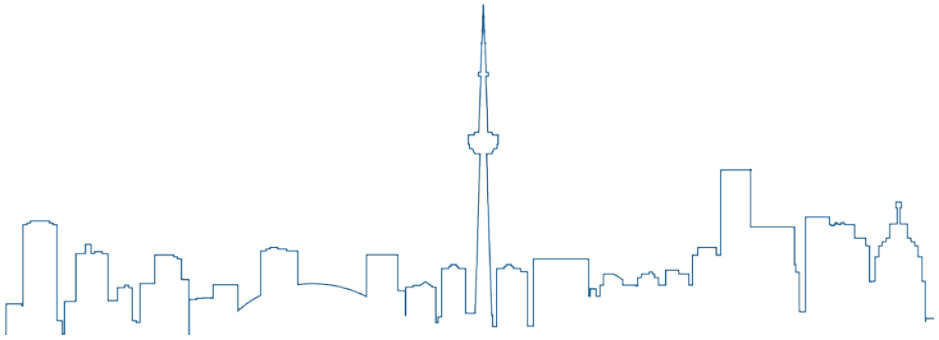
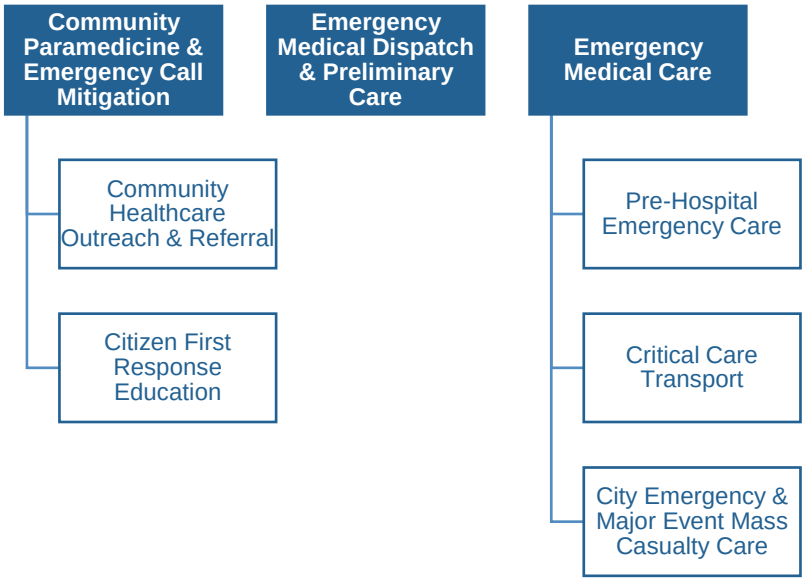
TORONTO



PARAMEDIC SERVICES

PROGRAM MAP

Paramedic Services



Paramedic Services, previously Emergency Medical Services (EMS) is responsible for protecting the quality of life in Toronto by providing 24/7 pre-hospital and out-of-hospital medical care, responding to patients with health emergencies and to the special needs of vulnerable communities through integrated, mobile, paramedic-based health care. This is provided through:

Community Paramedicine & Emergency Call Mitigation:

- Provides community-based primary medical care and referrals that support aging at home, health promotion, illness and injury prevention and reduction of 911 calls through emergency call mitigation strategies
- Provides at-home medical care to support seniors and vulnerable citizens in order to remain independent in the community
- Provides citizen first-response education and awareness within the community to support medical first response for all health care emergencies

Emergency Medical Dispatch & Preliminary Care

- Provides immediate access to dispatch life support instructions through Toronto's Central Ambulance Communications Centre prior to paramedic arrival

Emergency Medical Care

- Provides paramedic-based, mobile health services and emergency medical response, and provides medically appropriate and functionally sound transport for all patients in the community.

City Emergency and Major Event Mass Casualty Care

- Provides on-site, dedicated medical coverage for a variety of large-scale events and ability to respond to emergencies involving mass casualty victims.

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 hours are Paramedic vehicles in-service and available to respond to emergencies?	Paramedic Services Actual Weighted Vehicle In-Service Hours per 1,000 Population - (Activity/Service Level Indicator)	Increase Number of in-service vehicle hours increased (Activity/Service Level Indicator)	3 Lower rate of in-service vehicle hours compared to others (Activity/Service Level Indicator) (Toronto's density contributes to shorter travel distances, resulting in relatively fewer vehicle hours)	21.1 21.2 pg. 6/7
How many total patient transports does Toronto Paramedic Services provide?	Total Patients Transported (Codes 1through 4) per 1,000 Population (Activity/Service Level Indicator)	Stable Number of total patient transports per 1,000 population was stable compared to previous year (Activity/Service Level Indicator)	3 Lower number of total patient transports per 1,000 population compared to others (Activity/Service Level Indicator)	21.4 21.5 pg. 8/9
How many emergency calls (unique incidents) are responded to by Paramedic Services?	Unique Paramedic Services vehicle responses per 1,000 Population (Activity/Service Level Indicator)	Stable Number of unique vehicle responses per 1,000 population was stable compared to previous year (Activity/Service Level indicator)	2 Higher rate of unique vehicle responses compared to others (Activity/Service Level Indicator)	21.3 21.6 pg. 8/10
What percentage of time do ambulances spend at hospitals transferring patients?	Percentage of Ambulance Time Lost to Hospital Turnaround - (Community Impact)	Decrease Percentage of lost ambulance time (off-load delay) decreased (Community Impact)	4 Highest percentage of lost ambulance time (off-load delay) compared to others (Community Impact)	21.7 21.8 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 percentage of time does an ambulance crew arrive on-scene (within 8 minutes) to provide service to sudden cardiac arrest patients or other patients categorized as CTAS 1?	Response Time Performance Standard – Canadian Triage & Acuity Scale 1(CTAS 1) (Customer Service)	Increase The percentage of time an ambulance crew arrives within 8 minutes for life-threatening calls increased (No Chart) (Customer Service)	1 Higher percentage of time ambulance crews respond within 8 minutes to life-threatening calls compared to others (Customer Service)	21.9 pg. 13
What percentage of time does a person equipped with a defibrillator arrive on scene (within six minutes) to provide ambulance services to sudden cardiac arrest patients?	RTS SCA – Response Time - Sudden Cardiac Arrest (Customer Service)	Decrease The percentage of time a person equipped with a defibrillator arrived on scene within 6 minutes decreased (No Chart) (Customer Service)	1 Higher percentage of time ambulance crews respond within six minutes to sudden cardiac arrest patients compared to others (Customer Service)	21.10 pg.14
What does it cost for Paramedic Services to transport a patient?	Paramedic Operating Cost per Patient Transported - (Efficiency)	Increase Operating cost per patient transported increased (Efficiency)	3 Operating cost per patient transported was higher compared to others (Efficiency)	21.11 21.12 pg.15/16
What does it cost for Paramedic Services to transport a patient?	Paramedic Total Cost per Patient Transported - (Efficiency)	Increase Total cost per patient transported increased (Efficiency)	3 Total cost per patient transported was higher compared to others (Efficiency)	21.11 21.12 pg.15/16
What is the hourly cost to have a vehicle in-service, available to respond to emergencies?	Paramedic Services Operating Cost per Actual Weighted Vehicle Service Hour – (Efficiency)	Decrease Operating cost per in-service vehicle hour decreased in 2017 (Efficiency)	4 Highest operating cost per in-service vehicle hour compared to others (Efficiency)	21.13 21.14 pg. 17/18
What is the hourly cost to have a vehicle in-service, available to respond to emergencies?	Paramedic Services Total Cost per Actual Weighted Vehicle Service Hour – (Efficiency)	Stable Total cost per in-service vehicle hour was relatively stable in 2017 (Efficiency)	4 Highest total cost per in-service vehicle hour compared to others (Efficiency)	21.13 21.14 pg. 17/18

