**TO:** Chair and Members  
Emergency & Community Services Committee

**WARD(S) AFFECTED:** CITY WIDE

**COMMITTEE DATE:** December 10, 2012

**SUBJECT/REPORT NO:**  
Standardization of Emergency Response Vehicles (HES12021) (City Wide)

**SUBMITTED BY:**  
Brent Browett  
Paramedic Chief - Director  
Hamilton Paramedic Service

**PREPARED BY:**  
Doug Waugh (905) 546-2424 Ext. 7742

**SIGNATURE:**

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**RECOMMENDATION**

(a) That the Chevrolet Tahoe Special Service Duty Vehicle manufactured by General Motors be approved as the City’s standard for the Hamilton Paramedic Service for use as an Emergency Response Vehicle (ERV).

(b) That staff be authorized to single source all Emergency Response Vehicle (ERV) conversions to Rowland Emergency Vehicle Products Inc.

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**EXECUTIVE SUMMARY**

As per the corporate Purchasing Policy, Section 4.14, “Policy #14 – Standardization”, it is recommended that the Hamilton Paramedic Service purchase the Chevrolet Tahoe 4x4 SUV as a standard replacement for Emergency Response Vehicles (ERVs) and reassess the market conditions every three (3) years.
Since the year 2000 the Hamilton Paramedic Service has used various emergency response vehicles to identify the most economical, reliable and safe unit that serves the purpose, which is responding to calls for medical assistance in the community. In recent years the Hamilton Paramedic Service has been using the Special Service Duty Vehicle versions of the Chevrolet Tahoe and the Ford Expedition.

In 2008 the Hamilton Paramedic Service acquired several Ford Expeditions. The purchase of the Ford Expedition was approved by the Audit and Finance Committee as the Special Service Duty Chevrolet Tahoe was not in production at the time. This allowed the Paramedic Service to have even number of Chevrolet Tahoes and Ford Expeditions in the Paramedic Service creating an opportunity to do a comparison between the two vehicles.

The results of a survey completed by paramedics and paramedic supervisory staff indicated that the Chevrolet Tahoe was ranked highest in comfort. This is a key issue given that staff is in these vehicles for eight (8) to 12 hours per shift. The front line staff claims that the Chevrolet Tahoe is more reliable and considered safe. The driver and passenger area of the Chevrolet Tahoe provides more head and leg room than the Ford Expedition which accommodates taller Paramedic staff reducing ergonomic issues. The Paramedics, Supervisors and Joint Occupational Health and Safety Committee were consulted and prefer the Chevrolet Tahoe to the Ford Expedition.

The Hamilton Paramedic Service Mechanical Division reports that the Chevrolet Tahoe maintenance requirements are low relative to the emergency usage and high kilometers.

The Chevrolet Tahoe meets the needs of the Paramedic Service and is of similar capital cost. The Chevrolet Tahoe has a fuel management system that offers lower fuel consumption and costs.

In addition, standardizing the ERV reduces training demands for mechanics. Standardizing to one ERV also limits training demands for paramedics and paramedic supervisors and the inherent risk of the operator having to know various vehicles' operating nuances and being intimately familiar with a vehicle that they have to operate during emergency driving conditions.

Considering all factors, staff recommends standardizing to the Chevrolet Tahoe.

**Table 1. Key Factors of Special Duty Chevrolet Tahoe Relative to Ford Expedition**

<table>
<thead>
<tr>
<th>Tahoe</th>
<th>Factor</th>
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<tr>
<td>More efficient</td>
<td>Fuel economy</td>
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<tr>
<td>More space</td>
<td>Head and leg room for the paramedics and other operators</td>
</tr>
<tr>
<td>Better</td>
<td>Reliability according to Mechanical Division</td>
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<tr>
<td>Higher</td>
<td>Safety rating</td>
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Regardless of the vehicle type acquired, the conversion of the vehicle to be used as an ERV must meet strict Ministry of Health and Long Term Care (MOHLTC) vehicle standards. Converting a Chevrolet Tahoe or a Ford Expedition to a MOHLTC certified vehicle involves but is not limited to constructing a storage cabinet in the rear of the vehicle for equipment and supplies, installing emergency lighting, specialized wiring, operating controls, specialized console, computer mount and radio.

