

City of Dover Fire & Rescue

Capital Improvements Program

November 4, 2009

Perry E. Plummer, Chief

City of Dover Fire & Rescue Capital Improvements Program

Engine 3 Replacement Pumper

Project Year: FY 2011

The scheduled replacement of the 1991 E-One Pumper will be necessary to ensure the safety and reliability of the fleet. When the truck was purchased in 1991, as a demo, the anticipated life expectancy was 8 years frontline and 9 years in reserve. The replacement in 2011 will equate to a useful life of 20 years.

As proposed, this project would be funded out of the City's Capital Reserve Account. If the truck is not replaced on schedule, there will be an increase in maintenance costs.

Please note: This vehicle will take as long as 12 months to build.

Total Project Cost: \$400,000



The department currently employs a replacement program that will move the 2001 pumper from frontline service and place it in a reserve status. The vehicle above (1991 pumper) is being removed from the reserve status and liquidated. It is important to move the 2001 pumper from front line as it currently has 92,000 miles/6800 hours on it. When you convert the vehicle hours to miles, an industry standard, this equals 272,000 miles currently on this vehicle. If moved to reserve this year, the City will be able to keep this vehicle in reserve for another 12 years.

City of Dover Fire & Rescue Capital Improvements Program

Ambulance Replacement 1999 Marque

Project Year: FY 2012

This ambulance would replace a 1999 Marque ambulance. The life expectancy of an ambulance running under the conditions that the City of Dover requires is seven (7) years; 3 ½ years as front line, 3 ½ years as a back up ambulance. In our case, we have extended the usable life of these rigs to over 13 years.

The justification for the replacement of emergency response vehicles all comes down to reliability. Despite our excellent vehicle maintenance program, our ambulances have experienced mechanical problems during emergency incidents. This is a trend that will only increase if these vehicles are not replaced on this schedule.

As proposed, this project would be debt financed and would require a bond issuance. If the ambulance is not replaced on schedule, there could be an increase in maintenance costs as high as an additional \$10,000.

Total Project Cost: \$135,000



Rescue 2 – 1999 Marque Ambulance

Current Mileage: 131,007

Current Hours: 18,002

Hours converted to miles by industry standard = 720,080

Annual Revenue Generated by this unit = \$182,000

Overall annual ambulance revenue = \$730,000

City of Dover Fire & Rescue Capital Improvements Program

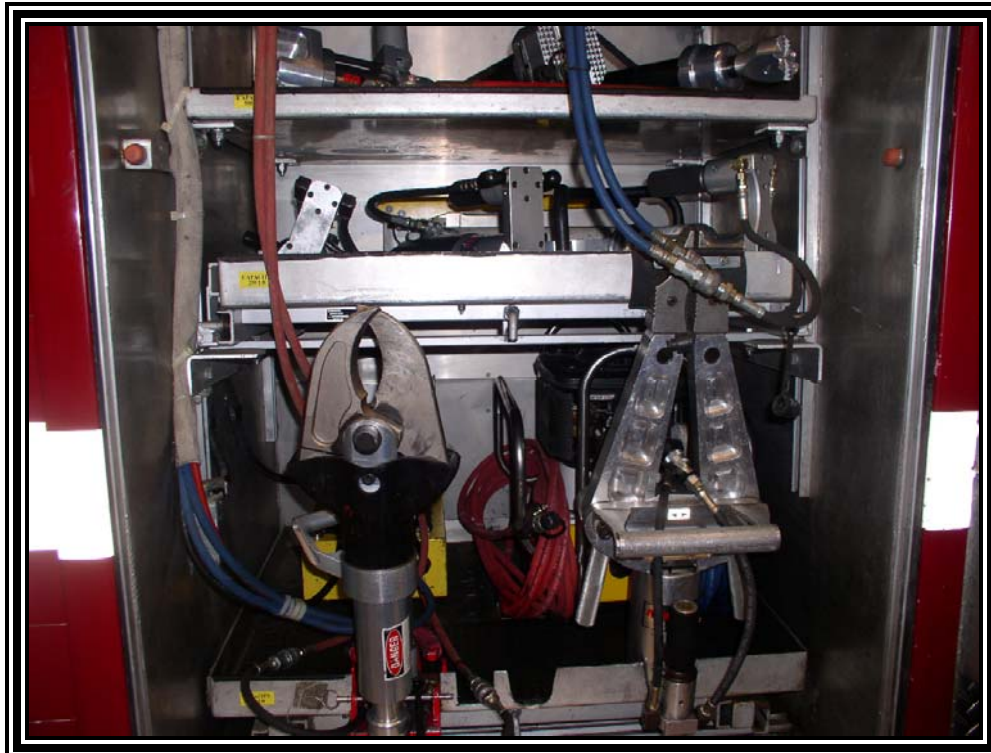
Hydraulic Extrication Equipment Replacement Amkus Equipment

