311 Toronto –
Full Potential For Improving Customer Service
Has Yet To Be Realized

October 17, 2011

Jeffrey Griffiths, C.A., C.F.E.
Auditor General
City of Toronto
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY** .............................................................. 1

**AUDIT OBJECTIVES, SCOPE AND METHODOLOGY** .................. 3

**BACKGROUND** ........................................................................ 4

**AUDIT RESULTS** ...................................................................... 9

A. Telephone Response Time Requires Improvement .................. 9
   A.1. Long Wait Time Impact Customer Service ............................... 9
   A.2. Factors Affecting Service Level and Wait Time ..................... 11

B. Service Request Processing Could Be Improved ..................... 14
   B.1. Opportunities to Improve Divisional Call Center Efficiency .... 15
   B.2. Service Request Information Can Be Confusing to the Public ... 17
   B.3. Response to Divisional Change Requests Has Not Been Timely . 18
   B.4. Service Level Agreement Has Not Been Finalized ................. 18

C. Cost Saving Opportunities ....................................................... 19
   C.1. Better Alignment of Call Volume With Staff Level ................. 19
   C.2. Review of Information Technology Resources ....................... 21
   C.3. Incorporation of Telephone Self-Serve Technologies ............. 22
   C.4. Incorporation of a Customer Satisfaction Survey Into Website . 23

D. Other Issues ............................................................................. 24
   D.1. Capital Fund for Divisional 311 Preparedness Should Be Re-assessed... 24
   D.2. Interdepartmental Charges Should Be Based on Updated Data .... 25

**CONCLUSION** ........................................................................... 26
EXECUTIVE SUMMARY

The Auditor General’s 2011 Audit Work Plan included a review of 311 Toronto operations. The audit objective was to assess the operating effectiveness and efficiency of 311 Toronto.

City launched 311 Toronto in September 2009

The City achieved a significant milestone in improving customer service when it launched 311 Toronto in September 2009. Located in the former Metro Hall Council Chamber, 311 Toronto Contact Center provides the public with one easy-to-remember phone number to obtain non-emergency City services and information 24 hours a day, seven days a week.

City invested significant financial and human resources in establishing 311 Toronto

With capital fund totaling $36.3 million and five years of planning and development since 2004, the City has invested significant financial and human resources in establishing 311 Toronto.

Benchmarking results

Based on the information available, the 311 operations of New York, San Francisco, Calgary and Ottawa answer a higher percentage of incoming calls, maintain a lower staff absenteeism rate, and operate with a relatively lower level of staff resources when compared to 311 Toronto. These comparisons may not take into account each operation’s unique aspects of service delivery and staffing model. We also recognize that the 311 operations in the benchmarked municipalities have been in existence for a longer time than 311 Toronto.

Call response statistics

Based on March 2011 call statistics, 1 in 5 calls to 311 Toronto was not answered, and 1 in 10 callers waited longer than 3 minutes before the call was answered.

The varying performance level among individual contact center staff, the high staff absenteeism rate, and the existing monitoring system, impact 311 Toronto’s ability to answer calls in a timely manner and should be addressed.
Service request processing

In addition to answering general inquiries, 311 Toronto is responsible for creating service requests for five City divisions. The service request process can be enhanced by:

- Reviewing the business processes of three divisional call centers to identify streamlining opportunities and better alignment with 311 Toronto;

- Improving the clarity of on-line information on service request status to avoid customer confusion;

- Responding to change requests from divisions in a timely manner; and

- Finalizing the Service Level Agreement with divisions.

Cost saving opportunities

The audit also identified a number of opportunities to improve operations while reducing costs:

- Ensuring the number of 311 contact center staff on overnight shift matches call volume;

- Reviewing the level and placement of Information Technology staff currently designated for supporting 311 Toronto;

- Developing a business case on incorporating telephone self-serve technologies into 311 operation to help improve call response and efficiency; and

- Incorporating a customer satisfaction survey into 311 website to gather instant customer feedback at minimal cost.

Conclusion

311 Toronto was launched approximately two years ago and is in its early implementation stage. As it continues to develop and mature, staff will have more time and experience to improve operation and services.
**Audit offers a timely and objective evaluation**

As 311 Toronto is entering its third year of implementation, this report offers a timely and objective evaluation of service level and operating efficiency, as well as opportunities for cost-saving. Implementation of the 12 audit recommendations contained in this report will help improve 311 Toronto’s customer service and efficiency.

### AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

The Auditor General’s 2011 Audit Work Plan included an audit of 311 Toronto operations. The overall objective of the audit was to assess the operating effectiveness and efficiency of 311 Toronto. In particular, the objectives of the audit were to determine whether:

<table>
<thead>
<tr>
<th>Focus of the audit was on operational effectiveness and efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 311 Toronto was implemented in accordance with Council approved funding and timelines</td>
</tr>
<tr>
<td>- 311 Toronto improves customer services by providing accurate, timely, and effective responses to public inquiries and service requests</td>
</tr>
<tr>
<td>- 311 Toronto provides other benefits to the City including cost savings and improved efficiency of City services.</td>
</tr>
</tbody>
</table>

The audit covered the period from January 1, 2010 to June 30, 2011.

<table>
<thead>
<tr>
<th>Current review did not include an evaluation of procurement process</th>
</tr>
</thead>
<tbody>
<tr>
<td>This review did not include an evaluation of the procurement process pertaining to 311. We are currently reviewing this particular aspect and if significant issues are identified we will report on this in early 2012.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audit methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>The audit methodology included the following:</td>
</tr>
<tr>
<td>- A review of staff reports and documents, financial information, and divisional policies and procedures</td>
</tr>
<tr>
<td>- Interviews with staff of 311 Toronto and the five City divisions whose service requests are created by 311 Toronto</td>
</tr>
</tbody>
</table>
Analyses of operational and performance measure data, and

A review of 311 literature including articles, audit reports, and news articles.

For benchmarking purposes, the following cities’ 311 operations were contacted for comparative information:

- New York City
- San Francisco
- Calgary
- Ottawa

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

BACKGROUND

Initiation of Toronto’s “311”

Many large cities have 311 for non-emergency services

The use of 311 by municipalities began in the late 1990s after the U.S. Federal Communication Commission approved the exclusive use of 311 as a national telephone number for non-emergency services. The City of Chicago was the first to successfully implement a comprehensive 311 system in 1999. Many other U.S. cities followed suit including New York, Los Angeles, and San Francisco.

In 2003 Toronto and a number of other Canadian cities submitted a joint application to the Canadian Telecommunications and Radio-Television Commission for the designation of telephone number 311 for non-emergency municipal services. The application was approved in 2004. Many Canadian cities including Calgary, Windsor, Ottawa, and Montreal, have since established a 311 service.
City Council approved a 311 Strategy in 2004

Toronto City Council at its September 2004 meeting adopted a 311 Customer Service Strategy that defined the vision, mission, strategic goals, and design elements of a new 311 model of customer service.

Council Approved 311 Priorities

A blueprint for a 311 contact center was developed in 2005

Further development of the Toronto 311 Strategy was guided by a Council-Staff Working Group comprised of elected officials and senior management staff. After extensive analyses, the Council-Staff Working Group in 2005 recommended a service model consisting of a 311 contact center that:

- Provides a single published telephone number and e-mail address for easy public access
- Consolidates several City wide call center inquiry functions
- Provides general inquiry information
- Accepts and tracks service requests for five City divisions
- Reduces call transfers by answering 70 per cent of calls at point of first contact.

Following Council approval of the recommended 311 service model, a 311 Project Management Office was established for implementation, and a Steering Committee comprised of the City Manager and other senior management staff was formed to provide project oversight and high-level guidance.

Implementation Phases

Implementation of the project was phased in as follows:

Phase 1 – Public launch of 311 contact centre with capacity to answer general inquiries for all City divisions and create service requests for three City divisions

Phase 2 – Extend service request capacity to a total of five City divisions.

Due to a delay in procuring an information system for the contact center and the 2009 labour disruption, Phase 1 was implemented twelve months after the targeted timeline. Phase 2 was fourteen months delayed from its original targeted date.
Phase 1 was completed in September 2009 when Toronto launched its new 311 contact centre to the public. Located in the former Metro Hall Council Chamber, the contact centre provides the public with one easy-to-remember phone number to obtain non-emergency City services and information 24 hours a day, seven days a week.

After completing Phase 2 in May 2010, the 311 contact center has the capacity to answer all general inquiries and create requests for service for the following five City divisions:

- Solid Waste Management Services
- Transportation Services
- Toronto Water
- Municipal Licensing and Standards
- Urban Forestry (part of the Parks, Forestry and Recreation Division)

Residents can reach customer service staff by phone or email, or access City information directly through the 311 website. For most City services, residents can call 311 to create a service request and receive a tracking number to find out the status of their requests either via phone or on-line.

Phase 3 has been commenced to add Animal Services and recreational program registration to the 311 service request menu.
Capital Funding for Initial Implementation

City Council in 2005 initially approved a total of $26.9 million for capital funding for 311 implementation, specifically $1.7 million for 2005 and $25.2 million for 2006-2008 (Figure 1).

