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## Memorandum

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**To:** Budget Standing Committee  
**Cc:** Kristine Douglas  
**From:** McCormick, Jeff  
**Date:** February 5, 2018  
**Subject:** Purchasing of Smaller Fire trucks

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Please accept this memo as an answer to a question that arose as part of the FEMS 2018 budget presentation on November 6, 2017. Staff were asked to investigate the costs of purchasing smaller fire trucks (i.e. as in San Francisco).

Research indicates that in November of 2017 the City of San Francisco put new fire trucks into service that are smaller in size than previous trucks. This was done in an effort to make it easier and safer for the trucks to respond through narrow, twisting and turning, and very hilly type of streets. It appears as though the initiative stems from an effort to improve both pedestrian and bicycle safety.

According to an article in FireRescue1, dated November 20, 2017 “the new engine”, (in St. Catharine we refer to them as pumpers) “is 10 inches shorter and 2 inches narrower than the previous trucks, and the turning radius has decreased by 8 feet. The trucks are better equipped to maneuver through bulb-outs, which are designed to give more space to pedestrians. Instead of doors that swing outward, the equipment compartments now roll up so less space is taken up when they are opened.” All existing FEMS fire trucks are already equipped with roll up doors.

In discussions with our current truck manufacturer they have indicated that their company can build anything we want in the way of a custom fire truck. Trucks with shorter wheel bases or narrower or shorter bodies can be designed and built, but they also indicated that the price point increases as you move further away from a standard or base model fire truck. They also advised that a price for a custom built fire truck cannot be determined until such times as the customer provides the exact vehicle specifications that they want in a particular fire truck.

When purchasing a fire truck, a fire department must consider a number of factors in determining exactly what the departments needs are. This would include the municipal road network, the design of existing fire stations, the size of existing truck bays, the types of emergency incidents the vehicle is required to respond to, the quantity of water to be

carried, the type of equipment required on the truck, the number of fire fighters the truck needs to carry and the financial resources required to purchase said truck.

Additionally, the trucks must be in compliance with numerous design regulations and or specifications including the Highway Traffic Act, the National Fire Protection Association, the Occupational Health and Safety Act and CANULC. All of these considerations will have a bearing on the size of the truck that is required to best suit the operational needs of the department.

While the size of the truck is a piece of the equation, it is not the only piece. If the truck isn't big enough to carry the water, the equipment and the personnel required at the emergency scene, then the truck will not be effective in fire department operations. If the truck is too big for the road network or the fire stations then it too is ineffective. There really is no pure science to purchasing a fire truck. In the writers opinion the best truck purchase is the one that meets the operational needs of the department at the time it is required and one that will continue to meet those needs for 15-20 years.

Respectfully submitted

*Jeff McCormick*

Jeff McCormick,  
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