase of:

- 1 operator
- 0 buses
- 1476,210 kilometres

**Table 63. Service hours and frequency of adjusted routes Year 10.**

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 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
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 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends
97	5:45 a.m. to 12:15 a.m. Mon-Sat; 7:15 a.m. to 10:15 p.m. Sun	Every 15 minutes weekdays till 6 p.m.; every 20 minutes after 6 p.m. and weekends
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





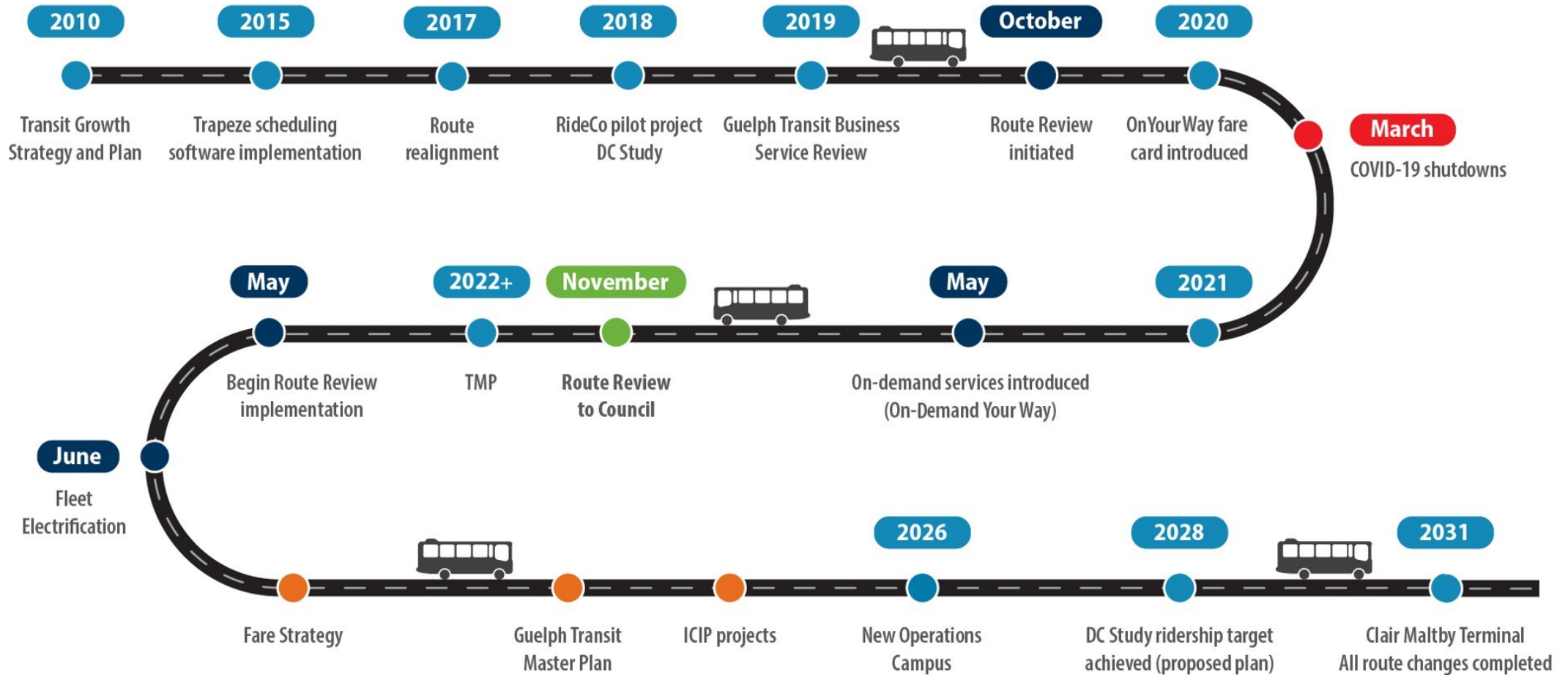
**Figure 94. High Frequency Plan year 10 (2031) network map.**

