

September 10, 2019

To: Members
Finance and Administration Committee

Re: Three-Year Software Contract for Environmental Systems Research Institute Software

RECOMMENDATION

- 1) That the City Manager, or his designate, be delegated authority to enter into an agreement for a three-year software license for the Environmental Systems Research Institute software.
- 2) That the City Manager, or his designate, be delegated authority, to renew in three-year increments, after the initial term, pursuant to the signed agreement.
- 3) That the City Clerk be authorized to execute the agreement with the Environmental Systems Research Institute after review and approval by the City Solicitor.
- 4) That this report be forwarded to the September 30, 2019 meeting of City Council for approval.

CONCLUSION

To take advantage of the benefits and cost saving opportunities it provides, Administration seeks City Council approval to draft an agreement for a three-year Enterprise Level Agreement (ELA) with Environmental Systems Research Institute (ESRI). The ELA enables the City of Regina (City) to access ESRI software licenses and extensions for a term of three years: 2020, 2021 and 2022. ESRI requires the City to commit to a three-year ELA for a total of \$425,000 (taxes not included), paid in three yearly installments of \$141,667.

City Council approval is required as Administration is not authorized to enter into the agreement under the delegated authority.

BACKGROUND

ESRI software provides a variety of tools for mapping, data collection, data management, data sharing and spatial analytics. They are designed to deliver location intelligence to support digital transformation requirements for organizations. ESRI provides a special subscription-based model for municipalities, known as an ELA, which provides access to limitless licenses for almost all ESRI products.

The City has been using ESRI software since the early 1990s. Initially, the City purchased a handful of licenses and extensions. As the demand increased, the City purchased additional licenses to add to the existing pool; however, licences and extensions were only accessible to a

few users. Each year, there is an operating budget amount identified to pay for the annual maintenance fees associated with the ESRI software.

Two years ago, the City began researching a cost-effective way of providing more licences and extensions to users as demand for ESRI software had risen and reached the tipping point where an ELA became more affordable than purchasing individual licenses.

The ELA excludes the following clauses that are required as per Schedule D - Purchasing Policy of the *Regina Administration Bylaw No. 2003-69*:

- A termination clause as required in Schedule D, Section 22 (c) of the *Regina Administration Bylaw No. 2003-69*.
- A subject to continued acceptable performance by the vendor as required in Schedule D, Section 22 (d) of the *Regina Administration Bylaw No. 2003-69*.

As a result, City Council approval is required to enter into an ELA as Administration is not authorized to enter into the agreement without the above two mentioned clauses.

DISCUSSION

In 2019, ESRI provided special consideration to the City and arranged for a one-time-only one-year subscription ELA. This provided access to limitless licenses and extensions for most of ESRI's products. This one-time offer provided Administration time to get City Council approval to enter into a three-year ELA for 2020, 2021 and 2022.

With this access, the City has been able to develop more applications using the online software ArcGIS Online, provide access to previously restricted extensions to all geospatial users within the City and has been able to configure ESRI architecture environment to have servers for developing, testing and production.

Option 1 - Revert to individual licenses model.

The City would return to the initial agreement that provided access to individual licenses as shown in Appendix A.

Pros

- Under this agreement, the City would pay annual maintenance fees of approximately \$108,000 instead of \$141,667 (taxes not included).
- This would be a savings of \$27,016.74 as the budget is currently set at \$135,000.

Cons

- The City would not fully realize the four pillars of our Corporate Technology Strategy:
 - Mobility – anytime, anywhere access.
 - Think digital – digital access to City services and information.
 - Data & analytics - manage and share data to empower decision making.
 - Agility - prioritize, collaborate, innovate and continuously improve.

- The City would discontinue online applications after December 31, 2019. Currently, the City is leveraging licences that were provided with the one-year special ELA. This will affect mosquito control application, road report data management, concrete inspection, pavement painting, alley grading etc.
- There would be limited user access to tools and extensions. Concurrent licensing of tools result in delay and frustration in accessing tools to do the required work.
- The City would not be able to install additional server instances to handle current online traffic, especially with the new regina.ca interactive maps and mobile applications developed for field workers.
- The City would not be able to effectively continue developing tools to meet the current demand of mobile data collection tools.

Option 2 - Revert to individual licenses model and purchase individual licences to meet the demand.

The City would return to the initial agreement that provided access to individual licenses and would purchase extra licences to meet current and future demand as shown in Appendix A.

Pros

- Doesn't bind the City to any long-term contract.

Cons

- The City would not fully realize the four pillars of our Corporate Technology Strategy:
 - Mobility – anytime, anywhere access.
 - Think digital – digital access to City services and information.
 - Data & analytics - manage and share data to empower decision making.
 - Agility - prioritize, collaborate, innovate and continuously improve.
- The cost of required licences and extensions would be over \$180,000 in order to maintain demand for current and future applications, \$45,000 over budget
- There would still be limited user access to tools and extensions. Concurrent licensing of tools may still result in delay and frustration as need arises.
- There would be limited install for additional server instances to handle current online traffic, especially with the new regina.ca that has more interactive maps.
- It would be too costly to continue effectively with the development of more mobile data collection tools.
- It would be too costly to maintain required level of service to meet business needs for mosquito control application, road report data management, concrete inspection, pavement paint, alley grading etc.

