



The Town of Wasaga Beach Transit Study and Operations Review Final Draft Report



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Transit Consulting Network

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Table of Contents

1.	Introduction	1
1.1	Background	1
1.2	Small Community Transit Environment	1
1.3	Study Scope.....	3
1.4	Description of Wasaga Beach Transit Service	3
1.4.1	Routes and Schedules	3
1.4.2	Bus Fares	5
1.4.3	Transit Fleet and Facilities.....	5
1.4.4	Accessible Transit in Wasaga Beach.....	6
2.	Phase I: Evaluation of Existing Transit Environment.....	8
2.1	Transit Report Card and Peer Review	8
2.1.1	2011-2015 Wasaga Beach Transit Report Card	8
2.1.2	2015 Wasaga Beach Transit Peer Review	9
2.2	Assessment of Wasaga Beach Transit Performance.....	10
2.2.1	Transit Ridership and Services Hours.....	10
2.2.2	Wasaga Beach Transit Efficiency.....	11
2.2.3	Wasaga Beach Transit Service Effectiveness	11
2.2.4	Wasaga Beach Transit Financial Indicators.....	12
2.2.5	Summary of Report Card and Peer Review.....	14
2.3	Community Engagement	14
2.3.1	Stakeholder Consultations	14
2.4	On-line Transit Survey.....	16
2.5	Analysis of Existing Transit Services.....	21
2.5.1	Wasaga Beach Transit and the C- Link.....	21
2.5.2	Wasaga Beach Transit Coverage.....	24
2.5.3	Red Cross Specialized Transit.....	25
3.	Phase II: Ridership Growth Plan.....	27
3.1	Transit Policy Framework.....	27
3.1.1	Goals and Objectives.....	27
3.1.2	Transit Service Design Guidelines	28
3.1.3	Acceptable Transit Route Design	30
3.1.4	Expanding the Client Base.....	33
3.1.5	Timed Transfers Between Bus Routes	34
3.1.6	Transit Technology.....	34

Town of Wasaga Beach Transit Study and Operations Review

3.1.7	Bus Fare Pricing Strategy	35
3.1.8	Enhanced Marketing and Branding.....	37
3.2	Transit Service Alternatives	37
3.2.1	Community Bus Fixed-Route Service	37
3.2.2	Specialized Transit as a Dial-a-Ride Service	37
3.2.3	Fixed Flex-route Concept	38
3.2.4	Fixed-route Shared-ride Taxi.....	38
3.2.5	Dial-a-Ride.....	39
3.2.6	Uber Taxi Model (Town of Innisfil).....	39
4.	Phase III: Transit Expansion Plan.....	41
4.1	Route and Service Design Challenges	41
4.2	Accommodating New Development.....	41
4.3	Route and Service Design Strategy	42
4.4	Proposed Route Concepts.....	43
4.4.1	Proposed Route 1 Concept	44
4.4.2	Route 2 Concept Alternatives	45
4.4.3	Route 3 Concept.....	46
4.5	Proposed Transit Service and Financial Plan.....	48
4.5.1	Cost and Revenue Estimates.....	48
4.5.2	Short-term (Year 1 to Year 3) Transit Service Improvements.....	49
4.5.3	Medium-term (Years 4 to 6)	50
4.5.4	Summary of Short- and Medium-term (Years 1 to 6)	51
4.5.5	Long-term (Year 7 to 10).....	52
4.6	Specialized Transit.....	53
4.6.1	Specialized Transportation Options.....	54
4.6.2	Preferred Option: Red Cross Specialized Transportation	55
4.6.3	Complementary Specialized Transit Options.....	57
4.7	Transit Asset Management Plan	58
4.7.1	Transit Vehicle Options	58
4.7.2	Fleet Size	61
4.7.3	Fleet Storage	61
4.7.4	Electric, Hybrid and Compressed Natural Gas Buses.....	61
4.7.5	Improved Bus Stop Amenities and Standardization	63
4.7.6	Bus Terminal	64
4.7.7	Technology Improvements	64

Town of Wasaga Beach Transit Study and Operations Review

4.8	Ten-year Capital Budget.....	65
4.9	External Funding and Other Revenues	65
4.9.1	Province of Ontario and Government of Canada Funding Programs	65
4.9.2	Advertising Revenues.....	66
4.10	Transit Business Model	68
4.10.1	Wasaga Beach Transit	68
4.10.2	C-Link Business Model	69
4.11	Summary, Recommendations and Next Steps.....	70
4.11.1	Summary	70
4.11.2	Recommendations	71
4.11.3	Next Steps	71
Appendix A: Excerpts from O. Reg. 191/11, Integrated Accessibility Standards Regulation.....		72

1. INTRODUCTION

1.1 Background

The Town of Wasaga Beach, located along the shores of Nottawasaga Bay, is home to the longest fresh water beach in the world that has attracted a steady stream of new residents and seasonal dwellers for many years. Wasaga Beach’s demographics include growing families, young couples and an increasing number of retirees moving to the area. The 21,000 permanent and 9,000 seasonal residents make up 60% of a catchment area of more than 50,000.

With its modest beginnings as a single vehicle shuttle service in 2008 with the slogan “Ride the Wave”, Wasaga Beach took a fiscally responsible ‘walk before you run’ approach to expanding Wasaga Beach Transit to the existing two-route system in place today, which is fully integrated with Collingwood Transit services through the C- Link route that is cost-shared with Collingwood. The service that links to Clearview Transit to Wasaga Beach and Collingwood is yet another example of the careful expansion in linking Simcoe County communities.

The Town of Wasaga Beach retained the services of the Transit Consulting Network to undertake a Transit Study and Operation Review of Wasaga Beach Transit to guide Wasaga Beach for the next five years and beyond.

1.2 Small Community Transit Environment

Rural and small communities are finding that residents faced with the loss of personal mobility or are unable to afford a car, are increasingly inclined or obliged to move to communities where affordable public transportation exists. Likewise, employers consider the availability of public transportation when making business location decisions. It is also well known that the dramatic decline in small community populations can be directly related to the inability of residents to access essential services. A major factor that makes possible a good quality of life is the availability of affordable public transportation to enable those that are unable to drive or do not have a vehicle to access goods, services, medical appointments, or jobs. Another key need is the ability to maximize social connectedness, which is now considered a health-related issue.

Figure 4 – Transit Shelter in Hamilton with System Route Map

(Note: there are also 2 InfoPosts strapped to bus stop pole)



The market for transit in small and rural communities consists mainly of minimum wage earners, lower income individuals and families, people with disabilities, senior citizens, students and youth, people on social assistance, and those that simply want to do without that 2nd or 3rd car are a significant segment of the population whose needs should not be ignored. The viability of policies to maintain the elderly in their homes instead of in long-term care, access to health care, social services, and essential maintenance such as shopping and banking all depend on personal mobility. Community leaders seeking

ANNUAL DRIVING COSTS – based on the Camry LE				
Km driven per year	Annual operating costs (variable)	Annual ownership costs (fixed)	Total cost	Cost per km
12,000 km	\$1,975.20	\$7,179.84	\$9,155.04	\$0.76
16,000 km	\$2,633.60	\$7,494.00	\$10,127.60	\$0.63
18,000 km	\$2,962.80	\$7,494.00	\$10,456.80	\$0.58
24,000 km	\$3,950.40	\$7,801.08	\$11,751.48	\$0.49
32,000 km	\$5,267.20	\$8,373.48	\$13,640.68	\$0.43

Table 1: CAA 2015 Driving Costs

To reverse or stabilize a potential decline in population must consider access to public transportation as a key issue affecting the vitality and the financial viability of their community.

Another key factor that can be considered to support the availability of affordable public transit with adequate levels of service is the positive financial impact transit can have on a family and the business community. For example, the ability to reduce car ownership can have a profound effect on a household’s finances and quality of life. Table 1: CAA 2015 Driving Costs provides the true cost of car ownership using a Camry LE as an example.

For auto owners that drive 16,000 kilometres per year, the total annual cost reported to own and operate a vehicle is \$10,127 per year. Arbitrarily applying a factor of 75% to be conservative, this would still equate to \$7,600 per year or approximately \$630 per month compared to a Wasaga Beach Transit monthly bus pass at \$40, saving residents \$590 per month or \$7,080 per year. The savings would likely be spent on local goods and services while improving the quality of life of residents.

For those residents that earn little income and are forced to own a vehicle in order to get to and from work, car ownership becomes a financial burden. For example, a person working part-time 24 hours per week with a net income of \$12 per hour would net \$15,000 per year (assuming they work 52 weeks per year to be conservative). After deducting the \$7,600 annual cost of car ownership, the net income after auto ownership costs would approximate \$7,400 (\$15,000 net income less \$7,600 auto costs). Half the wages would be needed just to cover the cost of getting to and from work. A major car repair expense can, therefore, be devastating. Those on low fixed incomes face even more challenges.

Fortunately, the Town of Wasaga Beach has a record of financially supporting transit since the inception of Wasaga Beach Transit in 2008; however, many residents are not served at all while the routes and schedules do not adequately meet other resident needs.

1.3 Study Scope

The study consisted of a number key milestone summarized as follows:

Milestone	Milestone Description
Critical Evaluation of Existing Transit Services	To assess the performance of existing transit services from an operations perspective and to identify gaps and opportunities for change from a wide range of community stakeholder perspectives
Transit Policy Framework	To develop appropriate transit supportive policies and guidelines, assess service alternatives and supporting transit ridership growth strategies
Finalization of Transit Service Plan Concepts	To develop a transit service concept plan that reflects an updated transit policy framework based on community priorities and transit best practices applicable to the Town of Wasaga Beach
Final Transit Service and Financial Plan	A fiscally responsible transit service plan supported by Council that meets community priorities today and, in the future,

The ultimate goal and challenge is to make adjustments to Wasaga Beach Transit that will meet community needs to the extent possible within the approved funding framework that would be determined by Council.

1.4 Description of Wasaga Beach Transit Service

1.4.1 Routes and Schedules

The Town of Wasaga Beach operates two bus routes - Route 1 and Route 2 - and shares one bus route with the Town of Collingwood, namely, the Wasaga Beach – Collingwood Transit Link (the C- Link).

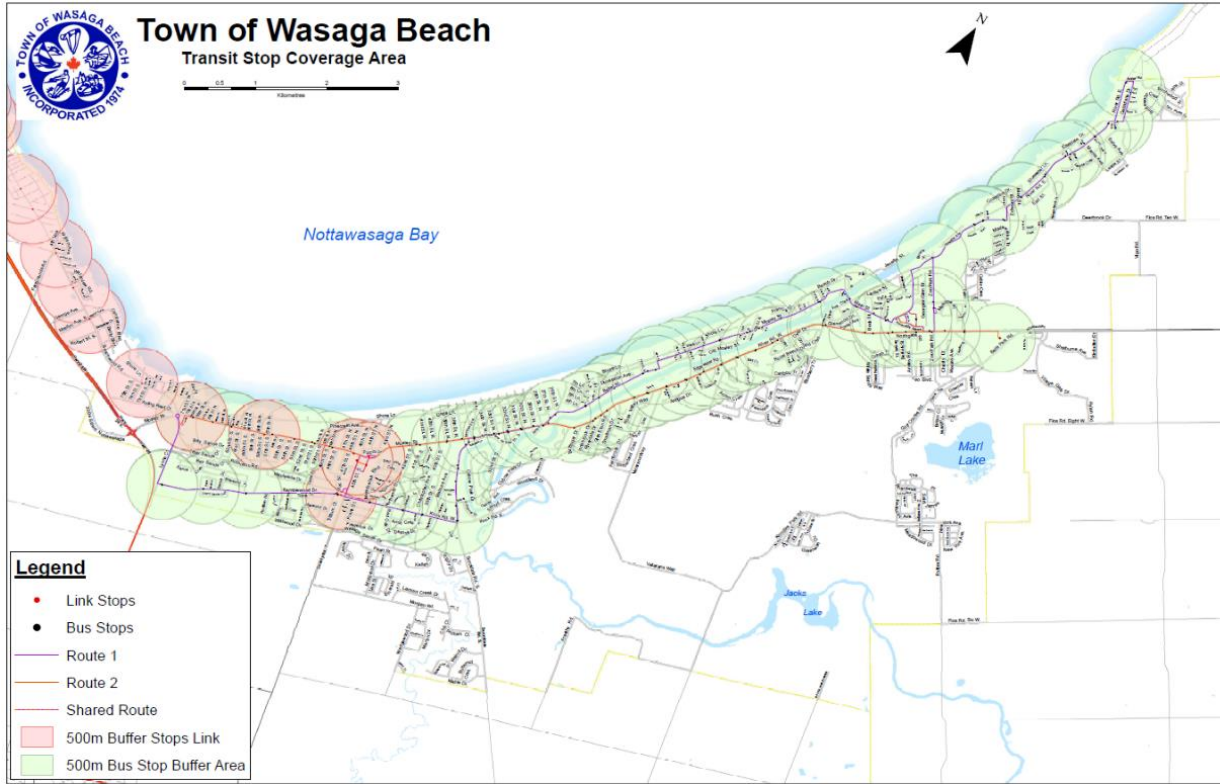
Wasaga Beach Transit operates seven (7) days per week as follows;

- Monday to Saturday – 7:00 a.m. to 9:00 p.m.
- Sundays and Holidays – 7:00 a.m. to 7:00 p.m.

The C- Link operates as follows:

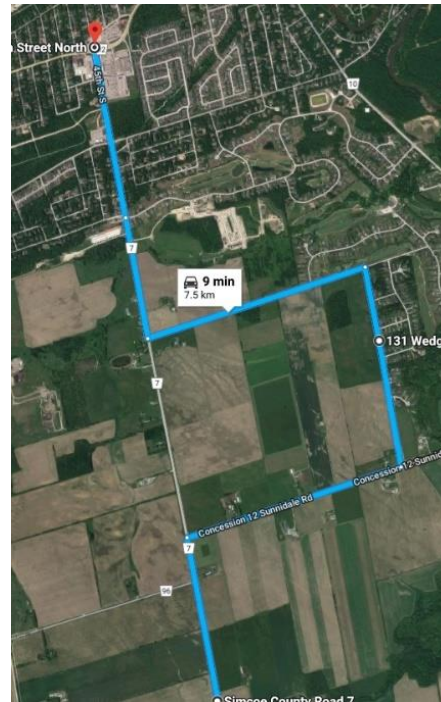
- Monday to Saturday – 6:00 a.m. to 8:00 p.m.
- Sundays (no holidays) - 7:00 am-10:00 am and 3:00 pm – 8:00 pm

In addition to the Wasaga Beach and Collingwood Transit services, the Town of Clearview funds the operation of a bus service between Stayner and the Wasaga Beach Superstore where all routes connect



Route 1 operates on a 90-minute cycle while Route 2 operates hourly. The Route 2 operates hourly and connects with the hourly service of the Wasaga Beach – Collingwood Link (herein referred to as the C-Link) after 7:00am. The C-Link operates between the 100 Pine Street terminal in Collingwood to the Superstore in Wasaga Beach. The route costs and transit revenues are split evenly between Collingwood and Wasaga Beach.

Bus service is also provided from the Town of Stayner to Wasaga Beach, which is funded by the Township of Clearview with service to the Superstore in Wasaga Beach travelling via Concession Road 12, Wedgewood Drive, Morgan Road and 45th Street S. (County Road 7). Although this portion of the route serves Wasaga Beach residents, there is no cost to the Town Wasaga Beach. In return, the Town of Clearview collects the revenues and the associated dedicated Provincial gas tax. The route deviation benefits both municipal jurisdictions by providing access to transit service to some Wasaga Beach residents at no cost to the Town of Wasaga Beach while Clearview Transit passengers that transfer to Wasaga Beach Transit will pay an additional fare to Wasaga Beach Transit.



Township of Clearview Bus Service

1.4.2 Bus Fares

The existing fare structure/schedule is outlined in the chart below;

Wasaga Beach Fare Category	Fare
Adult cash fare	\$2.00
Senior 60+ / Student (20 years with ID) / Youth (6-19 years old)	\$1.50
Monthly Pass	
Adult	\$40
Senior (60+) / Student (20 years old with ID)	\$30
Youth (6-19)	\$5.00
Under 5 years of Age	Free
Visually Impaired (with CNIB Card)	Free
Wasaga-Collingwood Link Transit	
All cash fares	\$2.00
Unlimited monthly pass	\$40
Monthly Universal Pass (Wasaga, Link, and Collingwood Transit)	\$120

Wasaga Beach Transit implements a ‘Smart Card’ payment system allowing riders to load multiple products on a single card. It should be noted that in 2016, 72% of the ridership paid with cash fares. Transfers between Wasaga Beach bus routes are valid for 45 minutes but cannot be used for a return trip. Transfer points where Route 1 and Route 2 meet, are as follows;

- Stonebridge Town Centre
- Riverbend Plaza
- Sunnidale Road
- Mosley Street between Riverbend Plaza and Sunnidale Road
- Ramblewood Medical Center
- Superstore Area

1.4.3 Transit Fleet and Facilities

The Transit Fleet is comprised of three (3) high-floor 20-passenger ‘cut-away’ buses that have bike racks mounted on the front of the bus that can accommodate two (2) bikes and are lift-equipped to transport up to two forward-facing wheelchairs. When in use, each of the two wheelchair positions reduces the number of seats available by two.

Boardings and alightings are accommodated through one door for regular passengers while customers using wheelchairs are accommodated through a lift on the side. The buses are owned by the Town of Wasaga Beach and are operated and maintained by the contractor, Sinton Landmark.



The Transit Fleet is comprised of three (3) high floor (i.e. with steps for boarding) 20 passenger vehicles that are rotated on a weekly basis for maintenance purposes. Each unit has accommodation for two (2) wheel chairs. Although the bus design does not accommodate standees, there is sufficient capacity based on current passenger loads. Based on recent experience, the bus life is limited to five (5) years.

Fleet No.	Make / Year	Engine	Kilometers
Unit#49	Chevrolet 2015	Gas	257,120
Unit #51	Ford 2017	Gas	4,668
Unit #50	Ford 2017	Gas	25,980

The buses are stored overnight at a facility located at the old Fire Hall at 16-2nd Street North in Wasaga Beach. Provision is made for a small office that Sinton Landmark occupies on a part time basis. The majority of repairs are undertaken by Sinton Landmark at their own facility in Collingwood. Sinton Landmark is also the contractor for Collingwood Transit, The C- Link and the Clearview Transit service.

1.4.4 Accessible Transit in Wasaga Beach

1.4.4.1 Wasaga Beach Accessible Transit Service

The Town of Wasaga Beach operates a fully-accessible conventional transit system. Accessibility accommodations include the Request Stop features that enables transit customers with disabilities to board or alight the bus at locations where no bus stop exists along a route, and where it is safe and convenient to do so.

A demand-responsive door-to-door Specialized Transportation service for individuals who are unable to use Wasaga Beach Transit is provided by the transportation service of the Simcoe-Muskoka Branch of the Canadian Red Cross Society, which also provides this service throughout the region. The Red Cross Specialized Transportation service assists in the Town of Wasaga Beach to comply with Accessibility for Ontarions Disability Act (AODA); however, there are some adjustments required; these are addressed in Section 4.2 Specialized Transit.

1.4.4.2 Red Cross Specialized Transportation

Specialized Transportation to Wasaga Beach residents with disabilities (frail, elderly, disabled) is provided by Simcoe-Muskoka Red Cross Transportation, a regional service which has a total of 20 vans and minibuses, and 35 volunteer drivers, and which serves all of the area the Red Cross described as the Simcoe-Muskoka service area, as illustrated in Figure 1, below. It is understood through discussions with the Red Cross that one accessible minibus with capacity for 6 ambulatory and 3 wheelchair passengers is designated for service in Wasaga Beach; however other Red Cross fleet vehicles are available for use in Wasaga Beach, as needed. Additional information about the Red Cross service is provided in Section 4.6 Specialized Transit.

Town of Wasaga Beach Transit Study and Operations Review

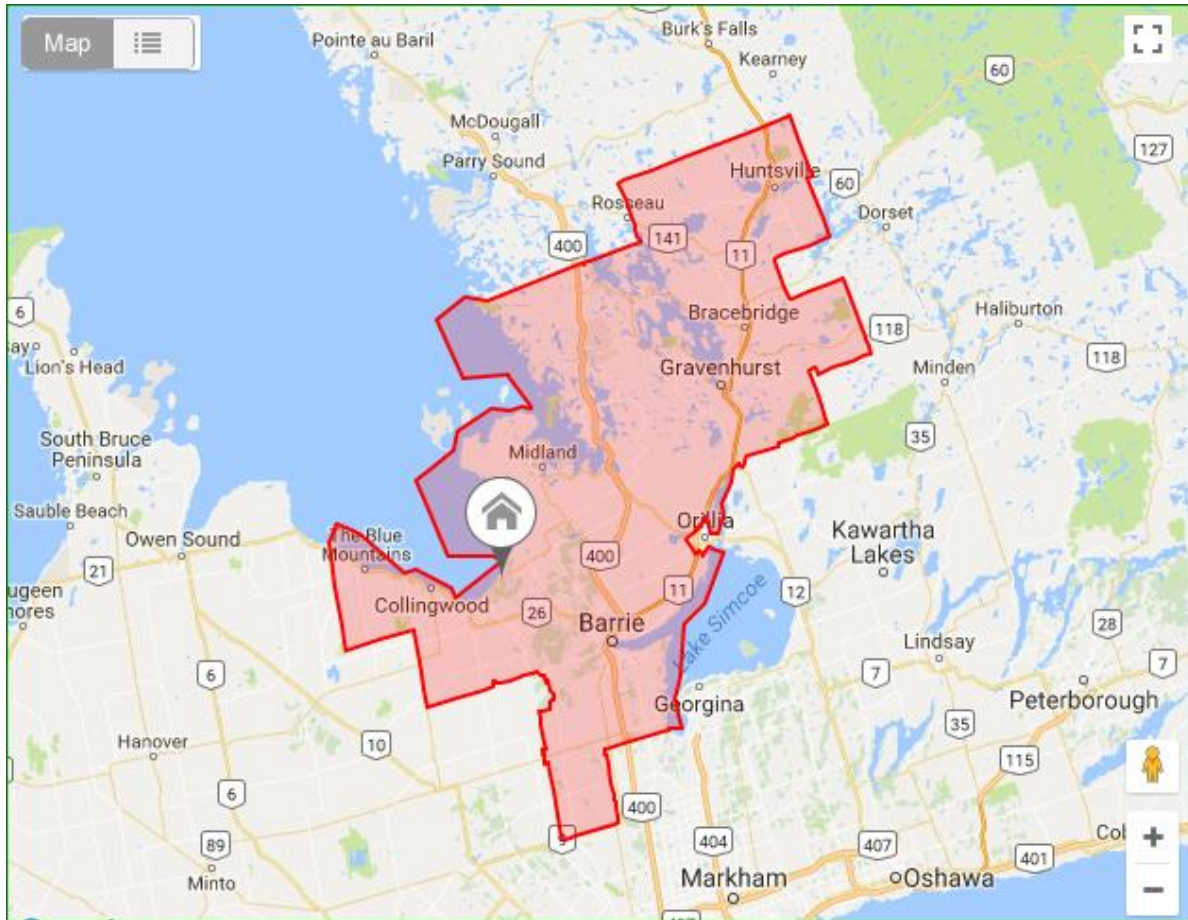


Figure 1 Red Cross Transportation Simcoe-Muskoka Service Area¹

The Red Cross Transportation service has been serving seniors and people with disabilities in Wasaga Beach since 2000. The Red Cross web site states: *“The Canadian Red Cross provides transportation service for those in need, such as elderly or disabled in the community, who are unable to use public transportation or private means. Our service keeps people connected in their community by providing affordable transportation to social gatherings, escorts to medical appointments or even for a shopping excursion. With a combination of cars and mid-sized vans, as well as accessible vehicles, we have the transportation service delivery and coordination expertise to meet your community’s transportation needs”*²

¹ Source: <https://www.caredove.com/canadianredcross>

² Source: <http://www.redcross.ca/in-your-community/ontario/nutrition-and-transportation/transportation/simcoe-muskoka-branch-transportation>

2. PHASE I: EVALUATION OF EXISTING TRANSIT ENVIRONMENT

The evaluation of the existing public transit environment consisted of four elements:

- A five-year report card to quantify how Wasaga Beach Transit has performed
- A peer review to see how Wasaga Beach Transit performs in comparison to other similar-sized municipalities.
- Consultations early in the study to help identify what works well and improvements that are considered desirable from the perspectives of a wide-range of stakeholders in informal focus group settings.
- An on-line and hard copy survey to enable the entire community to identify their perception of the services offered, gaps and opportunities, and to prioritize improvements.

