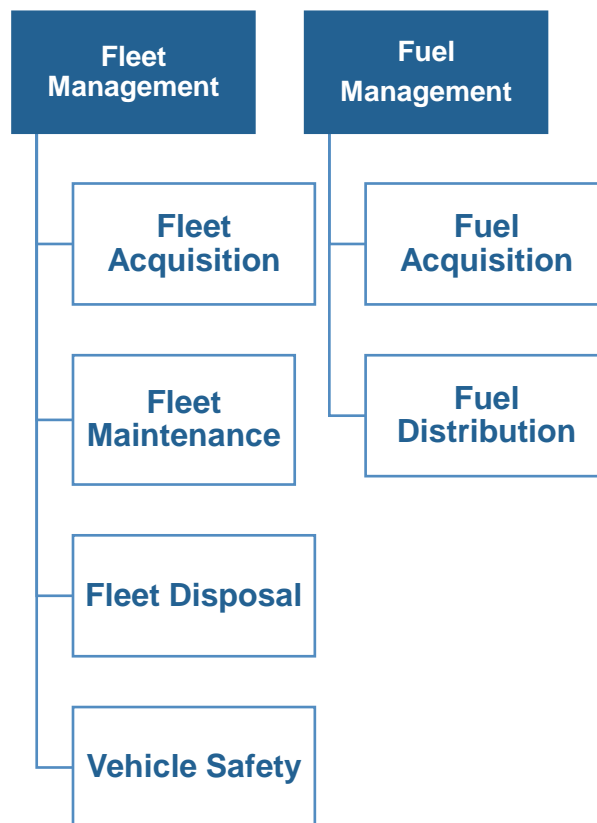




# FLEET SERVICES

## PROGRAM MAP

### Fleet Services



Fleet Services provides professional fleet management services to our clients in a fiscally and environmentally responsible manner. 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 2016 vs. 2015 Results	External Comparison to Other Municipalities (MBNC) By Quartile for 2016	Chart & Page Ref.
<b>Community Impact Measures</b>				
How many of Toronto's fleet are green vehicles?	Number of Green Vehicles – (Community Impact)	<b>Increase</b> <b>Number of green vehicles increased</b>	N/A	10.1 pg. 5
What mileage are Toronto's fleet vehicles getting?	Litres of Fuel Consumed per 100 Km - (Community Impact)	<b>Stable</b> <b>Vehicle mileage was stable in 2016</b>	<b>3</b> <b>Stable vehicle mileage than others</b> (densely populated and congested urban form)	10.2 10.3 pg 5/6
What is the provincial safety rating for the operation of City of Toronto Vehicles?	Provincial Commercial Vehicle Operators Registration (CVOR) S Safety Rating - (Community Impact)	<b>Increased</b> <b>Safety rating increased in 2016</b>	N/A	10.4 pg 6
<b>Customer Service/Quality Measures</b>				
How much reactive (unplanned) vehicle maintenance has to be done?	Reactive (Unplanned) Vehicle Maintenance as a Percentage of all Vehicle Maintenance – (Customer Service)	<b>Stable</b> <b>Amount of unplanned reactive maintenance remained stable</b>	<b>3</b> <b>Higher rate of unplanned reactive maintenance compared to others</b>	10.5 10.6 pg. 7/8
<b>Efficiency Measures</b>				
What does it cost to operate a light-duty vehicle per kilometer?	Operating Cost per Light Duty Vehicle KM – (Efficiency)	<b>Decrease</b> <b>Cost per light-duty vehicle km decreased</b>	<b>4</b> <b>Higher cost per vehicle km compared to others</b> (due to densely populated and congested urban form)	10.7 10.8 pg. 8/9
What does it cost to operate a medium-duty vehicle per kilometer?	Operating Cost per Medium Duty Vehicle KM – (Efficiency)	<b>Decrease</b> <b>Cost per medium-duty vehicle km decreased</b>	<b>4</b> <b>Higher cost per vehicle km compared to others</b> (due to densely populated and congested urban form)	10.7 10.8 pg. 8/9
What does it cost to operate a heavy-duty vehicle per kilometer?	Operating Cost per Heavy Duty Vehicle KM – (Efficiency)	<b>Stable</b> <b>Cost per heavy-duty vehicle km was stable</b>	<b>4</b> <b>Higher cost per vehicle km compared to others</b> (due to densely populated and congested urban form)	10.7 10.8 pg. 8/9