Staff subsequently requested an additional $8.5 million in its 2007 capital budget, and $2.8 million in its 2009 capital budget (Figure 1). Both funding requests were approved by City Council.

Figure 1 Council Approved Capital Budget for 311 Customer Service Strategy

<table>
<thead>
<tr>
<th>Annual Capital Budget</th>
<th>Purpose</th>
<th>Council Approval ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>311 preparatory activities</td>
<td>$1.7</td>
</tr>
<tr>
<td>2006</td>
<td>Project implementation 2006-2008</td>
<td>$25.2</td>
</tr>
<tr>
<td>2007</td>
<td>Additional funding for procurement of an information system</td>
<td>$8.5</td>
</tr>
<tr>
<td>2009</td>
<td>Additional staff resources to complete 311 implementation</td>
<td>$2.8</td>
</tr>
<tr>
<td><strong>Total approved</strong></td>
<td></td>
<td><strong>$38.2</strong></td>
</tr>
</tbody>
</table>

With the additional funding requests, the capital budget approved by Council for initial 311 implementation totaled $38.2 million. Actual expenditures for 311 implementation were $36.3 million by the end of 2010.

A significant portion of 311 Toronto’s capital costs were for acquiring an information technology vendor to design and implement a technology solution for the contact center, including hardware and software technologies, professional services, documentation, and training. The City issued two Requests for Proposal and evoked a Best and Final Offer process to select a preferred proponent.

Current review did not include an evaluation of procurement process

This review did not include an evaluation of the procurement process pertaining to 311. We are currently reviewing this particular aspect and if significant issues are identified we will report on this in early 2012.
Organizational Structure and Annual Operating Budget

A new 311 Toronto Division was created to implement the 311 Customer Service Strategy. Led by a Director, the Division is responsible for operating the contact center and a Project Management Office.

As of March 2011, the Division consisted of 188 staff including:

- 108 Customer Service Representatives for the contact centre
- 43 staff for the Project Management Office, and
- 37 support and supervisory staff.

The approved 2011 operating budget for 311 Toronto was $19.1 million gross and $9.7 million net.

Core Service Review Recommendations Respecting 311

City Council in 2011 approved a Core Service Review in preparation of the 2012 budget process. The firm KPMG LLP (KPMG) was retained to review all City services and identify opportunities to change services and service levels.

City Council in September 2011 approved, as amended, 16 recommendations from the City Manager in relation to the KPMG review. Included in the approved recommendations are two relating to 311:
Two Core Service Review recommendations are related to 311

“1. City Council approve the following actions and service level adjustments:
   a. 311- Eliminate development capacity in 2013 when 311 is fully implemented;”

“12. City Council refer the following motions from the special Standing Committee meetings to the City Manager for consideration, to determine whether and in what manner implementation is appropriate through the 2012, 2013 and 2014 Operating Budgets, subject to Toronto Municipal Code Chapter 71, Financial Control, City, and agency collective agreements, and human resource policies:
   b.i. The identification of which components of 311 could be outsourced – from the call centre to the technology – and the potential savings and timelines of outsourcing of the 311 call center;”

Our audit findings and recommendations will help facilitate the City Manager’s assessment and determination of an appropriate and cost effective 311 structure and service level in future budget consideration.

AUDIT RESULTS

A. Telephone Response Time Requires Improvement

A.1. Long Wait Time Impact Customer Service

The majority of the public contact 311 Toronto by phone

Among the different channels the public can reach 311 Toronto, telephone continues to be the predominant method and accounts for approximately ninety per cent of contacts. In 2011, 311 Toronto receives approximately 100,000 telephone calls per month. Email, fax, and on-line inquiries account for the remaining 10 per cent of contacts.
An important measure for customer service is call wait time. The public expectation, according to a national survey of Canadian citizens conducted by the Institute for Citizen-Centred Service, is less than 30 seconds call wait time before speaking to an agent.

311 Toronto’s current service target is to answer by agents 80 per cent of calls within 75 seconds. This target level was established by contact center management. According to 311’s monthly statistics, the percentage of calls answered within the targeted 75 seconds has declined from approximately 80 per cent between January and March to approximately 50 per cent in May and June 2011. The decline in service level was related to increasing call volume in summer months. A similar pattern was experienced in 2010.

This particular service target (80 per cent of calls answered within 75 seconds), however, pertains only to the wait time of calls that are answered by 311 staff. A considerable number of calls to 311 Toronto are not answered by agents, and they are not captured in the service level data.

Figure 2 depicts the disposition and wait time based on all incoming calls to 311 Toronto during March 2011.

