

**Presentation to the Audit Committee  
on October 25, 2019, Agenda Item AU4.6**

**AUDITOR  
GENERAL**  

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**TORONTO**

# **Fleet Services Operational Review – Phase Two Stronger Asset Management Needed**

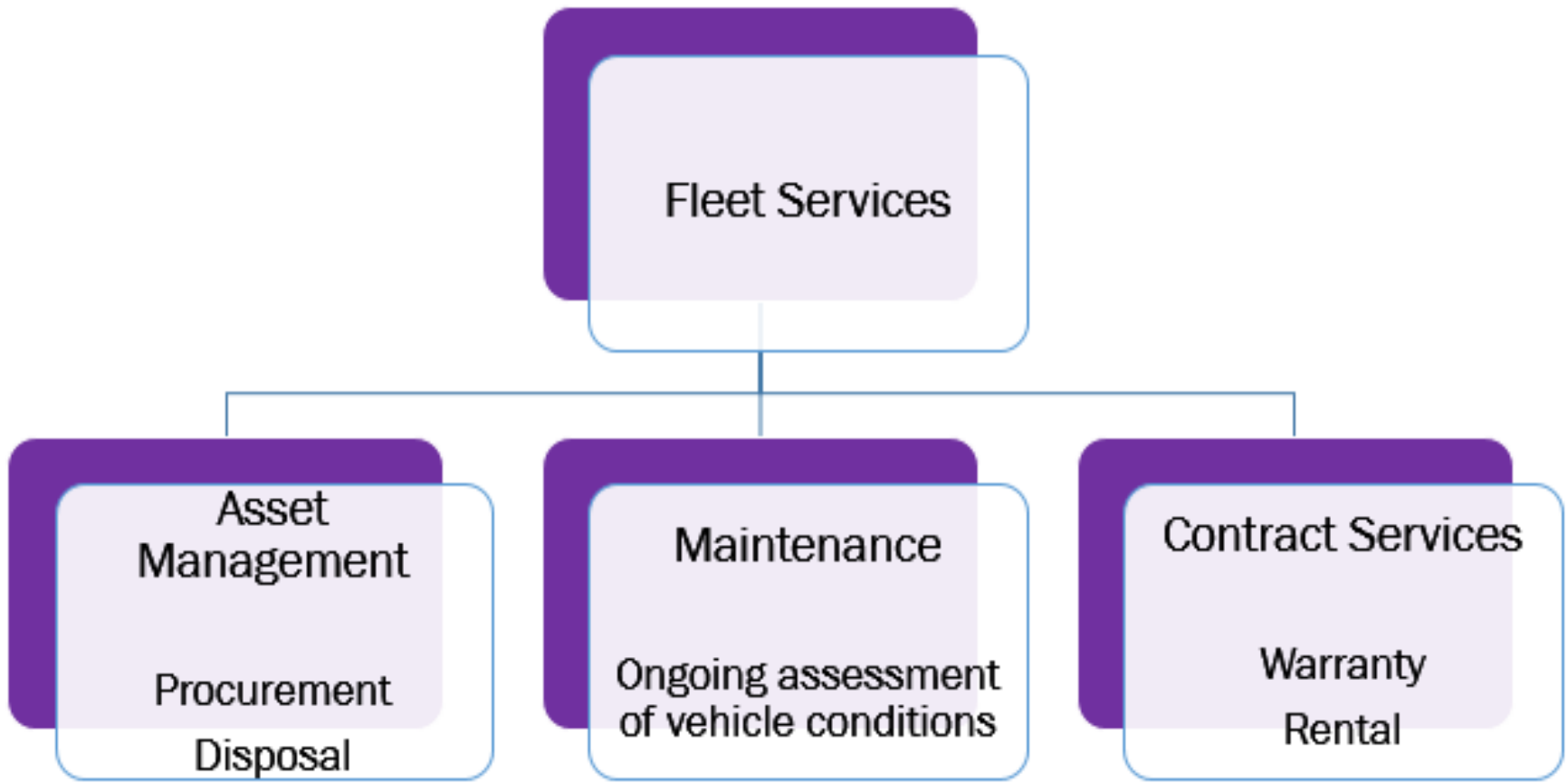
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# Asset Management Activities in Fleet Services (Phase 2)



# A. Better Procurement Planning Needed

- Vehicle procurement lead time varies widely:

	Light Duty (More Standardized)	Heavy Duty (More Customized)
Contract available	6-8 months	1-1.5 years
No contract	1 year	2-3 years

- Vehicles may not arrive until more than a year later than recommended replacement timelines.

