

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

Item 1, Report No. 26, of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on June 4, 2013.

1 PROGRAM REVIEW – SERVICE LEVEL COMPARISONS – ROAD SNOW CLEARING, SALTING / SANDING AND PATH / SIDEWALKS SNOW CLEARING

The Committee of the Whole (Working Session) recommends:

- 1) That the recommendation contained in the following report of the Interim City Manager, the Commissioner of Engineering and Public Works, the Commissioner of Community Services, the Commissioner of Strategic and Corporate Services and the Director of Innovation and Continuous Improvement, dated May 28, 2013, be approved; and
- 2) That Communication C1, presentation material entitled, *“Program Review – Service Level Comparisons”*, be received.

Recommendation

The Interim City Manager, the Commissioner of Engineering and Public Works, the Commissioner of Community Services, the Commissioner of Strategic and Corporate Services and the Director of Innovation and Continuous Improvement, in consultation with the Director of Public Works and the Director of Parks and Forestry, recommend:

- 1) That this report be received for information and discussion purposes; and,
- 2) That staff conduct a detailed operational review of all Winter Control programs, highlighting potential service delivery models, levels of service, impacts on residents, program costs, risks and mitigation.

Contribution to Sustainability

As the City grows, the expectations and requirements of its residents and stakeholders will continue to evolve and change. Program service levels define how the City strives to meet these expectations and provide insight into the effectiveness, efficiency and economy of the City's service delivery models.

Comparison of service levels for similar programs in comparable municipalities provides the City with an opportunity to identify areas where changes in service level may be considered in order to provide residents with reduced levels of service at an associated lower cost. Information gathered in these reviews will enable Council to determine how and where to allocate scarce resources, look to recover service costs through realistic user fees (where feasible) and, in some cases, identify ways in which to reduce environmental impacts which are all elements supporting the City's focus on sustainable use of resources (Goal 1 – Green Directions).

Economic Impact

For several of the winter control programs considered in this review, service levels are higher than those provided by other comparable GTA municipalities. The provision of higher levels of service is, all other things being equal, associated with higher costs; given the coordination necessary in the provision of winter control programs further investigation is required in order to understand the economic impacts of any potential changes in program service levels

While changes to service levels if implemented, could potentially reduce annual costs the realization of these benefits may take several years given current contract obligations.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

Item 1, CW(WS) Report No. 26 – Page 2

Communications Plan

Taxpayers, residents and other stakeholders should be consulted before changes are made to program service levels, so that the rationale for potential changes is understood by the community and that Council and staff are aware of the community's expectations for, and perception of, the changes.

It is the intent that, if changes to service levels are considered, a series of public consultation sessions and on-line surveys be conducted to inform the community and collect feedback with respect to any potential changes.

Purpose

The purpose of this report is to provide a comparison of GTA municipal service levels for several winter control programs identified in Item 1, Report No. 42 of the Committee of the Whole (Working Session) and adopted by Council on October 30th, 2012. The municipalities used as comparators were Brampton, Burlington, Markham, Mississauga, Oakville, Richmond Hill, Aurora and Newmarket.

Council specifically directed staff to compare the service levels of the following programs with other GTA municipalities and to identify any potential options for changing the level of service provided by the City:

- Winter Control / Sanding and Salting
- Winter Control / Road Snow Clearing
- Path / Sidewalk Snow Clearing
- Animal Services
- Seniors' Programming.

Although closely integrated with the Road Snow Clearing program, the Winter Control / Windrow Snow Clearing program was not included in the scope of this service level review. Additionally, Animal Services has already been addressed in Item 3, Report No. 1 of the Finance and Administration Committee 2013. A review of Seniors' Programming has been provided as a separate accompanying report.

Background - Analysis

Winter Control Programs – Sanding / Salting and Road Snow Cleaning

Ontario Regulation 239/02 sets out the Minimum Maintenance Standards for Municipal Highways and, among other items, defines when a road can be deemed to be in a state of repair with respect to snow accumulation (section 4(2)) and ice formation (section 5(3)). The Public Works Department of the Engineering and Public Works Commission is responsible for maintaining the City's roads in a state of repair and manages, or provides, the services necessary to meet the minimum maintenance standards.

For the winter control programs, Regulation 239/02 sets out the following minimum standards for each class of road, where each road class is a function of the posted or statutory speed limit and the average annual daily traffic volume. The City is responsible for roads of Class 2 through 6 as shown in the following table.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

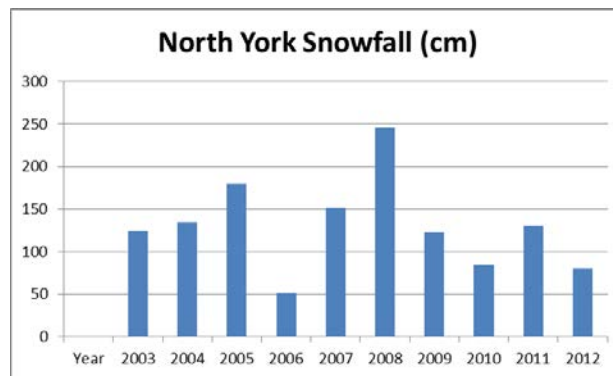
Item 1, CW(WS) Report No. 26 – Page 3

Road Class	Road Type	KM maintained by City	Snow Accumulation (Minimum Standards)			Ice Formation (Minimum Standards)	
			Depth of Snow	Time to clear to depth after Snowfall	City's Service Level	Time to de-ice after Notification	City's Service Level
Class 1	Expressway	N/A	2.5cm	4 hours	N/A	3 hours	N/A
Class 2	Arterial	147	5.0cm	6 hours	5cm/4hrs	4 hours	3hrs
Class 3	Collector		8.0cm	12 hours	5cm/4hrs	8 hours	4hrs
Class 4	Local / Residential	826	8.0cm	16 hours	5cm/12hrs	12 hours	6hrs
Class 5	Local / Residential		10.0cm	24 hours	5cm/12hrs	16 hours	6hrs
Class 6	Laneway		N/A	N/A	15cm/24hr	N/A	8hrs

The table above illustrates that for a Class 3 road, the depth of snow should be no greater than 8.0 cm 12 hours after the end of snowfall in order to be deemed in a state of repair, and should be de-iced within 8 hours of determining that roads are susceptible to ice formation.

