



PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE

**Thursday, October 2, 2014
4:00 PM**

Henry Baker Hall, Main Floor, City Hall



**Public Agenda
Public Works and Infrastructure Committee
Thursday, October 2, 2014**

Approval of Public Agenda

Minutes of the meeting held on September 11, 2014

Administration Reports

PW14-19 Annual Winter Maintenance Summary Report

Recommendation

That this report be received and filed.

PW14-20 Snow Clearing at Homes Without Driveways adjacent to Transit Stops

Recommendation

1. That the plowing and snow removal objectives in the Winter Maintenance Policy remain unchanged.
2. That Item number PW13-17 be removed from the List of Outstanding Items for this committee.

PW14-21 Snow Routes

Recommendation

1. That the current snow plowing practice be maintained with a concurrent increase in public outreach and communication intended to reduce the on-street parking during snow plow operations.
2. That the Administration evaluate the effectiveness of enhanced education and communication over the 2014/15 winter season, and by the end of quarter three of 2015 provide City Council with a summary of findings and potential new recommendations, if necessary, to address challenges with on-street parking during snow plow operations.
3. That this report be forwarded to City Council for approval.

PW14-22 Sidewalk Clearing Options

Recommendation

1. The Winter Maintenance Policy be amended to include a requirement



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for the City to clear sidewalks adjacent to City-owned parks that are next to a public school.

2. That The Winter Maintenance Policy be amended to treat all commercial properties consistently, requiring building owners to clear any frontage sidewalk adjacent to senior citizen complexes with more than twenty units in a single building.
3. That this report be referred to the 2015 budget process.

PW14-23 Alley Maintenance Strategy and Special Tax Levy Funding Option

Recommendation

1. That the City Solicitor be instructed to prepare the appropriate bylaw for alley maintenance for 2015, which includes the following levies, proposed revenues, and estimated costs;

Paved Alleys	\$3.85 per assessable foot
Gravel Alleys	\$2.71 per assessable foot

The proposed revenues and estimated costs for maintenance of alleys in 2015 are:	
Paved Alleys	\$3,228,710
Gravel Alleys	<u>\$1,669,520</u>
TOTAL	\$4,898,230

2. That the City Solicitor include a definition of flankage in the bylaw for alley maintenance; and
3. That the City Solicitor amends the bylaw for alley maintenance by eliminating the provision for exempting any “property frontage that flanks an alley”. Any property abutting a laneway either on its rear or flank will be charged an alley maintenance fee based on its assessable frontage as determined by the Director of Assessment and Property Taxation.

PW14-24 Snow Storage Site User Fee

Recommendation

1. That the Administration:
 - a) investigate and develop an appropriate permit process and fee for commercial contractors for the use of the City of Regina’s Snow Storage Site beginning November 1, 2015;



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- b) provide a follow up report back to City Council in quarter two of 2015 on the feedback received on the implementation of the fee and permit process; and,
- c) bring forward a report to City Council in quarter two of 2015 which contains the necessary amendments to *The Clean Property Bylaw, No. 9881* that include:
 - i. a fee structure for commercial contractors using City of Regina's Snow Storage Site; and
 - ii. processes for issuing permits to commercial contractors for use of the City of Regina's Snow Storage Site.

Adjournment

AT REGINA, SASKATCHEWAN, THURSDAY, SEPTEMBER 11, 2014

AT A MEETING OF THE PUBLIC WORKS AND INFRASTRUCTURE
COMMITTEE
HELD IN PUBLIC SESSION

AT 4:00 PM

These are considered a draft rendering of the official minutes. Official minutes can be obtained through the Office of the City Clerk once approved.

Present: Councillor Sharron Bryce, in the Chair
Councillor John Findura
Councillor Bob Hawkins
Councillor Barbara Young

Regrets: Councillor Terry Hincks

Also in Attendance: Committee Assistant, Linda Leeks
Executive Director, Transportation & Utilities, Karen Gasmo
Legal Counsel, Jayne Krueger
A/Director Roadways & Transportation, Les Malawksi
Manager, Roadway Preservation, Nigora Yulkakshieva
Coordinator, Construction Programming, Ted Duce
Manager, Operational Renewal, Tom O'Connell

Approval of Public Agenda

Councillor Findura moved, AND IT WAS RESOLVED, that the agenda for this meeting be approved, as submitted.

Minutes of the meeting held on June 5, 2014

Councillor Barbara Young moved, AND IT WAS RESOLVED, that the minutes for the meeting held on May 8, 2014 be adopted.

Administration Reports

PW14-15 Residential Road Network Improvement Plan

Recommendation

1. That a long term goal be established to achieve a service level of 'fair' or better conditions for 85% of the residential road network;
2. That the 1% dedicated mill rate, approved in the 2014 budget, be applied to residential roads within the 'good' and 'fair' condition category (i.e. using a strategy of "Proactive Repair"), in order to stabilize the network from further degradation; and

3. That, during the 2015 budget process, City Council considers establishing a program of Residential Road Network Improvement funding with an incremental 1% dedicated mill rate increase over each of the next five years, in addition to the dedicated 1% property tax allocated in the 2014 budget. This Residential Road Network Improvement funding is intended to secure the necessary financial resources to systematically address the condition of residential roads within the 'poor' category and deliver a program of on-going preventative maintenance and rehabilitation to roads in 'good' and 'fair' condition.

Mr. Jim Elliott, representing himself addressed and answered questions of the committee.

Councillor Barbara Young moved, AND IT WAS RESOLVED, that the recommendations contained in the report be concurred in.

PW14-17 Teachers' Superannuation: Enlargement of Street Name Signs

Recommendation

That this item be removed from the list of outstanding items for the Public Works and Infrastructure Committee.

Ms. Adeline Wuschenny, representing the Teachers' Superannuation addressed and answered questions of the committee.

Councillor Bob Hawkins moved, AND IT WAS RESOLVED, that the recommendations contained in the report be concurred in.

PW14-14 Potential Sale of Asphalt Mixes and granular/recycled materials to external customers

Recommendation

1. Direct the Administration to supply recycled materials for purchase to external customers and/or public entities;
2. Delegate the authority to establish the prices and sign individual recycled materials sale agreements to the Deputy City Manager & COO or his or her designate based on the guiding principals set out in this report;
 - a) The price of recycled materials will be set at the level required to generate net revenue and to sell the excess inventory of recyclable materials. The annual supply of raw recyclable materials will be balanced with the demand for crushed (recycled) materials;
 - b) The price of various materials sold to public entities will be maintained at cost plus 20%;

- c) Financial risks must be mitigated in association with the sale of products to the external parties; and
 - d) Materials will be prioritized for internal City use before supplying to external customers.
- 3. Direct the Administration to monitor the asphalt supply market over the next year, and if market conditions change significantly, advise City Council as to whether or not there is a need and a benefit for the City to enter this market;
 - 4. Instruct the City Solicitor to amend Schedule “E” to *The Regina Administration Bylaw, No. 2003-69* to permit the Deputy City Manager & COO or his or her designate to sign contracts relating to the sale of granular/recycled materials; and
 - 5. This report be forwarded to City Council for approval.

Councillor John Findura moved, AND IT WAS RESOLVED, that the recommendations contained in the report be concurred in.

PW14-16 Local Improvement Program Review

Recommendation

- 1. Subject to the 2015 budget decisions by City Council:
 - a. That the current Local Improvement Program (LIP) for walk, curb and gutter replacement be discontinued beginning with the 2015 budget year and construction season for all City planned projects;
 - b. That all works included under *The Local Improvements Bylaw, 2014, Bylaw No. 2014-34* (the “Bylaw”) be specially assessed as approved under the Bylaw;
 - c. That special assessment payments for LIP works constructed in 2014 or earlier continue for their full terms.
 - d. That a new LIP be developed for projects that are initiated by property owners either through requesting installation of a new infrastructure or requesting infrastructure renewal be carried out ahead of schedule of the work planned as part of the Residential Road Network Improvement Plan;
 - e. That the Administration bring a report to the November 2015 meeting of the Public Works & Infrastructure Committee detailing the new Local Improvement Program.
- 2. This report be forwarded to City Council as a part of the 2015 budget process.

Councillor Bob Hawkins moved, AND IT WAS RESOLVED, that the recommendations contained in the report be concurred in.

Communications

PW14-18 Waste Vegetable Oil Conversion

Recommendation

That the Public Works and Infrastructure Committee request the City Administration provide a report to the Public Works and Infrastructure Committee in the third quarter, which includes options for feasibility and local design of a waste vegetable oil conversion system such as the vegawatt system which could be used for a pilot project in 3 locations that have a minimum of 2 deep fryers such as Evraz Place, University of Regina and 1 independent restaurant and that the EAC be kept updated on the status of this item.

Councillor John Findura moved concurrence of the recommendations contained in the communication.

The motion was put and declared LOST.

Adjournment

Councillor Bob Hawkins moved, AND IT WAS RESOLVED, that the meeting adjourn.

The meeting adjourned at 5:00 p.m.

Chairperson

Secretary

October 2, 2014

To: Members,
Public Works and Infrastructure Committee

Re: Annual Winter Maintenance Summary

RECOMMENDATION

That this report be received and filed.

CONCLUSION

This report is a review of the Winter Maintenance program during the 2013/2014 season. The results discussed in this report have been evaluated against the objectives outlined in the City Council approved Winter Maintenance Policy.

The below-average temperatures throughout the 2013/2014 winter season caused an increase in both the number of freeze and thaw cycles, as well as equipment breakdown. Due to the increase in freeze and thaw days, more de-icing material was required on the road network in order to achieve safe winter driving conditions. Additionally, seven storm events occurred as compared to the seasonal average of five. Both the amount of snow accumulation and the number of snow days were lower than the five year average.

While the Winter Maintenance branch was able to deliver the majority of the program as specified in the Winter Maintenance Policy (the Policy), the 2014 budget is expected to be overspent by more than \$1 million. The program has traditionally overspent annual budget on average by \$1.828 million on a consistent basis since 2009, shortly after the Policy was approved. The majority of the over expenditures are due to equipment lease and rental costs, hiring external contractors for support, increase in storm frequency¹, and operating expenses at the Snow Storage Site. In past years, this shortfall has been funded by a City revenue surplus. As we prepare future budgets the administration will continue to analyze policy adherence and consider additional budget requirements. In years where there are budget shortfalls the Winter Maintenance Reserve could be utilized. The balance, in the reserve, is currently \$3.5 million. Although there is recognition that the budget is under funded to meet the minimum Policy requirements, there is also a realization that allocating additional funds is difficult to achieve due to many competing corporate priorities.

The Winter Maintenance Policy has several general objectives laid out to support the purpose of the program. The Winter Maintenance branch closely monitored its ability to meet these objectives throughout the season. Although City crews have proven to excel at consistently meeting Systematic Plowing timelines, there remains work to be done in ensuring that Routine Maintenance activities are being consistently documented and tracked by crews. In an effort to provide an additional evaluation of our compliance with the Winter Maintenance Policy, Winter

¹ Winter Maintenance Budget is based on five storms. During the 2013/2014 season, the City of Regina experienced seven storms. In 2012/2013, we experienced nine storms.

Maintenance crews conducted two quality surveys during the season and found that objectives were met 100% of the time during the Routine Maintenance program.

Due to ever increasing winter maintenance costs, Winter Maintenance staff continues to investigate innovative solutions to reduce costs in the delivery of the Policy. During the 2013/2014 season, crews began to utilize a technique of creating multiple snow ridges in certain open areas susceptible to drifting snow, as opposed to installing wooden snow fences. This experiment proved to be successful and resulted in a reduced cost of approximately \$37,466 to the operating budget based on the four year average annual expenditures, while also providing enhanced service levels on the rural roads, intersections and other selected locations. A second innovation introduced better utilization of resource capacity and winter road maintenance cost avoidance by deploying staff and equipment not needed for winter road maintenance activities to a hauling activity for Asphalt Production and Materials Engineering. Winter Maintenance crews hauled 39,406 tonnes of material for the Asphalt Production and Material Engineering branch during the winter season, realizing internal savings of over \$20,000 as compared to the cost if the same service was provided by an external contractor, as well as an operating budget cost avoidance of over \$87,000.

Lastly, there are many operational challenges that Winter Maintenance staff continue to face throughout the winter season. Further explanation of these challenges is outlined in the discussion of the report. Briefly, these challenges include, but are not limited to:

1. Equipment downtime
2. Increasing cost of Snow Storage Site
3. Sidewalk clearing
4. Growing Expectation of the Public
5. Winter Maintenance operating budget
6. Solid Waste Collection
7. Design standards

As a result of some of these challenges, as well as requests from City Council and the Executive Leadership Team, the following reports have also been submitted to the October 2 Public Works and Infrastructure Committee to discuss options to improve or enhance winter maintenance activities:

1. Snow Clearing at Homes without Driveways Adjacent to Transit Stops
2. Sidewalk Clearing Options
3. Snow Routes
4. Snow Storage Site User Fee

In addition, Winter Maintenance staff will continue to work with the various supporting departments and external stakeholders in an effort to minimize these challenges.

BACKGROUND

On December 18, 2006, City Council approved the Winter Maintenance Policy, which was officially implemented November 2007. Council approved the recommended policy amendments submitted in November 2010. The Administration is committed to annual reviews of the Winter Maintenance Policy.

The purpose of the Winter Maintenance program is to provide winter maintenance that effectively supports the health, attractiveness, and economic viability of this community. The Winter Maintenance Policy was created in an effort to provide an acceptable and consistent level of service when maintaining the road network and to ensure safe winter driving conditions for the citizens of Regina. The Policy includes guidelines and timelines regarding the plowing of streets, sidewalks, and alleys following snow events, as well as for routine maintenance of our road network during the winter months.

Within the Policy, there are several general objectives laid out to support the purpose of the program. The Winter Maintenance branch strives to meet these objectives in both performance and end conditions. This report discusses the status of each outlined Policy objective, a five year comparison of environmental conditions and financial expenditures, as well as any challenges crews faced in meeting these objectives.

