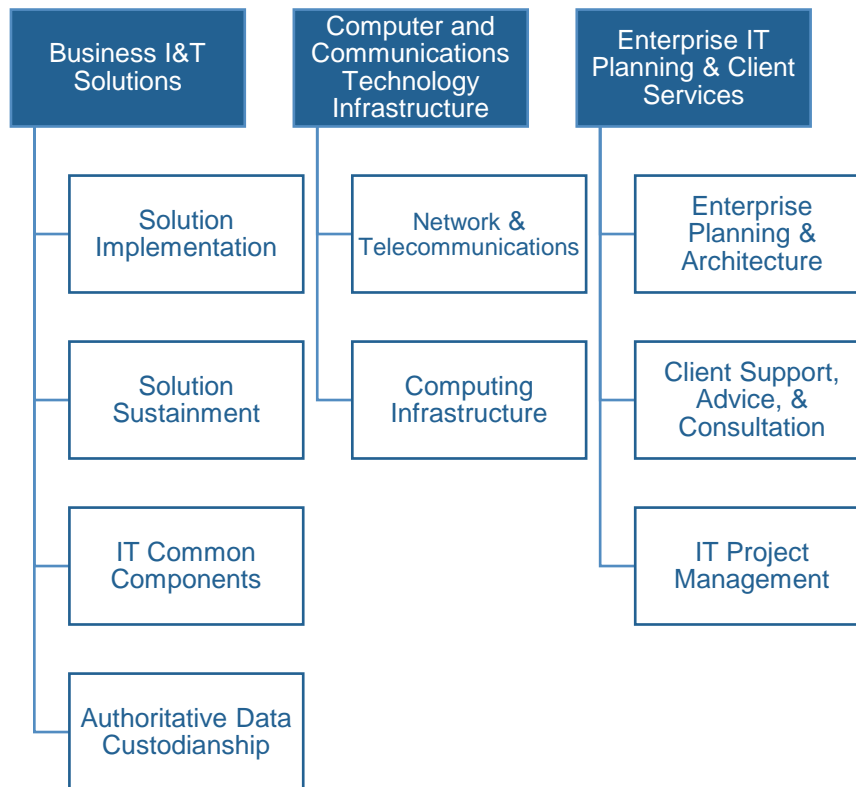


INFORMATION & TECHNOLOGY SERVICES

PROGRAM MAP

Information & Technology



Business I&T Solutions

Deliver Information Technology (IT) Solutions to enable the business capabilities required by the City to deliver services

Provide solution and component acquisition, configuration, development, sustainment and implementation of applications and solutions, as well as ongoing client support.

Computer and Communications Technology Infrastructure

Manage the City's computing infrastructure, including: desktop and mobile devices such as laptops and tablets, printers and other peripheral devices; and data centre services hosting servers and storage equipment; databases, application development platforms; security products and services.

Manage the City voice and data communications networks to approximately 29,000 staff at 700 locations. This includes both internal and external communications via the Internet to support business applications, email and fax, telephones (landlines and cell phones).

Enterprise IT Planning & Client Services

Provides a range of services to support enterprise strategic planning, enterprise architecture blueprint, portfolio planning and optimization and lifecycle management of IT projects.

Provides direct client support including client relationship management, client consultation and advice, service desk and IT training and education

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.
What is the average number of technology devices in use?	Average Number of IT devices per Total Municipal FTE – (Service/Activity Level Indicators)	<p style="text-align: center;">Increase</p> <p>Increased year over year growth of IT devices used by staff in comparison to other municipalities (Service/Activity Level Indicators)</p>	<p style="text-align: center;">1</p> <p>Higher number of IT devices used by staff compared to other municipalities (Service/Activity Level Indicators)</p>	15.1 15.2 pg.5/6
What is the average number of laptops and tablets in use?	Average Number laptops and tablets per Total Municipal FTE – (Service/Activity Level Indicators)	<p style="text-align: center;">Increase</p> <p>The number laptops and tablets used by staff increased (Service/Activity Level Indicators)</p>	N/A	15.1 15.2 pg. 5/6
What is the average number desktops and thin clients in use?	Average Number desktops and thin clients per Total Municipal FTE – (Service/Activity Level Indicators)	<p style="text-align: center;">Stable</p> <p>The number of desktops and thin clients used by staff was stable (Service/Activity Level Indicators)</p>	N/A	15.1 15.2 pg. 5/6
What is the average number of smart phones in use?	Average Number smart phones per Total Municipal FTE – (Service/Activity Level Indicators)	<p style="text-align: center;">Increase</p> <p>The number smart phones used by staff increased (Service/Activity Level Indicators)</p>	N/A	15.1 15.2 pg. 5/6