# A. Better Procurement Planning Needed

- Staff often have to keep vehicles in operations past their expected useful life due to procurement delays, incurring costly maintenance.

Vehicle Type	Annual Cost		Difference (\$)	Difference (%)
	During Expected Life	Past Expected Life		
Light Duty	\$2,450	\$2,650	\$200	8%
Medium Duty	\$4,400	\$6,450	\$2,050	47%
Heavy Duty	\$12,500	\$18,200	\$5,700	46%

- Procurement should begin earlier depending on the type of vehicle to provide sufficient lead time.

# A. Better Procurement Planning Needed

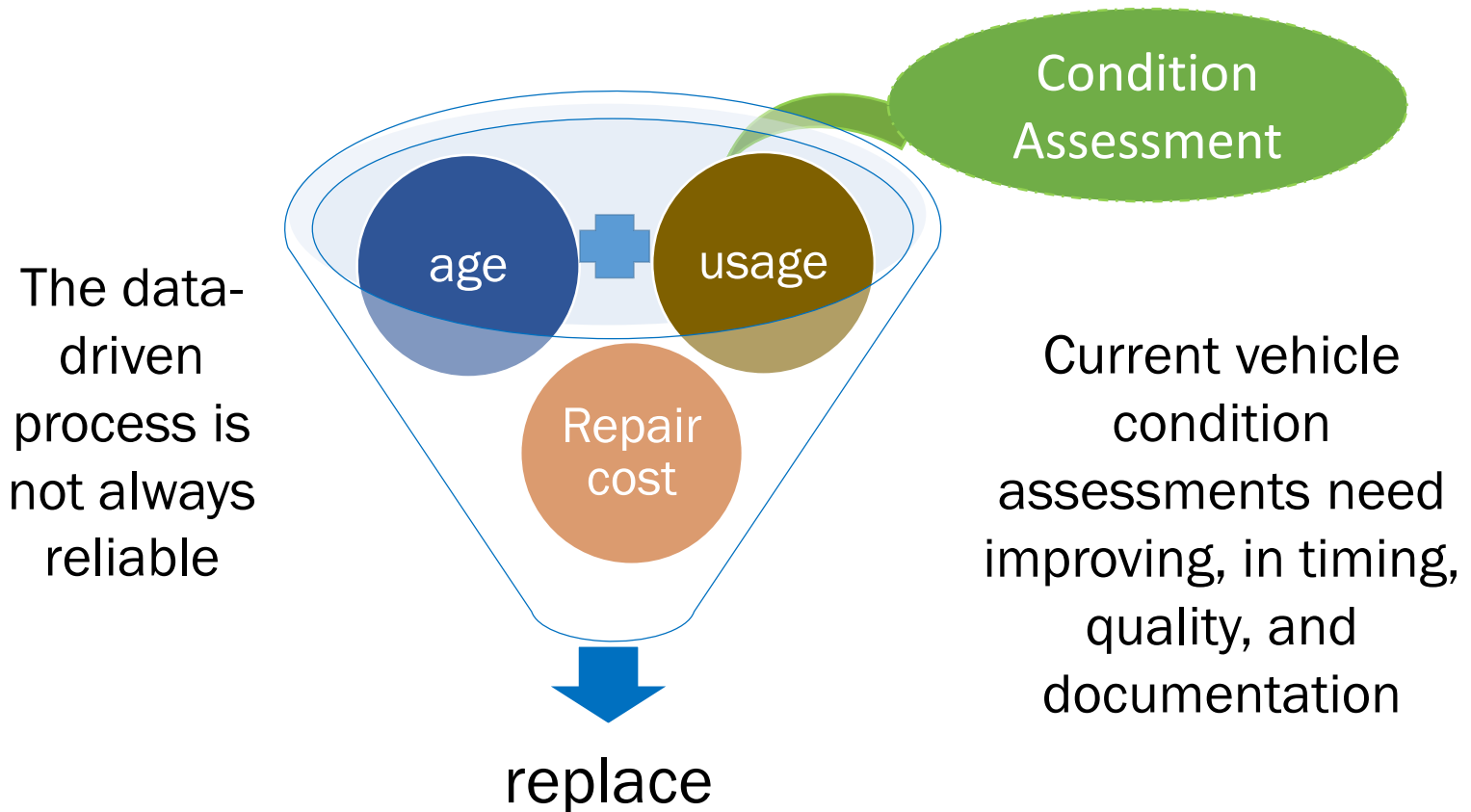
- The City spent \$875,000 to keep 69 units on the road in their final year of service, only to sell them for \$428,000 within a year.
- Some examples are shown below:

Unit #	Final Year Repair Cost	Sale Price
Unit #1	\$50,873	\$3,865
Unit #2	\$42,688	\$6,290
Unit #3	\$39,107	\$3,349

- We did not identify any potentially inappropriate activity. Rather, the costs were incurred to meet operational needs while waiting for replacement vehicles to arrive

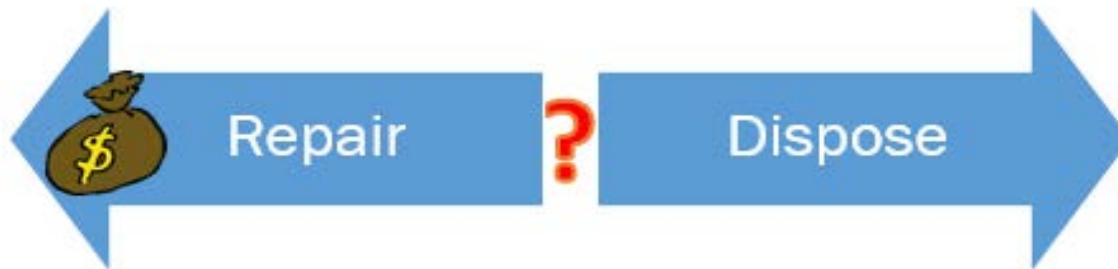
# B. Improve End of Life Decision-making

## 1. Better process needed to flag vehicles for disposal



## B. Improve End of Life Decision-making

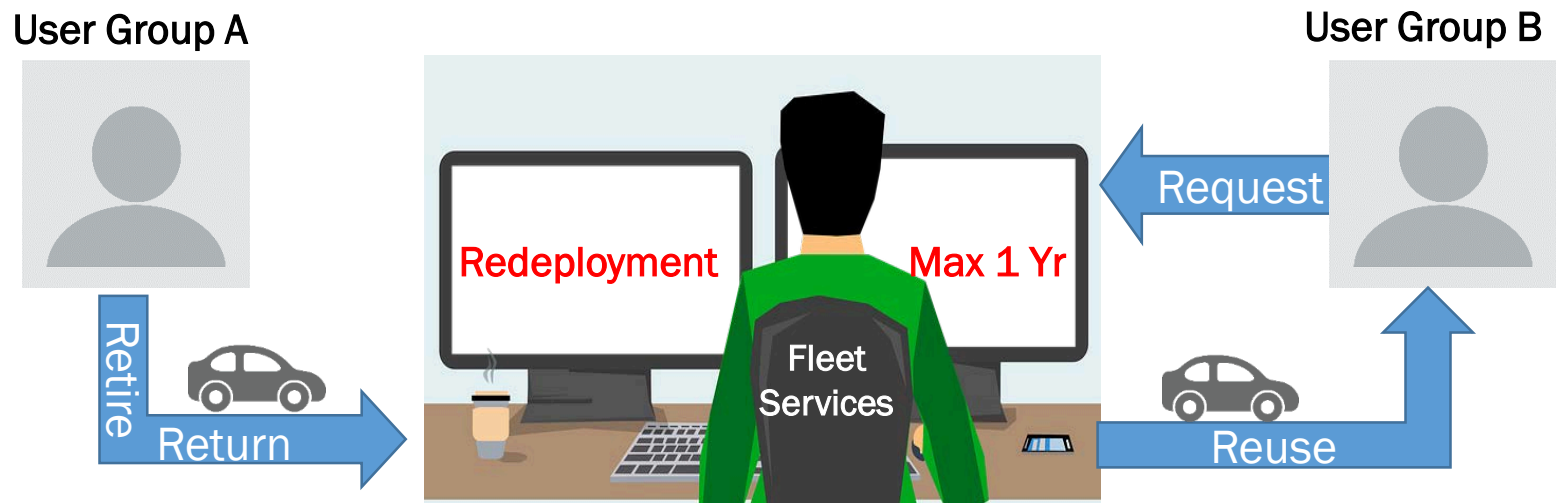
2. Lack of standard practices in removing vehicles from service when too costly to fix (“beyond economic repairs”)



