



Appendix 1

Essential Elements of Good Transit

Fast

Fast transit service can reduce travel time, making transit a better choice for more travelers. Faster service also helps encourage more drivers to use transit. We advocate three main ways to increase transit's speed:

- 1) **Give transit priority.** Transit lanes and special transit signals help transit bypass traffic jams, making service much faster and much more reliable. Reduce the number of stops. Rapid stop spacing of about 500 meters between stops. This spacing makes transit faster, without making the walking distance to transit stops too far.
- 2) **Reduce the number of turns on routes.** Long twisting and winding routes make taking transit unnecessarily slow. Every time a bus turns, it has to slow down. Turning buses also get caught in traffic – such as red lights.
- 3) **Make stops quicker.** When all riders pay only at one door, busy stops take a long time. This slows down the entire route. Allowing people to pay off the bus (off-board fare collection), remind passengers to only use the backdoor, or have all door boarding which can reduce the time buses spend at stops.

Frequent

Who likes waiting for the bus? Who wants to plan their life around a transit schedule? Frequent service – every 15 minutes or better on core routes – is key to making transit an appealing and convenient choice.

Less time waiting means less time en route, reducing overall transit time. High-frequency transit also makes transfers easy by reducing the time riders spend connecting. A network that allows easy connections lets people travel to many different locations and reduces the number of overlapping, inefficient routes.

Reliable

People are much more likely to take transit if it runs reliably i.e., on time. Providing transit-only lanes is an example of transit priority measures and the best way to get transit out of traffic and running on time. Transit lanes also make transit run faster. Other transit priority measures include special transit signals and short queue-jump lanes that get transit past busy intersections.

The most important places to get transit past traffic is at the choke points, such as along Gordon Street during rush hour. Getting transit through these choke points would make the entire network run more reliably, benefiting all riders.

Accessible

Transit needs to be accessible to everyone. Unlike cars, transit doesn't provide door-to-door service. That means that everyone must be able to walk (or roll) to and from their stop or station. That doesn't mean stops have to be everywhere, it just means that they have to be designed so that they encourage walking to and from each stop.

Transit riders must get to and from the stops they need. Most riders walk to their stop. Supporting transit means making streets and neighbourhoods safe and pleasant places to walk. Walkable areas have



sidewalks, many safe places to cross the street, and well-connected streets. Walkable streets must be a priority, especially near transit stops.

Cycling is quicker than walking. Developing bicycle routes around major transit stations and corridors would allow more people to quickly access transit. Safe and convenient cycling requires good routes and places to store bicycles. Good bicycle routes include quiet streets, dedicated off-road trails, and streets with protected bicycle lanes.

Providing covered bike racks, bike lockers and bike maintenance spaces also help encourage cycling. Bicycle racks on buses make it easier for people to use long-distance, express transit, which may not stop near their home or work. Finally, cyclists who travel long distances prefer having places to shower and change when they arrive at their destination; these end-of-trip facilities make cycling more convenient and attractive. Locating cycling services near transit will encourage riders to cycle to their stop.

User-Friendly

A simple, easy to understand network is appealing to both first time, and veteran riders. A user-friendly network is also comfortable and safe. Ways to make transit more comfortable include:

- 1) Shelters and seating at more stops;
- 2) Amenities and services near terminals and major stops; and
- 3) Less crowding.

Ways to make transit easier to use include:

- 1) Fewer routes; more frequent routes that are on a straight corridor;
- 2) Simple, clear network maps and diagrams;
- 3) Real-time arrival information;
- 4) Route and schedule information at stops and on vehicles;
- 5) Electronic smart cards for fare payment; and
- 6) Named stops.

Land Use Planning – Be on the Way

Certain neighbourhood types and street patterns support good transit. Transit is most efficient in areas with urban densities. Areas with high housing and job densities have a higher demand for transit, resulting in more transit riders.

Well connected streets and major destinations placed in transit-friendly locations also make transit more attractive and feasible. The best transit lines provide service between many important destinations along a direct route. Direct routes provide the quickest travel times, making transit an attractive choice. Transit consultant and author Jarrett Walker's 'Be on the Way' principle states that the best way to ensure good transit service is to locate on a strong, straight corridor with other major transit destinations.

