



**CITY OF HAMILTON**  
**PUBLIC WORKS DEPARTMENT**  
 Transit Division

<b>TO:</b>	Mayor and Members General Issues Committee
<b>COMMITTEE DATE:</b>	February 19, 2016
<b>SUBJECT/REPORT NO:</b>	Accessible Transportation Services Review (PW16015) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	David Dixon Director of Transit (905) 546-2424, Extension 1860  George Brovac Manager, Accessible Transportation Services (905) 546-2424, Extension 1666
<b>SUBMITTED BY:</b>	Gerry Davis, CPA, CMA General Manager Public Works Department
<b>SIGNATURE:</b>	

**RECOMMENDATIONS**

- (a) That DARTS be directed to aggressively expand the accessible and non-accessible van fleet, and correspondingly reduce the bus fleet at a rate and in a manner approved by the General Manager of Public Works with a targeted budget reduction of \$1 million by the end of 2016;
- (b) If DARTS is successful, develop a plan with DARTS that will ensure the full realization of potential savings (an additional \$1.5 million) prior to renewal/extension of the DARTS contract (expires June 30, 2017);
- (c) Should DARTS fail to achieve the targeted budget reduction by the end of 2016, the General Manager of Public Works be directed to complete:
  - (i) the transfer of DARTS operations (reservations, scheduling and dispatch) to the City engaging the appropriate parties as required;
  - (ii) a Request for Proposal (RFP) for the service delivery of ATS customers in buses, accessible vans and vans/sedans noting the DARTS contract expires on June 30, 2017;
- (d) That Council direct the City Manager to explore options with the Province of Ontario to fund a portion of the City's specialized transit service in light of the increased cost pressure placed upon the City as a result of AODA legislation;

- (e) That Council permanently fund the Travel Training program on an annual basis with a commitment of 100 trainees per year at a cost of \$175,000.

## **EXECUTIVE SUMMARY**

Since 2012, the City of Hamilton has experienced a dramatic growth in the cost of providing Accessible Transportation Services (ATS). Specifically, DARTS operating expenses have risen from approximately \$12 million in 2011 to \$16.5 million in 2015 or almost 40 percent. This increase is largely attributable to the increase in ridership primarily as a result of the early introduction of enhanced eligibility criteria for ATS required by Accessibility for Ontarians with Disabilities Act (AODA) legislation. AODA now requires consideration of cognitive and sensory impairments in addition to physical disability. Our aging population is also expected to put pressure on ATS.

While eligibility criteria have changed to include cognitive and sensory conditions in addition to physical challenges, the delivery model has remained largely unchanged. Based on an analysis of matching customer needs and challenges with vehicle capabilities, there is substantial opportunity to shift customers from expensive “bus” rides costing more than \$30 a trip, to “non-accessible van” rides costing about half (ie.\$16 to \$18 a trip). Approximately one half of our customers are Ambulatory with no mobility device, with a further one quarter only using a walker. The vast majority of these customers, almost 60% of our total customers, will comfortably fit into a non-accessible van. Currently (2015) only 46% are being transported by non-accessible van. This means, the use of non-accessible vans can potentially increase by 14% along with an offsetting reduction in bus use. If this optimization had occurred in 2015, approximately \$1 million could have been saved.

In addition, new limited capacity accessible vans (eg. MV-1) capable of carrying most mobility devices are emerging on the market. Since 70% of bus trips carry only one mobility device, there appears to be good opportunity to employ this type of accessible van. Potentially, bus trips could be further reduced from approximately 40% of the ride mix to just fewer than 7% with the introduction of accessible vans similar to MV-1's. Essentially, the current DARTS bus would function in the “oversized” space or when larger groups with similar origins and destinations require transportation. Based on limited experience, the average cost per trip for the MV-1 is between \$18.00 and \$25.00 all inclusive. Therefore, if this further transition could be made, another \$1.6 million could be saved based on 2015 trip data.

In summary, with optimization and the introduction of accessible vans such as the MV-1, in the order of \$2.6 million or almost 20% of service delivery expenditures could be saved based on 2015 trip data. In addition, the reduction of bus rides would also lead to the shrinkage of the bus fleet well below the current level of 72. All or some portion of the current transfer of \$1.35 million annually to the Capital reserve for bus replacement could be avoided. In 2016, the full \$1.35 million was removed from the budget.