- Too often, these decisions were made too late
- Half of the time, at the time of disposal, vehicles have incurred life-time maintenances costs in excess of their purchase cost

## B. Improve End of Life Decision-making

### 3. Stronger oversight needed for vehicle redeployments



- 164 out of 333 (49%) vehicles have been redeployed for > 3 years
- Many of them should have been disposed much sooner
- Only 38 out of 450 redeployment requests were kept on file.



## C. Maintain an Accurate Inventory

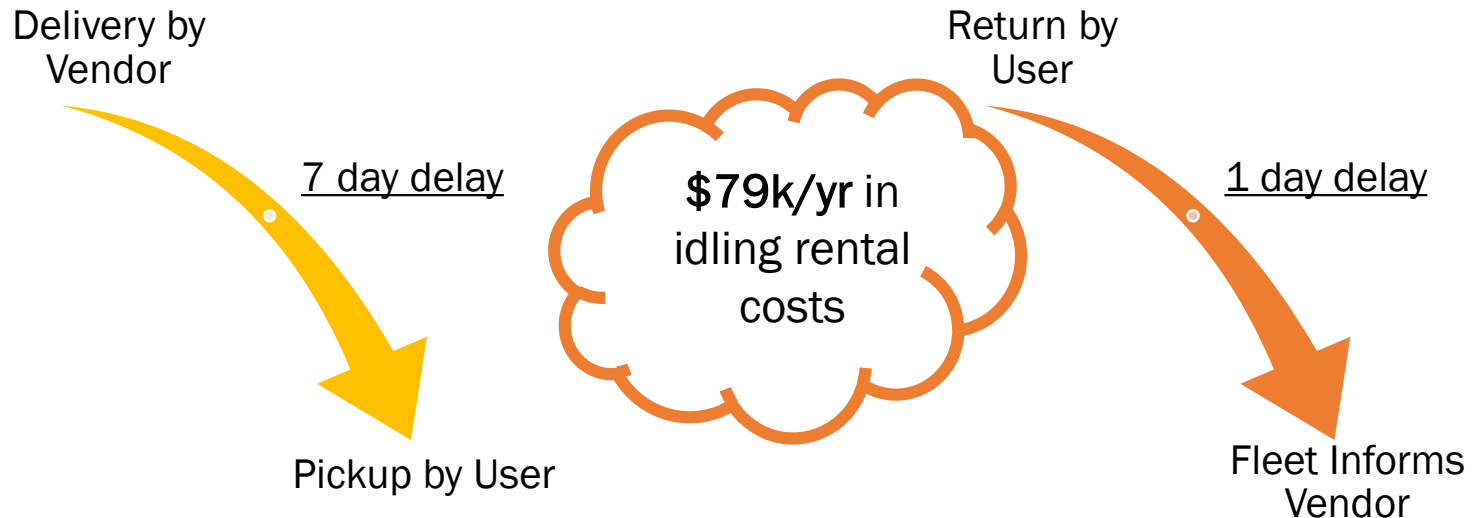
As of July 2019, there were 101 units in the City's fleet inventory unaccounted for. The total cost of these units was \$1.9 million.



# D. Improve Rental Process and Oversight

1. Staff should improve rental pick-up/drop-off logistics to eliminate delays and unnecessary costs

- City pays \$30 per day in rental charges regardless of whether the vehicle is being used



