



CITY OF HAMILTON
COMMUNITY AND EMERGENCY SERVICES DEPARTMENT
Hamilton Paramedic Service

TO:	Chair and Members Emergency & Community Services Committee
COMMITTEE DATE:	November 21, 2016
SUBJECT/REPORT NO:	Standardization of Ambulance Fleet Purchases (CES16058) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Ben Roth 905-546-2424 ext. 7743
SUBMITTED BY:	Michael Sanderson Chief, Hamilton Paramedic Service Community & Emergency Services Department
SIGNATURE:	

RECOMMENDATION

- (a) That the Demers Ambulance Manufacturer Inc. (Demers) Type III ambulance be designated a standardized Good pursuant to City Procurement Policy, Section 4.14, Policy # 14 Standardization, with this designation to be reviewed in 2022;
- (b) That ambulance vehicles and original equipment ambulance repair parts be obtained on a single-source basis from Demers and its authorized agents for a six (6) year time period extending through to December 31, 2022; and,
- (c) That the Chief of the Hamilton Paramedic Service, or his designate, be authorized and directed to enter into and sign, on behalf of the City of Hamilton, all negotiated agreements and all necessary associated documents with the Demers Ambulance Manufacturer Inc., with content acceptable to the General Manager of Community and Emergency Services, and in a form satisfactory to the City Solicitor for the purchase of ambulance vehicles and related original equipment ambulance repair parts.

EXECUTIVE SUMMARY

The report Standardization of Ambulance Fleet Purchases (Report HES12015) (previously approved by Council on September 12, 2012 designated Demers ambulances as a standardized Good, and authorized negotiation of a “house account” for the supply of original equipment replacement parts, with market conditions to be re-assessed every three years.

In accordance with legislation, the City of Hamilton may only utilize ambulance vehicles provided from vendors certified by the Ministry of Health and Long Term Care (MOHLTC). There are only two (2) vendors currently certified by the MOHLTC to provide the Type III ambulances utilized in Hamilton. A comparative evaluation of Type III ambulance vehicles from the two Ministry of Health and Long Term Care (MOHLTC) certified vendors was recently completed wherein the Demers ambulance was found to be superior in all areas of assessment, and it is therefore recommended for continued designation as a standardized Good. The Demers ambulance as evaluated is 2.1% more expensive than the other vendor's ambulance; however the small price difference is offset by other significant advantages.

As Demers ambulances and original equipment repair parts are only available from Demers Ambulance Manufacturer Inc. and its authorized agents, standardization will result in single-source purchase from the manufacturer and agents, and single-source purchase authority is accordingly recommended.

The Hamilton Paramedic Service replaces ambulances on a six (6) year cycle, and standardization and single-source approval is recommended for a full cycle, with the next review to occur in 2022.

Alternatives for Consideration – See Page 6

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: Funding for procurement of replacement ambulances is budgeted annually through the capital budget process and included in the self-funded Annual Paramedic Service Vehicle Replacement Budget

Staffing: There are no staffing implications associated with Report CES16058.

Legal: The City of Hamilton may only purchase ambulance vehicles certified by the MOHLTC as suitable for the purpose. All agreements will be in a form satisfactory to the City Solicitor.

HISTORICAL BACKGROUND

The Hamilton Paramedic Service ambulance fleet currently consists of thirty-eight (38) emergency transport ambulances, one specialized bariatric transport ambulance for large patients, and one specially equipped infectious disease transport ambulance for highly contagious patients. Except for the single Crestline Coach Ltd. (Crestline) ambulance purchased for the purpose of this evaluation, the ambulance fleet is comprised entirely of Demers vehicles, with Council having approved standardization and single-source procurement of Demers ambulances since 2008. Prior to 2008 the fleet included both Demers and Crestline vehicles.