DISCUSSION

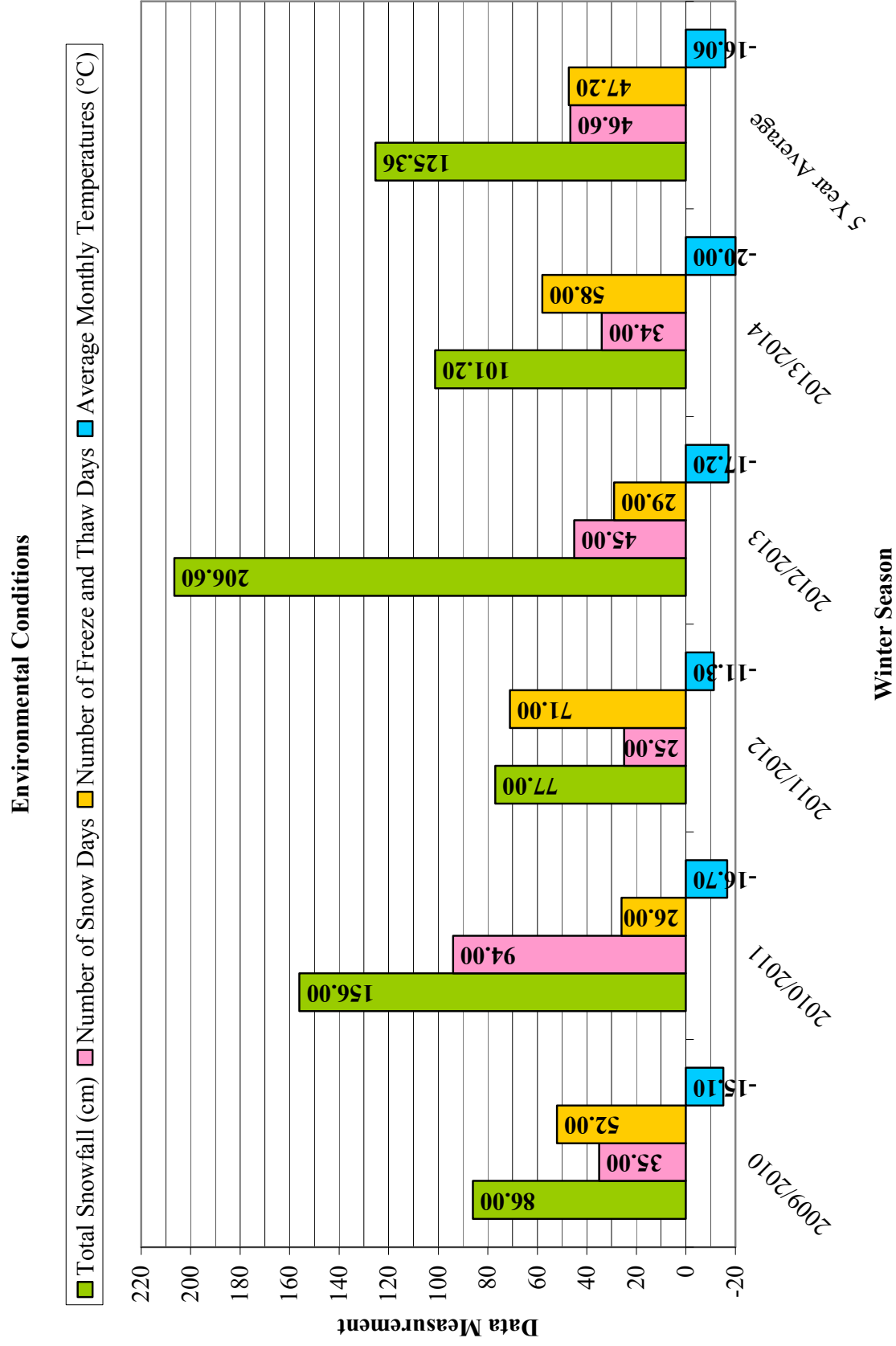
Environmental Conditions

A summary of winter conditions in Regina over the past five years are depicted in Chart 1.

During the 2013/2014 winter season, Winter Maintenance crews faced below average conditions based on the five year average for snowfall and number of snow days. However, the number of freeze and thaw days during the season was above the five year average. For analytical purposes, the winter season is defined as the period from October 1 to April 30.

The total snowfall accumulation was 101.2 cm as compared to the five year average of 125.4 cm. The total number of snow days was 34 and the five year average was 46.6 snow days. However, the total number of freeze and thaw days during this season was 58, more than the five year average of 47 days. This indicates that winter operations crews had to place more focus on ice control activities in order to meet the Policy guidelines. The average temperature of -20 degrees Celsius during the season was well below the yearly average of -16 degrees Celsius.

Chart 1 – Environmental Conditions



Winter Maintenance Budget and Expenditures

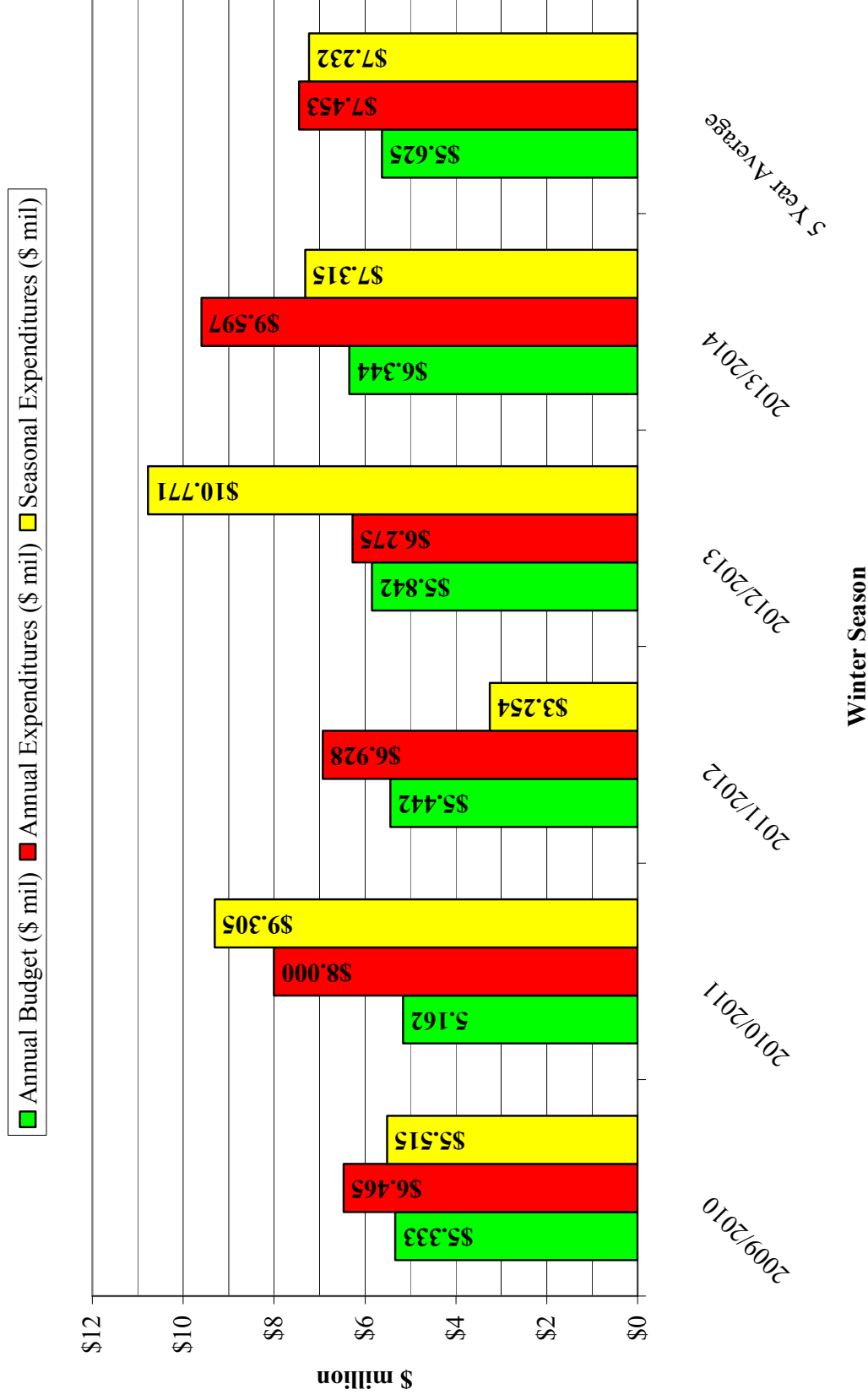
The Winter Maintenance operating expenditures during last five year were on average \$1.828 million higher than available budget annually. Although there have been annual budget increases, they have not been sufficient enough to keep up with the annexation, rapid growth, and expansion of our community, as well as the increased number of storms we have experienced. The Administration intention is to gradually close this gap over the next few years. In meantime the annual shortfall will continue to be covered from City year end revenue surplus, if available; for years with no revenue surplus, the shortfall will be covered from The Winter Maintenance Reserve which has current balance of \$3.523 million.

The majority of these over expenditures are due to increased equipment lease and rental costs, as well as the costs of hiring contractors to support the winter maintenance activities during snow storms and other weather events. Another major expenditure is the cost of operating the Snow Storage Site. Approximately 60 per cent of the snow hauled to the site comes from external contractors hauling constantly throughout the winter season. Many of these contractors are also travelling from neighbouring communities as the free access to the Snow Storage Site is a major incentive for contractors to drive the additional distance.

Chart 2 provides the Winter Maintenance branch's expenditure comparison over the last five years with both annual and seasonal expenditures in relation to the budget. Expenditures during the 2013/2014 season were approximately \$7.315 million, and forecasted expenditures through the remainder of 2014 are expected to be approximately \$1.031 million higher than the budget of \$6.797 million.

Chart 2 – Winter Maintenance Budget and Expenditures

Winter Maintenance Budget and Expenditures



Policy Objectives

The Winter Maintenance Policy has several general objectives laid out to support the success of the program. The Winter Maintenance branch closely monitored its ability to meet these objectives during the 2013/2014 season through the documentation of daily activities as outlined in the Policy. Winter Maintenance crews also conducted two quality surveys throughout the season in order to evaluate the alignment of the winter activities with the Policy timelines and quality expectations. The quality survey findings indicated that the Policy's quality objectives were met 100 per cent of the time during the Routine Maintenance program.

Table 3 - Winter Maintenance Policy Objective Achievements

Objective		Achieved	Remarks
#1	All roads are made passable for EMERGENCY RESPONSE VEHICLES (fire, police, ambulance)	99.5%	<ul style="list-style-type: none"> Objective achievement is measured based on the communication with dispatch and emergency services during storm plowing operations and on the overall plowing completion of all roads during systematic plowing operations within the defined timelines.
#2	Normal winter driving conditions and reasonable sidewalk access are provided on key routes through systematic plowing and sanding operations on PRIORITY 1 roads.	99.4%	<ul style="list-style-type: none"> Objective achievement is measured based on the overall plowing completion of Category 1 roads during systematic plowing operations within the Winter Maintenance Policy timelines. During the December 13 storm, two locations missed being plowed before the 24 hour timeline. All other storms achieved 100% completion within the Winter Maintenance Policy timelines.
#3.1 Roads	Normal winter driving conditions and reasonable sidewalk access are provided along regional commercial developments and secondary routes through systematic plowing and sanding operations on PRIORITY 2 roads.	96.1%	<ul style="list-style-type: none"> Objective achievement is measured based on the overall plowing completion of Category 2 roads during systematic plowing operations within the Winter Maintenance Policy timelines. The completion percentage did not achieve 100% due to the operational decision to perform plowing and snow removal activities in the Downtown core at the same time. This program is a major activity that utilizes many internal and external resources, and in order to achieve other objectives, must be completed over two different nights. With the exception of Downtown core, all other Category 2 roads achieved 100% completion within the Winter Maintenance Policy timelines.
#3.2 Sidewalk		97.2%	<ul style="list-style-type: none"> Objective achievement is measured based on the overall completion of the sidewalk plowing activity within the Winter Maintenance Policy timelines. The completion percentage did not achieve 100% due to the Hand Crew locations being missed on two out of seven storms. This was later identified and plowed during Routine Maintenance operations. In addition, two separate quality control surveys were conducted by Winter Maintenance staff during Routine Maintenance operations, confirming 100% achievement of this objective.

Objective		Achieved	Remarks
#4	Normal winter driving conditions are provided along tertiary routes through systematic plowing and sanding operations on PRIORITY 3 roads.	83.0%	<ul style="list-style-type: none"> Objective achievement is measured based on the overall plowing completion of Category 3 roads during systematic plowing operations within the Winter Maintenance Policy timelines. The completion percentage did not achieve 100% as Winter Maintenance staff faced a variety of issues during the first three storms. Downtown Removal and staffing issues were experienced during two of the storms, and severe wind chill and cold temperatures hindered timelines during the third storm. However, during the three subsequent storms, Category 3 roads were plowed in accordance with the Policy timelines and completed within 48 hours.
#5	Safety and travel efficiency are provided through the plowing and removal of windrows from in front of GUARD RAILS and off of BRIDGE DECKS .	40.4%	<ul style="list-style-type: none"> Objective achievement is measured based on the overall plowing completion of Guard Rail and Bridge Deck locations during Routine Maintenance operations within the Winter Maintenance Policy timelines. Although the completion percentage did not achieve 100%, this measure is not a true indication of our achievements throughout the winter season, but rather an indication that we lacked documentation of this specific activity. Although City crews are trained in the plowing of snow from the guard rails and bridge decks during the Systematic Plow, our Routine Maintenance guideline instructs that we remove the snow when the ridges exceed Policy requirements. Although proper plowing procedures took place, and these locations were removed during Routine Maintenance operations, Winter Maintenance staff failed to document the work each and every time. As a method of verifying Policy guidelines were met, two separate quality control surveys were conducted by Winter Maintenance staff during Routine Maintenance operations, confirming 100% achievement of this objective.
#6	ALLEYS are passable for the collection of solid waste collection and access by utility companies and the public.	99.8%	<ul style="list-style-type: none"> Objective achievement is measured based on a comprehensive communication plan in cooperation with both Solid Waste Collection and Loraas Disposal, and their respective collection schedules. This objective was met 99.8% of the time during the winter season. In total, Winter Maintenance received Service Failure communication during four out of seven storms, and for approximately 3.4 km of a combined 2086 km of the alley network. This also represents only thirteen different alleys over seven storms throughout the season. In the event of a Service Failure, Winter Maintenance has committed to clearing the alley within 24 hours, enabling the collection to continue.

Objective		Achieved	Remarks
#7	Normal winter driving conditions are maintained with SNOW REMOVAL operations.	79%	<ul style="list-style-type: none"> Objective achievement is measured based on the overall Snow Removal completion of the Category 1, 2 and 3 Transit Routes during Routine Maintenance operations within the Winter Maintenance Policy timelines. In measuring the Snow Removal program, approximately 79% of the Category 1, 2 and 3 Transit Routes had snow removed during the previous season. The majority of the roads that are specified in the Policy but did not receive snow removal were located on the Category 3 Transit Routes as the program was ended early to accommodate other competing activities. Many factors played into the failure to remove all locations at least once, such as low daytime productivity due to increased vehicular traffic, two back-to-back storms on February 13 and February 27, and a quick thaw in early March necessitating simultaneous Residential Plow and Catch Basin opening activities. During the Snow Removal program, Category 1, 2 and 3 Transit Routes were surveyed and inspected on numerous occasions to ensure both maximum prioritization, and that the roads with the highest degree of sightline and lane width issues were addressed as soon as possible.
#8	RESIDENTIAL and low volume routes are made passable through PLOWING operations.	100% (see remarks)	<ul style="list-style-type: none"> Objective achievement is measured based on the overall plowing completion of Category 5 roads during Residential Plowing and Ice Shaving operations within the Winter Maintenance Policy. All end conditions were met as defined in Winter Road Maintenance Policy. Winter Maintenance staff appointed a dedicated crew of two plow trucks during the season to provide ice shaving activities on a daily basis in an effort to keep any rutting below 10 cm. All Category 5 roads received ice shaving maintenance at least two times throughout the season. Additionally, a Residential Plow was initiated at the end of February in an effort to reduce snow pack to below 10 cm and to minimize any rutting that may occur during the spring thaw. At this time, every Category 5 road was plowed over a two week period. Residential roads were passable during the majority of the winter season with possible exception being immediately following an abnormal snowfall which still falls within the parameters of current policy; on the extreme rare occasion that emergency vehicles require passage on a street impacted, City crews are immediately deployed to remedy the situation

Innovations

Snow Windrowing

Traditionally, the City's Winter Maintenance crews have installed wooden snow fences at various locations throughout the community. These locations are selected based on service requests and the pre-season site inspections by staff. The snow fences are generally installed on the outskirts of the city, newly developed areas, or certain locations where the snow drifts are known to affect the intersections, rural roads, and/or private properties. The process of installing the snow fences prior to the winter season and uninstalling the posts and snow fences during spring time is labour intensive and time consuming, typically taking multiple crews several weeks to complete.