Encouraging higher densities is one way to support transit. Placing jobs at nodes or along corridors that are easy to serve by transit is another. We advocate for land use plans and transportation plans to identify major corridors and direct new jobs and housing into these corridors.



Appendix 2

Essential Elements – Further Information

Focus on Frequency

The Transit Action Alliance of Guelph is calling for fast, frequent, and reliable transit in Guelph. Great transit will help make Guelph a great city. We need transit that is attractive for more trips, for more people. Frequency – a bus is *coming soon* – is a huge need. Providing frequency will get more people using transit, since most people won't choose transit with a long wait.

Imagine a gate across your street that opened every half hour. Only twice an hour could people walk, bike or drive out. Mobility would be dramatically reduced. Shift starts at 8:30? Leave early to catch the gate. Want to pop home before running an errand? Catch the gate – both ways. Simple trips would need planning and lots of waiting. Opportunities might be closed to you: a new job; a night course; a visit to the doctor; a late movie.

This fictional experience is similar to what most Guelph Transit riders go through each day. Most routes only run every half hour, even in rush hour. It makes life frustrating for people relying on transit. It makes transit a hassle that people with a car rarely choose. Providing frequent service is key to gaining riders. Frequent service – every 15 minutes or better – is needed all day on busy base routes and core routes, so people can choose transit for a variety of daily trips.

While we support Guelph Transit's proposal to add 20-minute service on more routes, Guelph Transit needs to provide increased frequency on core routes and select base routes of 15 minutes or better all day so current riders will benefit, and new riders will choose transit. Busy, core routes in the Transit Quality Network Route Review need frequency. These routes serve tens of thousands of residents and thousands of jobs. Great service – frequent service – would help make transit the best choice for more trips. So far, Guelph Transit isn't proposing the frequent service Guelph needs.

Reliable Transit

Everyday, people have places they need to go, on time. Everyday, people riding Guelph Transit wonder if they'll get where they need to go, on time. There are ways to keep transit moving – transit priority. So far, Guelph has talk about it for the last 5-6 years but not done anything. Without transit priority, our system is slow, unreliable and unpopular.

When transit runs late, it plays havoc with people's schedules. Traffic is the biggest culprit slowing down transit; vehicle caught in transit easily fall behind schedule. Traffic isn't entirely predictable – some days are worse than others. On Thursday an intersection could be a 2 minute delay, but on Friday it's a 6 minute delay. It's hard to build unpredictability into a reliable schedule. Technology to track vehicles helps a bit, but knowing where your ride is won't get it moving.

Transit priority is the most effective way to increase reliability. Regardless of the vehicle – bus, light rail, streetcars or big trains – they need a clear path free from traffic to run quickly and on time. This is what transit priority provides.

Like many things, there's a spectrum of transit priority options to choose from. The Cadillac is a separate, dedicated right-of-way, meaning tracks or roads only for transit. Subways, commuter rail and Ottawa's busway are all examples. Dedicated right-of-ways let transit move lots of transit vehicles and huge numbers of people, quickly and reliably.

The Honda Civic of transit priority – reliable and reasonably priced – would be dedicated transit lanes on roads or highways. Transit bypasses most traffic, but can still be slowed down by traffic lights, by vehicles



turning or by clueless tourists caught in the wrong lane. Transit lanes dramatically increase transit's speed and reliability over standard bus or streetcar service.

Standard bus service in Guelph runs entirely in mixed traffic, using the same congested lanes as all other traffic. This is the Hyundai Pony of transit – slow, unreliable and frustrating. Transit gets no priority over other vehicles, so accidents or traffic jams slow transit and throws routes off schedule.

All of Guelph Transit services are bus routes running entirely in mixed traffic. 100% of riders use routes that run in mixed traffic, and for most people there isn't a better transit option. Busy routes to the hospitals, universities, downtown Guelph and the intensification corridors and major hubs get no transit priority and are routinely caught in traffic. Service that's slow and sometimes late: no wonder lots of people choose not to ride Guelph Transit. Ridership model share did not meet the 2005 Transportation Master Plan and decreased, so we weren't even heading in the right direction.