2.1 Transit Report Card and Peer Review

The Canadian Urban Transit Association (CUTA) has kept records of individual transit systems and their performance across Canada since 1980 when transit systems began reporting data annually. The data is summarized in the Canadian Urban Transit Fact Book. This mature database has evolved over the years, is consistent, and is designed for industry professionals. The Ministry of Transportation of Ontario requires Ontario municipalities that apply for the 2-cent per litre dedicated gas tax funding to report similar statistics as a condition of funding. The Ontario database is managed by CUTA.

The data was analyzed for two purposes:

- To measure Wasaga Beach Transit performance over a 5-year 2011-2015* period
 - To compare key 2015 Wasaga Beach Transit performance metrics in relation to its peer group
- Note (*): At the time of writing and analysis, 2016 data was not available for the Peer Review ; however, having 2016 data would not impact the final study recommendations, which will be based on priorities established during the community engagement process.

In summary, Wasaga Beach Transit's performance has been exceptional over the 2011-2015 period in terms of transit ridership growth and transit system efficiency and, in comparison to its peer group, Wasaga Beach Transit stands out as a top tier performing transit system. Although Wasaga Beach Transit's effectiveness has improved and exceeds the peer group average, there is room to improve further by expanding service area coverage.

2.1.1 2011-2015 Wasaga Beach Transit Report Card

Table 2: 2011-2015 Wasaga Beach Transit data quantifies the performance over the five-year period.

Town of Wasaga Beach Transit Study and Operations Review

2011 to 2015 CUTA Statistics - Wasaga Beach Transit Report Card												
Year	Municipal Population	Ridership (revenue passengers)	Total Direct Operating Expense	Passenger Revenues	Revenue Vehicle Hours	Cost Efficiency (Cost per Hour)	Revenue Passengers per Revenue Hour	Revenue Vehicle Hours per Capita	Revenue Passengers per Capita	Net Investment per Capita	Adult Cash Fare	Average Fare
2011	17,537	43,634	\$523,553	\$70,305	9,956	\$52.59	4.38	0.57	2.49	\$17.75	\$2.00	\$1.61
2012	17,537	47,705	\$522,311	\$78,936	9,956	\$52.46	4.79	0.57	2.72	\$16.98	\$2.00	\$1.65
2013	17,537	76,446	\$532,464	\$98,732	10,340	\$51.50	7.39	0.59	4.36	\$18.48	\$2.00	\$1.29
2014	18,615	84,174	\$542,560	\$113,165	9,984	\$54.34	8.43	0.54	4.52	\$18.99	\$2.00	\$1.34
2015	18,615	72,553	\$552,491	\$126,976	9,984	\$55.34	7.27	0.54	3.90	\$15.12	\$2.00	\$1.75
% Change 2015 Vs 2011	6.1%	66.3%	5.5%	80.6%	0.3%	5.2%	66.0%	-5.3%	56.6%	-14.8%	0.0%	8.7%

Table 2: 2011 – 2015 Wasaga Beach Transit Report Card

2.1.2 2015 Wasaga Beach Transit Peer Review

Comparisons were made of the various operating, service performance and financial data with 10 other Ontario transit systems. Caution must be exercised when comparing peer review statistics since the peer review only provides a high-level assessment of transit service levels and costs in other comparable jurisdictions.

The criteria guiding the selection of peer review jurisdictions for comparison purposes with the Town of Wasaga Beach were Ontario municipalities with a similar service area population (10,000 to 20,000 residents served by transit). It should be noted that transit systems across Ontario can vary significantly due to factors such as:

- Local labour costs
- Municipally operated versus contracted services
- Climate and topography, local bus fare policies
- High school student transportation policies (yellow school bus versus public transit)
- Local financial commitment to transit

Ten (10) Ontario municipal jurisdictions were selected and the 2015 data illustrated in Table 3 below. Since transit operating environments can vary significantly, direct comparisons between one jurisdiction and another should not be made.

5 MTO Conventional Transit Fact Book Peer Review Statist													
Jurisdiction	Municipal Population	Service Area Population	Service Area Size (sq. km.)	Ridership (revenue passengers)	Total Direct Operating Expense	Revenue Vehicle Hours	Cost Efficiency (Cost per Hour)	Revenue Passengers per Revenue Hour	Revenue Vehicle Hours per Capita	Revenue Passengers per Capita	Net Investment per Capita	Adult Cash Fare	Average Fare
Wasaga Beach	18,615	18,615	59.7	72,553	\$552,491	9,984	\$55.34	7.27	0.54	3.90	\$15.12	\$2.00	\$1.75
Collingwood	43,231	19,000	27.1	137,690	\$757,237	11,641	\$59.38	7.26	0.61	7.26	\$22.76	\$2.00	\$1.37
Fort Erie	29,650	21,200	168.0	47,558	\$514,542	8,749	\$74.86	5.44	0.41	2.24	\$23.67	\$2.50	\$0.55
Kawartha Lakes	73,214	20,354	27.0	92,248	\$1,698,046	15,027	\$104.18	6.14	0.74	4.53	\$34.92	\$2.00	\$1.76
Huntsville	19,056	10,000	12.0	28,966	\$260,151	5,500	\$47.30	5.27	0.55	2.90	\$12.16	\$2.00	\$1.09
Midland	17,000	12,500	30.2	48,750	\$235,029	3,150	\$74.61	15.48	0.25	3.90	\$13.22	\$2.00	\$1.32
Port Colborne	18,600	18,600	40.2	26,417	\$296,517	2,520	\$78.51	10.48	0.14	1.42	\$8.14	\$2.75	\$2.18
Tecumseh	24,330	17,274	12.5	28,134	\$270,368	3,600	\$75.10	7.82	0.21	1.63	\$6.94	\$2.00	\$0.98
Leamington	30,000	20,000	11.6	22,200	\$216,635	3,612	\$59.98	6.15	0.18	1.11	\$4.77	\$2.00	\$1.21
Quinte West	43,086	19,500	35.0	54,997	\$547,403	11,186	\$46.54	4.92	0.57	2.82	\$5.64	\$2.00	\$1.21
Brockville	21,870	21,870	20.3	106,363	\$737,908	10,847	\$64.85	9.81	0.50	4.86	\$20.41	\$2.25	\$1.83
Average of Peer Group	32,004	18,030	38.4	59,332	\$553,384	7,583	\$68.53	7.88	0.42	3.27	\$15.26	\$2.15	\$1.35

Table 3: 2015 Wasaga Beach Transit Peer Review

2.2 Assessment of Wasaga Beach Transit Performance

2.2.1 Transit Ridership and Services Hours

As can be seen in Exhibits 1 and 2, while the amount of service provided in 2011 was similar to that in 2015 yet Wasaga Beach Transit ridership grew by a very impressive 66%. Based on the Town of Wasaga Beach 2016 data submission to the MTO during the study, Wasaga Beach Transit ridership was reported to grow to 79,459 passengers, which equates to a more impressive 82% growth in transit use since 2011.

It should be noted that the transit ridership statistics reported do not reflect Wasaga Beach passengers that board the C-Link bus.

The increase in service in 2013 then decrease in 2014 can be attributed to an eight-month pilot project, whereby a third route was established to serve the South-East end of the Town. This was discontinued due to low ridership; however, it would be considered further in this study since demand for service will be even greater as more people move to developments outside the current service area.

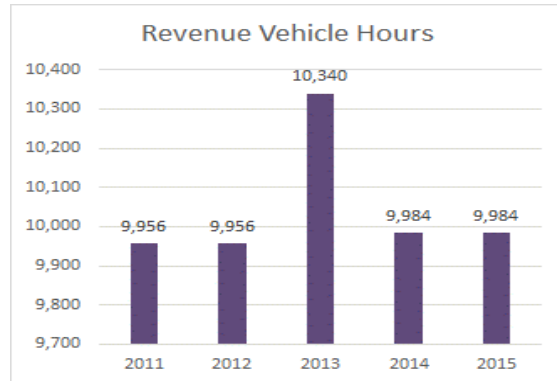
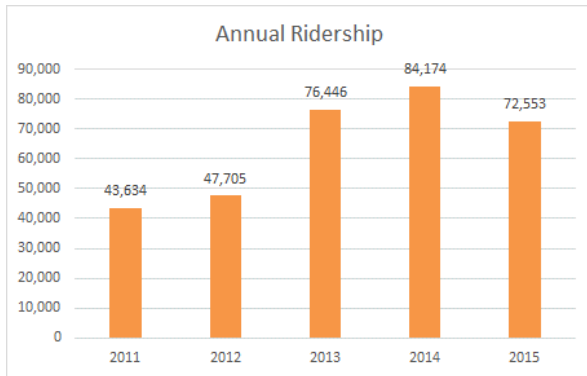


Exhibit 1: 2011-2015 Wasaga Beach Transit Ridership

Exhibit 2: 2011-2015 Wasaga Beach Transit Revenue Hours

To quantify the relative amount of service provided by the Town of Wasaga Beach, the Service Hours per Capita measure has been developed in the industry, which is simply the number of annual hours of revenue service divided by the service area population. These have been summarized in Exhibits 3 and 4.

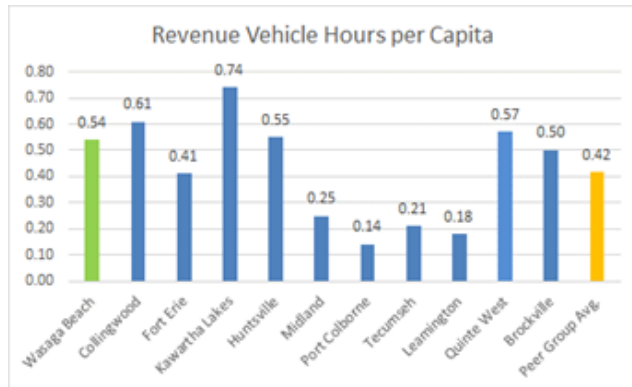
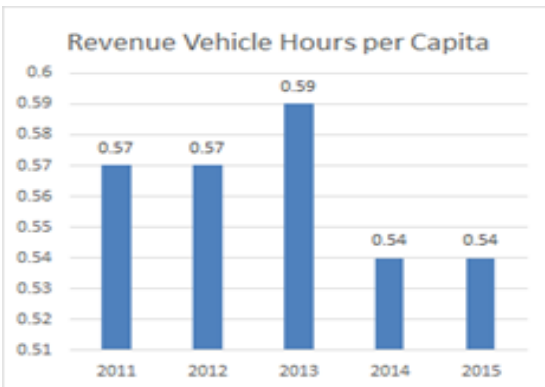


Exhibit 3: 2011-2015 Wasaga Beach Revenue Hours per Capita

Exhibit 4: 2015 Peer Group Revenue Hours per Capita

On a per capita basis, Wasaga Beach Transit service decreased by 5.3% service from 2011 to 2015. This can be explained by the population growth of 6.1% during the same period while the amount of transit service provided was relatively the same. In comparison to its peer group in 2015, Wasaga Beach Transit provided 28.6% more service hours per capita. Although this compares well, it should be remembered

that while service has been relatively constant, some residents are not served; this will be exasperated as new development occurs and people move to the community.

2.2.2 Wasaga Beach Transit Efficiency

Transit systems across Canada use the Passengers per Hour of service statistic as one measure to quantify transit efficiency and to help determine when to increase or modify service. Exhibit 5 and Exhibit 6 illustrate Wasaga Beach Transit’s efficiency from 2011 to 2015 and in comparison, to its peer group, respectively.

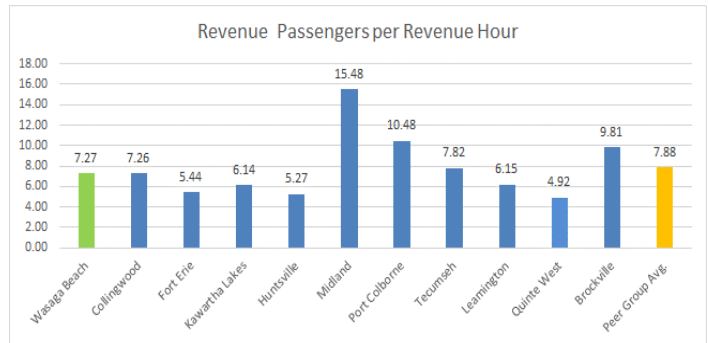
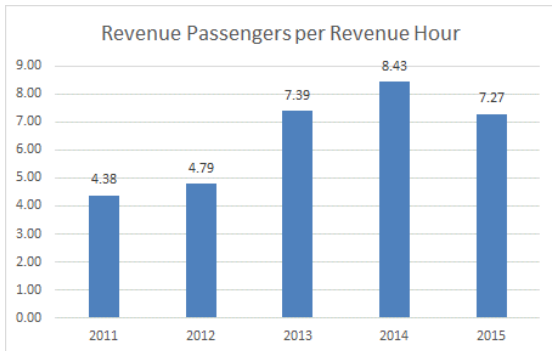


Exhibit 5: 2011-2015 Wasaga Beach Passengers per Hour

Exhibit 6: 2015 Peer Group Revenue Passengers per Hour

The 60% improvement in service efficiency from 2011 to 2015 during the time when the hours of service were relatively constant is impressive, although the 7.27 passengers carried per hour of service was slightly below the peer group norm; however, it is in line with the efficiency of Collingwood Transit. In the transit industry, it is normal to increase service hours to better meet community needs and during periods of expansion, the number of passengers per hour of service may drop off at first but it will eventually recover over time as demand increases.

2.2.3 Wasaga Beach Transit Service Effectiveness

A key measure of a transit system’s effectiveness is how many trips are taken annually based on the population served in a given year, which is expressed in the industry as Revenue Passengers per Capita. This is calculated using the total passengers carried in a given year divided by the service area population reported. If transit ridership growth exceeds population growth then service is deemed to be more effective and as such, transit becomes a more integral component of urban travel.

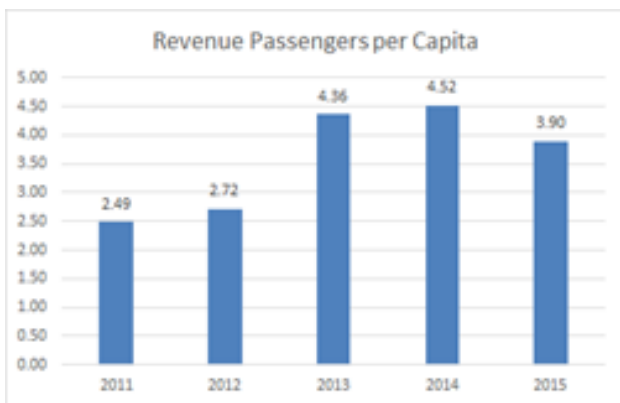


Exhibit 7: 2011-2015 Wasaga Beach Passengers Per capita

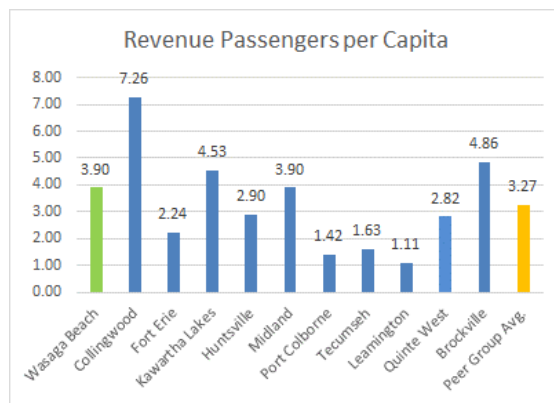


Exhibit 8: 2015 Peer Group Revenue Passengers per Capita

Exhibit 7 clearly shows that Wasaga Beach Transit’s effectiveness has improved by a very significant 56.6% from 2.49 revenue trips per capita in 2010 to 3.9 revenue trips per capita in 2015 and is slightly above the peer group average of 3.27 trips per capita. Although Wasaga Beach Transit effectiveness is shown to be below the 7.26 passengers per capita of Collingwood Transit, the population served is much less than that reported. In this regard, it should be noted that the 2015 Service Area Population – residents within 400 metres of bus service - reported by the Town of Wasaga Beach was identical to the Municipal Population (18,615), which is incorrect but still acceptable for funding reporting purposes.

During the study, Wasaga Beach staff correctly quantified the 2016 service area population at 11,560, representing 56% of the total municipal population of 20,675. Based on 56% of the population served (estimated at 10,242), the Revenue Passengers per Capita should be adjusted to 7.1 passengers; this is in line with Collingwood and almost double the peer group average reported at 3.27 passengers per capita in 2015.

2.2.4 Wasaga Beach Transit Financial Indicators

A key metric that transit systems use to track financial performance is the direct cost per hour of service. This can vary significantly between transit systems due to differences in operating environments. A more important comparison would be to look at individual transit system performance over time to identify trends while a peer group comparison provides an opportunity to determine whether or not a transit system is in line with the norm.



Exhibit 9: 2011-2015 Wasaga Beach Transit Cost per Hour

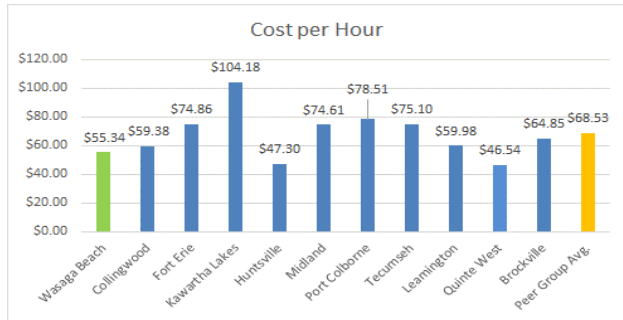


Exhibit 10: 2015 Peer Group Cost per Hour

Exhibit 9 illustrates that Wasaga Beach Transit’s hourly cost in 2011 was \$52.59 and only increased by 5.4% to \$55.34 in 2015, which is well below the cost of inflation over the five-year period. When compared to the peer group in Exhibit 10, Wasaga Beach Transit’s hourly cost is 19.2% below the average of \$68.53 in 2015. The peer group values range from a low of \$47.30 in Huntsville to a high of \$104.18 in Kawartha Lakes (Lindsay). Transit system wage rates, operating environments, topography, etc. can vary significantly across Ontario and as such, the hourly cost of service should not be compared directly with any individual transit system. Reasons that can be attributed to Wasaga Beach Transit’s relatively low costs are the private sector agreement in place with Sinton-Landmark and, from consultant observations, the low administrative overhead costs at the Town of Wasaga Beach.

Town of Wasaga Beach Transit Study and Operations Review



Exhibit 11: 2011-2015 Wasaga Beach Transit Average Fare



Exhibit 12: 2015 Peer Group Average Fare

The average fare paid by Wasaga Beach Transit passengers increased by 8.7% from \$1.61 in 2011 to \$1.75 in 2015, which is slightly above the 5.5% increase in transit costs. Given the 80.6% increase in the transit revenues received in 2015 versus 2011, the financial performance improved significantly. The increase in the average fare paid in 2015 over 2014 can be explained by the reduction in the Social Services (Ontario Works) pass program in 2015. It is interesting to note that Wasaga Beach Transit fares have not increased during the 2011 to 2015 period. In this regard, when considering the fare structure in the future, increases to off-set costs are more acceptable when service improvements are made. Best practices indicate that fare increases should at least keep pace with inflation.

A municipality’s commitment to transit is reflected by the quality of the transit service (e.g. service reliability) and the quantity of the transit service provided (e.g. hours of service per capita), which is dictated by the financial resources made available. The Net Cost per capita is a high-level measure of the local municipal investment that is calculated using net transit costs (total direct operating costs less all revenues) and dividing by the total population served.



Exhibit 13: 2011-2015 Wasaga Beach Transit Net Cost Per capita

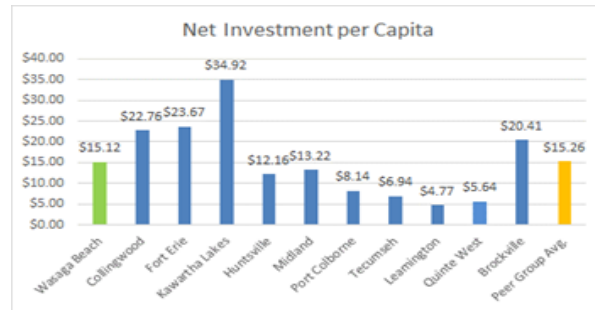


Exhibit 14: 2015 Peer Group Net Cost per Capita

Given the increased transit ridership and revenues and a relatively constant level of service, the net investment (cost) per capita has decreased significantly – by 15.8% in 2015 compared to 2011 in spite of the nominal 5.5% increase in annual budget over the 5-year period. In comparison, neighbouring Collingwood invested approximately 50% more per capita than the Town of Wasaga Beach.

2.2.5 Summary of Report Card and Peer Review

Based on the Report Card and Peer Review findings, the Town of Wasaga Beach has made significant progress from 2011 to 2015 in terms of its efficiency (66% increase in passengers carried for each hour of service provided) and effectiveness (56.6% increase in the number of transit trips taken on a per capita basis). Wasaga Beach Transit also stands out in its financial performance since 2011 and compared with its peer group average in 2015. Although the statistics show well, they do not necessarily mean things should not change.

2.3 Community Engagement

The Transit Consulting Network (TCN) initiated the first round of the study's community engagement process, which consisted of four components:

- Preliminary stakeholder consultations
- Public Information Centre (PIC) to launch the study and obtain preliminary comments
- Community-wide on-line and hard copy survey to obtain input from residents throughout the community whether or not they are transit customers
- Employer-based on-line survey

The purpose of the first round of consultations was to determine community-wide priorities at the outset of the study that would guide the development of route and service concepts that, when combined with industry best practices, would be short-listed and carried forward into a recommended route optimization and transit service plan.

2.3.1 Stakeholder Consultations

The stakeholder consultations consisted of informal roundtable meetings presenting all participants with an opportunity to be involved in very frank discussions, which would go a long way to successful study completion. Transit Consulting Network (TCN) provided an overview of the study and the desired study outcomes along with best practices in similar municipalities with transit systems across Ontario. This information provided the meeting participants with background relative to the role that transit can play to better enable them to provide meaningful input based on their own perspectives. The discussions enabled TCN to more fully understand community needs from a cross-section of interest groups.

TCN facilitated five (5) stakeholder meetings on July 26, 2017 and one on October 5, 2017:

- Municipal Staff Focus Group
- Bus Operator Group – Sinton Landmark and Bus Operators Focus Group
- Business Community Focus Group
- Taxi Operator
- Community Ride-alongs (July 27, October 5)
- Accessibility Advisory Committee (October 5, 2017)

The objective of the stakeholder meetings was to provide TCN with a preliminary understanding of community priorities from a wide range of perspectives. The meeting agendas were kept simple. Participants were provided with an overview of the objectives of the Transit Master Plan then invited to express their opinion on what services offered by Wasaga Beach Transit worked well and what areas needed improvement.

2.3.1.1 Transit Focus Groups

Highlight of the community engagement process revealed the following needs in a public transportation service plan:

- Need to expand service to newer (or planned) subdivisions such as:
 - along Golf Course Road in the east (i.e. Hometown of Parkbridge)
 - along Sunnidale Road south of Knox Road (future)
- Better accommodation of seniors even if service is minimal; seniors do not want to rely on friends and family to travel within Wasaga Beach
- Some respondents consider that transportation to and from seniors' residences and long-term care facilities could be improved, which would make people more independent
- Routes 1 and 2 should both connect with the C-Link bus at the same time
- Increased branding and awareness of Wasaga Beach Transit
- Better targeting of the tourist market
- Tourism market in the summer months, a trolley like the Saugeen Shores tourist trolley, between Port Elgin and Southampton.
- Increase the number of transit shelters
- Improved bus stop infrastructure and signage with posted schedules
- Buses need to accommodate scooters
- Ramps on buses are preferred over lifts
- Better accommodation of work shift times
- Reduce the amount of cash used to pay fares
- Mobile app for tracking buses and obtaining schedule information
- Later evening service on Sundays
- More timely bus stop snow clearing requested
- Lack of sidewalks connecting bus stops

2.3.1.2 Accessibility Advisory Committee Meeting

Transit Consulting Network (TCN) and Town of Wasaga Beach staff met with Accessibility Advisory Committee members at a regular meeting on October 5, 2017.

Among the points discussed were:

- Wasaga Beach Transit provides very good service with few complaints
- Wasaga Beach residents may be unaware of the accessible transportation options available to them
- Some people are under the impression that Red Cross will only transport people for medical purposes; however, discussion with Red Cross staff has clarified that there is no restriction on trip purpose, although priority is given to dialysis treatment trips.
- Some committee members suggested that a Dial-a-Ride service would be very useful for people with disabilities, particularly in the winter, when they cannot get to a bus stop, or when the bus stop is not accessible due to snow.
- Simcoe County has a strategy to link neighbouring communities by the combination of transit and Link services within the next 2 years
- Red Cross volunteer vehicles vary in their ease of use
- Wasaga Beach has no long-term care facility, therefore a resident whose spouse or relative is admitted to long term care in Collingwood or Stayner must travel there in order to visit
- Taxi fares are cost-prohibitive

- Some committee members stated that priorities for Wasaga Beach residents are being able to go shopping and having the ability to travel to Barrie

Conclusions

- Although Wasaga Beach Transit service is well-regarded by committee members, there seems to be lack of awareness or misunderstanding about who qualifies for Red Cross and whether trips can be accommodated purposes other than medical.
- Red Cross Transportation is a social services and home care support provider, and probably receives most of its clients by referrals, and does not seem to market its services proactively.
- It would be helpful if the Town publicized the availability of Red Cross service to seniors, care-givers and people with disabilities who cannot use Wasaga Beach Transit.