# Guelph Transit Action Plan – Route Review Recommended Plan

City Council

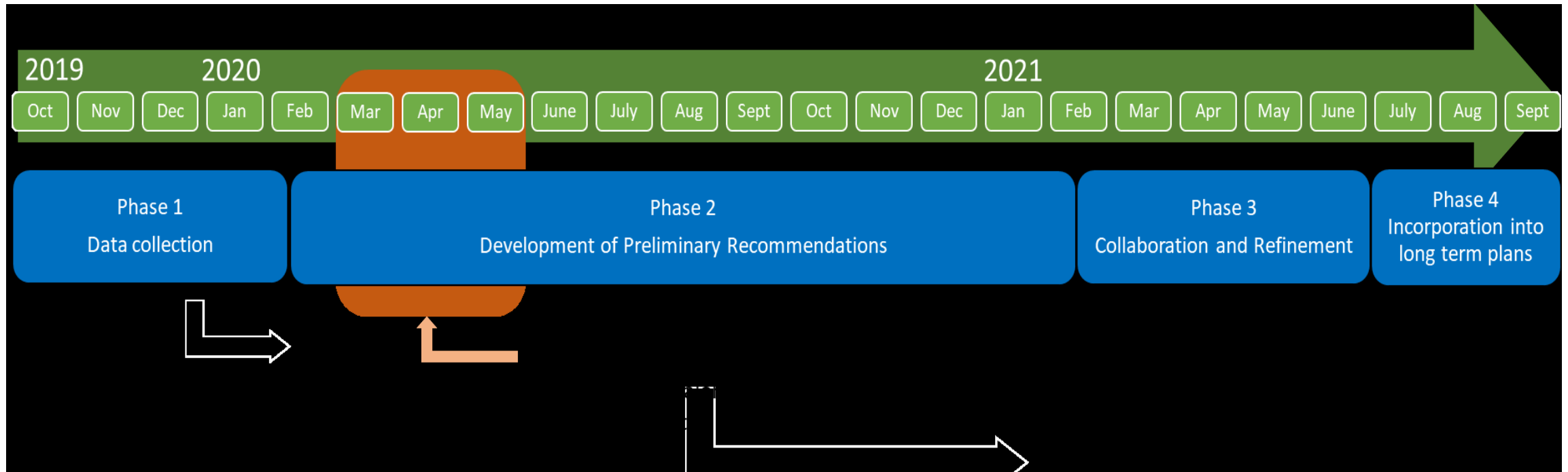
November 15, 2021

# Introduction





# Route Review Process and Timeline







# Vision – future ready

*Create a competitive, convenient, and reliable transit network that meets the needs of today's and tomorrow's customers.*



# Supporting transit investment

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

# Alignment with Guelph Plans and Strategies

Plan	Goals	Alignment
<b>Guelph's Community Plan, 2018</b>	<ul style="list-style-type: none"> <li>We move around freely</li> </ul>	<ul style="list-style-type: none"> <li>Transit is frequent, affordable, and gets us to work and neighbouring communities</li> <li>Increase transit use to reduce traffic congestion</li> </ul>
<b>Guelph Official Plan, 2018</b>	<ul style="list-style-type: none"> <li>Section 5.1.1(j): modal share increase for transit to 15% by 2031</li> </ul>	<ul style="list-style-type: none"> <li>Increase capacity of transit system to support intensification corridors</li> <li>Expand transit service to areas with transit-supportive densities</li> <li>Community mixed-use nodes to be well served by transit</li> <li>Maintain efficient transit service through improvements to routes, travel times, and service frequencies</li> </ul>
<b>Transportation Master Plan, in-progress</b>	<ul style="list-style-type: none"> <li>Implementing the Quality Transit Network</li> </ul>	<ul style="list-style-type: none"> <li>Corridors with frequent transit service and reduced travel delays</li> <li>Increasing service frequency and optimizing schedules</li> <li>Implementing transit priority measures for quick and efficient service</li> </ul>
<b>Development Charges Background Study Technical Appendix, 2018</b>	<ul style="list-style-type: none"> <li>Modal share of 13% (9.19 million in annual ridership) to 2031</li> <li>Target spare bus ratio of 20% (51 additional buses)</li> </ul>	<ul style="list-style-type: none"> <li>Will exceed modal share goal to 2031 with 9.68 million in annual ridership</li> <li>Will meet goal with smaller fleet of only 26 additional buses</li> </ul>