**Figure 2 Call disposition and wait time, 311 Toronto, March 2011**

* Immediately disconnected calls (e.g. wrong number, pocket dial) were removed from the total incoming call number

Over 20% of calls to 311 Toronto were not answered by agents

An average of 21 per cent of calls to 311 Toronto during March 2011 were not answered by agents. This average was likely higher in May and June when call volume increased significantly and callers were encouraged by the broadcast message to obtain the information on-line or call back later.
311 Toronto’s percentage of calls not answered (known as “call abandoned rate” in 311 operations) appears to be high when compared with other 311 operations, but each 311 operation may have a different method to measure the call abandoned rate making a precise comparison difficult.

For callers who decided to wait, based on a daily wait-time analysis of March phone records, on average 9 per cent of callers waited longer than 3 minutes before answered by an agent. Even for calls that were not answered, many waited longer than 3 minutes before hanging up.

In a nutshell, one in five calls to 311 Toronto was not answered by an agent, and one in ten waited longer than three minutes before the call was connected to an agent.

A.2. Factors Affecting Service Level And Wait Time

Figure 3 lists the monthly contact volume, staff complement, service level, and average call handling time of Toronto and other 311 operations. These benchmarked operations in general provide services similar to 311 Toronto (i.e. answer general enquiries and create service requests), but each 311 operation has its unique aspects of service delivery and staffing model.

---

**Figure 3** Average monthly incoming calls/emails, number of staff answering calls/emails, and service level statistics, January to March 2011

<table>
<thead>
<tr>
<th>City</th>
<th>Population (millions)</th>
<th>Monthly call/email volume</th>
<th>Num of staff</th>
<th>Volume to staff ratio</th>
<th>Service level achieved</th>
<th>Average call handling time (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>8.2</td>
<td>530,555¹</td>
<td>340</td>
<td>1,560:1</td>
<td>Answered 82% calls in 30 seconds</td>
<td>224</td>
</tr>
<tr>
<td>San Francisc o</td>
<td>0.8</td>
<td>221,666</td>
<td>68.5</td>
<td>3,236:1</td>
<td>Answered 75% calls in 60 seconds</td>
<td>90</td>
</tr>
<tr>
<td>Calgary</td>
<td>1.1</td>
<td>100,313²</td>
<td>65</td>
<td>1,543:1</td>
<td>Answered 55% calls in 68 seconds</td>
<td>210</td>
</tr>
<tr>
<td>Ottawa</td>
<td>0.8</td>
<td>53,200</td>
<td>27</td>
<td>1,970:1</td>
<td>Answered 73% calls in 120 seconds</td>
<td>184</td>
</tr>
<tr>
<td>Toronto</td>
<td>2.6</td>
<td>107,306</td>
<td>108</td>
<td>994:1</td>
<td>Answered 78% calls in 75 seconds³</td>
<td>220</td>
</tr>
</tbody>
</table>

---

1. Average 2.4 million incoming calls per month; average 530,555 calls answered by agents after initial screening by auto messages
2. Provided 2010 data
3. The service level is based on the percentage of calls answered by 311 rather than total incoming calls as shown in Figure 2
On a comparative basis, 311 Toronto employs more call answering staff than other cites after adjusting for call volume. For instance, while 311 Toronto’s call volume is similar to that of Calgary 311, Toronto has nearly twice as many staff as Calgary.

Figure 3 also shows that 311 Toronto’s average call handling time is comparable with New York and Calgary 311 within the range of 200 seconds per call.

Based on a comparison of Toronto with other 311 operations, it does not appear that insufficient staff level or prolonged call handling time are the primary factors affecting service level.

Our audit identified other factors that could be attributable to current service issues and they are:

a. Varying staff performance levels
b. High absenteeism rate
c. Existing monitoring system
d. Early implementation stage

### Varying staff performance levels

According to 311 Toronto statistics, the average number of calls answered per staff person per hour is 7.4 in 2011, or 52 calls per staff person per day. The targeted number set by management is 80 calls per person per day.

A sample review of March daily call logs found that more than half of staff (working on regular day shifts) did not meet the daily call target. Furthermore, the levels of performance varied significantly between individual staff. For instance, working on the same date and time period, one staff person answered a total of 29 calls within the shift, while another answered 98 calls. The sharp performance contrasts were consistent among the same individuals over a number of days.