If Guelph really wants more people riding transit, we need to get serious about transit priority that keeps people moving quickly and reliably. We need much more than what's currently proposed (Gordon Street corridor and Transit Quality Network within the Transportation Master Plan). We need to invest in permanent, dedicated infrastructure to keep transit moving. We have to look at major corridors – on-street and off-street – that can start moving lots of people, quickly and reliably. We need to give transit space to skip traffic and get people moving. That should happen within the upcoming Transit Master Plan.

Investing in fast, frequent and reliable transit won't be cheap or easy, but the timing is perfect. The federal government has committed billions for urban transit. Now is the time to decide what projects can transform our system. Now is the time for bold proposals that will move tens of thousands of new riders every day.

Giving transit significant priority over traffic could transform our city. Getting transit past traffic would speed commutes, improve reliability and attract new riders. Faster service is not only more popular, but it's also cheaper to operate. More revenue, lower costs, fewer cars on the road and less emissions: win, win, win. It's well past time that Guelph makes transit priority a serious priority.

Fast Transit

Speed is everywhere in our modern culture. Fast phones, fast food, fast cars. Like it or not, in our culture, fast is good and slow is bad. Even Disney movies push the message that fast wins. Lightning McQueen, the superstar racer in the Cars movies starts every race with the mantra, "I am speed."

If there's ever a Guelph Transit bus in a Cars movie, the mantra will be, "I am slow". Our buses travel slowly, stop too often, get caught in traffic, run winding routes and don't come often enough. All of this adds up to slow travel times and unattractive transit. Not too many people choose the slow alternative.

We need your help: Join us to tell City Council that our city requires fast, frequent and reliable transit. We must improve our transit network, and improve it quickly.

Including time at stops and in traffic, some of Guelph's busiest routes travel at 15 to 20 km per hour. Making transit even less appealing, the above speeds only consider the time spent on the bus. Wait times often add 5 to 10 minutes to travel time, but waits can be much longer when routes only run every 30 minutes, like most Guelph Transit routes.

Wait times matter when considering transit speed. For short trips, people riding transit might spend more time waiting and transferring than they spend on the bus. It doesn't matter how fast the vehicle travels, if it doesn't come often, riders are stuck with long travel times.

But it's not just long wait times that make trips on Guelph Transit so painfully slow. Our buses stop often, on some routes every 200 metres. This means people have short walks to stops, but the stops slow travel down dramatically. Once people are on the bus, their trips are often slowed down by windy routes. The fastest routes travel in straight lines, only turning when they need to.



Worst of all, transit is stuck in traffic, along with thousands of cars that are usually each carrying just one person. Buses caught on Gordon Street, narrow bridges or Downtown are certainly not fast. Transit caught in traffic is slow, unreliable and expensive to operate.

If Guelph is to dramatically increase transit ridership, we will have to provide high-quality, on-street transit service on many important corridors. **High-quality transit service is fast, frequent, and reliable. That means fewer routes, running more often. It means routes that run in straight lines on major corridors. It means fewer stops and more chances for transit to by-pass traffic jams.**

The Route Review, the new proposal to improve and expand Guelph Transit's routes, only provides some of these things. It will improve frequency on some routes, straighten other routes and provide new limited-stop rush hour services. This is all good. However, the big problem is that there are currently no big plans to increase speed for most routes massively. Stop spacing, as far as we know, will stay the same. There is currently big plans to make reliable transit corridors, but that is contingent on the Transportation Master Plan and the future Transit Master Plan. So many riders will have shorter waits and better routes, but most of those routes will be the same slow, unreliable service currently offered. Slow and unreliable transit simply won't attract many new riders.

With files from IMTB/Sean Gilles



Transit Quality Network

Within the proposed Transportation Master Plan, contains the proposal for a Transit Quality Network.

It identifies where the City *may* want to explore placing a “quality transit network” service improvements. The plan includes operational improvements such as transit priority at traffic lights and dedicated travel lanes for all or part of the day.

In areas with no physical constraints to having a 4-lane road, the City is recommending that they widen 2-lane arterial roads into 4-lanes wherever Guelph Transit anticipate future transit routes. This would be better for traffic flow. Cars can continue to move to the other lane to avoid a stopped bus, giving the City the opportunity to possibly make these lanes dedicated transit lanes.

