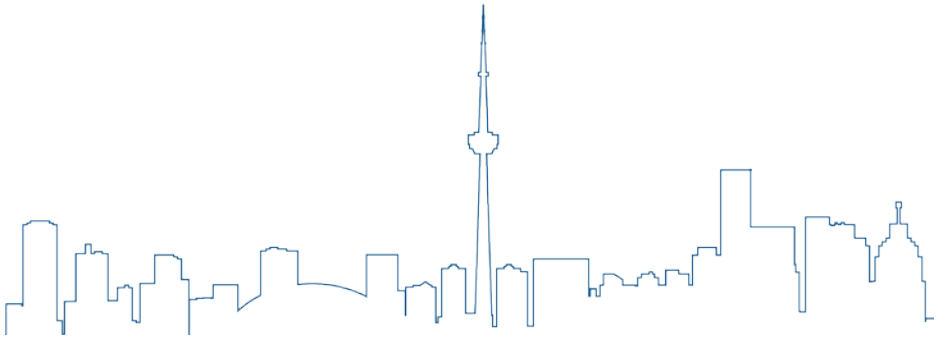
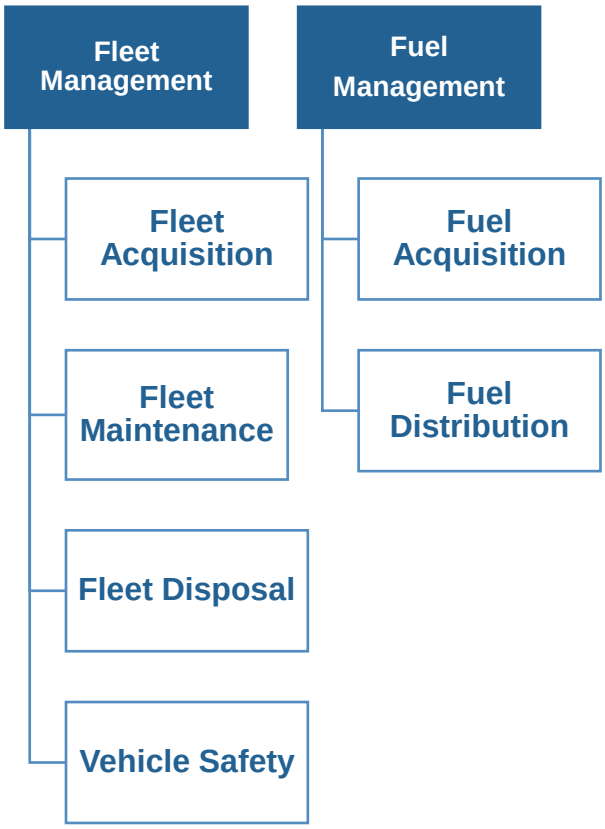
TORONTO



FLEET SERVICES

PROGRAM MAP

Fleet Services



Fleet Services provides responsive and efficient fleet management services to City Programs and Agencies that maximizes safety and environmental sustainability and minimizes lifecycle costs. Services include:

- Preventative maintenance services for vehicles and equipment to support divisional operations and comply with legislative requirements.
- Provide safety training, testing and certification to approximately 11,000 City employees who are required to operate City vehicles and equipment.
- Oversee and direct the City's fuel management operations, including, safety and compliance management, staff training and the associated management of fueling stations and the fueling of over 7,100 assets.
- Provide leadership in City-wide Fleet Management such as shared services, procurement and greening the City's fleet

SUMMARY OF PERFORMANCE MEASUREMENT RESULTS

Question	Indicator/Measure	Internal Comparison of Toronto's 2017 vs. 2016 Results	External Comparison to Other Municipalities (MBNC) By Quartile for 2017	Chart & Page Ref.
How many of Toronto's fleet are green vehicles?	Number of Green Vehicles – (Community Impact)	Stable Number of green vehicles was relatively stable (Community Impact)	N/A	10.1 pg. 6
What is Toronto's fleet fuel efficiency?	Light Duty Vehicle Litres of Fuel Consumed per 100 Km - (Community Impact)	Decreased Light Duty Vehicle mileage decreased in 2017 (Community Impact)	3 Higher Light Duty vehicle mileage than others (densely populated and congested urban form) (Community Impact)	10.2 10.3 pg. 6/7
What is Toronto's fleet fuel efficiency?	Medium Duty Vehicle Litres of Fuel Consumed per 100 Km - (Community Impact)	Decreased Medium Duty Vehicle mileage decreased in 2017 (Community Impact)	2 Lower Medium Duty vehicle mileage than others (densely populated and congested urban form) (Community Impact)	10.2 10.3 pg. 6/7
What is Toronto's fleet fuel efficiency?	Heavy Duty Vehicle Litres of Fuel Consumed per 100 Km - (Community Impact)	Decreased Heavy Duty Vehicle mileage decreased in 2017 (Community Impact)	4 Higher Heavy Duty vehicle mileage than others (densely populated and congested urban form) (Community Impact)	10.2 10.3 pg 6/7
What is the provincial safety rating for the operation of City of Toronto Vehicles?	Provincial Commercial Vehicle Operators Registration (CVOR) Safety Rating - (Community Impact)	Decreased Safety rating decreased in 2017 (lower number is more favourable) (Community Impact)	N/A	10.4 Pg. 7
How much reactive (unplanned) vehicle maintenance has to be done?	Reactive (Unplanned) Vehicle Maintenance as a Percentage of all Vehicle Maintenance – (Customer Service)	Decreased Amount of unplanned reactive maintenance decreased (Customer Service)	3 Higher rate of unplanned reactive maintenance compared to others (Customer Service)	10.5 10.6 pg. 8/9
What does it cost to operate a light-duty vehicle per kilometer?	Operating Cost per Light Duty Vehicle KM – (Efficiency)	Decrease Cost per light-duty vehicle km decreased (Efficiency)	4 Higher cost per vehicle km compared to others (due to densely populated and congested urban form) (Efficiency)	10.7 10.8 pg. 9/10