### Numerous gaps between calls in certain staff’s call logs

Among staff who answered significantly fewer calls, their daily telephone logs consisted of numerous 5-20 minute gaps between calls. According to management staff, these gaps could be for “after-call wrap up” activities such as consultation with supervisors, paper work, and training. These particular activities however appeared to be more prevalent among certain individual staff than others.
b. High staff absenteeism rate

311 Toronto experiences high absenteeism rates among contact center staff. Based on a review of January to March 2011 data, on average 12 per cent of staff each day were absent due to sickness, ill dependent, or non-scheduled time off. The daily unplanned absenteeism rates ranged from the lowest 1 per cent to the highest 23 per cent between January and March 2011. This high level of absenteeism was not reported by other 311 operations we contacted.

c. Existing monitoring system

311 Toronto has a comprehensive management information system to monitor both quality and quantity of staff performance. For quality monitoring, supervisory staff regularly review and rate recorded telephone conversations to ensure responses are standardized and adequate.

For quantity monitoring, the management information system tracks staff daily activity by minute and the number of calls answered. Any unscheduled absence from the workstation is recorded by the system. According to management staff, performance issues are addressed in accordance with the Union Collective Agreement.

Despite the comprehensiveness of the current monitoring system, it does not appear to be conducive to improved performance. Management should re-assess the effectiveness of the existing monitoring system.

d. Early implementation stage

Unlike New York or Calgary 311 which have been in operation for a number of years, 311 Toronto was implemented approximately two years ago in September 2009. Staff are constantly addressing new requirements, procedural changes, and unanticipated challenges. As it continues to develop and mature, staff will have more expertise and experience to improve operation and services.
Recommendation:

1. City Council request the Director, 311 Toronto Division, to take steps to reduce call wait time and call abandoned rate (i.e., percentage of calls not answered). Such steps should include but not be limited to:

   a. Increasing the number of calls answered per staff per day;

   b. Addressing the daily absenteeism issue among contact center staff; and

   c. Ensuring effective monitoring measures.

B. Service Request Processing Could be Improved

311 Toronto currently has the capacity to electronically create service requests for five City divisions. Service requests are automatically transmitted to the respective divisional information systems, thereby eliminating additional data input by divisional staff. Data is transmitted from 311 system to divisional systems, and vice versa.

Between January and June 2011, 311 created a total of 132,795 service requests, accounting for approximately 25 per cent of all call/email contacts (75 per cent were for general inquiries). Figure 4 provides an analysis of the number of service requests and the top three service requests by division.
Figure 4  Number and top three service requests by division, 311 Toronto, January to June, 2011

<table>
<thead>
<tr>
<th>Division</th>
<th>Number of Service request (%)</th>
<th>Top three service requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Waste Management</td>
<td>51,926 (39%)</td>
<td>Missed collection, Garbage or recycle bin size exchange, Residential bin missing</td>
</tr>
<tr>
<td>Transportation Services</td>
<td>28,908 (22%)</td>
<td>Road- pot hole, Missing/damaged signs, Sidewalk – damaged/concrete</td>
</tr>
<tr>
<td>Toronto Water</td>
<td>26,049 (20%)</td>
<td>Water service line-turn off/on, Sewer service line – blocked, Watermain – possible break</td>
</tr>
<tr>
<td>Municipal Licensing and Standards</td>
<td>15,835 (12%)</td>
<td>Property standards, Waste, Zoning</td>
</tr>
<tr>
<td>Urban Forestry</td>
<td>10,077 (8%)</td>
<td>General pruning, Storm clean up, Stemming</td>
</tr>
<tr>
<td>Total</td>
<td>132,795 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

B.1. Opportunities to Improve Divisional Call Center Efficiency

Divisions continue to maintain their own call centers

Each of the five divisions, even after the establishment of 311, continues to maintain a divisional call center or similar unit totaling 40 staff and 4 supervisors (Figure 5).

Figure 5  Divisional call center staffing level, 2011

<table>
<thead>
<tr>
<th>Division</th>
<th>Number of staff</th>
<th>Number of supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Waste Management</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Transportation Services</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Toronto Water</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Municipal Licensing</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Urban Forestry</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>4</td>
</tr>
</tbody>
</table>

The two call centers managed by the Transportation Services and Toronto Water are responsible for responding to service requests and emergencies such as chemical spills on the highway and major watermain breaks. Each center maintains a large number of staff in order to provide 24/7 coverage for emergency coordination, a function that is outside the mandate of 311 Toronto.
Consolidation would improve efficiency but not economically viable

Consolidating these two separately operated emergency call centers into one center would have certain advantages such as sharing of staff resources for overnight and weekend coverage, and enabling seamless communication between the two divisions in emergency response. However, two recent divisional reviews did not find a sound business case for consolidation due to the complexity of work functions, legislated responsibilities, and significant equipment costs.

