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GEOGRAPHIC INFORMATION SYSTEMS LOCATOR SOFTWARE APPLICATION IMPLEMENTATION PILOT PROJECT

The Health and Emergency Medical Services Committee recommends the adoption of the recommendations contained in the following report, May 20 2004, from the Commissioner of Health Services:

1. RECOMMENDATIONS

It is recommended that:

1. Health and Emergency Medical Services Committee and Regional Council approve the participation of York Region Emergency Medical Services (EMS) in the Geographic Information Systems (GIS) Locator pilot project with the Ministry of Health and Long-Term Care (MOHLTC).

2. Health and Emergency Medical Services Committee and Regional Council provide authorization to obtain the licence for the GIS Locator software application developed by the MOHLTC at no cost to The Regional Municipality of York.

3. Health and Emergency Medical Services Committee and Regional Council authorize the Commissioner of Health Services to execute the Memorandum of Understanding between the MOHLTC and The Regional Municipality of York with respect to the GIS Locator software application.

2. PURPOSE

The purpose of the report is to provide information on the GIS Locator pilot project being undertaken by the MOHLTC, and to seek approval for York Region EMS to participate as a pilot site for the period of one year.

3. BACKGROUND

The MOHLTC uses a custom-built software application known as GIS Locator in its Central Ambulance Communication Centers (CACC). GIS Locator is a client-server computer software application. This program has mapping data and Global Positioning Service (GPS) vehicle location capabilities that enable the user to see an EMS vehicle's current position and that of the entire York Region EMS fleet on a computer generated map of The Region. The MOHLTC has offered The Region use of this product in EMS Operations Supervisor vehicles at no cost to The Region subject to entering into an agreement with the MOHLTC governing the use of the GIS Locator software application.

4. ANALYSIS AND OPTIONS

4.1 Mobile Work Station Pilot

In 2003, York Region EMS implemented a Mobile Work Station Pilot for the use of mobile work stations by EMS Operations Supervisors. The pilot involved the use of rugidized laptop computers to connect to EMS system applications using a wireless network. In January 2004, a review of the six-month pilot was conducted with respect to productivity and system design. EMS staff identified that the workstations improved the productivity of field management staff by providing timely access to data and information. Previously, access to EMS scheduling GPS system applications were only available at work stations, at Paramedic Response Stations or at the EMS Operations Administrative Center located at 520 Cane Parkway in Newmarket, at the beginning and end of shifts.

The pilot identified that the amount of air time required for data transfer using the EMS applications was extremely high and, thus, too costly. Therefore, York Region EMS is continuing to work with York Region's Information Technology staff and communications experts regarding the reduction in data use across network computer systems through wireless applications.

4.2 GIS Locator Software Pilot

It is proposed that York Region EMS would continue to pilot GPS applications in the wireless environment by utilizing the MOHLTC's GIS Locator software product. This product would be installed on four lap top computers already purchased and in use by EMS Operations Supervisors. The application uses memory on the local computer and sends data through the network system. Therefore, less data is required to be sent through the wireless network. Only the GPS co-ordinates are sent, instead of the entire mapping data required by the Mobile Work Station Pilot. GPS applications are considered to be benchmark practices in EMS operations and dispatch systems. They have been proven to be very effective and efficient in supporting the operational management of ambulance resources. The use of GPS technology has been used in many other industries such as courier services, transportation services and public safety agencies throughout North America. If approved, York Region EMS will participate immediately in this pilot program.

4.3 Relationship to Vision 2026

York Region EMS supports the Vision 2026 goal of Responding to the Needs of Our Residents and Supporting Safe and Secure Communities by continuing to provide and support high quality emergency services. The use of the GIS Locator software application provides York Region EMS operational staff enhanced ability to achieve the Vision 2026 goals.

5. FINANCIAL IMPLICATIONS

The use of the GIS Locator software application is being provided by the MOHLTC at no cost to The Region. There are no new capital costs or anticipated additional support costs associated with the use of this software. If a software issue is identified, the MOHLTC will be responsible for resolving the problem. Waterloo had this software installed into 21 EMS vehicles four months ago and have had no software issues to date. However, it is anticipated that approximately two hours of additional IT staff time will be required in order to install this program. All equipment proposed to be used is currently part of EMS operations inventory and included in the 2004 approved operating budget. York Region EMS does not anticipate any costs for future operations.

6. LOCAL MUNICIPAL IMPACT

York Region EMS continues to explore benchmark practices in managing EMS resources. The GIS Locator software application will enable York Region EMS to better respond to emergency calls throughout The Region.

7. CONCLUSION

York Region EMS has been offered the opportunity to pilot the GIS–Locator software application developed by the MOHLTC for use in Operations Supervisor vehicles. Global Position Systems, such as the GIS Locator, have been identified as best practice technology for EMS operations and dispatch systems. The implementation of the GIS Locator software application will assist York Region EMS to plan, prepare and respond to emergency situations more effectively and efficiently.

The Senior Management Group has reviewed this report.