

City of Norman Vehicle Replacement Criteria

SECTION 2. VEHICLE REPLACEMENT (CYCLING) CRITERIA

During replacement analysis of equipment replacement needs, Fleet staff uses the Fleet FMIS reports. The FMIS reports automatically calculate equipment replacement needs based on age, usage, and maintenance dollars spent using a fifteen (15) point system. Points are accrued as follows: current life compared to life expectancy (Age), life-to-date meter compared to the life expectancy (Usage), and repair dollars spent compared to original purchase price (Maintenance Dollars Spent). The Fleet Team reviews all vehicles/equipment ranked between twelve (12) and fifteen (15) points from this report. The higher the total, the closer the equipment is to the end of its useful life. The following criteria are also taken into consideration during the replacement analysis: City priority, vehicle condition, total cost of maintenance and depreciation, the environment in which the equipment operates, conditional suitability, safety, downtime hours, and a review of replacement versus repair costs.

All heavy-duty fire pumpers and ladders are set up with a life expectancy of 10 years of front-line service and five years of reserve service in the FMIS.

Brush trucks are set up for eight years of service in the FMIS

We review all fleet replacements, including fire units, annually using the reports created by our FMIS. The National Fire Protection Association has the following standards that are considered along with the FMIS information we review. The NFPA states all the values a fire apparatus must achieve to be eligible for fire service. These include acceleration rate (distance vs time), stopping distance (distance vs time), pump testing (to be performed by a qualified person and documented), and aerial (ladders and platforms) testing, to name a few items we test annually at a minimum. As the City's fire apparatuses fleet ages, the ability to fulfill these NFPA testing requirements becomes more difficult. Both the FD and Fleet work closely to plan out replacements in an effort to avoid keeping a unit past its useful life and reliable service. However, this is always dependent on funding, and as fire apparatus repair costs vs new purchase prices continue to rise, it becomes a balancing act of when to request funding to replace a unit versus keeping them in the fleet for another fiscal year.

We currently have 2 fire apparatuses that are 15 years old or older. These are unit #19, a 2009 Peirce Velocity, and unit #23, a 2008 Pierce Velocity. These are both in line for production at Sutphen and are slated to be completed mid-2025.

Unit 19, 2009 Peirce Velocity

- FMIS points 13.3
- Miles 123,300
- Hours 11,402
- Purchase price \$389,701
- Life to date M&R \$219,991
- 3-year downtime hours 4483

Unit 23, 2011 Pierce Velocity

- FMIS points 14.1
- Miles 105,410

- Hours 10,363
- Purchase price \$416,422
- Life to date M&R \$192,259
- 3-year downtime hours 3680

For the last three years, both units have been experiencing ongoing electrical, suspension, and HVAC issues that have increased the downtime hours. To date, we have not experienced a significant engine or transmission failure with these units. The goal is to remove them from the fleet before a costly repair like this happens. Industry-standard goals recommend removing units from the fleet when the maintenance cost reaches 50% of the original purchase price.