

December 2013 Ice Storm City of Toronto's Emergency Response Review

**Executive Committee
July 2, 2014**

Overview – Agenda

1. Review of the City's Emergency Response to the December 2013 Ice Storm
 - Background
 - Key Findings and Recommendations

2. City of Toronto Priority Actions
 - Priority Actions
 - Next Steps

1. Review of the City's Emergency Response to the December 2013 Ice Storm



Background

- The Ice Storm on December 21 and 22 produced freezing rain, ice pellets and wind, resulting in wide-spread power outages due to downed hydro lines from fallen trees and limbs.
- In total, approximately 416,000 Toronto Hydro customers and over 1 million Toronto residents were without power at one point during the event.
- City staff and the Canadian Red Cross quickly mobilized to provide reception centres for displaced residents.
- TCH, CCACs, and Toronto Police Service attended high-rise buildings to ensure the health and safety of vulnerable residents.
- Toronto Hydro and Forestry crews, with assistance of mutual aid crews from other jurisdictions, worked around the clock to restore power by removing damaged trees and limbs and repair damage to the hydro system.
- Power was fully restored in the City 11 days later, on January 11.

Previous 2014 Ice Storm Reports

- **Impacts of the December 2013 Extreme Winter Storm on the City of Toronto – January 10/13, 2014 Special Council Meeting**
 - Preliminary impact and cost estimates of the Ice Storm and approval to request Provincial assistance.
- **Proposed Funding of 2013 Extreme Weather Events – January 29/30, 2014**
 - Revised cost estimates and financing options for the City's share of Ice Storm related costs.
- **December 2013 Extreme Winter Storm Event – Provincial Funding Request and Structure of Comprehensive Review – April 2014**
 - Authorization for the City Manager to take actions required to enable receipt of Provincial funds through the Ice Storm Assistance Program.

June/July Extreme Weather Reports

1. Review of the City of Toronto's Emergency Response to the December 2013 Ice Storm (Executive Committee)
2. Transmittal of the Final Report from the Independent Review Panel's Review of Toronto Hydro's Emergency Response to the December 2013 Ice Storm (Executive Committee)
3. Resilient City – Preparing for a Changing Climate (Parks and Environment Committee)
4. Comprehensive Review of Cold Weather Protocols and Cold Weather Health Impacts in Toronto (Community Development and Recreation Committee / Board of Health)

Areas of Focus: Key Findings & Recommendations

- a) Emergency Preparedness and Response
- b) Supports for Vulnerable Residents
- c) Emergency Communications
- d) 311 Toronto and Toronto Hydro Contact Centre Co-ordination
- e) Urban Forestry and Infrastructure Resiliency
- f) Provincial Requests

a) Emergency Preparedness and Response



**IS YOUR FAMILY
PREPARED?**



a) Emergency Preparedness and Response

Key Findings:

- Need for continued proactive promotion and communication to better educate and raise awareness on emergency preparedness.
- Need to develop response protocols with the Toronto Police Service for the management of traffic at key high volume intersections.
- The City learned valuable lessons which need to be incorporated into the City's Emergency Plan.
- Enhanced emergency staffing capacity is necessary, particularly for the Emergency Operation Centre and at Emergency Reception Centres.

a) Emergency Preparedness and Response

Recommendations:

1. Update the City of Toronto Emergency Plan and the Operational Support Functions and Risk Specific Plans (Appendix 1);
2. Enhance emergency staffing capacity and maintain, at a minimum, five-deep staffing levels to ensure sufficient redundancy for the Emergency Operation Centre and at Emergency Reception Centres;
3. Develop a proactive public education and awareness program to increase the awareness of residents and businesses on emergency preparedness measures;
4. Toronto Police Service and the City work to develop emergency response protocols to direct and control the City's highest priority traffic intersections during emergency events;
5. Standardized processes for the post-emergency review and evaluation of the City of Toronto's response to emergency events (Appendix 4);

b) Support for Vulnerable Populations



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Key Findings:

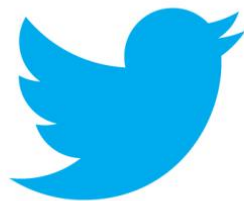
- The Ice Storm highlighted the benefits of establishing multiple, pre-staged and pre-equipped reception centres sites across the city.
- More effective partnerships with health and community-based service providers to identify and support vulnerable populations.
- Other organizations such as community, faith-based or similar groups utilized to assist the City in emergency response.

b) Support for Vulnerable Populations

Recommendations

6. Establish an Emergency Human Services working group and explore Emergency Response Agreements with the Toronto Central Local Health Integration Network, Findhelp Information Services (211), and other community-based agencies to increase access to services for vulnerable residents during an emergency situation;
7. Pre-identify appropriate Community Recreation facilities to be used as Emergency Reception Centres and develop facility-specific plans for operational response during an emergency event;

c) Emergency Communications



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Key Findings:

