

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. Information Item 3 Transportation Standing Committee January 26, 2023

SUBJECT:	Access-A-Bus Service Area Review
DATE:	January 11, 2023
	Cathie O'Toole, Chief Administrative Officer
SUBMITTED BY:	
то:	Chair and Members of Transportation Standing Committee

INFORMATION REPORT

<u>ORIGIN</u>

March 22, 2022 Halifax Regional Council motion (15.7.1):

MOVED by Councillor Deagle Gammon, seconded by Councillor Hendsbee

THAT Halifax Regional Council:

Direct the Chief Administrative Officer to provide a staff report to review the existing Access-A-Bus service area which is limited to 1,000 meters from a bus stop, and for the report to include options (including timeframes) for extending this boundary, as well as the financial implications and impact to service of any extension.

MOTION PUT AND PASSED

LEGISLATIVE AUTHORITY

Section 69 of the Halifax Regional Municipality Charter provides that:

69 (1) The Municipality may provide a public transportation service by

- (a) the purchase of vehicles or vessels and operation of the service;
- (b) providing financial assistance to a person who will undertake to provide the service; or
- (c) a combination of these methods.

Policy T-5 of the 2014 Regional Municipal Planning Strategy provides that:

T-5 Transit Service Plans shall be prepared at regular intervals for consideration by HRM. These plans will be developed in consultation with the public and other stakeholders and, upon adoption by HRM, shall provide guidance for investment in transit services.

BACKGROUND

Access-A-Bus is a paratransit service offered by Halifax Transit that provides public transit to eligible residents as an alternative to the conventional transit service. Currently, Access-A-Bus service is only available for locations that are within 1,000 meters of a Halifax Transit bus stop.

This report evaluates options for extending Access-A-Bus service to additional residents and the associated impacts.

DISCUSSION

In the period of January 2020 to August 2022, of the existing 7,257 registered clients, a total of 2,264 clients traveled using Access-A-Bus. These clients primarily live in communities with relatively high population density and frequent bus stops and reside within 1,000 meters of a bus stop. However, there are 152 existing clients that live outside of these limits. Most of these clients were approved when bus service existed near their residence. These clients are effectively grandfathered in, but no new clients from these communities are approved as Access-A-Bus clients.

The average distance between the client's residential address and the closest bus stop is 255 meters and the median is 136 meters. The total area covered by Access-A-Bus service is 344.24 square kilometers as shown in the map below.

As the median divides data into two parts, quartiles are used to divide data into quarters, and the lower 25% data set is termed as the lower quartile, 50% and 75% are termed as middle and upper quartiles respectively. Table 1 below illustrates that 75% of clients live within 263.51 meters of a conventional fixed route bus stop. Only 2.3% of the clients live beyond 900 meters from a conventional fixed route bus stop.

Quartiles	Distance in meters
Lower Quartile (25%)	45.19
Middle Quartile (50%)	136.48
Upper Quartile (75%)	263.51
Standard Deviation	744.8

Table 1: Quartiles

New applications for Access-A-Bus service are submitted regularly, with 443 new clients being approved in 2021, and 535 new clients to date in 2022. It is anticipated that population growth in the municipality will continue to increase demand for paratransit service within the existing service boundary.

Taxation

The municipal Local Transit Tax is applied to any dwellings within 1,000 meters of a conventional bus stop. This policy is currently in alignment with the Access-A-Bus service boundary. Should the boundary be extended in the absence of any parallel changes to taxation, residents who are not currently taxed for local transit service would be considered to be served by Access-A-Bus, but not conventional transit service.

Service Boundary Alternatives

An analysis was conducted that explored multiple potential changes to the service boundary, including an extension to 1,200 meters, 1,500 meters, 2,000 meters, 5,000 meters, and 10,000 meters from a conventional bus stop.

The below map shows the areas which would be considered serviced by Access-A-Bus under each scenario.