It must be stressed that these are minimum maintenance standards developed by the Ministry of Transportation and many municipalities have service levels that exceed the minimum requirement, for example, most municipalities clear a road to bare pavement.

A municipality must be able to deal with inconsistent snowfall patterns, and Vaughan is no exception. The nearest weather station to Vaughan (with continual records for over ten years) is located in North York (approximately 9km from the City). Since 2003, the average annual snowfall has been 130.34cm, with a range of 50.6cm to 245.6cm.



Program 131 – Sanding / Salting

The table in Attachment 1 provides a comparison between the City of Vaughan and other municipalities' service levels for sanding and salting (or ice formation prevention) on roadways for each road class. The information provided in the table has been collated from a variety of sources including each municipality's Roads' Department, 2011 Municipal Performance Measurement Program (MPMP) data and information publically available from each municipality.

The comparator municipalities have differing approaches to providing the program. The City, for example, has a blend of contracted and in-house resources for the delivery of the programs similar to York Region. Other municipalities contract out this work fully to a third party. The

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

Item 1, CW(WS) Report No. 26 – Page 4

general approach taken by municipalities is to divide their roads into routes (based on geography and/or road class) and to ensure that the roads within a route can typically be treated within the required service level time.

From the data, it is apparent that many of the comparator municipalities have set the minimum standard as their desired service level, though the City has set service levels that are higher than the required minimum. The City is also the only municipality to publish a standard for providing sanding / salting for Class 6 roads.

Given that the City provides a higher level service with respect to salting / sanding its roads, the average cost of material used in winter control operations per lane km is higher than that of other municipalities.

The direct costs associated with providing the Sanding / Salting program are due to the material spread on the road surface and the equipment / labour (and other contracted services) utilized to do so. The most significant drivers of these direct costs are:

- the length of road that needs to be maintained;
- the level of maintenance performed, i.e., clear to bare pavement or limited bare pavement; and,
- how quickly each class of road must be treated.

Currently, the largest cost element relates to the payment of equipment standby. This payment guarantees that the equipment and staff are available and dedicated to the City's use 24/7 throughout the entire winter season.

The cost drivers impact overall costs as more roads will require more salt / sand, while shorter times for road treatment require the road network be divided into more routes, requiring more equipment and staff.

The City provides its residents (and road users from other communities) with one of the highest levels of service with respect to salting / sanding its roads and ensuring that ice formation on roads is addressed as expeditiously as possible. Any changes to service levels would need to take into consideration, the safety concerns of road users, impacts on Fire / EMS response times and potential liability associated with traffic accidents

Additionally, as the services for the Road Snow Clearing program have been contracted out with the contracts running until March 2014, it would be winter 2015 before any change in the service levels could be implemented and the benefits realized.

An operational review of the Sanding / Salting program would more clearly identify the savings opportunities associated with a change in service levels, enable identification of required changes to service delivery models and infrastructure, allow full analysis of any associated risks and enable the development of a detailed implementation approach.

Program 128 – Road Snow Clearing

The table in Attachment 2 provides a comparison between the City of Vaughan's and other municipalities' service levels for clearing snow from roadways for each road class. The information provided in the table has been collated from a variety of sources including each municipality's Roads' Department, MPMP data (2011) and information publically available from each municipality.

As with Salting / Sanding, the general approach taken by municipalities is to divide their roads into routes (based on geography and/or road class) and to ensure that the roads within a route

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

Item 1, CW(WS) Report No. 26 – Page 5

can typically be treated within the required service level time. The municipalities also utilize a blend of delivery options to clear snow from roadways, with third party providers being the dominant model.

For clearing snow from their roads, the municipalities generally adhere to service levels that are superior to the Minimum Maintenance Standards, as in most cases, the municipalities strive to return roads to bare pavement rather than just meeting the depth of snow required “to be deemed in a state of repair”. Further, the City has some of the highest service levels and is the only municipality to set a service level for clearing snow from laneways.

The direct costs associated with providing the Snow Clearing program are due to the labour and equipment costs regardless of the service delivery model. The most significant driver of these direct costs is how quickly each class of road must be cleared, as, similar to the previous program, shorter times for clearing the roads of snow require the road network be divided into more routes, requiring more equipment and staff. The largest cost element relates to the payment of equipment standby. This payment guarantees that the equipment and staff are available and dedicated to the City's use 24/7 throughout the entire winter season.

The City provides its residents (and road users from other communities) with one of the highest levels of service with respect to clearing snow from its roads as expeditiously as possible. Any changes to service levels would need to take into consideration, the safety concerns of road users, impacts on Fire / EMS response times and potential liability associated with traffic accidents

Additionally, as the services for the Road Snow Clearing program have been contracted out with the contracts running until March 2014, it would be winter 2015 before a change in the service levels could be implemented and the benefits realized.

An operational review of the Road Snow Clearing program would more clearly identify the savings opportunities associated with a change in service levels, help in the identification of the potential impact on other programs (e.g., Windrow Clearing), enable identification of required changes to service delivery models and infrastructure, allow full analysis of any associated risks and enable the development of a detailed implementation approach.

Program 67 – Path / Sidewalk Snow Clearing

While the Minimum Maintenance Standards for Municipal Highways currently has not set a standard relating to snow / ice management on sidewalks, it does define standards relating to surface discontinuities (section 16).

