

Memorandum

City of Lawrence
Fire Medical

TO: David Corliss, City Manager

FROM: Mark Bradford, Fire Chief

CC: Diane Stoddard, Assistant City Manager
Cynthia Wagner, Assistant City Manager
Casey Toomay, Budget Manager
Steve Stewart, Central Garage Superintendent
Bill Stark, Division Chief

Date: October 6, 2012

RE: 2012 Quint Purchase – Equipment Replacement

Program Introduction and History

In 2006, the Fire Medical (FM) Department began a review of its fire apparatus fleet. The efforts of city staff culminated in a comprehensive vehicle study that included a survey of all primary and secondary fire apparatus, an overview of the organizational and city commission goals and service demands of FM, a comparative analysis of the fire apparatus replacement programs in other jurisdictions, and a proposed apparatus replacement schedule.

The departments' vehicle replacement program outlines the order of vehicle replacement based on the overall replacement score as determined by the Public Works Vehicle Maintenance department and operational efficiency.

Since the 2008 implementation of the replacement plan, a number of changes have occurred requiring modification to the apparatus requests. We have been able to reduce the department's fleet by two vehicles with the purchase of a 100' platform truck that has pumping capabilities and we combined the engine and hazardous materials capabilities in one vehicle that eliminates the need for a separate hazardous material vehicle. This is the second purchase that the department made combining existing apparatus and it has been determined that greater efficiency can be achieved through this method.

In addition, due to fiscal issues the need to move the scheduled "no purchase year" was moved from 2015 to 2013. Initially, this did not dramatically impact the department's apparatus status. However, since that time we have had two vehicles that warrant immediate replacement caused by mechanical failure of a turntable and significant operational reliability of another. These are outlined in the Program Details section of this memo (page 2).

Operational Efficiency and Reliability

As you recall in 2011, Unit 614 (1992 Quint) was sold along with Unit 630 (1986 100' ladder) even though it was not due to be replaced until 2014. This was done due to the failure of ladder operations and the estimated cost of repair that well exceeded its sale value.

Even though I believe we can still provide an acceptable level of operational efficiency and reliability, it would be imperative that we make our FY 2014 purchase in January of 2014. I would also recommend that we begin the initial specification design and pre-construction discussions in the fourth quarter of 2013.

Program Details

2012 Vehicle Replacement Request:

- Quint – Request will replace a 1994 Smeal Quint (Unit 615) with an overall replacement score of 54.8. Mileage of 68,893 and Engine Hours of 10,284. This unit is currently the only functional reserve quint apparatus and is pushed into service regularly. The overall condition of the apparatus is poor and results in safety and operational issues that can occur at any moment. The cab, chassis and pump are rusting and failures of passenger doors due to internal rusting has caused firefighters to be unable to exit or enter the apparatus at times and windows to fall down inside the door. The central maintenance garage has been fabricating parts to keep this unit operational. In our last review of apparatus, central maintenance identified this unit as the highest priority to remove from the fleet due to all of the failing components. Failure of components on this apparatus is probable but unpredictable as to when they will fail.

2014 Vehicle Replacement Request:

- Quint – Request will replace a 1992 Pierce Quint (Unit 614) that was sold in 2011 for \$28,525. At time of sale this unit was removed from service due to aerial ladder failure and the high cost associated with repairing it. When sold, this unit had an overall replacement score of 55.29, mileage of 111,350 and Engine Hours of 11,006.

Note: Overall Replacement Score – This is the score obtained by Public Works Central Vehicle Maintenance utilizing the replacement program worksheet which is used on all city vehicles. Any score equal to or greater than 30 points indicates immediate replacement is necessary.

Program Funding

Initially the 2008 multi-year sales tax program projected \$500,000 annually for fire equipment replacement. The vehicle replacement plan anticipated that total equipment replacement costs would be greater than sales tax proceeds, which would require additional funding sources.

In addition, the vehicle reserve account is funded by sale of old fire apparatus and equipment which generates modest amounts of funding which has historically been earmarked for fire apparatus replacement.

Since that time other competing capital improvement projects have modified the amount of Sales Tax and other funding percentages. The revised 2009-2012 Infrastructure

Sales Tax plan indicates \$250,000 from Sales Tax funding and \$773,000 from other sources, equaling a budget amount of \$1,023,000.

Ed Mullins, Finance Director, has conducted a financing analysis to determine the best method of securing additional funds required for apparatus purchases. They include purchase/cash, purchase/GO Bond debt, lease, or lease/purchase of the equipment. The cost analysis indicates a 12-year debt issuance as the best option to meet the designated useful life expectancy. Historically, the city has used cash, cash with GO Bond issuance or full GO Bond issuance for purchasing.

“Pre-paying” the purchase of this vehicle would result in a savings of \$41,999. This savings is due to the apparatus manufacturer paying for the major components (chassis and body) as they are constructed. Ed Mullins has evaluated the prepay option and recommends the financial benefit of prepaying.

Action Request

Fire Medical Department staff requests the approval for the following:

Option 1: No Prepay

- Utilize the Houston-Galveston Area Council contract administered by MARC for pricing quotes;
- Purchase:
 - One (1) Velocity PUC Quint from Pierce Manufacturing in the amount of \$1,014,524.
- Adopt a Resolution providing for acquisition of fire equipment and for providing for the issuance of General Obligation Bonds of the City to pay the cost of such equipment in the amount of \$764,524.

Option 2: Utilizing Prepay

- Utilize the Houston-Galveston Area Council contract administered by MARC for pricing quotes;
- Purchase:
 - One (1) Velocity PUC Quint from Pierce Manufacturing in the amount of \$972,525.00.
- Adopt a Resolution providing for acquisition of fire equipment and for providing for the issuance of General Obligation Bonds of the City to pay the cost of such equipment in the amount of \$722,525.