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 much is spent on IT services for each staff member supported?	Operating Cost for IT Services per service area Municipal FTE – (Service/Activity Level Indicators)	Decrease Operating cost for IT services per staff supported decreased slightly in 2017 (no graph) (Service/Activity Level Indicators)	2 Higher rate of IT investment per municipal staff member supported in comparison to other municipalities (Service/Activity Level Indicators)	15.3 pg.7
How frequently is the City's website visited?	Number of Visits to Municipal Website per Capita – (Community Impact Measure)	Stable Website visits was stable (Community Impact Measure)	3 Lower rate of website visits compared to others (Community Impact Measure)	15.4 15.5 pg. 8/9
What is the overall customer satisfaction with IT Services in Toronto?	Overall Customer Satisfaction of Toronto's IT Services – (Customer Service Measure)	Stable and High Stable rate of customer satisfaction with IT Services (90%) as well as above target levels. (Customer Service Measure)	No Chart Customer Satisfaction is currently not an MBNC Canada measure	15.6 pg. 10

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)
<div style="background-color: green; width: 100%; height: 10px; margin-bottom: 2px;">3 - Increased</div> <div style="background-color: yellow; width: 100%; height: 10px; margin-bottom: 2px;">1 - Stable</div> <div style="background-color: red; width: 100%; height: 10px;">0 - Decreased</div>	<div style="background-color: green; width: 100%; height: 10px; margin-bottom: 2px;">0 - Favourable</div> <div style="background-color: yellow; width: 100%; height: 10px; margin-bottom: 2px;">2 - Stable</div> <div style="background-color: red; width: 100%; height: 10px;">0 - Unfavourable</div>	<div style="background-color: green; width: 100%; height: 10px; margin-bottom: 2px;">1- 1st quartile</div> <div style="background-color: yellow; width: 100%; height: 10px; margin-bottom: 2px;">1 - 2nd quartile</div> <div style="background-color: yellow; width: 100%; height: 10px; margin-bottom: 2px;">0 - 3rd quartile</div> <div style="background-color: red; width: 100%; height: 10px;">0 - 4th quartile</div>	<div style="background-color: green; width: 100%; height: 10px; margin-bottom: 2px;">0 - 1st quartile</div> <div style="background-color: yellow; width: 100%; height: 10px; margin-bottom: 2px;">0 - 2nd quartile</div> <div style="background-color: yellow; width: 100%; height: 10px; margin-bottom: 2px;">1 - 3rd quartile</div> <div style="background-color: red; width: 100%; height: 10px;">0 - 4th quartile</div>
100% stable or increased	100% favourable or stable	100% in 1st and 2nd quartiles	0% 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 11 single-tier municipalities.

SERVICE LEVELS

One of the main goals of Information and Technology Services is to drive innovative solutions that enhance the delivery of City Services. One way this is done is by providing and support municipal staff with technology and equipment to assist them with their daily operations.

15.1 – WHAT IS THE AVERAGE NUMBER OF TECHNOLOGY DEVICES IN USE BY TORONTO STAFF?

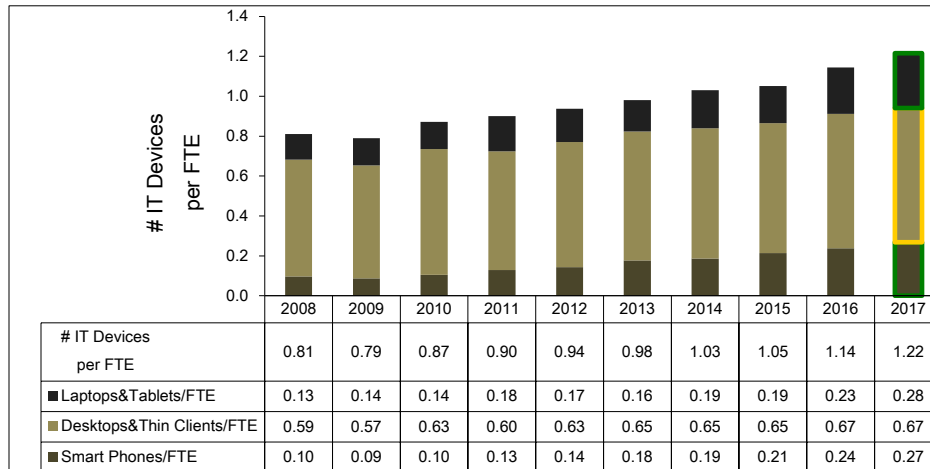


Chart 15.1 provides the technology types per supported Full Time Equivalent staff (FTE) over a period of ten years, including laptops and tablets, desktops, and smart phones.