Winter Maintenance staff began to use an innovative solution of creating multiple snow ridges in certain open areas as opposed to erecting snow fences. This exercise proved to be quite successful, reducing installation and take down expenditures to approximately \$26,121 even though the previous four year average was approximately \$63,587. This realized an average savings of \$37,466 to the winter maintenance budget, as well as providing efficient and enhanced level of service on the rural roads, intersections, as well as other selected locations.

Material Haul

Asphalt Production and Materials Engineering is a branch within Roadways and Transportation that provides a wide variety of products to internal departments.

During extended periods of time between major storm events, and once end conditions outlined in the Winter Maintenance Policy near completion, Winter Maintenance staff is continuously looking for effective allocation of our internal resources. This is necessary in order to maintain the minimum compliment of staffing levels necessary for the storm and snow removal response efforts and also utilize internal resources to the maximum capacity, and when available, Winter Maintenance crews customarily take on the activities of other internal departments that are typically performed by external contractors. As a result, Winter Maintenance crews' hauled 39,406 tonnes of material for the Asphalt Production and Materials Engineering branch during the 2013/2014 winter season. Our internal average cost came to \$4.17/tonne, lower than the \$4.68/tonne as quoted by using an external contractor. The savings realized on this activity amounted to \$20,097, as well as cost avoidance to the Winter Maintenance operating budget of over \$87,000. We will continue to look for ways to deliver cost effective services and activities.

Operational Challenges

1. Equipment Downtime

Throughout the winter season, equipment has typically been unavailable in excess of 30 per cent due to breakdowns and accidental damages. It is difficult to meet policy timelines and to provide desired levels of quality service as this excessive downtime puts a strain on the crews' ability to perform at peak levels. As a result, additional equipment is rented with or without operators in order to fulfill the gap.

Options to decrease equipment downtime to a more acceptable level will be explored.

2. Increasing Cost of Snow Storage Site

Approximately 60 per cent of the snow hauled to the site comes from external contractors hauling consistently throughout the winter season. Many of these contractors are travelling from neighbouring communities as the free access to unrestricted snow dumping is a major incentive for contractors to drive the additional distance.

As outlined in another report submitted to the October 2 Public Works and Infrastructure Committee titled 'Snow Storage Site User Fee', the Winter Maintenance branch recommends implementing a user fee for all private and commercial contractors who utilize the City's Snow Storage Site.

3. Sidewalk Clearing

A significant number of sidewalks are not cleared throughout the winter months, creating accessibility issues and safety hazards for pedestrians. Although the Clean Property Bylaw requires Commercial and Apartment Building property owners to clear their sidewalks, this only accounts for approximately 11 per cent of all sidewalks in the community. In addition, there is another 4 per cent that are cleared by city crews' in accordance with the Winter Maintenance Policy. At 78 per cent, the majority of sidewalks in front of residential homes make up the greatest proportion of sidewalks and these are cleared using the Encouragement Model. However, there are still many sidewalks that are classified as Commercial properties, but are exempt. Properties such as schools, churches and city owned parks are not required to clear sidewalks adjacent to the property, and make up approximately 7 per cent of the remaining sidewalks in the community.

As outlined in other report submitted to the October 2 Public Works and Infrastructure Committee titled 'Sidewalk Clearing Options', the Winter Maintenance branch recommends to address City obligation to clear snow in front of City owned parks and engaging the public and to enhance current encouragement model first before revising the current Bylaw to include commercial properties currently exempt from the Clean Property Bylaw.

4. Growing Expectation of the Public

There is a growing expectation of the public to have year round transportation choices which is supported by *Design Regina: The Official Community Plan Bylaw 2013-48* (Design Regina). This includes establishing all-season design and maintenance priorities for roads, sidewalks and pathways to ensure the transportation network provides safe travel, access and mobility for all residents.

As outlined in the Roadways and Transportation Business Plan, the goal is to initially align the Winter Maintenance Policy with Design Regina guidelines by 2017. Some of the reports and recommendations submitted to the Public Works and Infrastructure Committee are already moving towards meeting these guidelines.

5. Winter Maintenance Operating Budget

The annual budget of the Winter Maintenance branch has been traditionally overspent since 2009. Past budget increases have not been sufficient in keeping up with the annexation, rapid growth, and expansion of the city, as well as the increase in storm frequency. The majority of these over expenditures are due to increased equipment lease and rental costs, as well as the cost of hiring contractors to support the winter maintenance activities during snow storms

and other severe weather events. In past years, this shortfall has been funded by a City revenue surplus. As we prepare future budgets the administration will continue to analyze policy adherence and consider additional budget requirements. In years where there are budget shortfalls the Winter Maintenance Reserve could be utilized. The balance, in the reserve, is currently \$3.5 million.

6. Solid Waste Collection

Over the last number of years, Solid Waste Collection has moved many alley collection carts to the front street. This has had an impact on the homeowner as many homes (up to 150 at this time), do not have a driveway and cannot get their cart to the street curb during the winter months due to snow ridges stored in the parking lane. As per the Winter Maintenance Policy, snow is stored in the parking lane as a result of plowing operations. In discussions with Solid Waste Collection, there are plans to continue moving alley collection carts to the front street in many other areas.

The branch will continue to work with Solid Waste Collection exploring various options to address this issue.

7. Design Standards

Various developments in Regina are cause for concern with regard to Winter Maintenance activities. In an effort to maximize property in each development, narrow roadways are being constructed to a minimum road width of 8.7 metres. According to the Development Standards Manual (DSM), the developer is to install 'No Parking' signs on one side of the street when constructing streets less than 11.0 metres wide.

This issue was brought forward in late 2013, and Roadways and Transportation, in partnership with Infrastructure Development, initiated a plan to bring these narrow roads up to the standards outlined in the DSM. To date, many of the narrow streets in Harbour Landing have had "No Parking" signage installed, with the Greens on Gardiner in the queue for a similar installation.

The branch will continue to work with the Infrastructure Development to bring these roads up to the standards outlined in the DSM.

RECOMMENDATION IMPLICATIONS

Financial Implications

None with respect to this report.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

None with respect to this report.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

The Communications Branch develops an annual comprehensive strategy to communicate winter operations to the public. This strategy includes media relations, an advertising campaign for citizens to help clear snow from their sidewalks, as well as use of the City's social media tools including Facebook, Twitter and YouTube.

In 2013/2014, status updates were provided twice a day during storms and systematic plowing operations, and almost daily throughout the rest of the season. As media interest regarding snow updates is quite high, Winter Maintenance staff responded to over 160 media requests, including numerous media scrums.

Research and evaluation has taken place with regard to awareness of the City's winter maintenance programs and will be used in the development of the 2014/2015 winter communications strategy.

DELEGATED AUTHORITY

A change to the Winter Maintenance Policy would require City Council's approval. At this time, there are no policy changes. As such, the disposition of this report is within the delegated authority of the committee.

Respectfully submitted,



Les Malawski, A/Director
Roadways & Transportation Services

Respectfully submitted,



Karen Gasmo, Executive Director
Transportation & Utilities

Report prepared by:
Chris Warren, Manager, Winter Maintenance
Neeraj Saroj, Senior Engineer, Winter Maintenance

CW/NS/nd/bjd

October 2, 2014

To: Members,
Public Works Committee

Re: Snow Clearing at Homes Without Driveways and Adjacent to Transit Stops

RECOMMENDATION

1. That the plowing and snow removal objectives in the Winter Maintenance Policy remain unchanged.
2. That Item number PW13-17 be removed from the List of Outstanding Items for this committee.

CONCLUSION

The current Winter Maintenance Policy states that snow ridges may be stored in parking lanes adjacent to the curb. The present practice is that snow removed from a transit stop is stockpiled in the parking lane in front of or behind the transit stop. This creates bigger snow ridges in the parking lane in front of one house as compared to the neighbouring properties. The additional snow in these areas results in less parking being available on these streets and in particular in front of those properties, restricting space available for parking in that spot. A request from a resident was made that the snow be removed from in front of this and other properties without driveways. To accommodate this request an amendment to the policy would be required and there would be an increased cost to the Winter Maintenance Program.

An alternative option proposed in this report addresses some of the perceived inequality currently experienced by properties adjacent to transit stops by modifying operational practices to spread the snow being moved from the transit stops over a greater area rather than stock piling it in front of one property. This is the recommended option as it provides a more equitable level of service while maintaining the direction set by the Policy.

BACKGROUND

The current Winter Maintenance Policy states that during plowing operations following a snowfall, snow ridges may be stored in parking lanes adjacent to the curb.

On January 22, 2013, a residential homeowner appeared before the Public Works Committee with a presentation requesting snow removal in front of homes that do not have driveways. This request was made due to inadequate on-street parking for visitors during winter months as a result of snow storage in the resident's parking lane.

On November 7, 2013, the Administration submitted report PW 13-17 to the Public Works Committee outlining various options regarding snow removal in front of homes without driveways. Administration recommended the continuation of current plowing and snow removal objectives as set forth in the Winter Maintenance Policy, which allow for snow storage in the parking lane and do not provide on-street parking during the winter months.

Further to the discussion of this recommendation, the Administration was directed to undertake measures to identify options for reducing excessive snow accumulation in front of homes without driveways and adjacent to transit stops. The current practice is to clear snow from the transit stop area and deposit it in the parking lane adjacent, or beside, that transit stop. Specifically, the Administration was directed to identify the number of houses where this issue may exist, and determine what the costs and other implications of clearing an additional ten feet of on-street parking for these homes would be.

DISCUSSION

The purpose of the Winter Maintenance Policy is to provide guidelines for winter maintenance activities that effectively support the health, attractiveness and economic viability of this community, as well as to provide a safe and reliable transportation network for emergency vehicles, public motorists and pedestrians throughout the winter months. The current policy states that snow ridges resulting from plowing operations may be stored on centre medians or in parking lanes adjacent to the curb. These ridges are only reduced across driveways, intersections, alleys, signed unloading zones, transit stops, guardrails and pedestrian crossings. Typically, the snow cleared from a transit stop is pushed to the parking lane in front of the adjacent property. As a result, snow ridges tend to be bigger in front of the property immediately adjacent to the bus stop, as compared to other properties in the area. These snow ridges are removed from bus routes when their height exceeds 1 metre, as per the Winter Maintenance Policy (usually twice a year).

There are approximately 85 homes that currently do not have a front street driveway and are adjacent to transit stops. This represents approximately 0.1% of the 57,514 residential homes in the City of Regina. Winter Maintenance staff received over 400 calls to Service Regina this past winter requesting snow ridges be removed to better facilitate on-street parking in all areas of the City. All requests were declined as the ridges were within Policy standards. Providing only a small percentage of homes with this enhanced level of service may cause residents to call consistency into question. The expenditure associated with providing a consistent approach to all homes without driveways was reported in PW 13-17 as \$470,877 per cycle.

Further, the request to identify options for reducing excessive snow accumulation in front of homes without driveways and adjacent to transit stops the two following options were considered:

Option 1 – Continue in Accordance with the Winter Maintenance Policy, with a slight change made to the current operational practice (Recommended)

The Administration proposes a slight change be made to the current operational practice in attempt to mitigate the issue. This change to practice would involve having Winter Maintenance crews spread the snow that is removed from bus stops over the parking lanes in front of the adjoining three properties, rather than stockpiling all removed snow in front of a single property. This would reduce the size of the snow ridge in front of the property immediately adjacent to the bus stop.

This would be considered the status quo option as there is no change required to the Winter Maintenance Policy. Changes to operating practices like proposed in this option is something that is regularly considered and will continue to be looked at with the intent of achieving the service objectives of the Policy and providing an acceptable level of service with respect to on-street parking. It is important to note on-street parking in front of residents is not exclusive to the property it is in front of.

Benefits:

- As a result of plowing operations, snow ridges will continue to be stored consistently in the parking lane and the property next to the bus stop would have smaller ridges than under current practice.
- There will be no perception of inconsistent services among residents as a result of providing improved on-street parking to some homes and not to all.
- There will be no financial implications to the Winter Maintenance operating budget.

Risks:

- Residents at homes without driveways and adjacent to transit stops will continue to have snow cleared from transit stops to the parking lane in front of their residence, and would have limited access to improved Winter parking.
- Residents of the next two properties will have bigger ridges than in the past as the snow removed from the bus stop would be spread in front of three houses rather than one.

Option 2 – Snow Removal at Homes without Driveways Adjacent to Transit Stops

This option would involve the creation and deployment of a crew that would remove the snow in front of homes that do not have front driveways and are adjacent to transit stops. This method would consist of a skid steer, tandem truck, and traffic control truck, and would be deployed after the plowing operations were completed. Depending on the snowfall accumulation, an additional 36 to 60 hours of work would be required, as outlined in the Winter Maintenance Policy.

The estimated additional expenditure for *Option 2 – Snow Removal at Homes without Driveways Adjacent to transit stops* would be \$65,000 annually, with the ability to remove snow at approximately nine locations per day. This cost is based on one crew, where the 85 qualifying homes would take approximately ten (10) shifts to complete. A level of service would also need to be identified in order to determine the acceptable timeline expectations with regard to performing the snow removal operation after plowing is complete. This may also increase the expenditure estimate and compete with current Policy requirements and commitments, such as snow removal at schools.

Benefits:

- Residents of homes without driveways and adjacent to transit stops would have additional snow cleared from the transit stops to the parking lane in front of their residence, providing access to improved on-street parking during the Winter months though this parking is not exclusive to those properties.

Risks:

- The cost of this service would be approximately \$800 per affected household, per season
- This may be difficult to manage in the context of a storm event, and could be subject to increased error in applying the policy change
- While these areas would be available for anyone to park in, providing this enhanced level of service in front of only a few properties creates a perception of inconsistency

RECOMMENDATION IMPLICATIONS

Financial Implications

The recommended Option, *Option 1 – Continue in Accordance with the Winter Maintenance Policy with slight change made to the current operational practice* would not result in any new expenditure added to the current budget.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

None with respect to this report.

Other Implications

None with respect to this report.

Accessibility Implications

If the recommended option (Option 1) is approved, snow will be distributed in front of three properties instead of one, thus reducing the overall height of the snow ridges in front of properties adjacent to transit stops. This will increase visibility and accessibility for residents whose property is directly adjacent to a part of the parking lane next to a transit stop. However, in accordance with the current Winter Maintenance Policy, those ridges would be cleared when they reach the outlined height of one meter.

COMMUNICATIONS

If the recommended option (Option 1) is approved and current service levels are maintained, no additional communications activities will be required. The City has information about the Winter Road Maintenance Policy available on Regina.ca.

DELEGATED AUTHORITY

City Council approval is required to amend the Winter Maintenance Policy and/or allocate budget.

