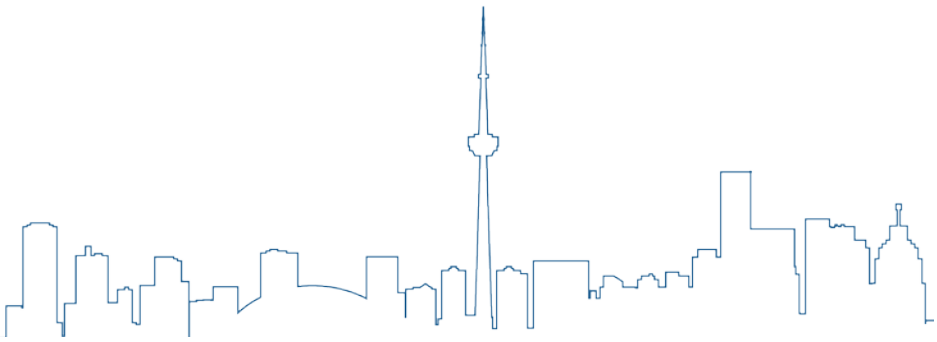
TORONTO



TRANSIT SERVICES

PROGRAM MAP

Toronto Transit Commission

Shaded boxes reflect the activities covered in this report

Transit services in the City of Toronto are delivered through the Toronto Transit Commission (TTC), which provides and maintains transit infrastructure and service including the operation and maintenance of an integrated transit system and a multi-modal fleet that includes buses, subways, streetcars and light rail transit.

The TTC is the third largest transit system in North America based on ridership after New York City and Mexico City. The TTC also provides special door-to-door transit service (Wheel-Trans) for persons with the greatest need for accessible transit as established by eligibility criteria based upon an individual's level of functional mobility. However, the results reported here exclude Wheel-Trans.

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 vehicle hours of transit service are provided?	Transit In-Service (Revenue) Vehicle Service Hours per Capita (Service Level)	Stable Vehicle hours of transit provided was stable (Service level indicator)	1 Highest rate of transit vehicle hours per capita compared to others (Service level indicator)	33.1 33.2 pg. 5/6
How many transit passenger trips are taken by an average person in a year?	Number of Conventional Transit Trips per Capita in Service Area (Community Impact)	Decrease Transit usage decreased (Community Impact)	1 Higher rate of transit usage by residents compared to others (Community Impact)	33.3 33.4 pg. 7/8
How satisfied were you overall with the quality of the TTC's service on the last TTC trip you took?	Percentage satisfied with overall quality of the TTC's service on the last TTC trip (Customer Experience)	Stable TTC Customer satisfaction score for 2018 was relatively stable to 2017 (Customer Experience)	N/A	33.10 pg. 13
What does it cost to operate a transit vehicle for an hour?	Operating Cost for Conventional Transit per In-Service Vehicle Service Hour (Efficiency)	Decrease Operating cost per in-service vehicle hour decreased (Efficiency)	4 Higher operating cost per in-service vehicle hour compared to others (impacted by multi-modal fleet) (Efficiency)	33.5 33.6 pg. 9/10
What does it cost to operate a transit vehicle for an hour?	Total Cost for Conventional Transit per In-Service Vehicle Service Hour (Efficiency)	Increase Total cost per in-service vehicle hour increased (Efficiency)	N/A	33.5 33.6 pg. 9/10
How well are transit vehicles used to move people?	Passenger Trips per In-Service Vehicle Hour (Efficiency)	Decrease Number of transit trips per in-service vehicle hour decreased (utilization) (Efficiency)	1 Higher rate of transit trips per in-service vehicle hour (utilization) (Efficiency)	33.8 33.9 pg. 11/12
What does it cost to provide one passenger trip?	Operating Cost for Conventional Transit per Regular Service Passenger Trip (Efficiency)	Stable Operating cost to provide a passenger trip was stable (Efficiency)	1 Lower operating cost to provide a passenger trip compared to others (Efficiency)	33.7 33.9 pg. 11/12

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 provide one passenger trip?	Total Cost for Conventional Transit per Regular Service Passenger Trip (Efficiency)	Increase Total cost to provide a passenger trip increased (Efficiency)	N/A	33.7 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)
0- Increase 1- Stable 0-Decrease	1- Favourable 2- Stable 4 -Unfavourable	1- 1st quartile 0- 2nd quartile 0- 3rd quartile 0- 4th quartile	3- 1st quartile 0- 2nd quartile 0- 3rd quartile 1- 4th quartile
100% increased or stable	42.8% favourable or stable	100% in 1st and 2nd quartiles	75% in 1st and 2nd quartiles

