CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JANUARY 19, 2016

Item 1, Report No. 2, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on January 19, 2016.

1 CORPORATE ASSET MANAGEMENT STRATEGY UPDATE & NEXT STEPS

The Committee of the Whole recommends approval of the recommendation contained in the following report of the Deputy City Manager, Public Works, and the Manager of Corporate Asset Management, dated January 12, 2016:

Recommendation

The Deputy City Manager, Public Works, and the Manager of Corporate Asset Management recommend:

1. That this report be received for information.

Contribution to Sustainability

An integral part of a sustainable city is effective asset management. The management of the City's assets will maximize the return on the City's capital and operating investments, and ensure services are provided optimally to the City's citizens.

Economic Impact

This report does not propose any changes to existing capital or operating budgets.

The current Corporate Asset Management (CAM) initiative is being funded from the Council-approved capital project EN-1958-13. This budget was endorsed by the Committee of the Whole on Nov 12, 2013, and approved in the 2014 Budget.

Communications Plan

External communications will be provided when the AM technology initiatives have further progressed, to advise citizens about asset data collection activities, and later, about improvements to customer service processes.

Communications are currently focused on internal staff users that will be impacted by AM technology initiatives; however, external communications will be provided when implementation has progressed further, to advise citizens about asset data collection activities that will occur the City. In addition, prior to launch of the new technologies, citizens will be informed about the City's improved processes for responding to service requests, including notifying callers about service request status and outcomes.

Purpose

The purpose of this report is to update Council on implementation of the Corporate Asset Management (CAM) Strategy and identify the next steps in meeting this City strategic objective.

Background - Analysis and Options

In accordance with earlier Council direction, staff have been working on three key elements of the Corporate Asset Management (CAM) Strategy, starting with preparing for the implementation of a Computerized Maintenance Management System.

The Corporate Asset Management (CAM) Strategy was approved by Council in 2013. The Strategy recommended core IT systems needed for asset management, specifically the

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Computerized Maintenance Management System (CMMS) and AM Planning System (AMPS). The CMMS will allow staff in all resident-facing operational areas to plan, action, and close-out work orders paperlessly, more quickly and more efficiently, and to record the asset life cycle costs and impacts immediately at that time. The AMPS will allow the City to more efficiently plan or program funding to maintenance and renewal of assets.

The City will implement the CMMS first, so that the organization may begin accumulating asset condition and maintenance data in work orders as soon as possible. This data may then be leveraged for AM analysis in the future AM Planning System. In parallel with the CMMS implementation, staff will begin collecting asset data for all assets, be they pipes, roads, buildings, fleet, trees or others.

Staff have defined current and improved maintenance work processes, and scoped the needs of the new CMMS to support the improved processes.

Staff from all program areas have been involved in multiple workshops to define business requirements and future state work order processes that address the specific needs associated with all infrastructure elements, while remaining consistent Enterprise-wide, and reflecting industry leading practices.

The Business Requirements include specific requirements for improving efficiency of work order management activities, including tracking and management issue reports (also known as service requests) and work orders, and scheduled maintenance, as well as enabling more efficient use of materials used for work orders, such as specialized equipment, vehicles and spare parts.

The Business Requirements also address the need for more efficient management of external resources, improved management of procurement and payment records related to work orders, and improvement management of health & safety and regulatory requirements. Specific requirements were also defined to ensure that data required for AM planning, budgeting, cost recovery, insurance claims, and performance management are captured.

Staff have determined that a CMMS solution building on the City's previously purchased JDE software will be the most cost-effective solution.

Many different technology solutions exist for work order management, and are marketed as Computerized Maintenance Management Systems. However, before considering procurement of any additional technologies, the City assessed the potential to leverage its existing JDEdwards (JDE) enterprise license for work order management.

In general, it was found that all major requirements can be fulfilled by building on existing JDE functionality. With additional investment in configuration, the existing JDE-based software could manage and track work orders, enable paperless work flow processes, automatically generate preventive maintenance work orders, support mobile applications on mobile devices, and provide geo-spatial mapping capabilities.

By leveraging our existing JDE license, the City stands to benefit from cost savings due to:

- No need for licenses and vendor support associated with an additional CMMS.
- No need for training and allocation of ITM Department staff to support an additional CMMS.
- Reduced need for system integrations, since JDE's work order module communicates seamlessly with the City's JDE-based financial and other modules.
- Knowledge sharing across a broader JDE user community within the organization.
- Simplified enterprise technology architecture, which facilitates future technology and data initiatives.

