TO: Chair and Members
   Public Works Committee

WARD(S) AFFECTED: CITY WIDE

COMMITTEE DATE: June 20, 2011

SUBJECT/REPORT NO:
Winter Control Program Maintenance Service Levels for Cycling Infrastructure - Pilot Program 2011/2012 (PW10096a) - (City Wide)
(Outstanding Business List Item)

SUBMITTED BY:
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RECOMMENDATION
(a) That a Cycling Infrastructure Winter Control pilot project be developed and implemented for the 2011-2012 winter season to assess the efficiency of winter control maintenance requirements for the City’s cycling infrastructure in conjunction with appropriate stakeholders;

(b) That staff report back on the Winter Control pilot project by September 2012 on the results and provide appropriate recommendations and/or alternatives for proposed winter maintenance activities for the City’s cycling infrastructure;

(c) That staff be directed to include provisions for potential service level adjustments for cycling infrastructure within specifications for future Winter Maintenance Contract renewals;

(d) That the Winter Control Program Maintenance Service Levels for Cycling Infrastructure be identified as completed and removed from the Public Works Committee Outstanding Business List.

EXECUTIVE SUMMARY
The purpose of the report is to provide information to Council on the winter maintenance services which can be used to maintain the use of the City’s cycling infrastructure during
the winter season. This report is a follow up to the Public Works Committee’s request for review of the winter maintenance service requirements for the City’s cycling infrastructure based on the Council approved Cycling Master Plan. Staff propose that a pilot program be implemented for the 2011-2012 winter season to determine the effectiveness of winter maintenance activities including snow ploughing, the use of anti-icing materials, and street sweeping practices.

Alternatives for Consideration - See Page 5

**FINANCIAL / STAFFING / LEGAL IMPLICATIONS**

Financial: The recommended pilot project activities will be performed within existing budgets primarily through adjustments to the current work plan. Further expansion of the program to include snow removal on cycling routes will increase costs. Pricing will be solicited as part of the procurement processes for winter control contracts to enable implementation if required.

Staffing: The work required as outlined in this report will be completed with existing staff resources.

Legal: The information and proposed strategy included in this report does not have inherent legal implications.

**HISTORICAL BACKGROUND**

The City’s Transportation Master Plan recommends a wide range of activities required to maintain the transportation system. One of the core initiatives of the Master Plan is to encourage the use of alternate transportation methods such as cycling, to reduce the use of single occupant motor vehicles. Cycling is a transportation method which offers several benefits including environmental responsibility and social well being such as improved health through increased physical activity.

The City has supported the creation of its cycling infrastructure; however, operational requirements need to be provided to ensure the safety and ongoing usage of this infrastructure by the public.

In May 2010, the Public Works Committee directed staff to review and report on winter maintenance service levels for the City’s cycling infrastructure. This direction is resulting from the operational considerations for endorsement of the City’s Cycling Master Plan. Staff report PW10096 recommended that proposed service levels would be developed in consultation with stakeholders and further information would be provided to Council in mid 2011.

The City’s approved winter maintenance service levels are currently based on road class priorities and Provincial Minimum Maintenance Standards. At present, these service levels do not include maintenance requirements for cycling infrastructure since
the service levels were developed prior to the introduction of the City’s Cycling Master Plan.

POLICY IMPLICATIONS

Providing services for the City’s cycling infrastructure complies with the Public Works “Innovate Now” mission statement to “Provide safe, strategic and environmentally conscious services that bring our communities to life.” In particular it supports the greening and stewardship priorities of the Business Plan since cycling is a low-impact form of transportation.

Services for the cycling network supports the City’s Transportation Master Plan and Cycling Master Plan which places and emphasis on active transportation including cycling and walking.

Winter maintenance activities for the cycling infrastructure will be developed in consideration of the Council approved winter maintenance service levels as part of the City’s winter control program.

RELEVANT CONSULTATION

The proposed strategy contained in this report was developed in consultation with staff from various sections of the Public Works Department including the Roads and Maintenance Section and Traffic Engineering in addition to representatives from the Hamilton Cycling Committee.

