The Regional Municipality of York

Committee of the Whole Finance and Administration March 7, 2019

Report of the Commissioner of Corporate Services

Contract Award for Esri GIS Software Licences

1. Recommendations

It is recommended that:

- Council authorize an agreement between the Region, Esri Canada Limited and Esri Inc. for an Esri Enterprise Agreement for York Region's Geographic Information System software on the following terms:
 - a. The term of agreement be for 4 years, starting on May 3, 2019 and ending on May 2, 2023
 - b. The Region pay Esri Canada Limited a total of \$1,100,000 divided into annual payments of \$275,000 per year, excluding HST
- 2. The Commissioner for Corporate Services be authorized to execute the agreement on behalf of the Region.

2. Summary

This report seeks Council approval for the Region to enter into an Enterprise Agreement (Agreement) contract with Esri Canada Limited and Esri Inc. for York Region's Geographic Information System (GIS) under the direct purchase provisions of the Purchasing Bylaw. The rationale for this direct purchase is compatibility with the Region's existing system is the paramount consideration.

- Esri software is critical to Regional and York Region Police mapping and analysis capability and is integrated into core business systems.
- Esri software is used by all local municipalities supporting integration, sharing and leveraging of data and tools with the Region.
- The current Agreement, approved by Council in May 2015, expires on May 2, 2019.
- The new Agreement is for four years, from May 3, 2019 to May 2, 2023.

- Agreement includes GIS software licensing, subscription to online services and four years of product maintenance.
- Council approval is required under the Purchasing Bylaw since the aggregate term of the proposed contract is greater than five years and over \$150,000.
- Esri Canada Limited is the exclusive distributor of Esri GIS software in Canada.

3. Background

GIS technology manages and distributes mapping data

Geographic Information Systems (GIS) is the technology which creates, manages, analyzes, publishes and shares mapping data. It is estimated that 80% of all data a municipal government collects is associated with a location. York Region services such as policing, transit, roads, traffic, water, wastewater, public health, land development, telecommunication and solid waste management all rely on mapping data to show and analyze the location of natural features, assets, and boundaries. There are over 825 mapping layers accessible to staff directly or through integration with business systems. Approximately 200 layers are shared with local municipalities and over 100 are available to the public on the Region's Open Data site or through YorkMaps, the Region's online mapping tool.

York Region has had an Enterprise Agreement with Esri since 2012 to provide GIS software

The Region purchased its first GIS software in 1994 from Esri Canada. Advancements in GIS software capability and business needs resulted in continuous growth in the use of GIS throughout the Region. In June 2012, the Region combined all Esri software into a more cost effective three-year Agreement. On May 21, 2015 Council approved the award of a second Agreement for a four-year term. The Esri Agreement includes licensing for a suite of GIS software, subscription to online services and four years maintenance.

4. Analysis

GIS technology is critical to municipal government services

Esri's GIS software directly or indirectly supports many business systems across the Region. This includes police and fire dispatch, transit systems, and asset management systems. Esri software and mapping data is seamlessly integrated into the Region's YorkTrax development tracking system and the Land Transaction Management system. Esri's software is critical to the Region's online mapping tool, YorkMaps, which receives over 80,000 internal and public users annually. York Region Police rely on Esri GIS software to provide real-time event information to: officers in their cars, in-office crime analysts and emergency management teams. Without Esri software, these business system users would not be able create or view

mapped business data unless capabilities are replaced at high cost and disruption to program delivery.

YorkInfo Partners rely on Esri GIS Software to find efficiencies

All YorkInfo Partnership organizations, including the nine local municipalities, two conservation authorities and the two school boards, use Esri GIS software to maintain mapping data and integrate data into business systems. This data is shared and used with Esri GIS software to support operational needs and project requirements. Data sharing examples include: mapped data of the water and wastewater pipe network from local municipalities, 100-year flood zones from conservation authorities, and school locations and enrollment from school boards.

Continued use of Esri GIS software will benefit the YorkInfo Partners:

- Seamless sharing of tools and over 200 datasets among through a Data Co-operative
- Public access to government data through the seamless connection of regional and local municipal Open Data sites
- Collaboration to create common region-wide datasets such as All-pipes
- Better coordination with projects such as Municipal Comprehensive Review and Regional and Local Official Plan mapping
- Coordinated GIS software training and best-practice sharing

Many government organizations use GIS software from Esri

Besides the nine Local Municipalities in York Region, the Regional Municipalities of Durham, Halton and Peel, Simcoe County and the City of Toronto have a corporate investment in Esri GIS software. The Province of Ontario, Ontario Provincial Police and Department of National Defence are also users of Esri GIS software. Using the same software as neighbouring municipalities and other levels of government makes sharing data between organizations easier and more efficient.

York Region receives good value from the existing agreement with Esri

Staff compared the value of the Region's Agreement to neighbouring municipalities. Though comparing jurisdictions of different size and deployment patterns is imprecise, overall the Region's costs are in line or better than neighbouring municipalities.

An Esri Enterprise Agreement allows the Region to deploy GIS solutions and add users as needed. This allows flexibility in the way solutions are developed and deployed. The previous Agreement allowed York Regional Police to develop their Business Intelligence solution without additional cost for licences and the agility to deploy to staff as necessary. This flexibility will be valuable to YorkNet as they move forward with fibre asset management.

York Region's GIS program is recognized as a leader in municipal GIS programs in Canada. This is based on the wide deployment and use of GIS throughout the organization, deep integration into key business systems and linkages to external partner organizations.

5. Financial

The new four-year Esri Enterprise Agreement is \$1,100,000 payable in equal annual installments of \$275,000, excluding HST.

The expiring 2015 to 2019 Agreement had an annual cost of \$235,000. The cost increase reflects the Region's increased use of Esri software including more than 200 new users through YorkTrax and Land Transaction Management systems, Police expansion with their Business Intelligence solution and addition of YorkNet as an eligible agency. The new Esri Agreement represents good value given the extent and depth to which the Region uses GIS to support all departments and partner organizations.

Funding has been incorporated in the approved 2019 DAVS budget. The cost certainty over four years is beneficial for multi-year financial planning.

6. Local Impact

Compatibility with the local area municipalities, surrounding governments, and the province, which all use Esri's GIS software, is important for ongoing business operations that rely on mapping. The Region's continued use of Esri GIS software will mean local municipalities will not experience service disruption in the exchange of mapping data and solutions, and can continue accessing no-cost GIS training offered by the Region.

7. Conclusion

This report seeks Council approval to enter into a contract with Esri Canada Limited and Esri Inc. for the Region's GIS software under the direct purchase provisions of the Purchasing Bylaw. Esri Canada Limited is the exclusive distributor of Esri GIS software in Canada.

Compatibility is a paramount consideration in the Region's continued use of Esri GIS software. Esri software is used by the local municipalities, supporting integration, collaboration and data sharing with the Region. Regional and York Region Police core business systems, existing mapping data and public facing applications such as YorkMaps and Open data all rely on Esri GIS software.

The new Agreement is for a four year term, from May 3, 2019 to May 2, 2023 at a cost of \$275,000 per year. Along with GIS software licensing, the Agreement includes subscription to online services and four years of product maintenance.

For more information on this report, please contact John Houweling, Director of Data, Analytics and Visualization at 1-877-464-9675 ext. 71529. Accessible formats or communication supports are available upon request.

Recommended by:

Dino Basso

Commissioner of Corporate Services

Approved for Submission:

Bruce Macgregor

Chief Administrative Officer

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