Question	Indicator/Measure	Internal Comparison of Toronto's 2017 vs. 2016 Results	External Comparison to Other Municipalities (MBNC) By Quartile for 2017	Chart & Page Ref.
What does it cost to operate a medium-duty vehicle per kilometer?	Operating Cost per Medium Duty Vehicle KM – (Efficiency)	Decrease Cost per medium-duty vehicle km decreased (Efficiency)	4 Higher cost per vehicle km compared to others (due to densely populated and congested urban form) (Efficiency)	10.7 10.8 pg. 9/10
What does it cost to operate a heavy-duty vehicle per kilometer?	Operating Cost per Heavy Duty Vehicle KM – (Efficiency)	Stable Cost per heavy-duty vehicle km was stable (Efficiency)	4 Higher cost per vehicle km compared to others (due to densely populated and congested urban form) (Efficiency)	10.7 10.8 pg. 9/10
What is the annual cost to operate a light-duty fleet vehicle?	Annual Operating Cost per light-duty vehicle – (Efficiency)	Decrease Cost per light-duty vehicle decreased (Efficiency)	2 Lower annual cost per light-duty vehicle compared to others (Efficiency)	10.9 10.10 pg. 11
What is the annual cost to operate a medium-duty fleet vehicle?	Annual Operating Cost per medium-duty vehicle – (Efficiency)	Stable Cost per medium-duty vehicle was stable (Efficiency)	2 Annual cost per medium-duty vehicle was at median compared to others (Efficiency)	10.9 10.10 pg. 11
What is the annual cost to operate a heavy-duty fleet vehicle?	Annual Operating Cost per heavy-duty vehicle – (Efficiency)	Increase Cost per heavy-duty vehicle increased (Efficiency)	3 Higher annual cost per heavy-duty vehicle compared to others (Efficiency)	10.9 10.10 pg. 11

SUMMARY OF OVERALL RESULTS

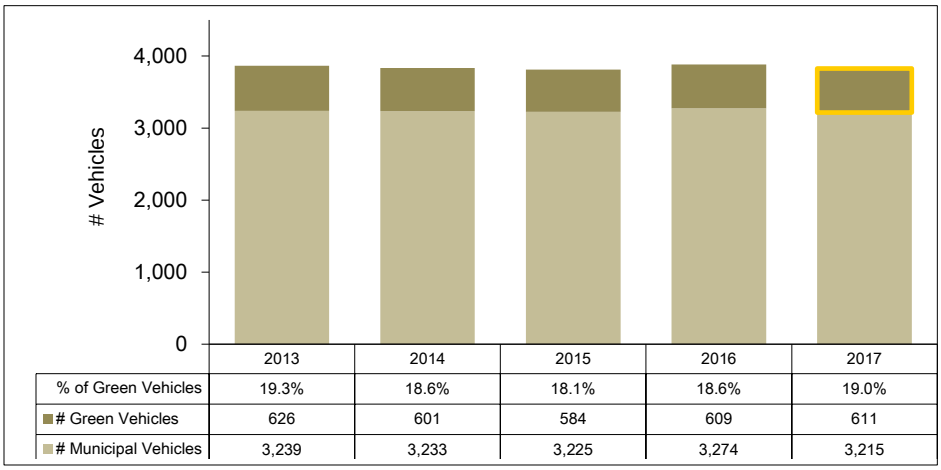
Internal Comparison of Toronto's 2017 vs. 2016 Results	Internal Comparison of Toronto's 2017 vs. 2016 Results	External Comparison to Other Municipalities (MBNC) By Quartile for 2017	External Comparison to Other Municipalities (MBNC) By Quartile for 2017
Service Level Indicators (Resources)	Performance Measures (Results)	Service Level Indicators (Resources)	Performance Measures (Results)
N/A	8- Favourable 3 - Stable 1 - Unfavorable	N/A	0 - 1st quartile 3 - 2nd quartile 3 - 3rd quartile 4 - 4th quartile
	92% favorable or stable		30% in 1st and 2nd quartile

For an explanation of how to interpret this summary and the supporting charts, please see the Guide to Toronto's Performance Results. These quartile results are based on a maximum sample size of 15 municipalities.