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 is Toronto's Citizen First (CF) Service Quality Score for municipal or regional ambulance services?	Citizens First Survey Service Quality Score for Municipal or regional ambulance or Emergency Medical Services (Customer Service)	Relatively Stable, High The CF8 (2018) Service Quality Score was relatively stable, but still high compared to CF7 (2014) (Customer Service)	N/A	21.15 Pg. 19

SUMMARY OF OVERALL RESULTS

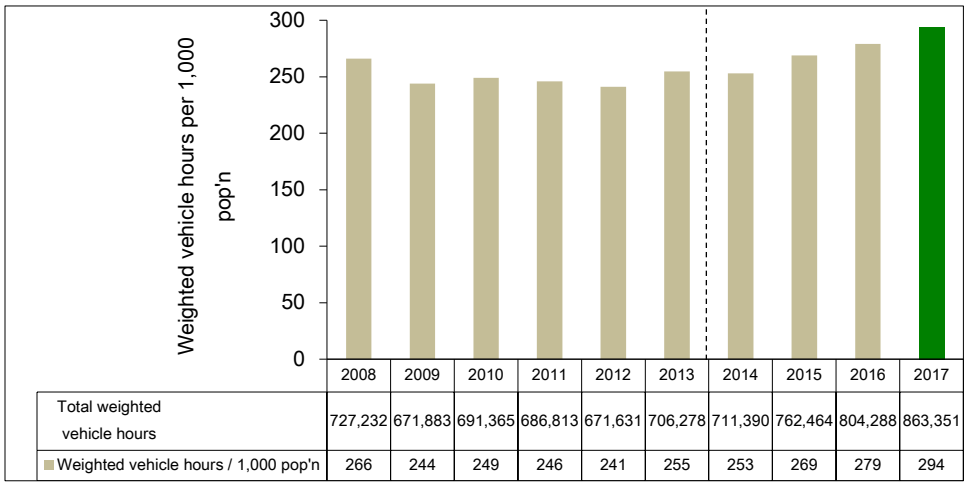
Internal Comparison of Toronto's 2017 vs. 2016 Results	Internal Comparison of Toronto's 2017 vs. 2016 Results	External Comparison to Other Municipalities (MBNC) By Quartile for 2017	External Comparison to Other Municipalities (MBNC) By Quartile for 2017
Service Level Indicators (Resources)	Performance Measures (Results)	Service Level Indicators (Resources)	Performance Measures (Results)
1- Increased 2 - Stable 0-Decreased	4 - Favourable 1 - Stable 3 - Unfavourable	0 - 1st quartile 1 - 2nd quartile 2- 3rd quartile 0- 4th quartile	2 - 1st quartile 0 - 2nd quartile 2 - 3rd quartile 3- 4th quartile
100% stable or increased	62.5% favourable or stable	33% in 1st and 2nd quartiles	28.5% 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 12 municipalities.

SERVICE/ACTIVITY LEVEL

Toronto Paramedic Services provides 24-hour paramedic care in response to life-threatening emergency medical calls. The section below provide information on how many hours that vehicles are in-service, how many patients they transport, and how many unique responses are provided by Toronto's Paramedic Services.

21.1 – HOW MANY HOURS ARE TORONTO'S VEHICLES IN-SERVICE AND AVAILABLE TO RESPOND TO EMERGENCIES?



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total weighted vehicle hours	727,232	671,883	691,365	686,813	671,631	706,278	711,390	762,464	804,288	863,351
Weighted vehicle hours / 1,000 pop'n	266	244	249	246	241	255	253	269	279	294

Chart 21.1 provides Toronto's weighted in-service Paramedic Service vehicle hours per 1,000 population.

An in-service vehicle refers to the hours that vehicles are available for service.

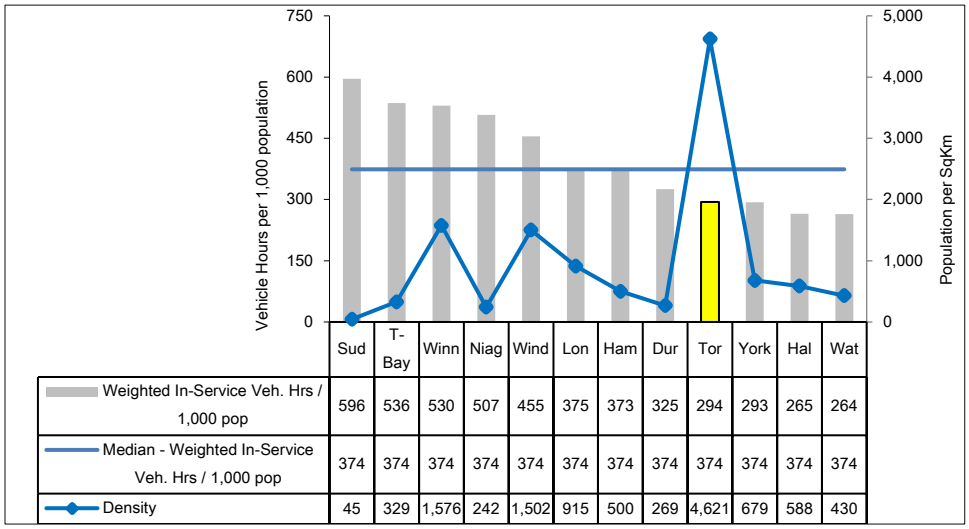
Chart 21.1 (City of Toronto) Weighted In-Service Vehicle Hours per 1,000 Population

Weighted hours take into consideration the number of personnel on the different types of emergency response vehicles. It should be noted that results exclude supervisory units.

In 2017, the weighted vehicle hours per 1,000 population increased by 5% from the previous year. From 2014 onwards, Toronto's weighted in-service vehicle hours per 1,000 population has generally increased. Over the longer term, Toronto's in-service vehicle hours have increased.

During the 2013-2016 period, City Council approved funding to increase staffing by 220 paramedic positions. With the increased staffing levels and through the implementation of several service efficiency initiatives, Paramedic Services has been able to maintain a response time of 11.5 minutes, 90% of the time in 2017. Further information is also available from the Toronto Paramedic Services Budget Notes.

21.2 – HOW DO TORONTO'S IN-SERVICE VEHICLE HOURS COMPARE TO OTHER MUNICIPALITIES?



	Sud	T-Bay	Winn	Niag	Wind	Lon	Ham	Dur	Tor	York	Hal	Wat
Weighted In-Service Veh. Hrs / 1,000 pop	596	536	530	507	455	375	373	325	294	293	265	264
Median - Weighted In-Service Veh. Hrs / 1,000 pop	374	374	374	374	374	374	374	374	374	374	374	374
Density	45	329	1,576	242	1,502	915	500	269	4,621	679	588	430

Chart 21.2 compares Toronto's 2017 weighted in-service Paramedic Services vehicle hours per 1,000 population to other MBNC municipalities, reflected as columns relative to the left axis.