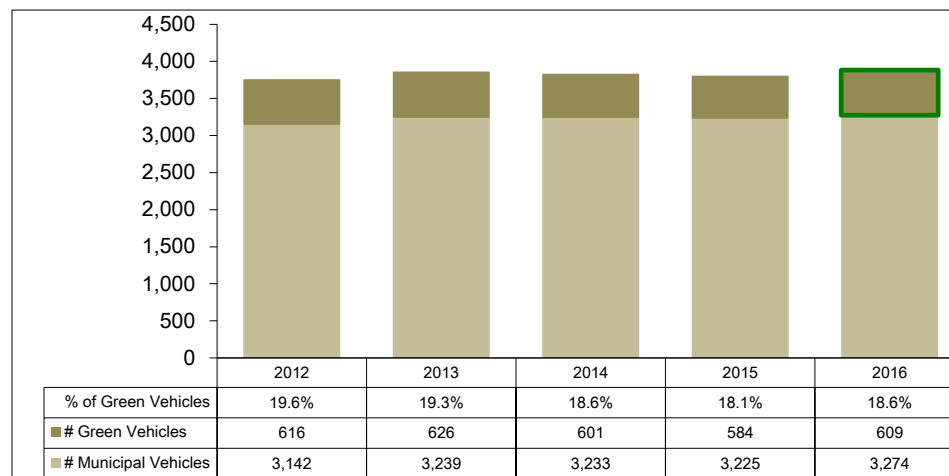
Question	Indicator/Measure	Internal Comparison of Toronto's 2016 vs. 2015 Results		External Comparison to Other Municipalities (MBNC) By Quartile for 2016	Chart & Page Ref.
What is the annual cost to operate a light-duty fleet vehicle?	Annual Operating Cost per light-duty vehicle – (Efficiency)	Decrease Cost per light-duty vehicle decreased		3 Higher annual cost per light-duty vehicle compared to others	10.9 10.10 pg. 10
What is the annual cost to operate a medium-duty fleet vehicle?	Annual Operating Cost per medium-duty vehicle – (Efficiency)	Decrease Cost per medium-duty vehicle decreased		3 Higher annual cost per medium-duty vehicle compared to others	10.9 10.10 pg. 10
What is the annual cost to operate a heavy-duty fleet vehicle?	Annual Operating Cost per heavy-duty vehicle – (Efficiency)	Decrease Cost per heavy-duty vehicle decreased		3 Higher annual cost per heavy-duty vehicle compared to others	10.9 10.10 pg. 10
<b>Overall Results</b>		Service Level Indicators (Resources)  N/A	Performance Measures (Results)  6- Favourable 3 - Stable 1 - Unfavorable  90% favorable or stable	Service Level Indicators (Resources)  N/A	Performance Measures (Results)  0 - 1st quartile 0 - 2nd quartile 5 - 3rd quartile 3 - 4th quartile  0% 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 14 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?

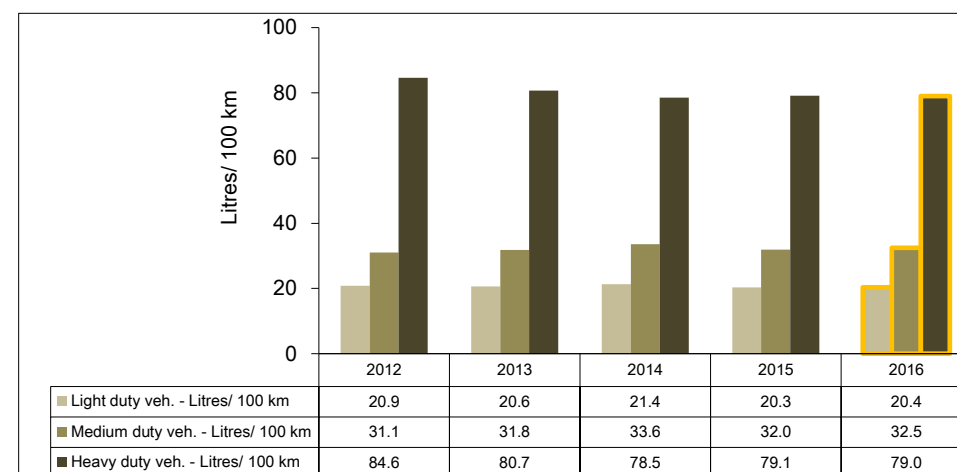


**Chart 10.1** shows that in 2016 there were 609 green vehicles representing 18.6% of the fleet. The number of green vehicles has continued to grow each year, with a slight increase in 2016.