Option 3 – Enter into a 3-year ELA (Recommended Option)

The City would sign on to the three-year ELA for 2020, 2021 and 2020 for a yearly cost of \$141,667.

Pros

- The City would be able to fully realize the four pillars of our Corporate Technology Strategy:
 - Mobility – anytime, anywhere access.
 - Think digital – digital access to City services and information.
 - Data & analytics - manage and share data to empower decision making.
 - Agility - prioritize, collaborate, innovate and continuously improve.
- The cost of extra licences and extensions is \$6,667 in order to maintain demand and provide for future requirements.
- The City would not have to discontinue using online applications like mosquito control application, road report data management, concrete inspection, pavement paint, alley grading etc.
- Business areas would continue using the geospatial applications as part of their everyday work, which would maintain levels of service.
- There would be unlimited access to desktop and server-based software and extensions. The ELA also provides for access to specialised extensions e.g. Drone2Map for processing large data files and GeoPlanner for general planning activities requiring geospatial analysis.
- There would be improved access to online accounts that meet our future demand, including continued development new mobile data collection tools to continue supporting asset management policies.
- The unlimited enterprise server licenses provide an opportunity to have a secure environment for access to applications and data because authentication (log in) can be effectively enforced limiting access to required data for business purposes.
- The City would be able to have server environments for testing, developing, production and publishing, which is an industry best practice for server architecture.

Administration recommends Option 3 as:

- The extra cost of \$6,667 above the current budget amount is minimal and can be absorbed through existing budgets.
- The City is heavily vested in using ESRI technology since the 1990s. Many datasets, analysis, processes and certain system integrations have been developed with ESRI software.
- According to Business World Online Magazine in 2017, ESRI is used by many businesses and governments around the world and has over 40 per cent market share of the geospatial market with annual revenues that exceed \$1.1B.
- ESRI has a very large market share among municipalities in Western Canada, as such, the risks of not having a termination clause and acceptable performance is deemed to be low based on the past 25 years of experience working with this company. In addition, this is a three year contract, which will be reviewed and reconsidered at the end of the three year term, prior to renewing.

RECOMMENDATION IMPLICATIONS

Financial Implications

Administration consulted with ESRI regarding the requirements for technology based on future usage. The total cost for the three-year ELA is \$425,000 (taxes not included). The City would pay \$141,667 annually, for three consecutive years, starting in 2020.

The City already budgets \$135,000 for ESRI software in the operating budget each year. This is split 40 per cent from Utility and 60 per cent from General operating budgets. The cost of \$141,667 represents an increase of \$6,667 annually, which is 5.2 per cent above the current amount and can be absorbed within the current Software Maintenance operating budget.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

Support for the management of the urban forest by providing ESRI tools and datasets for collecting, planning and maintaining the tree inventory through web based geospatial tools.

Design Regina: The Official Community Plan Bylaw No. 2013-48 contains the following related policies:

Section D2: Environment

Goal 2 – Urban Forest -Protect, promote and expand Regina’s urban forest and street tree canopy.

4.7 Maintain and continually expand a healthy and diverse urban *tree canopy* to improve air quality, increase carbon sequestration, reduce heat island effect and enhance the aesthetic character of the city

Geospatial software provides tools and data to Administration review and plan amendments to neighbourhood plans, including support for Zone Forward, through use of maps both PDF and interactive, for internal and external access.

Section D5: Land Use and Built environment

Goal 1 – Complete neighbourhoods

7.1 Require that new neighborhoods, new mixed use neighbourhoods, intensification areas and built or approved neighbourhoods are planned and developed.

Support for asset management and field work coordination by providing tools and datasets for mobile workers using geospatial technology for inspections, telematics and inventory i.e. concrete inspection web app, road preservations inspections, water works inspection application, roads characteristics to support MBNA reporting etc.

Section D4. Infrastructure

Goal 2 – Asset Management and Service Levels

Ensure infrastructure decisions result in long-term sustainability.

6.5 Determine requirements to upgrade and finance existing infrastructure to service new development at defined service levels.

Opportunities to collaborate with our neighbours by working with Rural Municipality of Sherwood No. 159 to support their addressing needs through use of ESRI technology.

Sections D1 – Regional context

Goal 1 – Support Regional Growth

Support a more sustainable and beneficial approach to growth within the region through collaborative regional planning and service delivery.

3.2 Work with regional partners to explore strategic planning initiatives, including but not limited to:

3.2.1 An integrated servicing strategy that may include cost-sharing models, corresponding service levels, and performance outcomes for long-term views;

The Corporate Strategic Initiatives Portfolio contains the following related 2018 -2021 Objectives:

Improve Internal and External Communication

Redesigning Regina.ca to ensure residents have a mobile-friendly website that meets their needs. The new Regina.ca website has many interactive maps to provide information for residents. There are also many PDF maps developed using ESRI software.

Improve Decision-making

Construction Programming & Integration Project: Using ESRI software, Administration have developed a construction coordination web map to help discussions on collaboration amongst business areas responsible for construction activities. Using ESRI software, Administration have developed a road report map tool that records and displays road closures. The road report is accessible by both public and internal users.

Improve Processes

Planning and Building Software for development and building permit process, which depends on geospatial information for location based activities. ESRI software is ensuring the information is available and will be integrated into the Planning and Building software.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

Communications

None with respect to this report.

Delegated authority

The recommendations in this report require City Council approval.

Respectfully submitted,



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Respectfully submitted,



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