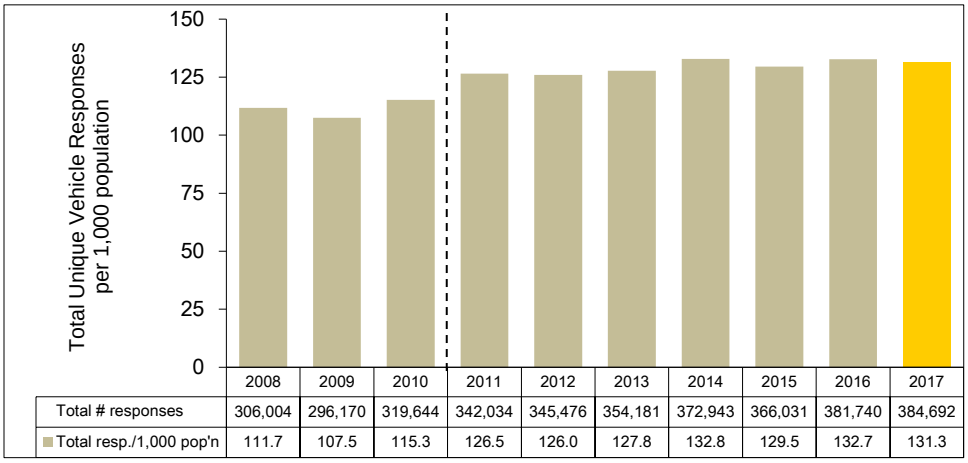
Chart 21.2 (MBNC 2017) Weighted In-Service Vehicle Hours per 1,000 Population

Population density (population per square km) is plotted as a line graph relative to the right axis.

Toronto ranks ninth of twelve municipalities (third quartile) in terms of having the highest number of in-service Paramedic Services vehicle hours. Toronto's high population density plays a significant role in this result. In cities with high population densities, travel distances might be shorter and have more traffic congestion, which could result in a lower number of vehicle hours. Municipalities with lower population densities generally require proportionately more vehicle hours in order to provide acceptable response times.

Although Toronto's Paramedic Services has a lower rate of in-service vehicles, Toronto's ambulances continue to be among the busiest of the MBNC municipalities, engaged in patient care activities 51.4% of the time in 2017, compared to MBNC median of 39.3%.

21.3 – HOW MANY UNIQUE RESPONSES DOES TORONTO PARAMEDIC SERVICES PROVIDE?



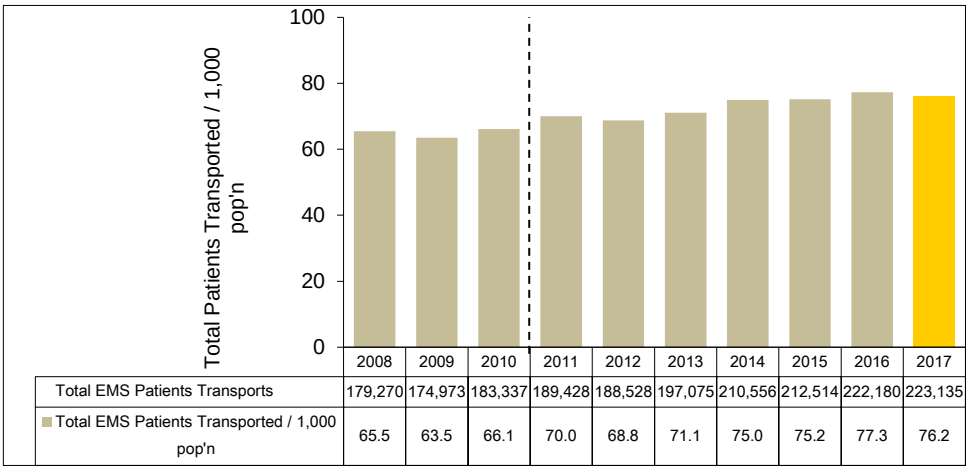
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total # responses	306,004	296,170	319,644	342,034	345,476	354,181	372,943	366,031	381,740	384,692
Total resp./1,000 pop'n	111.7	107.5	115.3	126.5	126.0	127.8	132.8	129.5	132.7	131.3

Chart 21.3 shows the total number of vehicle responses and the total number of vehicle responses per 1,000 population.

Chart 21.3 (City of Toronto) Total Unique Reponses per 1,000 Population

While the total number of responses increased by 2,952, the rate of unique responses per 1,000 population decreased slightly by 1 percent. It should be noted that the results for 2010 and prior years are not based on the revised population estimates.

21.4 – HOW MANY TOTAL PATIENT TRANSPORTS PER 1,000 POPULATION DOES TORONTO PARAMEDIC SERVICES PROVIDE?



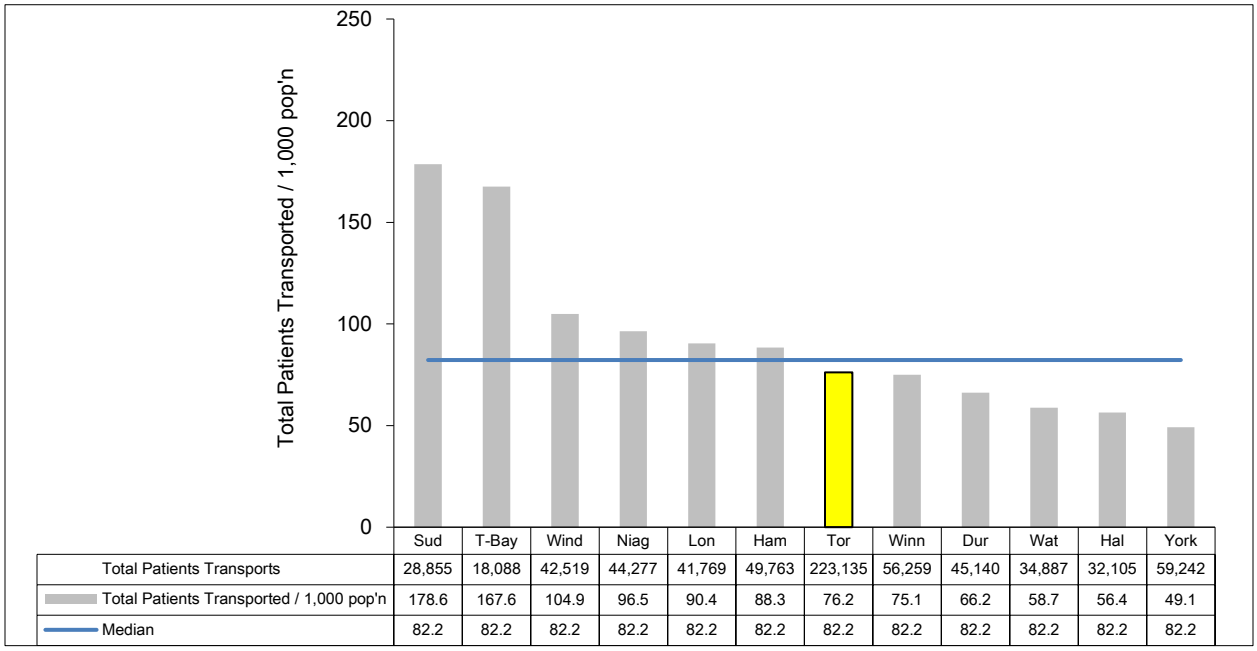
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total EMS Patients Transports	179,270	174,973	183,337	189,428	188,528	197,075	210,556	212,514	222,180	223,135
Total EMS Patients Transported / 1,000 pop'n	65.5	63.5	66.1	70.0	68.8	71.1	75.0	75.2	77.3	76.2

Chart 21.4 shows the number of total patients transported per 1,000 population by Toronto Paramedic Services, and provides an indication of activity. The result includes all Emergency (Code 3-4) and Non-Emergency (Code 1-2).