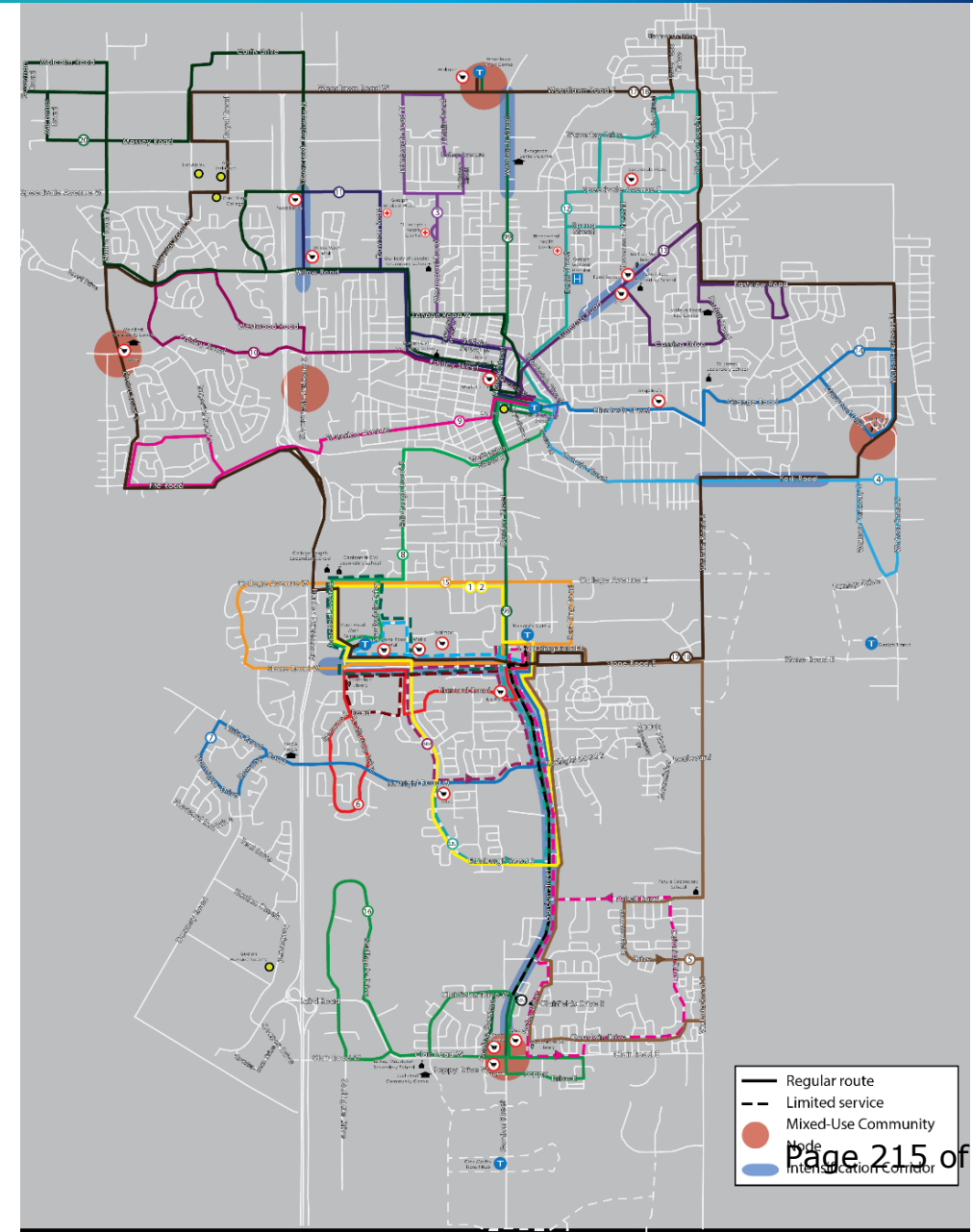
# Existing network

## Stats:

- 35 routes (1 spine route)
- 62 peak buses
- 182 operators

## Main concerns: long, indirect trips

- Many one-way loops
- Out-of-direction travel to transfer
- Few express routes