**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.

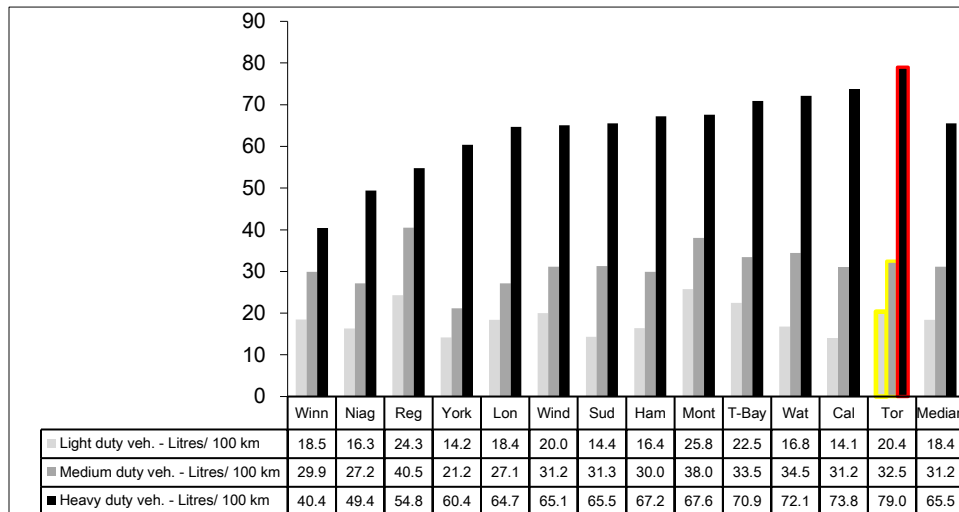
### 10.2 – WHAT MILEAGE ARE TORONTO'S FLEET VEHICLES GETTING?



**Chart 10.2** shows the litres of fuel consumed per 100 km for light, medium and heavy duty vehicles. In 2016, the mileage achieved for light duty, medium duty, and heavy duty vehicles were relatively stable.

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

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



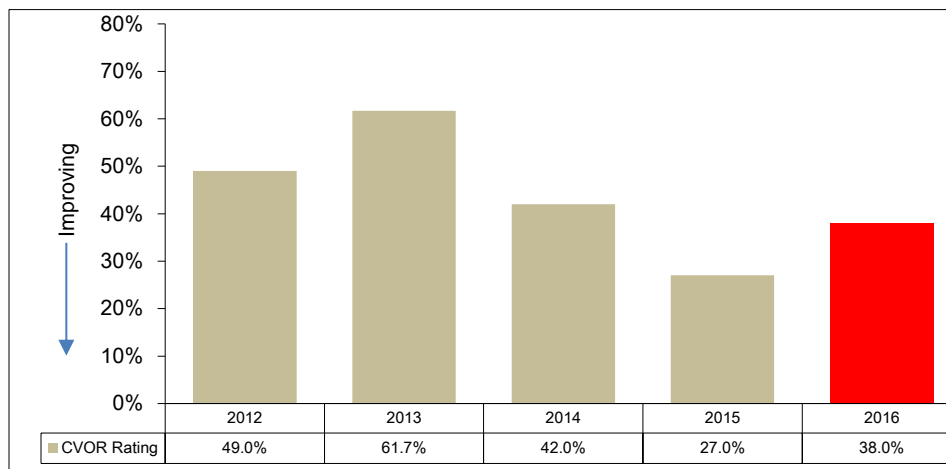
**Chart 10.3** compares Toronto's 2016 mileage by vehicle class to other municipalities. The main reason behind Toronto's results is due to the urban environment that results in much higher traffic congestion and constant starts and stops.

**Chart 10.3 (MBNC 2016) Litres of Fuel Consumed per 100 Km**

In terms of the lowest litres of fuel used per 100 km travelled, in 2016 by vehicle class Toronto ranked:

- Light duty vehicles – tenth of thirteen (third quartile);
- Medium duty vehicles – ninth of thirteen (third quartile); and
- Heavy duty vehicles – thirteenth of thirteen (fourth quartile)