Project Year: FY 2012

Hydraulic extrication equipment is better known as the “Jaws of Life”. This equipment is used on a weekly basis. The current equipment is 20 years old. The expected life of this type of unit is 15 years. The department has been able to extend the life of the system with upgrades paid for by Federal Grants. If replaced when outlined, the unit will be 22 years old.

As proposed, this project would be funded through the departments’ operating budget for FY12.

Total Project Cost: \$30,000



City of Dover Fire & Rescue Capital Improvements Program

Engine 6 Replacement 1995 Becker Pumper

Project Year: FY 2013

The scheduled replacement of the 1995 Becker Fire Pumper will be necessary to ensure the safety and reliability of the fleet. When the truck was purchased in 1995, the anticipated life expectancy was 8 years frontline and 9 years in reserve. The replacement in 2013 will equate to a useful life of 18 years.

As proposed, this project would be funded out of the City's Capital Reserve Account. If the truck is not replaced on schedule, there will be an increase in maintenance costs.

Please note: This vehicle will take twelve months to build.

Total Project Cost: \$450,000



The department currently employs a replacement program that will move the 2000 Quint from frontline service and place it in a reserve status. The vehicle above (1995 pumper) is being removed the reserve status and liquidated. It is important to move the 2000 Quint from front line as it currently has 98,000 miles/10,141 hours on it. When you convert the vehicle hours to miles, an industry standard, it equals 405,640 miles currently on this vehicle. If moved to reserve as scheduled, the city will be able to keep this vehicle in reserve for another 12 years.

City of Dover Fire & Rescue Capital Improvements Program

Station Generator Replacement-South End Station

Project Year: FY 2013

The South End Fire Station is currently equipped with an emergency generator that provides power to the station during power outages. This equipment is used on a regular basis and is essential to emergency response. The expected life of this type of unit is 20 years. If replaced when outlined, the unit will be 22 years old.

As proposed, this project would be funded through the departments' operating budget for FY13.