Chart 15.1 (City of Toronto) Average Number of IT Devices per Total Municipal FTE

In 2017, there was an increase in total devices per FTE of 7 percent in comparison to the previous year. This increase was due to improvements in business mobility access everywhere driven by the use of laptops, tablets and smartphones and facilitated through equipment refresh programs and an Office Modernization pilot program in City buildings.

15.2 – HOW DOES TORONTO'S AVERAGE NUMBER OF IT DEVICES IN USE COMPARE TO OTHER MUNICIPALITIES?

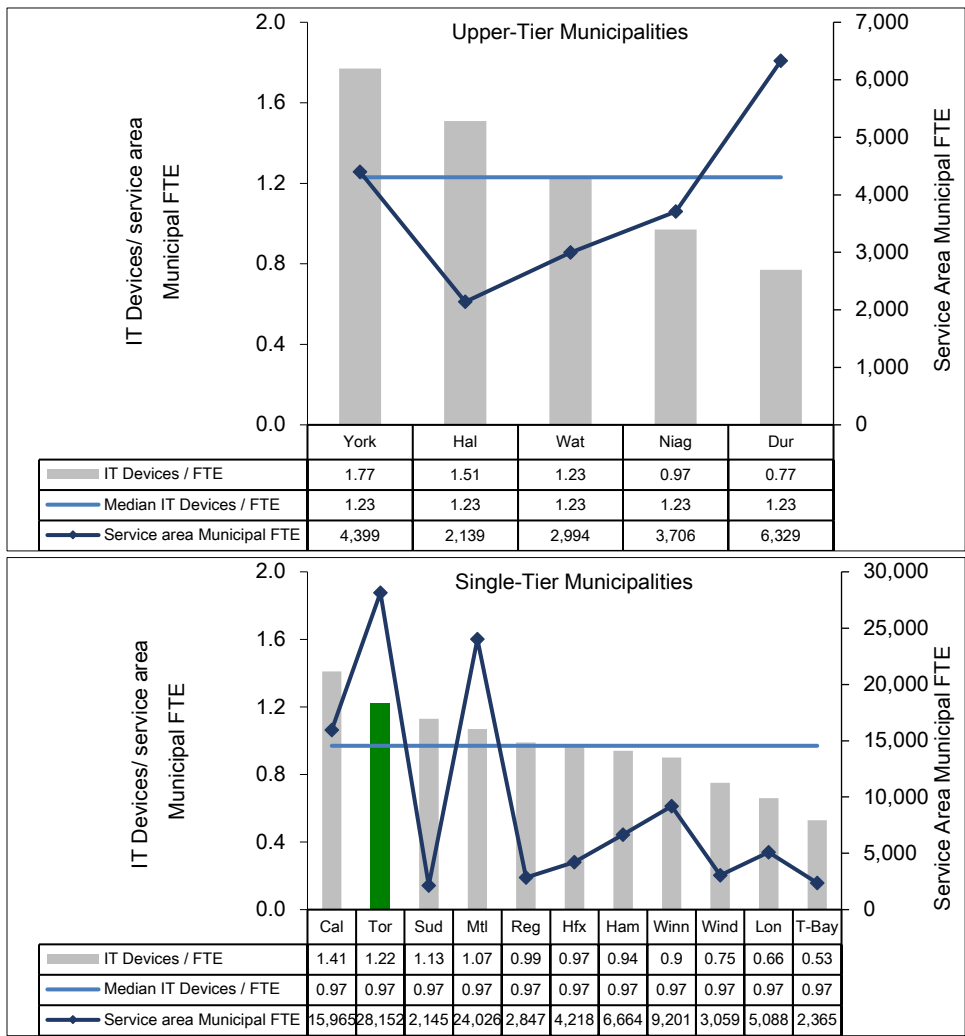


Chart 15.2 compares Toronto's IT Devices per service area Municipal FTE to the other municipalities.