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



**Chart 10.4** provides 2012 to 2016 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

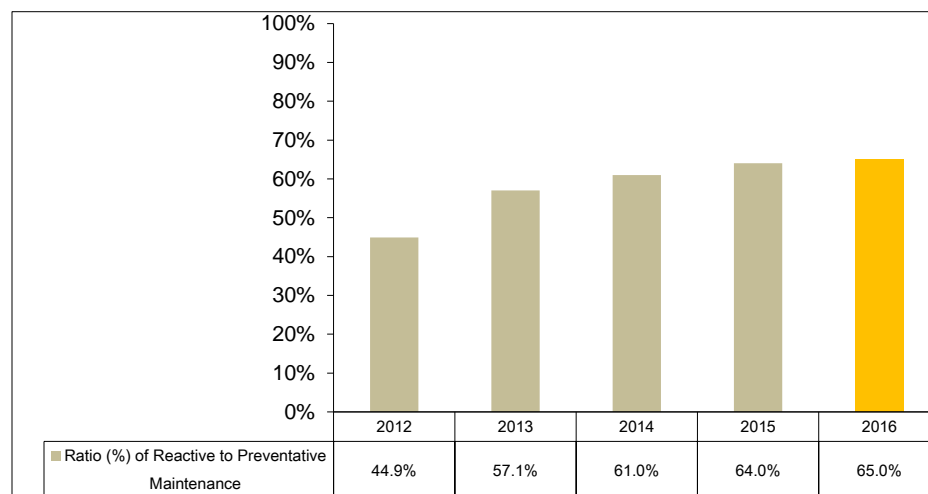
prevention through investigation and review of all collisions and performing spot checks on the road to monitor driver compliance with applicable legislation and safety policies.

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 1. Collisions 2. Convictions 3. 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 2016, 65% percent of these mechanic hours related to reactive, unplanned maintenance.

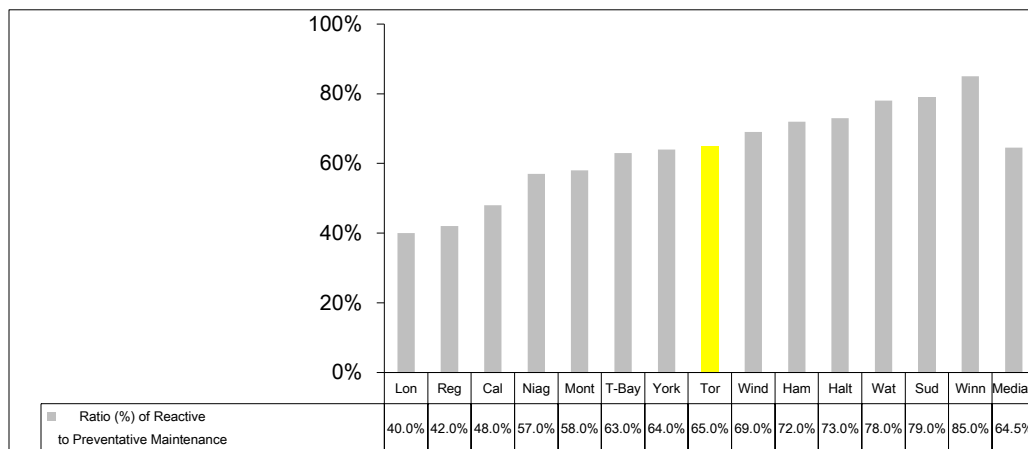
### 10.5 – HOW MUCH REACTIVE (UNPLANNED) VEHICLE MAINTENANCE HAS TO BE DONE IN TORONTO?



**Chart 10.5** provides Toronto's results for the percentage of unplanned reactive vehicle maintenance as a percentage of all vehicle maintenance labour hours.

**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 2016 result to other municipalities. Toronto ranks slightly above the median (third quartile) with a higher rate of unplanned reactive vehicle maintenance.

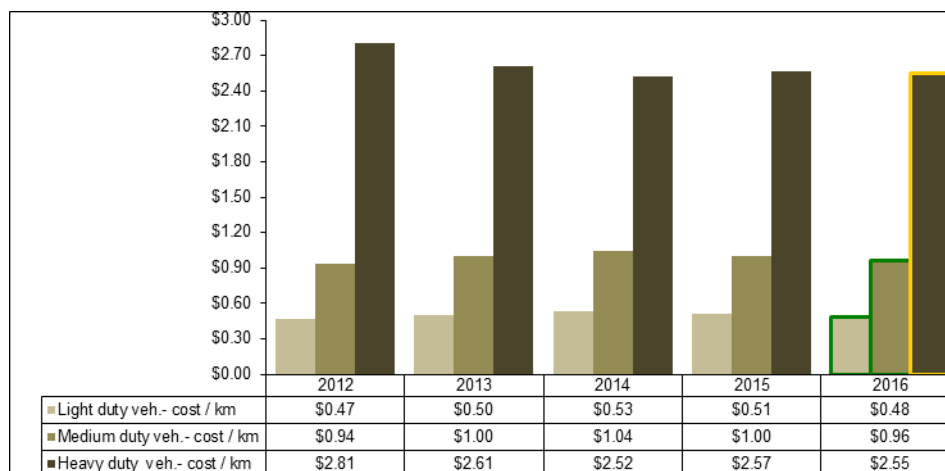
**Chart 10.6 (MBNC 2016) Reactive (Unplanned) Vehicle Maintenance as a Percentage of all Vehicle Maintenance**