The remaining three divisional call centers - Solid Waste Management, Municipal Licensing and Standards, and Urban Forestry - operate during normal business hours and are primarily responsible for two functions:

- Secondary review of 311 service requests to ensure they are adequate and complete, and
- Distribution of service requests to the appropriate field staff or supervisors.

Municipal Licensing and Standards and Urban Forestry call center staff also perform work that is not related to 311 service requests.

Potential opportunities exist to streamline business processes of the three divisional call centers

While the functions of secondary review and distributing service requests to field staff are important, potential opportunities exist to streamline the processes.

For instance, the need for secondary review of service requests may be reduced by identifying and addressing common errors in creating service requests by 311 staff. Distribution of service requests to field staff or supervisors may be automated by the information system. Such an automation has already been implemented by the Transportation Services whose service requests are directly routed to district supervisors by the system.

We understand that the subject of merging these divisional call center resources into 311 Toronto has been discussed on a number of occasions but a mutually agreed model has not been reached by staff. A comprehensive, systematic review of business process of these divisional call centers, however, has not been conducted. A business process review may also identify ways to better align divisional call center functions with 311 Toronto.
Recommendation:

2. City Council request the Deputy City Managers, in consultation with the Director of 311, to conduct a comprehensive review of business processes of the call centers operated by Solid Waste Management, Municipal Licensing and Standards, and Urban Forestry, with a view to streamlining processes to effect a consolidation of operations.

B.2. Service Request Status Information Can Be Confusing to the Public

When a service request is created by 311 Toronto, the customer is provided with a reference number which can be used later to track request status either on-line or by calling 311 Toronto. During our audit in March 2011, we noted that when customers checking on-line, the “status” was shown as either “open” or “closed”. However, “closed” did not necessarily mean the service had been provided. Instead “closed” could mean a range of actions by divisional staff including:

- service has been provided
- investigation has been initiated and service pending, or
- service could not be provided for operational reasons.

The ambiguity of the “closed” status could be confusing and frustrating for customers, who might decide to call 311 Toronto for clarification or complaint. Not only did this unnecessarily increase 311 call volume, but it was clearly not good customer service.

In response to our audit concern, staff in June 2011 added extra categories to the service request status information. The expanded list now includes “in progress”, “submitted”, “suspended, “cancelled” and “completed”. While this has improved the status information, staff continue to work on providing further details to the on-line information.
Recommendation:

3. City Council request the Director, 311 Toronto Division, in consultation with the General Managers/Executive Director of Solid Waste Management, Transportation Services, Toronto Water, Municipal Licensing and Standards, and Parks, Forestry and Recreation, to improve the service request status information such that customers are provided with accurate and clear status information on-line.

B.3. Response to Divisional Change Requests Has Not Been Timely

Two important tools for 311 staff are the “knowledge base” which consists of a large database of City information, and “scripts” which contain specific questions to ask customers when creating service requests. These two tools must be up-to-date to provide customers with accurate information, and to create correct service requests.

When service procedures or requirements are changed, divisional staff submit change requests to 311 Toronto, which is responsible for amending the “knowledge base” and “scripts” accordingly. While 311 staff have been able to keep pace with changes to the “knowledge base”, changes to “scripts”, which are more complex, have not been made in a timely manner.

Recommendation:

4. City Council request the Director, 311 Toronto Division, to ensure timely response to divisional change requests such that information used by 311 agents is up-to-date to meet both divisional and customer needs.

B.4. Service Level Agreement Has Not Been Finalized

While 311 Toronto has been creating service requests for the five divisions, it has not finalized a Service Level Agreement with these divisions. Important issues such as “knowledge base” update protocol and frequency, reporting frequency and criteria, and dispute resolution procedures have not been formalized with the divisions.
Recommendation:

5. City Council request the Director, 311 Toronto Division, to expedite the finalization of a Service Level Agreement with the five City divisions whose service requests are created by 311 Toronto. Protocol and procedures relating to updating divisional information, reporting frequency and criteria, and dispute resolution are to be adequately addressed in the Service Level Agreement.

C. Cost Saving Opportunities

C.1. Better Alignment of Call Volume With Staff Level

To ensure effective scheduling of contact center staff, 311 uses specific software to forecast daily call volume and pattern based on previous weeks’ call statistics. According to the terms of the Collective Agreement, scheduling of full-time staff is fixed by a shift schedule, whereas scheduling of part-time staff is flexible and adjusted according to forecasted call volume.

Figure 6 illustrates the weekday hourly call pattern and staff level (including full and part-time) based on March 2011 data. The weekend call volume is usually lower and staff level is reduced accordingly.
80% of calls are received between 8:30 a.m. and 5:00 p.m.

The busiest call period is between 9:00 a.m. and 11:30 a.m.