Chart 21.4 (City of Toronto) Total Number of Patients Transported per 1,000 population (includes emergency and non-emergency)

In absolute terms, the number of patient transports provided has increased, and has seen steady annual increases in the longer term (an increase of 24.5% since 2008). However, the 2017 *rate* of patient transports per 1,000 population saw a slight decrease of 1.4% in comparison to the previous year. As Toronto's population ages, this number of patient transports result is expected to increase in future years, and places significant pressures on Toronto Paramedic resources.

21.5 – HOW MANY TOTAL PATIENT TRANSPORTS PER 1,000 POPULATION DOES TORONTO PARAMEDIC SERVICES PROVIDE COMPARED TO OTHER MUNICIPALITIES?



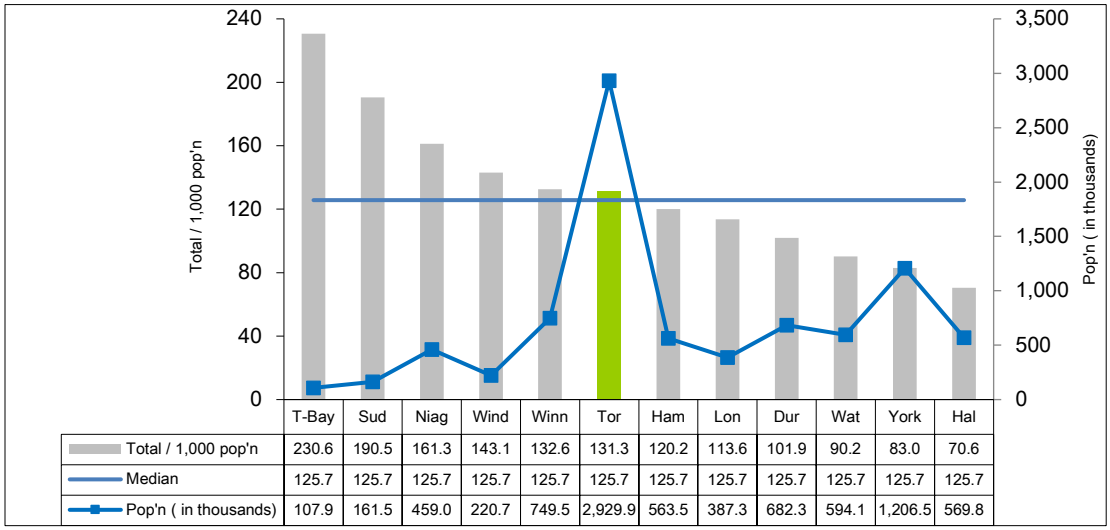
	Sud	T-Bay	Wind	Niag	Lon	Ham	Tor	Winn	Dur	Wat	Hal	York
Total Patients Transports	28,855	18,088	42,519	44,277	41,769	49,763	223,135	56,259	45,140	34,887	32,105	59,242
Total Patients Transported / 1,000 pop'n	178.6	167.6	104.9	96.5	90.4	88.3	76.2	75.1	66.2	58.7	56.4	49.1
Median	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2

Chart 21.5 (MBNC 2017) Total Number of Patients Transported per 1,000 population (includes emergency and non-emergency)

Chart 21.5 shows the number of total patients transported per 1,000 population by Toronto Paramedic Services compared to other municipalities. This number includes all non-emergency patients (Code 1-2) and emergency patients (Code 3-4).

In 2017, Toronto ranks seventh of twelve municipalities in terms of the rate of highest total emergency medical services patients transported per 1,000 population. However, in absolute terms, Toronto paramedics transported 223,135 patients (Codes 1 through 4), a far higher number than the absolute value of patient transports for all other MBNC municipalities.

21.6 – HOW DO THE NUMBER OF UNIQUE RESPONSES IN TORONTO COMPARE TO OTHER MUNICIPALITIES?



	T-Bay	Sud	Niag	Wind	Winn	Tor	Ham	Lon	Dur	Wat	York	Hal
Total / 1,000 pop'n	230.6	190.5	161.3	143.1	132.6	131.3	120.2	113.6	101.9	90.2	83.0	70.6
Median	125.7	125.7	125.7	125.7	125.7	125.7	125.7	125.7	125.7	125.7	125.7	125.7
Pop'n (in thousands)	107.9	161.5	459.0	220.7	749.5	2,929.9	563.5	387.3	682.3	594.1	1,206.5	569.8

Chart 21.6 (MBNC 2017) Total Unique Responses per 1,000 Population

Chart 21.6 compares Toronto's 2017 results for the total number of unique vehicle responses, to other MBNC municipalities. It should be noted that this does not reflect the total number of paramedic vehicles responding to events.

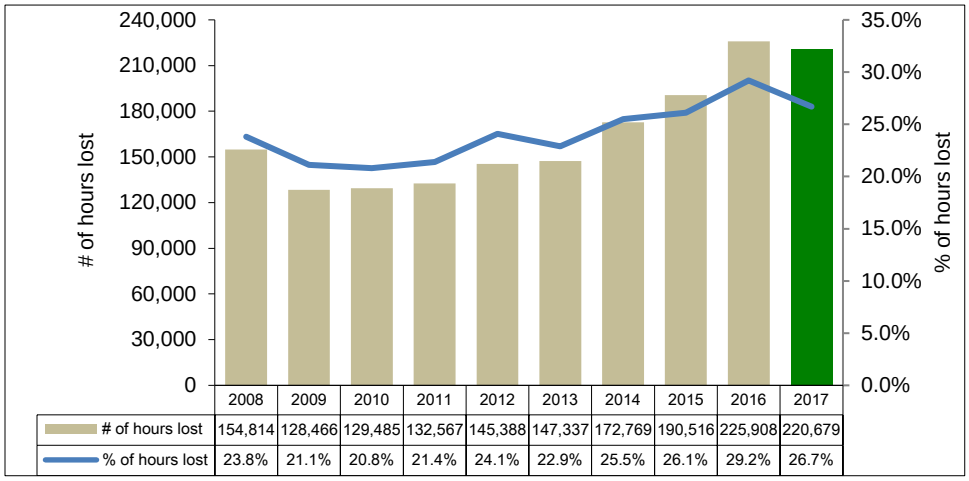
In terms of the highest rate of unique responses per 1,000 population, Toronto ranks sixth of twelve (second quartile) for unique responses.

As noted in Chart 21.3, Toronto's Paramedic Services had 384,692 unique responses in 2017, which is by far the highest number compared to the other MBNC municipalities reporting for this measure.

COMMUNITY IMPACT

The turnaround time required to transfer a patient from the care of paramedics to the care of hospital staff can have a significant impact on service. This turnaround time includes the time it takes the hospital to triage and transfer the patient, complete patient care documentation and delays due to shortages of hospital resources (commonly referred to as off-load delay). Off-load delays result in less time that paramedics are available "on the road" to respond to other emergency calls.

21.7 – WHAT PERCENTAGE OF TIME DO AMBULANCES IN TORONTO SPEND AT HOSPITALS TRANSFERRING PATIENTS?