Respectfully submitted,



Les Malawski, A/Director
Roadways & Transportation Services

Respectfully submitted,



Karen Gasmu, Executive Director
Transportation & Utilities

Report prepared by:
Chris Warren, Manager, Winter Maintenance

CW/nd/bjd/aeb

October 2, 2014

To: Members,
Public Works and Infrastructure Committee

Re: Snow Routes

RECOMMENDATION

1. That the current snow plowing practice be maintained with a concurrent increase in public outreach and communication intended to reduce the on-street parking during snow plow operations.
2. That the Administration evaluate the effectiveness of enhanced education and communication over the 2014/15 winter season, and by the end of quarter three of 2015 provide City Council with a summary of findings and potential new recommendations, if necessary, to address challenges with on-street parking during snow plow operations.
3. That this report be forwarded to City Council for approval.

CONCLUSION

Performing snow removal around parked vehicles is a challenge that Winter Maintenance crews face when plowing City streets throughout the winter months. Plowing around parked vehicles not only causes inconvenience to vehicle owners, but to equipment operators as well. Each parked car that remains on the street during a plow creates a hazard that impacts the overall efficiency of systematic plowing.

Several municipalities in Western Canada are currently using some form of enforceable Snow Route and/or Parking Ban to enhance plowing operations and interest around implementing such a program has increased both publicly and politically.

There is an adequate source of information in determining the benefits and advantages, as well as ways to mitigate potential issues or challenges with a Snow Routes program. Although every municipality is different in terms of population, winter maintenance levels of service and public expectations, some of the major challenges faced with a Snow Routes program are public communication and awareness, elimination of on-street parking, consistency in applying the respective parking bans, and enforcement of the parking ban with regard to both parking enforcement and ticketing and towing capabilities.

The expectation of the public is that Winter Maintenance crews will effectively and efficiently plow the city streets in the event of a snowfall, and maintain the priority streets throughout the winter months. At this time, Winter Maintenance crews are successfully upholding the timelines within the designated plowing schedule as stated in the current Winter Maintenance Policy. This is achieved through a familiarity with the plowing operations and policy requirements, as well as the ever-increasing education, awareness, skill and training of Winter Maintenance staff. The Administration is confident that our current snow plow operations and Winter Maintenance Policy are adequately servicing the citizens and meeting their expectations in the most cost effective and efficient manner.

At this time, the implementation of a dedicated Snow Routes program would not increase the overall efficiency and efficacy of Winter Maintenance activities. In taking into consideration the substantial financial investment creating such a program would require, the overall benefit to is the public minimal. If the cost of the program is to be funded through the cost-recovery method, an extensive communications would also need to be developed to ensure that citizens who take advantage of on-street parking are fully aware of the changes to policy and enforcement with the potential for negative public reaction to such changes.

Alternatively, the Administration recommends strengthening of the communications strategy for our current Winter Maintenance Policy with a focus on public education and awareness to reduce number of instances when on-street parking occurs during plowing snow. This approach would require a significantly smaller investment while anticipating similar results.

Should future growth or policy enhancements begin to impede plowing timelines, a Snow Routes program may be a cost-effective and efficient alternative to increasing necessary resources required to meet the targets outlined in the Winter Maintenance Policy, providing that funding necessary for new signage, bylaw enforcement and communication is available at that time.

BACKGROUND

The Winter Maintenance Policy was created in an effort to provide an acceptable and consistent level of service for Winter Maintenance. The policy includes guidelines with regard to the plowing of streets, sidewalks and alleys following snow events and for routine maintenance of our road network during the winter months.

One of the many challenges faced by Winter Maintenance crews is the hazard of manoeuvring around parked cars while attempting to plow city streets. The Winter Maintenance Policy specifies that when City crews encounter parked vehicles they are to plow around the vehicle, sometimes leaving a snow ridge. This is not only an inconvenience for the vehicle owner, but it also creates a risk of an accident and slows the snow clearing process.

Many municipalities are currently utilizing Snow Routes to enhance plowing operations. City Council has asked the Administration to investigate the feasibility of implementing snow routes. During City Council meeting on Feb. 19, 2013 considering 2013 operating budget, the motion was made:

“that in consideration of the winter road maintenance update report coming in the spring, the Administration be directed to include the feasibility of implementing snow routes in Regina.”

This report is an expansion of the information provided as part of 2012-2013 Winter Season Operations Summary Review, which included some high level information on snow routes advantages and challenges.

This report includes various options with regard to a potential Snow Routes program, as well as the roles and expectations of the various branches within the Administration that would be required in order to create and support such a program. Appendix A outlines the policies and procedures currently in place for Saskatoon, Winnipeg, Brandon, Calgary and Edmonton. Generally, each city has varying policies regarding types of snow routes, streets included in the snow routes program, length of time before a vehicle can resume parking in a snow route area, as well as varying enforcement bylaws

In order to fully understand the requirements of implementing a Snow Routes program with our city, a comprehensive review of the current communications strategy in regards to plow operations as well as analysis of data collected on the number of vehicles found to be non-compliant with the current Bylaw, *The Regina Traffic Bylaw, 1997 - No. 990* (the “Traffic Bylaw”), would be beneficial in understanding and implementing an effective Snow Routes program.

DISCUSSION

In addition to the many benefits of having a Snow Routes program, other municipalities continue to face many challenges when implementing and enforcing these types of programs during the winter season. These challenges may include, but are not limited to the following:

- Implementing effective communication plans to educate the public and increase awareness are expensive and time consuming, not only during the months leading up to the implementation of the program, but throughout the winter season and during every snowfall;
- It is difficult to predict a storm’s end and the start of a parking ban, which can cause confusion and frustration among the public if the weather predictions and timing of declared parking bans do not prove to be accurate;
- Due to unpredictable weather patterns, notice of the onset of a parking ban may be short;
- Municipalities may experience a potential shortage of both tow truck companies and the ability to tow vehicles within necessary timelines;
- An amendment to the Traffic Bylaw would be required in order to include processes for the enforcement of the ticketing and towing of illegally parked vehicles on designated Snow Routes;
- Parking enforcement must remain consistent throughout the winter season to avoid public confusion and to confirm bylaw consistency, should an offending vehicle owner dispute the ticketing/towing violation;
- If permanent seasonal parking ban is in effect at night only, the daytime plowing operations still encounter parked vehicles; and
- A permanent seasonal parking ban would eliminate on-street parking options for numerous residents located on the arterial and collector networks.

It is reasonable to assume that upon implementation the City would face similar challenges when introducing a Snow Routes program. Outlined below are two possible parking ban implementation strategies that include only Category 1 and 2 streets. Category 1 roads include expressways, arterials and hospital routes, and Category 2 roads include minor arterials and high volume collectors with traffic volumes in excess of 5000 vehicles per day, as well as all roads in the area referred to as “Regina downtown.” Combined, the Category 1 and 2 network consists of approximately 245 km of roadways within the City of Regina, however, only 173 km of these roads would require signage and enforcement as the remaining 72 km do not currently allow for on-street parking.

Option 1 – Status Quo

The current Winter Maintenance Policy does not currently have provisions for parking bans but provides allowance for snow removal around a parked vehicle leaving a snow ridge. This option would continue this practice with no change to policy or procedures and no additional costs would be incurred. It is anticipated that calls from customers requesting to have snow removed from locations where vehicles remained during snow plowing would continue as in past years.

Option 2 – Snow Route Declaration and Temporary Parking Ban

This option would require a series of communications to the public that a temporary parking ban on specific roadways as identified in the Snow Routes program would be imposed during a specific time and date following a snow event. Municipalities such as Saskatoon, Calgary and Edmonton utilize this type of Snow Routes program; the parking ban is typically in effect for 72 hours.

During the parking ban, Parking Services staff would ensure that the roads designated as Snow Routes are free of parked vehicles. Non-compliance would result in ticketing and towing (to a nearby location not on a Snow Route or to a pre-identified impound lot). Effectiveness of towing would be entirely dependent on the number of non-compliant vehicles and the availability of tow trucks. The ticket prices would be set at a rate high enough to offset tow charges.

This option would ensure efficient plowing of Category 1 and 2 roads reduce the risk of damage to private and City vehicles and would allow for snow storage in parking lanes during the ban. Upon completion of plowing operations, the parking ban would be lifted and on-street parking could resume adjacent to the existing snow ridge.

The capital cost to implement this option is estimated at approximately \$364,800 and operating costs as high as \$488,710. A portion of the operating cost would be offset by revenue from non-compliant parking.

Cost break down for Option 2 – Snow Route Declaration and Temporary Parking Ban

- Total Capital - \$364,800
 - Information Technology – \$40,000
 - Communications – \$200,000
 - Traffic – \$124,800
- Total Operating - \$488,710
 - Winter Maintenance - \$467,910
 - Parking Services - \$20,800 (lost revenue)

Additional details can be found in Appendix B.

Option 3 – Seasonal Snow Routes and Parking Ban

This option would require the installation and removal of Snow Routes signage along 173 km of roadways, indicating a permanent seasonal parking ban throughout the winter months. Municipalities such as Winnipeg and Brandon utilize this type of Snow Routes policy, where the permanent parking ban typically takes place during the overnight hours between the months from November to March.

This option would ensure efficient plowing of Category 1 and 2 roads, reduce the risk of damage to private and City vehicles and would allow for snow storage in parking lanes during the ban. Permanent overnight parking bans on these roads would also enable safe and efficient Snow Removal activities once the snow ridges begin to impact lane widths and sightlines. However, because there are generally only 15-20 days where on-street parking would impact Winter Maintenance activities; this represents a significant hardship to citizens that park their vehicles on Category 1 and 2 roads.

During the parking ban, Parking Services staff would focus on ensuring that the areas signed as 'No Parking' during the seasonal restriction are clear to support winter maintenance activities while not impacting service levels in the rest of the City. Non-compliance would result in ticketing and towing similar to Option 1 however, an overnight parking ban would likely result in more tow trucks being available and increased capacity to have vehicles towed to the impound lot.

The capital cost for implementation is estimated at approximately \$364,800, and operating costs as high as \$495,255. Portion of the operating cost would be recovered through revenue from parking tickets. Additional details can be found in Appendix

Cost break down of Option 3 – Seasonal Snow Routes and Parking Ban

- Total Capital - \$364,800
 - Information Technology – \$40,000
 - Communications – \$200,000
 - Traffic – \$124,800
- Total Operating - \$495,255
 - Winter Maintenance - \$498,555
 - Parking Services - \$3,300 (revenue generation)

While implementation of the pilot project to test effectiveness of the snow routes on one or two streets would be allowed under current bylaw, the implementation of the full scale snow routes program would require amendments to the Traffic Bylaw, which would most likely required community consultations to take place prior to any Bylaw change. Both options also represent a significant cost for outreach to the community to effectively and efficiently communicate changes to parking availability and penalties for non-compliance.

The third option as described below is worthwhile to test before any of the above two options are considered.

Option 4 – Status Quo with Enhanced Public Education/Communication

Option 4 represents a continuation of current practice, as City crews are currently meeting targets set out in the Winter Maintenance Policy. The substantial financial investment required to create a Snow Routes program represents a marginal overall benefit to citizens and the travelling public. Alternatively, the Administration recommends strengthening of the communications strategy for our current Winter Maintenance Policy with a focus on public education and awareness using the Encouragement Model much the same as used for sidewalk clearing in residential areas. This approach requires a significantly smaller investment while may produce similar results as well as creates the possibility for enhanced citizen engagement. Further, this would leave additional resources available to address clearing snow off of sidewalks adjacent to City owned parks or other services expected by the public. Additional consultation with Communication Branch would be done to determine outreach opportunities.

Table 1 (below) outlines the positive and negative implications for the four options presented above.

Table 1. Implications of Snow Routes program options

	Benefits	Risks
Option 1 – Status Quo	<ul style="list-style-type: none"> - No increased cost as no change to policy or procedure 	<ul style="list-style-type: none"> - Calls from residents requesting plowing on locations where vehicles remained during snow plowing
Option 2 – Snow Route Declaration and Temporary Parking Ban	<ul style="list-style-type: none"> - Reduced risk of damage to parked vehicles - Approximately 29% of Category 1 & 2 roads currently prohibit parking - Consistent & efficient plowing & placement of snow ridges in parking lanes - Temporary parking ban on identified Snow Routes minimal (15-20 days/season) 	<ul style="list-style-type: none"> - Substantial cost to implementing program - Creation of major communication plan required to ensure all affected road users are made aware of changes - Public confusion on implementation - Difficult to predict end of winter storm event & onset of parking ban - Unpredictable weather patterns make notice of parking ban short - Potential shortage of tow trucks - Substantial towing costs - Lengthy process for Traffic Bylaw amendment - Availability of parking enforcement resources/reallocation of resources to support snow ban/declaration and decrease to regular enforcement - Potential lost revenue in regular Parking Enforcement activities - Program only applicable to snow events
Option 3 – Seasonal Snow Routes and Parking Ban	<ul style="list-style-type: none"> - Reduced risk of damage to parked vehicles - Approximately 29% of Category 1 & 2 roads currently prohibit parking - Consistent and efficient plowing & placement of snow ridges in parking lanes and subsequent removal - Consistency would reduce public confusion - Simplified enforcement - Additional flexibility when planning street plowing & snow removal 	<ul style="list-style-type: none"> - Substantial cost to implementing program - Creation of major communication plan required to ensure all affected road users are made aware of changes - Availability of night parking may leave vehicles parked during plowing - Potential shortage of tow trucks - Substantial towing costs - Lengthy process for Traffic Bylaw amendment - Elimination of night parking for 71% of Category 1 & 2 roads for entire winter
Option 4 – Status Quo with Enhanced Public Education/Communication	<ul style="list-style-type: none"> - Time and commitment of many City departments would not be impacted due to Bylaw and Policy changes - No need for additional funding in future operating budgets - No calls from angry residents whose vehicles were towed away - Fewer calls from residents regarding towed vehicles 	<ul style="list-style-type: none"> - Increased communication and public awareness campaign requires approximately \$50,000 investment - Calls from residents requesting plowing on locations where vehicles remained during snow plowing - Low level of compliance

RECOMMENDATION IMPLICATIONS

Financial Implications

Implementation of option 4 would require an increased communication plan incorporating current communication and new educational elements. It is estimated that this would require an investment of approximately \$50,000.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

As Winter Maintenance crews currently meet policy timelines consistently during systematic plowing operations, there is no need to change the current policy. If the increased communication result in reduction of vehicles parked on category 1 and 2 streets it will increase efficiency by reducing time required for snow removal thus freeing up resources previously required for systematic snow plowing within existing timelines. The impact on service efficiency and cost would be monitored to inform future budget planning and/or Policy enhancements.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

To achieve behavioural change on the part of vehicle owners, an enhanced communication plan would be required to promote and encourage the change.

DELEGATED AUTHORITY

City Council's approval is required to approve the recommended option.