# D. Improve Rental Process and Oversight

2. Lack of monitoring of repeated rentals resulted in uneconomical decisions for the City

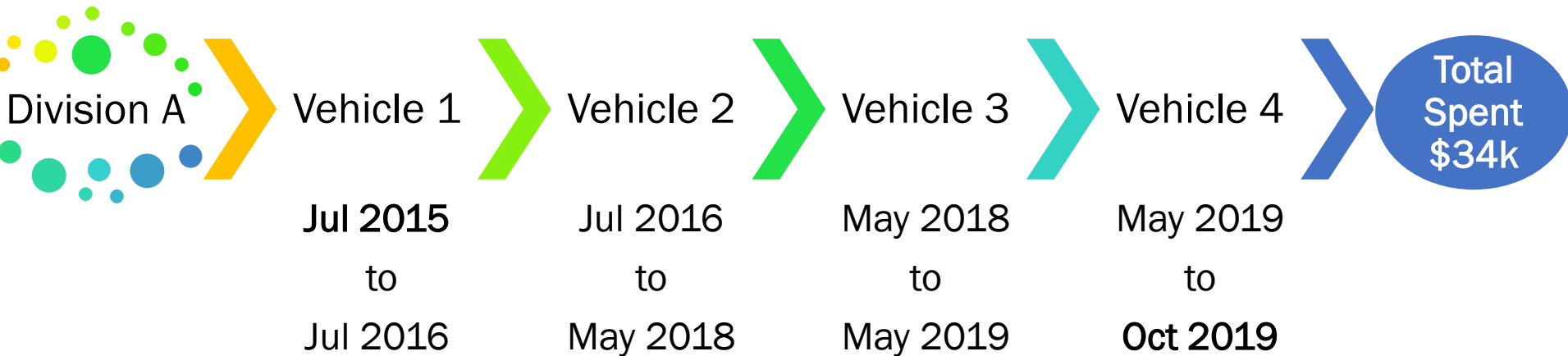
- 27 cases since 2010 where users rented vehicles from 2 to 6 years.

Division	Number of times	Avg. years rented	Cost to rent (actual)	Cost to buy* (projected)	Difference
Parks, Forestry & Recreation	11	3.30	\$410,000	\$261,000	\$149,000
Toronto Water	8	2.84	324,000	176,000	148,000
Transportation Services	3	2.93	92,000	37,000	55,000
Facilities Mgmt. & Real Estate	2	3.45	90,000	53,000	37,000
Other	3	2.57	74,000	32,000	42,000
<b>Grand Total</b>	<b>27</b>		<b>990,000</b>	<b>559,000</b>	<b>431,000</b>

- Savings could be higher if analysis includes repeated rentals by different operating units within a division or City-wide.

# D. Improve Rental Process and Oversight

Example of a repeated rental



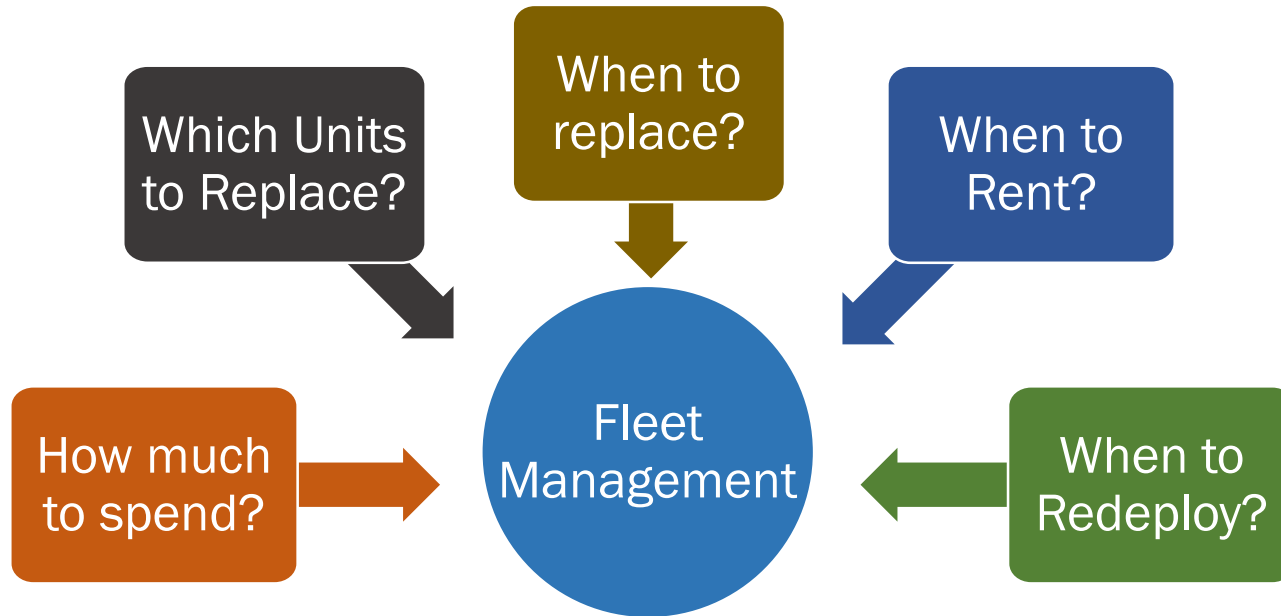
- Savings from purchasing the vehicle: \$18,000+
- Vehicle has been rented since July 2015. As of October 9, the vehicle is still active

