



City of Huntington Beach

File #: 19-1210

MEETING DATE: 12/16/2019

REQUEST FOR CITY COUNCIL ACTION

SUBMITTED TO: Honorable Mayor and City Council Members

SUBMITTED BY: Oliver Chi, City Manager

PREPARED BY: Dahle Bulosan, Interim Chief Financial Officer
David A. Segura, Interim Fire Chief

Subject:

Approve the purchase of a replacement fire engine with South Coast Fire Equipment, Inc. and an ambulance with Braun Northwest, Inc.; and, authorize the City Manager to execute all documents necessary to lease finance the purchase of the fire engine and ambulance

Statement of Issue:

City Council approval is requested for the purchase of a replacement fire engine with South Coast Fire Equipment, Inc. and an ambulance with Braun Northwest, Inc., and to authorize the City Manager to enter into any and all documents necessary to finance the purchase of both the fire engine and ambulance in order to enhance public safety and emergency response.

Financial Impact:

Funding for the replacement of both a fire engine and ambulance is included in the Equipment Replacement budget in the FY 2019/20 budget. Specifically, the Adopted Budget includes \$250,000 for the estimated annual debt service payments for a potential lease financing arrangement to acquire both the fire engine and ambulance. This funding level was based on interest rates at the time the FY 2019/20 budget was being developed. Interest rates fluctuate on a daily basis and final lease financing rates and costs will be determined prior to the close of escrow. Staff recommends the lease purchase of the fire engine and ambulance and all related equipment totaling \$1,172,579 through a seven-year lease purchase agreement. Based on current estimated interest rates of 2.134 percent, the annual debt service payment would be \$182,112. Please note the interest rate may be subject to change based on market conditions at the time of close of escrow.

Recommended Action:

Approve the purchase of the replacement fire engine with South Coast Fire Equipment, Inc. and an ambulance with Braun Northwest, Inc.; and, authorize the City Manager to execute all documents necessary to lease finance the purchase of the fire engine and ambulance, at an interest rate not to exceed 2.5 percent.

Alternative Action(s):

Do not approve the recommendation and direct staff accordingly.

Analysis:

The proposed fire engine purchase will replace a fire engine which has been in service for 23 years. This apparatus has over 6,600 hours on its diesel engine, requires frequent repairs, and is increasingly difficult to maintain and keep in service. The reliability of this apparatus is critical because of its use in providing emergency responses, including: fire suppression, hazardous materials, rescue, and medical responses.

Section 6 of City Budget Resolution 2019-28 requires that the acquisition of any capital items which exceed \$500,000 be

approved by the City Council. The value of the proposed replacement fire engine of \$825,149 exceeds this amount; hence, it requires City Council approval. The replacement fire engine will be obtained from Pierce Manufacturing, Inc. through South Coast Fire Equipment, the authorized dealer for Pierce Manufacturing, Inc. for this region of the country.

At this time, all of the City's front line fire engines are Pierce models. These engines are of the highest quality and maintaining consistency in the type of apparatus used provides interoperability and enables the highest level of emergency service delivery. The pricing for the engine is competitive, with bids having been obtained through an intergovernmental agency transaction with the City of Los Angeles in accordance with Municipal Code Section 3.02.190.

The ambulance, Unit 8229, proposed for replacement is 13 years old with 273,000 miles. Braun Northwest, Inc. has manufactured all of the City's six frontline ambulances. These are of a very high quality and are used by several municipal agencies, including the City of Los Angeles. This manufacturer was selected by the City's Fleet Management Division following extensive research regarding the most reliable chassis and platform to provide emergency transport services. Maintaining standardization of the ambulance fleet provides interoperability and facilitates the highest level of ambulance services. The quoted price of \$257,323 for the ambulance is also competitive, with bids obtained through an intergovernmental agency transaction in accordance with Municipal Code Section 3.02.190.

The following are best practices and additional information regarding the justification for replacement of the fire engine:

Industry Standards for Fire Engine Replacement

The National Fire Protection Association (NFPA) provides best practice recommendations for the fire service and recommends that the following factors be considered when replacing fire engines:

"The length of life depends on many factors, including vehicle mileage and engine hours, quality of the preventative maintenance program, quality of the driver training program, whether the fire apparatus was used within the design parameters, whether the apparatus was manufactured on a custom or commercial chassis, quality of workmanship by the original manufacturer, quality of the components used, and availability of replacement parts, to name a few." (NFPA Standard 1911-96 - Annex D, page 1)

According to the most current data available for state and locally owned fleets from the Federal Highway Administration, the average replacement age for fire apparatus is 15.8 years. A similar replacement standard has historically been adhered to by the City of Huntington Beach, based on the previously referenced NFPA factors and industry practices. The wear and tear on the vehicle, which naturally and inevitably occurs over time, reduces apparatus reliability, efficiency and performance.