Respectfully submitted,



Les Malawski, A/Director
Roadways & Transportation

Respectfully submitted,



Karen Gasmo, Executive Director
Transportation & Utilities

Report prepared by:
Chris Warren, Manager, Winter Maintenance

CW/nd/bjd/aeb

APPENDIX A

Summary of Snow Route Policies and Procedures in Western Municipalities

Table 1 - Types of Snow Routes

Saskatoon	<ul style="list-style-type: none"> Temporary parking ban declared during snowfall.
Winnipeg	<p>Overnight parking ban on regional and non-regional/ collector streets. The City implements five (5) different parking bans:</p> <p>1) Residential</p> <ul style="list-style-type: none"> Two or three times per year a residential parking ban is called to facilitate the City's snow clearing operation. All residential streets are assigned to a snow zone. Zones are plowed in 12 hour shifts: <ul style="list-style-type: none"> Day Shift - 7 a.m. to 7 p.m. Night Shift - 7 p.m. to 7 a.m. Under normal conditions, residential plowing operations will be completed in approximately five shifts. <p>2) Annual Snow Route</p> <ul style="list-style-type: none"> In effect from December 1 to March 1 every year. Vehicles may not park on designated snow routes between the hours of 2 a.m. and 7 a.m. These priority streets are kept clear of snow to ensure the fast, safe movement of emergency vehicles (ambulance, fire and police). <p>3) Declared Snow Route</p> <ul style="list-style-type: none"> The City of Winnipeg Public Works Department determines when additional overnight plowing is required on snow routes after a snowfall. Implementation of this ban extends the annual snow route parking ban by two hours, so when it is declared, vehicles are prohibited from parking on snow routes from 12 a.m. to 7 a.m. <p>4) Snow Emergency</p> <ul style="list-style-type: none"> The Mayor may declare a snow emergency at any time which will prompt a snow emergency parking ban prohibiting parking on snow routes. <p>5) Temporary No Parking</p> <ul style="list-style-type: none"> Occasionally, individual streets may require additional snow removal work. Temporary "No Parking" signs are posted when streets require snow removal.
Brandon	<ul style="list-style-type: none"> Annual snow route parking restrictions takes effect from November 15- March 31 Parking ban declared after a heavy snow and/or winds that cause drifting on snow routes by the City's Public Works Department.
Calgary	<ul style="list-style-type: none"> Temporary parking ban declared during snowfall
Edmonton	<ul style="list-style-type: none"> Seasonal parking ban declared when there is snowfall

Table 2 - Snow Route Declaration

Saskatoon	<ul style="list-style-type: none"> Declared after a significant snowstorm. If Environment Canada forecasts a significant amount of snow (in excess of 7 cm) and/or winds that cause drifting on high traffic streets, a Snow Route Temporary Parking Ban may be declared.
Winnipeg	<ul style="list-style-type: none"> Declared after a significant snowstorm (5 cm or more of snow)

Brandon	<ul style="list-style-type: none"> Declared after a significant amount of snow (in excess of 5 cm) and/or winds that cause drifting on snow routes. No minimum period of advance notice expected by the public. In the event there is an accumulation of snow to such an extent that the Public Works Department initiates a Snow Plowing/Removal Program, notification will be made by 4:00 p.m. that day.
Calgary	<ul style="list-style-type: none"> “Snow Events” may be declared when approximately 5 cm or more of snow has accumulated on city streets. If there is a chance of heavy snow, the City issues a “Snow Event Advisory” through the media to warn the public that snow is expected and Snow Route parking bans will likely be put in effect. Residents are urged to be proactive and remove their vehicles from the street in advance of a parking ban being declared.
Edmonton	<ul style="list-style-type: none"> Plowing commences when 3 cm of snow has accumulated on the main roads and the weather forecast calls for continued snowfall. A minimum of 8 hours notice will be given.

Table 3 - Length of Time Before Vehicle can Resume Parking

Saskatoon	<ul style="list-style-type: none"> Parking ban in effect for 72 hours following the 8 hour notice to remove vehicles.
Winnipeg	<ul style="list-style-type: none"> Parking ban in effect for 5 hours from 2:00 am to 7:00 am on Priority 1 and Priority 2 streets
Brandon	<ul style="list-style-type: none"> Parking ban in effect between the hours indicated on the Snow Route signs (24:00-8:00) Parking ban may be extended to the next evening when additional time is required to clear the designated snow routes. Additional notification is provided by the Public Works Department.
Calgary	<ul style="list-style-type: none"> Parking ban in effect for up to 72 hours following a declaration of a “Snow Event” by The City. Parking ban may be extended to the next evening when additional time is required to clear the designated snow routes in accordance with the 2011/2012 Snow and Ice Control Policy.
Edmonton	<ul style="list-style-type: none"> Parking ban remains in effect until notification is sent out by the City of Edmonton.

Table 4 - Type of Streets Included

Saskatoon	<ul style="list-style-type: none"> High traffic streets/street segments that are part of the priority system. Residential streets are not included in the priority system: <ul style="list-style-type: none"> Priority 1: Freeways, access to fire halls, hospitals and ambulance sites, and major roads Priority 2: Streets adjacent to emergency facilities, rapid transit bus routes, and busy roads. Priority 3: Local bus routes, access to schools, and main streets. Work on Priority 1 and 2 streets must be completed before starting work on Priority 3 streets.
Winnipeg	<ul style="list-style-type: none"> Priority I (Regional Streets): <ul style="list-style-type: none"> All Regional Streets, in addition, some streets around the Health Sciences Centre are included under Priority I to facilitate ambulance access to the hospital. Priority II (Non-Regional Streets): <ul style="list-style-type: none"> Non-regional bus routes and collector streets based on traffic counts although some streets in industrial areas are exceptions to

	<p>the traffic count standard.</p> <ul style="list-style-type: none"> • Priority III Streets: <ul style="list-style-type: none"> ○ Residential and/or little used industrial streets.
Brandon	<ul style="list-style-type: none"> • Major arterial routes and bus routes • Streets which have high volumes of traffic and are very important to ensure rapid movement of emergency vehicles such as Police, Fire and Ambulance throughout the City
Calgary	<ul style="list-style-type: none"> • Major roadways, collector roads and most bus routes
Edmonton	<ul style="list-style-type: none"> • Bus routes using Edmonton Transit System which has a system map of the entire bus route network

Table 5 - Enforcement of the Snow Routes

Saskatoon	<p>Bylaw No. 7200 The Traffic Bylaw (page 11 of 68) Parking Prohibited in Designated Snow Route Areas</p> <ul style="list-style-type: none"> • (1) No person shall park or stop a vehicle or permit a vehicle to be parked or stopped on any street or portion of any street identified as a snow route... • (2) ...snow routes have been declared in effect by the General Manager of Infrastructure Services • (3)...declaration announcing snow routes... shall remain in effect for a period of seventy-two (72) hours unless sooner terminated or extended... • (4) The General Manager of Infrastructure Services shall inform the general public of the existence of a snow route... • (5) All vehicles parked on designated snow routes while a declaration is in effect may be moved, without notice...or impounded by the City at the expense of the registered owner of the said vehicle.
Winnipeg	<p>Bylaw No. 76/2011: Winter Parking Ban By-Law (page 1-5 of 5) Designation of snow routes</p> <ul style="list-style-type: none"> • 3 After taking into account existing or future infrastructure, bus routes and traffic data, the Director is authorized, in compliance with subsection 8(1), to designate regional and non-regional streets or portions of them as snow routes... When the Director determines that a street or a portion of a street is no longer required to be designated as a snow route, he or she may remove its designation in compliance with subsection 8(1). <p>Towing of vehicles parked in contravention of bans</p> <ul style="list-style-type: none"> • 9(1) Where an enforcement officer has reasonable and probable grounds to believe that an unattended vehicle is stopped, standing or parked...the enforcement officer may cause the vehicle to be taken to and stored in a suitable place under subsection 243(2) of <i>The Highway Traffic Act</i>. Subsection 243(3) of <i>The Highway Traffic Act</i> applies to the costs of the moving and storage of the vehicle. • 9(2) A vehicle that is standing or parked in violation of a parking ban imposed under section 6 (Residential Parking Ban) is hereby determined to be in a position that causes it to interfere with the removal of snow from a street by a person authorized by the City of Winnipeg to remove the snow. A peace officer or an enforcement officer is authorized to move such a vehicle or cause it to be moved to a place where it will not interfere with the removal of snow from the street pursuant to subsection 243(1) of <i>The Highway Traffic Act</i>. <p>Consequential amendments</p> <ul style="list-style-type: none"> • 10(3) The Voluntary Payment of Fines By-law No. 789/74 is amended... and substituted by the following: • Stand/stop/park on snow route (2:00 to 7:00) - Fine: 100 and 50 (Annual

	<p>Snow Route Parking Ban, December to February)</p> <ul style="list-style-type: none"> • Stand/stop/park on snow route (12:00 to 7:00) – Fine: 100 and 50 (Declared Snow Route Parking Ban) • Stand/stop/park in residential zone subject to parking ban – Fine: 150 and 75 (Residential Parking Ban)
Brandon	<p>Traffic Bylaw No. 5463/16/87, Part III (page 42-45 of 59) Parking Prohibition to Accommodate Street Cleaning, Maintenance or Snow Clearing</p> <ul style="list-style-type: none"> • The City Engineer may, whenever he finds that weather conditions are restricting motor vehicle traffic flow, prohibit or restrict parking on any City streets for snow plowing and other purposes. Such parking restrictions may be put into effect on parts of or all streets other than snow emergency routes as necessary by declaring it in a manner prescribed hereinafter. This restriction shall remain in effect until terminated by announcement of the City Engineer. • (a.1) The Minister of Highways and Transportation, or his designate, shall have the same powers as the City Engineer... • (b)...it shall be an offence for any person to park or leave unattended, a vehicle on any portion of a street during the prohibition period as announced for the purpose of snow removal, street cleaning or maintenance operations. • (1) The announcement of temporary parking restrictions imposed under subsection (a) shall be printed in the local newspaper and announced over the broadcast media at least six hours before the parking prohibition comes into effect, if feasible, and/or portable traffic control devices may be placed on affected streets by 1700 hours on the previous day and at least twelve hours prior to the parking prohibition taking effect. Such temporary traffic control devices shall be placed a minimum of four per block (two per side of each block). • (2) Notwithstanding paragraph (1) above, where an emergency situation occurs the immediate placement of portable traffic control devices shall be deemed sufficient notice.
Calgary	<p>Bylaw No. 26M96 (page 28 of 67) Snow Control Routes</p> <ul style="list-style-type: none"> • 37.1 (1) The Traffic Engineer is authorized to designate any street in the City as a Snow Control Route. • (2) The Traffic Engineer must keep a record of every street that has been designated as a Snow Control Route pursuant to subsection (1) and the record must be available for public inspection at the office of the Traffic Engineer during normal business hours. • (3) The Traffic Engineer is authorized to declare a Snow Event at any time when, in the opinion of the Traffic Engineer, weather and snow conditions are sufficiently severe to require parking restrictions. • (4) The Traffic Engineer must inform the general public of a Snow Event declaration using whatever means the Traffic Engineer deems advisable. • (5) A declaration of a Snow Event pursuant to subsection (2) remains in effect for a period of 72 hours, commencing at the time specified in the declaration, unless sooner terminated or extended by further declaration of the Traffic Engineer. • (6) A person must not park or permit the parking of a vehicle on a Snow Control Route while a Snow Event is in effect.

Edmonton	<p>Bylaw 5590: Traffic Bylaw (page 19 of 43)</p> <p>Seasonal Parking Ban</p> <ul style="list-style-type: none"> • 36 (1) A vehicle shall not be parked on a highway in any location identified as a seasonal parking ban route. • (2) This section only applies when the location identified as a seasonal parking ban route has been designated in effect by the City Manager. • (3) A vehicle parked on a highway in a location identified as a seasonal parking ban route must be removed from the location identified as a seasonal parking ban route within 8 hours of a seasonal parking route ban having been declared in effect.
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Table 6 - Snow Route Enforcements

Saskatoon	<ul style="list-style-type: none"> • Ticketing or towing to a nearby street or impounding depending on circumstances.
Winnipeg	<ul style="list-style-type: none"> • Ticketing or towing as follows: • Residential Parking <ul style="list-style-type: none"> ○ Vehicles parked in violation of the residential parking ban will receive a \$150 ticket (\$75 if paid early), and may be towed to a nearby street that is not scheduled to be plowed or that has already been cleared. • Annual Snow Route <ul style="list-style-type: none"> ○ Receives a ticket in the amount of \$100 (\$50 if paid early), and may be towed to the towing company's compound. • Declared Parking Ban <ul style="list-style-type: none"> ○ Receives a \$100 ticket (\$50 if paid early), and may be towed to the towing company's compound. • Snow Emergency <ul style="list-style-type: none"> ○ No tickets are issued however vehicles will be towed out of the way of snow plows to nearby locations. • Temporary No Parking <ul style="list-style-type: none"> ○ Vehicles parked in violation of the ban may be ticketed and towed.
Brandon	<ul style="list-style-type: none"> • Ticketing or towing at the vehicle owner's expense
Calgary	<ul style="list-style-type: none"> • Ticketing or towing
Edmonton	<ul style="list-style-type: none"> • Tagging and Towing

APPENDIX B

Resources needed for the Implementation of Snow Routes

Communications – The implementation of Snow Routes would require a number of behavioral changes concerning drivers and residents along the affected areas (parking ban). Research shows that a mass media campaign to augment signage and enforcement, also known as a Social Marketing approach, is an effective tool to change behaviour and reinforce change. Ongoing communication will also be required to support the declaration of Snow Routes throughout the season. The estimated cost of this implementation would be approximately \$200,000.

Parking Services – Parking Services' involvement would be required to enforce parking restrictions along declared snow routes and to coordinate ticketing and towing operations throughout the season. Based on preliminary discussion regarding Option 1, four enforcement teams would be provided to support the five declared snow events by reassigning resources from day-to-day city wide enforcement. The approximate cost would be minimal as existing enforcement resources would be deployed, however, there may be a decrease in revenue of approximately \$20,800. Enforcement service levels throughout the City would not be met during declared bans as mobile teams will be supporting winter maintenance operations. Due to the minimal notice provided for a declared event, and the few events, it is not feasible for trained enforcement resources to be on standby which is why existing resources are reassigned and city-wide service levels would be decreased during declared bans. Regarding Option 2, the Parking Services Branch would add another shift from 12am to 7am (aligned with seasonal parking ban hours) to support winter maintenance operations. The approximate cost for the four months would be \$25,500 and would generate an estimated \$28,800 in additional parking ticket revenue.

In order to support Winter Road Maintenance by removing illegally parked vehicles, changes to the current tow contract will be required as the current service levels would not be sufficient to meet the enforcement needs. If a satisfactory resolution cannot be achieved with the current contract and providers, the City may have to look at alternatives for providing towing services, such as acquiring and operating our own tow truck. Without adequate towing services, the full benefits of a snow routes parking ban will not be recognized. Not included in this estimate is the cost of towing vehicles around the corner, which may range from \$40.00 to \$80.00 per tow and would come out of the Winter Road Maintenance budget and any revenue that may be recognized from tickets issued during snow events

Traffic – The installation of signs along approximately 173.3 km of 245 km of Category 1 and 2 roads would be required in order to implement a snow routes parking ban. Six signs are required for every km of roadway at a cost of approximately \$124,800

Information Technology – ITS' involvement would include the development of website services and mobile applications in order to keep the citizens educated and up-to-date on the various parking bans that may be declared, including a user requested notification system. This is estimated to cost approximately \$40,000

Winter Maintenance – The Winter Maintenance branch would be required to ultimately develop a plan that would optimize plowing operations as well as communicate this plan to all supporting branches and policy stakeholders.