As seen on the map, the dashed yellow lines are where the City would explore the opportunity to convert an existing 4-lane road to have the curb lane be a future dedicated transit lane (all or part of the day). The dashed orange line on the map shows where the City believes it will need to widen a two-lane arterial road to have this option available.

The solid orange line is where the City will run into physical or environmental constraints and cannot widen the road. A good example would be Gordon Street between the University and the river. This means that the City’s only option along this and other sections is to optimize transit operations with signal timing, service operations, and other measures that do not change the road.

At the end of the day, the Transportation Master Plan is primarily looking at the physical changes to the road network that need to be done such as widening the roads and changes to how the City designs roads. It also looks at high-level policies to guide future transportation-related work. For example, it will direct City Staff to do a future transit master plan to implement these recommendations.

The future Transit Master Plan, starting in 2022, would look at changes in ridership, available road capacity, and all available technology to determine if, where and when Guelph Transit and the City would move toward dedicated transit lanes.



Appendix 4

TRANSIT CORRIDORS: A KEY FIRST STEP

The centerpiece of Guelph Transit's proposal is its 4 Corridor Core Routes. They are routes that run along main streets, connecting many neighbourhoods to essential destinations, like downtowns, hospitals, universities, shopping, and Industrial Parks. Thousands of people live within 500 meters of a corridor. These routes and areas make up a significant part of the Transit Quality Network as seen in the Transportation Master Plan and will be part of the future Transit Master Plan.

The Corridor Core Routes are a solid improvement over the many routes they replace. In general, the corridors:

- Have much less overlap;
- Are straighter, and therefore faster;
- Provide somewhat more frequent service;
- Simplify transferring

The following Corridor Routes will run 10 minutes or better, most of the day weekdays, with reduced services on evenings and weekends ranging from 15, 20, and 30 minutes:

- Route 99 Mainline

The following Corridor Core Routes will run every 20 minutes weekdays, 30 minutes evenings and weekends:

- Route 98 Speedvale
- Route 97 Edinburgh
- Route 96 Victoria

While these Core Routes will give thousands of people riding transit a more frequent, somewhat all-day service, they fall short of regular enough.

Neighbourhoods will all gain more high-quality service all day, cut wait times, and make transfers easier. It will be a massive gain for students and people working in retail or sales. Many people need to ride the bus in the middle of the day, and better frequency helps people travel easily. More frequency and better service should also attract new riders to these already busy routes. Less wait time means a more attractive service and less need to check a schedule. As a result, more people will choose transit on these critical corridors. This should be a core discussion of the Transit Master Plan on how to convert these Core Routes into a functional frequent transit network.

IMPROVEMENTS THAT ARE REQUIRED TO MEET THE GOALS

While these corridors will significantly improve Guelph Transit's current system, we believe the proposal still needs several significant improvements to fully implement the Goals and principles.



1. The Corridor Core Routes require more resources and better frequency throughout the day.

TAAG believes these corridors will need more frequent service. As well, a stronger focus on high ridership – one of the principles behind Guelph Transit's plan and the Business Service Review– should mean more resources on these critical corridor routes.

The corridors will become the most important routes in the system but do not receive their share of resources: they are within a quick five-to-ten-minute walk from much of the urban population. Moreover, they will replace routes that already serve much of all of Guelph Transit's riders. Yet in Guelph Transit's plan, the corridors will receive only ?% of resources.

One of the four Goals / Principles guiding this route review (network redesign) is to focus resources on utilization (high ridership services). More service would allow more frequency, which would make the routes more attractive and make transferring easier. For example, Halifax Transit: Increasing midday service on route 7 resulted in a 21% ridership increase. Route 7 was already one of the busiest routes in the network. Similarly, many more people started riding route 1 when the frequency increased. These results strongly suggest that providing all-day high-frequency service on all of the corridor routes will encourage ridership.

However, in Guelph Transit's current proposal, the 96, 97, 98, and 99 would not provide 15-minute service all day, every day. To function as a true frequent transit network, these routes need more resources.