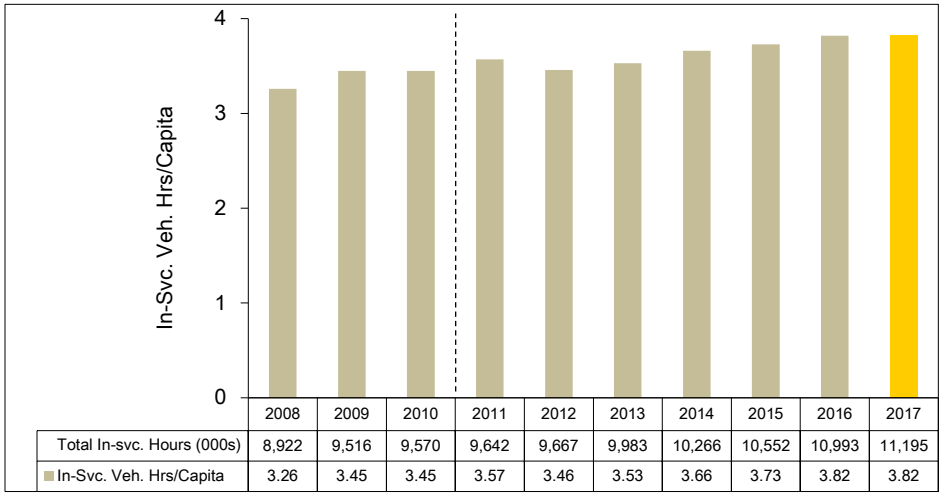
For an explanation of how to interpret this summary and the supporting charts, please see the Guide to Toronto's Performance Results. These quartile results are based on a maximum sample size of 13 municipalities.

SERVICE/ACTIVITY LEVELS

The number of in service transit vehicle hours available in a year for residents to use provides an indication of service levels. It can also influence how often residents use public transit.

An in-service vehicle hour refers to any hour a transit vehicle accepts paying passengers. It does not include other activities such as school contracts, charters and cross-boundary service, or vehicle hours devoted to road tests or maintenance activities.

33.1 - HOW MANY VEHICLE HOURS OF TRANSIT SERVICE ARE PROVIDED IN TORONTO?



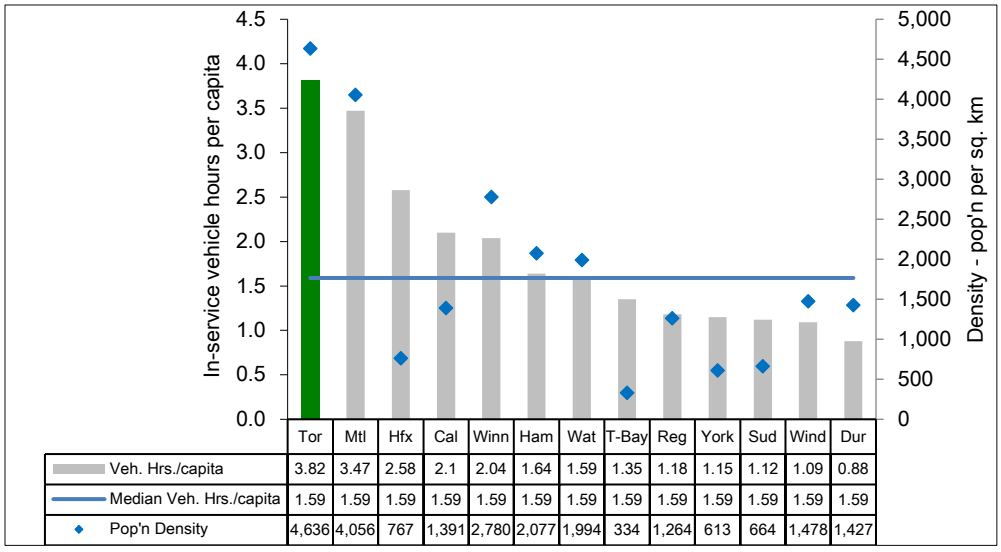
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total In-svc. Hours (000s)	8,922	9,516	9,570	9,642	9,667	9,983	10,266	10,552	10,993	11,195
In-Svc. Veh. Hrs/Capita	3.26	3.45	3.45	3.57	3.46	3.53	3.66	3.73	3.82	3.82

Chart 33.1 provides Toronto's total number and rate of in-service vehicle hours per capita. The results for 2010 and prior years are not based on the revised population estimates.