COMMUNITY IMPACT

Toronto is greening its fleet. A “green vehicle” is defined as one that reduces fuel consumption and/or reduces emissions of greenhouse gases and air pollutants, relative to a conventional vehicle. Examples of green vehicles include those with an ultra-fuel-efficient design, hybrid-electric or plug-in electric drive system, or an engine that uses cleaner alternative fuel or electricity as its energy source.

10.1 - HOW MANY OF TORONTO'S FLEET ARE GREEN VEHICLES?



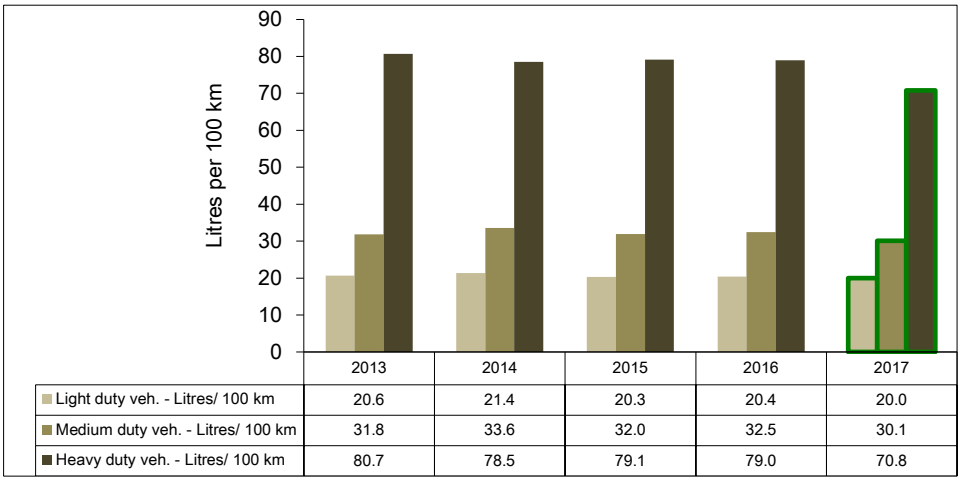
	2013	2014	2015	2016	2017
% of Green Vehicles	19.3%	18.6%	18.1%	18.6%	19.0%
# Green Vehicles	626	601	584	609	611
# Municipal Vehicles	3,239	3,233	3,225	3,274	3,215

Chart 10.1 shows that in 2017 there were 611 green vehicles representing 19% of the fleet. The number of green vehicles has continued to grow each year.

Chart 10.1 (City of Toronto) Number of Green Vehicles

The use of green vehicles and more fuel efficient conventional vehicles improves mileage (litres per 100 km travelled) and decreases emissions.

10.2 – WHAT IS TORONTO'S FLEET FUEL EFFICIENCY?



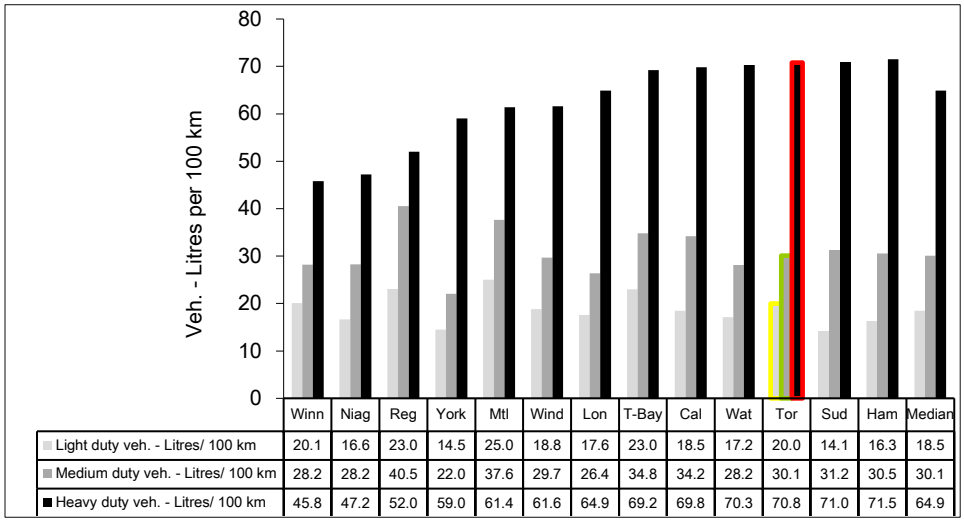
	2013	2014	2015	2016	2017
Light duty veh. - Litres/ 100 km	20.6	21.4	20.3	20.4	20.0
Medium duty veh. - Litres/ 100 km	31.8	33.6	32.0	32.5	30.1
Heavy duty veh. - Litres/ 100 km	80.7	78.5	79.1	79.0	70.8

Chart 10.2 shows the litres of fuel consumed per 100 km for light, medium and heavy duty vehicles. In 2017, the mileage achieved for light duty, medium duty, and heavy duty vehicles were lower.