To complement the findings of the transit focus groups and separate meeting with the Accessibility Advisory Committee, a community-wide on-line survey was undertaken.

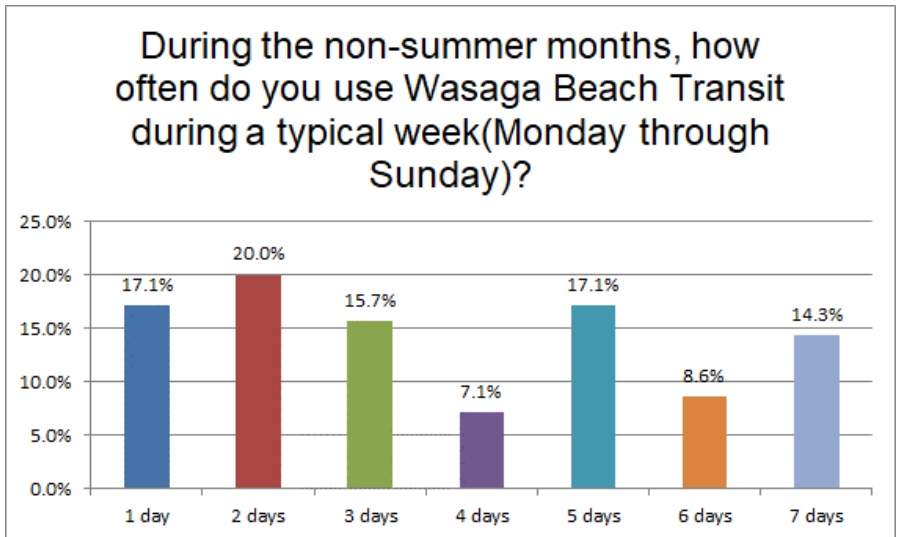
2.4 On-line Transit Survey

An on-line general public transit survey for both transit customers and on-transit customers was launched on August 14, 2017 and closed on September 15, 2017. There was a total of 229 respondents to the online and hard copy transit survey; this represents 1.2% of the total population of Wasaga Beach. To complement the survey, a separate employer survey was distributed to businesses on August 9, 2017 by transit staff with seven (7) companies participating.

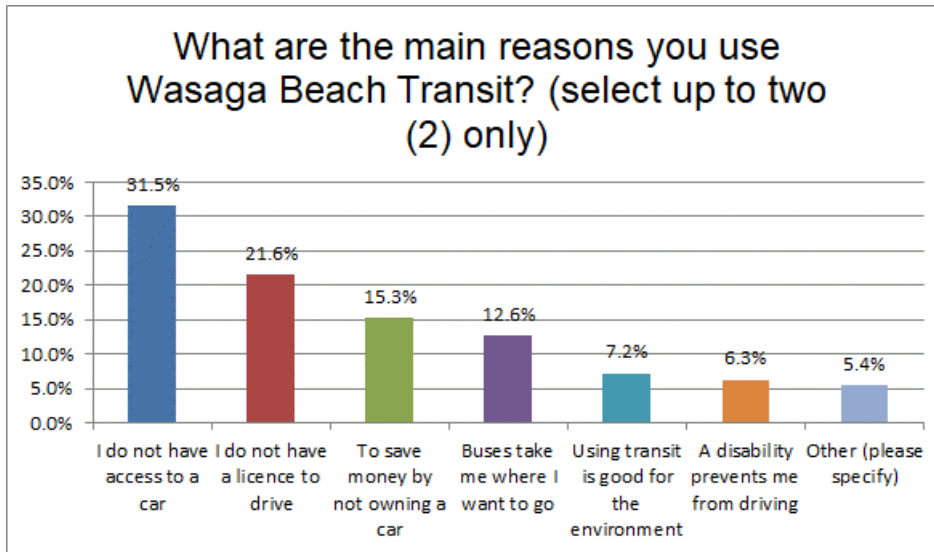
2.4.1.1 On-line Survey for Transit Customers

One-third responded that they used Wasaga Beach Transit within the last 3 months (considered transit customers) while two-thirds were considered to be non-transit customers. It is the non-transit resident that represents Wasaga Beach Transit’s relatively untapped and largest market potential.

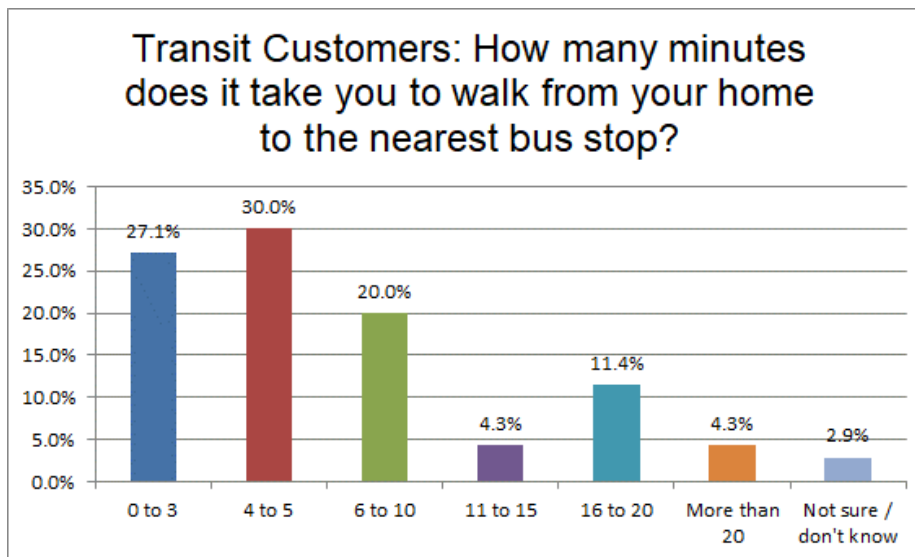
Although the on-line survey is not statistically significant, it does offer a snapshot of the total Wasaga Beach Transit market, which can then be compared to the information received during the previous community engagement consultations that were undertaken. Of the 70 transit customers that responded, 40% reported they used transit at least 5 days per week during the non-summer months.

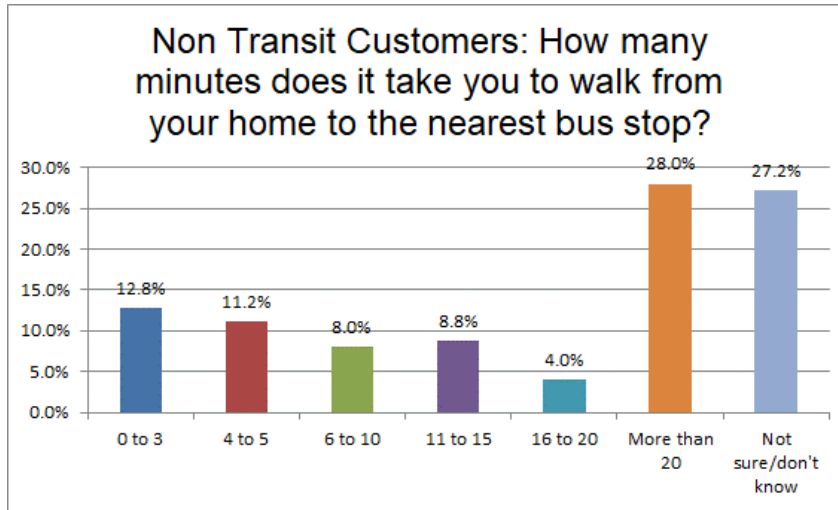


When asked why transit was taken, over 60% of the reasons given are related to being captive - no access to a vehicle, not having a license or being unable to drive. As the population ages, this is likely to increase since, at some point, we all will be unable to drive due to age-related challenges. What is considered significant is that 15.3% of the reasons given related to money being saved by not owning a car while 7.2% indicated environmental reasons; this is in line with the thinking of the emerging millennial generation; however, it also applies to the lower income cohort.



Of course, one of the most significant factors in determining whether or not one can or will use transit is the walk distance to the nearest bus stop. As a guide, transit bus stops should be within a 5-minute walk of 90% of residences, which equates to approximately 400 metres. Bearing in mind the 400-metre walk distance standard, the following responses are worth noting.

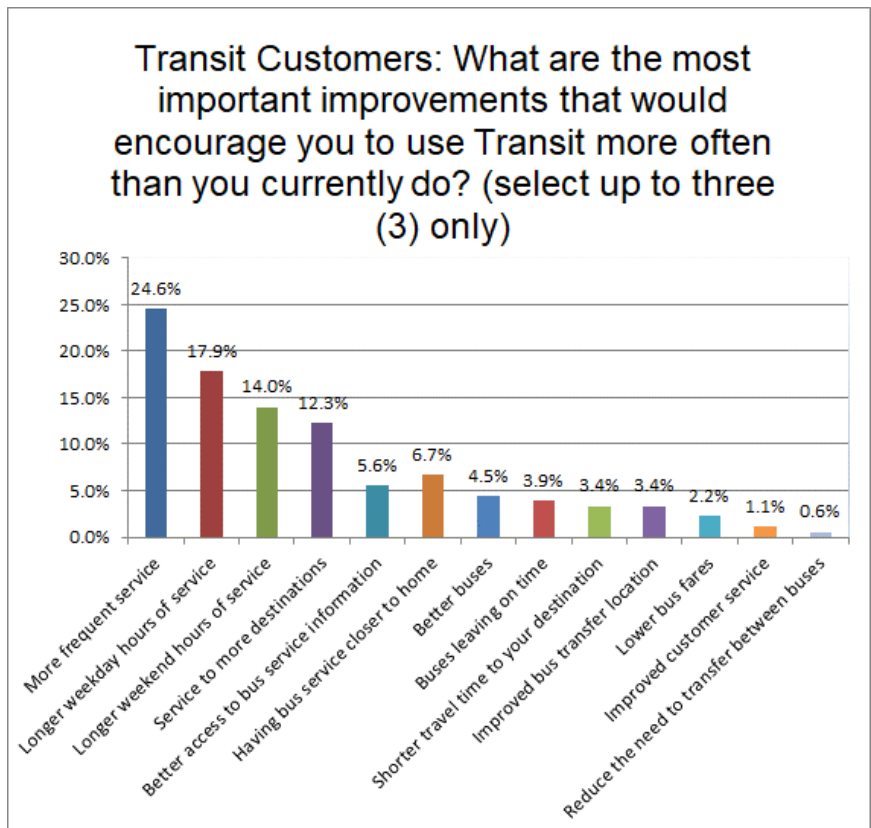




A significant number of transit customers (42.9%) reported they were beyond a 5-minute walk to a bus stop while 76% of the non-transit customers were beyond a 5-minute walk, the latter clearly indicating that there is a lack of transit coverage within the municipal boundaries of Wasaga Beach. Although the data is not statistically significant, the numbers provide a clear understanding of what needs to be overcome, namely, improving route coverage in order to build transit ridership. While reasonable access to transit is a priority based on industry best practices, transit customers are also sensitive to the need for other improvements, which they were able to select up to three when asked the question.

The breakdown of the improvement priorities from a transit customer perspective (up to 3 could be selected) would need to be addressed to the extent possible in the proposed route and schedule design. When listed in desired transit improvement priorities, transit customers listed more frequent service as the number one priority. Again, this in line with input received during the focus group meetings held before the survey. Longer weekday and weekend hours of service was the second and third most desired improvement.

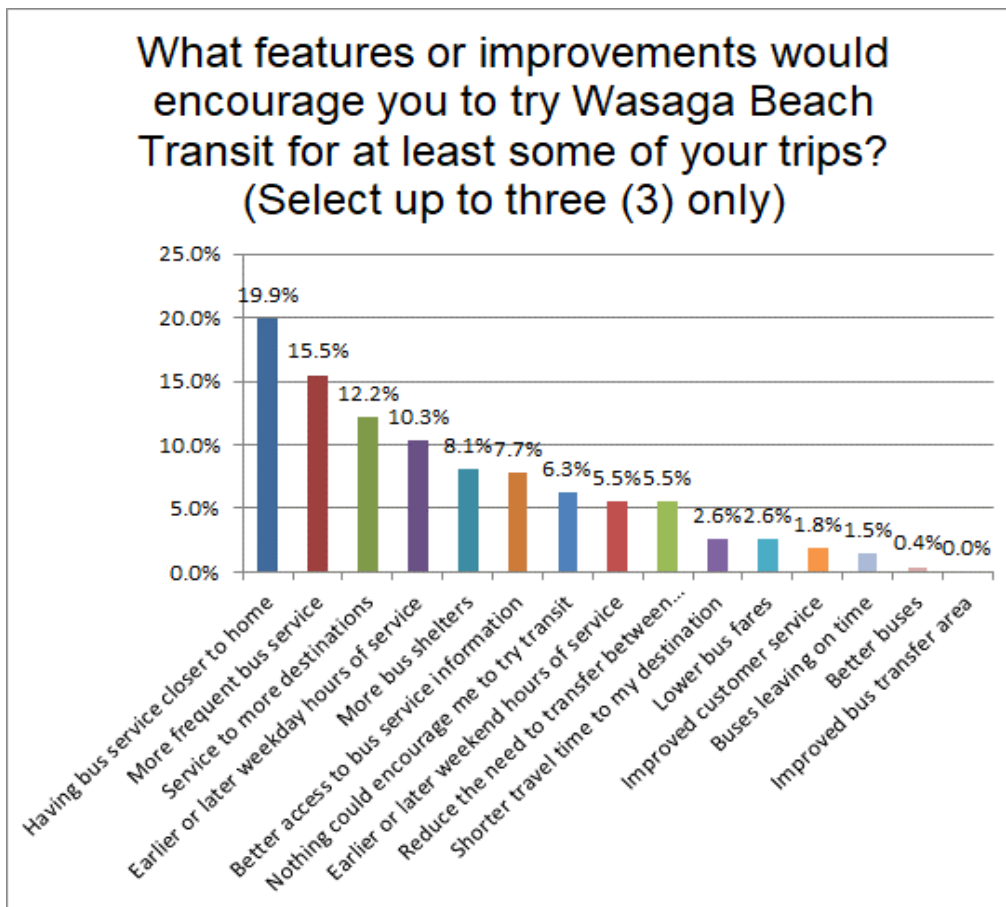
It is interesting to note that only 3.4% of the respondents rated shorter travel time as a priority, which indicates that the transit routes are fairly direct for current customers.



2.4.1.2 On-line Survey for Non-Transit Customers

Non-transit customers were asked for the top three improvements they would like to see that would encourage them to use transit at least some of the time. It is interesting to note that only 6.3% of the total responses given indicated transit would not be used, regardless of the improvements. This confirms that vast majority of the non-transit customer market may consider transit as an alternative to a private vehicle.

As expected, the top reason given was having transit closer to the respondents' homes since 76% reported they were beyond a 5-minute walk of a bus stop. More frequent service, better route coverage and increased hours of operation were the next three top improvements desired. It is interesting to note that the top five priorities selected for the non-transit customer for service improvement are in line with the priorities being sought by transit customers. What this indicates is that if improvements are made to Wasaga Beach Transit to address transit customer priorities, the improvements will likely attract new transit customers.



2.4.1.3 Community-wide on-line Comments

An open-ended question provided an opportunity for respondents to comment, namely, ‘Any other ideas on how we can make Wasaga Beach Transit better?’ Of the 215 respondents to the online transit survey, 60 respondents providing one or more comments about Wasaga Beach Transit services. The on-line survey comments complemented the feedback received during the consultation process.

The feedback received pointed to a need to expand the areas of operation to better serve workers and businesses, improve directness of travel, increase frequency of service, and improve bus travel times. The service improvement priorities sought by transit customers and non-transit customers were similar in most respects. The comments and suggestions were also passed onto Wasaga Beach Transit staff for review and consideration.

2.4.1.4 Summary of Community Engagement Input

In order to grow transit ridership and make transit more effective in the Town of Wasaga Beach, the community engagement process made it clear that more residents need to have access to affordable bus service to accommodate the latent demand that exists today. Transit coverage within the Town must be expanded and frequencies increased to encourage existing transit customers to use transit more often and, over time, attract new transit customers. In this regard, as transit improvement priorities are met, and the service is marketed appropriately, transit can continue to build on past successes.

Given the increase in the seniors’ population and recognizing that existing residential developments are beyond existing bus routes, the demand for increased coverage will only continue to grow. Many residents of all age groups want to be independent, they want to age in place, and they want to get around without having to rely on friends and family simply because taxis are cost-prohibitive. Ideally, adding a new route can go a long way to meeting needs; however, the eight-month 2013 pilot program that saw transit extended along Golf Course Road and Klondike Road was deemed cost-prohibitive and the service ended on November 1, 2013. Demand was considered far too low; however, the demand for service from residents has not changed.

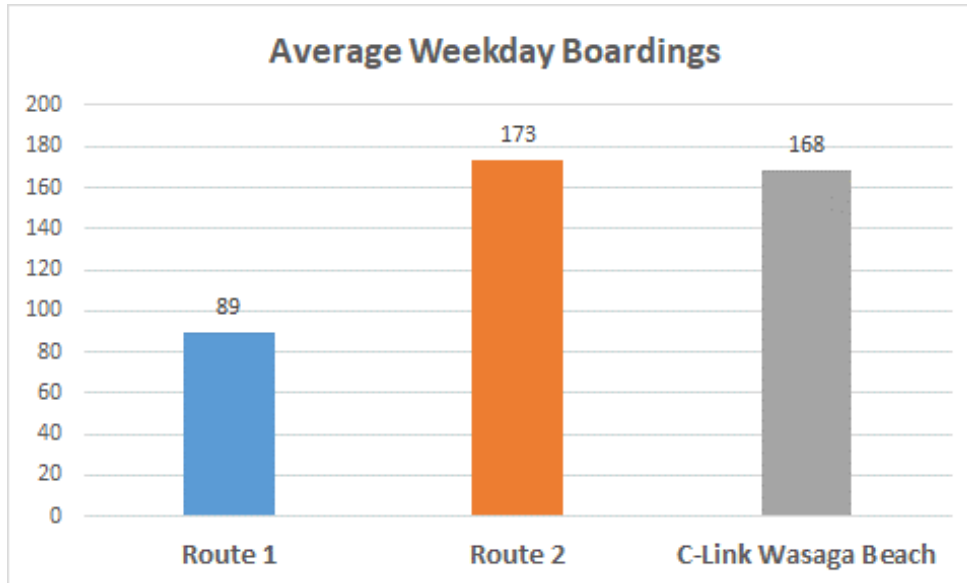
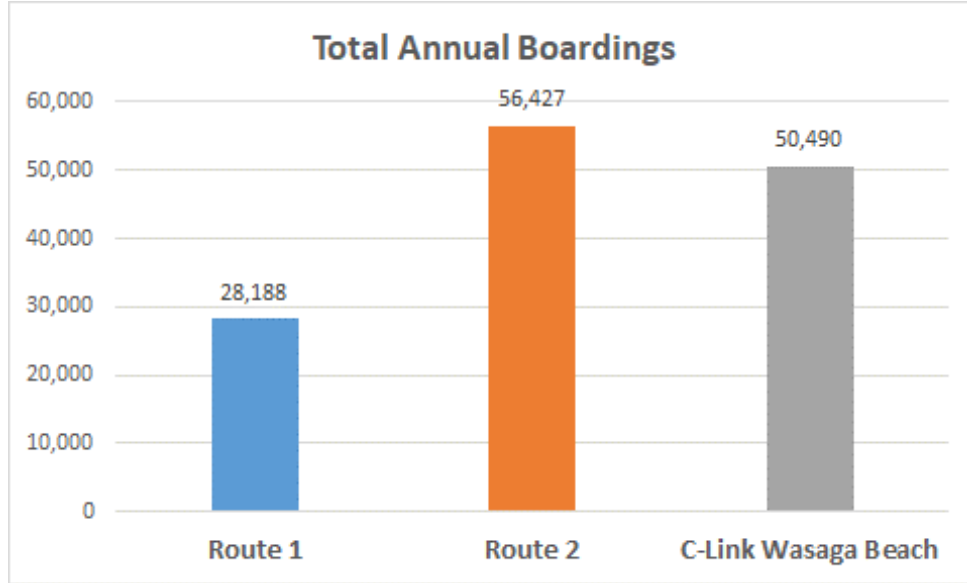
Increased development has taken place and, based on CUTA reporting statistics, the population has grown by 3,138 residents from 2013 to 2016 (18%). An interesting observation from the community engagement process was that the resident demand for transit in areas where there is no service was modest – they simply wanted service that would be sufficient to access goods and services a few times per week rather than all day being provided with all-day service.

Another reason the environment has changed since 2013 is AODA legislation, which now requires the Town to support a Specialized Transportation service for those unable to board Wasaga Beach Transit throughout the currently served and unserved areas of the Town. Fortunately, regular transit and Specialized Transportation services have become more integrated throughout Canada and as such, there is an opportunity to meet community priorities in a more cost-effective manner going forward.

2.5 Analysis of Existing Transit Services

2.5.1 Wasaga Beach Transit and the C- Link

Transit Consulting Network accessed the TransitFare & Systems smart card database to summarize monthly transit ridership statistics by route over the 12-month period December 2016 through November 2017.



Route 1 carried an average of 89 passengers per weekday, operates on a 90-minute cycle, and has a roundtrip length of 44.2 km at an average travel speed of 29.4 kph (kilometres per hour).

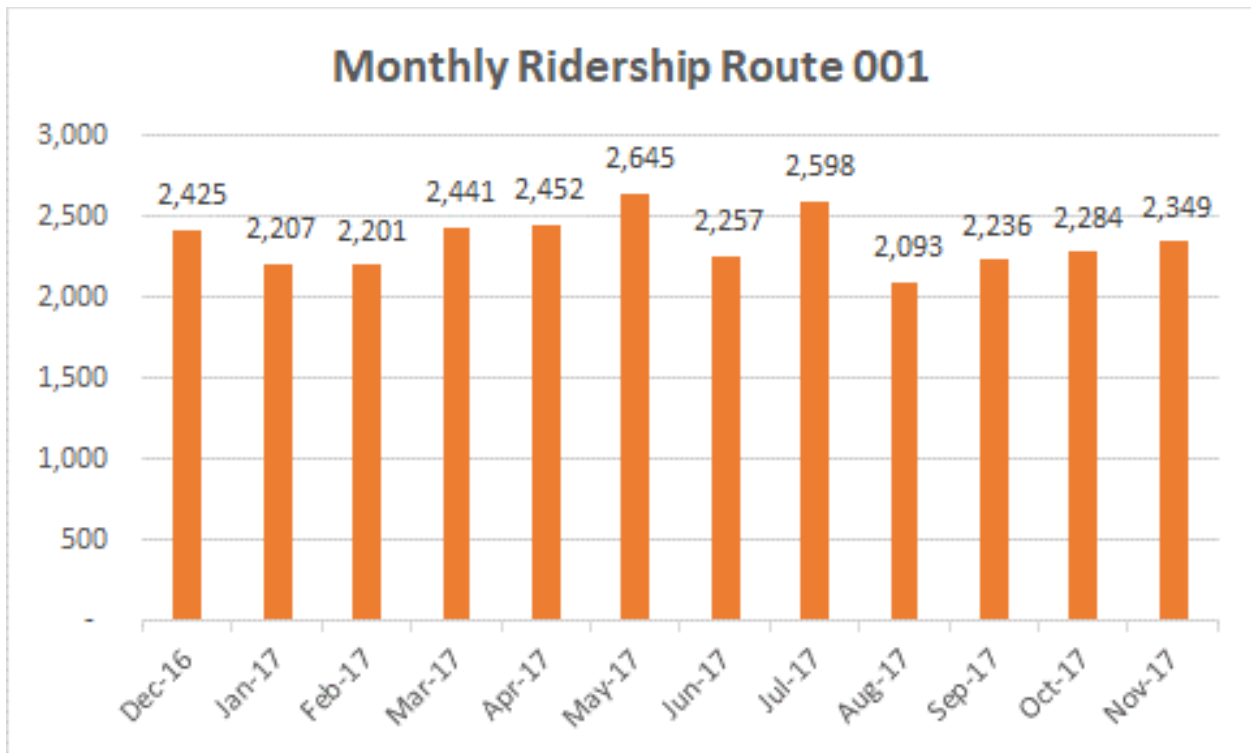
Route 2 carried an average of 173 passengers per weekday, operates on a 60-minute cycle, has a roundtrip length of 29.4km and also operates at an average travel speed of 29.4kph.

