



Staff Report

Meeting Date: February 16, 2022

To: County Council

Report Number: CPS 2022-05

Title: Process and Software Review Final Report

Author: Tammy Sikma, Enterprise Applications Manager

Approval: Sheridan Graham, CAO

Recommendation: That CPS 2022-05, Process and Software Review Final Report, be received;

That MNP LLP's final report (Appendix "A") titled, "County of Peterborough Software Selection – Recommendation Summary", and dated January 21, 2022 be received; and

That Cloudpermit be recognized as the Preferred Vendor for the Land Development Tracking solution; and

That staff be directed to negotiate a single-source contract for the Cloudpermit Ontario Planning Module from Cloudpermit with the County and interested local municipalities, with funding support available for those partnering in the Municipal Modernization Program Intake 3 – Implementation Steam; and

That staff be directed to issue an invitational RFP to the Preferred Vendors, PSD and Esri Canada, for the Asset Management / Work Order solution.

Overview

Staff are seeking direction to procure (1) Land Development Tracking and (2) Asset Management and Work Order solutions following the recommendations outlined in this report.

Background

The County gratefully acknowledges the Province of Ontario for up to \$60,000 support to complete the Project through the Municipal Modernization Program Intake 2 – Review



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Stream by January 31, 2022. The views expressed in Appendix “A” and this report are the views of the authors and do not necessarily reflect those of the Province.

The final Recommendation Summary from the “Peterborough County and Three Member Municipalities Joint Service Delivery Process and Software Review” project (“Project”), led by consultants at MNP, are provided as Appendix “A” (attached).

In summer 2021, Provincial approval was granted allowing the County to work jointly with the Township of Havelock-Belmont-Methuen, Township of North Kawartha, and Municipality of Trent Lakes (“the Project Partners”) to review service delivery processes related to (1) Land Development (“LD”) Tracking and (2) Asset Management and Work Orders (“AM/WO”) with the goal of identifying potential efficiencies through software integration.

MNP LLP (“MNP”) was contracted (as the firm that undertook the IT/GIS Master Plan previously) to deliver a requirements report, long list of vendors following a market scan, evaluation summary, short list of vendors, vendor demonstration script, and recommendation summary. Their work included a functional requirement analysis, software rationalization, integration planning, and 5-year implementation costing of prospective software solutions.

The Project Partners reviewed their existing process needs with MNP and these were used to develop the Functional Requirements for each software system. The opportunity to replace, expand or integrate with existing software was explored. An interim report indicated that new systems must provide ease of use, increased automation and improvements to integration and reporting in order to simplify efforts, create efficiencies, improve citizen service, reduce errors, and improve annual planning, budgeting and reporting. A market scan assessed available vendors for fit with the Project Partners and long-listed prospects were invited to respond to an RFI. Functional scores were evaluated and successful vendors invited to provide a demonstration where a multi-agency, multi-departmental panel assigned Usability Scores. Vendors with significantly higher demonstration results or who passed the overall utility assessment by at least half the panel were included in the final evaluation in Appendix “A”.

Analysis

In Appendix “A”, MNP measured the 5-year total cost of ownership (TCO) for applications judged by reviewers to be acceptable. Vendor budgetary responses were measured against the functional and usability scores to create a Performance/Price (P/P) Score. The highest-scoring P/P Score was deemed to offer the most “value for money”. Second- or third-place solutions received an equivalent 5-year TCO value calculated by comparing their P/P Scores and TCO to offer a comparative cost in order for the County to receive an equal “value for money”.



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MNP identified Cloudpermit as the recommended solution due to high functional and usability scoring and significantly lower five-year Total Cost of Ownership. Other identified benefits include their advanced Ontario-market (including being named as the approved e-permitting partner by AMO), product development, integrated data exchange with MPAC, and compliance with Planning Act requirements. Because six local municipalities currently licence Cloudpermit's parallel e-permitting module, including two funding partners, extending software licensing to Planning purposes would limit integration efforts. Staff at the County and Townships fully support the MNP recommended solution.