Chart 33.1 (City of Toronto) In-Service (Revenue) Transit Vehicle Hours per Capita

Over the past decade, Toronto's total in-service transit vehicle hours has grown each year, as has Toronto's population. In 2017, the results for the total in-service vehicle hours and in-service vehicle hours per capita were relatively stable.

33.2 - HOW DO TORONTO'S IN- SERVICE TRANSIT VEHICLE HOURS COMPARE TO OTHER MUNICIPALITIES?



	Tor	Mtl	Hfx	Cal	Winn	Ham	Wat	T-Bay	Reg	York	Sud	Wind	Dur
Veh. Hrs./capita	3.82	3.47	2.58	2.1	2.04	1.64	1.59	1.35	1.18	1.15	1.12	1.09	0.88
Median Veh. Hrs./capita	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
Pop'n Density	4,636	4,056	767	1,391	2,780	2,077	1,994	334	1,264	613	664	1,478	1,427

Chart 33.2 compares Toronto's 2017 in-service transit vehicle hours per capita with other municipalities, shown as bars relative to the left axis.

Chart 33.2 (MBNC 2017) In-Service (Revenue) Transit Vehicle Hours per Capita & Population Density

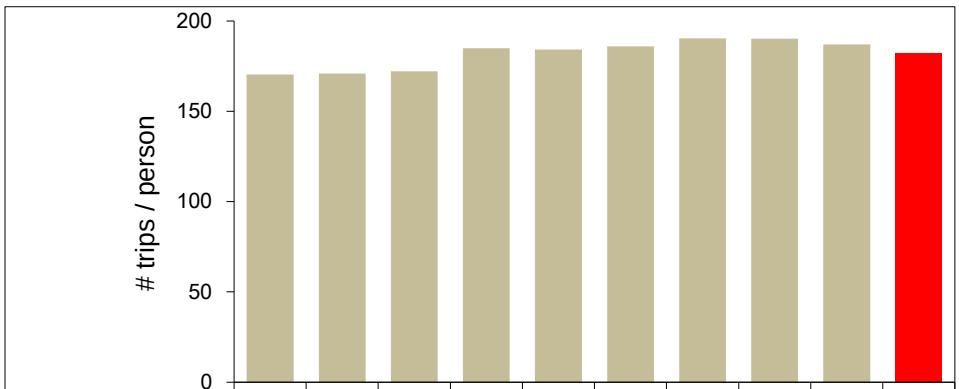
Toronto ranks first of thirteen municipalities (first quartile), with the highest number of transit vehicle hours per capita. As service levels are primarily set based on observed ridership, the number of trips taken per capita is the largest determinant of the number of in-service hours per capita required to carry passengers (see Chart 33.4 below).

Population density (persons per square kilometre) can have a large impact on the number of passengers attracted to the service and therefore the need for, and extent of, transit systems. Population density is plotted as a scattered plot graph relative to the right axis in Chart 33.2. Toronto's density is related to the extent of its transit system, with approximately 96 percent of Toronto residents living within 400 metres of at least one stop of the TTC's multi-modal services.

COMMUNITY IMPACT

One of the primary goals of a transit system is to maximize use by residents.

33.3 –HOW MANY PASSENGER TRIPS PER PERSON ARE TAKEN IN A YEAR IN TORONTO?



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total # of trips (millions)	466.7	471.2	477.4	500.2	514.0	525.2	534.8	537.6	538.1	533.2
# trips / person	170.4	171.0	172.1	184.9	184.2	185.9	190.4	190.2	187.1	182.0

Chart 33.3 provides a summary of the total number and rate of transit trips taken in Toronto per person, which has typically grown on a per capita basis since 2008, in part as a result of the Ridership Growth Strategy.

Chart 33.3 (City of Toronto) Number of Transit Passenger Trips per Person

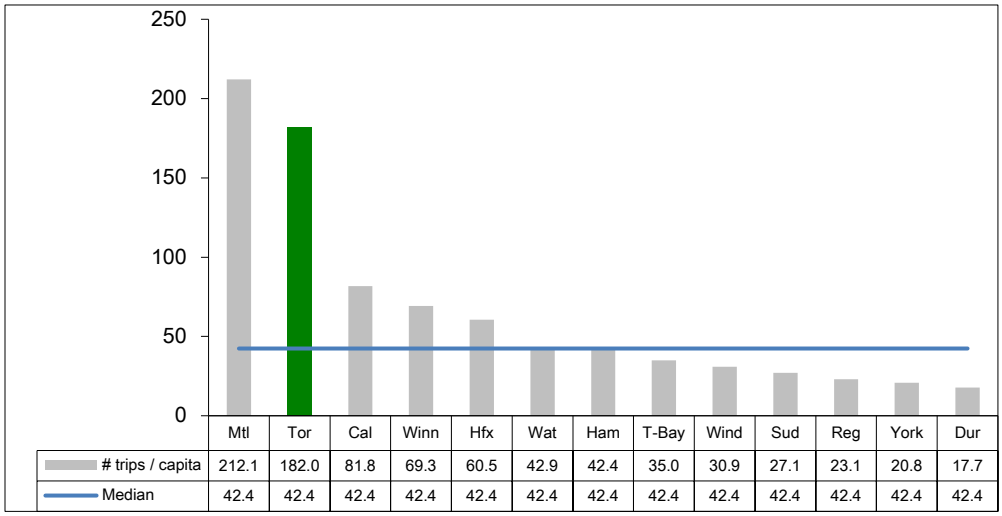
In 2017, the numbers of trips per person decreased by 2.7% compared to 2016.