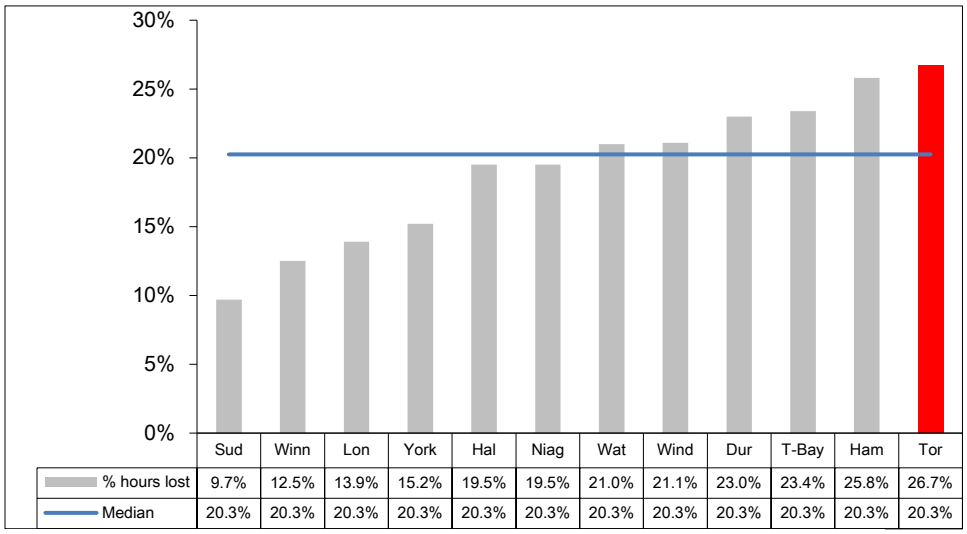
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of hours lost	154,814	128,466	129,485	132,567	145,388	147,337	172,769	190,516	225,908	220,679
% of hours lost	23.8%	21.1%	20.8%	21.4%	24.1%	22.9%	25.5%	26.1%	29.2%	26.7%

Chart 21.7 shows Toronto's results for the total hours and percentage of ambulance hours involved in the turnaround activities noted above.

Chart 21.7 (City of Toronto) Hours or Ambulance Time Lost to Hospital Turnaround

In 2017, number of hours lost decreased by 2.3% compared to the previous year.

21.8 – HOW DOES TORONTO'S AMBULANCE TIME SPENT AT HOSPITALS COMPARE TO OTHER MUNICIPALITIES?



	Sud	Winn	Lon	York	Hal	Niag	Wat	Wind	Dur	T-Bay	Ham	Tor
% hours lost	9.7%	12.5%	13.9%	15.2%	19.5%	19.5%	21.0%	21.1%	23.0%	23.4%	25.8%	26.7%
Median	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%

Chart 21.8 compares Toronto's 2017 result for ambulance turnaround time to other MBNC municipalities.

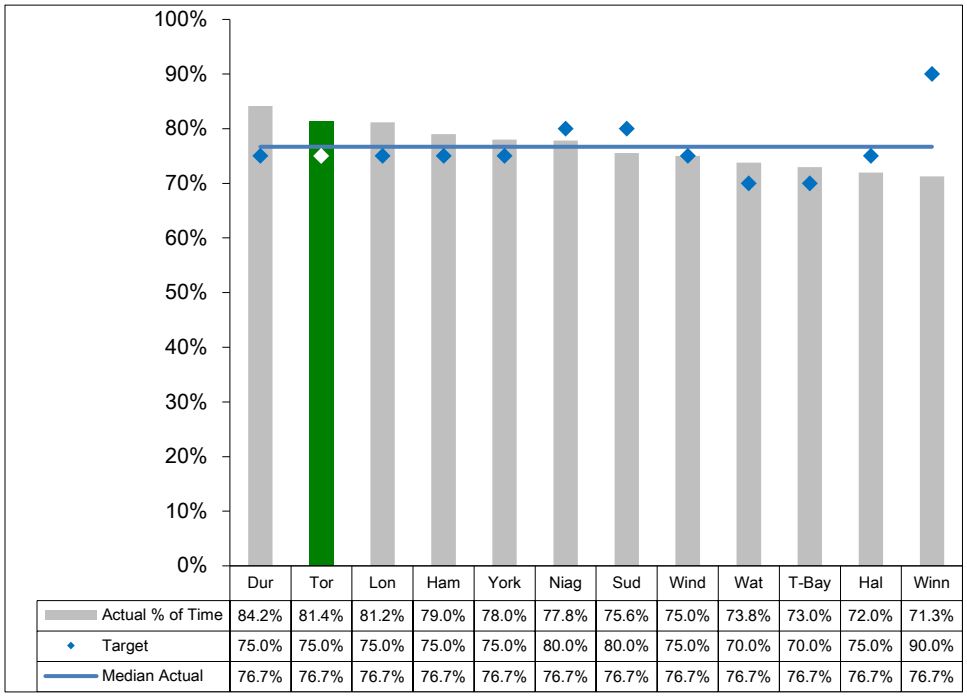
Chart 21.8 (MBNC 2017) Percentage of Ambulance Time Lost to Hospital Turnaround

In terms of shortest ambulance turnaround time, Toronto ranks highest of twelve municipalities (fourth quartile). While the Hospital Offload Delay Nurse Program has relieved some pressure on Paramedic Services resources, increased emergency calls, increased patient transports and offload delay remain significant pressures that contribute to Paramedic Services use of overtime in order to maintain service levels.

CUSTOMER SERVICE

CTAS, or the Canadian Triage & Acuity Scale, is a standardized tool that enables emergency departments and paramedic services to prioritize care requirements according to the type and severity of the presenting signs and symptoms. Patients are assigned a CTAS level between 1 (more severe, life threatening) and 5 (less severe).

21.9 – WHAT PERCENTAGE OF TIME DOES AN AMBULANCE CREW ARRIVE (WITHIN 8 MINUTES) TO PROVIDE SERVICE FOR CARDIAC ARREST OR OTHER PATIENTS CATEGORIZED AS CTAS 1 (LIFE THREATENING)?



	Dur	Tor	Lon	Ham	York	Niag	Sud	Wind	Wat	T-Bay	Hal	Winn
Actual % of Time	84.2%	81.4%	81.2%	79.0%	78.0%	77.8%	75.6%	75.0%	73.8%	73.0%	72.0%	71.3%
Target	75.0%	75.0%	75.0%	75.0%	75.0%	80.0%	80.0%	75.0%	70.0%	70.0%	75.0%	90.0%
Median Actual	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%	76.7%

Chart 21.9 compares Toronto's 2017 result to other municipalities for the percentage of time it takes (within 8 minutes) an ambulance crew to respond to life-threatening calls.

Each municipality is able to determine and set the percentage of compliance for this measure. The municipality's target is also plotted with each column.