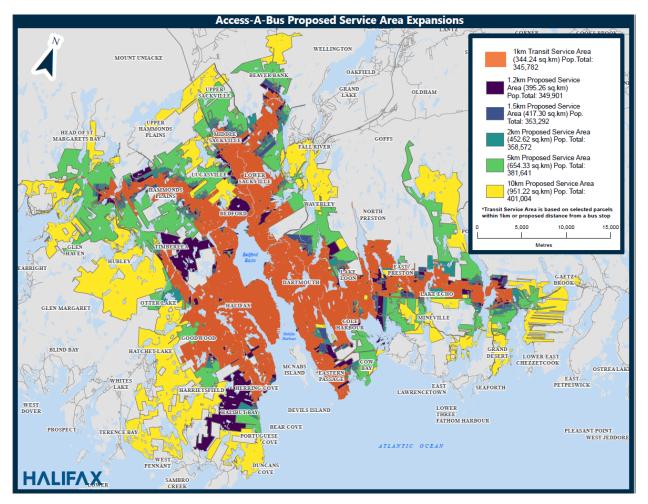


Table 2 below shows both the increase in land area and the population that would be included within the boundary if it were increased.

	Proposed Service Area (meters)	Area covered (Sq Km)	Increase in Land Area (%)	Increase in Population (%)
1	1,200	395.26	14.8%	1.2%
2	1,500	417.30	21.2%	2.2%
3	2,000	452.62	23.9%	3.7%
4	5,000	654.33	90%	10.4%
5	10,000	951.22	176.3%	16.0%

Table 2: Potential Increase in Land and Population areas

Demographic information is not available to inform whether residents who live outside of the existing Access-A-Bus service boundary are more, or less likely, to use the service, and to what degree. However, if we assume residents in these expansion areas are just as likely to register for the service as residents already within the service boundary, we could expect the number of clients to increase proportional to the population increase (1.2% to 16%), which would result in an additional 87 - 1,159 clients, depending on the extent of the service boundary increase.

- 3 -

	Proposed Service Area (meters)	Increase in Population	Increase in Population (%)	Estimated increase in registered clients
1	1,200	4,119	1.2%	87
2	1,500	7,510	2.2%	158
3	2,000	12,790	3.7%	268
4	5,000	35,859	10.4%	753
5	10,000	55,222	16.0%	1159

- 4 -

Table 3: Estimated increase in registered Access-A-Bus clients

From January 2020 to September 2022, approximately 30 Access-A-Bus applications were rejected due to the applicant residing outside of the service boundary. The median distance between the applicants dwelling and the nearest bus stop was 2,713 metres. Thus, if the service area was increased to 2,713 meters, then 50% of the applications rejected between 2020 to 2022 could be approved. However, it is assumed that a greater number of potential clients exist and have not applied because they are aware of the service boundary.

Destinations

Of 371,592 trips operated by Access-A-Bus between 2019 and 2021, more than 40% of them were for either medical reasons or school attendance. Most of the hospitals, medical centers, resource facilities, employment centres and schools in the region are near existing bus stops and well within the service area. There are rarely any requests for service to destinations outside of the service boundary, so any extension would primarily service to include more dwellings and allow more residents to be eligible for the service, but would not significantly increase access to employment, recreation, or other destinations currently on the periphery of the boundary.

Impact to Service

The extension of the service boundary without any changes to available service would not have a direct operating or capital cost, however, it would negatively impact the dimensions of service quality for current passengers i.e., reliability, responsiveness, and effectiveness. There is a great deal of demand on the existing system, and any expansion will create additional pressures, generally decreasing the quality of service provided to clients, by increasing the waitlist, therefore decreasing the chances that clients will secure the trips they require.

The areas outside the existing boundary have a lower population density and are further from the Regional Centre, which means that there are fewer opportunities for scheduling efficiencies (carrying multiple passengers, pairing trips), fewer trips can be provided within a given time period, the cost per passenger is higher, and the overall service efficiency will decrease. These negative impacts grow larger the greater the expansion area is.

In 2018, the 'Access-A-Bus Continuous Improvement Plan' was approved by Regional Council. It outlines specific activities to be undertaken by Halifax Transit to ensure ongoing improvements to the service and achieve the long-term vision of Access-A-Bus. To measure the performance and success of the Access-A-Bus service, five key metrics were selected to connect the targeted improvements and the guiding principles:

- Trip denials The percentage of trip requests unable to be accommodated;
- On-time performance The percentage of times a bus arrives within the 30-minute pick-up window;
- Trips per hour The number of trips provided divided by the combined bus operating hours.
- No shows/late cancels The percentage of scheduled pick-ups that are either no shows or late, cancellations; and
- Cost per trip The total operating costs divided by the total number of trips.