In 2017, Toronto's population grew at an annual rate of 1.84 percent and measured number of regular service passenger trips was lower by 0.9% compared to 2016. It should also be noted that this measure reports on the Total Regular Service Passenger Trips per Capita based on the definition of the Canadian Urban Transit Association (CUTA).

Highlights of the changes in ridership over the past ten years are:

- 2008 – Increase of +1.5 percent due to increased sales of monthly passes (federal income tax credit) and rising automobile vehicle fuel prices.
- 2009 – Total ridership increased due to increases in the system capacity from the Ridership Growth Strategy.
- 2011 – Ridership grew to over 500 million.
- 2014 – Total ridership grew by 1.8% to over 534 million trips.
- 2016- Total ridership grew to over 538 million trips.
- 2017 – Total ridership was lower by 4.9 million trips due to the transition to PRESTO and resulting change in customer behaviour (pass to epurse). These factors caused a reduction in measured ridership, even though boardings and revenue were stable or slightly higher.

33.4 - HOW DOES TORONTO'S ANNUAL TRANSIT USE PER PERSON COMPARE TO OTHER MUNICIPALITIES?



	Mtl	Tor	Cal	Winn	Hfx	Wat	Ham	T-Bay	Wind	Sud	Reg	York	Dur
# trips / capita	212.1	182.0	81.8	69.3	60.5	42.9	42.4	35.0	30.9	27.1	23.1	20.8	17.7
Median	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4

Chart 33.4 compares the number of public transit passenger trips in Toronto in 2017 to other municipalities.

Chart 33.4 (MBNC 2017) Number of Conventional Transit Passenger Trips per Person

Toronto ranked second of thirteen (first quartile) for the highest transit usage per capita. Toronto's high population density and extensive multi-modal transit system are the primary factors behind high transit use by Toronto residents in relation to other municipalities. A comprehensive list of all active transit stops on the TTC is provided by route on the TTC's web site at: http://www.ttc.ca/.

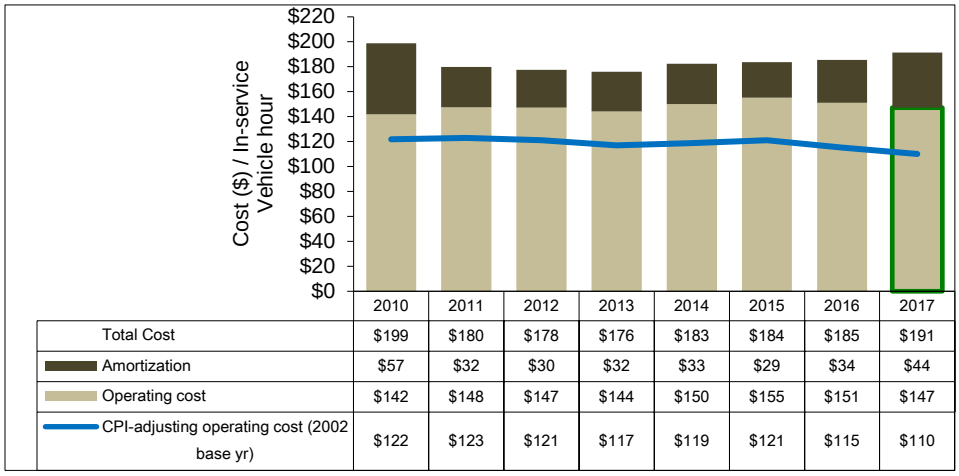
EFFICIENCY

In terms of efficiencies related to cost, it is important to examine two aspects of service delivery:

- The cost per hour to make a transit vehicle available (in-service) in order to accept passengers.
- The cost to provide a passenger trip, which takes into consideration actual use of the available transit supply.