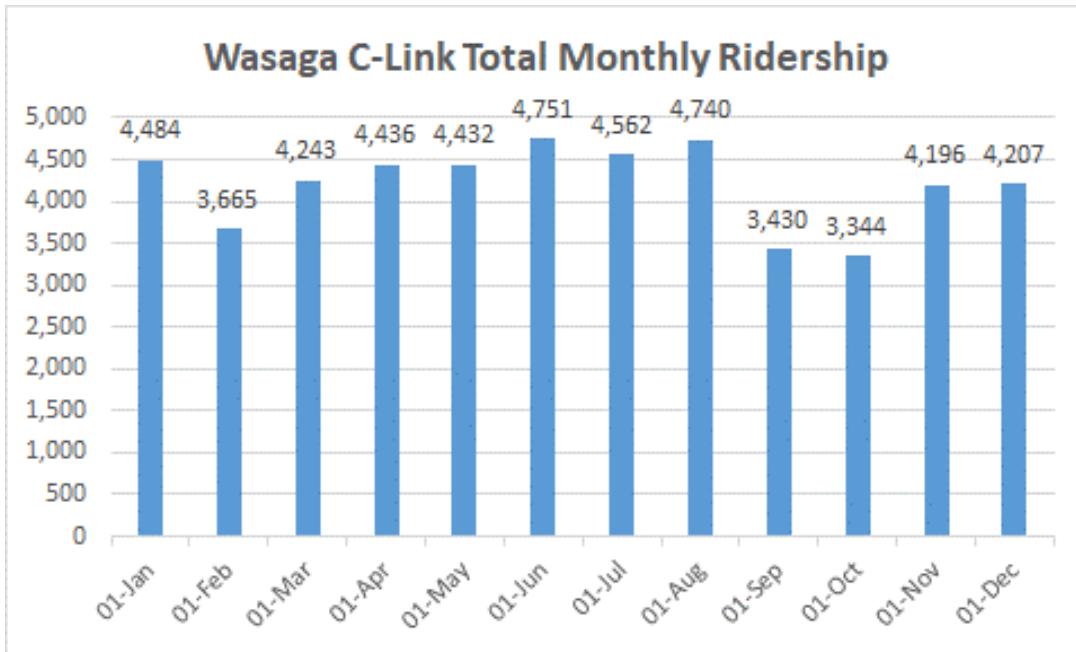
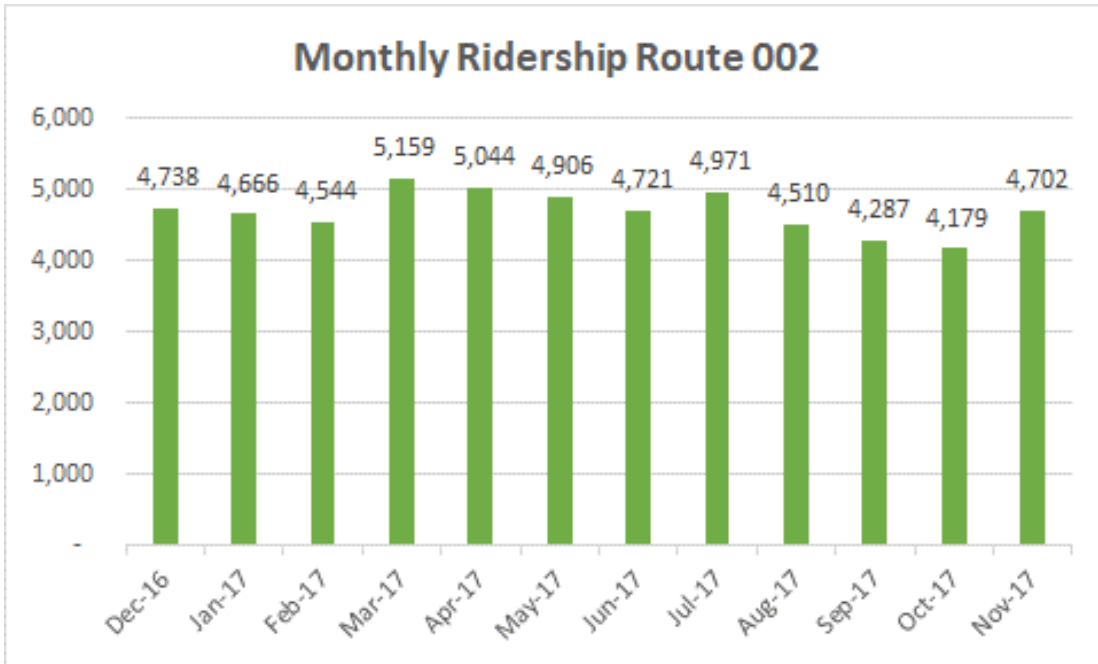
Further, should the route network be redesigned, the current average travel speeds of 29.4kph, which is considered excessive, should be reduced to approximately 22 to 25kph to maximize schedule reliability.

Route	Transit Ridership			
	Average Weekday	Average Saturday	Average Sunday	Annual
Route 1	89	70	54	28,188
Route 2	173	128	97	56,427
C-Link Wasaga Beach	168	124	64	50,490
Total	430	322	215	135,105

The Wasaga Beach portion of the C-Link between Fairgrounds Road and the Superstore at 45th Street has a roundtrip distance within Wasaga Beach of 11.8km. This portion of the C-Link attracted an average of 168 passengers per weekday and represents the highest concentration of boardings within Wasaga Beach, which can be attributed to travel to inter-municipal travel to Collingwood and Blue Mountain.

During the undertaking of this study, Transit Consulting Network’s detailed review of the fare collection data revealed that while the C- Link transit costs and revenues are split between Collingwood and Wasaga Beach, the transit ridership is allocated 100% to Collingwood.





Based on the November 2016 to December 2017 fare collection data, Wasaga Beach Transit Routes 1 and 2 carried 84,615 passengers while Wasaga Beach’s portion of the C- Link reported an additional 50,490 passengers for a total 135,105 passengers. It is not known what portion of the C- Link passengers are double counted for passengers that paid an additional fare when boarding on the C- Link and transferring to Routes 1 or 2.

Note: It is recommended that the Town of Wasaga Beach report all revenue passengers that board service within the Town’s boundary as Wasaga Beach Transit ridership. This will result in additional gas tax revenue for the Town. Further, the Town should also take advantage of the smart card technology in place to differentiate between revenue passengers (those that pay a fare upon boarding) and transferring passengers (those that transfer to another bus without paying an additional fare). The Town of Wasaga Beach should explore the ramifications with the Town of Collingwood.

2.5.2 Wasaga Beach Transit Coverage

The transit stop coverage illustrated below is currently based on a 500 metre ‘as the crow flies’ straight-line distance to a bus stop. It is suggested that the Town use a benchmark of a 400-metre ‘actual’ walk distance to a bus stop, which represents a 5-minute walk when designing future bus routes. In order to make transit travel more convenient for Wasaga Beach residents, it was determined that Wasaga Beach Transit and C-Link bus routes should be timed to connect at the existing Superstore transfer location to make transfers more convenient to Collingwood and Stayner.



2.5.3 Red Cross Specialized Transit

The Town does not currently have specialized transit but rather refers people who cannot use Wasaga Beach Transit because of a disability to Red Cross Transportation. The Red Cross service operates independently of the municipality, and presently receives no financial support from the Town of Wasaga Beach. The service is funded by the Ontario Ministry of Health through the North Simcoe Muskoka Local Health Integration Network (LHIN), by passenger fares, and by the Canadian Red Cross Society, which is a registered charity. (The Town of Wasaga Beach does not have a formal contract with Red Cross for Specialized Transportation service.)

To fully meet AODA, the specialized transit service will need to accommodate all ages, be available to operate the same hours as Wasaga Beach Transit and have identical fares as Wasaga Beach Transit for travel within the town and for travel to linked services such as the C-Link.

O. Reg. 191/11, the AODA Integrated Accessibility Standards regulations, provides that a municipality is not required to provide its own specialized transit service where a specialized transportation service provider operates within its jurisdiction.

Section	Summary of section	Applicable
45 (1), (2)	<p>Alternative accessible method of transportation</p> <p>45. (1) Except where not practicable to do so, a conventional transportation service provider that does not provide specialized transportation services shall ensure that any person with a disability who, because of his or her disability, is unable to use conventional transportation services is provided with an alternative accessible method of transportation. O. Reg. 191/11, s. 45 (1).</p> <p>(2) Subsection (1) does not apply where specialized transportation services are provided by a specialized transportation service provider in the same jurisdiction where the conventional transportation service provider provides transportation services. O. Reg. 191/11, s. 45 (2).</p>	January 1, 2013

Red Cross also operates a circuit route on Saturdays and statutory holidays that links Stayner, Creemore, Wasaga Beach, and Collingwood, and provides holiday light tours, flower tours, and other outings for nursing home residents and others on an as required basis throughout the year. Red Cross serves people with cognitive disabilities, including residents of the E3 Community Services and other group homes and day programs.

Currently, the 150 Wasaga Beach residents registered for Red Cross Transportation make about 3,500 one-way passenger trips per year, for medical, personal, and social purposes. Clients are invoiced for their rides. Drivers do not handle tickets or cash. People who are unable to afford the fares are able to apply to Red Cross Community Support Services for a subsidy. A one-way trip in Wasaga Beach costs \$3.50.

Red Cross Transportation operates the following hours of service:

- Monday through Friday from 6:30 am to 4:30 pm, with extended hours available on request, until as late as 10:30 p.m. based on passenger need.
- Saturdays for dialysis and medical trips only
- No scheduled service on Sundays

The Red Cross fare for trips within Wasaga Beach is \$3.50 one-way. Trips up to 15 km outside Wasaga Beach are \$5.60 one-way, \$11.20 round-trip. Trips from 16 to 30 km are \$8.50 one-way, \$17.00 round-trip. Longer trips, such as to Toronto are also provided. Fares are distance-based, using a 7-step rate scale depending on trip length.

AODA Compliance

As a specialized transportation provider, the Red Cross is accountable under the AODA for the general compliance of its service with the requirements of O. Reg. 191/11, (the Integrated Accessibility Standards Regulations) in matters such as driver training and accessible equipment features.

Although Red Cross serves residents of the Town of Wasaga Beach, the Town, as the provider of a conventional transit service, should work with the Red Cross to address issues such as parity of fares and hours and days of service between Red Cross and Wasaga Beach Transit, both to maintain equity for Town residents with disabilities, and to ensure compliance with AODA regulations.

It is interesting to note that Red Cross provides service to all areas of Wasaga Beach while Wasaga Beach Transit only covers an estimated 56% of the population (those within 400 metres of bus service).

Conclusions

AODA compliance

- Red Cross Transportation serves Wasaga Beach residents who are unable to use Wasaga Beach Transit due to a disability
- As a regional service, Red Cross facilitates travel throughout North Simcoe
- The regional mandate of Red Cross Transportation complies with the AODA requirement to “facilitate connections between [adjacent] services”³
- Red Cross is responsible for complying with the general requirements of the AODA
- The Town is responsible for compliance with strictly local requirements such as parity in fares and service hours between Wasaga Beach Transit and Red Cross Transportation and should work with Red Cross to achieve this.

Opportunities and Recommendations

Section 4.6.2 of this report, Preferred Option: Red Cross Specialized Transportation, provides the rationale and recommendations for improving Red Cross Transportation and enabling the Town of Wasaga Beach to achieve compliance with AODA requirements. Also addressed are alternatives in Section 4.6.3 Complementary Specialized Transit Options designed to attain AODA compliance.

³ Source: O. Reg. 191/11, s. 69 (1), Co-ordinated service

3. PHASE II: RIDERSHIP GROWTH PLAN

Study Phase I: Assessment of Existing Transit Environment incorporates findings from two perspectives – that of the community and that of what the ‘numbers’ are saying. This next phase is critical and is what the Transit study is all about. Expanding route coverage within the Town of Wasaga Beach while increasing the annual transit service hours is an obvious transit ridership growth strategy. Working closely with the municipality, a made in the Town of Wasaga Beach transit policy framework that incorporates best practices for small municipalities was developed. This, in turn, sets the stage for the development of a transit ridership growth strategy.

The following addresses specific strategies to maximize the effectiveness of the service expansion.

3.1 Transit Policy Framework

Transit policy drives the decision-making process by providing transit management and political decision-makers with the tools needed to support service recommendations and to maximize transit growth opportunities while maintaining cost effectiveness. Setting policies early also drives the planning process and clarifies, for example, whether service changes should be designed to expand the system and target new riders, or whether existing funding levels should be reallocated to better serve existing customers. It is important to ensure that the policies reflected input from all stakeholders, including non-transit users.

The policy framework consists of:

- **Goals and Objectives** provide general policy direction for the community
- **Transit Service Design Guidelines** to assist in determining where service will be provided, when service will be provided, and how it will be provided.

3.1.1 Goals and Objectives

Through the consensus-building process that the consultant team advocated throughout the study, TCN developed a number of goals and objectives based on the draft transit vision and mission statements recommended by the TCN.

Transit Vision Statement

The preferred future of public transportation in the Town of Wasaga Beach:

“The Town of Wasaga Beach will provide a fully accessible public transit system that is supported by existing and future residents, tourists and the business community, and supports an improved quality of life”.

Transit Mission Statement

The purpose of Wasaga Beach Transit:

“To provide safe, reliable, efficient, and customer-friendly public transit service that supports the economic vitality, growth, and health of the community.”

To support the transit vision, a number of goals and objectives were developed.

Service Goals

To provide a public transportation system as a viable alternative to the private vehicles in the Town of Wasaga Beach

- Improve the quality of life of residents who do not have access to a private vehicle
- Meet the travel demand generated by various target markets in the employment, commercial, medical, and service industries

Performance Goals

Transit performance targets have been established 5 years after proposed improvements take place as scheduled and as a method to support continuous improvement principles:

- Effectiveness: To increase transit use by 53 percent – from 3.9 to 6.0 trips per capita by 2024 (based on total population)
- Efficiency:
 - To increase service utilization, use by 37 percent from 7.3 to 10 passengers per hour by 2024
 - To attain 95% schedule adherence defined as buses being zero minutes early and no more than five minutes late all bus stops

The performance targets identified can be adjusted, as required, and are designed to be slightly out of reach to ensure continuous improvement is sought; this helps to ensure ridership growth initiatives are balanced with fiscal responsibility.

Service Objective

The minimum frequency of service and span of service provided shall be adequate to meet the various target markets within the community.

3.1.2 Transit Service Design Guidelines

Since 1980, municipalities have embraced various iterations of transit supportive land use policies and guidelines to address urban sprawl, support route design principles to maximize directness of travel, and service standards to balance community needs with local affordability.

3.1.2.1 Transit Service Standards

The goals and objectives provide general policy direction for the Town to follow with respect to the provision of Transit service. Transit service standards are needed to guide Wasaga Beach in determining when transit service will be provided, how often it will be provided and how it will be provided through:

- A framework for making rational decisions on the level and quality of service in the community
- Increased public awareness of the role that Transit plays today and in the future,
- A strong commitment by Council to maintain service standards within the context of balancing social and environmental objectives with fiscal responsibility
- A high degree of acceptance by Council and taxpayers for Transit expenditures since the decision-making process will be perceived as fair

3.1.2.2 Transit Service Level Policies

Recognizing fiscal restraint and the need for an expanded and sustainable public transportation system, there must be a balance between providing a desirable high level of service and affordability. The service level policies have been designed, within reason, to enable residents that are captive to transit to expect a minimum level of service. In this regard, the transit service levels are designed to enable all Wasaga Beach transit customers to board the first C-Link bus in the morning (6:30 a.m. departure from Superstore) and to return home for local retail centres employees and customers by connecting with the C-Link bus arriving at the Superstore transfer location at 9:30pm.

The existing service levels and hours of operation are summarized in Table 4: Proposed Transit Service Levels in the short-term (1 to 3 years) and medium term (4 to 6 years).

Hours of Operation	Weekday	Saturday	Sunday
Existing Service	60-minute frequency 7:00am – 9:00pm	60-minute frequency 7:00am – 9:00pm	60-minute frequency 7:00am – 7:00pm
Proposed Service	60-minute frequency 6:00 am – 10:00pm (adds 2 hours per day)	60-minute frequency 6:00am – 10:00pm (adds 2 hours per day)	60-minute frequency 6:00am – 10:00pm (adds 4 hours per day)

Table 4: Proposed Transit Service Levels

It should be noted that the proposed hours of operation are subject to change given recent discussions between Wasaga Beach, Collingwood and Blue Mountain relative to better addressing later evening travel requirements.

3.1.2.3 Service Reliability

It is reasonable to expect buses to be reliable, that is, buses must be on time at all publicly scheduled time points. ‘On time’ should be defined as buses never being early at a scheduled time point (zero minutes early) and not being more than 5 minutes late to allow for unforeseen delays. In order to maintain service reliability and maximize transit efficiencies, bus schedules must reflect what is actually happening on the street and as such, scheduled times may vary by time of day and by season.

Bus operators should travel their designated route in the quickest and safest travel time possible. This would ensure bus operators never arrive early along the route and are not late more than a few minutes. If this results in much earlier arrivals at a terminal/ transfer point, this is considered acceptable. By following this practice, schedules along the route would be consistent and layover (recovery) times that take place would be maximized.

3.1.2.4 Land Use Planning and Transit

Arterial transit routes offer a more attractive service because they are more direct and cost-effective than transit routes along slower internal collector roads and residential streets. However, transit service along collector roads or local streets is necessary in many cases since arterial roads are often limited or spaced too far apart to accommodate acceptable transit walk distance requirements. When designing for new residential developments, maximum transit route coverage at minimal cost must be viewed as a priority, not unlike other services the Town provides.

Following the development of community master plans are two planning phases that should address public transit needs – the Secondary Plan and the Draft Plan of Subdivision as summarized in the following:

- Determine basic location and orientation of transit routes
- Determine a street system and walkway layout, which attempts to accommodate efficient transit service along the arterial and collector road system
- Determine location of activity centres (schools, shopping facilities and medium to high density residential areas) along transit routes
- Determination of mobility hubs and transfer facilities to maximize integration of modes and reduce overall transit travel times
- Co-ordinate location of bus stops with design of intersections and walkways in order to minimize walk distances, provide for reasonable bus stop spacing, and provide for safe pedestrian routes; and
- Locating walkways which would serve as many purposes as possible (i.e. access to bus stops, schools, shopping, parks, and trail links)

When developing bus routes, best practices are applied to route design, walk distances to bus stops, the locating of bus stops, and bus stop accessibility.

3.1.3 Acceptable Transit Route Design

There are various ways of arranging transit routes to provide service. Best practices have been introduced relative to route design principles that provide for:

- Reasonable walk distances to bus service for residents
- Directness of travel by bus
- Safe travel speeds and reliable schedules

The guidelines can be applied when re-designing bus routes and used for land use planning purposes to help ensure transit requirements are being met during periods of urban growth. Applying the guidelines consistently provides transparency and objectivity when determining where bus routes will be placed.

3.1.3.1 Transit Travelways

Transit routes should be provided along arterial and collector roads, which have reasonable through access rather than on crescents or cul-de-sacs to the extent possible. A 9.0 metre pavement width is the preferred for transit routes. Exceptions can be made where no reasonable alternative is available to provide for acceptable walk distances to residential dwellings and businesses.

3.1.3.2 One-way Transit Loops

Provision should be made to minimize the length of one-way transit loops to no more than 2.0 kilometres. One-way transit routes provide for transit service on one side of the street only and will typically be found in residential areas to minimize vehicle requirements and where two-way service may not be warranted.

3.1.3.3 Bus Route Design Speeds

Safe travel speeds are needed to ensure buses can maintain their schedule and be designed such that people can get from point A to point B in the quickest and safest manner possible. An average design travel speed of approximately 18-22kph should be in place in urban environments. Wasaga Beach Transit's average travel speed was reported at 24.22 kph in 2015. Given the input received by bus operators during the consultation process, the average travel speeds should be reduced in order to maximize schedule adherence

3.1.3.4 Bus Route Lengths and Population Density

Road layouts in residential developments should be designed such that transit routes require a minimum 1,000 residents served per 1.0 kilometre of transit route. The Town of Wasaga Beach has approximately 34 km of roads that are covered by transit. Based on the current service area population reported by Town of Wasaga Beach staff, the service area population is estimated at 11,560 residents. This equates to 340 residents per 1.0 kilometre of bus route. The low density can be attributed to the additional bus travelway distances that are needed due to waterway and parkland barriers within the Town.

3.1.3.5 Walk Distance to Bus Stops

A guideline used to help design or redesign bus services is ensuring there is a reasonable walk distance to bus service as follows:

- 90% of dwelling units should be within a 400 metre walk distance of an existing or future bus stop.
- 70% of dwelling units should be within a 300 metre walk distance of a bus stop.
- All multiple housing units should be within a 300 metre walk distance of an existing or future bus stop.
- Special needs housing, high density employment, shopping, medical, and institutional development should be within a 150 metre walk distance of a bus stop.

The 400-metre walk distance standard is considered a realistic goal that equates to less than a 5-minute walk time to a bus stop for most people (walking 4 kph). If a more stringent standard than 400 metres is chosen, this may result in improved coverage being required in existing residential areas but at a higher cost. Under most circumstances, residents of multiple housing units tend to be more captive as transit customers and should be located close to transit service.

3.1.3.6 Bus Stop Locations and Design

Once bus routes are designed or existing routes modified, the following strategies should be applied to bus stop locations and bus stop design:

- **The location of bus stops should be coordinated with the design of walkways, intersections and development in order to minimize walk distances and provide for reasonable bus stop spacing.**

Ideally, bus stops should be located at walkways and intersections as well as being in proximity to high density residential complexes and major shopping facilities in order to minimize walk distances for most people. Other factors used to determine bus stop locations and reasonable spacing are demand, road type, pedestrian safety, and public requests.

- **In existing commercial and future industrial areas, sidewalks should be provided along at least one side of the roadway.**

Industrial areas are considered to be ‘hostile’ environments due to higher volumes of truck traffic; however, it is important that employees are provided with safe pedestrian access from bus stops to their places of employment, particularly during winter weather conditions. Walkways, for the purpose of transit connections, must be constructed out of a material which can be maintained year-round. Responsibility for the maintenance of these walkways must be allocated to the appropriate department.

- **Bus stops and bus stop amenities should meet Accessibility for Ontarians Disability Act (AODA) requirements.**

Meeting AODA requirements will better enable some customers to use Wasaga Beach Transit for at least some of their trips.

Transit Consulting Network reviewed the Town of Wasaga Beach Bus Stop Design Guidelines dated January 2014, which provide a set of suggested design criteria that should be considered when designing and placing transit infrastructure. It is recommended that Sub-section 2.3.3 Design Factors increase bus stop landing pad lengths to accommodate a larger vehicle with a separate rear door for alighting. This will ensure that future landing pads do not require reconstruction at a higher cost than adding to the length of newly constructed bus stop pads. Accommodation be provided for transit buses that are 12.2 metres in length.



Exhibit 15: Bus Stop Landing Pad for 12.2 Metre bus

3.1.3.7 Trade-offs

Since the types of residential community design varies significantly from high density apartment complexes to low density estate type development, all design objectives may not be met in all cases. Trade-offs may be necessary from time to time in view of other design considerations. In order to provide some flexibility in the guidelines, the following recommendations should also be considered:

- That land use/transit coordination is a necessary and valuable goal recognizing that, in the implementation of the transit service design guidelines, trade-offs may exist in some instances with other planning, engineering and environmental considerations.
- That secondary plans and draft plans of subdivisions recommended by staff shall reflect efforts used in trying to achieve the transit guidelines stated herein.
- The Town of Wasaga Beach should initially inform the development industry of the proposed guidelines as set out in this report. It is suggested that the Planning and Development Department in conjunction with Public Works staff be responsible for informing developers and their representatives on an ongoing basis.

The key factor is that at the outset of community design, it is known whether or not the design guidelines have been met with every effort made to attain them. It is likely that existing and planned subdivisions which do not meet all of the guidelines would receive a lower level of transit service (e.g. peak period only) than more transit-oriented subdivisions which meet or exceed the design objectives.

3.1.4 Expanding the Client Base

With an expanded transit system and increased hours of operation, Wasaga Beach Transit would be in a better position to target specific markets, which are discussed below.

3.1.4.1 Better Accommodating Employee Shifts

The current weekday service hours, which begin at 7:00am and end at approximately 9:00pm do meet many shift times; however, there remains to be unmet needs particularly for the retail sector where shift completion times are after 9:00pm. In addition, there are long distances to travel when Wasaga Beach residents need to access jobs, goods and services within Wasaga Beach and Collingwood/ Blue Mountain. The Town of Wasaga Beach should eventually provide longer service hours to accommodate later shifts and while doing so, enable all businesses to meet the needs of their customers for shopping and other trip purposes. It is suggested that the Town of Wasaga Beach work closely with both the business community and Collingwood Transit to quantify unmet needs and develop low-cost solutions such as those discussed in Section 3.3 Route and Service Alternatives.