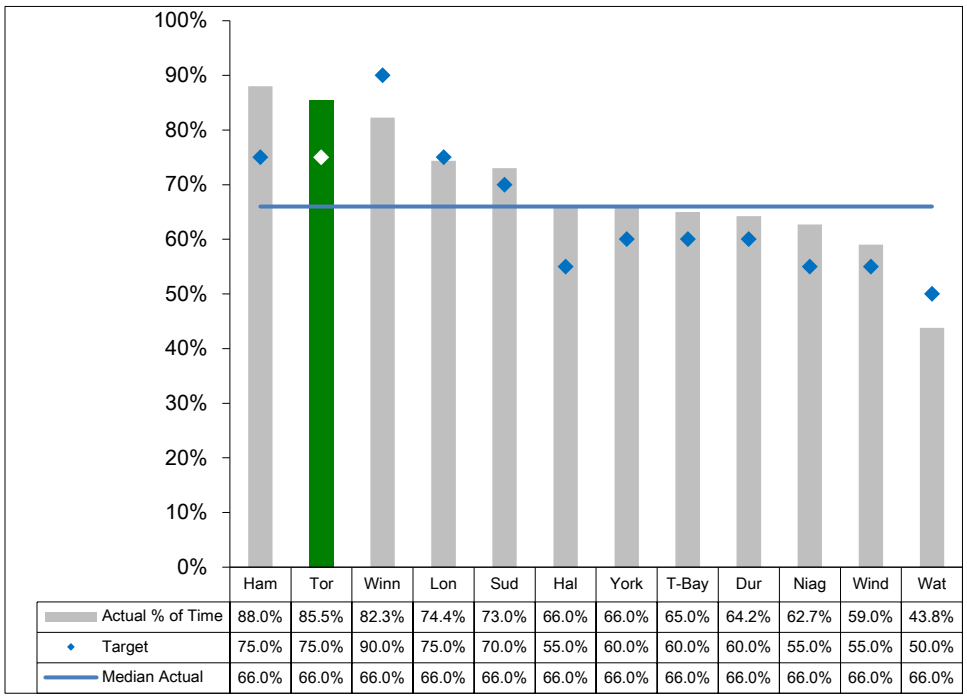
Chart 21.9 (MBNC 2017) Percentage of time an ambulance crew arrives on scene to provide ambulance services to sudden cardiac arrest patients or other patients (CTAS 1), within eight minutes of the time notice is received from dispatch

In 2017, Toronto ambulance crews responded to life-threatening calls (CTAS 1) within 8 minutes, 81.4% of the time. This percentage is well above the municipally set target of 75%.

The response time is calculated based on the crew notified (T2) time of the first vehicle being notified of the call and the arrived scene (T4) time of the first vehicle to reach the scene.

In terms of highest actual percentage of time to arrive at the scene, Toronto ranked second of twelve (first quartile).

21.10 – WHAT PERCENTAGE OF TIME DOES A PERSON EQUIPPED WITH A DEFIBRILLATOR ARRIVE ON SCENE (WITHIN SIX MINUTES) TO PROVIDE AMBULANCE SERVICES TO SUDDEN CARDIAC ARREST PATIENTS?



	Ham	Tor	Winn	Lon	Sud	Hal	York	T-Bay	Dur	Niag	Wind	Wat
Actual % of Time	88.0%	85.5%	82.3%	74.4%	73.0%	66.0%	66.0%	65.0%	64.2%	62.7%	59.0%	43.8%
Target	75.0%	75.0%	90.0%	75.0%	70.0%	55.0%	60.0%	60.0%	60.0%	55.0%	55.0%	50.0%
Median Actual	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%

Chart 21.10 (MBNC 2017) Percentage of time that a person equipped to provide any type of defibrillation has arrived on scene to provide defibrillation to sudden cardiac arrest patients within six minutes of the time notice is received from dispatch

Chart 21.10 compares Toronto's 2017 result to other municipalities for the percentage of time it takes a person equipped with a defibrillator to arrive on scene to provide emergency medical care to sudden cardiac arrest patients, within six minutes.

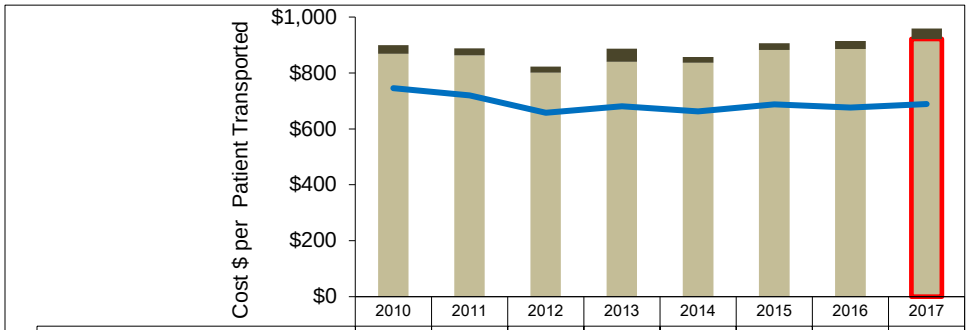
Each municipality is able to determine and set their own percentage compliance for this measure, which is also plotted in the chart.

The actual result is the percentage of time that a person equipped to provide any type of defibrillation has arrived on-scene to provide defibrillation to sudden cardiac arrest patients within six minutes of the time notice is received from dispatch.

In 2017, Toronto Paramedic Services responded to sudden cardiac arrest patients within six minutes, 85.5 percent of the time. Compared to other municipalities, Toronto ranked second of twelve municipalities (first quartile).

EFFICIENCY

21.11 – WHAT DOES IT COST PARAMEDIC SERVICES TO TRANSPORT A PATIENT IN TORONTO?



	2010	2011	2012	2013	2014	2015	2016	2017
Total Cost	$900	$888	$823	$887	$858	$907	$914	$959
Amortization	$31	$25	$22	$47	$21	$24	$28	$38
Operating Cost	$869	$863	$801	$840	$837	$883	$886	$922
CPI- adjusted operating cost (base yr 2002)	$746	$719	$658	$681	$662	$688	$676	$689

Chart 21.11 (City of Toronto) Operating & Total Cost per Patient Transported

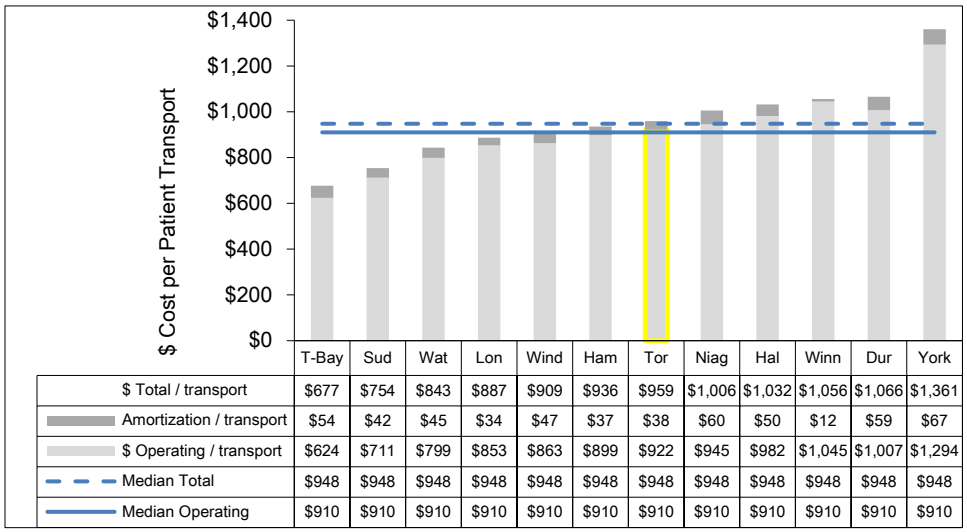
Chart 21.11 presents the operating cost and total operating costs of paramedic services to transport a patient in Toronto over a period of 8 years.

In 2017, the total cost per patient transported increased by 5% from the previous year.

To reflect the impact of inflation, the graph also provides Consumer Price Index (CPI) adjusted operating cost results, 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.

Both the operating cost and total cost (operating cost plus amortization) per patient transported increased in 2017. It should be noted that Toronto's costs exclude those related to dispatch in order to be comparable to other municipalities, where this function is provided by the Ontario Ministry of Health and Long-Term Care.