Another aspect of service efficiency is from the utilization perspective, where the transit cost to provide a passenger trip is considered. This indicator should not be confused with the cost of purchasing a transit ticket.

33.5 - WHAT DOES IT COST IN TORONTO TO OPERATE A TRANSIT VEHICLE FOR AN HOUR?



	2010	2011	2012	2013	2014	2015	2016	2017
Total Cost	$199	$180	$178	$176	$183	$184	$185	$191
Amortization	$57	$32	$30	$32	$33	$29	$34	$44
Operating cost	$142	$148	$147	$144	$150	$155	$151	$147
CPI-adjusting operating cost (2002 base yr)	$122	$123	$121	$117	$119	$121	$115	$110

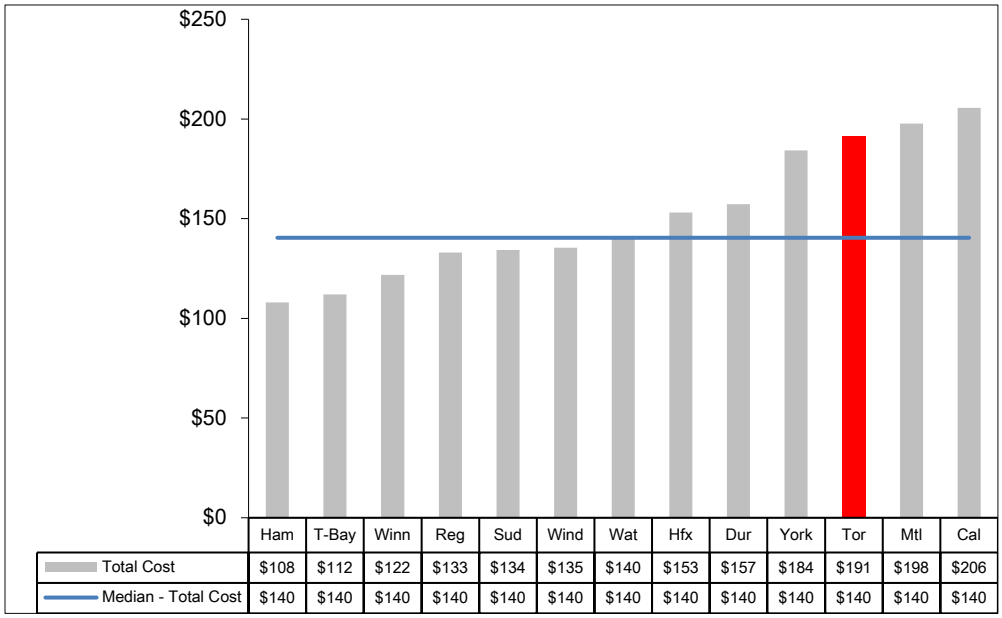
Chart 33.5 (City of Toronto) Operating and Total Costs for Conventional Transit per In-Service Vehicle Hour

Chart 33.5 provides Toronto's operating cost and total cost (operating cost plus amortization but excludes interest) per in-service vehicle hour, and shows that operating cost decreased by 2.5% and total cost increased by 3.2% compared to 2016.

In 2017, amortization increased mainly due to the expected lifecycle change of the bus fleet from 18 years to 13 years and the opening of the Toronto-York Spadina Subway Extension late in 2017.

To reflect the impact of inflation, Chart 33.5 also provides Consumer Price Index (CPI) adjusted operating costs, which are plotted as a line graph. This adjustment discounts the actual operating cost result for each year by the change in Toronto's CPI since the base year of 2002.

33.6 –HOW DOES TORONTO'S TRANSIT COST PER VEHICLE HOUR COMPARE TO OTHER MUNICIPALITIES?



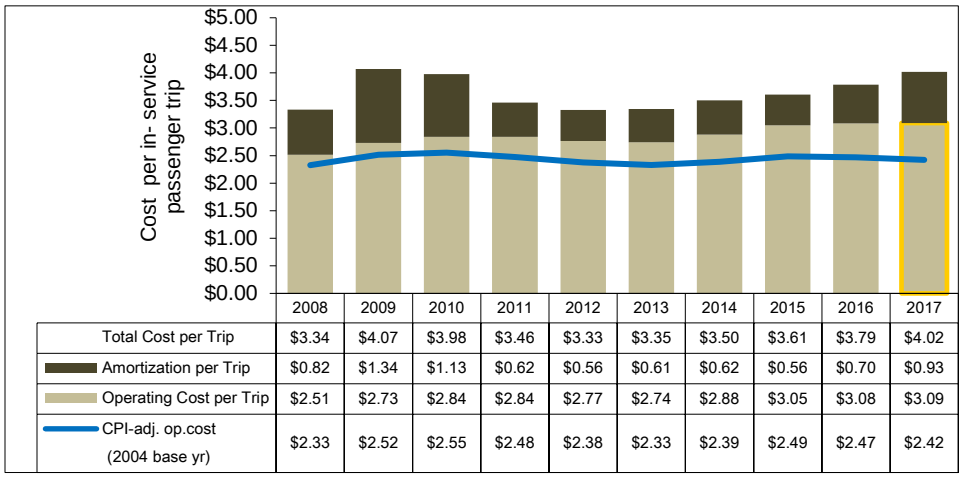
	Ham	T-Bay	Winn	Reg	Sud	Wind	Wat	Hfx	Dur	York	Tor	Mtl	Cal
Total Cost	$108	$112	$122	$133	$134	$135	$140	$153	$157	$184	$191	$198	$206
Median - Total Cost	$140	$140	$140	$140	$140	$140	$140	$140	$140	$140	$140	$140	$140