3.1.4.2 Seniors – the ‘Grey’ Market

Seniors are a growing segment of the population that will place further demands on the Town for accessible transportation since, at some point, none of us will be able to drive or walk to the nearest bus stop yet would not qualify for Specialized Transportation (i.e. Red Cross). This ‘grey’ market – individuals that do not qualify for specialized transit but are unable to walk to their nearest bus stop - will continue to challenge Councillors to meet resident needs. What is interesting from the stakeholder engagement process; however, is that these residents are not demanding full service; their demands are modest for the most part. The ability to access infrequent medical appointments, go shopping or even socialize (a health benefit), can make a significant difference to their quality of life even if service is provided a few times a day and a few days a week.

3.1.4.3 Simcoe County Transit Initiatives

The 2016 Simcoe County Transit study addressed the connectivity of transit systems throughout Simcoe County (e.g. Barrie) with connections in the south to York Region and northerly to the Muskoka Region. The market for transit would expand to accommodate those travelling beyond their municipal borders and do so seamlessly through service and potential fare integration. The Township of Clearview service connecting Stayner to Wasaga Beach is one example of transit integration. It would, therefore, be prudent that the Town of Wasaga Beach plan for the inevitable connection to other transit systems and build on the C- Link initiative where service was integrated with Collingwood Transit.

3.1.4.4 Tourist Market

Wasaga Beach, Collingwood and Blue Mountain are year-round tourist destinations and as such, travel on Sundays and Statuary holidays is common. Although Wasaga Beach offers service on statutory holidays, the C-Link does not. Adding statutory holiday service to the C-Link would enable local residents, tourist industry employees and residents with access to tourist events that take place.

3.1.5 Timed Transfers Between Bus Routes

Wasaga Beach Transit Route 1 and Route 2 and buses connect at:

- Stonebridge Town Centre
- Riverbend Plaza
- Sunnidale Road
- Mosley Street between Riverbend Plaza and Sunnidale Road
- Ramblewood Medical Centre
- Superstore Area (to transfer between the C- Link to Collingwood and Stayner-Wasaga Beach buses)

Given the 90-minute service frequency on Route 1, connections with the Route 2 hourly service and the C- Link cannot be accommodated for every trip, which was a concern expressed during the community engagement process. Some passengers will need to wait for extended periods of time to transfer, which can be avoided if both Routes 1 and 2 were on the same service frequency. Ensuring transfers can be accommodated within a few minutes will go a long way to reducing the time people are travelling by bus that, in turn, will help increase transit use.

3.1.6 Transit Technology

3.1.6.1 Enhanced Use of Existing Smart Card Technology

The passive GPS smart card system employed by Wasaga Beach Transit provides a wealth of information relative to passenger and revenue counting, and the automated next-stop announcements, which are required under AODA. The technology's capabilities – provided by TransitFare & Systems – should be expanded to report on bus schedule adherence. The information would provide Wasaga Beach staff with the information needed to measure schedule adherence that, in turn, could be used to identify where service can be modified or expanded. For example, if one route consistently has several minutes of layover time, some of this can be converted to expanding the reach of transit at no additional cost.

Less than 30% of Wasaga Beach transit customers board buses using smart cards; the rest board by paying cash. Considered a ridership growth strategy, pre-paid smart card customers as a rule, tend to use transit more frequently and equally important, take less time to pay their fare. In this regard, increasing the use of smart cards will reduce bus travel times, making transit more efficient.

The smart card technology can be expanded to support mobility payments whereby the transit customer can use an app to download and pay a fare using their smart phone. The app could also be used by tourists if marketed properly.

3.1.6.2 Realtime Passenger Information

The inherent GPS technology of the smart card system used by Wasaga Beach Transit should also be upgraded to provide real time passenger information via smart phones, personal device assistants (PDA) and from home computers. The availability of real time schedule information will enable transit customers to reduce the time needed to wait at bus stops by obtaining next bus stop arrival times, which will be helpful during inclement weather conditions.

3.1.7 Bus Fare Pricing Strategy

3.1.7.1 Cash Fares

Transit fares are designed to be affordable and to mitigate the cost of transit to the taxpayer. A best practices fare pricing philosophy with respect to balancing transit costs with revenues is to have a fare pricing policy that has a higher fare for the infrequent transit customer (base cash fare) and one that rewards frequent transit customers through pre-purchased fares such as monthly passes. When boarding a Wasaga Beach Transit bus, transit customers pay by cash, transfer or smart card. Cash accounts for 72% of all fares paid, which is considered to be high for a transit system with smart card payment.

Given the relatively low uptake on the smart card and the proportion of cash, it is suggested that incentives be in place to increase smart card use. As a first step and based on best practices, cash fares should be the same for all transit customers regardless of age. Concession fares should only be available on the smart card and should be priced to offer a minimum 20% discount.

It is recommended that the single cash fare be increased to \$2.50 for all transit customers. At the same time, current discounts can be maintained for those paying for a single ride using their smart card (e.g. \$2.00 adult, \$1.50 seniors and youth). By increasing the cash fare for all customer categories, there will be an incentive to obtain a smart card. The \$2.00 smart card adult fare would represent the minimum 20% discount on the \$2.50 cash fare. Those that continue to pay by cash tend to be infrequent transit customers and are less sensitive to higher costs.

With the increase in the cash fare and offering discounts on smart card use only, it is likely that smart cards will eventually account for 70% to 80% of all fare payments.

Municipal Transit Fares - 2017	Adult	Senior	Student	Pre-school
Wasaga Beach				
Cash	2.00	1.50	1.50	free
Ticket (book of 20)	30.00	20.00	20.00	
Monthly pass (also youth 6-19)	40.00	30.00	30.00	5.00
Other Universal pass	120.00	120.00	120.00	
Special notes: monthly pass for wasaga link, BlueMountain link				
Collingwood				
Cash	2.00	1.50	1.50	free
Ticket	2.00	2.00	2.00	
Monthly pass	40.00	30.00	30.00	
Other Universal pass	120.00	120.00	120.00	
Special notes: monthly pass for wasaga link, BlueMountain link				
Leamington				
Cash	2.00	1.75	1.50	1.00
Ticket (unit cost)(11 tickets)	2.00	2.00	2.00	
Other (22 tickets)	1.59	1.36		
Special notes: Children under 12 \$1.00				
Midland				
Cash	2.00	1.75	1.75	free
Ticket (unit cost) (20 tickets)	1.25	1.00	1.00	free
Fort Erie				
Cash	2.50	2.50	2.50	free
Ticket (unit cost) 5	2.25	2.25	2.25	
Ticket (unit cost) 10	2.10	2.10	2.10	
Monthly pass	60.00	60.00	60.00	
Other: Niagara Falls	3.50	3.50	3.50	
Special notes: beyond Niagara Falls prepaid fare				
Huntsville				
Cash	2.25	2.25	1.00	free
Ticket (unit cost) (10 Tickets)	1.13	0.90	1.30	
Monthly pass	52.50	52.50	25.00	
Port Colbourne				
Cash	2.75	2.75	2.75	1.50
10 Ride Pass	2.40	1.90	2.10	
Monthly pass	78.00	59.00	68.00	
Other - Link fare services	3.50	3.50	3.50	
Special notes: Children under 12 with paying adult free				
Brockville				
Cash	2.25	2.25	2.25	free
Ticket (unit cost)	1.80	1.80	1.80	
Monthly pass	64.00	64.00	64.00	
Other (40 Ride pass)	64.00	64.00	64.00	
Special notes: Medical or support person no charge				
Tecumseh				
Cash	2.00	1.50	1.00	free
Monthly pass	35.00	30.00	25.00	
6 month pass	175.00	150.00	125.00	
annual pass	350.00	200.00	250.00	
Special notes: Veterans, Blind Persons, Person accompanying a Disables rider - Free				
Quinte West				
Cash	2.50	1.50	1.50	free
Monthly pass	40.00	30.00	20.00	
Special notes: Children 6-12 Cash 1.00, monthly pass 15.00				
Kawartha Lates				
Cash	2.00	1.50	1.50	free
Tokens (unit cost)	1.67	1.43	1.43	
Monthly pass	60.00	50.00	50.00	
Special notes: ages 6-12 1.00 cash fare				

Table 5: 2017 Ontario Transit Fare Structures*

*Wasaga Beach Transit ticket sales discontinued in 2018

3.1.7.2 Single Fare Payment for Travel Within Wasaga Beach

One of the concerns expressed by transit customers is the additional fare paid by Wasaga Beach residents who board the C- Link bus along Beachwood Road west of Mosley Street and transfer at the Superstore to another bus. There should be one fare for travel within Wasaga Beach rather than having to pay for two fares. Any revenues lost in this regard would be off-set by the higher cash fare recommended.

3.1.7.3 90-minute Transfer Policy

Currently, transfers are only valid for connections at the terminal and valid on a connecting bus within 45 minutes. A transfer time of 90 minutes of the original boarding is recommended along with the ability of the transit customer to return via the same bus route. The transfer would, in effect, act as a period pass.

One example of the benefit of the 90-minute transfer time is that a customer can board a Route 1 bus, shop and then continue their journey or return home on a single bus fare. When introduced in Kitchener-Waterloo, which was one of the first transit systems in Ontario to do so, the strategy was found to be revenue neutral yet resulted in increased transit use. The 'free' transfer was designed for 1) the single parent who could drop off their child at daycare then resume travel to work on the next bus and 2) the stay at home parent who needed to have a short-trip to a store with their pre-school child during the day and return home on a single fare.

3.1.7.4 30-Day Pass

The current monthly pass is not transferable and only valid during the calendar month, which means that under a new pricing formula, if a transit customer is unable to use the pass on some days (e.g. due to vacation, holidays), the discount would not be as great. An alternative to a monthly pass is a 30-day pass, which means that a transit customer can purchase the pass (or load value on their smart card) at any time.

When monthly transit passes were first introduced in the 1980s, the pass cost was based on 40 trips per month at the cash fare. The Wasaga Beach Transit adult cash fare of \$2.00 would then translate to \$80 per month versus the current \$40 per month cost. The youth pass, at \$5 per month, is deeply discounted as well and represents one of the lowest fares for youth in Ontario. It is suggested that monthly transit and deep discounted youth pass be increased gradually in subsequent years, especially as service is expanded.

3.1.7.5 Future Fare Increases

It is recommended that the Town of Wasaga Beach increase transit fares on an annual basis to at least keep pace with the hourly cost of transit. As the impact of the new \$2.50 cash fare, 90-minute transfer policy, single fare payment for travel within Wasaga Beach, and transferable monthly pass impact is quantified, consideration can be given to increasing other concession fare discounts such as family day passes or providing free transit to pre-secondary school students (12 and under) accompanied by an adult.

3.1.8 Enhanced Marketing and Branding

With the implementation of new transit service improvements, there is now an opportunity to brand the entire transit system by adopting clear and consistent messaging and information through a communications plan. Branding builds and enhances transit system visibility by communicating a clear message to existing and potential transit customers that this is their transit service.

The very basic aspects of branding would consist of common and universal images throughout the following components of the transit system:

- Bus stops signs that are prominent and are accessible
- Posted schedules and route maps at major busy stops and shelters
- System route maps (printed, online and posted)
- Fonts (including AODA compliance with font size and contrasting colours)
- Service announcements, detours, route changes, etc.
- All promotional and marketing materials

Fortunately, the current branding – ‘Ride the Wave’ – is an excellent and recognizable name and logo that the Town of Wasaga Beach can build on and promote.

3.2 Transit Service Alternatives

Based on the community engagement process and policy framework developed, there are a variety of transit vehicles available and a number of transit route and service concepts that were considered for Wasaga Beach Transit’s community bus service to determine whether or not they would be considered for the transit service plan.

3.2.1 Community Bus Fixed-Route Service

A community bus typically, but not necessarily, is a small- to medium-sized vehicle that is easy to board and able to arrive close to locations that generate or attract a larger proportion of seniors, serving areas such as seniors’ residences, shopping centres, recreation, social, and medical facilities. Service frequencies tend to be hourly or even every two hours, and buses usually operate at off-peak periods for larger urban centres. In smaller communities such as Wasaga Beach, the community bus is provided as the all-day fixed-route service to accommodate the work and school trip in addition to service.

Recommendation: Community bus to continue use as scheduled fixed-route service.

3.2.2 Specialized Transit as a Dial-a-Ride Service

Ontario communities such as Oakville are experimenting with carrying non-registered passengers on specialized service. The objectives of accommodating registered and non-registered passengers are to extend the reach of transit into areas without fixed-route service and enable the curtailment or elimination of poorly-performing transit routes.

Recommendation: To be considered in the future through consultation with Red Cross, or with another provider.

3.2.3 Fixed Flex-route Concept

A Fixed-flex route service combines some of the advantages of fixed route (predictable service, low cost per passenger) with those of door-to-door specialized transit services. A fixed-flex route bus would follow a normal scheduled route but have the ability to deviate off the route and return to the route within 5 minutes to continue their trip, if requested.

Fixed-flex route service could provide curb-to-curb service to some Red Cross registrants. This can reduce the demand for local Red Cross client travel within Wasaga Beach (and Collingwood), enabling them to travel dynamically by using a scheduled transit service. The service; however, is not a replacement for all Red Cross customers since many will require the more personalized door-to-door customer service due to their individual limitations of mobility.

A fixed flex-route can be employed along both arterial and collector roads similar to other scheduled transit service. The vehicle can deviate from the established route to pick up and drop off individuals with limited mobility. Route deviations for pick-ups must be requested in advance, either through dispatch or by phoning the vehicle directly, if permitted. Deviations for drop-offs may be requested in advance but can also be requested on-board and accommodated if the driver has sufficient time to do so.

Given the need to have a reliable schedule at stops and route-end points, it is necessary to set limits to both the number and the distance of deviations. In the case of Wasaga Beach Transit; however, the fixed flex-route service is not an option at this time since route deviations of 5 minutes cannot be accommodated due to the vehicle design.

Paratransit scheduling software typically allows longer boarding and alighting times for lift-equipped vehicles than for ramp-equipped vehicles because the lift has to cycle once for each passenger, and a complete cycle for boarding, alighting and securement takes from 5 to 6 minutes per passenger. In contrast, a boarding ramp deploys in seconds, and cycles only once per stop, independent of the number of passengers. A passenger on a mobility device can board in approximately 30 seconds. In addition, since ambulatory passengers must climb and descend steps on lift-equipped vehicles, ambulatory boarding times are also longer than for ramp-equipped vehicles; stair accidents can occur as well with ambulatory passengers.

Recommendation: Not to be considered until buses are low-floor and ramp-equipped; and coordination/dispatch resources are available.

3.2.4 Fixed-route Shared-ride Taxi

Where demand is low, the taxi industry can be used to offer a low-cost option to residential areas that are too distant from existing fixed route transit services. A large accessible van or small bus can be used. The significant benefits are lower cost, extended reach for transit, and the ability to establish the pattern of catching a transit vehicle at a designated stop at a scheduled time. Taxis would travel along a set route and schedule and customers would board at designated bus stops, similar to fixed-route Wasaga Beach Transit service. Areas of the Town where no fixed route transit exists due to low density and demand, there are still expectations that at least some service can be provided.

Taxis could be used in a number of ways:

- Feeder services from outlying communities to link up with Wasaga Beach Transit at a designated bus stop or bus transfer area
- A fixed schedule or fixed flex-route schedule
- As a feeder service to employment areas not adequately served by public transit
- As a limited feeder service to remote neighbourhoods where transit may only be required to access goods and services for residents that are unable to drive yet do not qualify for Red Cross service

Contracted taxi service providers would be compensated based on a negotiated hourly rate. The Town of Wasaga Beach might undertake to offer a minimum revenue guarantee in the contract tender if deemed necessary to secure good quality bids. As an example, taxi vans can provide daily off-peak service from 9am to 3pm two days per week, reaching areas currently not served. The schedules could be developed upon consultation with residents.

Shared-ride taxis can be used in conjunction with bus service until bus service is warranted. No dedicated dispatch service is required for this option. Since taxis would not offer a door-to-door service and is being shared, the service is not viewed as competing with regular taxis.

Recommendation: To be considered for outlying neighbourhoods as a potential option to fixed-route bus service.

3.2.5 Dial-a-Ride

Dial-a-Ride service is a demand-responsive curb-to-curb service whereby residents call into a dispatch centre or driver cell phone to request service. For regular trips (i.e. daily, weekly, etc.), service can be arranged on a reservation basis so that the customer is not required to continuously call. Service can be completely in response to requests or can be structured to operate on a frequency basis (e.g. every two hours). In that case, the requester is given the next available time the vehicle can arrive to pick him or her up, and an approximate arrival time at destination.

Similar to a fixed route shared-ride taxi, a dial-a-ride customer would be able to transfer to a bus route, if necessary, to complete a trip. On the return trip, the process is the same where the customer is also required to call and request the trip. Dial-a-Ride service is generally used in place of bus service in areas where population is sparse and demand for service is low. The need to request each trip and wait for the next available time can make it less convenient for the customer; however, this is offset by the convenience of door-to-door service, especially important during inclement weather.

Recommendation: To be considered further as an option to fixed-route bus and fixed-route shared-ride taxi service.

3.2.6 Uber Taxi Model (Town of Innisfil)

Similar to Dial-a-Ride, the demand-responsive Uber taxi pilot project operated in the Town of Innisfil is a unique service that operates in place of regular transit service. The Uber service requires customers to have a mobile app on their phone; however, a resident can also use a regular phone line to arrange service, which can be shared with others. The passenger pays the normal zone-based bus fare (\$3.00 or \$5.00) while the difference in the cost is subsidized by the Town.

The experience was presented by Town of Innisfil staff at the Ontario Public Transit Association conference on April 23, 2018 with the following highlights given:

- The Innisfil communities, in proximity to the City of Barrie, are dispersed over a large geographic area
- The program is in its infancy, was well received and demand has grown to approximately 4 passengers per hour (Wasaga Beach Transit carries 8 passengers per hour)
- Residents use the service predominantly for travel within the Town, to GO Transit and to link up with Barrie Transit
- At some point it is expected that some fixed-route services could be implemented to replace some Uber service if there is a business case to do so
- In order to have an Uber service, there needs to be drivers available
- Although Uber owns the data (i.e. individual information and trip origin-destinations, etc.), data is shared with the Town

In the opinion of Transit Consulting Network, it is too early to determine the applicability of Uber service for the Town of Wasaga Beach particularly since other low-cost options exist.

Recommendation: To be monitored and considered in the future as an alternative to Dial-a-Ride and Fixed Route Shared-ride Taxi service for areas not served by Wasaga Beach Transit.

4. PHASE III: TRANSIT EXPANSION PLAN

The community engagement process and onsite observations helped the study team to more fully understand the community priorities relative to service issues and the need to expand the Wasaga Beach Transit community bus service today and in the future.

4.1 Route and Service Design Challenges

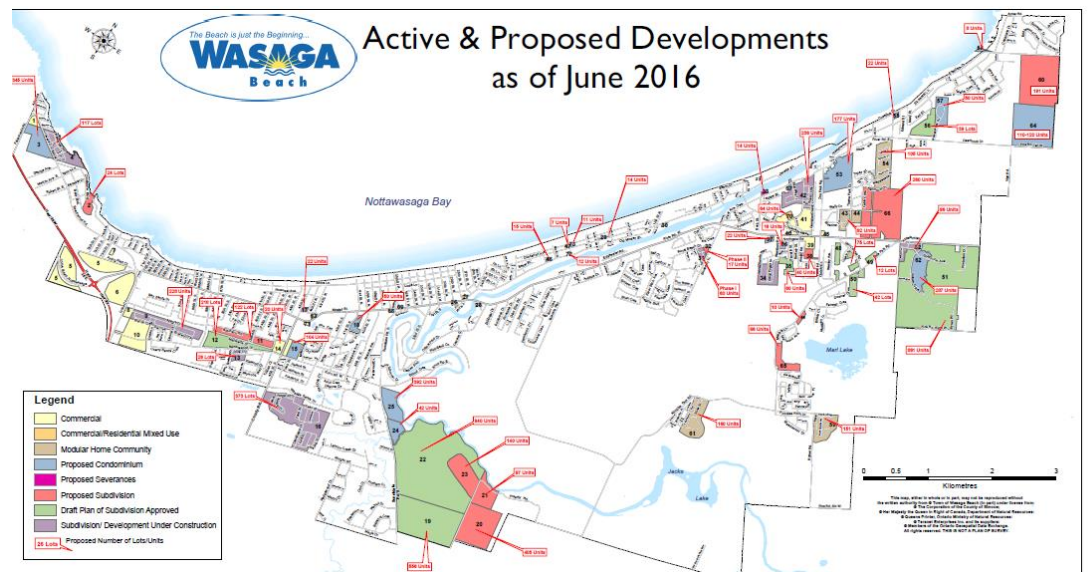
In terms of route design, there are a number of challenges faced by the Town of Wasaga Beach that limit transit route design options, namely:

- Dispersed low-density population
- 5 km of waterway between Mosley Street and River Road W. requires the separation of bus routes that:
 - Require 2 routes versus one
 - Duplication of service in some sections of bus travel way
 - Limits route design flexibility
 - Increases the need to transfer
- Circuitous streets in newer subdivisions result in the need for indirect bus travel to serve them
- High proportion of seniors requires routes to deviate off main roadways
- Lack of separate specialized transit service
- No high school in Wasaga Beach, which minimizes transit use
- Buses are lift-equipped, which requires more travel time allocated to all bus services

Although challenges exist, these challenges can be overcome by applying best practices and designing service by putting oneself in the shoes of a transit customer.

4.2 Accommodating New Development

The Town of Wasaga Beach continues to grow; however, transit service expansion has not kept pace. It will be important for the Town to ensure that as residential development growth occurs that at least some transit service is available at the outset. This would help ensure that the need for auto ownership levels are determined by households based on the availability of transit. For example, if transit service is available, the need for a second vehicle is mitigated.



4.3 Route and Service Design Strategy

Costs reference

It was concluded by the study team that a new route with all-day service will be needed to provide the extension of service to areas not served today, provide more reasonable travel speeds and to ensure more transit customers can have timed transfers to the C-Link service. This required a redesign of both Routes 1 and 2 to have 60-minute service frequencies (versus 60- and 90-minute frequencies today) with routes terminating at the Superstore transfer location where a third route would be introduced to serve future residential development south of Knox Rd. W.

In summary, the route design principles applied were:

- All Wasaga Beach Transit buses to be timed to connect with the C-Link at the Superstore

The Wasaga Beach Transit route and service design strategies are proposed to reflect the following strategies:

- Redesign of the transit route network to add a third route so more residents can be served.
- Timed transfers will be accommodated at the Superstore location at 45th St. S. and Mosley St.
- Provide service within 400 metres of a bus stop for 90% of residents as a service area 'guideline'
- 60-minute route frequencies.
- Bus travel speeds of up to 25 kph (currently 29.4 kph).
- Enable all transit customers to connect with the first C-Link trip in the morning
- Hours of operation will be increased in evenings to at least accommodate major retail store hours for both employees and store customers.
- C-Link service will be provided on Sundays all day from 7:00am to 8:00pm (service added between 10:00am and 3:00pm).
- Longer-term increased frequencies on key routes.

There will be time needed to restructure routes and open dialogue with Collingwood Transit staff to implement the transit strategies proposed in this study. In addition, there will be a new Simcoe County bus service that will link Collingwood and Wasaga Beach to Barrie, which is being addressed at the time of writing this report by Simcoe County.

4.4 Proposed Route Concepts

Only 56% of residents were within 400 metres of bus service, which cannot be extended further and as such, it was clear early in the study that an additional route was required. Since the service improvements are not to take place until 2019, the study team decided to identify recommended route concepts as well as options that would be assessed further during 2018. Additional refinements can also be made that may incorporate other concepts considered by the study team but not included in this report.

