

Municipality of Chatham-Kent
Infrastructure and Engineering Services
Engineering and Transportation Division
Information Report

To: Mayor and Members of Council
From: Ian Clark, Engineering Technologist
Date: September 8, 2022
Subject: Transit Access Improvements for Rural Residents

This report is for the information of Council.

Background

On May 30, 2022, Council approved the following:

“That Whereas the Driving Forward Transit Strategy adopted by Council envisioned all Chatham-Kent residents the ability to access sustainable transit services to support urban growth and daily life;

Whereas the Driving Forward Transit Strategy recommended the establishment of community routes, or their equivalent in partner-provided service, in order to meet this vision and ensure all residents have access to the critical services they need to support a healthy community;

Whereas due to low ridership Municipal Council removed public transit route S1, the Beach Bus, from the base budget in 2020 which provided seasonal transit service to the communities of Erieau and Mitchell’s Bay;

And whereas inflation and gas prices have made access to affordable transit services critical to the daily lives of many rural Chatham-Kent residents;

Be it resolved administration prepare a report with recommendations on how to improve access to affordable, accessible, and convenient transit services for rural Chatham-Kent residents, consistent with the Driving Forward Transit Strategy, with consideration to the current inter-urban network, on-demand technology, existing transit partners, fare structures, and new opportunities. The report should be brought to council for information purposes prior to October 2022 so recommended transit service changes or enhancements can be incorporated into the 2023 budget.”

Comments

Current Environment

Chatham-Kent communities outside Chatham have access to accessible transit services delivered through either the Municipality's Ride CK public transit service or services operating in partnership with the Municipality. The 2022-2023 Ride CK Service Guide (Appendix A) provides information on most of the below services.

Ride CK Public Transit (Internally Managed)

| Service | Description | Standard Fare |
|-----------------------|--|----------------------|
| Inter-Urban | Fixed Route: 5 runs (M-F) and 4 runs (Sat.) across 3 routes connecting Chatham, Dresden, Wallaceburg, Ridgetown, Blenheim, Charing Cross, Tilbury, Jeannette's Creek, Cedar Springs, Dealtown, South Buxton, North Buxton, and Merlin. | \$5.00 |
| Wallaceburg OnRequest | Demand-Responsive: Bus stop-to-bus stop service within the urban boundaries of Wallaceburg, M-Sun. Curb-to-curb specialized transit trips eligible for those with a disability ("Wallaceburg Accessible"). | \$2.50 |

Table 1: Ride CK Services available outside Chatham

Partner Services (Externally Managed)

Fare information is available in Appendix B.

| Service | Description |
|--------------------------|---|
| SECC Transportation | Demand-Responsive: Curb-to-curb trips available to residents of Wheatley aged 55+ or if the rider has a disability. Flat fare trips available to Leamington and parts of Essex County. Trips available to Windsor and other destinations at a higher fare; Operated by South Essex Community Council under the Carelink program. The Municipality financially contributes to the operating deficit and capital lifecycle of this service in order to subsidize the price of fares. |
| Four Counties Transit | Demand-Responsive: Curb-to-curb trips available to all residents within Ward 3. Flat fare trips available anywhere within Ward 3 or to West Elgin, Southwest Middlesex, and Newbury. Additional destinations available at an extra charge; Operated by the Municipality of West Elgin. The Municipality financially contributes to the operating deficit of this service in order to subsidize the price of fares. |
| adVANTage Transportation | Demand-Responsive: Curb-to-curb trips available to rural and/or low-income residents age 0-60. Trips available anywhere within Chatham-Kent with fares based on income and distance; Operated by Family Service Kent and subsidized through the Ontario Community Transportation Grant in partnership with the Municipality. Grant expires in 2024; Carelink Health Transit available to adults over 60 through the same service provider. |

Table 2: Partner Transit Services available outside Chatham

Analysis – Barriers Impacting Access

There are publicly subsidized accessible transit services currently available to all communities across Chatham-Kent. As determined through the Driving Forward public engagement process, service uptake is primarily impacted by these barriers:

1. Affordability
 - Fares for partner services are higher than fares for Ride CK public transit services, but remain below market rates due to subsidization. Ride CK inter-urban fares are higher than urban fares.
2. Service Levels
 - Operating hours do not always align with a rider's needs. Scheduled runs on the inter-urban network may not accommodate personal schedules, offer a convenient level of frequency, or the route design may warrant a rider to spend excessive time on the bus before reaching their destination.
3. Availability
 - Under the demand-responsive model operated by partner services, a rider may not be able to secure a trip at a preferred time if there are competing requests from other riders. Trip requests are assigned on a first-come-first-served basis and partner services may request bookings up to 72 hours in advance with poor availability for same-day service requests.
4. Knowledge
 - The Driving Forward public engagement process revealed significant gaps in resident knowledge of available services. Long-time residents were not aware of some partner services or inter-urban destinations. Some residents incorrectly believed they were ineligible for certain services.

Comparator Scan

The below municipal comparators were selected due to similarities in geographic size, population density, and/or their mix of rural and urban communities.

| Comparator | Service Description | Standard Fare |
|-------------------|---|--|
| Norfolk County | Fixed Route: Weekday service within Simcoe (10 runs/day); Weekday service to Brantford Bus Terminal (3 runs/day); 1 service day per week alternating connections between Simcoe and different smaller communities (4 runs/day). | \$2.50 (in Simcoe) \$6.00 (to other locations) |
| Wellington County | Demand-Responsive: Door-to-door shared ride transportation anywhere within county boundaries as well as to/from Guelph. | Min. \$5 per person + \$0.60 per km up to \$40 max. each way |
| Niagara Region | Fixed Route: 11 routes available Monday to Saturday operating as early as 7am and as late as 11pm. Routes operate up to 16 runs per day (hourly w. peak time trips) with others as low as 11 runs (hourly w. earlier service | \$6 (most fixed routes) |

| | | |
|-----------------|--|---|
| | <p>termination). Routes connect St. Catharines, Niagara Falls, Welland, Fort Erie, Port Colborne, and Niagara-on-the-Lake.</p> <p>Demand-Responsive: Connects smaller communities with hub locations in the larger communities serviced by fixed routes. 7am – 10 pm, Monday – Saturday.</p> | <p>\$3.50 - \$4 (shorter routes)</p> <p>\$3 - \$6 (on demand)</p> |
| Grey County | <p>Advanced Booking Fixed Route: Four bi-directional routes operating 4 runs each Monday to Sunday. Routes connect Owen Sound, Dundalk, Wiarton, Meaford, Blue Mountain, Flesherton, and Walkerton. Sauble Beach service offered in summers.</p> | <p>\$3 (Owen Sound-Wiarton)</p> <p>\$5 (other locations)</p> |
| Greater Sudbury | <p>Demand-Responsive: Riders can book a ride directly home within identified rural zones which extend the urban conventional network. Conventional routes terminate at a hub location in a rural area whereas a partner taxi company will take the rider the rest of the way home (or vice versa).</p> | <p>\$3.50 (Same as urban fare. Includes transfer to/from rural zones)</p> |

Table 3: Comparator Service Characteristics

Comparators implement rural transit solutions with a variety of methods. Administration does not view any single model as an all-encompassing solution to eliminate the barriers impacting rural transit access in Chatham-Kent. However, elements of different systems can be adopted to reduce these barriers, address Chatham-Kent's unique needs, and remain consistent with the Driving Forward transit strategy.

Improvement Options

#1 – Adopt a Hub and Spoke Inter-Urban Model connecting Primary Urban Centres

Efficient transit systems operate a hub and spoke model. Routes converge at a centralized point to facilitate transfer to routes servicing other points. Niagara Region has adopted this model on a regional scale. The largest communities are connected by frequent and direct fixed routes. Each hub is fed by a demand-responsive transit network available to the smallest and most rural communities.