21.12 – WHAT DOES IT COST PARAMEDIC SERVICES TO TRANSPORT A PATIENT IN TORONTO?



	T-Bay	Sud	Wat	Lon	Wind	Ham	Tor	Niag	Hal	Winn	Dur	York
$ Total / transport	$677	$754	$843	$887	$909	$936	$959	$1,006	$1,032	$1,056	$1,066	$1,361
Amortization / transport	$54	$42	$45	$34	$47	$37	$38	$60	$50	$12	$59	$67
$ Operating / transport	$624	$711	$799	$853	$863	$899	$922	$945	$982	$1,045	$1,007	$1,294
Median Total	$948	$948	$948	$948	$948	$948	$948	$948	$948	$948	$948	$948
Median Operating	$910	$910	$910	$910	$910	$910	$910	$910	$910	$910	$910	$910

Chart 21.12 compares Toronto's 2017 operating cost and total cost per patient transported to other MBNC municipalities.

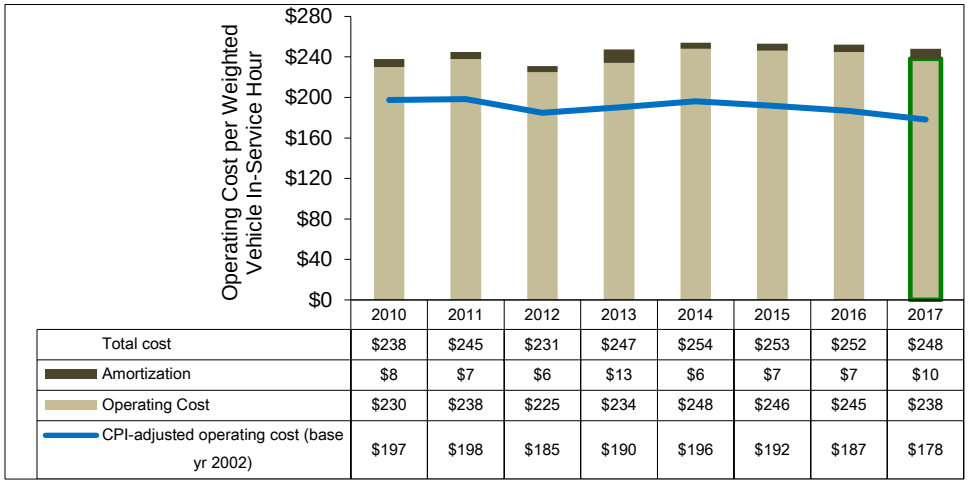
Chart 21.12 (MBNC 2017) Operating & Total Cost per Patient Transported

In terms of the lowest cost Toronto ranks seventh of twelve (third quartile) for both operating and total costs.

It should be noted that Toronto's costs exclude those related to dispatch in order to be comparable to other municipalities, where this function is provided by the Ontario Ministry of Health and Long-Term Care.

Toronto's ambulances are one of the busiest when compared to other MBNC municipalities. Toronto continues to have one of the highest utilization rates of its vehicles in transporting patients.

21.13 – WHAT IS THE HOURLY COST IN TORONTO TO HAVE A PARAMEDIC SERVICES VEHICLE IN-SERVICE, AVAILABLE TO RESPOND TO EMERGENCIES?



	2010	2011	2012	2013	2014	2015	2016	2017
Total cost	$238	$245	$231	$247	$254	$253	$252	$248
Amortization	$8	$7	$6	$13	$6	$7	$7	$10
Operating Cost	$230	$238	$225	$234	$248	$246	$245	$238
CPI-adjusted operating cost (base yr 2002)	$197	$198	$185	$190	$196	$192	$187	$178

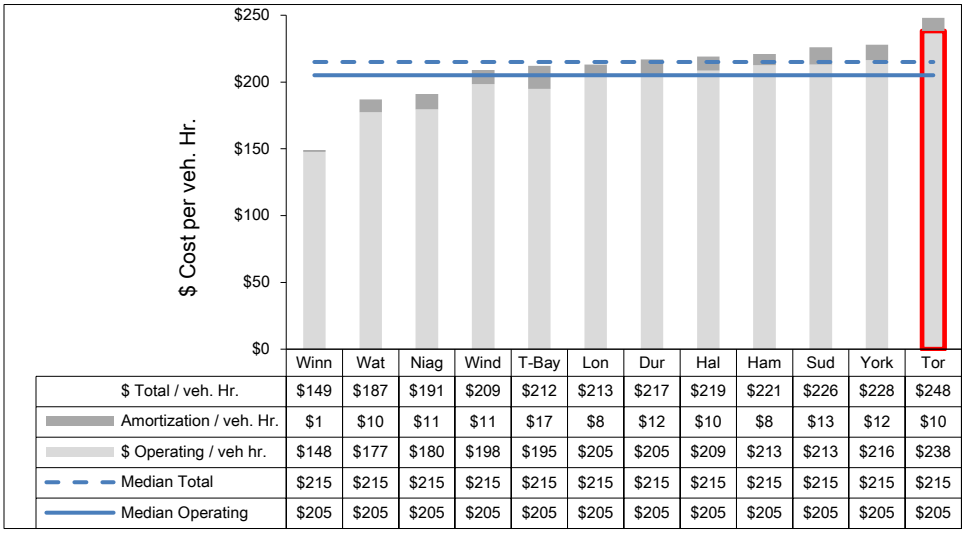
Chart 21.13 presents Toronto's results over time in terms of its supply by relating costs to the hours that Paramedic Services vehicles are in-service, responding to or available to respond to emergencies.

Chart 21.13 (City of Toronto) Operating & Total Cost per Weighted In-Service Vehicle Service Hour

To reflect the impact of inflation, this graph also provides Consumer Price Index (CPI) adjusted operating cost results, 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.

Toronto's costs exclude those related to dispatch in order to be comparable to other municipalities, where this function is provided by the Ontario Ministry of Health and Long-Term Care.

21.14 – HOW DOES TORONTO'S HOURLY IN-SERVICE VEHICLE COST FOR PARAMEDIC SERVICES COMPARE TO OTHER MUNICIPALITIES?



	Winn	Wat	Niag	Wind	T-Bay	Lon	Dur	Hal	Ham	Sud	York	Tor
$ Total / veh. Hr.	$149	$187	$191	$209	$212	$213	$217	$219	$221	$226	$228	$248
Amortization / veh. Hr.	$1	$10	$11	$11	$17	$8	$12	$10	$8	$13	$12	$10
$ Operating / veh hr.	$148	$177	$180	$198	$195	$205	$205	$209	$213	$213	$216	$238
Median Total	$215	$215	$215	$215	$215	$215	$215	$215	$215	$215	$215	$215
Median Operating	$205	$205	$205	$205	$205	$205	$205	$205	$205	$205	$205	$205

Chart 21.14 compares Toronto's 2017 Paramedic Services operating and total cost per weighted-in-service vehicle hour to other municipalities.

Chart 21.14 (MBNC 2017) Operating & Total Cost per Weighted In-Service Vehicle Service Hour

In terms of the lowest cost, Toronto ranks the highest of twelve municipalities (fourth quartile) for the highest cost (both operating and total) per vehicle hour. However, it should be recognized that Toronto's ambulances continue to be among the busiest of the MBNC municipalities, engaged in patient care activities 51.4% of the time in 2017, compared to MBNC median of 39.3%. Toronto has the highest cost of living and is generally more expensive in every relevant area.