Chart 10.2 (City of Toronto) Litres of Fuel Consumed per 100 Km

In 2017, number of off-road vehicles/equipment was reclassified to heavy duty on-road units (licensing requirement). Please note that Toronto's values in this graph have been updated after the November publication of the 2017 MBNCanada Performance Measurement Report.

10.3 –HOW DOES THE MILEAGE OF TORONTO'S FLEET VEHICLES COMPARE TO OTHER MUNICIPALITIES?



	Winn	Niag	Reg	York	Mtl	Wind	Lon	T-Bay	Cal	Wat	Tor	Sud	Ham	Median
Light duty veh. - Litres/ 100 km	20.1	16.6	23.0	14.5	25.0	18.8	17.6	23.0	18.5	17.2	20.0	14.1	16.3	18.5
Medium duty veh. - Litres/ 100 km	28.2	28.2	40.5	22.0	37.6	29.7	26.4	34.8	34.2	28.2	30.1	31.2	30.5	30.1
Heavy duty veh. - Litres/ 100 km	45.8	47.2	52.0	59.0	61.4	61.6	64.9	69.2	69.8	70.3	70.8	71.0	71.5	64.9

Chart 10.3 compares Toronto's 2017 mileage by vehicle class to other municipalities. The main reason behind Toronto's results is due to the urban environment that results in much higher traffic congestion and constant starts and stops.

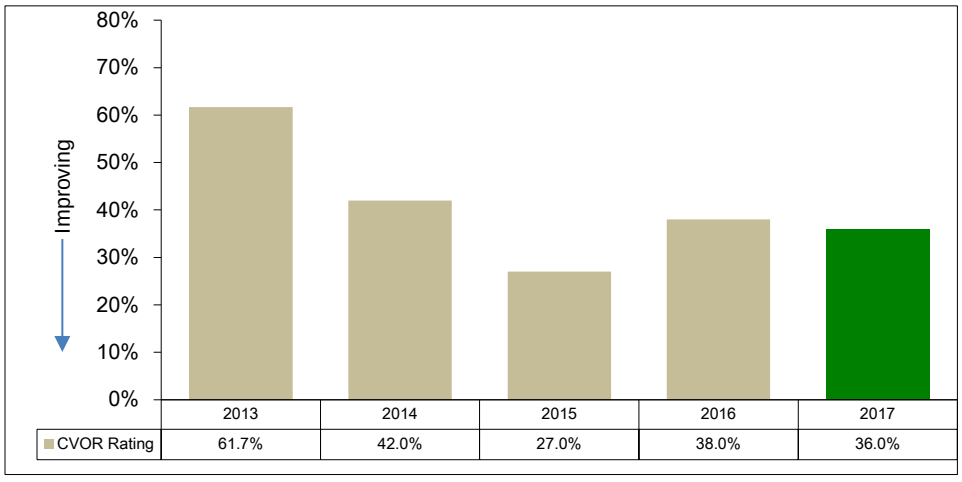
Chart 10.3 (MBNC 2017) Litres of Fuel Consumed per 100 Km

In terms of the lowest litres of fuel used per 100 km travelled, in 2017 by vehicle class Toronto ranked:

- Light duty vehicles – ninth of thirteen (third quartile);
- Medium duty vehicles – seventh of thirteen (second quartile); and
- Heavy duty vehicles – eleventh of thirteen (fourth quartile)

Please note that Toronto's values in this graph have been updated after the November publication of the 2017 MBNCanada Performance Measurement Report

10.4 –WHAT IS THE PROVINCIAL SAFETY RATING FOR THE OPERATION OF CITY OF TORONTO VEHICLES?



	2013	2014	2015	2016	2017
CVOR Rating	61.7%	42.0%	27.0%	38.0%	36.0%

Chart 10.4 provides 2013 to 2017 data from the Ontario Ministry of Transportations' Commercial Vehicle Operator's Registration System (CVOR).

Chart 10.4 (City of Toronto) Provincial Commercial Vehicle Operators Registration (CVOR) Safety Rating

Fleet Services has a number of programs for city vehicles and drivers/operators to ensure the safe operation of equipment and to maintain good public relations with those who use the City roadways. These programs include mandatory driver training and testing, promoting collision prevention through investigation and review of all collisions, and performing spot checks on the road to monitor driver compliance with applicable legislation and safety policies.

With an objective of increasing road safety, the Provincial CVOR program applies to businesses and government organizations that operate certain types of vehicles including commercial motor vehicles weighing 4,500 kg or more. The CVOR program assesses an operator based on Collisions, Convictions, and Roadside Inspection involving the operator's vehicle and operator. Safety rating ranges from excellent to unsatisfactory along with a percentage. Toronto's rating is updated regularly by the MTO based on recent safety performance, with the rating increasing each time a negative event is recorded for city vehicles or drivers as a result of collisions, convictions or inspections involving the City's vehicles falling under this program.