Chart 33.6 compares Toronto's 2017 result to other municipalities for total cost per in-service vehicle hour.

Chart 33.6 (MBNC 2017) Total Costs for Conventional Transit per In-Service Vehicle Hour

Toronto ranks eleventh of thirteen municipalities (fourth quartile) in terms of lowest total cost per in service vehicle hour. Toronto's costs are high among MBNC municipalities due to a number of factors that are unique to Toronto, such as the use of many modes of transit (subway, streetcars and light rapid transit) that are more expensive to operate on an hourly basis than buses.

33.7 –WHAT DOES IT COST TO PROVIDE ONE PASSENGER TRIP IN TORONTO?



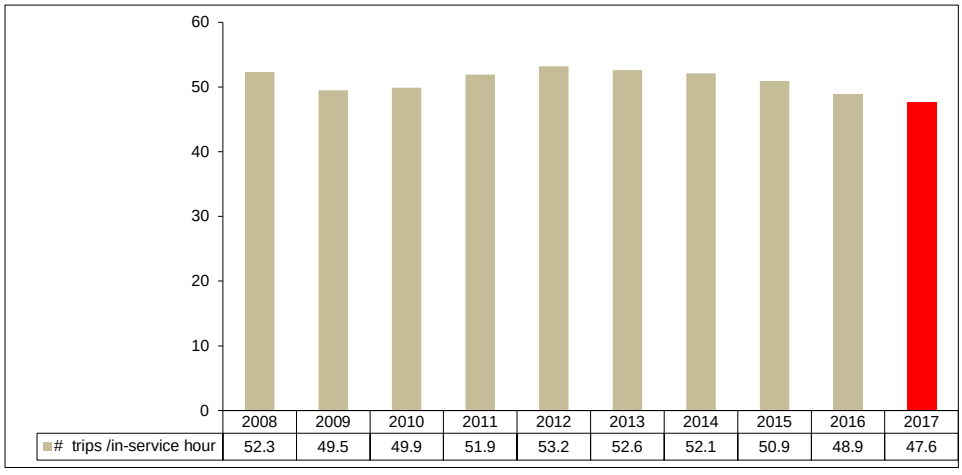
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Cost per Trip	$3.34	$4.07	$3.98	$3.46	$3.33	$3.35	$3.50	$3.61	$3.79	$4.02
Amortization per Trip	$0.82	$1.34	$1.13	$0.62	$0.56	$0.61	$0.62	$0.56	$0.70	$0.93
Operating Cost per Trip	$2.51	$2.73	$2.84	$2.84	$2.77	$2.74	$2.88	$3.05	$3.08	$3.09
CPI-adj. op.cost (2004 base yr)	$2.33	$2.52	$2.55	$2.48	$2.38	$2.33	$2.39	$2.49	$2.47	$2.42

Chart 33.7(City of Toronto) Operating and Total Cost for Conventional Transit per Regular Service Trip

Chart 33.7 illustrates Toronto's transit operating cost and total cost (operating cost plus amortization, but excludes interest) per passenger trip.

In 2017, total cost per trip increased by 6% to $4.02 per trip. The operating cost per trip was relatively stable in 2017.To reflect the impact of inflation, Chart 33.7 also provides Consumer Price Index (CPI) adjusted results for operating costs, using 2004 as the base year.

33.8 – HOW WELL ARE TRANSIT VEHICLES BEING UTILIZED TO MOVE PEOPLE?