If a rider is required to transfer from a bus with 20-minute midday frequencies to a bus with 30-minute midday frequencies, that is a trip that is no longer attractive to take by transit. Thus, low midday frequencies on base routes undermine the usefulness of the corridors as a transfer-based network and will discourage ridership. For that reason, lower midday frequencies on the base routes contradict the Route Review Principles.

The corridor cord routes should form a frequent, all-day, transfer-based network. Frequent service on all the corridors would mean that more residents than ever before could reach almost any major destination with a short walk and one transfer – some riders with a short walk, a quick wait, and no transfers. Crosstown trips to major hospitals, schools, universities, retail areas, and office and industrial parks would be dramatically easier.

Thousands of current transit riders would have much shorter waits, and thousands of people near main corridors would have easier access to tens of thousands of jobs. All day frequent service is nothing short of liberating for people riding transit.

2. The network must be further simplified

Corridors (Core): Beyond the need for frequency, a midtown crosstown route would be ideal. Understanding how the Core Route and Base Route feed into each other is also needed to allow riders to transfer simply.

Base Routes: Making sure to provide alternatives to the Routes that will be losing some Saturday service, be it with other nearby routes or using tools like On-Demand Transit.

More generally, not every neighbourhood needs local service directly to and through Downtown Guelph. Rather, every neighbourhood needs a local connection to the network of corridors, which will take riders to most destinations in the region's urban core, including Downtown.



Simplifying the network further is one way to free up additional service that can be re-invested into frequent service on the major corridors.

Route 13 and 24 – should be the same Route number as other Routes doing the same two-way service.

Route 1 and 2 – service same, but a reduction in Route 1 makes it difficult to go both directions in a timely fashion

Route 12 - Simmonds/Inverse Dr. What is the justification for service? Is there enough time to get back?

Additional points are included in our summary.

3. The plan must show how critical transit priority measures are to make it work

While not in the scope of the Route Review, it will be essential to link the Transportation Master Plan to the future work of the Transit Master Plan. Together with the Route Review Proposal, it will show both Council and Transit Users how critical it will be to have TPM's in place.

Transit Priority Measures (TPMs) are any infrastructure that gives transit a path around and ahead of cars and past traffic. TPMs include a range of measures, from short queue-jump lanes at lights, through reversible transit lanes, and on to full transit-only lanes in both directions.

One of the Goals (and our principles) guiding this plan is to give transit more priority in the roadway network. This will be essential for achieving the Transportation Master Plan's goal of increasing transit's modal share to 15% of all trips. In addition, transit priority makes trips faster and more reliable. For that reason, it is indispensable for high-quality transit that is an attractive choice for many people. What is more, permanent TPM infrastructure on Core Routes and Intensification corridors will tell residents, businesses, and developers that the corridors will provide the highest-quality service over the long term. Thus, high-quality transit routes – with permanent infrastructure – can help direct development and further support the goals of the Community Plan.

Unfortunately, all routes carry dozens of people now given the same priority as cars in our road network.

This has to change there is too little road space to move everyone by private car. Implementing any TPMs will cost money and be disruptive in the short term, but we need to invest in the proper infrastructure. TAAG believes that any road upgrades that add capacity within the Quality Transit Network in the Transportation Master Plan should add capacity exclusively for people using transit or people in carpools.

Guelph Transit's proposal is a chance to start planning that infrastructure. But in its current draft, the proposal only hints at it and fails to provide at least some indication of where TPMs might be located.

Instead, we must wait to complete the TMP and the Transit Master Plan for both short-term and long-term TPM plans and try and integrate low-cost TPMs with other capital projects. This falls well short of the dramatic, pressing need for transit priority on high-quality transit corridors.



A real plan must start by targeting the chokepoints. We are encouraged that the Gordon Street Corridor will be the first TPM study. Buses have predictably fallen off schedule and often run late in both directions since the exact vehicle has to do several runs and falls behind. When it comes time to create the Transit Master Plan, we encourage Guelph Transit's to propose a transit-only or transit and carpool lane to move buses past congestion.

There is simply no way to provide quality transit to Victoria, Edinburgh, Gordon, Norfolk, Speedvale etc., without TPMs to get buses quickly through various choke points. To connect most of our residents to jobs and services, we will have to make these roads transit-friendly.