The table in Attachment 3 provides a comparison between the City of Vaughan's level of service for clearing snow from sidewalks and those of comparable GTA urban municipalities. As municipalities in the Region are responsible for maintaining sidewalks adjacent to Regional roads, the Region is not included in this comparison.

The City provides some of the highest level of service for clearing snow from sidewalks within this group of municipalities, with the major difference being the target time for completing the activity. The City of Vaughan appears to be one of the only municipalities in this group where sidewalks are cleared solely by city staff, while several of the other municipalities have fully contracted out this service. (Richmond Hill is currently evaluating a pilot study which saw responsibility for sidewalk clearing brought in-house.)

In the City's case, the service is delivered by Parks and Forestry Operations and enables the department to utilize full-time and seasonal staff during the winter season. The City is divided

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

Item 1, CW(WS) Report No. 26 – Page 6

into 42 sidewalk snow clearing routes, each of approximately 25 km with assigned equipment and staff. The current route structure also reflects limits placed on the number of consecutive hours that an equipment operator may work.

The direct costs associated with providing the Sidewalk Snow Clearing program are due to the labour, salt and equipment costs. The most significant driver of costs is how quickly each sidewalk must be cleared, as, similar to the previous programs, shorter times for clearing the sidewalks of snow require the sidewalk network be divided into more routes, requiring more equipment and staff.

Given the current service delivery framework, i.e., using internal Parks and Forestry Operations staff, changing the service level for clearing snow from sidewalks would likely deliver limited costs savings. It is important to note that the current service levels were established ten years ago and are proving difficult to maintain. The service levels were developed for routes of 24km but the routes have become (on average) 27km which has resulted in routes taking longer to clear. Further challenges to meeting the current service levels include staff availability to work overtime and Ministry of Labour regulations for consecutive hours worked.

An initial review suggests the City receives between 60 and 75 personal injury annually (based on 2008 – 2011 files). Further investigation of each of these files, (some of which are still being resolved), is required in order to identify which are “Slip & Fall” claims that are attributable to Winter Control – Sidewalk Clearing. Changing the service level could have an impact on the number of claims made against the City.

An operational review of the Path / Sidewalk Snow Clearing program would facilitate the exploration of any change to the program's service delivery model, such as contracting out services. In turn, this would enable the City to explore potential changes to service levels, allow full analysis of any associated risks and enable the development of a detailed implementation approach.

Relationship to Vaughan Vision 2020/Strategic Plan

A comparison of service levels between the City's programs and those of other similar municipalities provides an opportunity to identify any significant differences in the services delivered to residents in different jurisdictions. These differences can be explored further to understand the impact on any costs or revenues associated with the delivery of the services.

On-going review of service levels and dialogue with service recipients enables the City to identify ways in which service levels, or service delivery models, could be changed so as to ensure that residents are provided with the required services with the most appropriate cost structure.

The Service Level Reviews are consistent with and support the City's strategic goals of Service Excellence by enabling the City to “demonstrate excellence in service delivery”.

Regional Implications

Not applicable.

Conclusion

A comparison of the City's current service levels for Road Snow Clearing, Salting / Sanding and Path / Sidewalks Snow Clearing Programs with other urban GTA municipalities demonstrates that the City's residents are provided with a high level of service.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 4, 2013

Item 1, CW(WS) Report No. 26 – Page 7

The provision of higher levels of service is, all other things being equal, associated with higher costs. As the most recent Ipsos-Reid survey demonstrates that residents “believe they receive good value for their tax dollars” with over 85% *VERY SATISFIED* or *SOMEWHAT SATISFIED* with the winter control services provided by the City, the survey suggests that residents are comfortable supporting the current service levels. The Ipsos-Reid report also identified Road and Sidewalk Removal programs as areas for maintenance, i.e., services of relatively high importance where satisfaction is good and where the focus is on maintaining current levels of service.

Changes to service levels are not without associated risks (and potential financial liability). Specifically, changes to service levels in winter control programs could potentially impact Fire / EMS response times and increase the number of claims made against the City with respect to accidents that are deemed attributable to poor states of repair.

Winter control programs (i.e., Road Salting / Sanding, Road Snow Clearing, Ice and Snow Removal, Windrow Snow Clearing, Snow Fencing and Path / Sidewalk Clearing) are highly interlinked (e.g., snow clearing roads and sidewalks, and snow clearing roads and windrows), so any proposed changes in service level (or service delivery model) in one program could have a ripple impact on another program. To understand these impacts and to develop a holistic and truly integrated approach to winter control, an operational review of all winter control programs is warranted.

City staff recommends that an operational review of all Winter Control Programs be conducted in order to highlight potential service delivery models, levels of service, impacts on residents, program costs, risks and mitigation.

Attachments

- Attachment No. 1: Winter Control / Sanding and Salting – Municipal Service Level Comparisons
- Attachment No. 2: Winter Control / Road Snow Clearing – Municipal Service Level Comparisons
- Attachment No. 3: Path / Sidewalk Snow Clearing – Municipal Service Level Comparisons

Report prepared by:

Derek Patterson
Director Innovation and Continuous Improvement
Ext. 8053

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

CI
CW (WS)
May 28/13
Items 142

Committee of the Whole (Working Session)

Program Review – Service Level Comparisons

Winter Control Programs
Seniors' Programming

May 28th, 2013



Agenda

- ❑ Program Review Background
- ❑ Service Level Comparison
- ❑ Winter Control
 - ❖ Overview
 - ❖ Metrics
 - ❖ Recommendation
- ❑ Seniors' Programming
 - ❖ Overview
 - ❖ Metrics
 - ❖ Recommendation
- ❑ Summary



