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# **Audit Follow Up Report**

May 31, 2014

To: Pre Audit Sub Committee

From: Brian Bigger, Auditor General

Re: Roads - Miscellaneous Winter Maintenance

Audit Report Released	June 2010
Original # Of Recommendations	32
# Of Action Plans Previously Completed	29
# Of Action Plans Now Closed	29
# Of Action Plans On Next Follow Up	3
Status As Of May 31, 2014	Some Delays

Recommendation and Summary Of Progress	Self-assessed
(Note: Self assessment conducted by Roads Division)	Status

#### Recommendation 2 (a)

Due to the age of the software and limited ability within current MMMS to associate activities and costs to specific road assets or road segments, management should continue to investigate other available programs in the market place that could be used to support budget planning, work order management, productivity tracking and cost analysis to the infrastructure asset level.

Partially Implemented

#### **Original Management Response**

Staff agree that a more updated software program should be pursued to better refine the MMMS system. A Project Development Team is being established to pursue a replacement for the current MMMS system and a new system is expected to be in place by early 2012.

# Actions Taken, Results and /or Actions Planned - As Of June 30, 2013

Staff is currently involved with the implementation of a new Computerized Maintenance Management System (CMMS) to replace the legacy MMMS. Phase 1 is scheduled to be implemented by the Spring or 2014. Phases 2 and 3 will follow. The CMMS will include these functions.

## Actions Taken, Results and /or Actions Planned - As Of May 31, 2014

Phase 1 of the new Computerized Maintenance Management System (CMMS) will be phased in over the next 24 months. Phases 2 and 3 will follow. The CMMS will include these functions.

## Recommendation 3 (a)

It is recommended that the City continue to extend the implementation of an AVL/GIS system that will capture the entire roads infrastructure. This will reduce the need for paper based road patrol reports as the information can be captured timely and accurately, right into GIS. Therefore, our road data will be available for reference purposes. It will be complete, accurate and timely. This information will also assist in the investigation of claims by reducing the amount of time required to trace though paperwork. Since an AVL/GIS system contains all the maintenance information, it can also be used to track potholes and plan the most efficient and cost effective repair for a section of road. This will ensure that once a pothole is identified, it is repaired according to minimum maintenance standards. The system should handle work orders, in order to track the productivity of the crews.

Partially Implemented

## **Original Management Response**

Staff agree. Staff have been investigating an electronic road patrolling system which would be tied to the ACR system. It is anticipated this will be in place with the new MMMS system.

# Actions Taken, Results and /or Actions Planned - As Of June 30, 2013

Council approved the purchase of new AVL hardware / software on May 28, 2013, which includes the development of an electronic Road Patrol application. Staff will commence work on the project in the spring/summer of 2013.

# Actions Taken, Results and /or Actions Planned - As Of May 31, 2014

The AVL equipment is 80% installed, and will be completed prior to the start of the 2014/2015 winter control period. The Route Completion software is in development, with a trial expected to start in November 2014.

#### Recommendation 3 (b)

Management needs to improve procedures related to road patrol documentation to ensure regulatory requirements for patrols and repairs are consistently met.

Partially
Implemented

#### **Original Management Response**

Paper copy road patrol records are being kept and are continuously being improved. Staff follow the province's road patrol documentation process. Staff have been investigating an electronic road patrolling system which would be tied to the ACR system. It is anticipated that this will be in place with the new MMMS system.

## Actions Taken, Results and /or Actions Planned - As Of June 30, 2013

Council approved the purchase of new AVL hardware / software on May 28, 2013, which includes the development of an electronic Road Patrol application. Staff will commence work on the project in the spring/summer of 2013.

## Actions Taken, Results and /or Actions Planned - As Of May 31, 2014

The Route Completion software is in development. Following completion, the development of the Road Patrol software will commence.

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Brian Bigger, CGA, CRMA

Auditor General for the City of Greater Sudbury