CUSTOMER SERVICE

Unplanned vehicle maintenance increases vehicle downtime which results in increased maintenance costs as well as reduced productivity of staff. A vehicle that is being regularly serviced during its useful life through an effective preventative maintenance program will have minimal amounts of unplanned maintenance or vehicle breakdowns. In 2017, 57% of maintenance and repair work was related to unplanned maintenance.

10.5 – HOW MUCH REACTIVE (UNPLANNED) VEHICLE MAINTENANCE HAS TO BE DONE IN TORONTO?

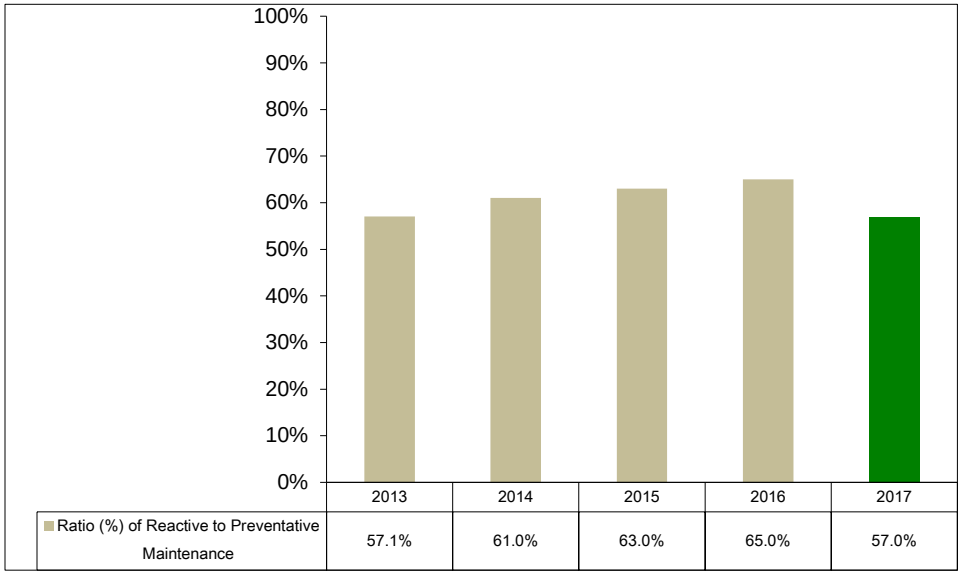


Chart 10.5 provides Toronto's results for the percentage of unplanned reactive vehicle maintenance as a percentage of all vehicle maintenance labour hours. 2017 results were better than 2016 as a result of continuous operational improvements, including monitoring and reporting.

Chart 10.5 (City of Toronto) Reactive (Unplanned) Vehicle Maintenance as a Percentage of all Vehicle Maintenance

10.6 – HOW DOES THE AMOUNT OF REACTIVE (UNPLANNED) VEHICLE MAINTENANCE IN TORONTO COMPARE TO OTHER MUNICIPALITIES?

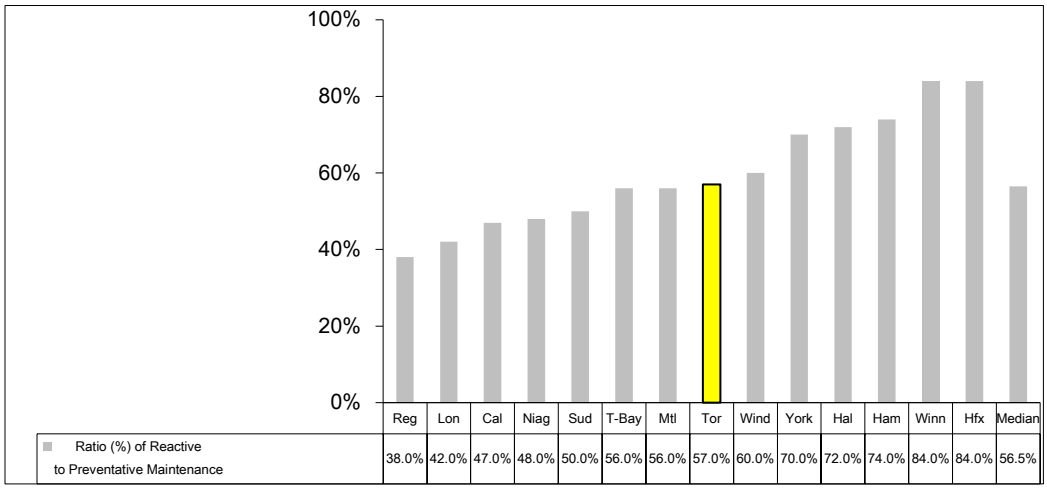


Chart 10.6 compares Toronto's 2017 result to other municipalities. Toronto ranks slightly above the median (third quartile) with a higher rate of unplanned reactive vehicle maintenance.