Chart 15.2 (MBNC 2017) Average Number of IT Devices per service area Municipal FTE

In terms of having a higher number of IT devices per service area Municipal FTE, Toronto ranks second of eleven single-tier municipalities (first quartile).

As mentioned above, there was an increase in the total (and therefore, the average) number of devices per service area Municipal FTE in 2017 from the previous year due to a focus on improving business mobility access everywhere through the use of laptops, tablets and smartphones by City of Toronto employees. It should also be noted that Toronto IT staff supports a far larger amount of staff (FTE) at the City of Toronto compared to all other cities.

15.3 – HOW DOES TORONTO'S COST FOR IT SERVICES COMPARE TO OTHER MUNICIPALITIES?

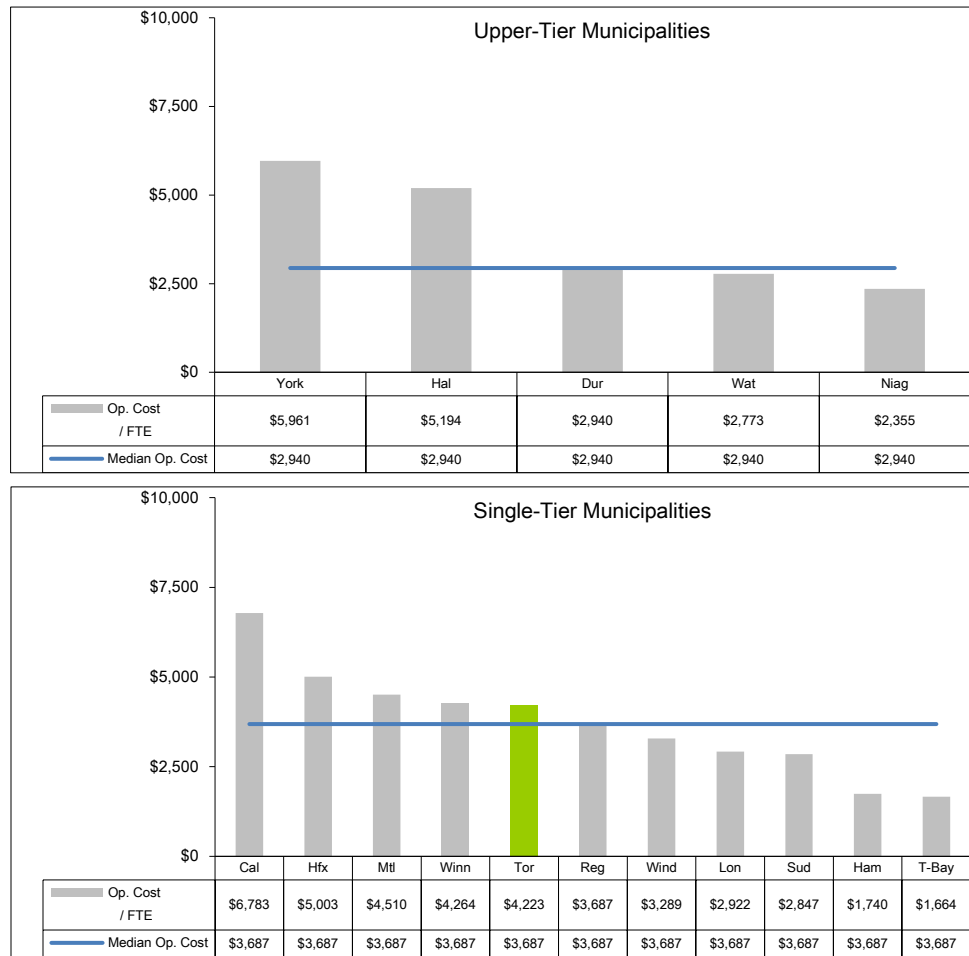


Chart 15.3 provides one way to examine the level of investment in IT services, in relation to the staff supported, using an indicator of cost/investment of IT services per staff member supported.

Chart 15.3 (MBNC 2017) Operating Cost for IT Services per Municipal FTE Supported with IT Account

These costs relate to all IT activities, described in the introductory section of this Chapter, but excludes annual capital investments related to IT assets.

In comparison to other municipalities, Toronto ranks fifth of eleven single-tier municipalities (second quartile) in terms of highest operating costs/investment per municipal staff member supported.