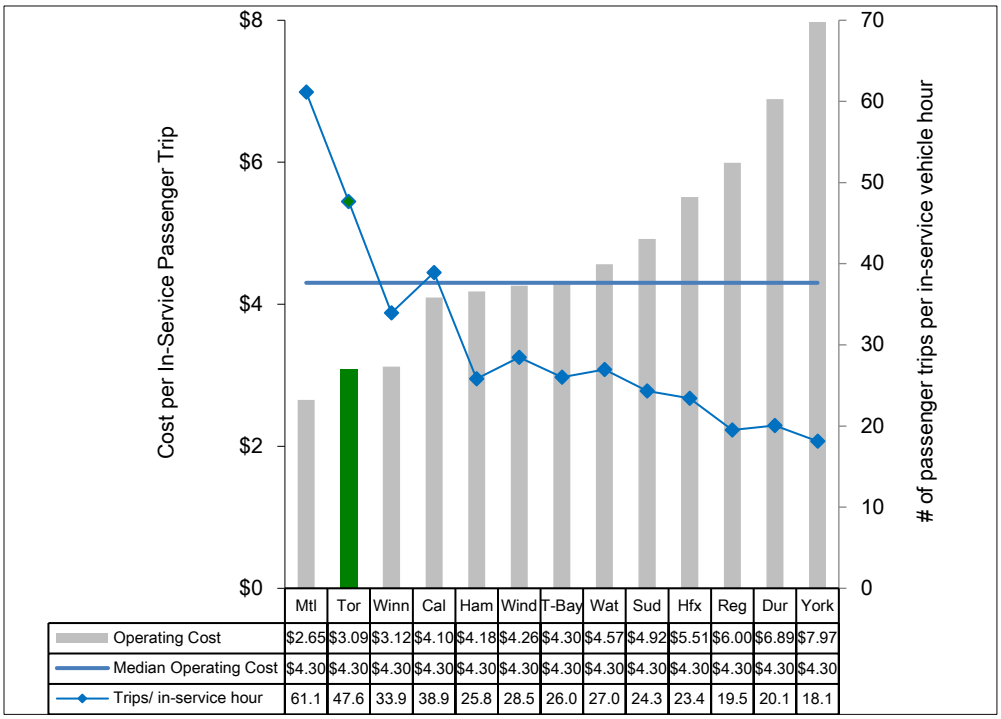
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# trips /in-service hour	52.3	49.5	49.9	51.9	53.2	52.6	52.1	50.9	48.9	47.6

Chart 33.8(City of Toronto) Passenger Trips per In-Service Vehicle Hour

Chart 33.8 provides this utilization data for Toronto expressed as the number of passenger trips per vehicle hour.

In 2017, Toronto's utilization of transit vehicles reduced to 47.6 trips per service. The degree of passenger utilization of transit vehicles is a primary factor in the cost per passenger trip, as higher usage rates allow fixed and variable costs to be spread over a larger number of riders.

33.9 – HOW DO TORONTO'S TRANSIT COST PER PASSENGER TRIP COMPARE TO OTHER MUNICIPALITIES?



	Mtl	Tor	Winn	Cal	Ham	Wind	T-Bay	Wat	Sud	Hfx	Reg	Dur	York
Operating Cost	$2.65	$3.09	$3.12	$4.10	$4.18	$4.26	$4.30	$4.57	$4.92	$5.51	$6.00	$6.89	$7.97
Median Operating Cost	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30	$4.30
Trips/ in-service hour	61.1	47.6	33.9	38.9	25.8	28.5	26.0	27.0	24.3	23.4	19.5	20.1	18.1

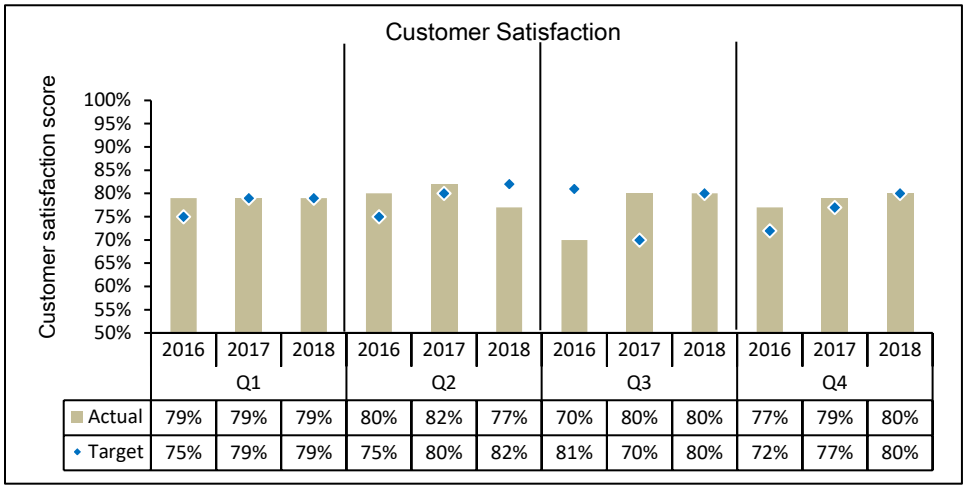
Chart 33.9 displays the 2017 operating cost per transit trip, and the average number of passenger trips per hour that a transit vehicle is in service on the line graph relative to the right axis.