Although extending Access-A-Bus service to locations outside of 1,000 meters would allow more residents to access the service, an extension could negatively impact four of these six metrics. The largest and more direct impact would be on trips per hour, and cost per trip. The average trip length for Access-A-Bus is currently 10.74 km, which is considerably higher than the Canadian average of 8.14 km. As per the analysis, the length for the top 10 percentile of the trips added for clients outside the boundary would be in the range of 30 km to 40 km each. These trips would be significantly longer and more costly than average, impacting the overall metrics.

The length of the trips would also be expected to increase the number of trip denials, and resources consumed on the longer trips. Finally, there is evidence that longer travel times have a negative impact on on-time performance, as it increases the risk of encountering delays. It may be possible to mitigate an impact to this fourth metric by increasing buffers around travel times, so that on-time performance levels are maintained, but unproductive time is added to the schedule, further driving up costs per trip.

Potential for Service Increases

To mitigate the expected decline in the quality of service, Access-A-Bus resources could be increased to account for the additional new service area. The table below shows the estimated cost of adding new resources to address the increase in the service boundary. These calculations are estimates, based on potential clients being proportional to those in the service area, but uptake for the service being approximately 20%¹ lower than in urban/suburban areas to account for increased personal vehicle ownership and reliance in outer suburban and rural areas.

	Proposed Service Area (meters)	Increase in Population (%)	Estimated increase operating costs	Estimated increase in operating costs (% of current budget)
1	1,200	1.2%	\$380,000	5%
2	1,500	2.2%	\$700,000	10%
3	2,000	3.7%	\$1,250,000	18%
4	5,000	10.4%	\$3,800,000	55%
5	10,000	16.0%	\$6,700,000	96%

As evidenced in the table, it is anticipated that the incremental costs to the Access-A-Bus 2022/2023 operating budget would increase in a way that is disproportionate to the increase in residents eligible for the service. For example, if the boundary was extended by 10 km, 16% more residents would be eligible, but the operating cost would go up by 96%, or would almost double.

In addition to operating costs, capital costs would be required for the purchase of new vehicles to provide the additional service, and additional space would be required at the Burnside Transit Centre to house the vehicles. As the Burnside Transit Centre is at capacity, with very little ability to absorb new vehicles in the short term, increasing Access-A-Bus service to absorb the additional clients without impacting the quality of existing service would present multiple challenges. Should expansion vehicles be purchased in the short or medium term, to meet the objectives of the 'AAB Continuous Improvement Plan' and improve the quality of service, those vehicles would be better served to be dispatched within the existing service boundary to improve services and address demand pressures from population growth.

<u>Timelines</u>

Should Regional Council choose to expand the service boundary in isolation of any other changes, this policy change could be adopted by Halifax Transit within a few weeks. However, because the resources available would remain the same, the quality of service delivered would drop and may lead to customer dissatisfaction.

¹ This factor was calculated based on historic reductions in modal split in suburban and outer suburban areas when compared to urban areas in the municipality.

If direction to expand the service boundary is contingent on increasing resources to reduce the impact on existing clients, or amendments to taxation policy, a supplemental report would be required to discuss funding sources/taxation changes. An increase in service would also require the boundary expansion to be postponed to a future fiscal year to allow for the procurement of additional vehicles and increase in operating funding to be considered by Regional Council in a future budget process.

Accessible Taxi Service

The new accessible taxi service, branded as 'Extra Care Taxi', was introduced in July 2022 to compliment existing accessible transportation services provided in the municipality. Although Access-A-Bus services are restricted to locations within the boundary, Extra Care taxi service is not restricted, and may meet residents' needs for some trips.

FINANCIAL IMPLICATIONS

There are no financial implications at this time. However, if Regional Council alternatively approves an increase to the service area of Access-A-Bus, this will add pressure on future operating and capital budgets.

COMMUNITY ENGAGEMENT

No community engagement was undertaken in the preparation of this report.

ATTACHMENTS

No attachments.

A copy of this report can be obtained online at <u>halifax.ca</u> or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Abhishek Singh, Business Analyst, Halifax Transit, 902.717.8394