COMMUNITY IMPACT

One of the main goals of IT services is to facilitate communication of information and completion of transactions between the City government, residents and other users, through the City's website. One method to assess the effectiveness of providing these functions is to examine how frequently the website is visited.

15.4–HOW FREQUENTLY IS TORONTO'S WEBSITE VISITED?

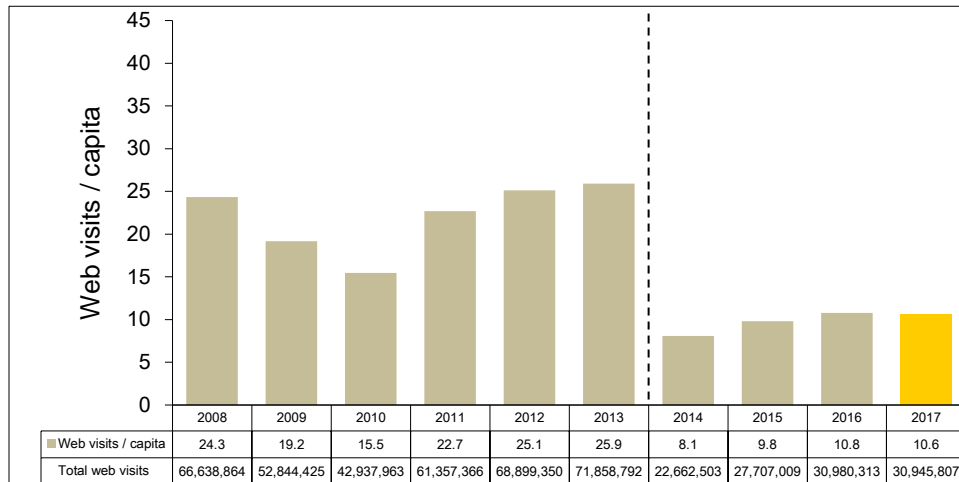


Chart 15.4 provides Toronto's data on the total number of website visits by year as well as the number of visits per capita.

Chart 15.4 (City of Toronto) Number of Visits to Municipal Website per Capita

Web visits per capita remained relatively stable for 2017. The significant variance from 2013 to 2014 is due to use of a different web analytics tool and methodology.

In 2014 the City improved and expanded the use of its web analytics tool to more accurately track the usage of toronto.ca.

The reporting tool was further upgraded to the online version on December 2017, so the results are a combination of the old and new tool's reports.

The new tool and analytics better reflects actual user visits and not web-crawlers/robots so the numbers are slightly lower than they would have been under the old tool.

The total number of website visits is expected to grow in 2018 and beyond for this reason.

15.5 – HOW FREQUENTLY IS TORONTO'S WEBSITE VISITED COMPARED TO OTHER MUNICIPALITIES?