Highlights of the route changes are summarized as follows:

- Routes 1 West Bound and Route 2 East Bound would travel directly to and terminate at the Superstore, providing duplicate service along the 2.5-kilometre distance on Mosley Street between River Rd. W. and the Superstore. This was done in order to:
 - Enable Route 1 and Route 2 service to have timed connections with the C-Link at the Superstore
 - Enable Route 1 and Route 2 service to have timed connections each other at the both the Superstore and the Wasaga Beach Supercentre
 - Enable Route 2 service to be extended to serve more residents in eastern Wasaga Beach (Golf Course Rd. and Klondike Park Rd.)
- Route 3 Central was added to:
 - Replace Route 1 service along Sunnidale Rd. S., Knox Rd. W. and Ramblewood Dr.
 - Replace Route 2 service along Mosley St. between the Superstore and 71st St.; this stretch of roadway has service provided by the C-Link
 - Provide coverage to existing residents and future growth along Sunnidale Rd. S. to the town boundary

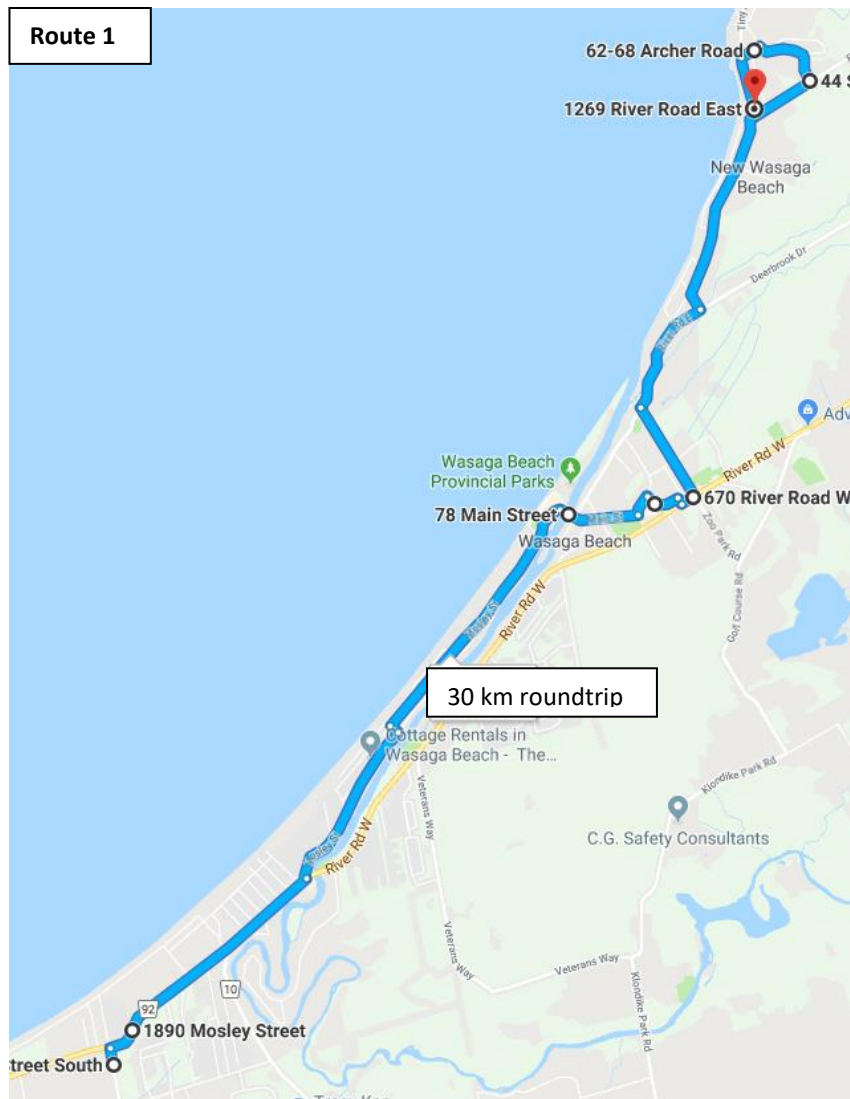
The recommended route concepts and options are described in the foregoing.

4.4.1 Proposed Route 1 Concept

The Route 1 Concept follows the current Route 1 travelway along River Rd. E. and Mosley St. with the exception that it serves Eastdale Dr. and Sunward Dr. area and terminates at the Superstore transfer location. Service along Sunnidale Rd. S. is removed but is served by the proposed Route 3 Concept. The 30 km roundtrip distance is slightly long for a 60-minute frequency; however, it is a more direct route with fewer turns. In order to reduce the average travel speed further, consideration can be given to interlining the route with Route 3 to reduce the average speed.

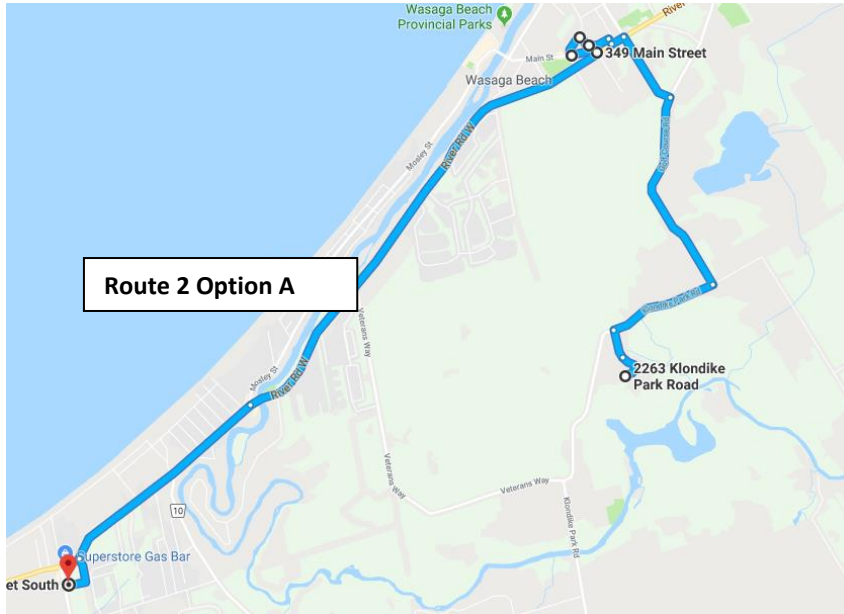
The Route 1 Concept follows the current Route 1 travelway along River Rd. E. and Mosley St. with the exception that it terminates at the Superstore transfer location. Service along Sunnidale Rd. S. is also removed but is served by the proposed Route 3 Concept.

The Route 1 concept proposed will provide for two-way service in the Walmart Supercentre and Zoo Park Rd., which eliminates one-way service on Stoneridge Blvd. between the Supercentre and River Rd. E.

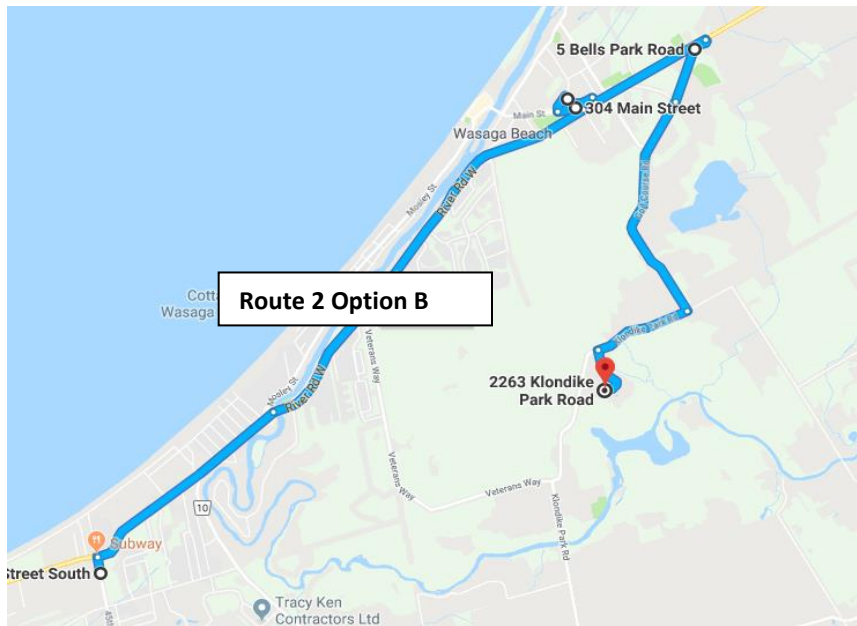


4.4.2 Route 2 Concept Alternatives

Two options were considered for Route 2, which extends the reach of service along Golf Course Rd. Klondike Park Rd. by eliminating the section of route from the Superstore at 45th St. S. to end of Ramblewood Dr., which will be served by the proposed Route 3 concept. In both options, service into the Wasaga Beach arena would be eliminated. It is only served today since it is used as a bus turnaround with little boarding activity.



Route 2 Option A eliminates 1.0 km of the existing route section along River Rd. W. between the arena and Zoo Park Rd. in order to minimize the distance travelled to 28.8 km.



Route 2 Option B provides coverage along Golf Course Rd. and River Rd. W. while providing reasonable access to bus service for residents on Zoo Park Rd.; however, the 33 km round trip distance is considered excessive.

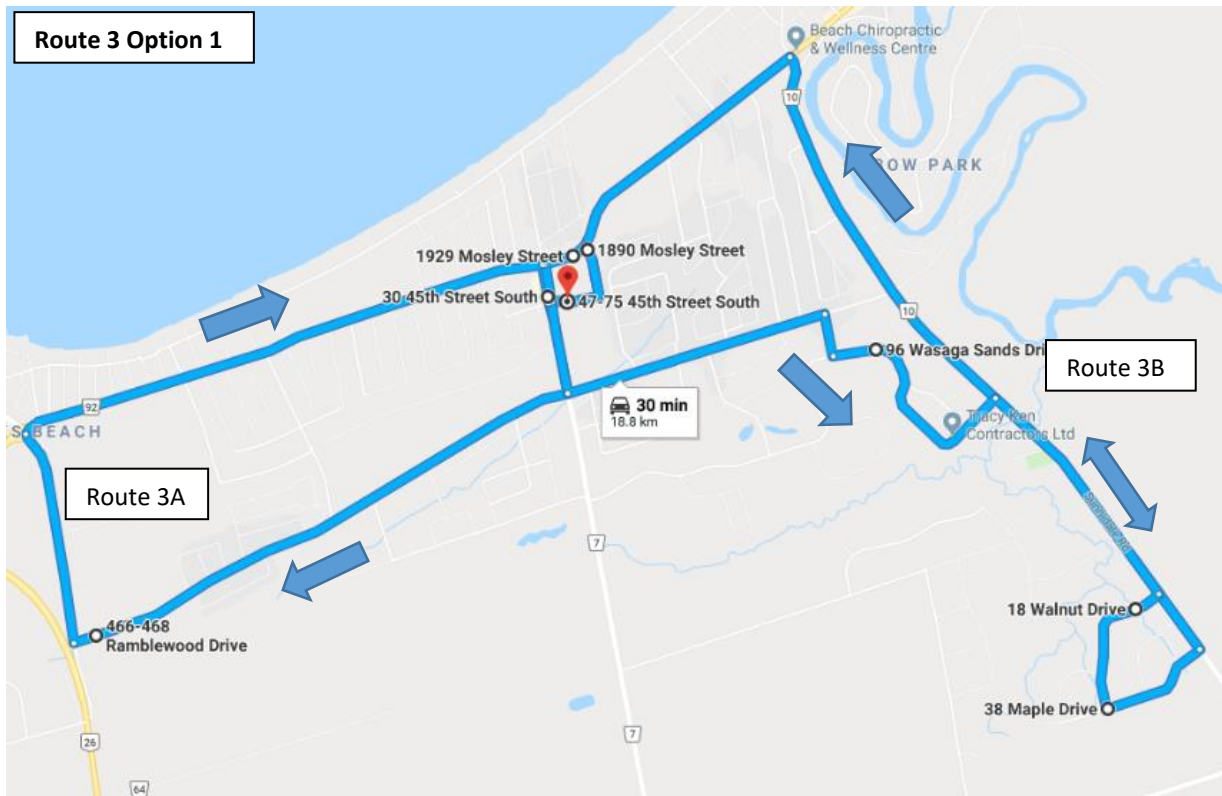
Route 2 Option B provides more coverage than Option A and is preferred; however, schedules may not be reliable. It is suggested that Option A be supported as a minimum and that consideration be given to Option B since much of the travelway (Klondike Park Rd. and Golf Course Rd.) has light traffic. Further, Option B could be considered as an off-peak routing or alternate trips with Option A to ensure some coverage (i.e. every 2 hours) is provided.

4.4.3 Route 3 Concept

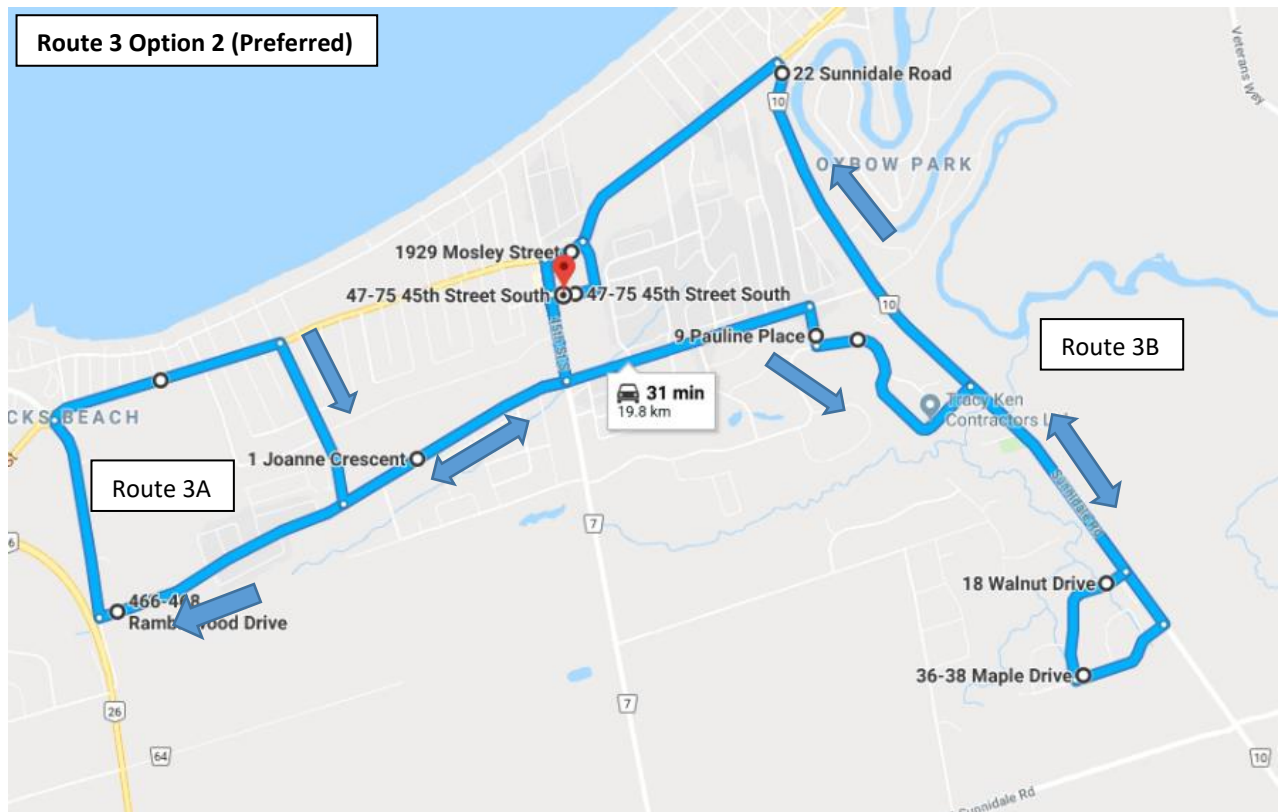
Currently, Route 2 service is extended westerly along Mosely St. from the Superstore to 71st St. S. This will be removed in favour of the hourly C-Link service that is in place today. Service currently provided by Route 1 along Sunnidale Rd. S., Knox Rd. E. and Ramblewood Dr. will also be removed in favour of being replaced by a third route. This was necessary to ensure timed connections can be attained for all three Wasaga beach Transit routes as well as the C-Link bus.

The proposed Route 3 concept consist of one bus travelling on a westerly leg (Route 3A) from the Superstore then back to the Superstore then the bus would travel the easterly leg (Route 3B) from the Superstore to the southerly town limits along Sunnidale Rd. S. before it returns to the Superstore to meet up with the C-Link, Route 1 and Route 2.

Two Route 3 options were considered as shown below. Route 3 Option 1 provides a one-way 7.2 km and 13-minute roundtrip (Route 3A) from the Superstore back to the Superstore via Ramblewood Dr., Lyons Ct. and Mosely St. The total roundtrip distance approximates 18.8 km so schedule reliability will be good. In addition, there will be available time to have service extended further, if required.



Route 3 Option 2 illustrated below has a partial loop service and provides service to residents along 58th St. S. as well as bringing transit closer to residents along Robinson Rd. and Lily Dr. This is considered the preferred Route 3 option. The roundtrip distance of 19.8 km is only slightly longer than Option 1.



It should be noted that although long one-way routes are not ideal, they can make sense where there are no cost-effective alternatives. In the case of Route 3 Option 2; however, there is some two-way service along Sunnisdale Rd. S. and Ramblewood Dr. And given the average travel speed of 19.8 kph, the route can be extended further in the future, if required, or it can inter-line with Routes 1 or 2.

4.5 Proposed Transit Service and Financial Plan

The proposed route structure and expanded hours of operation will enable the Town of Wasaga Beach to take Transit service to the next level, that is, extending its reach within the community, providing improved timed-transfer connections with inter-municipal transit services (e.g. Collingwood, Stayner, Barrie), and expanding hours of operation to better accommodate residents, tourists, and businesses. These improvements will have a direct impact on transit ridership and revenues and the dedicated Provincial transit gas tax that is received.

The short- and medium-term transit service plan is based on the proposed span and frequency of service to be in place within the first six years as re-stated below. In addition, the C-Link bus operated between Collingwood and Wasaga Beach is proposed to match the Wasaga Beach hours of operation to attain consistency, which will require co-ordination with the Town of Collingwood.

	Weekday	Saturday	Sunday
Existing Service	60-minute frequency 7:00am – 9:00pm	60-minute frequency 7:00am – 9:00pm	60-minute frequency 7:00am – 7:00pm
Proposed Service	60-minute frequency 6:00 am – 10:00pm (adds 2 hours per day)	60-minute frequency 6:00am – 10:00pm (adds 2 hours per day)	60-minute frequency 6:00am – 10:00pm (adds 4 hours per day)

4.5.1 Cost and Revenue Estimates

The 2016 Urban Transit statistics provided by the Town of Wasaga Beach reported a total of \$587,567 in direct operating costs to provide 9,984 hours of service, which equates to \$58.85 per hour. For conservative budgeting purposes, \$60 per hour would be used to estimate additional operating costs for fixed route transit services.

In order to estimate the impact on transit ridership and revenues, the following assumptions have been made:

- 4.0 passengers per hour of service based on 50% of 2016 average (8.0 passengers per hour)
- 252 weekdays, 52 Saturdays, 63 Sundays and statutory holidays
- \$1.65 revenue per passenger based on 2016 average, which assumes that the impact of the proposed fares below to be revenue neutral:
 - \$2.50 cash fare will apply to all transit customers
 - Discount fares on TransitFare smart card only
 - 90-minute transfer policy for all Wasaga Beach Transit buses, regardless of direction of travel (i.e. can make a return trip within 90 minutes of boarding a bus)
 - Single fare payment for travel within Wasaga Beach
 - Transferable adult monthly pass
- Increased C-Link service cost and revenue allocated 50% to Wasaga Beach

The Transit service plan developed for the Town of Wasaga Beach is broken down into the short-term (1 to 3 years), medium term (3 to 6 years) and long-term (7 to 10 years). It should be noted that the span of service may be modified in the future and possibly extended,

4.5.2 Short-term (Year 1 to Year 3) Transit Service Improvements

The options for the first three years are provided as follows:

4.5.2.1 Option 1: Add Third Route

Adding a third route is necessary to provide more reliable service, extend the reach of transit to serve more residents and to ensure all routes are timed to connect with the C-Link.

Description:

- Restructure Routes 1 and 2
- Add Route 3
- Operate same hours and days as current Wasaga Beach Transit service

Impact:

- Additional 5,110 hours of service annually
- \$306,600 annual cost
- Additional transit ridership: 20,440 passengers
- Additional revenue: \$33,700
- Cost less revenue: \$272,900

4.5.2.2 Option 2: Add Sunday C-Link Hourly Service + Holiday Service

Option 2 is designed to match C-Link service with service provided by Wasaga Beach Transit. Since the C-Link is shared with the Town of Collingwood, the option would be subject to Collingwood Transit service being expanded in the same manner. It is assumed that all costs and revenues will be shared 50/50 between Wasaga Beach and Collingwood

Description:

- Provide 10:00am – 3:00pm C-Link service on Sundays
- Provide fill C-Link service on holidays 7:00am – 7:00pm

Impact:

- Additional 200 hours of service annually (Wasaga Beach portion) for Sunday service (10:00am to 3:00pm) and for 11 Holidays (7:00am to 8:00pm)
- \$12,000 annual cost
- Additional transit ridership: 800 passengers
- Additional revenue: \$1,300
- Cost less revenue: \$10,700

4.5.2.3 Option 3: Commence Service One Hour Earlier All Days

Description:

- Commence service one hour earlier on all three routes to connect with first C-Link bus to Collingwood which is at the Superstore at 6:30 a.m.

Impact:

- Additional 1,095 hours of service annually
- \$66,000 annual cost
- Additional transit ridership: 4,400 passengers
- Additional revenue: \$7,260,
- Cost less revenue: \$58,740

4.5.2.4 Option 4: Extend Monday through Saturday Evening Service to 10:00pm

This option considers the expansion of service on all Wasaga Beach Transit service on Mondays through Saturdays to end at 10:00pm with the last trip leaving the Superstore transfer point at 9:30pm. This does not include any portion of the C-Link service that may be extended after 8:00pm in the future.

Description:

- All three routes extended from 9:00pm to 10:00pm Monday through Saturday
- All three routes extended from 7:00pm to 10:00pm on Sundays and Holidays
- To accommodate retail work shifts

Impact:

- Additional 900 hours of service annually
- \$54,000 annual cost
- Additional transit ridership: 3,600 passengers
- Additional revenue: \$5,940
- Cost less revenue: \$48,060

4.5.2.5 Option 4: Extend Monday through Saturday Evening Service to 10:00pm

This option brings the hours of operation to 10:00pm on all days of Wasaga Beach Transit service, including Sundays and holidays.

Description:

- All three routes extended from 7:00pm to 10:00pm on Sundays and Holidays
- To accommodate retail work shifts

Impact:

- Additional 570 hours of service annually
- \$34,200 annual cost
- Additional transit ridership: 2,280 passengers
- Additional revenue: \$3,762
- Cost less revenue: \$30,438

4.5.3 Medium-term (Years 4 to 6)

Implementation of the short-term improvements will address the transit priorities based on attaining:

- Improved coverage with the addition of the third route
- Adding trips to the C-Link service to link with all Wasaga Transit trips on Sundays and holidays
- Starting service one hour earlier and ending at 10:00pm on all days for both Wasaga Beach and C-Link services

The improved service will meet residents needs for the most part; however, consideration can be given to eventually extending service to 11:00pm to accommodate the retail sector where shifts end at 10:00pm with service provided to 11:00pm and 11:00pm with service provided to midnight. This would also assume that C-Link service cost-shared with Collingwood would be extended accordingly.

4.5.3.1 Option 5: Extend Evening Service to 11:00pm

Description:

- All three Wasaga Beach Transit routes extended from 10:00pm to 11:00pm (all days)
- Extend C-Link service by one hour

Impact:

- Additional 1,200 hours of service annually
- \$72,00 annual cost
- Additional transit ridership: 4.800 passengers
- Additional revenue: \$7,920
- Cost less revenue: \$64,080

4.5.3.2 Option 6: Extend Evening Service to Midnight

Description:

- All three Wasaga Beach Transit routes extended from 11:00pm to midnight (all days)
- Extend C-Link service by one hour

Impact:

- Additional 1,200 hours of service annually
- \$72,00 annual cost
- Additional transit ridership: 4.800 passengers
- Additional revenue: \$7,920
- Cost less revenue: \$64,080

4.5.4 Summary of Short- and Medium-term (Years 1 to 6)

To reiterate, Wasaga Beach Transit operated 9,984 hours of service in 2016 and carried approximately 80,000 passengers or approximately 8 passengers per hour.

The additional route, earlier and later service will result in an estimated 10,120 hours per year of additional service – doubling the 9,983 hours operated in 2016 to approximately 20,000 hours of service. The total net cost (cost less ridership revenue) is conservatively estimated at \$543,098 per year, which is based on attracting 4.0 passengers per hour of additional service. This would equate to approximately 120,000 passengers per year or 6 passengers for all hours of service, which is below the 2016 efficiency of 8 passengers per hour.

Over the short- and medium-term, Wasaga Beach Transit service would be expanded to areas currently not served, attract new target markets such as employees in the tourist and retail sector, and have opportunities to connect with other municipalities through Simcoe County transit initiatives and improved C-Link connections that have been proposed. There is no question that transit would play a more integral role within Wasaga Beach. In this regard, the transit efficiency target's key performance

Town of Wasaga Beach Transit Study and Operations Review

improvement (KPPI) measurement is set at 8.4 passengers per hour of service. Should this be attained, the annual transit ridership would be estimated at 168,000 passengers rather than 120,000 passengers based on 6.0 passengers per hour that was conservatively estimated. This would reduce the net cost of the additional service from \$543,098 to approximately \$431,000 per year.