Chart 33.9 (MBNC 2017) Operating Cost of Conventional Transit per Passenger Trip, and Average Number of Passenger Trips per In-Service Vehicle Hour

Toronto has a very high utilization rate, ranking second of thirteen in terms of highest utilization rate (first quartile). Toronto also ranks second of thirteen municipalities (first quartile), in terms of lowest operating cost per passenger trip.

CUSTOMER EXPERIENCE

33.10 – HOW SATISFIED WERE YOU WITH THE OVERALL QUALITY OF THE TORONTO TRANSIT COMMISSION'S (TTC) SERVICE ON THE LAST TTC TRIP YOU TOOK?



	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
	Q1			Q2			Q3			Q4		
Actual	79%	79%	79%	80%	82%	77%	70%	80%	80%	77%	79%	80%
Target	75%	79%	79%	75%	80%	82%	81%	70%	80%	72%	77%	80%

Chart 33.10 displays Toronto Transit Commission's (TTC) overall customer satisfaction score for the last three years. The graph shows both the target and actual score.

Chart 33.10 (Toronto Transit Commission CEO's Reports) Customer Satisfaction Score

Definition: *Overall satisfaction: How satisfied were you with the overall quality of the TTC's service on the last TTC trip you took?*

In general, a representative sample size of 1,000 is selected every quarter for this survey. The sample sizes varies only slightly each quarter.

The overall Customer Satisfaction Score for 2018 (79%) is relatively stable with last year's results (80%). It is important to note that 2017 marked the highest annual overall satisfaction score to date.

Perceptions of overall customer satisfaction are driven by several service reliability attributes, which are measured across the different modes of transit (bus, streetcar and subway). The top five key drivers across all modes are: *Trip Duration, Helpfulness of Staff/Operators, Comfort of Ride, Wait Time, and Level of Crowding in Vehicle*.

Nearly two-in-five customers believe the TTC has improved over the last two-year period (2018 yearly average: 38%). The proportion of customers who stated that the system has gotten better is higher than the two previous years, where roughly one-third agreed that services have improved.

2017 ACHIEVEMENTS AND 2018 PLANNED INITIATIVES

The following initiatives have improved or are expected to further improve the efficiency and effectiveness of Toronto's Transit Services:

2017 Initiatives Completed/Achievements

- TTC named North America's best transit agency for 2017 by American Public Transportation Association (APTA)
- Open the Line 1 Toronto-York Spadina Subway Extension with six new fully accessible modern stations
- Install 200 passenger information displays in shelters to provide real time information on vehicle arrivals
- Commence fully accessible streetcar service on 514 Cherry route
- Enable new Presto fare gates at 43 subway station entrances
- Launch a Safety and Security app as another tool for customers to report related incidents

2018 Planned Initiatives

- Provide transit service to an anticipated 539.4 million riders, representing a 3.4 million, or 0.6% increase over the 2017 projected year end ridership of 536 million rides.
- Provide rail, streetcar and bus service spanning 247 million kilometers and 9.25 million hours of service.
- Operating the new Toronto York Spadina Subway Extension (TYSSE).
- Maintain 2017 Service levels with no fare increase.

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:

- Demographics: Average household income, auto ownership rates, age of population.
- Economic Conditions: Fare increases, fluctuations in commodity and energy prices, foreign
- exchange rates, magnitude of external contracting and contractual obligations with labour.
- Environmental Factors: Topography and climate.
- Nature of Transit: Diversity and number of routes, proximity and frequency of service, service coverage and hours of operation, automated fare systems, GPS, advance and delay traffic signals and the use of dedicated bus lanes. Subway systems can involve much more costly infrastructure to be maintained.
- Non-Residents: Catchment area for transit riders may extend beyond municipal boundaries.
- Size of Service Area: Higher costs per capita to service large geographic areas with small
- populations. Higher density development corridors and contiguous development contribute to a lower cost per capita. Service and costs are also affected by type of development, topography, density and total population.
- Transit System and Vehicles: Loading standards of vehicles, composition of fleet (bus, subway or LRT), diesel versus natural gas, high floor versus low floor accessible and age of fleet.