The Ride CK inter-urban network was originally conceived to connect Chatham-Kent's Primary Urban Centres (PUCs) – Chatham, Wallaceburg, Blenheim, Ridgeway, Dresden, and Wheatley – with a two-way direct transit route comparable with driving times. Inter-urban service between PUCs was in alignment with the development policies of the Official Plan. Subsequent Council decisions – specifically impacting Route D – removed Wheatley and bi-directional Chatham-to-Tilbury service in favour of a one-way loop to accommodate Merlin and several hamlet communities.

Riders of Route D now spend 1 hour and 50 minutes to travel from Chatham to Tilbury compared to the previous 30 minutes. More than 90% of ridership on this route originate from those two communities. Route D is the lowest used route with several riders from Tilbury or Chatham reporting they seek any alternative transportation available to avoid its excessive in-transit time. Administration is of the opinion this realignment has

suppressed ridership numbers from Tilbury and Chatham to a greater degree than any ridership gains from the smaller hamlets. Route D ridership is available in Appendix C.

Conversations with residents from Bothwell, Pain Court, Thamesville, Highgate and other small Chatham-Kent communities indicate a new fixed route service to those communities would at least be comparable to the low ridership from hamlets along Route D. Providing fixed route service to all secondary and hamlet communities would require significant taxpayer subsidy with fare recovery expected to be below 5%. Ride CK Public Transit has a target 25% fare recovery average across all services.

Realigning Route D to the original bi-directional service connecting Chatham, Tilbury, and Wheatley will improve service quality to riders from all three communities, be consistent with the inter-urban routes connecting other PUCs and provide a backbone from which other rural transit services could be developed under a hub and spoke model. Low ridership communities no longer serviced by Route D could be accommodated under the services outlined further in this report.

#2 – Increase Inter-Urban Frequency

Inter-Urban routes originally launched with 4 daily runs (6:15am, 8:45am, 4:15pm, 6:45pm), Monday to Saturday, to primarily accommodate riders working standard business hours in other PUCs. In 2019 a 12:15pm run, Monday to Friday, was introduced to accommodate riders using inter-urban routes for shorter visits to Chatham. This run is now the second most popular run with overall inter-urban ridership having risen 16% (+1,400 riders) 8 months after launch.

There is strong correlation between frequency of service and usage among transit systems. While current inter-urban frequency is above that of comparators with similar population densities, it is likely still insufficient should Council wish to leverage the inter-urban network as a backbone to improve rural transit connections to all communities. For example, excessive time spent at a Ridgetown hub waiting for the inter-urban trip to Chatham would discourage riders from smaller communities from using a rural feeder system to get to Ridgetown under a hub and spoke model. A less efficient point-to-point service between all communities requires either higher fares – similar to Norfolk County and Chatham-Kent's existing partner services – or high tax subsidy. As seen in the Niagara Region and Greater Sudbury models, a frequent and direct connection between hub locations will support further service access to the smallest rural communities.

Driving Forward recommended increasing inter-urban frequency to a minimum of every 120 minutes with consideration for further peak or extended service hour trips directly between Wallaceburg and Chatham.

#3 – Incorporate Flex Routing into the Inter-Urban Service

Since December 2021, administration has worked with its demand-responsive software provider, Spare Labs, to develop a model to reduce unnecessary vehicle mileage on inter-urban routes while maintaining schedule consistency and coverage within the PUCs serviced by those routes. The model is a hybrid between on-demand and fixed

route transit. Select bus stop destinations within a PUC – or potentially an entire PUC – would only be visited should a booking request be made in advance.

Flex service would benefit rural riders as it has the potential to decrease overall time spent in-transit. Flex service benefits transit systems as it reduces unnecessary mileage incurred while servicing empty bus stops. Flexible routes have been successfully deployed for many years in services across North America including Grand River Transit in Ontario.

Driving Forward recommended an increase in inter-urban frequency be explored in conjunction with adopting a flexible service model. Route D cannot be accommodated by flex service under its current one-way alignment over a large geographic area as it creates too much in-transit time variability for riders.

#4 – Unify Inter-Urban and Urban Fare Structures

Chatham-Kent uses separate fare structures between urban routes (i.e. within Chatham or Wallaceburg) and inter-urban routes. The higher inter-urban fares reflect the higher per passenger cost of delivering those services.