Transferring reservations, scheduling and dispatch to the City would ensure efficiencies in service delivery through the introduction of accessible vans and the optimization of fleet mix are achieved and achieved rapidly as the City would be unencumbered by contractual limitations on trip allocation. However, DARTS should first be given the opportunity to demonstrate their ability to achieve these savings. If DARTS can achieve a \$1 million savings by the end of 2016, then a plan to achieve all potential savings prior to the expiration of the DARTS contract on June 30, 2017 would be developed and implemented.

In October 2011, ATS staff initiated HSR bus travel training for persons with developmental disabilities. The cost of the program is approximately \$175,000 annually to train 100 clients with a 75% success rate resulting in cost avoidance of \$324,000 annually. The City benefits socially and financially, by providing independence to Citizens and avoiding costs on the ATS.

It is projected that ATS trips will increase from 579,124 trips in 2015 to 850,831 by 2020; therefore it is imperative that immediate steps are taken to reduce the service delivery cost structure. Even with structural adjustments to the service delivery model, costs in 2020 are projected to be over \$21 million.

### **Alternatives for Consideration – See Page 8**

### **FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

Financial: There is a potential annual savings of approximately \$4 million by reconfiguring the fleet make-up through an increase of non-accessible vans or sedans, the reduction of buses and the introduction of accessible vans.

Staffing: DARTS currently has 23 employees responsible for the reservations, scheduling and dispatch functions. If these service functions are transferred to the City, staffing at or below this level will be required.

Legal: Discussions are ongoing between ATS and Legal staff to determine potential impacts of not renewing the contract with DARTS and moving forward with a new service delivery model.

### **HISTORICAL BACKGROUND**

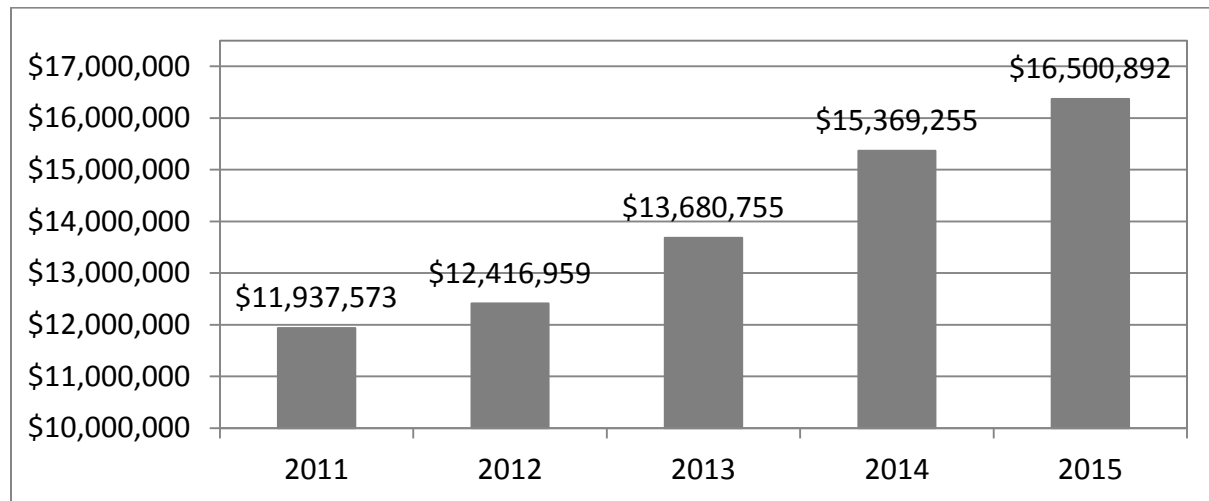
The City of Hamilton provides point-to-point transportation for local residents who are unable to use conventional public transit due to physical, cognitive or sensory challenges. City oversight for this service is provided by Accessible Transportation Services (ATS), a section of the Transit Division. The service is delivered by the Disabled and Aged Regional Transportation System (DARTS), a not-for-profit organization, under a service agreement. ATS ensures compliance with AODA and the 2004 Human Rights Settlement, manages the eligibility and registration process, manages customer service and the taxi scrip program, and provides contract administration. DARTS provides the reservation, scheduling and dispatch functions, all

on-street services through City supplied buses and sub-contracted vans, bus storage and maintenance, fare management, and complaint investigation.

The service is currently delivered through a mix of accessible specialized buses operated by DARTS (72), largely sub-contracted non-accessible minivans (46) and recently added sub-contracted accessible vans (6). The cost per trip ranges from \$16 for a sub-contracted non-accessible van to almost double that for a bus at just over \$30.