Up until seven (7) years ago these conversions were completed in house by the Mechanical Division. This activity required a substantial commitment of staff time to maintain the necessary knowledge and skill that is minimally used and carries a high risk of liability in the event of an oversight in the process.

For the last seven (7) years the Hamilton Paramedic Service has been using Rowland Emergency Vehicle Products Inc. for ERV conversions. Upon completion of a vehicle being converted for use under the MOHLTC vehicle standards, Rowland provides a certificate indicating the vehicle does adhere to the strict standards set out by the MOHLTC.

Rowland Emergency Vehicles Inc. is one of two vendors who are currently on the MOHLTC Vendor of Record list to provide Emergency Vehicle conversions. The two vendors supply different brands of equipment which makes it difficult for Paramedic staff to maintain familiarity with the layouts and different ways of operating the emergency response controls. The Mechanical Division would have to stock different parts and receive additional training if other vendors were used.

Having used Rowland Emergency Vehicle Products Inc. exclusively over the last seven (7) years there have been no issues with workmanship or MOHLTC certification when the vehicles have been inspected by the MOHLTC during Ambulance Service Reviews.

The Paramedic Service is recommending that Rowland Emergency Products Inc. complete such conversions and provide MOHLTC certification, with staff reassessing the market conditions every three (3) years.

**Alternatives for Consideration – See Page 6**
FINANCIAL / STAFFING / LEGAL IMPLICATIONS (for Recommendation(s) only)

Financial:
The funding for the vehicles is available from the approved Capital Budget and vehicle reserves. Direct costs are anticipated to be similar or less if standardization is approved. Indirect costs are anticipated to be contained as training for staff will not have to be increased, fuel consumption is more efficient with the Tahoe, and there are fewer parts to hold in stock.

Staffing:
The standardization process is expected to:

1. Reduce staff time for the Paramedic Service and the Procurement Section in purchasing ambulances.
2. Reduce or, at minimum, contain potential health and safety vehicle concerns.
3. Contain Mechanical staff training requirements of multiple vehicle types.
4. Contain Paramedic staff training requirements on multiple vehicle types.

Legal:
With Rowland Emergency Vehicle Products Inc. being a vendor of record with the MOHLTC, the Municipality will be assured it complies with MOHLTC regulations and standards pertaining to Emergency Response Vehicle conversions.

HISTORICAL BACKGROUND (Chronology of events)

The Emergency Response Vehicles (ERV) are staffed by front line Paramedics and Supervisors. The ERVs are used to respond to emergency calls and rarely would transport patients. The vehicles are stocked with the necessary equipment to deal with various medical emergencies. The rear of the ERV contains custom-made cabinets and drawers to hold the equipment and supplies. The Paramedics and Supervisors spend a large portion of their shift in these vehicles. In addition the ERV acts as a mobile office and command post for the Supervisors which is equipped with wireless network computers and communication equipment. When purchasing these Special Service Duty Vehicles, ergonomics and safety are included as key considerations along with environmental and economic factors in choosing the most appropriate vehicle for the purpose.

In the past four (4) years the Hamilton Paramedic Service has been using both the Chevrolet Tahoe and the Ford Expedition as Emergency Response Vehicles as the size of both of these vehicles is the closest match to the intended purpose of the vehicle. In addition, both of these vehicles are available with the Special Service Duty Package.
built especially for emergency services. The Special Service Duty Package includes but is not limited to heavy duty transmissions, suspension, breaking systems and electrical equipment necessary for emergency response. These vehicles do not have the cosmetic features of the standard showroom vehicle (i.e. no carpeting, console) thus they are sold at a lower cost.