- Lower risk and complexity associated with configuring an existing solution, compared to implementation and configuration of a new CMMS.

In addition, a significant amount of time and effort would be saved by avoiding a complex procurement process, and additional effort required to implement a new system. This savings in procurement and implementation effort could easily add 12 months to implementation of the CMMS (summer 2016 for procurement of JDE configuration services followed by JDE configuration, versus summer 2017, for an all-vendor procurement followed by implementation, configuration and integrations).

The City will now be hiring professional software configuration services to build the CMMS on the JDE platform, through a competitive procurement process.

Although JDE has been identified as the preferred solution, there are many vendors who provide JDE configuration services. As such, a procurement process is required to select a preferred consultant to lead the CMMS implementation. The scope of work will include configuration of JDE, staff training and project communications.

Roll-out of the CMMS is expected to start with Fleet and Forestry beginning in mid-2016, and to the remainder of the service areas through 2017 and early 2018.

It is expected that the preferred CMMS consultant (JDE configuration consultant) will be engaged in the first quarter of 2016. The improved work order process will be launched in stages by service area. The Fleet Department has been selected as the first service area for CMMS launch, because their staff are already accustomed to detailed tracking of work order data, and because of their role in maintain vehicles and equipment that are used by other service areas. By launching the CMMS improvement in the Fleet Department first, roll-outs in subsequent service areas will benefit from being able to coordinate vehicle and equipment reservations with maintenance.

The Forestry and Horticulture Department has been selected as the second service area for launch of the updated CMMS and work order processes, because they are also accustomed to detailed tracking of work order data. They are currently generate over 17,000 paper- based work orders, and will thus benefit immensely from mobile devices and paperless processes.

The ordering of roll-out to the remaining service areas (Transportation, Parks, Water, Wastewater & Stormwater, Facilities) will be determined in cooperation with the selected CMMS consultant, based on their recommendations and progress of asset data collection. Roll-out to all service areas is expected to be complete by early 2018.

Work on scoping the AM Planning System is on-going and implementation will follow in 2016-17.

Business Requirements for the AM Planning System will be developed in early 2016, and it is expected that the system will be procured and implemented within the year. Since this system will support planning activities, rather than operational activities, the user base is much smaller than for the CMMS, so the implementation and roll-out will be less intensive.

A Data Strategy is being developed to coordinate collection of asset data with the roll-out of the CMMS and AMPS.

The Data Strategy will define the types of data needed for roll-out of the CMMS, and assess the quality of the City's existing data. The Strategy will then recommend actions for filling the data gaps. Recommendations may include having internal staff to collect data, hiring a contractor to

collect data, or hiring temporary staff to collect data. For data that are not critical to the CMMS or AMPS, the Data Strategy may recommend against a concerted data collection effort, but that the data be built up as a by-product of other activities. The Data Strategy will also recommend external communications activities to advise citizens who may be affected by data collection efforts.

Some data collection has already been started by internal staff, and is on-going. Based on the recommendations of the Data Strategy, outsourcing of data collection initiatives will begin in early 2016, along with any necessary communications.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

In reference to the Term of Council Service Excellence Strategy Map, the progress and on-going efforts described in this report support the Term of Council Priority to "Invest, renew and manage infrastructure and assets" by improving the processes, technology systems and data used to manage our assets most efficiently through their life cycles. These same improvements will also Service Excellence, specifically by allowing the City to better forecast the financial sustainability of its infrastructure funding needs.

Regional Implications

Not Applicable.

Conclusion

Staff recommends that this report be received for information.

Attachments

None.

Report prepared by:

Elaine Chang, Manager of Corporate Asset Management, ext. 8303

COMMITTEE OF THE WHOLE – JANUARY 12, 2016

CORPORATE ASSET MANAGEMENT STRATEGY UPDATE & NEXT STEPS

Recommendation

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Regional Implications

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Conclusion

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Attachments

None.

Report prepared by:

Elaine Chang, Manager of Corporate Asset Management, ext. 8303

Respectfully submitted,

Paul Jankowski	Elaine Chang
Deputy City Manager, Public Works	Manager of Corporate Asset Management