In addition, towing costs may need to be absorbed by the Winter Maintenance branch, depending on the number of tow trucks available, and the desire to tow to a compound versus towing around the corner and out of the way. Over the past two seasons, Winter Maintenance and Parking Services have towed an average of nine vehicles per km of signed roadway around the corner for Snow Removal activities. Therefore, at an average of \$60 per tow, and five storms per season, on-going operating

costs may be approximately \$467,910¹ for Option 1 or \$498,555² for Option 2, until the general public becomes fully aware of, and adheres to, the temporary parking bans. This cost could be passed on to the non-compliant vehicle an adequate number of tow trucks were available and it is towed to an impound lot.

Legal – Involvement of the legal department would be necessary in order to identify the proposed amendment and to advise on the implementation of an amendment to the current Bylaw.

¹ (173.3 km) x (9 non-compliant vehicles per km) x (\$60 per tow) x (5 storms)

² [(173.3 km) x (9 non-compliant vehicles per km) x (\$60 per tow) x (5 storms) / (1/2 for night enforcement only)] + [(50 Snow Removal shifts) x (9.8 km per shift average snow removal) x (9 non-compliant vehicles per km) x (\$60 per tow)]

October 2, 2014

To: Members,
Public Works and Infrastructure Committee

Re: Sidewalk Clearing

RECOMMENDATION

1. The Winter Maintenance Policy be amended to include a requirement for the City to clear sidewalks adjacent to City-owned parks that are next to a public school.
2. That The Winter Maintenance Policy be amended to treat all commercial properties consistently, requiring building owners to clear any frontage sidewalk adjacent to senior citizen complexes with more than twenty units in a single building.
3. That this report be referred to the 2015 budget process.

CONCLUSION

During recent years, increased attention has been paid to the accessibility of public sidewalks during the winter months. The Administration is currently exploring options for expanding the number of sidewalks that the City of Regina (the “City”) crews maintain based on public use, and for increasing the level of accountability placed on property owners in terms of clearing snow from adjoining public sidewalks.

The current service levels outlined in the Winter Maintenance Policy regarding the clearing of snow from sidewalks have been found to be inadequate due to the number of sidewalks that surround City parks, and that are adjacent to no frontage locations (locations adjacent to noise attenuation walls constructed along various subdivisions). Sidewalks that fall under this category are currently not cleared during the winter months, as per the Winter Maintenance Policy. The expectation from the public that the City will clear these sidewalks is evident, based on the number of calls received by Service Regina regarding these areas over the course of the winter months (293 Service Requests in 2013/2014 and 409 in 2012/2013). An enhanced sidewalk clearing program would be greatly beneficial to the users of the sidewalk network during the winter months.

BACKGROUND

On July 17, 2007, a report was submitted to the Public Works Committee to amend *The Clean Property Bylaw, No. 9881* (the “Bylaw”) in order to clarify the intent of certain sections of the Bylaw, allowing the public to better understand it, and to ensure more consistent enforcement.

Although the majority of the recommendations stated in this report were carried forward, one item was not updated. Recommendation #5 stated that the Administration be requested to submit a report to the Public Works Committee on options with regard to the plowing of sidewalks adjacent to properties currently exempt from the Bylaw.

On October 3, 2013, report WU07-29 was submitted to the Public Works Committee outlining options with regard to the plowing of sidewalks adjacent to properties exempt from the Bylaw. In this report, the Administration outlined the following options:

- Option 1 – Status Quo;
- Option 2 – City to Plow all Sidewalks that do not have Private Frontage; and
- Option 3 – Amend the Clean Property Bylaw to include all Residential Properties.

The Administration recommended choosing *Option 2 – City to Plow all Sidewalks that do not have Private Frontage*, which was estimated to cost an extra \$418,203 annually to plow an additional 59 km of sidewalk. However, during the meeting, members of the committee expressed their concern that the recommendation did not provide enough information to allow them to make an informed decision, especially when compared and weighed against other budget requests throughout the corporation. There was also a discussion regarding the allocation of additional resources to sidewalk clearing, as opposed to using those funds to enhance other levels of service within the Winter Maintenance budget as stated in the recommendation.

Further to the discussion of this recommendation, the Administration sought to provide further information, in addition to exploring the possibility of breaking down the potential service level enhancement into various phases to maximize decision making when weighted against other budget requests throughout the corporation. This report is in response to the Public Works Committee's request for further information.

The current Bylaw states that commercial properties, apartment buildings, commercial parking lots and vacant lots are to be cleared by the property owners within 48 hours of snowfall. This Bylaw is applicable to 134 km of Regina's 1265 km sidewalk network.

In 2006, the City adopted a Winter Maintenance Policy to provide quality winter maintenance that supports the health, attractiveness and economic viability of the community. This Policy dictates that 44 km of Regina's 1265 km sidewalk network is to be cleared by the City. Additionally, the Bylaw represents an additional 134 km of sidewalk cleared by commercial property owners. In total, 178 km of sidewalks are currently cleared under either the Bylaw or the Policy. The City of Regina uses an encouragement model to ensure that the remainder of the sidewalk network is cleared of snow by either residential or commercial property owners.

The following table shows a breakdown of the City's sidewalk network into five categories.

Table 1 - City of Regina Sidewalk Network

	Location of Sidewalk	Total length (km)	% of total sidewalk network	Method used to motivate property owners to clear sidewalks
A	In front of residential properties	993	78.5%	Encouragement
B	In front of taxable commercial properties	134	10.6%	Bylaw enforcement
C	In front of tax exempt commercial properties	35	2.8%	Encouragement
D	In front of City owned parks	46	3.6%	Currently do not get cleared using either method
E	Properties with no frontage	13	1.0%	Currently do not get cleared using either method
F	In front of various locations specified in the Winter Maintenance Policy	44	3.5%	Winter Maintenance Policy

DISCUSSION

The Administration approach is to address each category of sidewalks separately in gradual process:

Category A:

- At present, there is no plan to alter the current method of encouragement used to motivate owners to clear snow off of sidewalks adjacent to their property.

Category B:

- Snow clearing activities on the sidewalks that fall under this category are currently regulated by the Bylaw and successfully delivered.

Category C:

- The encouragement will continue to be the method to be used to address sidewalks in this category. A special effort will be dedicated to communication with property owners who do not currently comply. We would need to find the reasons why these sidewalks are not cleared of snow and work with the property owners to find a solution.

Categories D and E:

- The clearing of the sidewalks in this category are the responsibility of the City. We need to address them first to lead by example. This report focus is on this category.

Category F:

- The clearing of snow off of sidewalks in the category is currently mandated by the Winter Maintenance Policy and successfully delivered by City crews.

The Administration would need to ensure that sidewalks adjacent City-owned properties are cleared prior to extending the bylaw to include properties that are currently exempt.

The discussion is focused on comparing the Status Quo approach (Option 1) to the proposed Phased approach (Option 2), allowing for the City to clear snow off of all sidewalks without private frontage.

Option One – Status Quo

Option One – Status Quo represents only a total of 178 km, or 14 per cent, of the approximate 1265 km sidewalk network in the community. The remaining sidewalks are to be cleared using the Encouragement Model by Residential and other Commercial property owners that are currently exempt from the Bylaw due to statutory exemptions in *The Cities Act*.

Option Two – City to Plow all Sidewalks without Private Frontage – Phased Approach

It may be difficult to immediately allocate the total required funding in order to plow all sidewalks without private frontage. As such, the Administration sought to break down and redefine the 59 km of sidewalks that were previously identified as sidewalks that do not have private frontage, and are currently not cleared during the winter months. The following table provides an additional breakdown of these sidewalks:

	Sidewalk Classification	Length (Km)	Estimated Cost
Phase 1	Sidewalks Adjacent to City-owned Parks beside a School	6	\$33,555
Phase 2	Sidewalks Adjacent to City-owned Parks on Cat 3&4 Roads	13	\$73,634
Phase 3	Sidewalks Adjacent to No Frontage Locations	13	\$73,634
Phase 4	Sidewalks Adjacent to City-owned Parks on Cat 5 Roads	27	\$179,132

1. *Sidewalks Adjacent to City-owned Parks beside a School*
These sidewalks were chosen as the highest priority in terms of maximum benefit for public use and necessary funding, and have been recommended as Phase 1. These sidewalks are directly adjacent to school parks and property, and are traversed by students accessing the school on a daily basis. The public has repeatedly called both City Councillors and Service Regina throughout the winter months with inquiries regarding when the City will clear these sidewalks and why they are not included in the Policy.
2. *Sidewalks Adjacent to City-owned Parks on Category three and four Roads*
These sidewalks were chosen for Phase 2 as they are located on Major Collector Roads and Transit Routes. They are accessed by pedestrians accessing nearby schools and parks as well as users of the public Transit system.
3. *Sidewalks Adjacent to No Frontage Locations*
These sidewalks were chosen for Phase 3 as they are located on Major Collector Roads and Transit Routes. They are accessed by both users of the public transit system as well as by pedestrians accessing walled subdivisions and apartment complexes.
4. *Sidewalks Adjacent to City-owned Parks on Category Five Roads*
These sidewalks are located on Local Roads and were chosen for Phase 4 as they are utilized by pedestrians accessing nearby City-owned parks.

Therefore, Phase 1 of this option would be to clear sidewalks that are adjacent to City-owned Parks and next to schools. This would represent approximately 6 km of the current sidewalk network that is not cleared during winter months. The annual expenditure associated with Phase 1 would be approximately \$33,555. This Phase is the most valuable as the sidewalks immediately adjacent to the schools are the primary mode of transport for numerous children during the winter months, and could be implemented as early as the 2015/2016 winter season without any impact on our labour and equipment availability.

The Winter Maintenance Policy states that City crews are responsible for clearing snow off of sidewalks adjacent to senior citizen complexes greater than 20 units in a single building. Since senior citizen complexes are commercial properties that are not exempt from the current Clean Property Bylaw, the Administration would expect to treat these properties the same as other commercial properties with regard to snow removal. This would require building owners to ensure sidewalks are cleared of snow. It is recommended that the Policy be amended to align with the Bylaw.

Should City Council choose to modify the Policy to cease the clearing of any frontage sidewalk adjacent to senior citizen complexes, this would result in a reduction in the Sidewalk Operating Budget by approximately \$18,641, as the current linear measurement of the sidewalks adjacent to senior citizen complexes is an estimated 3 km (16 locations). This would be an opportunity to allocate existing funding to implement Phase 1, and to strategically clear additional sidewalks in high profile public locations. The required additional funding would be approximately \$14,914 for Phase 1.

Phases 2 and 3 could be implemented as early as the 2016/2017 winter season, should the additional expenditures be approved in the 2016 budget.

Phase 4 is a scenario that could be implemented for the 2017/2018 winter season if funding were to become available. However, the additional sidewalks in Phase 4 could not be achieved without an amendment to the Winter Maintenance Policy timeline (96 hours as compared to the current policy of 72 hrs), or an addition to the Fleet Rental operating budget or a Fleet Capital Addition. The estimated financial expenditure outlined in Phase 4 includes an Operating Budget request of two (2) rental units to supplement this sidewalk addition.

Table 2, below, outlines the costs and benefits associated with options 1 and 2.

Table 2. Costs & Benefits

	<i>Option 1 – Status Quo</i>	<i>Option 2 – City to Plow all Sidewalks without Private Frontage – Phased Approach</i>
Benefit	<ul style="list-style-type: none"> - No need for additional funding in future operating budgets 	<ul style="list-style-type: none"> - Sidewalks adjacent to City-owned parks and next to schools on all roads would be cleared, ensuring accessibility in the immediate vicinity of school property - Annual expenditure is minimal (\$33,555/6 km) - Removing frontage sidewalk adjacent to senior citizen complexes (more than 20 units in a single building) from Policy would reduce Sidewalk budget by \$18,641 - Phase 1 could be implemented in 2015
Cost	<ul style="list-style-type: none"> - Large amount of sidewalks adjacent to City-owned parks and no frontage locations are not cleared during the winter months - Requests will continue for sidewalk clearing around City-owned parks and no frontage locations for public access and safety reasons 	<ul style="list-style-type: none"> - Large amount of sidewalks adjacent to City-owned parks and no frontage locations will not be cleared until all four phases are implemented - Financial impact on senior complexes to fund private sidewalk clearing

RECOMMENDATION IMPLICATIONS

Financial Implications

Financial implications are based on five snow events, as well as Routine Maintenance activities during the winter season. Therefore, these amounts may fluctuate should we receive an above average total snowfall:

Impact on 2015 budget:

- Implementing *Option 2 – City to Plow all Sidewalks without Private Frontage – Phase 1*
 - \$14,914 (net balance) of operating budget increase
 - Phase 1 Implementation - \$33,555 (total expenditure required)
 - Remove Sidewalk Clearing at Senior Complexes from Policy - \$18,641 (financial reallocation to Phase 1)

Impact on future budgets (2016 and beyond) associated with phases 2-4 of option 2

- Implementing *Option 2 – City to Plow all Sidewalks without Private Frontage – Phase 2*
 - \$73,634 (net balance) of operating budget increase
- Implementing *Option 2 – City to Plow all Sidewalks without Private Frontage – Phase 3*
 - \$73,634 (net balance) of operating budget increase

- Implementing *Option 2 – City to Plow all Sidewalks without Private Frontage* – Phase 4
 - \$179,132 (net balance) of operating budget increase
 - Includes additional two (2) rental units at a cost of \$30,000 annually necessary to supplement this phase

Environmental Implications

There will be increase of emissions associated with additional hours the snow clearing equipment would be used to clear snow off of sidewalks not currently cleared.

Policy and/or Strategic Implications

The Winter Maintenance Policy would need to be amended to specify that the Winter Maintenance branch is responsible for the clearing of sidewalks adjacent to City-owned Parks and City-owned vacant lands that are adjacent to a school.

The Winter Maintenance Policy would need to be amended to remove the snow clearing of any frontage sidewalk adjacent to senior citizen complexes with more than 20 units in a single building.

The recommendations also respond to goals and actions outlined in the *Design Regina: The Official Community Plan* (OCP). In the Transportation section of the OCP, the first goal is to, “Offer a range of year-round sustainable transportation choices for all, including a complete streets framework.”

Among the actions outlined in this policy section, there is the following:

1. Establishing all-season design and maintenance priorities for roads, sidewalks and *pathways* to ensure the transportation network provides safe travel, *access* and mobility, including for the following:
 - Key transit facilities;
 - Key pedestrian and cycling routes; and
 - Public buildings and institutions.

The recommended changes to the Winter Road Maintenance Policy in this report target sidewalks in accordance with the prioritization set out in the OCP.

Other Implications

There may be an additional cost to senior citizen complexes, as they will be required to clear their own sidewalks similar to other Multi-Family Apartments as currently outlined in the Clean Property Bylaw.

Accessibility Implications

Winter accessibility will be improved on sidewalks adjacent to city-owned parks next to schools, which are high pedestrian traffic areas. It is expected that the proposed reduction in service levels to senior citizen complexes will be backfilled by the owners of the complex, minimizing any loss of accessibility for this population.

COMMUNICATIONS

Communications will include any Policy amendments in the overall winter communications strategy. Special attention will be paid to notifying senior citizen complexes of the change in policy to allow sufficient time for property owners to establish alternate plans to remove sidewalk snow accumulation.