Program Review Background

- ☐ Conducted 2011 – 2012 to build awareness of broad scope of services provided and their relative costs
- ☐ Identified 204 discrete programs offered by City
- ☐ Provided additional insight:
 - ❖ Fees and costs recovery for each program
 - ❖ Rationale for offering:
 - 30 - Mandatory, 141 - Standard, 33 – Premium
 - 2012 Budget \$190M – 18% - Mandatory, 77% - Standard, 5% - Premium
- ☐ In 2012, five programs identified for service level comparisons with other GTA municipalities



Service Level Comparison

□ Objective:

- ❖ Identify how City's level of service compares to other municipalities
- ❖ Provide insight into opportunities to change service levels

□ Levels of service:

- ❖ Addressing customer expectations – defined by Council
- ❖ Balancing effectiveness, efficiency and economy

□ Programs:

- ❖ Sanding and Salting
 - ❖ Road Snow Clearing
 - ❖ Sidewalk Snow Clearing
 - ❖ Seniors' Programming
 - ❖ *Animal Services**
- } Winter Control Programs



* Addressed in previous report to Finance & Administration Committee
- Program Review for Animal & Wildlife Services, January 2013

Winter Control Programs – Overview

❑ Comparators

- ❖ Aurora, Brampton, Burlington, Markham, Mississauga, Newmarket, Oakville

❑ Sources

- ❖ Municipal departments
- ❖ MPMP data
- ❖ Municipal websites

❑ Service Levels

- ❖ Time to clear road to specified depth after snowfall ends
- ❖ Time to treat road after treatment is determined to be necessary
- ❖ Time to clear snow from all sidewalks in route (once snow has reached a certain depth)



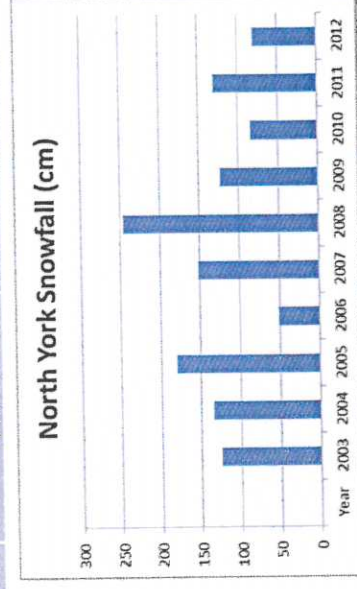
Winter Control Programs – Overview

❑ Constraints:

- ❖ Ontario Regulation 239/02 – defines minimum maintenance standards for municipal highways (not sidewalks)

			Snow Accumulation (Minimum Standards)			Ice Formation (Minimum Standards)	
Road Class	Road Type	KM maintained by City	Depth of Snow	Time to clear to depth after Snowfall	City's Service Level	Time to de-ice after Notification	City's Service Level
Class 1	Expressway	N/A	2.5cm	4 hours	N/A	3 hours	N/A
Class 2	Arterial	147	5.0cm	6 hours	5cm/4hrs	4 hours	3hrs
Class 3	Collector		8.0cm	12 hours	5cm/4hrs	8 hours	4hrs
Class 4	Local / Residential	826	8.0cm	16 hours	5cm/12hrs	12 hours	6hrs
Class 5	Local / Residential		10.0cm	24 hours	5cm/12hrs	16 hours	6hrs
Class 6	Laneway		N/A	N/A	15cm/24hr	N/A	8hrs

- ❖ Weather patterns – “planning for normal”



Salting / Sanding – Metrics

Metric	Vaughan	Brampton	Burlington	Markham	Mississauga	Oakville	Richmond Hill
Lane KM Maintained (2011)	1,950	3,480	1,584	2,022	5,500	1,908	1,300
Service Levels - Time to Treat:							
Class 1 - Expressway	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Class 2 - Arterial	3 hours	4 hours	4 hours	4 hours	4 hours	4 hours	N/A
Class 3 - Collector	4 hours	8 hours	8 hours	8 hours	8 hours	8 hours	N/A
Class 4/5 - Local / Residential	6 hours	N/A	N/A	Hills, intersections and sharp curves a/r	Blanket sanded as conditions warrant	Hills, intersections and sharp curves a/r	12 hours
Class 6 - Laneway	8 hours	N/A	N/A	N/A	N/A	N/A	N/A
Material Cost / Lane km (2011)	\$1,672	\$695	\$541	\$1,145	\$942	\$-	\$501
Salaries & Services per lane KM (2011)	\$3,070	\$3,935	\$1,348	\$2,322	\$2,619	\$1,883	\$1,478
Service Delivery Model	Contractor	Brampton / Contractor	Burlington / Contractor	Contractor	Mississauga / Contractor	Oakville / Contractor	Richmond Hill Contractor
Events 2011	41	26	42	37	29	26	53



Road Snow Clearing – Metrics

Metric	Vaughan	Brampton	Burlington	Markham	Mississauga	Oakville	Richmond Hill
Lane KM Maintained (2011)	1,950	3,480	1,584	2,022	5,500	1,908	1,300
Service Levels: - Depth Trigger / Time to Bare Pavement							
Class 1 - Expressway	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Class 2 - Arterial	5cm / 4 hours	5 cm / 6 hours	5 cm / 6 hours	5 cm / 6 hours	8 cm / 12 hours	5 cm / 6 hours	N/A
Class 3 - Collector	5 cm / 4 hours	5 cm / 12 hours	5 cm / 6 hours (after primary)	5 cm / 6 hours (after primary)	8 cm / 12 hours	5 cm / 6 hours (after primary)	N/A
Class 4/5 - Local	5 cm / 12 hours	7.5 cm / 24 hours	7.5 cm packed snow / 24 hours	7.5 cm / 24 hours	8 cm made safe / 24 hours	10 cm / 24 hours	5cm / 16 hours
Class 6 - Laneway	15 cm / 24 hours - removal	N/A	N/A	N/A	N/A	N/A	N/A
Service Delivery Model	Contractor	Brampton / Contractor	Burlington / Contractor	Contractor	Mississauga / Contractor	Oakville / Contractor	Richmond Hill Contractor
Events 2011	41	26	42	37	29	26	53



