

East Montpelier Fire Department

Engine 4 and Rescue 2 Replacement Proposal

Truck Information

- Engine 4 (E4) a 1994 International commercial chassis is positioned at the Templeton Road Station. It serves as a primary fire suppression and water supply unit. For calls in sections of our coverage area E4 may be the first arriving unit as such its capabilities for pumping and water supply are critical to quick fire suppression.
- Rescue 2 (R2) is a 1993 Freightliner chassis which serves the heavy rescue function throughout our operating territory. R2 is our primary response unit for vehicle accidents and many other emergency calls which do or may require rescue or special support.

Truck Inventory

Vehicle	Year	Notes	Mileage new	Mileage Sept 2016	Cost	Per year miles	Est. market Value
Engine 4	1995	Purchased new Dec 1994	1,800	29,727	\$159,900	1,269	\$30,000
Rescue 2	1994	Purchased used June 2008	21,305	31,065	\$52,000	1,220	\$35,000
Engine 2	2002	Purchased Feb 2003	2,500	22,036	\$220,665	1,503	
Utility 1	2011	Purchased Nov. 2010	4	20,206	\$31,474	3,367	
Tanker 1	2007	Purchased used Sept 2014	166,696	169,130	\$113,908	1,217	
Rescue 4	2012	Refurb body on new chassis 2012	93	19,411	\$108,582	4,830	
Rescue 3	2009	Purchased used in Dec 2013	49,715	62,268	\$52,900	4,184	

Our Goals

- Replace Engine 4 with new
- Replace Rescue 2 with 10 year old used
- Reestablish on-going 10 year vehicle purchase cycle
- Utilize 10 year financing for vehicle purchases allowing us annual capital to address EMT staffing sustainability issues

Why Replace These Vehicles?

- **NFPA 1901:** This standard defines the requirements for new automotive fire apparatus and trailers designed to be used under emergency conditions to transport personnel and equipment and to support the suppression of fires and mitigation of other hazardous situations.
- **NFPA 1911:** Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus. A good decision can be made on the repair versus replacement argument, if it can be determined through the NFPA 1911 "Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus 2012 Edition" **that the apparatus meets the less than 25 year requirement for front line and reserve service. Any apparatus over 25 years of age per NFPA 1911 Annex "D" should be retired from service.**

- The repairing of an apparatus will not make it “new” or free of any future repairs. A comprehensive report should include any future repair costs that can be expected, or unexpected, during the useful life extension **as long as it does not pass the 25 year requirement of NFPA 1911.**

- NFPA 1901 has changed substantially since 1993/4 especially in terms of crew and vehicle safety.
- Both vehicles are quickly approaching the end of life date per NFPA 1911
- Per NFPA 1901 important safety standards around firefighter and public safety have evolved substantially since the existing vehicles were constructed.
- The existing vehicles are showing age related corrosion that can lead to failure of critical components i.e. frame, suspension and brake mounting hardware.

Capital Plan FY2014-FY2025

**East Montpelier Volunteer Fire Department
Capital Plan (FY2014-2025)**

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Capital Balance beginning 2013						
Balance FY13	115979					
Income FY14	70000					
Expense Replace Rescue 3 Ambulance 2014	-50000					
Expense SCBA loan payment 2014	-14800					
Balance FY14		121179				
Income FY15		70000				
Expense Tanker 2015		-36685				
Expense SCBA loan payment 2015		-14800				
Balance FY15			139694			
Income FY16			70000			
Expense Tanker loan payment 2016			-40510			
Expense Rescue Cutter 2016			-8000			
Expense Roof Saw 2016			-2000			
Expense SCBA loan payment 2016			-14800			
Balance FY16				144384		
Income FY17				70000		
Expense Rescue tool 2017				-13000		
Expense Tanker loan payment 2017				-40510		
Expense SCBA loan payment 2017				-14800		
Balance FY17					146074	
Income FY18					70000	
Expense Class A Pumper 2018					-400000	
Expense SCBA loan payment 2018					-14800	
Balance FY18						-198726
Income FY19						70000

Capital Balance FY19						-128726
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Capital Expenses and Income	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Capital Balance FY19	-128726					
Income FY20	70000					
Expense replace Rescue 2 Heavy Rescue 2020	-250000					
Balance FY20		-308726				
Income FY21		70000				
Balance FY21			-238726			
Income FY22			70000			
Balance FY22				-168726		
Income FY23				70000		
Balance FY23					-98726	
Income FY24					70000	
Expense replace Rescue 4 (2024)					-150000	
Balance FY24						-178726
Income FY25						70000
Capital Balance FY25						-108726
Total Capital Income		840000				
Total Trucks	(817705)					
Total equipment	(80200)					
Total Capital Spending	(897905)					