In addition to attracting passenger revenues, the net cost of service would be further offset through the province’s dedicated 2-cent per litre transit gas tax and the Town of Wasaga Beach tax base. Since 30% of the 2-cent per litre dedicated provincial gas tax funding is based on transit ridership and 70% based on population, it can be surmised that the Town of Wasaga Beach will receive additional gas tax revenue. Further, should the gas tax be increased by 0.5 cents per year for the next four years as proposed for 2018-2022, the gas tax funding will double province-wide.

Table 6 below summarizes the short- and medium-term transit plan.

Wasaga Beach Transit Expansion Plan	Additional Annual Hours	Additional Cost	Additional Annual Ridership	Additional Annual Revenue	Cost less Ridership Revenue
Short-term Service Expansion Year 1 to 3					
Option 1: Add third route, same hours as existing service	5,000	\$300,000	20,000	\$33,000	\$267,000
Option 2: Add Sun. C-Link service 10am-3pm; add C-Link holiday 7am-10pm	200	\$12,000	800	\$1,300	\$10,700
Option 3: One hour earlier weekdays	1,100	\$66,000	4,400	\$7,260	\$58,740
Option 4: One hour later (9:00pm to 10:00pm) Monday through Saturday	900	\$54,000	3,600	\$5,940	\$48,060
Option 5: 3 hours later (7:00pm to 10pm) on Sundays and Holidays	570	\$34,200	2,280	\$3,762	\$30,438
Total Year 1 to Year 3	7,770	\$466,200	31,080	\$51,262	\$414,938
Medium-term Service Expansion Year 4 to 6					
Option 6: Extend Wasagas Beach Transit and C-Link service to 11:00pm	1,200	\$72,000	4,800	\$7,920	\$64,080
Option 6: Extend Wasagas Beach Transit and C-Link service to midnight	1,200	\$72,000	4,800	\$7,920	\$64,080
Total Year 3 to 6	2,400	\$144,000	9,600	\$15,840	\$128,160
Total Year 1 to 6	10,170	\$610,200	40,680	\$67,102	\$543,098

Table 6: Wasaga Beach Transit Expansion Plan

4.5.5 Long-term (Year 7 to 10)

Since it is too challenging to develop budget projections beyond a few years, it is suggested that the amount of service per capita after Year 6 be used as a guide when estimating future service increases.

As the service area population and development increases, the Town of Wasaga Beach can keep pace with addressing transit needs by adhering to the Transit Policy Framework guidelines relative to where transit needs to expand to and the type of service that can be in place to meet the demand. As a guideline, it is suggested that the relative quantity of service be maintained at 1.0 to 1.2 service hours per capita, which helps ensure that Wasaga Beach Transit service levels are increased to keep pace with population.

The current and proposed short- and medium-term transit service plan is based on a 60-minute service frequency that is essentially a community bus service level. As transit use increases faster than the population growth and efficiencies improve, consideration can be given to increasing service frequencies from 60 minutes to 30 minutes during the weekday peak periods. This would help attract

the work trip demand and reduce the need for higher auto ownership since employees would be able to arrive and leave work at more convenient times. Another approach to service delivery is where some municipalities provide target marketed bus trips that entail a bus travelling for one or two trips during the peak by following a fixed route that may differ from the proposed routes. This approach is used to accommodate work trips and school trips are often referred to as 'specials'.

As Wasaga Beach Transit has access to detailed transit customer travel data over the next few years, it will increase the Town's ability to better customize transit services and schedules.

4.6 Specialized Transit

The Town does not currently operate its own specialized transit service, but rather, refers people who cannot use Wasaga Beach Transit because of a disability to Red Cross Transportation.

The Accessibility for Ontarians with Disabilities Act (2005) defines disability as follows⁴:

"Disability" means,

(a) any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device,

(b) A condition of mental impairment or a developmental disability,

(c) A learning disability, or a dysfunction in one or more of the processes involved in understanding or using symbols or spoken language,

(d) A mental disorder, or

(e) an injury or disability for which benefits were claimed or received under the insurance plan established under the Workplace Safety and Insurance Act, 1997; ("handicap")"

In order to meet AODA fare and hours of service parity compliance, improvements need to be addressed.

⁴ <https://www.ontario.ca/laws/statute/05a11#BK2>

4.6.1 Specialized Transportation Options

Alternative service delivery models for specialized transit range from the current Red Cross service delivery model to a 100% in-house specialized transit service model. These models are presented below, in ascending order of relative cost, with an overview of their relative strengths and limitations.

Service Delivery Model	Strengths	Limitations
<p>Arm’s-length. The municipality, due to the presence of a non-municipal specialized service in its territory, is not directly involved in providing or funding the service. Examples: Wasaga Beach, Brampton, and Mississauga.</p>	<ul style="list-style-type: none"> ▪ Third-party accountability and administration ▪ Low cost 	<ul style="list-style-type: none"> ▪ Little or no direct control ▪ Low incentive to re-direct rides to accessible transit
<p>Contracted-out. Under the contracted model, a private or voluntary sector provider furnishes vehicles, drivers and all support services. Examples: Collingwood, Barrie, Orillia, Midland, Bradford West Gwillmbury, Innisfil</p>	<ul style="list-style-type: none"> ▪ Management and operations out-sourced ▪ Lower operating cost than in-house service ▪ Competitive bids ▪ Capital costs may be avoided 	<ul style="list-style-type: none"> ▪ Contractor allocates resources ▪ Municipality is accountable, without direct control ▪ Low incentive to re-direct rides to transit
<p>Hybrid. The hybrid model is a blend of in-house and contracted-out. The municipality and the contractor divide up the provision of vehicles and/or support services, and the mix of municipal and contracted service can vary considerably. Examples: York Region, Hamilton</p>	<ul style="list-style-type: none"> ▪ Resource allocation decided by municipality ▪ Operations provided at lower cost ▪ Competitive bids 	<ul style="list-style-type: none"> ▪ Municipal staff costs to manage and supervise ▪ Potential for asset management problems
<p>In-house. The in-house model uses municipally-owned vehicles operated by municipal employees. All support services, such as eligibility, scheduling, dispatch and vehicle maintenance are municipal. Examples: Toronto, Guelph, Brantford</p>	<ul style="list-style-type: none"> ▪ Direct control over service quality and availability ▪ Coordination with conventional transit ▪ Full municipal accountability 	<ul style="list-style-type: none"> ▪ Highest cost model ▪ Cross-boundary service can be challenging

Even though specialized transit models may be similar, every municipality has its own approach to implementation. Within the hybrid model are many variations in services that can be retained by the municipality or contracted out, especially eligibility determination and scheduling functions, which control resources. With any model, the core dedicated service may be supplemented by non-dedicated services such as taxis for more capacity at peak hours, and to reduce fleet needs during off-peak hours.

Wasaga Beach Transit currently meets accessibility requirements for seniors or residents with disabilities that can walk, are ambulatory disabled or use a mobility device to get to a bus stop; they are fortunate since they can take trips dynamically. Residents that are not able to use transit must make alternate arrangements with Red Cross. It was determined based on consultations with Wasaga Beach Transit staff that every effort should be made to build on the services in place today to leverage resources and maximize capacity by working with Red Cross to enhance AODA compliance and lower its operating costs.

4.6.2 Preferred Option: Red Cross Specialized Transportation

This report recommends that consideration be given to existing service providers to leverage resources, and capacity, training and qualifications of the existing specialized service model, under which Red Cross is the service provider.

As explained in Section 2.5.3, Red Cross Specialized Transportation fulfills the Town's obligation under the AODA of providing an "Alternative accessible method of transportation" to residents who cannot use Wasaga Beach Transit by reason of a disability. There are numerous examples in Ontario, such as Brampton, Mississauga, and Bradford, where a regional service is the specialized transit provider for a lower-tier municipality.

As mentioned earlier, Red Cross Transportation service is regional in scope. Having a regional service also provide local service in Wasaga Beach enables the Town to comply with the AODA requirement to facilitate inter-municipal travel for people with disabilities⁵. It also facilitates inter-community travel within North Simcoe, which is strategic objective of both the Town of Wasaga Beach and the County.

Section 4.2.1 above presents alternative models and approaches by which the Town of Wasaga Beach could address its obligation to provide a specialized service to those who are unable to use Wasaga Beach Transit due to a disability. The consultants' general recommendation is that the existing model should be expanded or formalized and that the Town work with the Red Cross to resolve gaps in eligibility, service hour's parity, and fare parity. These issues are discussed in the paragraphs that follow.

Note: Expenditures by the Municipality to implement the recommendations that follow would be considered eligible contributions for the Ontario Gas Tax Rebate Program. It is noted, however, that the entire funding estimated at \$180,000/year is fully allocated.

Eligibility

The Red Cross describes its service as "*transportation service for those in need, such as elderly or disabled in the community, who are unable to use public transportation or private means.*"⁶ This broad definition of eligibility is supported by the fact that Red Cross transports people with cognitive disabilities such as residents of the E3 Group Homes.

However, for AODA compliance, Red Cross should consider adding a Conditionally Eligible category intended for people who require specialized transportation under certain conditions, such as the presence of ice and snow, or the need to make a complex trip requiring one or more transfers on fixed-route transit.

Recommendation: That the Town encourage the Red Cross to update its eligibility criteria to include people who only require specialized transportation under certain conditions.

Transportation of people under 19 years of age

⁵ Source: Co-ordinated service O. Reg. 191/11, s. 69 (1).

⁶ Source: <http://www.redcross.ca/in-your-community/ontario/nutrition-and-transportation/transportation/simcoe-muskoka-branch-transportation>

Red Cross insurance coverage currently does not permit it to transport people 18 years of age or younger. This is a limitation that does not exist on Wasaga Beach transit, and for the sake of parity between the two services, the Town should consider working with Red Cross to overcome this restriction.

Recommendation: That the Town of Wasaga Beach consider assisting Red Cross to remove the restriction on transporting people under the age of 18.

Hours of Service

Red Cross Transportation operates the following hours of service:

- Monday through Friday from 6:30 am to 4:30 pm, with extended hours available on request, until as late as 10:30 based on passenger need.
- Saturdays for dialysis and medical trips only

Wasaga Beach Transit operates Monday through Saturday from 7:00 am to 9:00 pm, and on Sundays from 7:00 am to 7:00 pm. Consequently, there is a gap between Wasaga Beach Transit and Red Cross service hours which, for AODA compliance, should be addressed⁷. This would involve 4.5 additional hours per weekday, 14 hours on Saturdays, and 12 hours on Sundays, for a total of 48.5 hours per week, 2,500 hours per year. Using \$45 per hour for estimation purposes, the annual cost to the Town is estimated at approximately \$115,000.

Another option that may be considered is to provide service only to eligible residents that are within a defined distance to a bus route and during times not covered by Red Cross when Wasaga Beach Transit operates. This approach is applied in other municipal jurisdictions. For example, the City of Sarnia provides specialized transit to residents within 450 metres of regular bus service while the City of Greater Sudbury provides specialized transit service to residents of outlying communities who reside within 1.0 km of bus service.

An accessible taxi could be made available every two hours on an as needed basis with a 24-hour advance request requirement. The service could initially be implemented as a pilot and the cost can be based on a negotiated fixed rate per passenger to encourage ride-sharing.

Recommendation: That the Town consider negotiating an agreement with Red Cross to provide the same service hours to Wasaga Beach residents as Wasaga Beach Transit. In the event that this is not feasible, the Town might consider engaging an accessible taxi or some other provider to furnish these additional hours of service.

Fares

The Red Cross fare for trips within Wasaga Beach is \$3.50 one-way. Trips up to 15 km outside Wasaga Beach are \$5.60 one-way, \$11.20 round-trip. Trips from 16 to 30 km are \$8.50 one-way, \$17.00 round-trip. Longer trips, such as to Toronto are also provided. Fares are distance-based, using a 7-step rate scale depending on trip length.

⁷ A similar gap also exists in Collingwood, where 'Red Cross Para Transit Operates Monday to Friday from 7:00 a.m. to 5:00 p.m.'

Wasaga Beach Transit charges \$2.00 (\$1.50 for seniors) for trips within Wasaga Beach. Consequently, there is a fare parity gap between Red Cross and Wasaga Beach Transit. The consultants recommend that the Town of Wasaga Beach, for the sake of AODA compliance, make an agreement with Red Cross to reduce its fare for trips within Wasaga Beach, to \$2.00, to match the transit fare, and that Red Cross bill the Town for the difference of \$1.50/\$2.00 per passenger trip. Using 3,500 passenger trips per year for estimation purposes, the annual cost to the Town would be between \$6,000 to \$7,000.

Recommendation: That the Town consider negotiating an agreement with Red Cross under which Red Cross would charge a Wasaga Transit fare for specialized transportation trips within Wasaga Beach and be reimbursed by the municipality for the difference between Red Cross standard fare and the Wasaga Beach Transit fare.

Collaboration to Reduce Red Cross Service Costs

Fueling and vehicle maintenance are obtained for Red Cross vehicles by means of fleet cards issued by the parent organization. These goods and services might be made available to Red Cross at reduced rates by allowing Red Cross vehicles to fuel under the Town's fuel contract, and by having Town maintenance garage provide routine service to Red Cross vehicles. It is possible that by this means the Town could reduce Red Cross operating costs and receive a reduced rate on additional service hours purchased from Red Cross to implement Hours of Service Parity recommendation mentioned above.

Recommendation: That the Town investigate the potential benefits of extending Town fueling and maintenance access to Red Cross vehicles.

At the time of writing, the Town of Wasaga Beach was advised that the organization structure in the six different communities served by the local Red Cross is being re-evaluated; change is likely. The recommendations described still apply as a strategy; however, they may need to be reassessed once more details of the re-organization are known by Wasaga beach staff.

4.6.3 Complementary Specialized Transit Options

Complementary specialized transit services to that offered by Red Cross can be provided for travel within the Town of Wasaga Beach in order to meet AODA requirements, when required, such as on Sundays when Red Cross is not scheduled to provide service. In this regard, the Town of Wasaga Beach can contract out the service to the taxi industry, which is similar to that offered by Ace Cabs within the Town of Collingwood. Alternatively, the Wasaga Beach Transit service provider, Sinton Landmark, could be retained to provide the demand-responsive specialized transit service within Wasaga Beach on Sundays. To keep costs to a minimum, the service could be provided with a minimum 24-hour notice and only operate on Sundays, as required. If a taxi service provider is used, a rate would need to be negotiated with the taxi company, bearing in mind that the fare paid would not exceed that of the Wasaga Beach Transit bus fare.

Recommendation: The Town of Wasaga Beach explore options with the taxi industry or Sinton Landmark to ensure AODA compliance is met.

4.7 Transit Asset Management Plan

To help ensure that the transit ridership growth plan succeeds in attracting new transit customers and encouraging existing customers to use transit more, a transit asset management plan has been developed.

4.7.1 Transit Vehicle Options

In a public transit system, there are several vehicle types and options available that can range from large vans to heavy-duty conventional transit buses. In fixed-route transit services for urban areas, municipalities operate a number of different vehicles.

In determining the appropriate bus model and size, municipalities should consider a number of factors, namely:

- Seating capacity and standee capacity to ensure that the bus capacity can accommodate the transit demand for the life cycle of the bus.
- Wheelchair accessibility, which is a mandatory requirement for public transit systems.
- Wheelchair position (forward-facing versus rear-facing).
- Passenger accessibility, which favours ramp access over steps when boarding.
- Passenger comfort for ease of boarding, fare payment and seating.
- Vehicle replacement cycle based on life expectancy of the vehicle, mileage.
- Maintenance requirements.

In order to have maximum efficiency, bus routes should be designed to accommodate as many residents and businesses as possible for each hour travelled. To maximize transit ridership, bus schedules must be reliable (zero minutes early to 5 minutes late). This can only be realized if every effort is taken to minimize non-driving time, that is, the time taken to board a vehicle and pay the fare and to alight the vehicle when at their destination.

It is the opinion of TCN that in urban communities both large and small that a ramp-equipped vehicle be used and that rear-facing wheelchair positions be used, if possible, for fixed-route transit services. Not only can wheelchairs be accommodated much quicker, the ramp also makes the boarding and alighting experience quicker and safer than buses with steps for the ambulatory disabled, seniors, parents with strollers, and all other passengers. In terms of maintenance, ramps have much fewer maintenance problems than the lifts on high-floor buses.

In the case of a wheelchair boarding, if a lift and forward-facing wheelchair position is used, it can take approximately 5 to 7 minutes to board and alight the bus compared to 2 minutes with a ramp and rear-facing wheelchair position where tie-downs are not necessary. The 4 to 5 minutes saved is significant when considering it represents, for example, a 15% time-savings on a 30-minute route. To put this in perspective, a bus with 4 minutes extra can travel 1.3 km longer to serve more residents. Based on 1,000 residents per kilometre, this translates to 1,300 residents that could be served without needing to add a bus.

Since community vehicle costs can vary significantly (i.e. from \$85,000 to \$400,000 or more, depending on size and weight (from 'cutaways' on truck chassis to heavy duty mid-size diesel buses), consideration must be given to what is best for the transit customer, the passenger capacity, vehicle operating costs and maintenance costs and the replacement cycle. The current cutaway buses are sufficient to handle future bus loads given that Wasaga Beach Transit averaged 8 passengers per hour of service in 2016. Community bus options are compared in Table 7 below.

Community Bus Option	Estimated Cost	Life Cycle	Annual Capital Cost	Comments
High floor 8.2 metre (27')	\$100,000	5 years	\$20,000	'Cut-away' vehicle (gas) with steps Wheelchair lift required Approx. 20 passengers + standees (similar to current Wasaga Beach buses)
Low-floor ramp-equipped 8.2 metre (27')	\$130,000	Up to 7 years	\$18,500	Cut-away type (gas) with two forward-facing wheelchair positions Approx. 20 passengers + standees
Low-floor mid-size 8.2 metre (27') to 10 metre (33')	\$230,000	7 years	\$32,000	Gas powered with ramp Forward or rear-facing wheelchair positions Up to 35 passengers + standees
Heavy-duty mid-size 9.2 metre (30') to 10.7 metre (35')	\$400,000	Up to 12 years	\$33,000	Diesel powered with ramp and two doors Rear-facing wheel chair position Up to 24 seats + 16 standees Life can be extended up to 15 years with refurbishment

Table 7: Community Bus Option Comparisons

Municipalities that currently have high floor community buses (i.e. Wasaga Beach) that operate a fixed-route transit service would best serve their residents with low-floor ramp-equipped buses. Bus designs and sizes can vary significantly between models as does the price and as such, annual or ongoing research on what is available and their costs should be undertaken. The best source of research is to attend trade shows or contact transit peers to obtain their first-hand experience. In this regard, one bus may be the lowest cost but the fuel and maintenance costs could off-set the savings compared to a higher-priced vehicle.



8.2 metre high-floor-floor community bus



8.2 to 10 metre low-floor community bus



9.2 to 10.2 metre mid-size heavy duty diesel bus

Although high-floor community buses are the least expensive, the higher average annual cost of \$1,500 for a low-floor bus with a ramp versus steps is the preferred option for Wasaga Beach Transit customers since they are safer than steps and provide ease of boarding for customers with strollers and the ambulatory disabled. In addition, buses with ramps can be used in a fixed flex-route option while buses with no ramps cannot be used due to the increased time needed to board and alight.

4.7.2 Fleet Size

The Town owns three buses with two buses in service and one spare vehicle. Two buses were replaced in 2018 while the third bus is scheduled for replacement in five years (2023). When Wasaga Beach Transit adds the third route in the short-term, there will be need to increase the fleet from three buses to five buses to accommodate the three one-bus routes and to two spare vehicles versus one.

The 40% spare ratio (2 buses out of 5) is recommended for three reasons:

- To ensure availability for both short- and long-term vehicle maintenance
- To prolong vehicle life by rotating buses to minimize vehicle mileage
- Having buses available for charters

The recently delivered two – 2017 Ford high-floor buses will need to be replaced after 5 years of service (2023), while one bus (2015 Chevrolet) will need to be replaced in 2020 also based on the five-year life cycle.

Recommendation: Wasaga Beach Transit to increase and upgrade the fleet by two low floor buses to accommodate the third bus route and to plan for a 7-year vehicle replacement cycle. In addition, three buses have been budgeted for peak hour service expansion in the long-term.

4.7.3 Fleet Storage

Consideration will need to be given to either reclaiming and expanding the existing overnight storage facility at 16 – 2nd St. N. Storage will be needed when the fleet is increased from three buses to five buses. If the existing facility is not retained and expanded, an alternate site will be required. In this regard, the Town of Wasaga Beach should also consider a permanent and larger bus storage facility in the near future since it is anticipated that Wasaga Beach Transit peak period fleet size could increase further within the 10-year period. For example, if service frequencies increased to 30 minutes, there would be a need for an additional 4 to 5 buses, including spares. A nominal amount of \$80,000 has been allocated for bus storage expansion at the current location.

Recommendation: Secure and expand existing storage facility or identify an alternative bus storage location in the short-term. In the long-term, a new permanent facility should be planned to accommodate transit needs over a 20 to 30-year period.

4.7.4 Electric, Hybrid and Compressed Natural Gas Buses

Alternatives to purchasing diesel or gasoline propulsion engines consist of full electric vehicles (EV), electric/ diesel (hybrid) and compressed natural gas (CNG) buses. Based on CUTA statistics, fuel costs for all Ontario transit systems in municipalities with a population under 50,000 was reported to be \$3,864,107 in 2015. This represents 8.1% of total direct operating expense of \$47,446,779. Although relatively marginal, efforts continue to be made throughout Canada towards the procurement of propulsion systems that are more environmentally friendly than diesel. At the same time, improvements to diesel fuel economy are being realized as well through, for example, the use of lighter vehicle materials to reduce overall vehicle weight.

EV buses are in their infancy compared to combustible engines and show promise; however, re-charging of buses would need to occur on the road or at the transit garage for overnight charging. Since EV buses are zero emission, studies have been recently commissioned to investigate electric buses in Canada (e.g. York Region Transit, Metro Transit in Halifax, N.S. and elsewhere). Given its infancy and environmental benefits, it would be prudent to monitor the progress of electric bus technology in the coming years.

Hybrid buses have a much longer track record than EV buses and greater range. Depending upon the options selected, a hybrid bus could cost up to an estimated \$800,000 per bus compared to diesel buses at approximately \$500,000. There would also be a need to add the cost of infrastructure modifications and additional parts inventory.

Based on research from Transport Canada (<http://data.tc.gc.ca/archive/eng/programs/environment-utsp-casestudy-cs71e-hybridbuses-272.htm>), hybrid bus technology has matured, is commercially viable and has a number of advantages and disadvantages.

Hybrid buses offer the following advantages compared to conventional diesel buses:

- Reduced fuel consumption in the order of 10% to 40%.
- Reduced noise level due to either a smaller internal combustion engine or lower RPMs
- Extended brake life due to regenerative braking
- Potential for reduced maintenance (fewer oil changes, less engine wear-and-tear)
- Better acceleration from a stop
- Passenger acceptance due to smooth ride and environmental friendliness
- Reduced emissions

There are several disadvantages to hybrid buses:

- The capital cost for hybrid buses is 50% to 70% more than comparable diesel buses, depending on the options ordered and the order size. It remains to be seen how much the price difference will close as hybrid buses gain wider usage.
- Battery life has been a significant cost and operational factor. There are three types of batteries typically used for hybrid buses and they offer different costs, advantages, and disadvantages.
- Some changes in maintenance procedures are required. For examples, additional parts need to be inventoried and equipment is required for the servicing of roof-mounted battery packs.

An alternative to hybrid engines compressed natural gas (CNG) engines, which are also more environmentally friendly than diesel. CNG bus technology in the past was unreliable; however, the technology has improved to a point that the purchase CNG buses are becoming more common.

All alternative propulsion systems will require modifications to maintenance facilities (charging or storage facilities) and additional parts and equipment inventories. Given the small Wasaga Beach Transit fleet size, the significantly higher cost to purchase hybrid or electric buses, and the marginal financial benefits over hybrid, it is recommended that the Town maintain the use of gasoline for the time being and continue to monitor the performance of hybrid, CNG and electric buses in the industry.

4.7.5 Improved Bus Stop Amenities and Standardization

Citizens who may consider riding transit, especially those who have the option to drive, may be deterred by the unfamiliarity of the transit system (where it goes, the fare collection, the boarding process) – basically every aspect of using it. The following information should be available where feasible at bus stops:

Minimum

- Name or Identification number of the stop (i.e. 4-digit I.D. number)
- Routes that serve the stop by posting each route number
- Decals providing high tonal contrast colours for easy viewing by persons with low visibility
- Bus stop signs should be double sided with the international bus pictogram, so prospective customers may see the location of the bus stop from 2 directions
- Bus stop signs should use 3M reflective sheeting material (similar to other traffic signs) to enable bus drivers to easily view them during nighttime and low visibility periods.