Path / Sidewalk Snow Clearing – Metrics

Metric	Vaughan	Brampton	Burlington	Markham	Mississauga	Oakville	Richmond Hill	Aurora	Newmarket
KM Maintained (2011)	1,000	760			1,300		550		210
Service Levels - Accumulation / Time:									
Primary Sidewalks	5cm / 8 hours	24 hours	<12.5cm / 24 hours, >12.5cm / 18 hours	5cm / 24 hours	<15cm / 24 hours, >15cm / 36 hours	5cm / 48 hours	6 hours	5cm/24 hours	5cm/24 hours
Secondary Sidewalks	5 cm / 16 hours (after primary)	N/A	<12.5cm / 24 hours, >12.5cm / 36 hours <12.5cm / 24 hours, >12.5cm / 72 hours	5cm / after primary	N/A	5cm / 48 hours (after primary) 5cm / 48 hours (after secondary)	10 hours	5cm/24 hours	5cm/24 hours
Residential Sidewalks									
Routes	42	38	14	33	64		15		8
Service Delivery	Vaughan	In-house / Contractor	In-house/ Contractor	In-house/ Contractor	Contractor	In-house / Contractor	In-house (pilot project)		In-house / Contractor
Events 2011	41	26	42	37	29	26	53	46	42



Winter Control Programs – Recommendation

□ Assessment

- ❖ Higher levels of service when compared with other municipalities
- ❖ 90% of residents satisfied with road snow removal services
- ❖ 85% of residents satisfied with sidewalk snow removal services

□ Impacts of Changes in Service Levels

- ❖ Cost - “standby time”, fleet size, material usage, labour
- ❖ Risks – liability, Fire & EMS access
- ❖ Operating models – integration of roads and sidewalks, extending use of contractors

□ Recommendation

- ❖ Conduct operational review of **all** winter control programs
 - Service delivery models, levels of service, impacts, costs, risks and mitigation
 - Include Windrow Snow Clearing and Snow Fencing



10

Seniors' Programming – Overview

❑ Comparators

- ❖ Brampton, Burlington, Markham, Oakville, Richmond Hill, Toronto, “X”

❑ Sources

- ❖ Municipal departments
- ❖ MPMP data
- ❖ Municipal websites

❑ Service Levels

- ❖ Hours of programming available
- ❖ “In kind” support
- ❖ Pricing / discounting



Seniors' Programming – Metrics

Metric	Vaughan	Brampton	Burlington	Markham	Oakville	Richmond Hill	Toronto	X
Seniors' Population	47,060	85,245	51,450	55,615	59,470	43,010	518,400	
Seniors as %	16%	16%	29%	18%	33%	23%	20%	17%
Eligibility	60+	55+	55+	55+	50+	55+	60+	60+
Seniors' programming Offered - Spring & Summer	45	58	80	47	120	83	156	79
Costs Recovered	Yes - some	Yes - some	Yes - some	Yes - some	Yes - some	Yes - some	Yes - some	Yes - some
Seniors' programming Hours*	453	515	608.5 (summer)		1475	953	1735 (summer)	938
Program Hours Available / 1000 Senior	9.6	6.0	11.8	N/A	24.8	22.2	3.3	7.9
Senior Drop-in Programs	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Senior Group Support	Space		Space	Space				Space
Fee Reductions	48% Fitness	35% Fitness	25% Fitness	40% Swim	30% Fitness	30% Fitness	50% Fitness	20% Fitness
Other		Seniors Centre	Seniors Centre	Seniors Centre	Seniors Centre			

* Does not include programming offered by other groups, e.g. Seniors' Clubs

Seniors' Programming – Recommendation

- Assessment
 - ❖ Comparable levels of service with other municipalities
 - ❖ 85% of residents satisfied with recreation & fitness services
- Impacts of Changes in Service Levels
 - ❖ Cost / Revenue – program delivery, program discounts, services in lieu
 - ❖ Access – “affordability”/participation
- Recommendation
 - ❖ Maintain levels of service associated with Seniors' Programming



Summary

- ☐ The City of Vaughan provides it residents with a high level of service with respect to Winter Control programs and Seniors' Programming when compared to other GTA municipalities;
- ☐ At least, 85% of residents are VERY SATISFIED or SOMEWHAT SATISFIED with current service levels associated with these programs
- ☐ The service levels for Winter Control Programs should be reviewed once an Operational Review of all interconnected programs has been conducted;
- ☐ The service levels for Seniors' Programming should not be adjusted at this time.



COMMITTEE OF THE WHOLE (WORKING SESSION) MAY 28TH, 2013

PROGRAM REVIEW – SERVICE LEVEL COMPARISONS – ROAD SNOW CLEARING, SALTING / SANDING AND PATH / SIDEWALKS SNOW CLEARING

Recommendation

The Interim City Manager, the Commissioner of Engineering and Public Works, the Commissioner of Community Services, the Commissioner of Strategic and Corporate Services and the Director of Innovation and Continuous Improvement, in consultation with the Director of Public Works and the Director of Parks and Forestry, recommend:

- 1) That this report be received for information and discussion purposes; and,
- 2) That staff conduct a detailed operational review of all Winter Control programs, highlighting potential service delivery models, levels of service, impacts on residents, program costs, risks and mitigation.

Contribution to Sustainability

As the City grows, the expectations and requirements of its residents and stakeholders will continue to evolve and change. Program service levels define how the City strives to meet these expectations and provide insight into the effectiveness, efficiency and economy of the City's service delivery models.