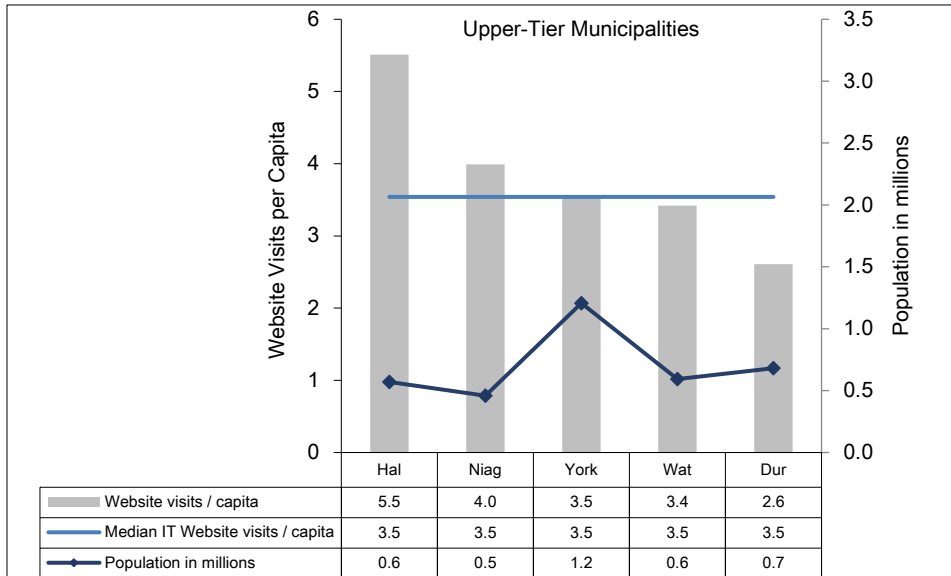
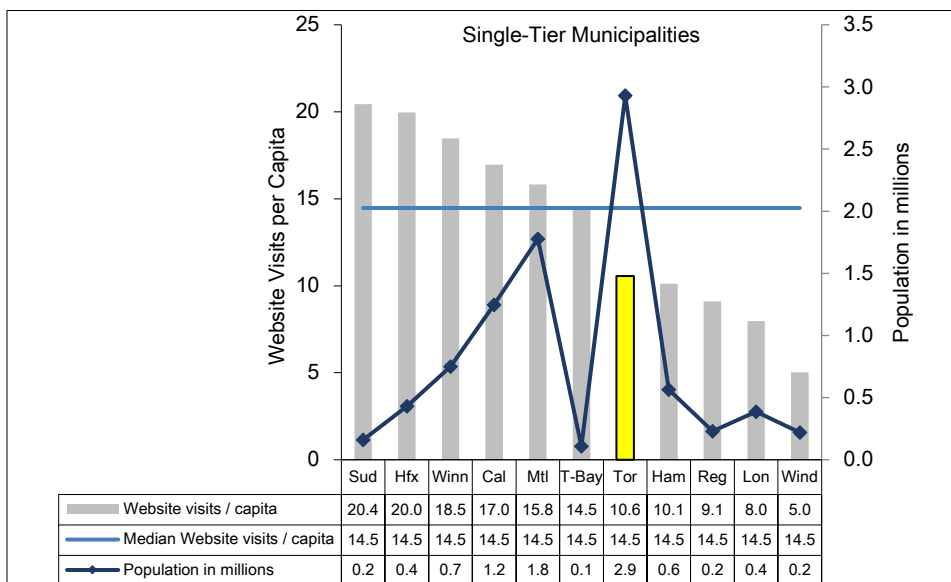


Chart 15.5 compares Toronto's 2017 website visits per capita to other municipalities.

Toronto's results do not include visits to the TTC website, as well as visits to on-line service transactions, which might be captured by some of the other participating municipalities.



Toronto ranks seventh of eleven single-tier municipalities (third quartile) in terms of the highest number of website visits per capita.

Chart 15.5 (MBNC 2017) Number of Visits to Municipal Website per Capita

CUSTOMER SERVICE

Customer satisfaction of a service is one method to identify the levels of customer service provided by that service to its users.

15.6 – WHAT IS THE OVERALL CUSTOMER SATISFACTION WITH IT SERVICES IN TORONTO?

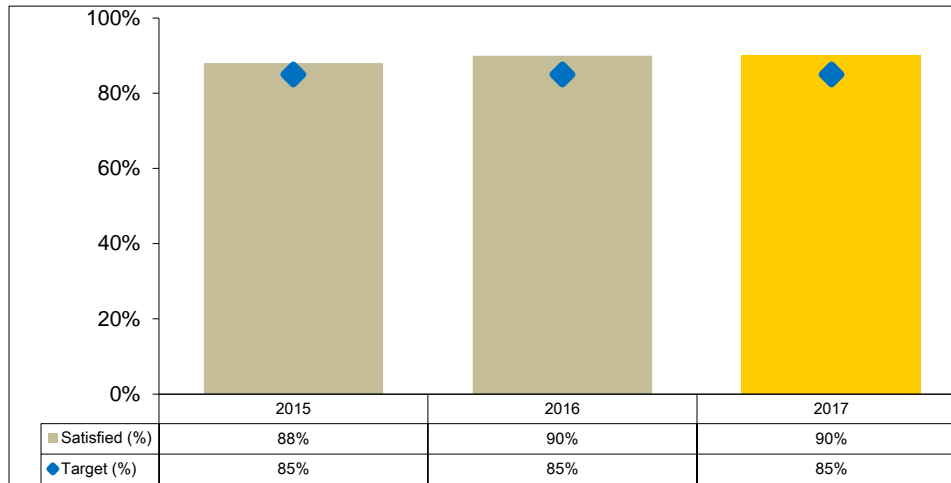


Chart 15.6 displays the overall customer satisfaction with IT Services in Toronto.