Due to a proactive preventive maintenance and fleet rotation program, the Paramedic Service is able to replace ambulances on a 72 month (six (6) year) cycle. This provides for approximately 12 to 16 months longer service life than most peer ambulance services and an overall decreased capital cost. Replacement ambulances are purchased annually, with funding allocated in the Annual Paramedic Service Vehicle Replacement budget. Future replacements are forecast as follows:

Year:	2017	2018	2019	2020	2021	2022	2023
Replacements due*:	3	0	11	8	11	5	3

*Uneven distribution of replacements is due to the timing of past replacements and approved fleet enhancements. Where feasible, vehicles will be life extended and procurement delayed to better equalize the annual procurement of replacements.

End-of-service-life ambulances are repurposed for special-purpose or logistics use, maintained in an operational state as a contingency resource, donated to charitable or non-profit organizations on Council direction, or disposed of at public auction consistent with Procurement policy.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Ambulances used in Ontario must be certified as conforming to the Ontario Provincial Land Ambulance and Emergency Response Vehicle Standard, Version 5.0, September 28, 2012. Only Demers Ambulance Manufacturer Inc. and Crestline Coach Ltd. currently offer Type III ambulances which conform to the Standard.

RELEVANT CONSULTATION

Corporate Services, Procurement Section – Consultation with Procurement staff regarding the interpretation and application of Procurement policy.

Corporate Services, Finance – Consultation with Finance to verify financial information.

Former Chief Mechanical Officer, Hamilton Fire Service – engaged on a consultant basis to provide analysis of the trial vehicles.

Front line paramedic staff – Consultation and structured user survey feedback relative to the functional aspects of the trial ambulances.

Joint Health and Safety Committee – Consultation with respect to the configuration of the vehicles, safety specifications, and equipment storage.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

In order to “reassess the market conditions” as mandated by the 2012 Council report (Report HES12015) and to provide an equitable competition opportunity for both vendors of certified vehicles it was determined that a live comparative evaluation would be required. As loan or lease of a Crestline vehicle was not feasible, Policy 11 approval was obtained to procure a Crestline ambulance in place of a single standardized Demers ambulance as part of the 2016 procurement process. This purchase provided the ability to have one vehicle from each authorized vendor to be purchased as part of our normal fleet replacements to perform the evaluation. Following evaluation both vehicles are now in service as regular operational fleet vehicles.

Both Demers and Crestline were advised of our intent to conduct the evaluation, provided with generic specifications for the ambulance currently in service and invited to submit a quote for supply of an equivalent model. Based on these specifications each vendor determined which product model they would submit for evaluation and costing. As Hamilton ambulances are now equipped with the Stryker Power Cot/Power Load system which largely eliminates manual lifting, the air-ride suspension “kneeling” capability to reduce deck height is no longer required, so vehicles for evaluation were ordered with standard suspensions – a saving of \$8,700 per vehicle which has been included in this evaluation.

Crestline proposed their FleetMAX ambulance at a cost of \$124,970, while Demers offered the MX164A ambulance at \$127,685; prices include discounts and exclude freight and taxes. Both vehicles use the Ford E-350 cutaway chassis, so engine, drivetrain and chassis body characteristics of both ambulances are identical, with the differences being in the cab and patient compartment design, layout and construction. Both vehicles were then fit up and equipped by the Service at an identical cost to the Ministry of Health Equipment Standard.

As staff were already familiar with the Demers ambulance layout, care was taken to also familiarize crews with the Crestline layout and equipment operation to minimize the potential for inherent bias. Vendor representatives provided on-site vehicle familiarization to staff, including members of the Joint Health and Safety Committee, prior to commencement of the evaluation.

The evaluation commenced on August 9, 2016 and concluded on October 5, 2016, with the two ambulances rotating between selected stations bi-weekly, and used for front-line response by regularly-scheduled crews. The following four components were included in the evaluation:

- a) Operational Evaluation and User Survey (attached as Appendix A to Report CES16058).