Comparison of service levels for similar programs in comparable municipalities provides the City with an opportunity to identify areas where changes in service level may be considered in order to provide residents with reduced levels of service at an associated lower cost. Information gathered in these reviews will enable Council to determine how and where to allocate scarce resources, look to recover service costs through realistic user fees (where feasible) and, in some cases, identify ways in which to reduce environmental impacts which are all elements supporting the City's focus on sustainable use of resources (Goal 1 – Green Directions).

Economic Impact

For several of the winter control programs considered in this review, service levels are higher than those provided by other comparable GTA municipalities. The provision of higher levels of service is, all other things being equal, associated with higher costs; given the coordination necessary in the provision of winter control programs further investigation is required in order to understand the economic impacts of any potential changes in program service levels

While changes to service levels if implemented, could potentially reduce annual costs the realization of these benefits may take several years given current contract obligations.

Communications Plan

Taxpayers, residents and other stakeholders should be consulted before changes are made to program service levels, so that the rationale for potential changes is understood by the community and that Council and staff are aware of the community's expectations for, and perception of, the changes.

It is the intent that, if changes to service levels are considered, a series of public consultation sessions and on-line surveys be conducted to inform the community and collect feedback with respect to any potential changes.

Purpose

The purpose of this report is to provide a comparison of GTA municipal service levels for several winter control programs identified in Item 1, Report No. 42 of the Committee of the Whole (Working Session) and adopted by Council on October 30th, 2012. The municipalities used as comparators were Brampton, Burlington, Markham, Mississauga, Oakville, Richmond Hill, Aurora and Newmarket.

Council specifically directed staff to compare the service levels of the following programs with other GTA municipalities and to identify any potential options for changing the level of service provided by the City:

- Winter Control / Sanding and Salting
- Winter Control / Road Snow Clearing
- Path / Sidewalk Snow Clearing
- Animal Services
- Seniors' Programming.

Although closely integrated with the Road Snow Clearing program, the Winter Control / Windrow Snow Clearing program was not included in the scope of this service level review. Additionally, Animal Services has already been addressed in Item 3, Report No. 1 of the Finance and Administration Committee 2013. A review of Seniors' Programming has been provided as a separate accompanying report.

Background - Analysis

Winter Control Programs – Sanding / Salting and Road Snow Clearing

Ontario Regulation 239/02 sets out the Minimum Maintenance Standards for Municipal Highways and, among other items, defines when a road can be deemed to be in a state of repair with respect to snow accumulation (section 4(2)) and ice formation (section 5(3)). The Public Works Department of the Engineering and Public Works Commission is responsible for maintaining the City's roads in a state of repair and manages, or provides, the services necessary to meet the minimum maintenance standards.

For the winter control programs, Regulation 239/02 sets out the following minimum standards for each class of road, where each road class is a function of the posted or statutory speed limit and the average annual daily traffic volume. The City is responsible for roads of Class 2 through 6 as shown in the following table.

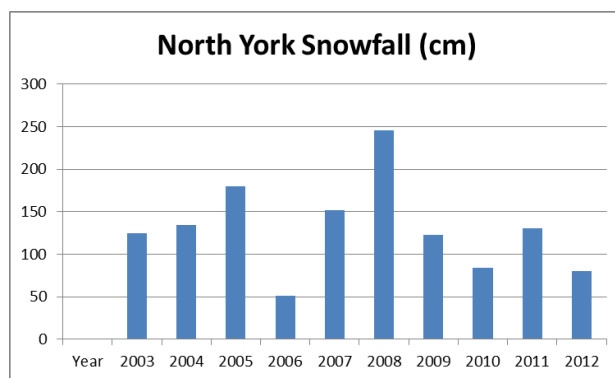
Road Class	Road Type	KM maintained by City	Snow Accumulation (Minimum Standards)			Ice Formation (Minimum Standards)	
			Depth of Snow	Time to clear to depth after Snowfall	City's Service Level	Time to de-ice after Notification	City's Service Level
Class 1	Expressway	N/A	2.5cm	4 hours	N/A	3 hours	N/A
Class 2	Arterial	147	5.0cm	6 hours	5cm/4hrs	4 hours	3hrs
Class 3	Collector		8.0cm	12 hours	5cm/4hrs	8 hours	4hrs
Class 4	Local / Residential	826	8.0cm	16 hours	5cm/12hrs	12 hours	6hrs
Class 5	Local / Residential		10.0cm	24 hours	5cm/12hrs	16 hours	6hrs

Road Class	Road Type	KM maintained by City	Snow Accumulation (Minimum Standards)			Ice Formation (Minimum Standards)	
			Depth of Snow	Time to clear to depth after Snowfall	City's Service Level	Time to de-ice after Notification	City's Service Level
Class 6	Laneway		N/A	N/A	15cm/24hr	N/A	8hrs

The table above illustrates that for a Class 3 road, the depth of snow should be no greater than 8.0 cm 12 hours after the end of snowfall in order to be deemed in a state of repair, and should be de-iced within 8 hours of determining that roads are susceptible to ice formation.

It must be stressed that these are minimum maintenance standards developed by the Ministry of Transportation and many municipalities have service levels that exceed the minimum requirement, for example, most municipalities clear a road to bare pavement.

A municipality must be able to deal with inconsistent snowfall patterns, and Vaughan is no exception. The nearest weather station to Vaughan (with continual records for over ten years) is located in North York (approximately 9km from the City). Since 2003, the average annual snowfall has been 130.34cm, with a range of 50.6cm to 245.6cm.



Program 131 – Sanding / Salting

The table in Attachment 1 provides a comparison between the City of Vaughan and other municipalities' service levels for sanding and salting (or ice formation prevention) on roadways for each road class. The information provided in the table has been collated from a variety of sources including each municipality's Roads' Department, 2011 Municipal Performance Measurement Program (MPMP) data and information publically available from each municipality.

