



## CITY OF MELROSE

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### DEPARTMENT OF PUBLIC WORKS

*Administration-Engineering-Water-Sewer-Facilities  
Parks-Forestry-Highway-Sanitation-Cemetery-Fleet*

**Elena Proakis Ellis, P.E., BCEE**  
*Director of Public Works*

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## MEMORANDUM

Date: June 2, 2022

To: Mayor Paul Brodeur

From: Elena Proakis Ellis, Director of Public Works

cc: Patrick Dello Russo, CFO/Auditor  
Jim Troup, Deputy Director Admin & Finance  
Joe Hobbs, DPW Operations Manager

Subject: DPW Vehicles – Free Cash Request

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The Department of Public Works has recently evaluated all of our vehicles and developed the attached memorandum summarizing our highest needs. The conclusion is a request for free cash in the amount of \$482,000 to fund the purchase of five replacement vehicles, along with one additional vehicle requested to be replaced separately via the Sewer Enterprise Fund. Please see the attached report for details.

We respectfully ask for your consideration of this request. Thank you.



## CITY OF MELROSE

### DEPARTMENT OF PUBLIC WORKS

Administration–Engineering–Water–Sewer–Facilities  
Parks–Forestry–Highway–Sanitation–Cemetery–Fleet

**James Troup**

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May 6, 2022

To: Paul Brodeur, Mayor

Patrick Dello Russo, CFO/Auditor

From: James Troup, DPW Deputy Director Administration and Finance

CC: Elena Proakis Ellis, DPW Director Joseph Hobbs, Operations Manager

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**RE: Vehicle Condition and Replacement Request**

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The Department of Public Works has assessed the current condition of an aging fleet to identify specific vehicles and equipment that should be targeted for replacement. Included in the criteria to assess the fleet were age, miles, body condition, and services the vehicle is used to provide. Of note, we utilize most of our fleet to deliver snow removal and emergency response services. In the current state, we are in jeopardy of compromising the services we deliver in such instances. Please see the below list of vehicles that should be targeted for replacement in the immediate and short-term future. The vehicles are grouped by type.

### **Roll-off Vehicle**

Truck 17 – 1999 International 4900 – 116,098 Miles – Sanitation Division



Conditions: Cracked frame in several locations has been welded and plated. Hydraulics in need of replacement. Passed most recent inspection but is not expected to pass in the future.

Replacement Cost: \$200,000

Additional Notes: This vehicle is used to transport roll-off containers from the City Yard to the recycling and yard waste facilities. It is critical to the day-to-day operations of the City Yard's recycling and yard waste facility and is the only vehicle in our fleet of this type. Thus its replacement is a very high priority.

## Trash Packers

### Truck 26 - 2004 International Packer - 115,623 Miles - Sanitation Division (public barrels and yard waste)



Conditions: Rotted body. Hydraulic lines in need of replacement. Rotted hopper.  
Replacement Cost: \$305,000

Additional Notes: This vehicle is critical to the department's day-to-day operations. It is used for curbside yard waste pickup and for municipal barrel collection. If this vehicle is not replaced within the next couple of years, we will need to look at outsourcing our curbside yard waste program and municipal barrel collection.

### Truck 18 – 2010 International Packer – 130,549 Miles – Sanitation Division (public barrels and yard waste)



Conditions: Rotted body. Recently invested \$22K to rebuild engine (temporary repair).  
Replacement Cost: \$285,000

Additional Notes: This vehicle is in full-time use for public barrels and school trash disposal and is also used to supplement peak yard waste operations. It is also used to collect curbside solid waste and recycling from a handful of streets that JRM's larger collection vehicles cannot access.



## Heavy Duty Trucks

### Truck 21 - 1998 International Dump - 77,894 Miles - Highway Division (snow operations)



Conditions: Cracked frame. Rotted floor. Failed inspection.  
Replacement Cost: \$225,000

### Truck 29 - 1997 International - 33,995 Miles - Highway Division (snow operations)



Conditions: Rotted floor. Failing frame. Failed inspection.  
Replacement Cost: \$225,000

## Light Dump Trucks

### Truck 33 - 2012 Chevy 3500 Dump w/Liftgate - 63,810 Miles - Parks & Forestry Division (snow operations)



Conditions: Rotted holes in floor. Failed inspection. Primary vehicle for pulling landscape trailers and parks maintenance.  
Replacement Cost: \$88,000

Truck 35 - 2011 Chevy 3500 Dump - 50,263 Miles - Parks & Forestry Division (snow operations)



Conditions: Rotted floor. Failed inspection.  
Replacement Cost: \$96,000

Truck 38 - 2012 Chevy 3500 Dump - 66,930 Miles - Parks & Forestry Division (snow operations)