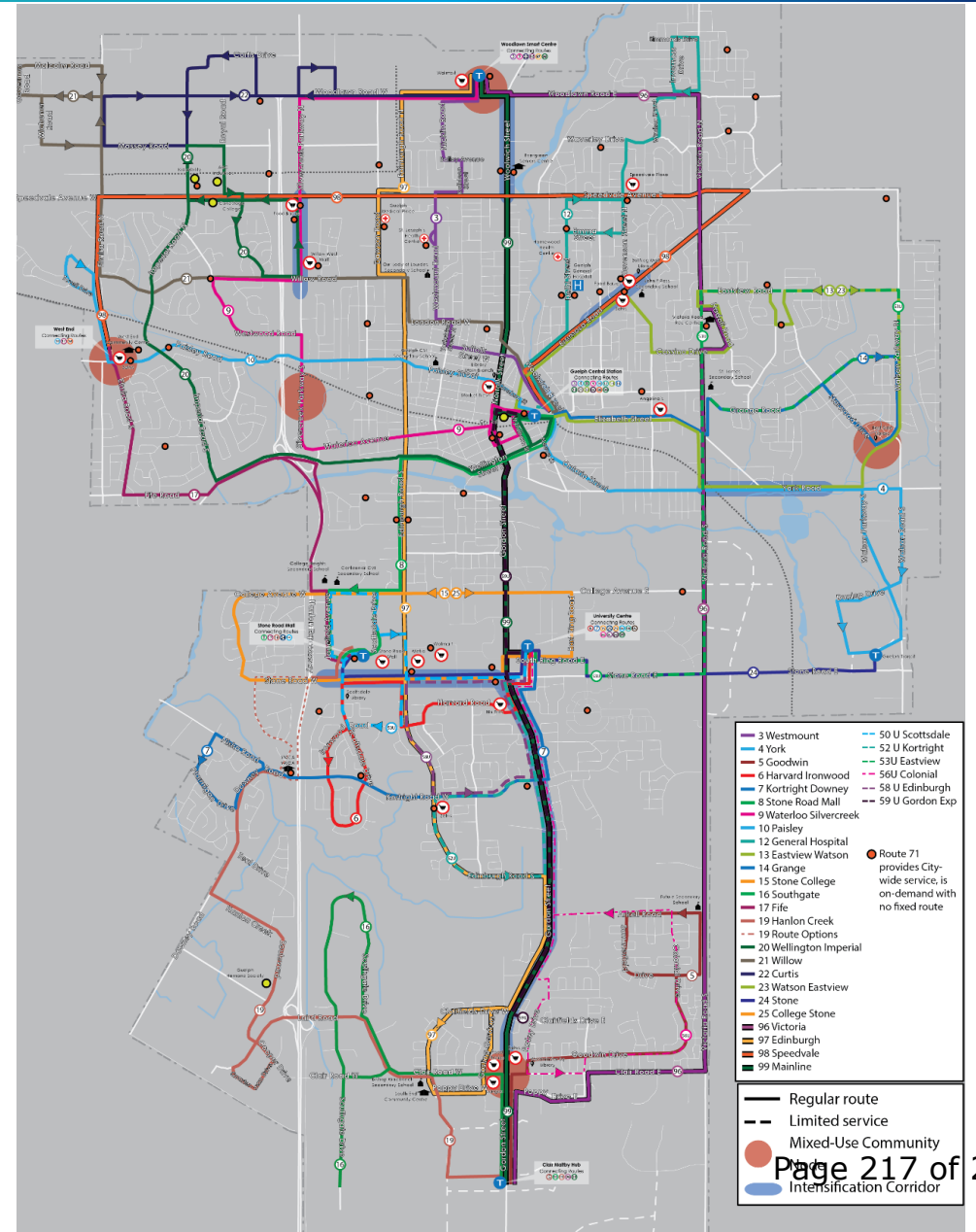
# Service Guidelines

- Proposing a set of Transit Service Guidelines for consistent decision-making
- Service Guidelines include:
  - Service design standards
  - Service level targets
  - Service expansion targets
  - Service review targets