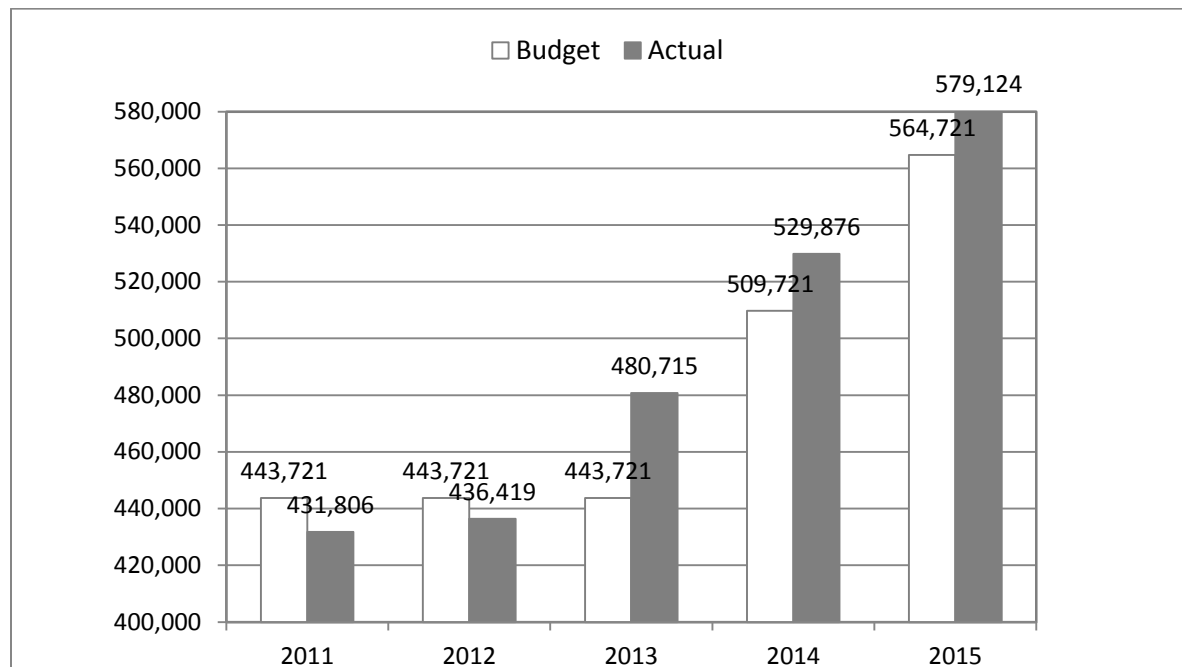
Since 2012, the City of Hamilton has experienced a dramatic growth in the cost of providing Accessible Transit Services (ATS). As outlined in Figure 1, operating expenses have risen from approximately \$12 million in 2011 to \$16.5 million in 2015 or almost 40 percent.

Figure 1 - DARTS Expenditures



As shown in Figure 2, this increase is largely attributable to the growth in ridership primarily as a result of the early introduction of enhanced eligibility criteria for ATS required by Accessibility for Ontarians with Disabilities Act (AODA) legislation. Prior to AODA, eligibility for service was based largely on physical disability. AODA requires consideration of cognitive and sensory challenges in addition to physical disability. Finally, our aging population is also expected to put considerable pressure on ATS in the very near future.

Figure 2 – DARTS Trips



Given the new criteria and the resultant customer growth and financial pressure being faced by ATS, staff has been examining alternate service delivery models to more closely align customers with appropriate vehicle delivery type, thereby lowering the unit cost of providing a customer trip and overall costs to the City.

This direction is also consistent with Audit Services conclusions reported to Council on September 23, 2014:

- DARTS has capacity on existing vehicles to transport additional passengers;
- Cost savings of any magnitude may only be possible by changing how services are provided to passengers; and
- The Driver Collective Agreement between DARTS and CUPE 5167 contains specific clauses limiting the number of trips that DARTS may subcontract to another service provider.

## **POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

If DARTS is unable to make the transition to service delivery through vans/sedan and accessible vans at a significantly lower cost, staff will need to complete a Request for Proposal (RFP) in 2016 (prior to the expiration of the DARTS contract on June 30, 2017) for the service delivery of ATS customers in buses, accessible vans and vans/sedans. In addition, plans will be made to complete the transfer of DARTS operations (reservations, scheduling and dispatch) to the City. As a result of these two actions, the ongoing viability of DARTS may be dubious.