DELEGATED AUTHORITY

City Council's approval is required to amend the Winter Maintenance Policy and/or the allocated budget.

Respectfully submitted,



Les Malawski, A/Director
Roadways & Transportation Services

Respectfully submitted,



Karen Gasmo, Executive Director
Transportation & Utilities

Report prepared by:
Chris Warren, Manager, Winter Maintenance

CW/nd/bjd/aeb

October 2, 2014

To: Members,
Public Works and Infrastructure Committee

Re: 2015 Alley Maintenance Strategy and Special Tax Levy Funding Options

RECOMMENDATION

1. That the City Solicitor be instructed to prepare the appropriate bylaw for alley maintenance for 2015, which includes the following levies, proposed revenues, and estimated costs;

Paved Alleys **\$3.85** per assessable foot
Gravel Alleys **\$2.71** per assessable foot

The proposed revenues and estimated costs for maintenance of alleys in 2015 are:	
Paved Alleys	\$3,228,710
Gravel Alleys	\$1,669,520
TOTAL	\$4,898,230

2. That the City Solicitor include a definition of flankage in the bylaw for alley maintenance; and
3. That the City Solicitor amends the bylaw for alley maintenance by eliminating the provision for exempting any “property frontage that flanks an alley”. Any property abutting a laneway either on its rear or flank will be charged an alley maintenance fee based on its assessable frontage as determined by the Director of Assessment and Property Taxation.

CONCLUSION

The proposed increase for the 2015 Alley Maintenance Program is consistent with the previously approved strategy to continue to maintain the City’s alley inventory in an acceptable and sustainable condition. The 2014 alley maintenance budgets have increased by amounts that reflect the rising costs of labour, equipment and materials. For paved alleys, this represents an increase of 3.4 percent, and for gravel alleys, an increase of 4.8 percent. In addition to these budget increases the 22 percent corporate overhead will be applied, based on the 2011 City Council’s approval of a 3 year phased-in process.

The Administration is committed to ensuring that the full costs of delivering alley maintenance services are reflected in the levies charged to residents. Ongoing reviews will be necessary given the upcoming changes occurring in service delivery and impact on alleys. In particular, the solid waste conversion to cart containers and the addition of a recycling cart service has the potential to alter or influence the public’s view on the preferred level of service associated with the alleys.

BACKGROUND

Historical information on the Alley Maintenance Program and special tax levy has been attached as Appendix A of this report.

DISCUSSION

The City of Regina's Alley Maintenance Program is intended to provide a sustainable alley system that is passable, safe, affordable, efficient, equitable and environmentally responsible. There are approximately 306 kilometres of alleys in the city. This alley inventory consists of 172 kilometres of paved alleys and 134 kilometres of gravel alleys.

The City of Regina's Alley Maintenance Program is governed by *The Cities Act, Sections 275 to 278*, which provides the authority to levy a special tax on properties for specific services. Property owners abutting paved or gravel alleys are required to pay the special tax. Revenues collected from the special tax provide 100 percent of the operating funding dedicated to the Alley Maintenance Program.

In the past, the *City's Alley Maintenance Bylaw* has stated that "There will be no levy for any property frontage that flanks an alley." The Director of Assessment and Property Taxation believes that the intention for the exemption of levy on flankage was for those properties which may have both backed and flanked an alley (i.e.: T-lanes). However, the historical wording has been applied to mean that where a property only flanks an alley it has not had an alley maintenance levy.

It has now been identified that there are situations where property owners abutting a paved or gravel alley are not required to pay the special levy due to the property only flanking the alley. In order to comply with the City's intention to equitably provide the alley maintenance service the Administration recommends that *The Alley Maintenance Bylaw* provide the Director of Assessment and Property Taxation the ability to assess those properties which only flank the alley, without having any alley abutting the rear property line. There are 180 properties that have been identified under this scenario. These properties represent less than 1 per cent of the total 2015 proposed levy for the alley maintenance.

Such a provision would mean that where a property has both frontage and flankage it will be assessed a levy in relation only to the assessable frontage. Where a property only flanks an alley such a property will be assessed a levy in relation to the flankage only and the calculation of the flankage will be determined by the Director in a manner consistent with the City's policy for determining an assessable frontage.

Proposed 2015 Paved & Gravel Alley Budgets

The proposed budget for 2015, as shown by activity, and the special tax levy for paved and gravel alleys are summarized in Table 1 and Table 2, respectively. These are based on the continuation of the strategy for a sustainable alley system. The approved 2014 budget is provided for comparison. A 3.4 per cent increase to the paved alley budget and a 4.8 per cent increase to the gravel alley budget, are recommended to adjust for the estimated increased costs of labour, equipment, materials and the 2011 City Council approved corporate overhead of 22 per cent.

Table 1 – Proposed and Existing Paved Alley Maintenance Budgets

Program Item	2014 Budget	Proposed 2015 Budget
Pavement Maintenance	\$ 816,650	\$ 836,050
Paved Alley Reconstruction	\$ 2,307,318	\$ 2,392,660
Total	\$ 3,123,968	\$ 3,228,710

Paved Alley Levy	2014 Budget	Proposed 2015 Budget
Assessable Footage*	799,256	837,859
Levy Rate	\$ 3.90/ft.	\$ 3.85/ft.
Levy Amount per 50 ft. lot	\$ 195.00	\$ 192.50

* Any change in assessable footage can be attributed to continual updating of City records.

Table 2 – Proposed and Existing Gravel Alley Maintenance Budgets

Program Item	2014 Budget	Proposed 2015 Budget
General Maintenance	\$ 512,850	\$ 538,360
Reconstruction/Refreshing	\$ 1,079,800	\$ 1,131,160
Total	\$ 1,592,650	\$ 1,669,520

Gravel Alley Levy	2014	Proposed 2015
Assessable Footage*	613,222	616,250
Levy Rate	\$ 2.57/ft	\$ 2.71/ft
Levy Amount per 50 ft. lot	\$ 128.50	\$ 135.50

* Any change in assessable footage can be attributed to continual updating of City records.

Full Level of Service Cost Recovery

The maintenance and reconstruction of alleys is based on the principle of full cost recovery, which means that the cost associated with the maintenance and reconstruction of alleys is fully offset by the levy collected. The original 1996 Alley Maintenance Strategy, approved by City Council, provided a basic clarity on the reconstruction/gravel refresh components of the gravel and paved alley. In summary, that strategy provided a 30 year reconstruction life cycle for paved alleys and a 10 year systematic gravel refreshment cycle for gravel alleys. However, now that the solid waste/recycling cart implementation is for the most part complete, the Administration is committed to monitoring the impact of this new method of waste collection on the condition of alleys. If necessary, the frequency of preventive maintenance and reconstruction schedules will be adjusted. The principals of asset management will also be incorporated in the alley maintenance program. Additional light treatments will be introduced in order to keep alleys in good or fair condition for a longer period of time. This may extend the life cycle of paved alleys well beyond 30 years, which would, in turn, reduce the overall cost of these assets. It would also delay the inconvenience associated with alley reconstruction. The overall evaluation of the condition of alleys will take place over the next two years. Based on the results of this evaluation, a detailed maintenance plan will be developed. The maintenance plan will determine whether or not the levies need to be adjusted.

RECOMMENDATION IMPLICATIONS

Financial Implications

The recommended increases to paved and gravel alley levies will allow the Administration to maintain its current service levels. The increases are a result of increases in the costs of labour, equipment, materials as well as the phasing-in of corporate overhead rates. The Alley

Maintenance Program is fully funded by revenues obtained through the special alley tax levy to property owners abutting alleys.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

The Alley Maintenance Strategy approved by City Council in 1996 was intended to maintain the alley inventory in an acceptable and sustainable condition. Funding to fully implement that strategy was phased in over a 10 year period. Full funding for the strategy was achieved in 2006 and has continued since that time. The primary focus of the strategy is the provision of a 30 year reconstruction cycle in paved alleys and a 10 year systematic gravel refreshment cycle in gravel alleys.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

Public notice of the special tax levy will be carried out in accordance with the requirements contained in *The Cities Act*. Affected residents who have not previously been charged the levy will be provided with written notification of the changes prior to implementation. The Administration also provides information to various parties, including affected property owners upon request. In addition, construction notices, where the scope of construction is significant, are hand delivered to affected abutting properties prior to the commencement of work.

DELEGATED AUTHORITY

Special tax levies for 2015 require the approval of City Council.

Respectfully submitted,

A blue ink signature of Les Malawski, written in a cursive style.

Les Malawski, A/Director
Roadways & Transportation Services

Respectfully submitted,

A blue ink signature of Karen Gasmo, written in a cursive style.

Karen Gasmo, Executive Director
Transportation & Utilities

Report prepared by:
Danielle Chorney, Project Engineer, Sweeping & Alleys
Karen Howie, Manager, Sweeping & Alleys

DC/KH/nd/bjd

APPENDIX A

HISTORY OF THE ALLEY TAX LEVY

PAVED ALLEY MAINTENANCE

In 1996, a condition survey estimated that over 47 percent of paved alleys required extensive repairs or reconstruction. The majority of these alleys were constructed in the 1960s or 1970s and had far exceeded their design life expectancy.

As a result, in 1996 City Council adopted a strategy to achieve a 30 year reconstruction cycle for paved alleys. This approved strategy was phased in over a 10 year period by increasing the number of paved alley reconstructions by four alleys per year until a full implementation of 45 alley reconstructions per year was achieved. During the first half of the 10 year period, annual funding increases were approximately in the order of 10 percent. However, in 2001, City Council deferred the increase to the special tax levy for one year pending the results of an evaluation on strategy objectives, design methodology, and construction costs. The 2001 evaluation concluded that the approach was sound. In 2002, the strategy continued along with the requested special tax increases.

In 2006, funding for the strategy was fully phased in and the 30 year reconstruction cycle strategy has been maintained since that time. In 2008, an additional line item was added to the paved alley budget for snow ploughing paved alleys. In 2009, additional line items were added to the paved alley budget to initiate bylaw enforcement for the pruning of private trees and for the time spent cost of engineering work related to alleys.

GRAVEL ALLEY MAINTENANCE

Typical maintenance activities, which are undertaken to maintain stable surfaces in gravel alleys, are regular maintenance blading, systematic gravel refreshing, re-grading to improve significant drainage concerns, and spot gravelling. During the 1996 review, a 40-year reconstruction life cycle strategy was adopted by City Council for gravel alleys with the original intent that the 40 year life cycle be fully phased in by 2005.

Increasing funding levels between 1996 and 2001 resulted in the completion of those gravel alley reconstruction locations, which had originally been identified and required. The 2001 alley evaluation previously referred to confirmed objectives for reconstruction had been substantially met. A revised strategy was developed, which provided additional efforts aimed towards improving surface maintenance rather than the deeper, structural reconstructions. The revised gravel alley maintenance strategy involved maintenance blading approximately four to five times during the non-winter months, spot gravelling, cleaning of catch basin sumps, minor reconstruction/drainage improvements, and achieving a systematic program of gravel refreshment based on a 10 year cycle. In conjunction, the number of full depth reconstructions was reduced to roughly the equivalent of two locations per year.

In 2006, the revised strategy was fully phased in and the strategy has been maintained since that time. In 2008, an additional line item was added to the gravel alley budget for snow ploughing gravel alleys. In 2009, additional line items were added to the gravel alley budget to initiate bylaw enforcement for the pruning of private trees and for the time spent cost of engineering work related to alleys.

October 2, 2014

To: Members,
Public Works and Infrastructure Committee

Re: Snow Storage Site User Fee

RECOMMENDATION

1. That the Administration:
 - a) investigate and develop an appropriate permit process and fee for commercial contractors for the use of the City of Regina's Snow Storage Site beginning November 1, 2015;
 - b) provide a follow up report back to City Council in quarter two of 2015 on the feedback received on the implementation of the fee and permit process; and,
 - c) bring forward a report to City Council in quarter two of 2015 which contains the necessary amendments to *The Clean Property Bylaw, No. 9881* that include:
 - i. a fee structure for commercial contractors using City of Regina's Snow Storage Site; and
 - ii. processes for issuing permits to commercial contractors for use of the City of Regina's Snow Storage Site.

CONCLUSION

The substantial rise in the number of users and volume of snow hauled to the Snow Storage Site has resulted in a significant increase in annual expenditures. The current operating budget is \$230,000, whereas the five-year average of annual expenditures is \$579,008.

Many municipalities in eastern Canada have been charging a fee for accepting snow at City owned snow storage facilities. This has become standard practice in provinces such as Ontario and Quebec. Although many municipalities in Saskatchewan are not currently charging a user fee, there is certainly movement in that direction. Cities such as Yorkton and Saskatoon are planning to implement fees to recover snow storage cost.

The Administration, subject to the approval of the recommendations contained in this report, will initiate the process to collect feedback from contractors that currently haul snow to City owned storage facilities on the proposed process and fee structure. Questions relating to possible changes in usage and alternative snow storage options as a result of the change in practice would provide information that will inform an environmental assessment and the final fee structure. The final process and fee structure will be one that is both the most cost effective and acceptable to contractors. Once complete, changes to *Clean Property Bylaw, No. 9881* (the "Bylaw") and the request for approval of the new revenue opportunity will be presented to PW&I Committee.

Introducing a Snow Storage Site user fee has the potential to generate annual revenues offsetting the cost associated with accepting snow from contractors. One of the two revenue generating options, Option 1 – Annual permitting fee, is recommended at this time as it provides the lowest cost to customers, eliminates the need to handle cash on site and provides the quickest payback. Based on the feedback received the recommended option 1 may need to be altered. Alternatively, if commercial dumping was discontinued, the current costs associated would be eliminated. However, in doing so there will be a greater environmental impact and increased hardship on contractors who currently use City owned storage facilities. The following table provides a summary of investigated options; all options are based on the principal of cost recovery. Therefore the cost equal on average to \$207,954, associated with accepting snow from contractors would be recovered under each option. The difference between options is in capital investment and operational cost.

Table 1 – Summary of options.

Option	Average Annual Expenditures	Annual Revenue or Cost Reduction Opportunity	Additional Capital Expenditures	Additional Operating Expenditures	Net Annual Benefit	Simple Pay Back
Option 1 – Annual permitting fee - recommended	\$579,008	\$210,454	\$110,000	\$2,500	\$207,954	0.53 year
Option 2 – On site dumping fee	\$579,008	\$311,138	\$180,000	\$103,184	\$207,954	0.86 year
Option 3 – Snow Storage Site for City Use only	\$371,054	\$207,954	\$0	\$0	\$207,954	n/a
Option 4 – Status Quo	\$579,008	\$0	\$0	\$0	0	n/a

BACKGROUND

The City's Snow Storage Site is a City owned property on the corner of Fleet Street and MacDonald Street that is used to store snow during the winter months and is free of charge to all users. On average, 60 percent of all snow hauled to the site is from commercial and private enterprises and the remaining 40 percent is from Winter Maintenance crews as part of the Snow Removal program outlined in the Winter Maintenance Policy.