The comparator municipalities have differing approaches to providing the program. The City, for example, has a blend of contracted and in-house resources for the delivery of the programs similar to York Region. Other municipalities contract out this work fully to a third party. The general approach taken by municipalities is to divide their roads into routes (based on geography and/or road class) and to ensure that the roads within a route can typically be treated within the required service level time.

From the data, it is apparent that many of the comparator municipalities have set the minimum standard as their desired service level, though the City has set service levels that are higher than the required minimum. The City is also the only municipality to publish a standard for providing sanding / salting for Class 6 roads.

Given that the City provides a higher level service with respect to salting / sanding its roads, the average cost of material used in winter control operations per lane km is higher than that of other municipalities.

The direct costs associated with providing the Sanding / Salting program are due to the material spread on the road surface and the equipment / labour (and other contracted services) utilized to do so. The most significant drivers of these direct costs are:

- the length of road that needs to be maintained;
- the level of maintenance performed, i.e., clear to bare pavement or limited bare pavement; and,
- how quickly each class of road must be treated.

Currently, the largest cost element relates to the payment of equipment standby. This payment guarantees that the equipment and staff are available and dedicated to the City's use 24/7 throughout the entire winter season.

The cost drivers impact overall costs as more roads will require more salt / sand, while shorter times for road treatment require the road network be divided into more routes, requiring more equipment and staff.

The City provides its residents (and road users from other communities) with one of the highest levels of service with respect to salting / sanding its roads and ensuring that ice formation on roads is addressed as expeditiously as possible. Any changes to service levels would need to take into consideration, the safety concerns of road users, impacts on Fire / EMS response times and potential liability associated with traffic accidents

Additionally, as the services for the Road Snow Clearing program have been contracted out with the contracts running until March 2014, it would be winter 2015 before any change in the service levels could be implemented and the benefits realized.

An operational review of the Sanding / Salting program would more clearly identify the savings opportunities associated with a change in service levels, enable identification of required changes to service delivery models and infrastructure, allow full analysis of any associated risks and enable the development of a detailed implementation approach.

Program 128 – Road Snow Clearing

The table in Attachment 2 provides a comparison between the City of Vaughan's and other municipalities' service levels for clearing snow from roadways for each road class. The information provided in the table has been collated from a variety of sources including each municipality's Roads' Department, MPMP data (2011) and information publically available from each municipality.

As with Salting / Sanding, the general approach taken by municipalities is to divide their roads into routes (based on geography and/or road class) and to ensure that the roads within a route can typically be treated within the required service level time. The municipalities also utilize a blend of delivery options to clear snow from roadways, with third party providers being the dominant model.

For clearing snow from their roads, the municipalities generally adhere to service levels that are superior to the Minimum Maintenance Standards, as in most cases, the municipalities strive to return roads to bare pavement rather than just meeting the depth of snow required "to be deemed in a state of repair". Further, the City has some of the highest service levels and is the only municipality to set a service level for clearing snow from laneways.

The direct costs associated with providing the Snow Clearing program are due to the labour and equipment costs regardless of the service delivery model. The most significant driver of these direct costs is how quickly each class of road must be cleared, as, similar to the previous program, shorter times for clearing the roads of snow require the road network be divided into more routes, requiring more equipment and staff. The largest cost element relates to the payment of equipment standby. This payment guarantees that the equipment and staff are available and dedicated to the City's use 24/7 throughout the entire winter season.

The City provides its residents (and road users from other communities) with one of the highest levels of service with respect to clearing snow from its roads as expeditiously as possible. Any changes to service levels would need to take into consideration, the safety concerns of road users, impacts on Fire / EMS response times and potential liability associated with traffic accidents

Additionally, as the services for the Road Snow Clearing program have been contracted out with the contracts running until March 2014, it would be winter 2015 before a change in the service levels could be implemented and the benefits realized.

An operational review of the Road Snow Clearing program would more clearly identify the savings opportunities associated with a change in service levels, help in the identification of the potential impact on other programs (e.g., Windrow Clearing), enable identification of required changes to service delivery models and infrastructure, allow full analysis of any associated risks and enable the development of a detailed implementation approach.

Program 67 – Path / Sidewalk Snow Clearing

While the Minimum Maintenance Standards for Municipal Highways currently has not set a standard relating to snow / ice management on sidewalks, it does define standards relating to surface discontinuities (section 16).

The table in Attachment 3 provides a comparison between the City of Vaughan's level of service for clearing snow from sidewalks and those of comparable GTA urban municipalities. As municipalities in the Region are responsible for maintaining sidewalks adjacent to Regional roads, the Region is not included in this comparison.

The City provides some of the highest level of service for clearing snow from sidewalks within this group of municipalities, with the major difference being the target time for completing the activity. The City of Vaughan appears to be one of the only municipalities in this group where sidewalks are cleared solely by city staff, while several of the other municipalities have fully contracted out this service. (Richmond Hill is currently evaluating a pilot study which saw responsibility for sidewalk clearing brought in-house.)

In the City's case, the service is delivered by Parks and Forestry Operations and enables the department to utilize full-time and seasonal staff during the winter season. The City is divided into 42 sidewalk snow clearing routes, each of approximately 25 km with assigned equipment and staff. The current route structure also reflects limits placed on the number of consecutive hours that an equipment operator may work.

The direct costs associated with providing the Sidewalk Snow Clearing program are due to the labour, salt and equipment costs. The most significant driver of costs is how quickly each sidewalk must be cleared, as, similar to the previous programs, shorter times for clearing the sidewalks of snow require the sidewalk network be divided into more routes, requiring more equipment and staff.