Conditions: Rotted Floor. Failed inspection.  
Replacement Cost: \$88,000

Truck 47 - 2012 Chevy 3500 - 56,000 Miles – Cemetery Division (snow operations)



Conditions: Rotted bed.  
Replacement Cost: \$88,000



Truck 48 - 2010 Chevy 3500 - 60,000 Miles – Cemetery Division (snow operations)



Conditions: Rotted body and bed. Failed inspection.  
Replacement Cost: \$88,000

Truck 55 - 2005 Chevy 3500 Dump - 76,158 Miles - Sewer Division (snow operations)



Conditions: Rotted floors and bed. Failed inspection.  
Replacement Cost: \$90,000

Truck 57 - 2001 Ford F350 - 76,121 – Facilities Division (snow operations)



Conditions: Inoperable. Fire damage from recent vehicle fire during use. Rotted floor. Transmission overhaul needed.  
Replacement Cost: \$88,000

Truck 65 - 2010 Chevy 350 Dump - 89,797 Miles – Highway Division (snow operations)



Conditions: Rotted floor and bed. Failed inspection. Primary vehicle to respond to pothole work orders.  
Replacement Cost: \$96,000

**Pickup Trucks**

Truck 10 - 2000 Chevy Pick-up - 119,611 Miles - Highway Division (snow operations)



Conditions: Rotted Floor. Failed inspection.  
Replacement Cost: \$53,000

Truck 8 - 2004 Chevy Pick-up - 125,450 Miles - Water/Sewer Divisions (snow operations)



Conditions: Rotted floor. Exhaust system leaks. Failed inspection.  
Replacement Cost: \$53,000



Truck 39 - 1999 Chevy 1500 Pick-Up - 132,002 Miles – Highway Division (snow operations)



Conditions: Engine replacement needed (parked). Rotted floor. Rotted bed.  
Replacement Cost: \$53,000

Truck 46 - 1999 Ford F150 - 99,000 Miles – Cemetery Division



Conditions: Rotted floor. 2 wheel drive (not available for snow operations). Failed inspection  
Replacement Cost: \$53,000

**Specialty Equipment**

Truck 50 - 1997 Case Backhoe – Cemetery Division (snow operations)



Conditions: Rotted floors. Primary vehicle for all cemetery operations.  
Replacement Cost: \$150,000



### Truck 77 - 1997 Volvo L90 C Loader - Highway Division (snow operations)



Conditions: Rotted body and in need of tires. Hydraulic hoses in need of replacement. Engine overhaul needed.

Replacement Cost: \$190,000

### **Summary**

As shown above, the conditions of the vehicles compromise the safety of our staff and jeopardize the levels of services that our residents have come to expect from the DPW. We have exceeded the expected life of these vehicles on both miles and age. Fleet Counselor Services, a nationally recognized consulting firm, recommends replacement of fleet vehicles at intervals shown below.

Vehicle Type	Recommended Useful Life (Fleet Counselor Services Data)	Age of City Vehicles	Estimated Replacement Cost
Roll-off	12 years or 9,000 hours	#17 – 23 years	\$200,000
Packer	7 years or 9,000 hours	#26 – 18 years #18 – 12 years	\$305,000 \$285,000
Heavy Dump Truck	12 years or 120,000 miles	#21 – 24 years #29 – 25 years	\$225,000
Light Dump Truck	12 years or 120,000 miles	#33 – 20 years #35 – 11 years #38 – 10 years #47 – 10 years #48 – 12 years #55 – 17 years #57 – 21 years #65 – 12 years	\$88,000 to \$96,000
Pickup Trucks	12 years or 120,000 miles	#10 – 22 years #8 – 18 years #39 – 23 years #46 – 23 years	\$53,000
Backhoe	12 years or 9,000 hours	#50 – 25 years	\$150,000
Loader	12 years or 10,000 hours	#77 – 25 years	\$190,000

The Melrose DPW fleet vehicles shown above represent approximately \$2.5M in short-term need. Vehicles over 20 years old are shown in red. Please note that this does not include non-DPW fleet needs, such as the Fire Department and Recreation Department, who have also requested new vehicles which should be considered for funding.

For this year's free cash request, we recommend replacing the following DPW vehicles:

- Roll-off (Truck #17) - \$200,000
- Light Dump Trucks (#33, #55 and #57) - \$176,000 general fund; \$90,000 sewer fund
- Pickup Trucks (#39 and #46) - \$106,000

This results in a total free cash request of \$482,000 from the general fund and \$90,000 from the sewer fund. All purchases will be discussed in advance with the Sustainability Manager to explore sustainable options. We would be happy to discuss alternative approaches to funding and strategies different from or in addition to the vehicles selected for this year's request. We appreciate all your consideration. Please feel welcome to reach out with any questions you may have.

We thank you for your continued support as we serve the City and our residents.