CUSTOMER SATISFACTION: CITIZENS FIRST (CF) SERVICE QUALITY SURVEY RESULTS

One way to measure satisfaction of a public service is to through the use of surveys. The Citizens First surveys, conducted every 2 to 3 years by the Institute for Citizen-Centred Services, provides a comprehensive overview at how citizens view their government services.

Citizens First 8 (CF8) is the most recent survey and was conducted between December 2017 and February 2018. A total of 401 Toronto residents were surveyed in CF8. The final data are weighted for Toronto by age and gender. Based on this sample size, Toronto's results have a margin of error of ±4.9% for a result of 50% at the 95% confidence interval. However, data based on sub-groups is subject to a greater margin of error.

The Service Quality Score (SQR) relates to how Toronto residents rate their municipal services. Respondents were requested to provide a score on a 5-point scale where 1 means 'very poor' and 5 means 'very good'. In order to remain consistent with results from previous years, all the results are scaled from 0 to 100.

Rating	**Very Poor** 1	2	3	4	**Very Good** 5
Score	0	25	50		100

The survey respondents were asked the following question: Please rate the quality of [*Municipal or regional ambulance or Emergency Medical Services*]. If you did not use this service in the past 12 months, select 'Does Not Apply'.

21.15 –WHAT IS TORONTO'S SERVICE QUALITY SCORE FOR MUNICIPAL OR REGIONAL AMBULANCE SERVICES?

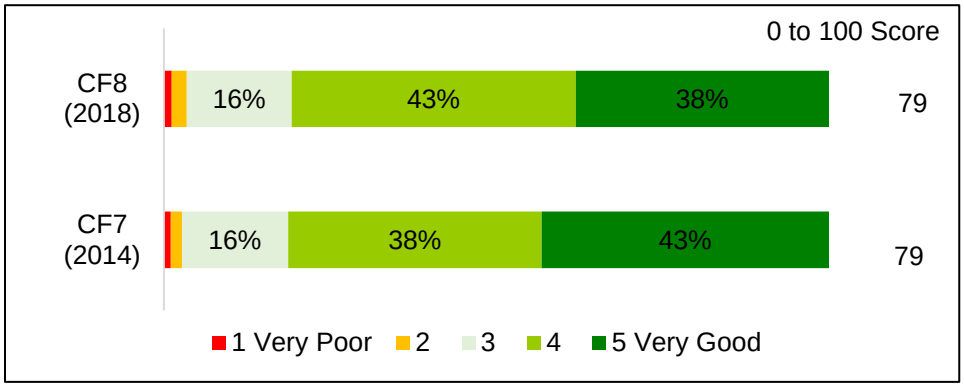


Chart 21.15 (Citizen's First 7 and 8) Service Quality Score for municipal or regional ambulance services

Chart 21.15 displays the Service Quality Score for Toronto's municipal or regional ambulance services. In CF8 (2018), Toronto's municipal or regional ambulance services scored 79 out of 100, relatively stable from the 79 score in 2014 results. The vast majority (81%) of all CF8 survey respondents who have used municipal or regional ambulance services in the past 12 months rated Toronto's municipal or regional ambulance services at a "4" or "5" on the 5-point scale.

2017 ACHIEVEMENTS AND 2018 PLANNED INITIATIVES

The following initiatives have improved or will help to improve the effectiveness of Toronto's Paramedic Services:

2017 Achievements

Emergency Medical Care

- Projected to transport 231,440 emergency patients to hospital in 2017.
- Paramedic Services' first-ever multifunction station began operation in the fall of 2017. Due to its strategic geographic location and proximity to the new Humber River Hospital, this new station is being used as part of the Division's active deployment plan.
- Continued to expand lifesaving programs such as: STEMI (type of heart attack), stroke, trauma and post cardiac arrest patient care programs to reduce pre-hospital mortality and significantly improve quality of life for patients and families.

Emergency Medical Dispatch & Preliminary Care

- Continued to improve processing of emergency calls using decision-support software which allows EMDs to more accurately anticipate, monitor and assign the right paramedic resources throughout the city.
- Upgraded the Medical Priority Dispatch Triage system to reduce extra steps and increase speed in the triage of life-threatening calls.
- Continued to implement a Part-time Emergency Medical Dispatcher (EMD) program, with the first class graduating in the fall, leading to a more efficient use of EMD resources.
- Continued to employ, during peak periods of call activity, a Patient Safety Advocate (PSA) function as part of the Division's strategy to mitigate possible service delays.

Community Paramedicine & Emergency Call Mitigation

- Continued to employ and investigate innovative emergency call diversion and mitigation strategies for low acuity calls to improve ambulance availability for high acuity calls.
- Continued to use the Community Paramedicine Program to re-direct specific patient groups to appropriate preventative, out-of-hospital medical care to minimize or eliminate their reliance on 911 and the hospital system.
- Continued to coordinate and expand the Public Access Defibrillation (PAD) Program to save more lives.
- Received additional funding from the Ministry of Health & Long Term Care to expand the Independence at Home (IAH) initiative, designed to ensure that seniors at higher risk of health care issues have appropriate supports in place to manage their

medical and social conditions, ultimately reducing their reliance on 911 and the hospital system.

2018 Initiatives Planned

- Continue to provide 24-hour emergency medical response from 45 ambulance stations located across the City with a fleet of 215 ambulances and an approved complement of 1,077 paramedics and 125 emergency medical dispatchers.
- Provide an estimated 240,700 emergency patient transports in 2018, an estimated increase of 4% over the 2017 projection of 231,440 emergency patient transports.
- Provide an estimated 37,800 hours of continuing medical education to Toronto Paramedic Services staff as mandated by the Ministry of Health and Long-Term Care and Paramedic Services' Base Hospital (medical oversight);
- Upgrade training for 14 Primary Care Paramedics to the Advanced Care Paramedic level.

Influencing Factors

- Demographics: Age and health status of the growing population in the city has an impact on the number and severity of calls. An older population can increase the demand for services, as can seasonal visitors and the inflow of workers from other communities during the day.
- Communications Centre/Dispatch: The system, processes and governance of dispatch impact the efficiency and effectiveness of the land ambulance operation. Local control or influence of dispatch operations has a direct influence on Emergency Medical Services/Paramedic Services operations. The majority of dispatch centers in Ontario are operated directly by the Ministry of Health.
- Governance: All Emergency Medical Services/Paramedic Services operations are governed and regulated provincially pursuant to the Ambulance Act including minimum operational standards. Budgeted Resources, Local Response Times Standards and Deployment Plans are mandated by Council.
- Community Services: Community paramedicine, tactical teams, multi-patient transport units, bike and marine teams are examples of services being provided by municipalities to meet the needs of their local community. System design and service delivery are impacted by the ratio of Advanced Care Paramedics vs. Primary Care Paramedics.
- Hospital Delay: Emergency Medical Services/Paramedic Services face varying lengths of delays in the transfer of care of patients to local hospitals. This can negatively impact the availability of ambulances to respond to calls.
- Non Residents: Visitors, workers, tourists and out of town hospital patients can increase the call volume but are not reflected in the measures (population used for metrics is that of the municipality only).

- Urban vs. Rural: Mix of urban vs. rural geography can influence response time and cost factors. Traffic congestion can make navigating roads more difficult, resulting in longer response times. Large rural geographic areas can make it challenging to provide cost-effective, timely emergency coverage.
- Vehicle Mix: Emergency Medical Services/Paramedic Services use a varying mixture of response vehicles which have different staffing models.