# E. Strengthen Warranty Administration



# F. Strengthen Fleet's Central Oversight Role

- The City needs an overseer with an organization-wide perspective to manage its fleet assets effectively



- In our view, it is important that Fleet Services **move from playing an administrator's role to driving policies and decisions** and to overseeing user groups to ensure compliance.

# **Repairs due to “Negligence /Vandalism”**

# Not All Operators Handle Their Vehicles with Care

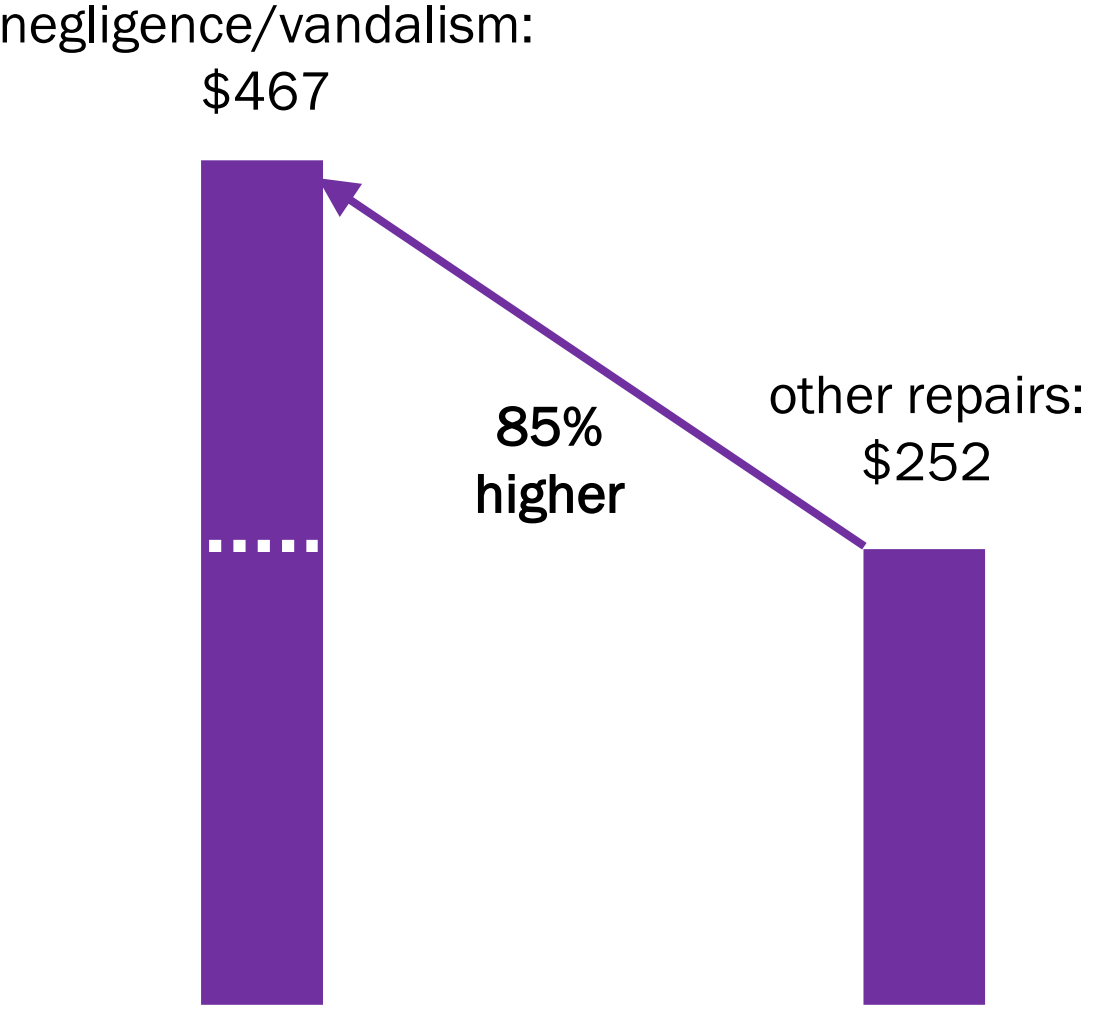


\$2.8M (7.8%) of all repairs due to operator error or unreported accidents over 18 months