The current delays that people riding transit face are unacceptable, and attracting new riders means buses have to move quickly and on time. More people riding transit means more revenue, less strain on roads, and less pollution. On top of that, buses running quickly cost less to operate over the same distance. Transit priority is efficient, attractive, and environmentally friendly.

TAAG will support a plan for transit priority measures. Guelph needs to spend more money on infrastructure to benefit the thousands upon thousands of people trying to make it past several chokepoints. A bold investment of money and road space would transform transit's speed and reliability. However, only such an aggressive investment can meet the City's various goals in its different plans – a commitment to transit priority needs to be a top budget priority.

4. The network needs a Midtown-Downtown crosstown connection

Crosstown routes are critical for people traveling to peripheral locations. One significant gap in Guelph Transit's proposal is not having a route pass through Downtown Guelph. TAAG recommends that consideration be made for a high-quality service using Routes 4 and 10 or Routes 10 and 14 to connect the East and West ends of Guelph through Downtown Guelph. TAAG believes that the absence of a transit corridor through Downtown Guelph is a significant hole in the network.

5. The plan must be rolled out faster

Better service needs to happen now, not slowly over ten years. Therefore, TAAG will ask City Council to provide Guelph Transit with more resources so that these changes can happen immediately and in a shorter span.

The current system is overly complex and can be frustrating for some users. Implementing some parts of the new, proposed network while leaving other parts of the current system unchanged will only add to the frustrations. In addition, to have these changes on-going for ten years will be intolerably confusing.

Implementing the proposed changes more quickly, with minimum impacts and simplified (i.e., Roll out Route 20, 21, 22 instead of having 20-minute service on Route 20 the year prior) would minimize potential frustrations and backlash from the ridership and avoid having the system continually disrupted for years.

We understand that Guelph Transit wants to keep the tax impact at a certain level each year. However, TAAG recommends making sure City Council understands there will also be a Fare Strategy out of the upcoming Transit Master Plan to help fill in some revenue. TAAG also



recommends showing Council how increased frequency can increase revenues from both the farebox and the Gas Tax Revenues.

The current system wastes an immense number of resources on overlapping, poorly performing routes. Inefficient routes cost Guelph Transit directly through lower fare revenues. We can convince Council that providing additional resources upfront will help Guelph Transit quickly increase ridership and fare revenue: a slight increase in resources now will be rapidly repaid in new riders and new fares.

6. What are the schedules, and will they work?

The new Guelph Transit plan is a big, complex document. It's 300+ pages. There are dozens of routes. Have you found a simple explanation of people's travel options?

The new plan doesn't answer the key question: where can people easily travel to using transit? We ask that Guelph Transit provide information about how many people can access key regional destinations on the proposed transit network and to provide estimates of travel times and increases in ridership. Until we have that type of information, the plan is just not ready, yet.

To judge this plan effectively, residents need to see how the whole network provides different travel options from lots of origins. Clear visuals would go a long way to showing where residents can travel using the new network. They'd also identify gaps in the plan, places where not many people can easily travel.

Residents and Councillors must have the correct information before discussing any changes to the network. Providing clear visuals that show travel options is the easiest way to see how effective this proposed plan is. This will more likely come via the Transit Master Plan, but having some rough idea is critical to convincing Council and the Public this is the right path forward.

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Questions for Guelph Transit

Travel Time and Transfers

How did (or will) Guelph Transit weigh travel time trade-offs?

Are timed transfers planned to connect lower frequency routes to higher-frequency services? If so, where?

Public Engagement

What level of involvement will stakeholders and the public have in evaluating and creating this new network? What can we expect during consultations before the November presentation? Will there be a chance to revisit the Route Review in some form during the Transit Master Plan to get a better public response and input after Covid?

Overlap and Simplicity.

How much overlap are you planning on removing from the system?

High Frequency Grid

Can a high-frequency grid work? If so, where?

High Frequency Service

Are high frequency, all day transit lines a key part of your network, if so, what type of transit corridors do you envision?

Would the 90 series routes be prime areas to convert to a Frequent Transit Network after year 10?