The Hamilton Paramedic Service has a similar number of Chevrolet Tahoes and Ford Expeditions in the fleet and has been able to compare the two vehicles. Both vehicles meet the basic Ministry of Health and Long Term Care (MOHLTC) Emergency Response Vehicle Standards for an ERV. There have been no health and safety concerns filed by staff in regards to either unit. Surveys completed by Paramedics and Supervisors have demonstrated a clear preference for the Chevrolet Tahoe over the Ford Expedition as it applies to comfort and ergonomics. In addition, there was a clear distinction in favour of the manoeuvrability of the Chevrolet Tahoe. An important preference relative to the Chevrolet Tahoe is that the Tahoe offers more head and legroom for the driver than the Ford Expedition, which is an important consideration for our taller staff who are in these vehicles many hours of the day.

The Chevrolet Tahoe, being a smaller unit than the Ford Expedition, has Flex Fuel Management capabilities (E85 Ethanol) and Active Fuel Management which automatically changes the engine to run on four (4) cylinders instead of eight (8) under light loads/slower speeds providing energy savings, thus a” greener vehicle”. The Chevrolet Tahoe also offers better dual economy than the Ford Expedition which will result in lower operating costs and potentially less of an impact on the environment.

The Mechanical Division has nine (9) years of mechanical experience with the Chevrolet Tahoe as a first response Emergency Vehicle. The Mechanical Division reports that they have found the vehicle to be reliable, easy to mechanically maintain and repair. The Mechanical Division also notes given the very high kilometres and engine hours that the Paramedic Service puts on these vehicles each year, the frequency of necessary repairs is relatively low.

Overall, Hamilton Paramedic Service staff, having compared the Chevrolet Tahoe and Ford Expedition to be used as a Paramedic and Supervisor First Response Vehicle, seeks to standardize on the Chevrolet Tahoe given the ergonomic, environmental, and economic findings.

**POLICY IMPLICATIONS**

Procurement Policy for the City of Hamilton, Policy #14 – Standardization
Procurement Policy for the City of Hamilton, Policy #11 – Non-competitive Procurements
RELEVANT CONSULTATION

Finance Services Division, Procurement Section – Consulted with Procurement in regards to the application of the Procurement Policy.


Hamilton Paramedic Service, Mechanical Division – Consulted with the Chief Mechanical Officer who was supportive of the recommendations in regards to standardization to the Chevrolet Tahoe, parts and service availability and standardization from the mechanics’ perspective.

ANALYSIS / RATIONALE FOR RECOMMENDATION
(include Performance Measurement/Benchmarking Data, if applicable)

Purchasing Policy #14 – Policy for Standardization, defines Standardization as a management decision making process that examines a specific common need or requirement and then selects a Good and/or Service that best fills that need to become the standard.

Purchasing and maintaining one (1) make and model of vehicle in this capacity will provide professional commercial quality and reliable equipment to front-line staff. This will allow for continuity and consistency of training and interoperability. Standardization also allows for the reduced stick level of spare parts.

ALTERNATIVES FOR CONSIDERATION
(include Financial, Staffing, Legal and Policy Implications and pros and cons for each alternative)

The City of Hamilton purchases the lowest priced equipment meeting tendered specifications regardless of specific brand requirements.

Staff does not recommend this as it will result in the City of Hamilton being required to purchase non end user supported/recommended equipment that may lead to operational issues, end user dissatisfaction, compatibility issues and health and safety concerns.
CORPORATE STRATEGIC PLAN (Linkage to Desired End Results)


Skilled, Innovative & Respectful Organization
• A culture of excellence
• A skilled, adaptive and diverse workforce, i.e. more flexible staff
• More innovation, greater teamwork, better client focus
• An enabling work environment - respectful culture, well-being and safety, effective communication
• Opportunity for employee input in management decision making

Financial Sustainability
• Financially Sustainable City by 2020
• Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner
• Full life-cycle costing for capital

Growing Our Economy
• Competitive business environment
• An improved customer service

Social Development
• Residents in need have access to adequate support services

Environmental Stewardship
• Reduced impact of City activities on the environment

APPENDICES / SCHEDULES

None

Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.
Values: Honesty, Accountability, Innovation, Leadership, Respect, Excellence, Teamwork