# Network proposal

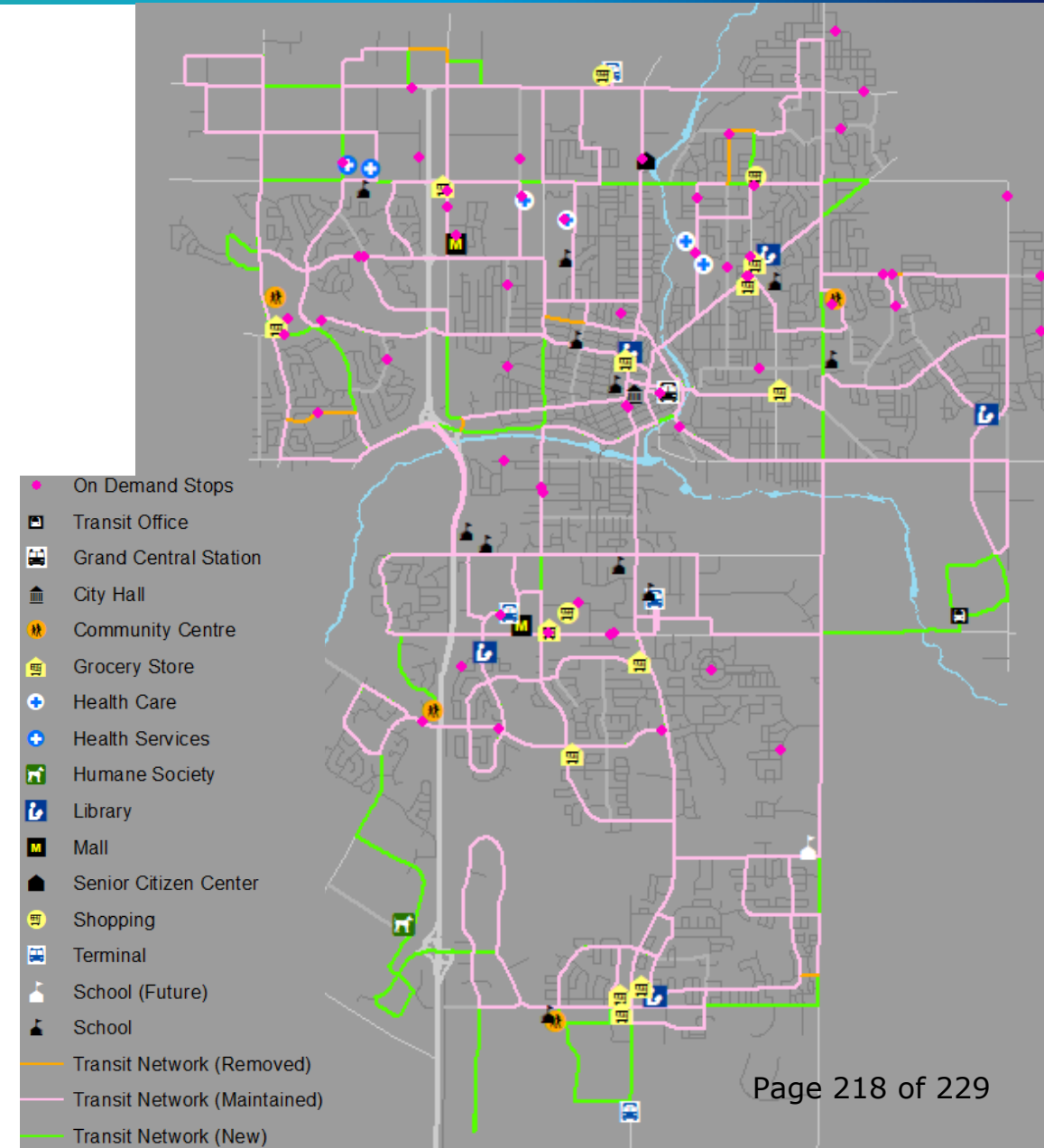
- 3 plan options
- All plans offer:
  - Grid like system to make trips more direct with fewer transfers
  - 4 core cross-city routes
  - On-demand Sunday and holiday service
  - Fewer one-way loops



# Network comparison

Map highlights the changes from the current network to the proposed Future Ready Plan network in 2031.

- Green lines show roads with new coverage
- Pink lines show roads with maintained coverage
- Orange lines show roads with removed coverage
- Dark pink dots show on demand bus stops





# Plan options

## Future Ready Plan (Staff Recommended)

- Increased frequencies to key routes
- On-demand Sunday service
- Requires 100 operators and 26 additional buses
- Primarily implemented in first 7 years

## 1% Levy Plan

- Slower implementation, returning to a full 10-year plan
- Essentially same ultimate cost as Staff Recommended Plan (100 operators, 26 buses), but yearly impact is spread out more

## High Frequency Plan

- Same as package 1 plus:
  - Some routes have increased peak and midday frequencies of 15 minutes
  - Some routes have increased off-peak frequencies of 20 minutes
  - 1 route is extended (Route 17)
  - Requires 131 operators and 35 additional buses

# Financial Implications

# Operating expenses of implementation comparison

	Future Ready Plan (Staff Recommended)	1% Levy Plan	High Frequency Plan
Total	\$17.21 M	\$17.41 M	\$22.58 M