Chart 10.6 (MBNC 2017) Reactive (Unplanned) Vehicle Maintenance as a Percentage of all Vehicle Maintenance

EFFICIENCY

Vehicle operating costs for this report include the costs of work orders (labour and parts), maintenance work done by external firms plus the cost of fuel. It excludes depreciation, transfers to reserve funds and allocations of program support costs.

MBNC defines light-duty vehicles as less than 4,500 kg, medium-duty vehicles as less than 9,000 kg but higher than 4,500 kg and heavy-duty vehicles as greater than 9,000 kg.

10.7 –WHAT DOES IT COST IN TORONTO TO OPERATE A FLEET VEHICLE PER KM?

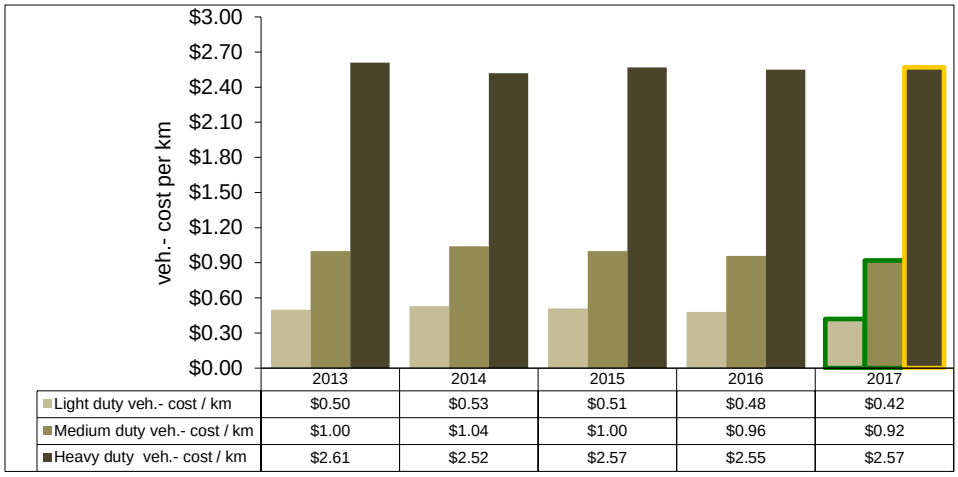


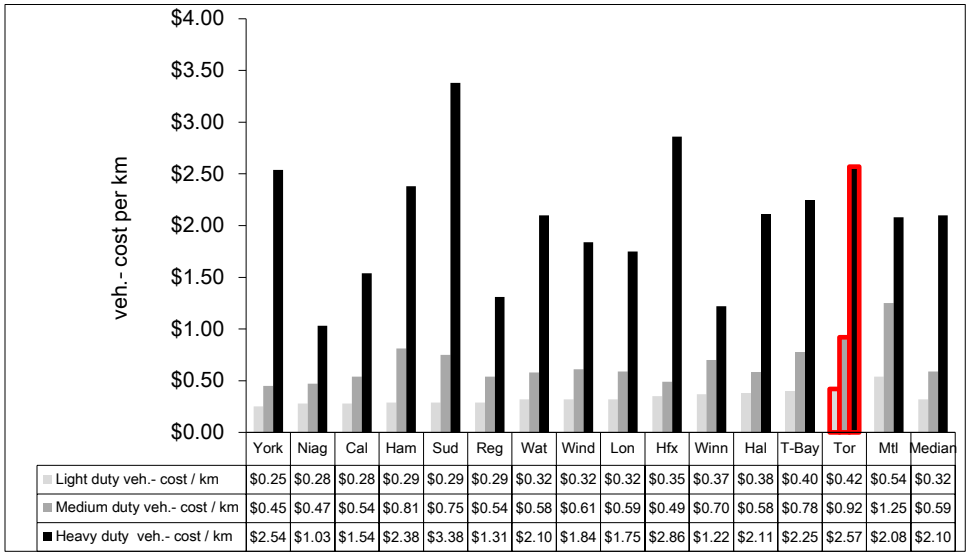
Chart 10.7 shows Toronto's 2017 operating cost per vehicle km by vehicle class. It also shows decreased costs in 2017 for light and medium duty vehicles, but a relatively stable costs for heavy duty vehicles.

Chart 10.7 (City of Toronto) Operating Cost (by Vehicle Class) per Vehicle km

As noted earlier, Toronto's urban form, with much higher population densities, traffic congestion and starts and stops, leads to higher fuel consumption. It can also lead to more frequent maintenance; therefore, higher costs.

Please note that Toronto's values in this graph have been updated after the November publication of the 2017 MBNCanada Performance Measurement Report

10.8 –HOW DOES TORONTO'S COST TO OPERATE A FLEET VEHICLE PER KM COMPARE TO OTHER MUNICIPALITIES?