Total Project Cost: \$50,000



City of Dover Fire & Rescue Capital Improvements Program

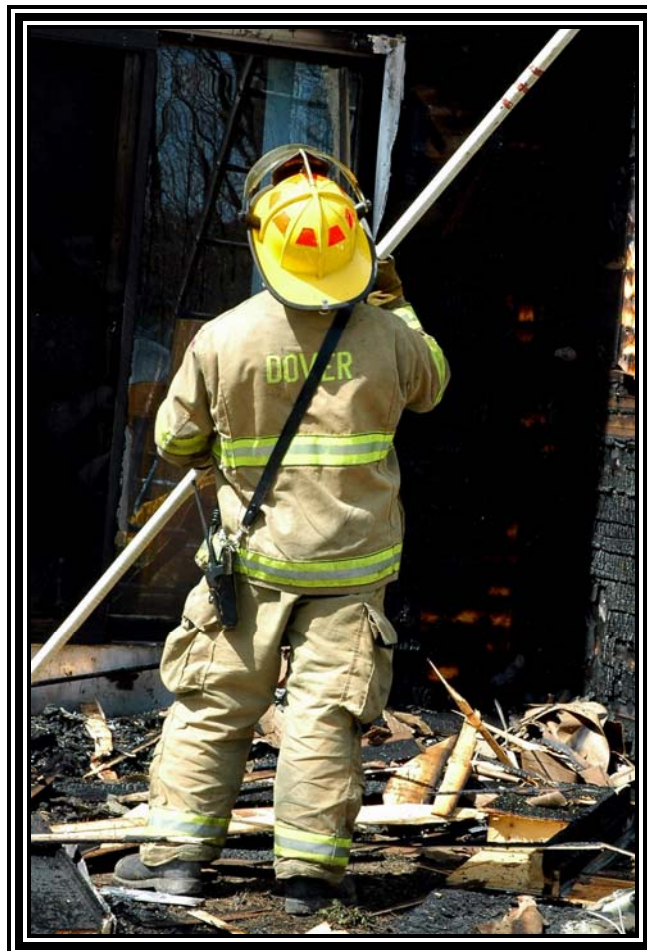
Bunker Gear Replacement

Project Year: FY 2014

Bunker gear is the head-to-toe firefighter gear which provides protection for our personnel during all type of emergencies. This protective gear allows firefighters to enter untenable atmospheres and fire situations to rescue victims. This gear is used on a regular basis and is essential to emergency response. The expected life of this type of gear is 6 years. If replaced when outlined, these units will be 10 years old.

As proposed, this project would be debt financed and would require a bond issuance.

Total Project Cost: \$120,000



City of Dover Fire & Rescue Capital Improvements Program

Self Contained Breathing Apparatus Replacement

Project Year: FY 2014

Self Contained Breathing Apparatus (SCBA) is the breathing equipment that firefighters wear on their back, which supplies their breathing air during firefighting operations, hazardous material incidents and hazardous atmospheres. This breathing equipment is the most important life safety equipment a firefighter can have. This equipment is used on a regular basis and is essential to emergency operations. The expected life of this type of equipment is 10 years. If replaced when outlined, these units will be 10 to 13 years old.

As proposed, this project would be debt financed and would require a bond issuance.

Total Project Cost: \$240,000



City of Dover Fire & Rescue Capital Improvements Program

Ambulance Replacement 2005 Marque

Project Year: FY 2015

This ambulance would replace a 2005 Marque ambulance. The life expectancy of an ambulance running under the conditions that the City of Dover requires is seven (7) years; 3 ½ years as front line, 3 ½ years as a back up ambulance. In our case, we have extended the usable life of these rigs to over 10 years.

The justification for the replacement of emergency response vehicles all comes down to reliability. Despite our excellent vehicle maintenance program, our ambulances have experienced mechanical problems during emergency incidents. This is a trend that will only increase if these vehicles are not replaced on this schedule.

As proposed, this project would be debt financed and would require a bond issuance. If the ambulance is not replaced on schedule, there could be an increase in maintenance costs as high as an additional \$10,000.

Total Project Cost: \$140,000



Rescue 3 – 2005 Marque Ambulance

Current Mileage: 101,488

Current Hours: 15,312

Hours converted to miles by industry standard = 612,480

Annual Revenue Generated by this unit = \$84,000

Overall annual ambulance revenue = \$730,000

City of Dover Fire & Rescue Capital Improvements Program

Cardiac Monitor and Defibrillator Replacement

Project Year: FY 2016

This would replace all three cardiac monitors; one is located on each of the department's three ambulances. The cardiac monitor and defibrillators are one of the most used pieces of life saving equipment the ambulance carries. These need to be replaced to ensure reliability, safety and up-to-date technology.

As proposed, this project would be funded through the department's operating budget for FY13.

The department currently employs a replacement program that will move the Physio Control monitors to the fire engines and remove the older outdated monitor currently on the engines from service.

Total Project Cost: \$72,000



City of Dover Fire & Rescue Capital Improvements Program

Staff Vehicle Replacement

Project Year: FY 2016

The scheduled replacement of the 2002 Chevy Tahoe will be necessary to ensure the safety and reliability of the fleet. At the time of replacement, this vehicle will have been a front line emergency vehicle for 15 years (purchased in 2001) and will have well over 120,000 miles on it.

The type of vehicle to be purchased will be thoroughly investigated and the most cost effective, functional vehicle will be purchased. We will investigate hybrid options available at the time the project comes to fruition.

As proposed, this project would be funded through the departments' operating budget for FY16.

Total Project Cost: \$ 35,000



City of Dover Fire & Rescue Capital Improvements Program

South End Station Ramp Paving

Project Year: FY 2016

This is the replacement of the base and the paving the South End Fire Station ramp. The South End Fire Station ramp is showing signs of deterioration. The paving has pot holes and cracks and there are ruts that have formed under the weight of the truck traffic.

As proposed, this project would be funded through the department's operating budget for FY16.

Total Project Cost: \$38,000