ANALYSIS / RATIONALE FOR RECOMMENDATION

During the 2010-2011 staff initiated several winter control activities which included improved windrow clearing for roadways with on-road cycling lanes as well as operator training to increase awareness of the requirements for the cycling lanes. Staff is planning to develop and implement a pilot project for the 2011-2012 winter season to assess winter control maintenance requirements for the City’s cycling infrastructure.

The pilot project activities will be applied to 10 kilometers of existing delineated cycling lanes within the traveled portion of the roadway and will be developed based on a priority basis in consultation with stakeholder groups including the Hamilton Cycling Committee. The City currently has approximately 170 kilometers of shared on-road cycling lanes throughout the City. Priority cycling lanes will be based on several factors but mainly cycling commuter usage. The pilot project will assess the effectiveness of the following winter service activities:

- Enhanced snow ploughing techniques to minimize the impacts of windrows on the cycling lanes.
- Evaluate the use of various types of anti-icing materials for cycling lanes in consideration of the City’s Salt Management Plan. This option would involve the
usage of appropriate anti-icing materials which would be better suited to cycling lanes.

- Provide street sweeping of on-road cycling lanes during winter months. This service would be provided throughout the winter season as weather permits and will be completed in conjunction with the City’s existing road sweeping operations. This will help reduce potential risks to cyclists from the accumulation of sand and other debris. The City’s current road sweeper fleet employs technologies enabling this operation during winter, i.e. waterless system.

- Staff will engage the cycling community to communicate information on the pilot project.

Public Works staff will continue to review best practices from other jurisdictions as part of the pilot program. Other municipalities with cycling infrastructure also face challenges with maintenance requirements during the winter season. Municipalities utilize various winter control techniques for their cycling infrastructure to maintain serviceability during the winter months for their cycling community. For example, the City of Vancouver (BC) sprays salt brine on the most heavily used bike routes so that the cycling road surface is less slippery. In addition, snow is cleared on major bike routes depending on the snow accumulation. The City of Missoula (MT) operates a volunteer program which involves neighbourhood captains who will notify their Street Maintenance Division when bike lanes have not been cleared within the required timeframe or there are obstructions in bike lanes such as windrows.

The outcome of the 2011/2012 pilot project will allow staff to assess the feasibility and merits of developing service delivery recommendations for the cycling infrastructure. The development of the future service activities will be based on several criteria including cycling lane usage resulting from the winter service activities, public feedback, safety implications, and return on investment. Some potential considerations could include:

- Establishing temporary bike lanes on selected bike routes during the winter season.

- Removal of snow windrows in designated areas. This would be provided for on-road cycling lanes outside of the Downtown and BIAs which have limited snow storage capacity to ensure that the cycling lanes are clear for cyclists.

- Provide winter maintenance of the designated escarpment rail trail access in conjunction with Parks winter maintenance program to facilitate escarpment access for cyclists.

- Develop communication strategies to inform the public on the status of winter operations for cycling routes. As an example, the City may provide updates on the City’s website on the condition of cycling lanes.
ALTERNATIVES FOR CONSIDERATION

As an alternative, Council may choose to maintain the status quo and not proceed with the pilot project; however, staff does not support this alternative since the results of the pilot project will provide valuable information to assist the City in the development of proposed winter maintenance service level recommendations for the City’s cycling infrastructure.

Council may wish to pursue both Phase 1 and Phase 2 initiatives as an alternative. Staff does not support this alternative because significant capital investment would be required. These capital costs cannot be determined at this time.

CORPORATE STRATEGIC PLAN


Financial Sustainability

- Effective and sustainable Growth Management
- Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner

Social Development

- People participate in all aspects of community life without barriers or stigma - **cycling is a low cost transportation method**

Healthy Community

- Plan and manage the built environment
- Adequate access to food, water, shelter, safety, work, recreation and support for all - **an adequately maintained cycling network encourages the public to use the City’s cycling infrastructure year-round allowing them to be physically active**

Environmental Stewardship

- Natural resources are protected and enhanced
- Reduced impact of City activities on the environment - **cycling is an environmentally sustainable transportation method**

APPENDICES / SCHEDULES

None