	York	Niag	Cal	Ham	Sud	Reg	Wat	Wind	Lon	Hfx	Winn	Hal	T-Bay	Tor	Mtl	Median
Light duty veh.- cost / km	$0.25	$0.28	$0.28	$0.29	$0.29	$0.29	$0.32	$0.32	$0.32	$0.35	$0.37	$0.38	$0.40	$0.42	$0.54	$0.32
Medium duty veh.- cost / km	$0.45	$0.47	$0.54	$0.81	$0.75	$0.54	$0.58	$0.61	$0.59	$0.49	$0.70	$0.58	$0.78	$0.92	$1.25	$0.59
Heavy duty veh.- cost / km	$2.54	$1.03	$1.54	$2.38	$3.38	$1.31	$2.10	$1.84	$1.75	$2.86	$1.22	$2.11	$2.25	$2.57	$2.08	$2.10

Chart 10.8 compares Toronto to other municipalities in terms of the lowest cost per vehicle km by vehicle class. Toronto ranks:

Chart 10.8 (MBNC 2017) Operating Cost (by Vehicle Class) per Vehicle km

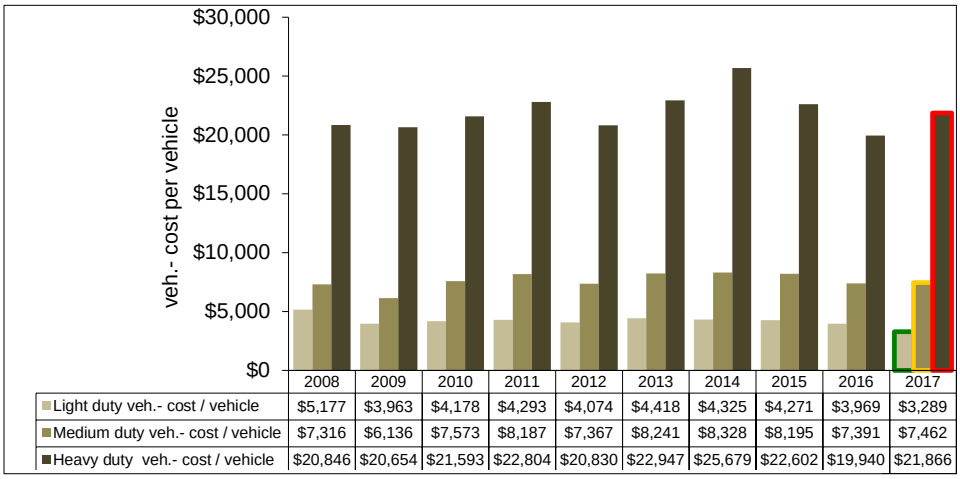
In 2017, Toronto ranks:

- Light duty vehicles – fourteenth of fifteen (fourth quartile);
- Medium duty vehicles – fourteenth of fifteen (fourth quartile); and
- Heavy duty vehicles – thirteenth of fifteen (fourth quartile)

An alternative way of examining efficiency, less influenced by urban form, is to consider the annual cost to operate a vehicle.

Please note that Toronto's values in this graph have been updated after the November publication of the 2017 MBNCanada Performance Measurement Report

10.9 –WHAT DOES IT COST TO OPERATE A FLEET VEHICLE IN TORONTO?



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Light duty veh.- cost / vehicle	$5,177	$3,963	$4,178	$4,293	$4,074	$4,418	$4,325	$4,271	$3,969	$3,289
Medium duty veh.- cost / vehicle	$7,316	$6,136	$7,573	$8,187	$7,367	$8,241	$8,328	$8,195	$7,391	$7,462
Heavy duty veh.- cost / vehicle	$20,846	$20,654	$21,593	$22,804	$20,830	$22,947	$25,679	$22,602	$19,940	$21,866

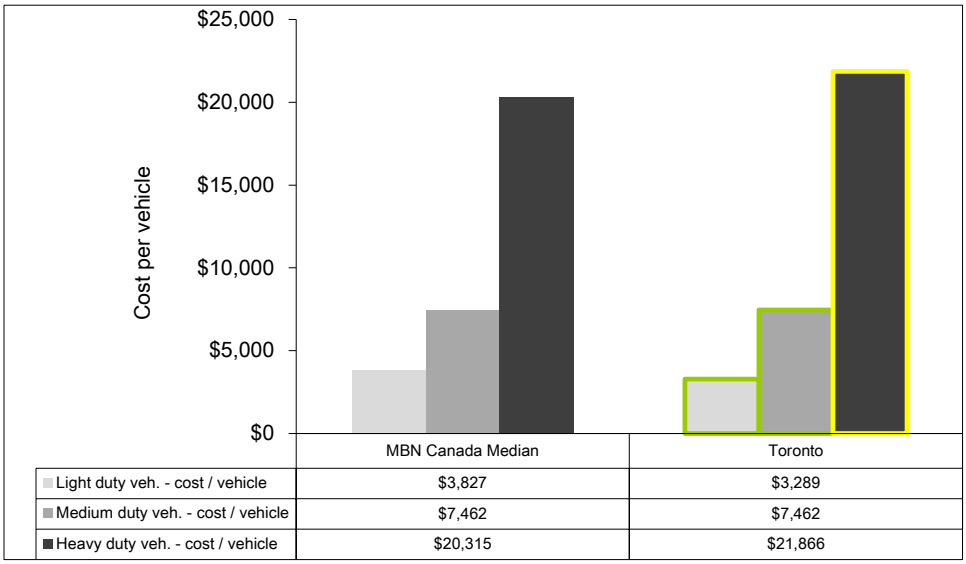
Chart 10.9 shows the annual cost to operate a vehicle in Toronto.