**RELEVANT CONSULTATION**

ATS has worked with DARTS in 2015 to develop unit cost data. DARTS has been consulted on the direction the City is moving in – DARTS supports moving to a lower service delivery cost structure, but not the transferring of reservations, scheduling and dispatching to the City, nor the issuing of an RFP.

**ANALYSIS AND RATIONALE FOR RECOMMENDATIONS**

**Matching Customers to Vehicles**

While eligibility criteria have changed to include cognitive and sensory conditions in addition to physical challenges, the delivery model has remained largely unchanged. Based on an analysis of matching customer needs with vehicle capabilities, there is substantial opportunity to shift customers from expensive “bus” rides costing more than \$30 a trip, to “non-accessible van” rides costing about half (ie.\$16 a trip).

Figure 3 – Maximize Fleet Mix

Customer Type	Number of Trips (2015)	% of Total Trips	Actual % Van Trips	Actual % Bus Trips	Potential % Van Trips	Resultant % Bus Trips
Ambulatory (No Mobility Device)	275,597	47.6%	31.2%	16.4%	36.0%	11.6%
Walker	157,846	27.3%	14.0%	13.2%	21.8%	5.5%
Wheelchair	98,470	17.0%	0.0%	17.0%	0.0%	17.0%
Electric Wheelchair	25,278	4.4%	0.0%	4.4%	0.0%	4.4%
Oversized Wheelchair/Scooter/Ambulatory, Scooter, Ambulatory (Cane)	21,933	3.8%	0.5%	3.2%	0.7%	3.1%
<b>Total</b>	<b>579,124</b>	<b>100.0%</b>	<b>45.8%</b>	<b>54.2%</b>	<b>58.5%</b>	<b>41.5%</b>
Annual Rides			265,237	313,890	338,651	240,473
Unit Cost			\$16.55	\$30.90	\$16.55	\$30.90
Annual Cost			\$4,389,672	\$9,699,201	\$5,604,674	\$7,430,616
Total Annual Cost			\$14,088,873		\$13,035,290	
<b>Net Annual Saving</b>			<b>\$1,053,584</b>			

As shown in Figure 3, approximately one half of our customers are Ambulatory with no mobility device, with a further one quarter only using a walker. The vast majority of these customers, almost 60% of our total customers, will comfortably fit into a non-accessible van. However, currently (2015) only 46% are being transported by non-accessible van. This means, the use of non-accessible vans can potentially increase by about 14% along with an offsetting reduction in bus use. If this optimization had occurred in 2015, approximately \$1 million could have been saved.

In addition, new limited capacity accessible vans (eg. MV-1) capable of carrying most mobility devices are emerging on the market. Since 70% of bus trips carry only one mobility device, there appears to be good opportunity to employ this type of accessible van. In July 2015, one MV-1 vehicle was introduced into service as a pilot to prove out

this theory and validate “best practices”. Based on positive pilot results, the fleet was expanded to six (6) MV-1 vehicles by the end of 2015. Based on our experience to date, the average cost per trip for the MV-1 is between \$18.00 and \$25.00 which includes capital, maintenance, insurance, fuel, driver and DARTS overheads.

Figure 4 – Introduce Accessible Van

Customer Type	Number of Trips (2015)	% of Total Trips	Van & Bus		Van, Accessible Van & Bus		
			Potential % Van Trips	Resultant % Bus Trips	Potential % Van Trips	Potential % Accessible Van Trips	Resultant % Bus Trips
Ambulatory (No Mobility Device)	275,597	47.6%	36.0%	11.6%	36.0%	11.6%	0.0%
Walker	157,846	27.3%	21.8%	5.5%	21.8%	5.5%	0.0%
Wheelchair	98,470	17.0%	0.0%	17.0%	0.0%	13.3%	3.7%
Electric Wheelchair	25,278	4.4%	0.0%	4.4%	0.0%	3.7%	0.7%
Oversized Wheelchair/Scooter/Ambulatory, Scooter, Ambulatory (Cane)	21,933	3.8%	0.7%	3.1%	0.7%	0.8%	2.3%
<b>Total</b>	<b>579,124</b>	<b>100.0%</b>	<b>58.5%</b>	<b>41.5%</b>	<b>58.5%</b>	<b>34.8%</b>	<b>6.7%</b>
Annual Rides			338,651	240,473	338,651	201,491	38,982
Unit Cost			\$16.55	\$30.90	\$17.27	\$22.00	\$30.90
Annual Cost			\$5,604,674	\$7,430,616	\$5,848,503	\$4,432,802	\$1,204,544
Total Annual Cost			\$13,035,290		\$11,485,849		
<b>Net Annual Saving</b>			<b>\$1,549,441</b>				