Chart 15.6 (City of Toronto) Overall Customer Satisfaction of Toronto's IT Services

The percent of overall customer satisfaction with IT services in Toronto was stable compared to 2016 results. Moreover, the overall satisfaction levels in 2017 exceeded the target levels of 85%. The satisfaction target levels are set for 85% for the next 4 years until 2020. The increase in levels of satisfaction of Toronto's IT Services was the result of continuous client service improvement initiatives.

2017 ACHIEVEMENTS AND 2018 PLANNED INITIATIVES

The following initiatives improve the efficiency and effectiveness of services through the use of Information and Technology solutions across Toronto.

2017 Initiatives Completed/Achievements

In 2017, Information & Technology made significant progress and/or accomplished the following:

- Municipal Licensing digital transformation and innovation by implementing an end to end digital process for over 60,000 Vehicle for Hire licenses since 2016 supporting the ride sharing economy, providing modernized service delivery and operational efficiencies.
- Implemented numerous City website www.toronto.ca enhancements for over 16,000,000+ visitors annually, improving public access to City services.
- Enhanced the Online Citizen experience improving access to Solid Waste Management Services to help residents and business determine how to sort and properly dispose of their unwanted items.
- Winter road Maintenance Online Map now allows residents to see when Toronto roads have been cleared and de-iced to support effective commuting.
- MyWaterToronto allows residents to view their household water usage online by day, week, month or year, helping foster water conservation.
- RentSafeTO helps inform the public and prospective tenants on information concerning a building maintenance and upkeep.
- Automated data entry to the Fleet Fuel Management System used by the City and Agencies thereby increasing accuracy, reliability of data saving 1,820 person hours and approximately \$388,000.
- Supported the Permit Parking Renewal process for Transportation Services for 53,000 citizens to renew over \$105,000 permits annually, generating over \$9.0 million in revenue.
- Expanded Open Data for the City to 246 datasets and 1,108 published providing greater accessibility and transparency to citizens.
- Responded to 186,000 IT service desk calls annually.
- Resolved 37,000+ application requests and 1,300+ changes for over 850 City applications.
- Developed new Open Data Portal (in Beta) that will fundamentally improve and transform how citizens engage and visualize data.
- Launched a new Online Tax & Water Certificate service that is available 24/7 and allows clients to obtain a certificate within 30 minutes (as compared to the previous time of 5 days).
- Enhanced MLS Licensing System to automate Council-ordered refunds for 1000+ licensees, accept digitized documents in Licensing Mobile App and enable multi-offence long-form to summon from the system.
- Refreshed IT equipment across the City as part of life cycle management including 2,200 desktops/notebooks/tablets, 162 servers, 411 printers, 4,774 monitors, and upgraded 103 network devices.
- Provided business application infrastructure (security, the internet, database, servers, and storage) for over 850 applications City-wide including many 7/24/365 requirements.
- The I&T Division has also been the recipient of two Municipal Information Systems Association Awards, one Digital Transformation Award, one Open Cities Index Award, and two City Manager Awards.

2018 Initiatives Planned

The 2018 Operating Budget will enable the I&T Programs to continue to:

- Enhance City Programs and Services in partnership with City divisions and to the public through the delivery and support for over 850+ enterprise and division business systems, including:
- Respond to 1000+ requests for enhancements and growth of business systems across the City to meet public demands and business needs.
- Maintain the City's technology network, application systems and technology infrastructure in a secure, reliable and high performance manner and state of good repair to ensure 7/24/365 availability.
- Deliver effective Client Support for over 23,000+ City employees through the City's IT service desk, technical and business application support and IT education.
- Work collaboratively with Agencies and Commissions to drive innovation and to accelerate enablement efforts associated with the delivery of City services and programs.

Factors Influencing Results of Municipalities

Each municipality's results are influenced to varying degrees by a number of factors, including:

- **Devices:** The device numbers and types could be influenced by the types of services provided and or organizational culture.
- **IT Services:** The type of IT services provided may vary from one municipality to another, i.e. does IT include GIS, Telecommunications, etc.
- **Organizational Form:** The extent to which IT services are centralized or decentralized can influence reported results, i.e. services may also be contracted out, directly impacting FTE levels.
- **Municipal Topology:** The physical territory covered within the municipal boundaries and associated resident density can influence technology delivery mechanisms and associated costs.
- **Additional Information:** Cost measure results may vary from previous years and between municipalities that are able to obtain the full costs of decentralized IT goods and services. Decentralized goods and services refer to IT costs that are outside of the IT department's budget. Total IT costs include all IT operating costs, as well as amortization.