The City of Huntington Beach's practice for fire engine replacement includes moving engines from front line to reserve status after 15 years and removing them from the fleet after three years in reserve, for a total of 18 years of service. This practice is consistent with the majority of fire departments in the county. Fire Engine 8214 has been in service for 23 years and is past due for replacement.

Fire Engine Age, Mileage and Hours

Fire Engine Age: Fire Engine 8214 was purchased in 1996 and rebuilt in 2001 due to pump cavitation problems. It has the original drive train, but the vehicle housing, pump and other equipment were replaced in 2001. The original motor that operates the apparatus was not replaced and is still the original mechanical motor acquired with the apparatus in 1996, 23 years ago. Although the engine's mileage is shown as 108,000, at the time of rebuild in 2001 it was zeroed out and the actual mileage is much higher.

Fire Engine Mileage and Hours: The standard industry conversion calculation for fire engines, as provided in Fire Mechanic training academies, is 26 miles for each hour of operation. According to the hours to miles factor for fire engines, the apparatus has 6,600 vehicle hours, which equates to approximately 171,600 miles of driving.

Improved Apparatus Technology: Due to the evolution of software, parts and electronic technology, emergency response apparatus now become obsolete much sooner than in the past. In order to provide maximum operating efficiency and increase public safety service delivery, it is important to replace older vehicles, such as Fire Engine 8214.

Apparatus Maintenance Record

The maintenance record from 2013 to 2019 shows total expenditures of \$104,000. This includes rebuilding the engine transmission; replacement of tires, gauges, meters, lights, antenna, bumper, sirens, etc.; repair to leaks in water tanks, the engine, packing, valves, etc. In addition, the cost to operate this engine is estimated at \$6.05 per mile, compared to a new engine which operates at \$3.80, a cost savings of \$2.25 per mile.

It is important to note that if approved, a new fire engine will take approximately 12-15 months to be built, delivered, and put into service. Therefore, over the next year Fire Engine 8214 will add further miles and hours to its operational life. Once a new fire engine is put into service, it will push the oldest frontline fire engine into reserve status (that is, a reserve fire engine that covers for when frontline fire engines are out of service or non-operational). Fire Engine 8214 will then be surplus through the City's fiscal services process. This replacement scenario is keeping with the City's Fleet Management practices.

Ultimately, older apparatus are less dependable and the reliability of this fire engine is critical to public and fire personnel safety.

The following are best practices and additional information regarding the justification for replacement of the ambulance:

Ambulance Replacement Standards

The Huntington Beach Fire Department annually provides over 20,000 emergency responses, including over 10,000 emergency medical transports in City ambulances. Due to the large number of transports, the wear and tear on the vehicle, which naturally and inevitably occurs, has increased and the reliability of the vehicle is reduced. Typically, the City's past practice has been to replace ambulances after eight years of service, although this timeframe has been extended for this particular apparatus.

Treatment Optimization and Patient Comfort

This type of ambulance is superior to other models in that its design includes an advanced suspension system that replaces outdated technology and, more importantly, increases patient comfort while transporting during critical care incidents. The design of the interior treatment area includes improved ergonomics, which allow paramedics to enhance safe and effective emergency treatment while in route to the hospital.

City Council approval is also requested for the City Manager, or his designee, to enter into any and all documents necessary to finance the purchase of the fire engine and ambulance and all related equipment. The City's existing Master Lease Agreement would need to be amended to include the lease-purchase of these critical pieces of public safety equipment at an estimated cost of \$1,172,579. Based on the current estimated 2.134 percent interest rate, annual debt service payments would equal \$182,112 over the seven-year period.

The purchase of a replacement fire engine and ambulance, and all related equipment, are necessary to continue to provide reliable emergency service to the residents and visitors of Huntington Beach. As the FY 2019/20 Adopted Budget contains funding for the lease financing of this equipment, staff recommends proceeding with the replacement of these important items as soon as possible to ensure public safety.

Environmental Status:

Not applicable.

Strategic Plan Goal:

Enhance and modernize public safety service delivery

Attachment(s):

1. Lease Documents
2. Amortization Schedule
3. Master Lease-Purchase Agreement
4. Certificate of Incumbency
5. Opinion of Counsel
6. Quote from South Coast Fire Equipment, Inc.
7. Quote from Braun Northwest, Inc.