Snow Storage Site expenditures are comprised of human resources, the use of City owned and rented equipment and site maintenance. The main activities include:

1. *Snow Storage:*
Storage and stacking of snow hauled by City crews and private contractors constitutes the main activity on site during the winter months. City crews haul the snow removed from the City's arterial and collector road networks, whereas private contractor trucks haul snow from commercial sidewalks and parking lot snow removal operations, as well as commercial and residential development sites. Machinery such as front end loaders and dozers are used 24 hours a day, seven days a week to safely store the snow dumped by the City and contractor trucks. The snow is then stockpiled and compacted to make room for additional snow storage, thereby increasing the capacity of the site. Site attendants are also on site to ensure safe and efficient service, as well as to address any concerns site users may have.

2. *Site Cleanup and Preparation:*

During the summer and fall seasons, debris from melted snow is removed; crews mow, rake and level ground, rebuild access roads, install signage and train for the upcoming season. During the 2013 summer cleanup, over 500 tons of debris was removed from the snow storage site and was taken to the landfill, at a cost of \$50,000. The majority of this debris included concrete slabs and construction material, which would have originated from snow hauled by private contractors when cleaning commercial parking lots, as well as commercial and residential construction sites.

3. *Environmental Testing:*

Since 1994, the City has compiled an annual runoff and soil monitoring report at the City-owned Snow Storage Site documenting the quality of runoff, from the city's urban snowmelt and snow dump site, and identifies any impacts to downstream receiving waters. Additionally, the storm water data is used for reference when updating the City's Salt Management Plan.

Only 40 percent of the snow at the Snow Storage Site is hauled from City-owned or City-maintained facilities. The remaining 60 percent is hauled by private contractors from commercial business establishments, as well as residential and commercial development sites. Currently, there are no fees for dumping snow. The City currently provides this service free of charge to any and all users, including those from outside the city limits, meaning that the City taxpayers are subsidising commercial operations. In examining practices in other Canadian municipalities, the Administration found many cities moving away from free snow storage, no longer accepting snow from contractors or charge for the service. Based on this research, options to be evaluated, a summary of findings and recommendations are provided in this report.

DISCUSSION

The Winter District Maintenance branch has seen an increase in usage of the storage site from both the general public and private contractors. The Administration has been monitoring traffic and quantities of snow being deposited and found that accumulation of over 1.3 million cubic metres of snow hauled and stored on the site occurs on multiple occasions annually with an influx of nearly 200 trucks hauling to the site per hour following a snow event. Additionally, over this period of time, annual expenditures and maintenance costs have drastically increased, severely impacting the annual Winter Maintenance operating budget, specifically the Snow Storage budget (currently \$230,224). In the last five years, average annual expenditures at the Snow Storage Site have been approximately \$579,008, with the expenditures in 2014 forecasted to be \$606,000.

Currently, there is no federal or provincial environmental regulation impacting the snow storage operation in the province but such a regulation may be imposed in the near future. If such regulations were to be put in place, the City would incur substantial costs in preparing the Snow Storage Site, as the current practices of snow storage may cause potential environmental risks due to salts, sand, oil, debris and other contaminants in the snow. Current expenditure to monitor spring runoff and soil testing is more than \$15,000 annually.

Other Saskatchewan municipalities, such as Saskatoon and Yorkton, are currently considering the implementation of a snow dumping fee for all private contractors who utilize the City-owned snow storage sites (see Appendix A). These cities have started a public awareness campaign to educate their citizens, businesses and contractors regarding the fees. Out of province municipalities, such as Sudbury and Red Deer, have successfully implemented a snow dumping fee to offset their operational costs.

In order to implement a Snow Storage Site user fee or permit fee, the following is required:

1. Obtain PW&I Committee approval (in principal) of this new revenue generation opportunity;
2. Collect feedback from impacted parties and design effective process and fee structure;
3. Create proper processes to implement new fees;
4. Amend the existing Bylaw; and
5. Obtain City Council's approval to amend the existing Bylaw.

Implementing this project would require a significant investment in time from various branches as a part of the Bylaw Working Group (Legal, Bylaw and Licensing, Traffic, Regina Police Service, Communications, Information Technology and Winter Maintenance), but would ultimately eliminate the need to subsidize the commercial industry at the expense of the taxpayers.

The options are presented below, along with the associated benefits and risks of each option. Option 1 and 2 assume that capital investment to implement fees is to be absorbed by the City. If these options are implemented, it is anticipated users will expect an increased level of service and be able to use the site for the entire winter season. Upgrades to the site to accommodate various weather conditions, including time when temperature is above freezing causing road conditions to deteriorate, would require an estimated \$80,000 investment in capital improvements such as drainage grading and enhanced lighting. This assumed customer expectation would be verified during feedback collection process.

The additional site operating expenses would be recovered through fees.

Option One - Annual Permitting Fee

This option would mandate that any private or commercial contractor hauling snow to the Snow Storage Site require a prominently displayed annual permit purchased in advance through Service Regina thus eliminating the need to handle cash and other monetary transactions on-site. Annual permit rates would vary depending on vehicle size. Municipalities such as Yorkton, Saskatchewan and Timmins, Ontario utilize this type of fee with permits ranging in cost per semi truck from \$1,400 to \$2,200, annually.

It may also be valuable to create a website that could be used to apply for and renew annual permits, communicate closures and conditions and track issues. Working with Information Technology Services, it could be determined that current business systems can accommodate such services; if additional development is required, this would require approximately \$30,000 with \$2,500 annual operating costs to maintain the website.

Ensuring compliance would not require additional investment as current staffing levels can be maintained at an annual operating cost of approximately \$100,684; a cost that is now a part of the branch's operating expenditures.

It is possible that if user fees are implemented that the City could see a decrease of 20 to 50 percent of its users, currently estimated to be 150 private contractors. As a result, the potential revenue opportunity may be reduced, but a reduction in annual operating costs may also occur.

The way to implement permits would be determined after feedback is analyzed. It could be rolled out in two ways; set rate as per results of industry consultation or gradual introduction of fees, increasing over several years until final fee structure is in place. Implementing a set rate from the beginning would remove confusion and allow the City to quickly offset the cost of the capital investment required. Incremental implementation would allow contractors to ease into the program and thus may offset rejection of the fee implementation.

Benefits:

- City operating budgets could realize some cost recovery from the users of the Snow Storage Site
- Annual permits purchased in advance would eliminate the need for cash and other monetary transactions on site
- Infrastructure to administer annual permit currently in place through Service Regina

Risks:

- Increased risk of private contractors using alternate, unauthorized locations, therefore passing on potential clean up costs to other departments or property owners
- May experience a negative reaction from the private trucking industry causing reduce usage of site and therefore reducing potential income from fees
- Annual permits may seem biased to the sporadic users when compared to the major users, as all contractors would be asked pay the same permit price regardless of level of use. This risk could be mitigated by introducing different level of permit for occasional users.
- May need additional capital or operating budget to improve site conditions in order to ensure that the site is available for the entire season.
- The investments in the site upgrade may be lost if the current site is sold for development.

Option Two – On Site Dumping Fee

This option would mandate that private or commercial contractors hauling snow to the Snow Storage Site would be required to pay per load when utilizing the site. This type of fee would involve the Administration issuing a user fee on a per-dump basis and would be dependant on the type of truck being used, amount of snow, magnitude of the fee and other factors. Municipalities such as Red Deer, Alberta and Sudbury, Ontario utilize this type of fee with semi truck loads, charging approximately \$27 per load.

If this option was selected there is potentially a need for an additional site attendant to operate the cashier/load acceptance system at an annual operating cost of approximately \$100,684. This would depend on the level of automation achieved to accept payment. Further, enhancement to the infrastructure of the Snow Storage Site would be required in order to accommodate a swipe card for automation, or alternatively, a site attendant responsible for accepting monetary transactions. Installation of swipe card technology and/or cashiering capabilities would require a capital investment through Information Technology Services of approximately \$100,000, along with annual licensing costs depending on the technology/software.

It is possible that if user fees are implemented that the City could see a decrease of 20 to 50 percent of its users, currently estimated to be 150 private contractors. As a result, the potential revenue opportunity may be reduced, but a reduction in annual operating costs may also occur.

Benefits:

- City operating budgets could realize cost recovery from the users of the Snow Storage Site
- Contractors required to pay per use, as opposed to everyone paying the same annual fee regardless of use, could be perceived as being a more fair solution for occasional users

Risks:

- Enhancements to the infrastructure of the Snow Storage Site would be required in order to accommodate a swipe card for automation, and/or a site attendant responsible for accepting monetary transactions
- May experience a negative reaction from the private trucking industry and smaller snow removal operations resulting in a decrease in private contractors hauling to the Snow Storage Site
- Private contractors may start to dump snow in alternate, unauthorized locations
- The investments in the site upgrade may be lost if the current site is sold for developments
- Per dump transactions may cause delays in comparison to permit option which may result in customer dissatisfaction

Option Three – Snow Storage Site for City Use Only

The City may also choose to close the Snow Storage Site to all commercial and private trucking companies, and accept snow dumping from City crews only. This would not generate any revenue for the City but would decrease annual operating budgets and clean up costs. The municipality of Calgary, Alberta currently utilizes this type of snow storage site.

The City is currently responsible for approximately 40 per cent of the snow dumped at the Snow Storage Site. This percentage accounts for approximately 400,000 cubic metres of snow based on a three year average. Restricting the Snow Storage Site to city crew use only would require that the site only remain open during snow removal activities (an estimated two months, as cited in the Winter Maintenance Policy), reducing the current hours of operation by half. As a result, the City would see a decrease in the annual operating expenditures associated with the Snow Storage Site in excess of \$200,000.

Second, as the majority of the garbage and debris left behind at the Snow Storage Site is dumped by the commercial industry, eliminating commercial dumping may also result in a marked decrease in annual clean up costs. For example, in 2013, Winter Maintenance crews removed over 500 tonnes of debris made up largely of concrete, metal, and lumber, at a cost of over \$50,000.

Benefits:

- City Snow Storage Site operating budget would realize some cost savings
- Annual maintenance and clean up of the site would be minimal (potential reduction of up to \$50,000 in expenses)
- The snow storage site could be open when needed by the City only, allowing to allocate resources to other priorities

Risks:

- May experience a negative reaction from the commercial snow removal industry and residents who use the City-owned snow site
- May experience an increase in illegal dumping at remote locations and perimeter roads surrounding the city as the private contractors may start to dump snow in alternate, unauthorized locations, as a result of the elimination of a site for commercial use.

Option 4 – Status Quo

Under this option the City would continue to accept snow from contractors bringing snow from Regina and surrounding area.

Benefits:

- No additional effort required to collect feedback and create processes necessary to implement snow storage fees

Risks:

- The winter maintenance budget will have to be increased to cover the expenses associated with accepting snow from contractors
- City wide tax payers would continue to subsidize commercial snow removal operations

The Administration recommends *Option 1 – Annual permitting fee*, which would eliminate the subsidies to industry at the expense of the taxpayers. This option would still provide environmentally controlled place for disposal of snow from Regina and surrounding area. To address issue of fairness for occasional users, the special permits could be created for occasional users which would allow for limited number of use of snow storage site.

RECOMMENDATION IMPLICATIONS

Financial Implications

The recommended option, Option 1 – Annual permitting fee, is estimated to require capital investment of \$110,000 to upgrade the current snow storage facility and implement the online technology used to communicate with contractors and the general public as described above. A minimal operating cost of \$2,500 annually would offset any additional requirements for staffing and facility as the snow storage site budget is already reflective of a site attendant.

Environmental Implications

There is a risk associated if contractors select to dump contaminated snow in unauthorized space either within city limits or beyond.

Policy and/or Strategic Implications

Design Regina: The Official Community Plan Bylaw, No. 2013-48 (OCP) has established a goal to use a consistent approach to funding the operation of the City of Regina by adhering to the following principles:

1. Allocate the cost of delivering programs and services based on the following principles, which shall be referred to as the benefits model:
 - Where the benefits of a program or service are city-wide and shared collectively among numerous beneficiaries, the costs are to be paid for by the general revenues of the City of Regina;
 - Where the benefits of a program or service are directly attributable to specific beneficiaries, the costs are to be paid through user fees or other similar charges; and
 - Where some of the benefits of a program or service are city-wide and some of the benefits are directly attributable to specific beneficiaries, the costs are to be paid for by a combination of general revenues of the City of Regina and user fees or other similar charges.
2. Consider, except where prohibited by *The Cities Act* or other regulations, and where appropriate, establishing user fees and other similar charges in excess of full cost recovery for the program or service to which the fees apply. Such resources shall be considered general revenues for the payment of costs associated with public benefits that are shared city-wide.

Charging the users of the Snow Storage Site a fee supports the direction laid out in the OCP. This approach will impact contractors involved in the snow removal operation.. As snow dumping has been a free service for so many years, there is potential for a negative reaction from the private industry.

The implementation of a Snow Storage Site User Fee would also have implications for *The Clean Property Bylaw, No. 988* which would need to be amended to both reflect a fee structure and to enforce potential illegal dumping on the site should a contractor utilize the site without obtaining the appropriate permit.

Other Implications

Charging a user fee may result in additional debate regarding the snow storage facility for impacted stakeholders. It will be important that stakeholders and taxpayers are made aware of the cross-subsidisation and residents will still be permitted to bring small amounts of snow, on half-ton trailers or smaller, without incurring cost.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

The Communications Department will work closely with the Roadways & Transportation Department to develop a communications plan to ensure that private snow clearing contractors and the community are informed of changes to the operational practices of the snow storage site.

DELEGATED AUTHORITY

City Council's approval is required to authorize the new revenue, as well as to approve any potential amendments to *The Clean Property Bylaw, No. 9881*.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Les Malawski'.

Les Malawski, A/Director
Roadways and Transportation

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Karen Gasmo'.

Karen Gasmo, Executive Director
Transportation and Utilities

Report prepared by:
Chris Warren, Manager, Winter Maintenance

CW/nd/bjd/aeb

APPENDIX A

Summary of Snow Storage Sites in Western Municipalities

Table 1 - Type of Snow Storage Site

Saskatoon	Currently have 4 non-engineered sites, with plans to construct 3 engineered sites in the future
Yorkton	Currently have 1 site that is partly engineered (melt water collection ditches and a 2-part settling pond.
Winnipeg	Currently have 1 engineered facility, and 3 non-engineered sites.
Calgary	Currently have 3 engineered facilities.
Edmonton	Currently have 4 engineered facilities.

Table 2 - Fee Structure

Saskatoon	Plan to charge from 2014-2015 winter season, possibly a hybrid of an annual permit and pay per use. Cost range from a ticket-per-load system from \$5-22/load based on estimated vehicle capacity to \$100 for an annual permit
Yorkton	Annual Permit \$100 for half ton in 2014, rising to \$150 in 2015 \$500 for a one ton rising to \$700 in 2015 \$1400 for a tri-axle semi rising to \$1500 in 2015
Winnipeg	No Cost at this time. Looked at it 5-6 years ago, with \$20 fee per truck load. Felt it would be hard to operate. Did not want cash handling.
Calgary	No Cost at this time.
Edmonton	No Cost at this time.

Table 3 - Open to Public? Hours of Operation?

Saskatoon	Open to Public 24/7 75% estimated to be from the private industry
Yorkton	Open to Public 75% estimated to be from the private industry
Winnipeg	Open to Public 24/7 75% estimated to be from the private industry
Calgary	Not open to the Public. For internal crews only.
Edmonton	Open to Public 24/7