While this two-tiered structure is used in other transit systems, there are benefits to adopting a single fare structure across all Ride CK routes:

- Simpler to understand for riders and the same products/smart cards can be used on all routes;
- Increases service opportunities for urban riders in Chatham and Wallaceburg to use an inter-urban bus for service within their community while the bus is travelling in-town;
- Decreased back-end programming required for fare and route changes / easier education process for other departments and social service groups using Ride CK online fare systems;
- Reduces instances of riders purchasing wrong passes;
- Opens up inter-urban routes to the Affordable Bus Pass Program and 30-Day period passes only available on urban services;
- Assuming adoption of the lower urban fare structure, there will likely be an increase in inter-urban transit ridership by those with cost sensitivity.

It should be noted that Ottawa and Greater Sudbury, single tier amalgamated municipalities, have eliminated their previous practice of charging higher fares for rural-based routes.

#5 – Continue Support for Rural Partner Services

Chatham-Kent's longstanding partnerships with SECC and West Elgin (Four Counties) has brought valuable service to rural residents at minimal budget impact. Driving Forward recommended these partnerships be maintained and potentially expanded. Opportunities include:

- Working with SECC to open up eligibility to all Wheatley residents looking to access Leamington;
- Working with West Elgin to increase service territory to Dresden;
- Supporting a capital contribution to assist West Elgin with vehicle lifecycle.

The launch of adVANTage Transportation in 2019 further eliminated service gaps in other rural areas of Chatham-Kent. However, the Community Transportation Grant used to subsidize service operations expires in 2024 (remaining funds unspent due to Covid-19 can be used until 2026). It is currently uncertain if adVANTage will be financially sustainable following expiry of the grant. Given the rural coverage this operation provides it may be necessary for the Municipality to enter into a similar agreement with Family Service Kent as is currently arranged with SECC and West Elgin. An ongoing subsidy will better ensure continued operation at affordable fares for riders.

To support the inter-urban hub and spoke model and reduce higher distance-based fares experienced by riders of these services, the Municipality may also consider providing all external transit partners with free transfers to the Ride CK network for distribution to their riders who are dropped off within their closest PUC.

An alternative to supporting these partner services would be for the Municipality to launch a demand-responsive Ride CK rural feeder system to its inter-urban routes. This alternative could result in service level improvements in terms of booking availability and vehicle capacity, while fares and service hours would be under direct Municipal control. However, at this time administration is of the opinion that service improvements would not justify the higher costs required to operate this service and the existing partner service model remains the preferred option.

#6 – Implement a Transit Education Program

Most large transit systems have education programs with targeted consideration given to vulnerable populations. While Ride CK creates educational and marketing tools for riders, including maintaining an online and social media presence, Driving Forward has revealed a knowledge gap among the general population's understanding of available services and how they operate.

The implementation of a transit education program, including versions for both online and in-person delivery, would boost knowledge of available services for urban and rural residents and increase confidence in using those systems. The development of this program would require one-time design costs plus ongoing base budget for targeted delivery and material updates. While existing transit staff capacity is insufficient to maintain a comprehensive program, collaboration could be explored with other municipal departments or social service groups with expertise in the types of groups prioritized for education.

Consultation

Information in this report is the result of ongoing dialogue between peer transit systems, external partner service agencies, contractors, and ridership.

Financial Implications

There are no financial implications from this report. Council may choose to direct administration to include the proposed options to improve rural transit access in the 2023 Budget or in future years. Estimated costs are provided in Appendix D.

Prepared by:

Ian Clark, Engineering Technologist, Engineering and Transportation

Reviewed by:

Ann-Marie Millson, Manager, Engineering (Transit & Capital Asset Management),
Engineering and Transportation

Chris Thibert, P. Eng., Director, Engineering, Engineering and Transportation

Ryan Brown, P. Eng., General Manager (Acting), Infrastructure and Engineering
Services

Attachments:

Appendix A – 2022-2023 Ride CK Service Guide

Appendix B – Partner Services Fare Structure

Appendix C – Route D Ridership

Appendix D – Rural Transit Access Improvement Options – Costs