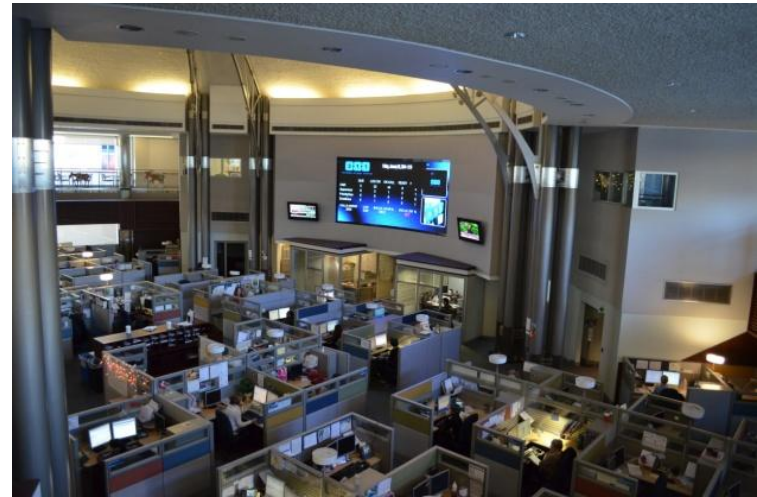
- Prolonged power outage limited the ability of many residents to get up-to-date emergency information and identified a need for additional communications tactics and strategies.
- Ensure that social media channels are better utilized across the city with well co-ordinated and consistent messaging.
- Highlighted the need to improve communications co-ordination with City Councillors during emergency events.

c) Emergency Communications

Recommendations

8. Work with Toronto Hydro, the Red Cross and other members of the City's Emergency Risk communicators network to expand and communications tactics and channels to communicate with the public;
9. Develop a Councillor Co-ordination Operational Support Function (OSF) to further refine and define the role of Councillors during an emergency event, including protocols for the co-ordination of information and appropriate training;

d) 311 / Hydro Contact Centre Co-ordination



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Key Findings:

- Toronto Hydro's call centre was overwhelmed with 100 times the normal call volume and we must develop sufficient overflow capacity during widespread power outages.
- 311 Toronto and Toronto Hydro need enhanced co-ordination to enable residents to report or receive timely power outage information.
- Protocols and processes between the two Contact Centres needs strengthening to ensure that the sharing of real-time information is as seamless as possible to improve services to residents.

d) 311 / Hydro Contact Centre Co-ordination

Recommendation

10. 311 Toronto and Toronto Hydro develop a Memorandum of Understanding that documents the expectations and actions of both organizations to ensure co-ordination of communications, information and requests for service related to power outages

e) Urban Forestry & Infrastructure Resiliency



e) Urban Forestry & Infrastructure Resiliency

Key Findings:

- Fallen trees and tree limbs on power lines has highlighted the need to review and enhance the co-ordination of line-clearing practices between the City's Urban Forestry and Toronto Hydro.
- Need to explore the use of hydro infrastructure that is more resilient to power outages.
- Targeted approach for the conversion of overhead lines to underground is needed to improve the resiliency of priority facilities such as hospitals, water treatment plants, etc.
- Balancing the need for infrastructure resiliency while protecting and enhancing the growth of the City's tree canopy.

e) Urban Forestry & Infrastructure Resiliency

Recommendations

11. Urban Forestry work with Toronto Hydro to review current line clearing programs and identify opportunities to enhance co-ordination to more effectively manage trees in close proximity to hydro lines;
12. Toronto Hydro, in consultation with Urban Forestry, explore infrastructure that is resilient to power outages caused by tree contact when replacing or installing new, above-ground infrastructure;
13. Support Toronto Hydro's inclusion of \$70 to \$75 million over five years for the conversion of overhead hydro lines to underground as part of its 2015-2019 rate application to the Ontario Energy Board, and request that Toronto Hydro work with Urban Forestry to identify priorities for conversion of overhead lines to underground;

f) Provincial Requests



Ice Storm Assistance Program

f) Provincial Requests

Key Findings:

- Ontario Building Code currently requires multi-residential buildings to have a two-hour supply of emergency power, which does not enable residents to remain safely in their home during a prolonged power outage.
- City staff are confident that virtually all of the City's Ice Storm related expenditures of \$77 million (exclusive of Toronto Hydro costs of \$13 million) are eligible for reimbursement under the Province's Ice Storm Assistance Program.

f) Provincial Requests

Recommendations

14. The Province expand provisions in the Ontario Building Code to require continuous power supply for back-up generators in buildings more than six storeys, long-term care occupancies, hospitals, etc.; and
15. Report to Budget Committee once confirmation of reimbursements through the Provincial Ice Storm Assistance Program is received.

2. City of Toronto Priority Actions



Priority Actions

1. Communications

- Provide more timely information to residents.
- Enhance communications tactics and channels.
- Improve co-ordination between Toronto 311 and Toronto Hydro.

2. Enhanced Resiliency of Hydro Infrastructure

- Enhance line-clearing practices between Urban Forestry and Toronto Hydro.
- Use of above-ground hydro infrastructure that is more resilient to power outages.
- Develop a targeted approach to converting overhead lines to underground.

Priority Actions

3. Support for Vulnerable Populations

- Establish an Emergency Human Services working group.
- Develop Emergency Response Agreements with Toronto Central Local Health Integration Network, Findhelp Information Services (211), and other community-based health and social service agencies.

4. Emergency Reception Centres

- Pre-identify City facilities for use as emergency reception centres.
- Pre-equip and supply with continuous back-up power.
- Develop facility-specific emergency response and training plans.

Next Steps

- **Budget Committee**

Once received, the DCM/CFO will report on assistance received through the Provincial Ice Storm Assistance Program and on a funding plan for any expenditures deemed ineligible.

- **Executive Committee**

Early in 2015, the City Manager will report on the progress on implementation of Ice Storm related recommendations including the four key priorities areas:

- 1) Communications
- 2) Enhanced Resiliency of Hydro Infrastructure
- 3) Support for Vulnerable Populations
- 4) Emergency Reception Centres