Given the current service delivery framework, i.e., using internal Parks and Forestry Operations staff, changing the service level for clearing snow from sidewalks would likely deliver limited costs

savings. It is important to note that the current service levels were established ten years ago and are proving difficult to maintain. The service levels were developed for routes of 24km but the routes have become (on average) 27km which has resulted in routes taking longer to clear. Further challenges to meeting the current service levels include staff availability to work overtime and Ministry of Labour regulations for consecutive hours worked.

An initial review suggests the City receives between 60 and 75 personal injury annually (based on 2008 – 2011 files). Further investigation of each of these files, (some of which are still being resolved), is required in order to identify which are “Slip & Fall” claims that are attributable to Winter Control – Sidewalk Clearing. Changing the service level could have an impact on the number of claims made against the City.

An operational review of the Path / Sidewalk Snow Clearing program would facilitate the exploration of any change to the program’s service delivery model, such as contracting out services. In turn, this would enable the City to explore potential changes to service levels, allow full analysis of any associated risks and enable the development of a detailed implementation approach.

Relationship to Vaughan Vision 2020/Strategic Plan

A comparison of service levels between the City’s programs and those of other similar municipalities provides an opportunity to identify any significant differences in the services delivered to residents in different jurisdictions. These differences can be explored further to understand the impact on any costs or revenues associated with the delivery of the services.

On-going review of service levels and dialogue with service recipients enables the City to identify ways in which service levels, or service delivery models, could be changed so as to ensure that residents are provided with the required services with the most appropriate cost structure.

The Service Level Reviews are consistent with and support the City’s strategic goals of Service Excellence by enabling the City to “demonstrate excellence in service delivery”.

Regional Implications

Not applicable.

Conclusion

A comparison of the City's current service levels for Road Snow Clearing, Salting / Sanding and Path / Sidewalks Snow Clearing Programs with other urban GTA municipalities demonstrates that the City's residents are provided with a high level of service.

The provision of higher levels of service is, all other things being equal, associated with higher costs. As the most recent Ipsos-Reid survey demonstrates that residents "believe they receive good value for their tax dollars" with over 85% *VERY SATISFIED* or *SOMEWHAT SATISFIED* with the winter control services provided by the City, the survey suggests that residents are comfortable supporting the current service levels. The Ipsos-Reid report also identified Road and Sidewalk Removal programs as areas for maintenance, i.e., services of relatively high importance where satisfaction is good and where the focus is on maintaining current levels of service.

Changes to service levels are not without associated risks (and potential financial liability). Specifically, changes to service levels in winter control programs could potentially impact Fire / EMS response times and increase the number of claims made against the City with respect to accidents that are deemed attributable to poor states of repair.

Winter control programs (i.e., Road Salting / Sanding, Road Snow Clearing, Ice and Snow Removal, Windrow Snow Clearing, Snow Fencing and Path / Sidewalk Clearing) are highly interlinked (e.g., snow clearing roads and sidewalks, and snow clearing roads and windrows), so any proposed changes in service level (or service delivery model) in one program could have a ripple impact on another program. To understand these impacts and to develop a holistic and truly integrated approach to winter control, an operational review of all winter control programs is warranted.

City staff recommends that an operational review of all Winter Control Programs be conducted in order to highlight potential service delivery models, levels of service, impacts on residents, program costs, risks and mitigation.

Attachments

- Attachment No. 1: Winter Control / Sanding and Salting – Municipal Service Level Comparisons
- Attachment No. 2: Winter Control / Road Snow Clearing – Municipal Service Level Comparisons
- Attachment No. 3: Path / Sidewalk Snow Clearing – Municipal Service Level Comparisons

Report prepared by:
Derek Patterson
Director Innovation and Continuous Improvement
Ext. 8053

Respectfully submitted,

Barbara Cribbett,
Interim City Manager

Paul Jankowski,
Commissioner of Engineering and Public Works

Marlon Kallideen,
Commissioner of Community Services

Joseph Pittari,
Commissioner of Strategic and Corporate Services

Derek Patterson,
Director of Innovation and Continuous Improvement

Attachment 1: Winter Control / Sanding and Salting – Municipal Service Level Comparisons

[illegible]

Attachment 2: Winter Control / Road Snow Clearing – Municipal Service Level Comparisons

[illegible]

Attachment 3: Path / Sidewalk Snow Clearing – Municipal Service Level Comparisons

Metric	Vaughan	Brampton	Burlington	Markham	Mississauga	Oakville	Richmond Hill	Aurora	Newmarket
Sidewalk KM Maintained (2011)	1,000	760			1,300		550		210
Service Levels - Accumulation / Time:									
Primary Sidewalks	5cm / 8 hours	24 hours	<12.5cm / 24 hours, >12.5cm / 18 hours	5cm / 24 hours	<15cm / 24 hours, >15cm / 36 hours	5cm / 48 hours	6 hours	5cm/24 hours	5cm/24 hours
Secondary Sidewalks	5 cm / 16 hours (after primary)	N/A	<12.5cm / 24 hours, >12.5cm / 36 hours	5cm / after primary	N/A	5cm / 48 hours (after primary)	10 hours	5cm/24 hours	5cm/24 hours
Residential Sidewalks			<12.5cm / 24 hours, >12.5cm / 72 hours			5cm / 48 hours (after secondary)			
Material Cost per KM (2011)	\$1,662			N/A	\$1,605			N/A	In process of calculating figure
Routes	42	38	14	24 hired 9 in-house	64		15		8
Service Delivery	Vaughan	In-house / Contractor	In-house/ Contractor	In-house/ Contractor	Contractor	In-house / Contractor	In-house by Roads staff (pilot project)		Newmarket (65% of sidewalks, in future may contract out)
Events 2011	41	26	42	37	29	26	53	46	42
Service Levels met	85%	100%	100%	100%	100%	100%	?	N/R	100%