At Major Bus Stops

- Schedule departure times (see example from Burlington Transit)
- Route map
- Fare information
- Phone number (to access transit information)
- Website addresses to link to a future Wasaga Beach Transit GPS/Real time application and other information about transit (fares, hours of service, routes, etc.)



Posted Schedules at Bus Stops

Bus Stop Area Improvements

There is a total of 171 bus stops served by transit with seven bus shelters - five municipally owned bus shelters plus two privately owned bus shelters with a ratio of approximately one shelter for every 24 bus stops (4%). Municipal transit systems typically strive to have 25% to 50% of total bus stop locations with transit shelters.

For budgeting purposes, there will need to be a requirement for bus stops that are spaced at an average of every 250-300 metres on both sides of future bus travel ways. For every 1.0 km of bus route, the Town should budget for up to 8 bus stops with landing pads and two shelters.

For budgeting purposes, the following unit costs have been estimated for the supply and installation of various bus stop area components:

- \$300 Bus stop post and sign
- \$300 Bench
- \$1,000 Concrete bus pad (up to 12-metre length)
- \$7,500 4 ft. X 8 ft. standard shelter; \$12,500 for 5' x 10' shelter
- \$500 miscellaneous (e.g. waste receptacles)

For bus stop infrastructure improvements, the challenge for the Town is to prioritize the most important physical aspects of bus stop locations. For example, the first priority should be that all bus stops are able to bear a Wasaga Beach Transit 'Ride the Wave' stop sign with route numbers, bus stop I.D. (e.g. 4 digits) and logo at the lowest cost (e.g. bus stop sign on existing post or separate bus stop post and sign). The 2nd priority should be transit shelters and concrete landing pads at key high ridership bus stops (for existing and new service improvement areas) and the remaining budget would then be allocated to other bus stop infrastructure.

It is recommended that the Town of Wasaga Beach budget \$30,000 annually for first three years then \$20,000 per year to accommodate new bus stops, the addition of shelters and refurbishing existing bus stops, where required. With the use smart card boarding data by bus stop, shelter location priorities can be determined by passenger volumes and passenger classification.

4.7.6 Bus Terminal

As Wasaga Beach Transit expands service, builds transit ridership and enhances connections to inter-municipal transit services in Simcoe County, a central transfer location will be needed to accommodate five buses at one time for Wasaga Beach Transit (3 buses), C-Link (one bus) and Clearview Transit (one bus). Bus terminals will enhance the image of Wasaga Beach Transit.



The Town of Wasaga beach should explore the opportunity to enhance the off-street bus terminal at the Superstore location and provide amenities such as a heated shelter, benches, bike storage, route maps and schedules, and security cameras. Negotiations with Superstore should take place to ensure traffic and parking concerns are addressed and that up to five vehicles can be accommodated at one time.

A budget of \$120,000 to \$150,000 is suggested for a heated bus shelter and amenities. Since the off-street terminal would be shared with Simcoe County and Clearview Township, the Town of Wasaga Beach would be in a position to negotiate a cost-sharing agreement for use of the terminal.

4.7.7 Technology Improvements

The TransitFare smart card system used by Wasaga Beach Transit is integrated with GPS, which provides Wasaga Beach Transit with the ability to capitalize on state-of-the-art technology improvements such as:

- Mobility payment from smart phones
- Mobile apps that provide a number of tools for the transit customer such as
 - Trip planning (enables transit customer to access schedules in real time)
 - Real-time bus arrival information and trip planning
 - Real time vehicle tracking and announcements
- Simplified generation of detailed reports that can be used for monitoring of:

- Route schedule adherence
- Bus stop utilization to prioritize shelter locations or elimination of redundant bus stops
- Bus stop loads by direction and time of day
- Origin-destination analysis within Wasaga Beach and beyond to improve route design
- Monthly performance reports for Council information

Since Collingwood Transit also uses the same smart card system with GPS capabilities, it is recommended that the Town work with Collingwood Transit to maximize the capabilities of the technology in place on an ongoing basis. A very important attribute to the technology in place is the fact that it is cloud-based and does not require Town staff time to manage and support the applications. Building on this technology, a budget of \$30,000 is suggested for Year 1 should be sufficient to enhance customer information through various mobile apps available. Given the integration with other transit services that are provided by the Town of Collingwood Transit, Township of Clearview, and future Simcoe County bus service, the functional requirements should be developed by all parties for consistency, ease of use and economies of scale through potential cost-sharing.

4.8 Ten-year Capital Budget

The 10-year capital budget of an estimated \$2,020,000 is illustrated in Table 8 below

Item	Proposed 10-year Wasaga Beach Transit Capital Budget										Total
	Short-term (Year 1 to 3)			Medium-term (Year 4 to 6)			Long-term (Year 7 to 10)				
Fleet Expansion (\$130,000 per bus)	\$260,000							\$130,000	\$130,000	\$130,000	\$650,000
Fleet Replacement			\$130,000		\$260,000			\$260,000		\$130,000	\$780,000
Technology improvements	\$20,000	\$10,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$70,000
Bus Terminal with heated shelter	\$150,000										\$150,000
Bus Storage Expansion		\$80,000									\$80,000
Bus stop infrastructure	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$20,000	\$290,000
Total	\$460,000	\$120,000	\$165,000	\$35,000	\$295,000	\$35,000	\$35,000	\$425,000	\$165,000	\$285,000	\$2,020,000

Table 8: Proposed 10-Year Capital Budget

4.9 External Funding and Other Revenues

In addition to passenger revenues, other funding and revenue sources are available to off-set the cost of transit to the taxpayer:

- Dedicated transit gas tax provided by the Province
- Federal and Provincial funding initiatives such as the Public Transit Infrastructure Fund (PTIF) and Community Transportation Grant Program
- Advertising Revenues

4.9.1 Province of Ontario and Government of Canada Funding Programs

For every litre of gasoline sold, Ontario currently provides two cents to Ontario municipalities to help fund local public transit services. For the 2016 operating year, the Town of Wasaga Beach applied to receive \$153,229 while the Town’s contribution would be \$303,212. On January 27, 2017 the Province of Ontario announced that beginning in 2019, Ontario is proposed to gradually double the municipal share of gas tax funds to a total of \$0.04 per litre by 2021-22 as follows:

- 2.5 cents for 2018-2019
- 3.0 cents for 2019-2020
- 3.5 cents for 2020-2021
- 4.0 cents for 2021-2022

In 2016, 99 municipalities received a share of a dedicated transit tax collected by the Province, which is determined by a formula of 70% ridership and 30% cent population. In this regard, if the number of municipalities receiving the dedicated gas tax remains constant, maintain their existing ridership levels and population, the doubling of the gas tax could also double the gas tax received by Town of Wasaga Beach. Since the increased funding proposed is not confirmed, the study team elected not to apply the proposed increases to the budget; however, municipal staff would take this into consideration should it be passed in 2019.

Going forward, since the gas tax allocation among municipalities is more heavily dependent on transit ridership (i.e. 70%) than population (30%), transit ridership growth strategies take on a more important role. If transit system effectiveness (revenue passengers per capita) improves better than the provincial average, the municipality will benefit in two ways:

- Increased passenger revenues
- Increased gas tax revenue attributed to transit ridership gains

Another factor that comes into play is the amount of gasoline sold. Ironically, if more gasoline is sold in Ontario, this adds to the carbon footprint; however, more gas tax revenues will be collected by the Province of Ontario and as such, Ontario transit systems will benefit further.

The Federal and Provincial governments have recognized the importance of transit to municipalities and residents. As such, these levels of governments are investing more in public transit. The Town of Wasaga Beach is encouraged to continue to apply for and invest in future funding programs. This could accelerate, accommodate or augment many of the existing and newly proposed services provided at a reduced rate, benefiting all residents.

The federal government Public Transportation Infrastructure Fund (PTIF) is designed to be invested in transit infrastructure, including rolling stock (buses), while the provincial government Community Transit Project Grants available for both operating and capital investments. The Town of Wasaga Beach pursued applications during the time of this study and the results of the applications were not available. In this regard, the Town of Wasaga Beach Transit Study will provide the background information to support the current and future external funding programs.

4.9.2 Advertising Revenues

A strategy used to off-set municipal transit costs is through the selling of advertising space on buses, shelters and benches. Shelter advertising can be lucrative; however, they are more suited for larger urban centres where there are multiple shelters along busy roadways. For smaller municipalities such as Wasaga Beach, it is suggested that bench advertising be undertaken as a first step to attracting advertising revenues.

There are three options that can be pursued:

- Municipally owned benches with advertising sold by the Town
- Municipally owned benches with advertising sold by a third party
- Privately owned benches with advertising sold by a third party

Given the availability of transit infrastructure funding, the Town could purchase and install the benches then secure a vendor/ contractor to sell and maintain the advertising. The contractor would not have the revenue risk associated with purchasing the bus benches and as such, this increases the revenue to the Town.

Bus bench advertising clients will typically attract established local business owners such as real estate agents, the legal profession, accounting firms and, in the Wasaga Beach area, tourist-related businesses. Beachwood Road and Mosely Street are high traffic roadways linked to Collingwood that would likely attract the highest advertising interest. The Town profit that can be expected would approximate \$75 per month per shelter assuming there a sufficient number of benches available to attract multiple advertisers. For example, if the advertising was sold on 30 benches over time, this could generate up to \$27,000 in revenue. The \$27,000 in revenue is equivalent to providing 450 hours of service annually. The larger the market, the more successful both the contractor and Town will be.

It is recommended that the Town of Wasaga Beach initiate steps to sell advertising on bus benches through a third party and that consideration be given to working with Collingwood Transit to select a single vendor that could sell in both municipalities.

4.10 Transit Business Model

Public transit systems business models range from 100% privately owned and operated to 100% publicly owned and operated, which are outlined in Exhibit 16 Transit Business Model Continuum. The Town of Wasaga Beach business model was assessed as well as the C-Link business model.

4.10.1 Wasaga Beach Transit

There are a number of transit business models that range from 100% private to 100% public that are illustrated in Exhibit 16: Transit Business Model Continuum.

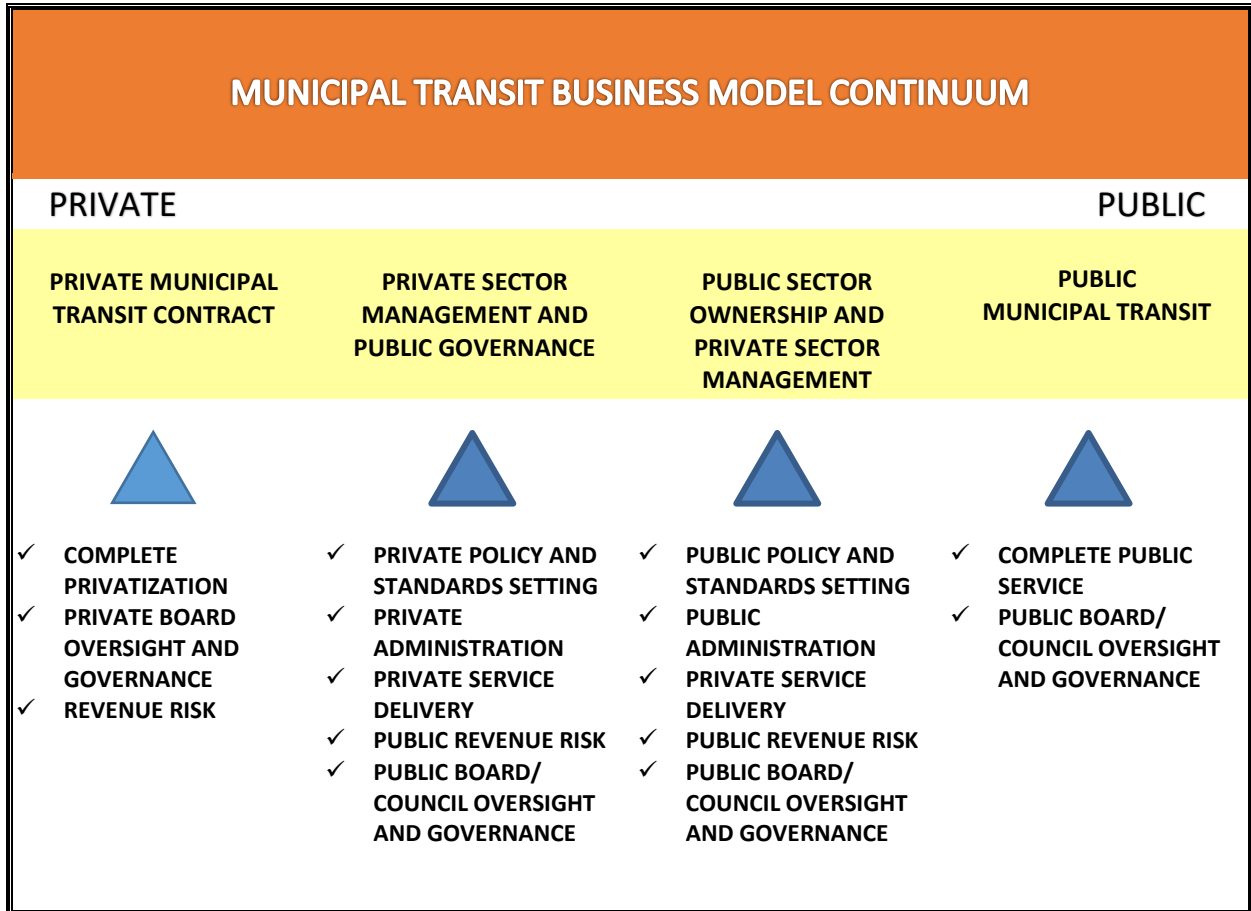


Exhibit 16: Transit Business Model Continuum

Note: Administration refers to non-transportation functions: finance and budgets, service planning, marketing, customer service, IT systems, revenue management, etc.

The Wasaga Beach Transit business model is the Public Sector Ownership and Private Sector Management model, which is typical for municipalities throughout Simcoe County and across Canada. The Town of Wasaga Beach owns the fleet and sets transit policy while the private sector contractor (Sinton Landmark) is responsible for delivering the service and the front-line customer liaison. This approach to service delivery keeps costs down since the contractor is able to attain economies of scale with its other operations such as Collingwood Transit, the C-Link and Township of Clearview service from Stayner to Wasaga Beach. The contractor is also responsible for maintenance while overnight bus

storage is provided by the Town on 16 – 2nd St. N., which keeps costs down. This is borne out by the 2015 peer review where the \$55.34 hourly cost of service was approximately 20% less than the average of the peer group.

The integrated smart card – GPS system on Wasaga Beach Transit buses also enables the Town of Wasaga Beach staff to monitor route and schedule performance off-line to monitor service performance and quality.

It is recommended that the Town of Wasaga Beach maintain the existing business model.

4.10.2 C-Link Business Model

The C-Link business model mirrors that of Wasaga Beach Transit. The C-Link bus is co-owned by Wasaga Beach and Collingwood and service is operated by Sinton Landmark. Collingwood pays for the service within Wasaga Beach. In exchange for no cost to Wasaga Beach, Collingwood keeps all the C-Link fare revenues, and the credit for the fares and costs when reporting the municipal own spending (MOS) to the Ministry of Transportation when applying to secure the 2-cent per litre dedicated gas tax funding. The associated gas tax from this is, therefore, allocated 100% to the Town Collingwood.

Assuming an average weekday ridership on the C-Link during January 2018 (reported in Exhibit 17 below) was 138 passengers per day that, coincidentally, is the same as the average daily ridership shown in Section 2.5.1. Approximately 45% of the route travels within Wasaga Beach while 55% is within Collingwood. Assuming that the C-Link passenger demand is broken down proportionately (45/55), Wasaga Beach residents would account for 22,500 of the approximate 50,000 passengers per year. Based on \$2.00 per fare, this equates to a revenue of \$45,000 annually. For cost estimating purposes, it is assumed that there are currently 4,600 hours of service per year (2,070 hours travelled in Wasaga Beach, 2,530 travelled in Collingwood).

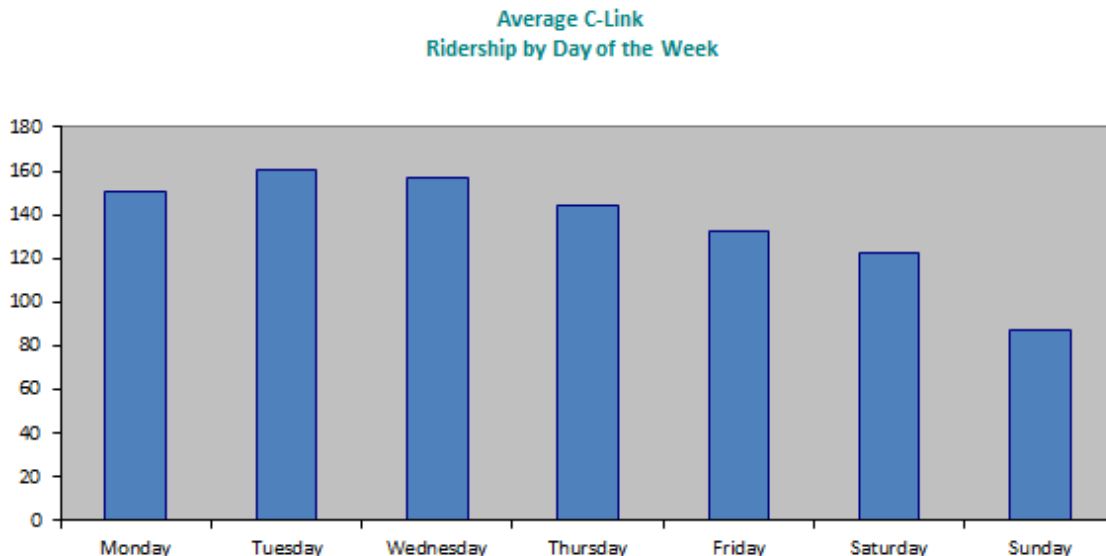


Exhibit 17: Average C-Link Daily Ridership January 2018

Assuming the \$60 hourly cost (excluding capital costs) is apportioned the same (45/55), the approximate annual cost of the service in Wasaga Beach would approximate \$125,000 while Collingwood would approximate \$153,000 per year. The net cost to Wasaga Beach is estimated at \$80,000 per year (\$125,000 cost less \$45,000 revenue). If Wasaga Beach reported its own costs, ridership and revenues, the MOS portion of the gas tax submission would increase by \$170,000 (\$80,000 cost + \$45,000 revenue). In addition, the transit ridership would increase by 22,500 to an approximate total of 102,000 annual passengers based on the reported \$79,459 passengers carried in 2016. This represents an increase of 22% in the passengers reported to the Province. Since the transit ridership reported represents 70% of the gas tax allocation, it may be prudent for the Town of Wasaga Beach to identify what the gas tax impact would be.

It is also interesting to note that the C-Link carried an estimated 10.8 passengers per hour in 2016, which is 2.8 passengers per hour more than was reported by Wasaga Beach Transit in 2016 (8.0 passengers per hour). If the estimates above hold true then Wasaga Beach efficiency system-wide would approximate 8.5 passengers per hour, which is 6.2% more efficient. These changes would also have a bearing on other peer review metrics.

In view of the recommendation by Transit Consulting Network to have a single fare payment for travel within Wasaga Beach on all services, it is suggested that the Wasaga Beach Transit staff review the current agreement relative to the C-Link service. Given the TransitFare and Systems technology put in place since the C-Link agreement was first developed, the impact of the changes can more easily be quantified.

4.11 Summary, Recommendations and Next Steps

4.11.1 Summary

The Transit Master Plan study was broken down into three phases:

- Phase I: Critical Evaluation of Existing Public Transportation Services
- Phase II: Transit Ridership Growth Plan
- Phase III: Transit Expansion Plan

Key to the study was the community engagement process, which involved consultations with bus operators, the general public, the business community, accessibility and social service agencies, and senior staff of the Town of Wasaga Beach. This was complemented by an on-line survey that was completed by 229 residents. It was made very clear at the outset of the study that the Wasaga Beach Transit performed well and transit use was on the rise; however, residents in many areas of Wasaga Beach lacked service, all buses did not connect for convenient transfers, and improvements to branding, marketing and bus stops were needed. There was also a clear need to modernize the transit fleet and improve infrastructure that would be in-line with other municipal initiatives such as accommodating the tourist industry and working more with employers.

4.11.2 Recommendations

Going forward, the revised routes of the proposed transit service plan will be further tested prior to implementation and as such, additional minor modifications to the plan may be required.

The Wasaga Beach Transit Study and Operations Review culminated with a number of proposed improvements that address community priorities, which are summarized as follows:

- Expand transit coverage within the Town of Wasaga Beach area to accommodate more residents due to population and development growth that has occurred since the existing year-round bus route was introduced
- Expand the hours of operation to better accommodate the worker
- Better meeting of AODA requirements for public transportation
- Support the connectivity to future inter-municipal transit service that would link Wasaga Beach to destinations within Simcoe County
- Development of a central transit mobility hub
- Introduce a single fare for all trips originating and ending in Wasaga Beach, regardless of the route travelled
- Review and modify the C-Link agreement with the Town of Collingwood
- Building on existing technology to provide real time schedule information, and the ongoing monitoring of passenger loads and bus schedule adherence

It is recommended that the Town of Wasaga Beach approve, in principle, the recommendations of the Wasaga Beach Transit Study and Service Review and take steps to implement change in 2019.

4.11.3 Next Steps

The most important recommendation of the transit service plan was the revised route design and the addition of a third route. Fortunately, very few bus stops need to be eliminated and far more bus stops will need to be added. Given that the route changes can be considered significant by some, the implementation phase will require extensive marketing efforts to educate the existing transit customers and residents that will be receiving transit for the first time.

Upon approval by Council, the following tasks will need to be undertaken prior to implementation:

- Bus procurement to expand fleet
- Expand use of existing smart card technology
- Finalize bus stop locations and infrastructure needs
- Procure and install bus stop infrastructure
- Identify a service expansion start date that may be based on vehicle delivery
- Test new routes and modify, as required
- Community outreach to educate existing and future transit customers
- Enhanced branding and marketing

It should be pointed out that during the implementation phase, further route and schedule modifications can be expected; this is normal. As the route and service changes are rolled out, it will be important to monitor the impact of the changes and recognize that while some current customers may be slightly impacted, far more existing and new transit customers will benefit in the longer term.

Appendix A: Excerpts from O. Reg. 191/11, Integrated Accessibility Standards Regulation

The following excerpts from AODA Integrated Accessibility Standards Ontario Regulation 191/11 indicate that Red Cross Transportation qualifies as a Specialized Transportation Service.⁸

Section	Summary of section	Applicable
33.	<p>Section 33: Definition of Specialized Transportation</p> <p>“Specialized transportation service provider” means a designated public sector transportation organization described in paragraph 5 of Schedule 1 that provides specialized transportation services that operate solely within the Province of Ontario; (“fournisseur de services de transport adapté”)</p> <p>“Specialized transportation services” means public passenger transportation services that,</p> <p>(a) Operate solely within the Province of Ontario,</p> <p>(b) Are provided by a designated public sector transportation organization as described in paragraph 5 of Schedule 1, and</p> <p>(c) are designed to transport persons with disabilities;</p>	January 1, 2013
Schedule 1, Para. 5	<p>Definition of Broader Public Sector</p> <p>5. Every public transportation organization in Ontario, including any municipally operated transportation services for persons with disabilities, that provides services for which a fare is charged for transporting the public by vehicles that are operated,</p> <p>i. by, for or on behalf of the Government of Ontario, a municipality, a local board of a municipality or a transit or transportation commission or authority,</p> <p>ii. under an agreement between the Government of Ontario and a person, firm, corporation, or transit or transportation commission or authority, or</p> <p>iii. under an agreement between a municipality and a person, firm, corporation or transit or transportation commission or authority.</p>	January 1, 2013

The following excerpts from O. Reg. 191/11 pertain to parity in fares and hours of service:

Section	Summary of section	Applicable
66.(1)	<p>Fare Parity. Where conventional transportation services and specialized transportation services are provided by separate transportation service providers in the same jurisdiction, the specialized transportation service provider shall not charge more than the highest fare charged for conventional transportation services in the same jurisdiction. O. Reg. 191/11, s. 66 (1).</p>	January 1, 2017
70.(1)	<p>Hours of service. Where conventional transportation services and specialized transportation services are provided by separate transportation service providers in the same jurisdiction, the specialized transportation service provider shall ensure that it has, at a minimum, the same hours and days of service as any one of the conventional transportation service providers. O. Reg. 191/11, s. 70 (1).</p>	January 1, 2017

⁸ Source: <https://www.ontario.ca/laws/regulation/110191#BK74>