Chart 10.9 (City of Toronto) Annual Operating Cost (by Vehicle Class) per Vehicle

In 2017, Toronto's operating cost per vehicle decreased by 17 percent for light duty vehicles, remained relatively stable for medium duty vehicles, and increased by 10 percent for heavy duty vehicles. Increase for heavy duty was a result of increased average age, and number of off-road vehicles and equipment, that require more extensive maintenance, becoming heavy duty units in 2017 (new Provincial licensing requirement).

Please note that Toronto's values in this graph have been updated after the November publication of the 2017 MBNCanada Performance Measurement Report

10.10 –HOW DOES THE ANNUAL COST TO OPERATE A FLEET VEHICLE IN TORONTO COMPARE TO OTHER MUNICIPALITIES?



	MBN Canada Median	Toronto
Light duty veh. - cost / vehicle	$3,827	$3,289
Medium duty veh. - cost / vehicle	$7,462	$7,462
Heavy duty veh. - cost / vehicle	$20,315	$21,866

Chart 10.10 compares Toronto's results to the MBNC median. In terms of the lowest cost to operate a fleet vehicle, Toronto;

-was below the median costs for light duty vehicles;

-was at the median costs for medium duty vehicles; and

-was above the median costs for heavy duty vehicles.

Chart 10.10 (MBNC 2017) Annual Operating Cost (by Vehicle Class) per Vehicle

Please note that Toronto's values in this graph have been updated after the November publication of the 2017 MBNCanada Performance Measurement Report

2017 ACHIEVEMENTS AND 2018 PLANNED INITIATIVES

The following initiatives have improved or are expected to further improve the efficiency and effectiveness of the Fleet Services:

2017 Initiatives Completed/Achievements

- Commenced implementation of the Council approved alternate service delivery model for all preventative maintenance and repairs for class 1-2 vehicles.
- Completed the centralization and oversight of 23 City Wide fuel sites that fuel over 7,100 assets. The 23 City fuel sites now utilize 1 common software and hardware program.
- Continued to partner with Solid Waste Management to implement CNG technology on curbside residential collections vehicles. To date, approximately 40% of the collections units have been replaced by CNG vehicles.
- Continued to maintain the City of Toronto's Commercial Vehicle Operator's Registration (CVOR) rating at a satisfactory level with the Ministry of Transportation.
- Completed the installation of one DC Fast charging station which will substantially reduce electric vehicle charging time. Two new electric vehicles added to the City's fleet.
- Leveraged procurement leadership to provide Toronto Transit Commission, Toronto Parking Authority, Toronto Fire Services, Toronto Paramedic Services, Exhibition Place and the Toronto Zoo with the ability to procure vehicles or equipment based on existing Fleet Services specifications.

2018 Initiatives Planned

- Provide a full-range of fleet management services for City Divisions and Agencies.
- Direct the lifecycle management of the City's fleet including the acquisition, maintenance and disposal of vehicles and equipment based on lifecycle and operational analysis.
- Ensure compliance with Provincial legislation and City policies and guidelines.
- Provide safety training, testing and certification to approximately 11,000 City employees who are required to operate City vehicles and equipment.
- Oversee and direct the City's fuel management operations, including, safety and compliance management, staff training and the associated management of fueling stations and the fueling of over 7,100 assets.
- Work closely with client Programs to optimize fleet size through ensuring that all vehicles are required and fully utilized.
- Provide leadership in reducing the environmental impact of the City's fleet operations through the City's 2014 - 2018 Consolidated Green Fleet Plan.

- Provide permanent opportunities combined with a multi-faceted approach that includes training and apprentice programs; to attract, develop and retain fully qualitied and knowledgeable staff.
- Enhance service delivery by adopting leading fleet practices, including Reliability-Centered Maintenance practices to improve Preventative Maintenance execution, and reduce downtime and costs.

Factors Influencing Results of Municipalities

The results of each municipality included in this report can be influenced to varying degrees by factors such as:

- Demographics – The population differences and rural/urban density variation
- Fleet Mix - The average age of each municipality's fleet, the mix of vehicles in each fleet category, and the number of hours they are in use.
- Urban Form - The urban form of a municipality (congested city streets vs. highway use) will impact the number of kilometres travelled and the level of wear and tear (example constant acceleration and braking) can influence the amount of maintenance required and associated costs.
- Organizational Form – The organizational form refers to whether a Municipality provides centralized or de-centralized services, or outsources its services.