Work Order Date: May 25, 2018 -  
“Excessive salt build-up” per mechanic notes



# Cost Per Repair Comparison



# Driver's Manual Requires Weekly Cleaning of City Vehicles



## 7.0 VEHICLE MAINTENANCE

### 7.1 General care

City drivers are responsible for looking after the general condition of City vehicles. **Good housekeeping practices must also be maintained by keeping the interior and exterior of the vehicles reasonably clean.** City drivers who do not maintain a good appearance of their assigned vehicles may have action taken against their City driving privileges. Driver should adhere to the following guidelines:

- Vehicle cabs must remain free of loose articles other than the personal equipment required for the work to be performed (i.e., no scavenging, or unauthorized equipment, radios, etc.).
- No offensive materials, pictures, cartoons or unauthorized signs may be posted in or on a City vehicle.
- **Whenever possible, vehicles should be given an exterior wash, at a wash bay, at least once per week.**
- **All vehicles should be washed when bringing the vehicle in for service, especially the undercarriages.** Mud and dirt can hide frame and undercarriage problems.

“Good housekeeping practices must also be maintained by keeping the interior and exterior of the vehicles reasonably clean”

“Whenever possible vehicles should be given an exterior wash, at a wash bay, at least once per week.

All vehicles should be washed when bringing the vehicle in for service, especially the undercarriages”<sup>18</sup>

# Some Divisions Require Cleaning Prior to Each Shift

## SWM Pre-shift Checklist

Pre-Trip Inspection Checklist - Transfer Station:			
Date July 9/19	Make/Model Case	Hour Meter START 368	Hour meter FINISH Early 369 = 1 Late = 2
Unit # 98			
Operator's Name	Employee #	Operator's Signature	Shift Supervisor Supervisor's Signature
1. [Redacted]	[Redacted]	[Redacted]	
2. [Redacted]	[Redacted]	[Redacted]	
3.			
4.			

All boxes must be completed using the legend below

ANY SAFETY DEFECTS NOTED MUST BE REPORTED TO THE SUPERVISOR BEFORE OPERATING THE MACHINE

Legend: ✓ = OK X = DEFECTIVE O = NOT APPLICABLE

<input checked="" type="checkbox"/> Check condition of cutting edge/squeegee bar	<input checked="" type="checkbox"/> Blow out dust and remove any debris from radiator, engine compartment/exhaust, from under the lifting arms, etc. (and leave clean for next shift)
<input checked="" type="checkbox"/> Check for loose or missing pivot pins / locking bolts	<input checked="" type="checkbox"/> Check Cab Cleanliness, Steps and Grab Handles
<input checked="" type="checkbox"/> Grease lifting frame and bucket pins	<input checked="" type="checkbox"/> Check condition of Mirrors and Seat Belt
<input checked="" type="checkbox"/> steering cylinder pivot pins/ articulation joint (if applicable)	<input checked="" type="checkbox"/> Check Windshield / washer & wiper operations
<input checked="" type="checkbox"/> Check condition of tires	<input checked="" type="checkbox"/> Check function of control lamps/gauges
<input checked="" type="checkbox"/> Check for loose or missing wheel lug bolts	<input checked="" type="checkbox"/> Check defroster & heater operation
<input checked="" type="checkbox"/> Check for any leaks (fuel, oils, antifreeze, etc.)	<input checked="" type="checkbox"/> Check steering wheel for excessive play
<input checked="" type="checkbox"/> Check Engine Oil level	<input checked="" type="checkbox"/> Check brake pedal & accelerator - reserve & fade
<input checked="" type="checkbox"/> Check Fire system (incl. operator controls)	<input checked="" type="checkbox"/> Check function of travel & work Lights
<input checked="" type="checkbox"/> Check Coolant level	<input checked="" type="checkbox"/> Check function of Reverse alarm
<input checked="" type="checkbox"/> Check Transmission fluid	<input checked="" type="checkbox"/> Check undercarriage condition & track tension (Track Machine)
<input checked="" type="checkbox"/> Check Fan and Belt condition	<input type="checkbox"/> Changed Air Filter(s) (date):
<input checked="" type="checkbox"/> Check Hydraulic Oil level	
<input checked="" type="checkbox"/> Check fuel cap and strainer	