The spike between 6 a.m. and 7 a.m. was a result of a large number of calls inquiring about the recreational program registration which took place in March 2011. Other than this, the March daily call pattern is fairly typical of general call patterns.

In general, call volume increases sharply starting 6:30 a.m. and continues to climb throughout the morning reaching its peak between 9:00 a.m. and 11:30 a.m. The number of calls declines after 4:00 p.m. Approximately 80 per cent of daily calls are received between 8:30 a.m. and 5:00 p.m.

The hourly staff level is generally in alignment with the call pattern with two exceptions:

(a) Staff level for high call volume period

Since the heaviest call volume occurs between 9:00 a.m. and 11:30 a.m., management should assess the staff level required for the morning peak.

(b) Staff level for low call volume period

The average hourly call volume overnight (from 11:00 p.m. to 6:00 a.m.) is very low ranging from 5 to 21 calls per hour. Staff on the overnight shift also answer on average 10 emails per person per shift. In March 2011, 311 Toronto scheduled four staff and one supervisor for the overnight shift. Calgary 311, on the other hand, assigns two staff for the overnight shift.
The combined email and call volume for 311 Toronto does not justify the assignment of five staff for the overnight shift. In response to our concern, management staff reported that the number of overnight staff would be reduced in November 2011 to three agents.

We also discussed with management staff the necessity of assigning a supervisor on duty for the overnight shift. According to staff, the deployment of a supervisor for the overnight shift was necessary for monitoring and it was cost-effective use of staff resources.

**Recommendations:**

6. City Council request the Director, 311 Toronto Division, to review daily call patterns and staff levels to ensure an appropriate level of staff coverage.

7. City Council request the Director, 311 Toronto Division, to ensure cost-effective deployment of staff in alignment with workload for the overnight shift.

**C.2. Review of Information Technology Resources**

The number of information technology (IT) staff for 311 totals 34 - 16 for daily operations and 18 for projects.

*311 has a team of 16 IT staff for daily operation*

The daily operation of 311 Toronto is supported by a designated team of 16 IT staff. Nine IT staff were approved for initial implementation, and seven staff were added in 2011 to carry out system support and maintenance services.

Other 311 operations we contacted, however, are either partially or fully supported by corporate IT without their own designated IT staff. This allows IT resources to be shared across departments.

The number of IT staff in 311 Toronto is significantly higher than that of other 311 operations. For example, Calgary 311 relies on four corporate IT staff for support, and San Francisco 311 has two designated IT staff and four IT staff shared with other city services.
A team of 18 contract staff are retained for IT projects

In addition to ongoing operations, 311 currently retains 18 contract IT staff for projects such as smart phone application development, expansion of an on-line self-serve menu, and expansion of divisional service request capacity.

Demand for IT support was high during the initial 311 implementation, but the demand should have decreased since that time. In light of 311 Toronto’s significantly higher level of IT resources than other 311 operations, a detailed review of IT resource requirements should be expected. The review should examine opportunities for efficiency gain including merging 311 IT resources into Corporate Information Technology Division to facilitate sharing of resources.

Recommendation:

8. City Council request the City Manager, in consultation with the Chief Information Officer and the Director of 311, to review the level of information technology staff resources in the 311 Toronto Division to identify cost saving opportunities. Such a review should include assessing the merits of merging 311 Toronto information technology resources into the Corporate Information and Technology Division.

C.3. Incorporation of Telephone Self-Serve Technologies

311 Toronto does not use telephone self-serve technologies

Unlike other 311 operations, 311 Toronto does not use telephone self-serve technologies such as Auto Attendant or Interactive Voice Response (IVR). These technologies use pre-recorded messages to allow callers to define the nature of their call using voice or touch-tone phone.

The initial design of 311 Toronto excluded the use of telephone self-serve technologies. Another initial design element was the requirement for first call resolution to minimize transfer to other staff whenever possible. These design elements were intended to provide the best model of customer service such that customers can speak to a live agent immediately, and obtain the information without being transferred to another agent.
IVR has been proven to be an effective tool in other 311 operations. For instance, during multiple storms in January 2011, New York City 311 successfully resolved over 50 per cent of incoming calls via IVR messages. Customers received pertinent information (e.g. school closures) through recorded messages without speaking to an agent. According to the Executive Director of New York City 311:

“Quite frankly we couldn’t operate our customer service operation without the IVR. It serves both customer needs and interests, as well as financial and budgetary limits.”

We are aware that as a result of the core service review City Council in September 2011 approved a recommendation to eliminate 311 development capacity in 2013. In light of the potential benefits of self-serve technologies in improving 311 customer services and efficiency, a business case outlining costs and benefits should be developed for Council consideration.