Equipment Purchased with Capital Funds

Equipment	Year	Cost	
Child Restraint Seat for Ambulance	2012	(\$671.35)	
New Chassis and Remount Rescue 4 Ambulance	2012	(\$90,089.42)	
Personal CO Monitors for Ambulance Personnel	2012	(\$313.90)	
Scoop Stretcher for Ambulance	2012	(\$751.68)	
Refurbished Stairchair for Ambulance	2012	(\$1,500.00)	
New Stairchair for Ambulance	2012	(\$3,086.34)	
Floor Scrubber for Building 2	2013	(\$2,445.00)	
(16) SCBA, Bottles and Masks (1/5 down)	2013	(\$16,947.20)	
SCBA Emergency Fill Hose (Rapid Intervention)	2013	(\$722.43)	
CET Water Pump	2013	(\$7,500.00)	
(2) Multi-Gas Meters	2013	(\$3,570.70)	
Thermal Imaging Camera	2013	(\$4,131.49)	
(11) Turnout Pants/(9) Turnout Coats	2013	(\$10,000.00)	
Inflatable Mattress for Ambulance	2013	(\$490.99)	
Burn Kit and Child Restraint Seat for Ambulance	2013	(\$247.78)	
Trauma Trousers for Ambulance	2013	(\$1,089.03)	
			(\$143,557.31)
Rescue 3 ambulance	2014	(\$50,000.00)	
Tanker (1/3 down)	2015	(\$117,705.00)	
EZ/IO	2015	(\$2,735.23)	
			(\$170,440.23)
Total		(\$313,997.54)	

Capital Plan FY2017-FY2027

East Montpelier Volunteer Fire Department

Actual

Capital Plan (FY2017-2027)

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Balance FY16 Jun 2016	138743					
Income FY17	70000					
Expense Rescue tool 2017-couplings	-3600					
Expense Tanker loan payment 2017	-40510					
Expense SCBA loan payment 2017	-14800					
Balance FY17		149833				
Income FY18		70000				
Town payments- (EM=\$10,000/ Calais=\$5000)		15000				
Expense Class A Pumper 2018- \$400,000		-40000				
Expense Used Heavy Rescue-\$150,000		-150000				
Expense SCBA loan payment 2018		-14800				
Balance FY18			30033			
Income FY19			70000			
Town payments			15000			
Apparatus Loan payment			-40000			
Balance FY19				100033		
Income FY20				70000		
Town Payments				15000		
Apparatus Loan payment				-40000		
Balance FY20					145033	
Income FY21					70000	
Town payments					15000	
Apparatus Loan payment					-40000	
Balance FY21						190033
Income FY22						70000
Town payments						15000

Apparatus Loan payment						-40000
Balance FY22						235033
Capital Expenses and Income	FY2023	FY2024	FY2025	FY2026	FY2027	
Balance FY23	235033					
Income FY24	70000					
Town payments	15000					
Expense replace Rescue 4- \$150,000	-150000					
Apparatus Loan payment	-40000					
Balance FY24		130033				
Income FY25		70000				
Town payments		15000				
Apparatus Loan payment		-40000				
Balance FY25			175033			
Income FY26			70000			
Town payments			15000			
Apparatus Loan payment			-40000			
Balance FY26				220033		
Income FY27				70000		
Town payments				15000		
Apparatus Loan payment				-40000		
Balance FY27					265033	
Income FY28					70000	
Town payments					15000	
Apparatus Loan payment					-40000	
Balance FY28						310033
Start balance	138743					
Ten year funding	835000					
Total income/ revenue	973743		270783			

Total Trucks	700000					
Total equipment	3600					
Total Capital Spending	702960					

Proposed Financials

EMFD Engine 4 & Rescue 2 replacement financial projections

Replacement costs and truck sale values are estimates the actual amounts may vary slightly

	Estimated Financials	Original Cap. Plan Cost
Engine 4 Replacement	\$ 466,000.00	\$ 400,000.00
Rescue 2 Replacement	\$ 150,000.00	\$ 250,000.00
Engine 4 Sale Value	\$ 30,000.00	
Rescue 2 Sale Value	\$ 35,000.00	
Contribution from EMFD exisiting capital fund	\$ 100,000.00	
Total Cost net of sale of E4 & R2***	\$ 451,000.00	
East Montpelier annual contribution	\$ 10,000.00	
Calais annual contribution	\$ 5,000.00	
Total towns annual contribution	\$ 15,000.00	
East Montpelier upfront contribution	\$ 30,000.00	
Calais upfront contribution	\$ 15,000.00	
Total towns upfront contribution	\$ 45,000.00	
Loan Amount net of towns initial contrib.	\$ 391,000.00	
Payment Summary on	\$ 391,000.00	
Estimated interest rate - 10 years	4.5%	
Total Monthly Payment	\$ 4,052.26	
EMFD Annual Payment	\$ 33,627.12	
Total towns annual contribution	\$ 15,000.00	
Annual Payment Amount	\$ 48,627.12	

*****Note: Assumes proceeds from sale of E4 and R2 is available to reduce initial loan amount**