As shown in Figure 4, bus trips can be further reduced from approximately 40% of the ride mix to just fewer than 7% with the introduction of accessible vans similar to MV-1’s. Essentially, the current DARTS bus would function in the “oversized” space or when larger groups with similar origins and destinations require transportation. If this further transition could be made, another \$1.5 million could be saved based on 2015 trip data.

In summary, with optimization and the introduction of accessible vans such as the MV-1, approximately \$2.6 million or almost 20% of service delivery expenditures could be saved based on 2015 trip data. In addition, the reduction of bus rides would also lead to the shrinkage of the bus fleet well below the current level of 72. All or some portion of the current transfer of \$1.35 million annually to the Capital reserve for bus replacement could be avoided, resulting in total savings in the order of \$4 million annually. In 2016 the full amount (\$1.35 million) was removed from the budget.

Transferring reservations, scheduling and dispatch to the City would ensure efficiencies in service delivery through the introduction of accessible vans and the optimization of fleet mix are achieved and achieved rapidly as the City would be unencumbered by contractual limitations on trip allocation. However, DARTS should first be given the opportunity to demonstrate their ability to achieve these savings. DARTS will be given the end of 2016 to demonstrate their ability to increase the number of trips on vans/sedans and accessible vans and correspondingly reduce the number of trips on

buses with a targeted savings of \$1 million over this time period. If DARTS can achieve a \$1 million savings by the end of 2016, then a plan to achieve all potential savings prior to the expiration of the DARTS contract on June 30, 2017 would be developed and implemented. If DARTS is unable to achieve this target, then the transfer of reservations, scheduling and dispatching would proceed along with a Request for Proposal (RFP) for the delivery of bus, van/sedan and accessible van service. More than one vendor may be selected to limit the risk of service interruption.

### **Travel Training**

In October 2011, ATS staff initiated HSR bus travel training for persons with developmental disabilities. The cost of the program is approximately \$175,000 annually to train 100 clients with a 75% success rate resulting in cost avoidance of \$380,000 annually. The City benefits socially and financially, by providing independence to Citizens and avoiding costs on the ATS.

### **Projected Demand and Service Cost**

Through data analysis of the past 5 years of operation, some fairly constant factors emerge:

- 55% of Registered Customers are Active (at least one trip per annum)
- Active Customers take an average of 92 trips per year.

Thus accurately predicting Registered Customers will lead to accurate trip forecasts. However, given the dynamic environment we are moving through (AODA requirements and an aging population), budgeting will continue to be a challenge.

It is projected that ATS trips will increase from 579,124 trips in 2015 to about 850,000 by 2020; therefore it is imperative that the average cost per trip is kept to a minimum. Even with structural adjustments to the service delivery model, costs in 2020 are projected to be over \$21 million.

## **ALTERNATIVES FOR CONSIDERATION**

### **Status Quo (Do Nothing)**

Continue with the current service delivery model and incrementally move to a lower service delivery cost structure to the extent possible under DARTS Collective Agreement. The City will achieve only a small portion of the potential savings possible.

## **ALIGNMENT TO THE 2012 – 2015 STRATEGIC PLAN**

### **Strategic Priority #1**

A Prosperous & Healthy Community

*WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.*

### **Strategic Objective**



- 1.4 Improve the City's transportation system to support multi-modal mobility and encourage inter-regional connections.
- 1.5 Support the development and implementation of neighbourhood and City wide strategies that will improve the health and well-being of residents.
- 1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

**Strategic Priority #2**

Valued & Sustainable Services

*WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.*

**Strategic Objective**

- 2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.
- 2.2 Improve the City's approach to engaging and informing citizens and stakeholders.
- 2.3 Enhance customer service satisfaction.

**Strategic Priority #3**

Leadership & Governance

*WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.*

**Strategic Objective**

- 3.4 Enhance opportunities for administrative and operational efficiencies.

**APPENDICES AND SCHEDULES ATTACHED**

Appendix A – Accessible Transportation Services Review Presentation