LOCK-OUT before servicing any moving parts

USE PPE for Foot, Head, Hand & Eye Protection

“Blow out dust and remove any debris from radiator, engine compartment/exhaust, from under the lifting arms, etc. (and leave clean for next shift)”

“Clean and service equipment at end of each day”

## PF&R Parks Branch Operations Handbook

### General Equipment Care

- Familiarize yourself with the manufacturer's recommended operating procedures.
- Refer to the equipment safety grams and the

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### PARKS BRANCH OPERATIONS HANDBOOK

manufacturer's operators manual.

- Check equipment twice a day as per the Daily Service Record Report to be completed and signed each day for all self-propelled equipment.
- Grease and / or lubricate as required.
- Check fuel levels in all equipment. Fill or top up as required.
- Report any equipment damage or wear immediately to your Supervisor or designate.

Clean and service equipment at end of each day.

## Example #1

Garbage packed up underneath cylinder causing damage

Two damaged cylinders cost \$40,650 to repair



## Example #2

A dump truck came on August 8, 2019 for the end of season maintenance, “still covered in salt”  
– M5 job notes

Notes for job 11-010-000 - WASH/STEAM VEHICLE.

Note Text

unit covered in salt , on frame and hydraulic hoses , wiring harness's in cab see pictures

re washed unit, was still covered in salt after user washed unit



## Example #3

“Debris laying against  
the cooling package  
that has accumulated  
over time”  
– Garage Staff



# Garage Staff Notify the Supervisor of the Vehicle Operator When They See Negligence / Vandalism

“ask for your help to reinforce with your staff the importance of cleaning the equipment”

“This repair may not have been needed with proper cleaning & care”

From: [REDACTED]  
Sent: September 9, 2019 11:08 AM  
To: [REDACTED]  
Cc: [REDACTED]  
Subject: FW: [REDACTED]

Good Morning,

Before anyone gets their back up I am not sending this to point fingers or lay blame, but to ask for your help to reinforce with your staff the importance of cleaning the equipment  
I am sending this e-mail on behalf of [REDACTED] to bring to light a little of his frustration when coming in to do repairs at any one of our locations. While some units are better than others, most of our heavy equipment is not being cleaned properly on a regular basis.

Please have a look at the attached pictures from unit [REDACTED], this repair may not have been needed with proper cleaning & care. The back of the alternator is over heated and melted because of lack of air flow (plugged). The bottom of the rad is piled high with garbage & the syringe fell out while removing the batteries. The day to day cleaning & removal of debris is part of your operations staff's daily maintenance inspections and not the job our Road Service Mechanic should be doing. [REDACTED] is willing to show what needs to be done during daily inspections all they have to do is ask

Please see the note from [REDACTED] below

Thanks  
[REDACTED]

From: [REDACTED]  
Sent: September 9, 2019 9:29 AM  
To: [REDACTED]  
Subject: [REDACTED]

This unit looks like it hasn't been properly cared for by the user department. The amount of downtime that they bring up is mostly their own creating. The rad has a good 10 inches of concrete and other large chunks built up against it. How long before the unit overheats or blows a radiator is anyone's guess but if it's as important to to the operation as they claim they should start taking better care of it

“most of our heavy equipment is not being cleaned properly on a regular basis”

# City-Wide Oversight Needed

- Current practice: Fleet notifies and bills user groups for negligence /vandalism monthly.
- AG's Recommendation: The City Manager should implement a process to effectively identify, report, and deter vehicle damages resulting from operating vehicles without care.
- Every 10% reduction in negligence / vandalism represents \$180,000 in cost savings to the City.



# Conclusion

- The report provides 20 recommendations to
  - help improve procurement planning,
  - ensure consistent and economical end-of-life decision making,
  - improve rental processes and oversight,
  - and strengthen warranty administration.
- Some changes will result in cost savings, and an overseer role for Fleet will help ensure the most economical solution for the City as a whole.

**AUDITOR  
GENERAL**  

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