## New FTEs needed

	Future Ready Plan (Staff Recommended)	1% Levy Plan	High Frequency Plan
Total	122	122	159

# Net Cost of Implementation (Future Ready Plan)

Year	Projected Revenue Increase	Operating Cost – Future Ready Plan	Net Cost	Indirect Revenue
2022	\$57 K	\$1.82 M	\$1.76 M	\$1.73 M
2023	\$596 K	\$1.85 M	\$1.26 M	\$.39 M
2024	\$264 K	\$2.16 M	\$1.90 M	\$.32 M
2025	\$596 K	\$2.71 M	\$2.12 M	\$.27 M
2026	\$311 K	\$2.55 M	\$2.24 M	\$.12 M
2027	\$832 K	\$4.2 M	\$3.36 M	\$.10 M
2028	\$638 K	\$1.44 M	\$.80 M	\$.10 M
2029	\$270 K	\$ .00 M	-\$ .27 M	\$.10 M
2030	\$231 K	\$ .00 M	-\$ .23 M	\$.09 M
2031	\$57 K	\$.48 M	\$.42 M	\$.10 M
2032	\$96 K		-\$ .10 M	
2033	\$76 K		-\$ .08 M	
2034	\$98 K		-\$ .10 M	
<b>Total</b>	<b>\$4.12 M</b>	<b>\$17.21 M</b>	<b>\$13.08 M</b>	<b>\$3.31 M</b>

# Net Cost of Implementation Comparison

Year	Future Ready Plan (Staff Recommended)	1% Levy Plan	High Frequency Plan
2022	\$1.76 M	\$1.64 M	\$2.14 M
2023	\$1.26 M	\$.36 M	\$1.35 M
2024	\$1.90 M	\$1.61 M	\$2.30 M
2025	\$2.12 M	\$1.80 M	\$3.59 M
2026	\$2.24 M	\$2.18 M	\$3.30 M
2027	\$3.36 M	\$2.60 M	\$4.97 M
2028	\$.80 M	\$1.07 M	\$.69 M
2029	-\$ .27 M	\$1.10 M	-\$ .33 M
2030	-\$ .23 M	\$.87 M	-\$ .23 M
2031	\$.42 M	\$.49 M	\$.59 M
2032	-\$ .10 M	-\$ .12 M	-\$ .10 M
2033	-\$ .08 M	-\$ .09 M	-\$ .08 M
2034	-\$ .10 M	-\$ .10 M	-\$ .10 M
<b>Total</b>	<b>\$13.08 M</b>	<b>\$13.37 M</b>	<b>\$18.17 M</b>

## New Buses

	Future Ready Plan (Staff Recommended)	1% Levy Plan	High Frequency Plan
2022	4	3	4
2023	2	2	3
2024	5	3	7
2025	4	5	6
2026	7	5	11
2027	4	3	4
2028	0	3	0
2029	0	2	0
2030	0	0	0
2031	0	0	0
Total	26	26	35

## Capital Cost

	Future Ready Plan: 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

# Capital Investments

- Capital investments include:
  - Additional buses
  - New transit operations campus
  - New Guelph Central Station facility
  - Clair Maltby Transit Terminal
  - Electrification
- Total capital investment over 10 years is \$253.9 million
  - Only 15% (\$37.63 million) is a direct capital investment of the Future Ready Plan
- Capital funding sources include:
  - Development Charges
  - ICIP
  - Provincial gas tax
  - 100RE fund
  - City Building Reserve Fund
  - Infrastructure Renewal Reserve Fund

# Capital Investments – Funding Summary

Project Group	2022-2031 Budget	DC	ICIP	PGT	100 RE	CB	IR
Route Review \$	\$37.26 M	\$14.91 M	\$16.40 M		\$5.96 M		
Route Review %		40%	44%		16%		

Project Group	2022-2031 Budget	DC	ICIP	PGT	100 RE	CB	IR
Other* \$	\$216.65 M	\$41.01 M	\$61.64 M	\$33.99 M	\$39.00 M	\$6.82 M	\$34.18 M
Other %		19%	28%	16%	18%	3%	16%

\*additional buses, electrification, operations campus, GCS facility, Clair Maltby Terminal



# Next steps

Based on the recommendations:

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.

# Conclusion

Proposing a redesigned transit system that grows with the City to meet the needs of current and future residents.



# Questions