## 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?



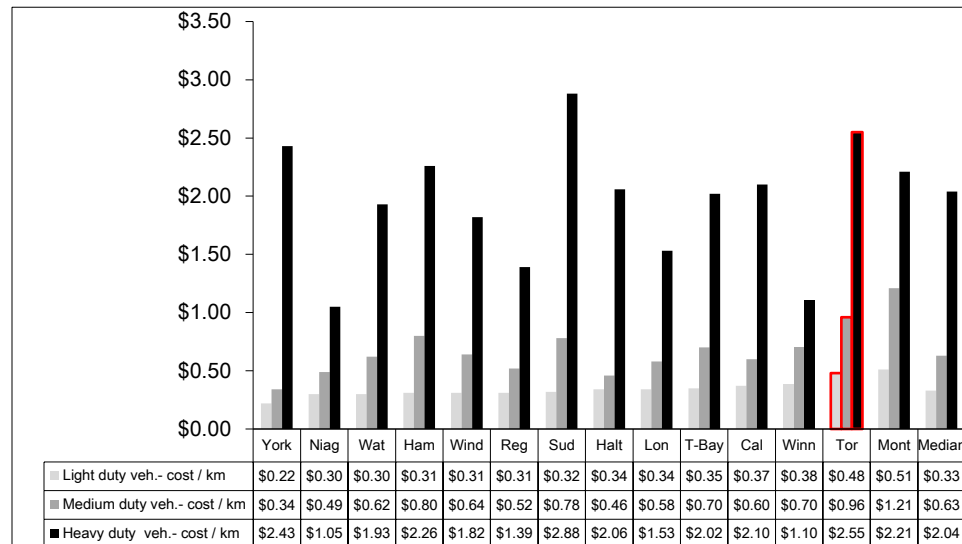
**Chart 10.7** shows Toronto's 2016 operating cost per vehicle km by vehicle class. It also shows decreased costs in 2016 for light and medium duty vehicles, but a relatively stable costs for heavy duty vehicles.

**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.

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



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

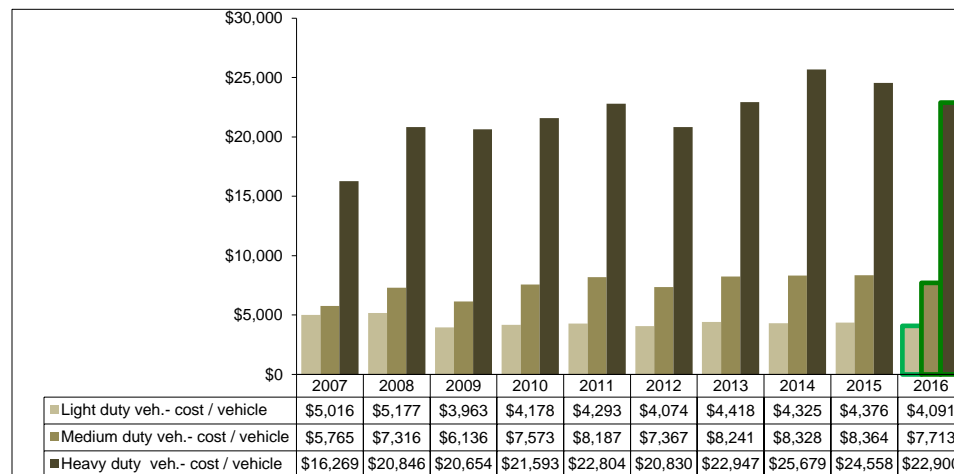
**Chart 10.8 (MBNC 2016) Operating Cost (by Vehicle Class) per Vehicle km**

In 2016, Toronto ranks:

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

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

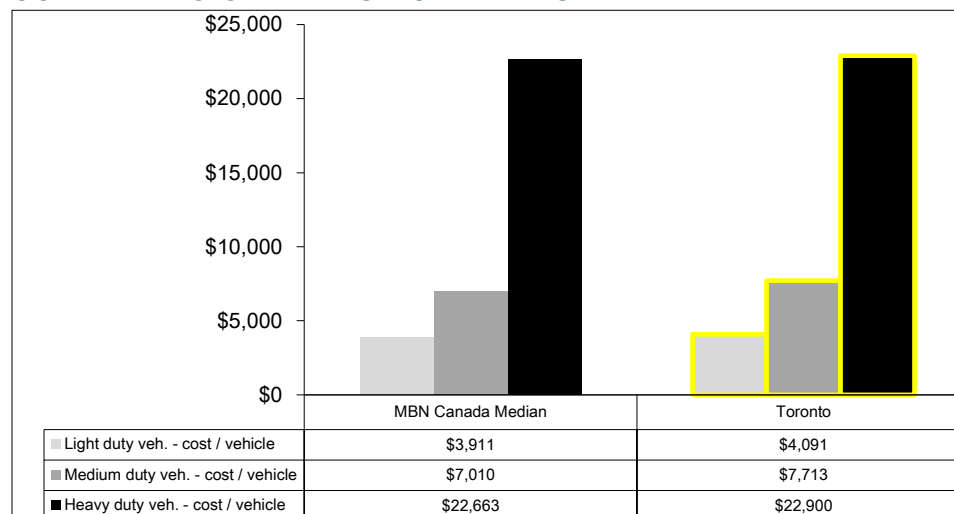
### 10.9 –WHAT DOES IT COST TO OPERATE A FLEET VEHICLE IN TORONTO?



**Chart 10.9** shows the annual cost to operate a vehicle in Toronto. In 2016, Toronto's operating cost per vehicle decreased for light, medium, and heavy duty vehicles.

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

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



**Chart 10.10** compares Toronto's results to the MBNC median. In terms of the lowest cost to operate a fleet vehicle, Toronto;  
Has slightly above the median costs for light duty vehicles;  
Has slightly above the median costs for medium duty vehicles; and  
Has slightly above the median costs for heavy duty vehicles.

**Chart 10.10 (MBNC 2016) Annual Operating Cost (by Vehicle Class) per Vehicle**

## 2016 ACHIEVEMENTS AND 2017 PLANNED INITIATIVES

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

### 2016 Initiatives Completed/Achievements

- Developed and obtained Council approval of an alternate service delivery model for all preventative maintenance and repairs for non-specialized class 1-2 vehicles. For Class 1-2 vehicles, this reliability centered maintenance approach will reduce vehicle downtime by 67% at the end of the 5 year phased-in implementation. These changes will result in improved service delivery and reduced city-wide costs.
- Developed and received approval for a new chargeback/operating cost model that will help to drive efficiencies and fleet optimization through improved transparency and accountability.
- Implemented the City's first car share program for use by all Divisions.
- Integrated the fueling of over 500 TTC assets at Fleet Services Division (FSD) Fuel sites
- Completed the integration of all Fire Services vehicles to FSD fuel sites.
- Completed of fuel site upgrades & closures. Fleet now utilizes 1 software & hardware program to manage 23 City-wide fuel sites that fuel over 13,000 assets. All sites now have above ground fuel storage tanks that reduce soil contamination, combined with technology that allows for secure, real-time, fuel and data management.
- Through leadership in city-wide Fleet Shared Services, continued to leverage procurement leadership to provide TTC, TPA, Toronto Fire Services, Toronto Paramedic Services, Exhibition Place and the Toronto Zoo the ability to procure vehicles or equipment based on existing FSD specifications.
- Completed the upgrade and closure of fuel sites to meet strategic and emergency requirements by 2016 year-end, which will reduce infrastructure costs, and minimize potential environmental risks. As a result, three Parks, Forestry & Recreation fuel sites will be upgraded and oversight transferred to Fleet Services and one low utilized site will be closed.
- Oversaw the delivery of 54 new Compressed Natural Gas (CNG) Collections vehicles. The CNG units support the City's consolidated green fleet plan, in choosing vehicles that emit less GHGs and air pollution, while meeting the City's operational requirements.

### 2017 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 13,000 assets.

- Work closely with client Programs to optimize fleet size through ensuring that all vehicles are required and fully utilized.
- Provide leadership in reducing environmental impact of the City's fleet operations through the City's 2014 - 2018 Consolidated Green Fleet Plan.

### **Factors Influencing the Results of Municipalities**

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

- 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.