- b) Mechanical Evaluation (consultant report – attached as Appendix B to Report CES16058).
- c) Logistics Functional Evaluation (attached as Appendix C to Report CES16058).
- d) Joint Health and Safety Committee Review

Operational Evaluation and User Survey

The user survey revealed an overwhelming clear preference by the paramedics (92% of respondents) for the Demers ambulance. Appendix A to Report CES16058 provides both qualitative and quantitative results. There was general agreement that the smaller size of the Crestline patient compartment as well as the layout and lack of storage, in particular the absence of segregated storage for crew personal equipment, were major negative factors. Many of the Crestline layout and storage issues could be remedied, but the patient compartment size cannot be changed in the model proposed by Crestline, and at the cost proposed by Crestline, for the purpose of this evaluation.

Mechanical Evaluation

The recently retired Chief Mechanical Officer for both the Paramedic Service and the Hamilton Fire Department, who has extensive experience with maintaining the Hamilton ambulance fleet, was engaged as a consultant to evaluate maintenance and mechanical factors for both ambulances. The Chief Mechanical Officer's report notes fifteen specific features or aspects of the Demers ambulance that he finds superior to the Crestline model, and identifies that savings in staff time and parts inventory costs can be achieved by continuing with Demers ambulances. The Chief Mechanical Officer indicates a belief that a change to Crestline has the potential "to increase the life cycle costs and out of service hours over the 6-year depreciation life." He also notes his opinion that "Mechanical break downs and out of service maintenance data supports that historically the Demers ambulance has proven to be more reliable than the Crestline ambulance." Details are attached as Appendix B to Report CES16058.

Logistics Functional Evaluation

The Paramedic Service Fleet Management Supervisor noted that except for scheduled preventive maintenance, both vehicles remained in continuous service throughout the evaluation period, both recording approximately 4,500 kilometres usage with no mechanical issues or problems. Specific concerns with the smaller size of the Crestline patient care compartment, equipment access and storage, layout and the absence of a segregated crew locker were identified. Details are attached as Appendix C to Report CES16058.

Joint Health and Safety Committee Review

The Joint Health and Safety Committee was consulted when it was decided to undertake the evaluation. They were provided a copy of the vehicle specifications prior to the vehicles being ordered. The committee was afforded an opportunity to examine both vehicles before they were put into service, and question vendor representatives. Committee members had the opportunity to examine the vehicles in service during the evaluation and solicit comments from crews, and finally the committee was provided with copies of the Operational, Mechanical and Logistics evaluations. The Committee has not submitted a written report, but the minutes of the Committee meeting of October 12, 2016 record that the Committee supports continued use of the Demers ambulance, equipped with a standard suspension.

The clear consensus from the evaluation is to select the Demers ambulance in preference to the Crestline. Both vendor representatives have confirmed that there are no significant design, configuration or construction changes planned for the immediate future. Continued acquisition of the Demers ambulance for the next 6-year cycle is therefore the preferred option.

ALTERNATIVES FOR CONSIDERATION

Purchase of Crestline ambulances is the alternative. While this may achieve a small initial capital saving of \$2,715 on the initial \$127,685 purchase, the Mechanical evaluation indicates that these savings are likely to be more than offset by greater life cycle costs. Purchase of the Crestline vehicle would be contrary to the Operational, Mechanical, Joint Health and Safety Committee, and Logistics evaluations of the offered vehicles.

Financial: Again, funding for procurement of replacement ambulances is included in the self-funded Annual Paramedic Service Vehicle Replacement Budget. Despite a minor savings on the initial purchase cost of Crestline ambulances that saving is expected to be offset by greater overall life-cycle costs

Staffing: There are no staffing implications associated with this alternative

Legal: There are no legal implications associated with this alternative

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

APPENDICES AND SCHEDULES ATTACHED

Appendix A to Report CES16058 - Operational Evaluation and User Survey

Appendix B to Report CES16058 - Mechanical Evaluation (consultant report)

Appendix C to Report CES16058 - Logistics Functional Evaluation