

AVL-Based Snow Clearance Information For Residents on Portal Site and Mobile Application

Operations and ITS
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Purpose

- ❑ To provide General Committee with information on:
 - implementation of the City's Automatic Vehicle Location (AVL) system
 - the City's NEW AVL-based Snow Clearance Portal Site and Mobile Application
- ❑ To provide a live demonstration of the new Application

What is AVL?

- ❑ An **Automatic Vehicle Locator (AVL)** is a system that collects location and other sensor-based data from vehicles in “real time”.
- ❑ AVL pinpoints and records other parameters such as:
 - vehicle speed, idling time, location of and duration of vehicle stops
 - maintenance alerts
 - specific to Markham: plow up/down, hard braking, speeding, salt spreading activity, route completion and vehicle performance – maintenance and technical requirements
- ❑ AVL provides reports for management on performance
- ❑ New system was installed in 2014/15 in all road/sidewalk based vehicles/ equipment including snowplows and contractor vehicles.
- ❑ A total of 426 vehicles now have AVL technology
 - 250 City fleet vehicles (Water Works, Bylaws, Engineering, Operations, Fire), 15 City-owned winter maintenance vehicles and 161 contractor-owned winter maintenance vehicles

AVL: Service Level Tracking

- ❑ AVL provides a critical support to management staff to ensure we are meeting service levels and contract performance. It provides staff the means to:
 - Ensure contractor performance/compliance – provides data for staff to better manage complex and large number of contractors with limited resources. (Value for Money)
 - Improve response time to customer complaints
 - Optimize equipment/staff deployment in an efficient manner.
 - Support faster problem-solving and issue resolution through better and immediate information gathering
 - Provide better defence against claims for motor vehicle accidents and “slips and falls” on roads and sidewalks
 - Obtain direct and accurate data collection for “fact-based” decision making.

Portal/Mobile Information for Residents

- ❑ With the complete installation of AVLs on all Winter Maintenance equipment, there is now a platform for the implementation of:
 - a new portal site to provide public access to snow removal information through a “self-serve” web interface on the Markham Portal; and
 - a mobile application - part of All Access Markham suite of apps
- ❑ Previous Winter Maintenance Workshops indicated a need for increase communications and education to residents on service levels, status of storms and timing of clearing.

Portal/Mobile Information for Residents

- ❑ Markham's portal site/mobile app for Winter Maintenance has the following features:
 - Status of winter maintenance on both roads and sidewalks
 - Hourly refresh of winter maintenance information
 - Identification of streets by type (primary, secondary, local)
 - Service levels specific to the street address, or area on map highlighted
 - Identification of roads not maintained, or not assumed by the City
 - Current weather data

Live Demonstration

Benefits

Benefits of AVL for Winter Maintenance

- ☐ provides operational efficiency (monitor contractor performance/compliance) and enhanced services to residents through appropriate deployment of vehicles
- ☐ more effective risk management
- ☐ provides the opportunity to identify location specific issues/concern (e.g.. fallen trees during ice storm) to understand impact and plan appropriate response

Benefits of Portal/Mobile App for Residents

- ☐ helps to inform residents about snow clearance service levels and improve communication;
- ☐ allows self service capability for residents, using devices of all types
- ☐ integrates available information for ease of access and may reduce service calls
- ☐ new features and enhancements can be added

Implementation Plan

- ❑ Launch with the *Winter Maintenance – Ready for Winter Press Conference* on November 17th at Miller Yard:
 - Show media the City's winter maintenance equipment
 - Highlight service levels
 - Educate public on what they can do to get ready for winter
- ❑ Monitor the feedback from residents over the winter and fine-tune for 2016/17 season
- ❑ Sign boards and other promotions will be undertaken to promote the portal site/app.
- ❑ Thanks to the team of Staff from: ITS/Operations/Corporate Communications/Contact Centre/Bylaws