**Recommendation:**

9. City Council request the Director, 311 Toronto Division, to develop a business case on incorporating telephone self-serve technologies into 311 operation where necessary to improve service level and reduce call wait time. The business case should outline short-term and long-term costs and potential benefits.

C.4. Incorporation of a Customer Satisfaction Survey Into Website

311 Toronto has a dynamic website through which the public can request a range of City services, search the 311 information database, and make payment to the City. As well, the website information is available in multiple languages.

Currently customers may forward complaints, compliments, and suggestions to 311 Toronto through its website in a basic text format. Submission must be accompanied with an email address. The basic text format and the requirement to provide an email address may deter certain customers from providing feedback.
An online customer satisfaction survey can be implemented at minimal cost

To measure customer satisfaction level, 311 is planning to retain a firm to conduct a telephone survey. Compared to a telephone survey, an online customer survey may be more economical and effective. The San Francisco 311 website includes a customer satisfaction survey form whereby customers can rate the telephone and web self service by answering several simple questions, and provision of contact information is optional.

An online customer satisfaction survey would enable 311 Toronto to collect instant customer feedback on an ongoing basis at minimal cost. As well, a structured questionnaire will simplify data analysis and facilitate reporting.

Recommendation:

10. City Council request the Director, 311 Toronto Division, to consider including a customer satisfaction survey questionnaire in the 311 Toronto website to facilitate timely customer feedback. The survey results be periodically analyzed and reported on the 311 website or through other means.

D. Other Issues

D.1. Capital Fund for Divisional 311 Preparedness Should Be Re-assessed

In addition to the $38.2 capital fund approved directly for 311 implementation, City Council approved $4.9 million in the 2005 Capital Budget for the Parks, Forestry and Recreation Division for divisional preparedness activities for 311. The budget request was approved for $1.4 million for 2005 and $3.5 million for 2006 to:

- Develop an automated work order system for parks and recreation services
- Upgrade forestry information system, and
- Consolidate forestry call center functions.

As of September 2011, approximately $1.4 million remained unspent in the Capital Financing Reserve Funds.
Parks, Forestry and Recreation Divisional staff reported that the fund was primarily used for improving the division’s existing information system to facilitate future integration with 311.

Current management staff of the 311 Toronto Division were not informed of this earlier divisional funding approval. There appears to be a lack of communication and coordination between the two Divisions in ensuring effective expenditures of the approved fund for divisional 311 preparedness.

**Recommendation:**

11. City Council request the General Manager, Parks, Forestry and Recreation Division, to assess the need for carrying forward the balance of the fund in the 311 Customer Service Strategy sub-project to 2012 Capital Budget. Should the fund be carried forward to future years, the General Manager of the Parks, Forestry and Recreation Division ensures consultation and coordination with the Director of 311 Toronto Division in future expenditures of the fund.

**D.2. Interdepartmental Charges Should Be Based on Updated Data**

<table>
<thead>
<tr>
<th>2010 gross operating cost at $15.1 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>The 2010 operating costs of the 311 Toronto Division were $15.1 million gross and $8.7 million net. The gross and net difference is a result of inter-departmental charges to other City divisions such as Public Health and Toronto Water. Interdepartmental charges allow the service providers to recover their costs of delivery for cost-shared or rate supported programs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basis for allocation of inter-departmental charges should be updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-shared and rate supported programs must continue to reflect full cost of service in their respective budgets (including call center costs). Currently 311 does not track general enquiries by division related subject matter, and the inter-departmental charges are based on historical call center statistics and resource levels. The allocation of inter-departmental charges should be reviewed annually using best estimates of call volume information and service delivery expectations.</td>
</tr>
</tbody>
</table>
Recommendation:

12. City Council request the Director, 311 Toronto Division, in consultation with the Chief Financial Officer, to ensure that the inter-departmental charges to divisions are based on updated and accurate information supporting the basis for funding and cost recoveries.

CONCLUSION

311 Toronto was implemented in accordance with service priorities recommended by the Council-Staff Working Group. Rollout of the 311 contact centre was twelve months delayed due to the acquisition of an information system and the 2009 labour disruption. The total project costs of $36.3 million were significantly higher than initial approval at $26.9 million.

The City invested significant financial and human resources in establishing a 311 service model. The successful launch of 311 Toronto Contact Center in September 2009 marked a milestone in the City’s efforts to improve customer service.

Our independent review of 311 Toronto provided 12 recommendations to improve service level and efficiency. Entering its third year of operation, 311 Toronto needs to focus on answering more calls and shortening wait time. Answering calls in a timely manner is fundamental to good customer service in a 311 operation.