In Appendix "A", MNP identifies Cityworks AMS and Citywide as the "two best scoring solutions" and identifies strengths of each. Both applications are understood to offer the capabilities that the County is seeking through integration with existing County applications or recommended partner products. To ensure the integration capabilities of the selected solution, staff support MNP's recommendation that a brief Proof of Concept engagement precede the signing of any AM/WO contract. In order to fully assess both solutions, staff are recommending that an invitational RFP be issued to the two best scoring proponents, with a final review and selection report to be brought back to Council.

Financial Impact

The County is pleased to receive notice from the Province of Ontario of its successful application for a Municipal Modernization Program Intake 3 – Implementation Stream ("MMP3 – Implementation") grant to assist with the procurement and implementation of the Land Development Tracking and Asset Management and Work Order systems. This provides up to \$231,504, or a maximum of 65% of incurred project costs, to be spent by March 31, 2024 to support the implementation of these solutions. The draft 2022 County budget has allocated \$250,000 to this project, with funding provided by participating Townships as well.

In the 2021 Public Works Service Delivery Review by WSCS Consulting Inc. the estimated the 10-year savings / cost avoidance of \$542,857 to develop an IT Strategy to implement a comparative system for work orders, asset management, patrolling, and payroll that would offset the software licensing and maintenance fees identified by MNP.

Further, MNP has identified on page 10 of Appendix "A" that replacing legacy systems with the new AM/WO system could potentially result in \$216,000 in licensing fees over 5-years that could offset new AM/WO expenditures.

Anticipated Impacts on Local and/or First Nations Communities

Project Partners continue to participate in the MMP3 – Implementation funding opportunity. All municipalities will be invited to join Cloudpermit negotiations.

Alignment to County of Peterborough Strategic Plan Priorities

To provide high quality services to residents, businesses and Townships:



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Communications – To elevate the County of Peterborough’s profile, enhance community engagement, and communicate proactively.

Full lifecycle software will enable staff to provide transparent and more efficient responses to service requests, Planning applications, and Council reporting.

Financial Responsibility – To ensure evidence-informed planning and approaches to achieve financial sustainability and accountability, while keeping ratepayers top of mind.

Streamlining and documenting staff processes in a central location will provide greater staff efficiency, mitigate potential risk, and allow for clearer financial management of resources resulting in cost savings over time.

Infrastructure – To efficiently address current infrastructure demands, while maintaining the vision and planning necessary to meet future needs.

Centralizing the documentation of service requests, work orders, asset management, and related project inventory, costs, and usage will help staff to maintain and improve infrastructure stock.

Organizational Development – To invest in our people and systems to foster a resilient, thriving organizational culture.

Implementing fewer enterprise-level applications that share information between departments will streamline staff processes, eliminate waste, save time, and reduce potential risk. Enterprise-level information management supports improvements to customer service, use of staff time and talents, and staff pride in their work.

Housing – To engage in partnership and planning in support of meeting the housing needs of our community.

Providing a centralized and historic electronic record of Planning decisions will improve information access and flow between applicant, approver, and commenting agencies and future response times.

In consultation with:

1. MNP LLP – Vivek Baijal, Project Lead & Kunal Jain, Project Consultant
2. Lynn Fawn, Director of Corporate Services
3. County Public Works
4. County Planning
5. County Finance
6. County IT
7. Township of Havelock-Belmont-Methuen
8. Township of North Kawartha
9. Municipality of Trent Lakes



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10. WSCS Consulting Inc. – Tammy Carruthers, CEO

Communication Completed/required: Staff from the County and participating local municipalities were involved in requirements interviews, product demonstrations, reviews of draft deliverables. WSCS CEO met with MNP Project Lead to discuss process mapping from the Public Works Service Delivery Review on October 27, 2021. References were contacted from the County of Grey, Northumberland County, City of Peterborough, Town of East Gwillimbury, and Springwater Township.

Additional meetings will be held to prepare for and facilitate procurement requirements.

Attachments

Appendix A – Software Selection Recommendation Summary

Respectfully Submitted,

Tammy Sikma, Enterprise Applications Manager

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County of Peterborough Software Selection

Recommendation Summary

January 21, 2022

Demonstration Results – Land Development Permitting

The demonstrations were scored independently by each member of the County and Township team on five criteria listed below. The focus was on assessing usability while assigning a Pass/Fail score on the overall utility of the solution. Cloudpermit scored significantly higher on all criteria and Cityworks PLL lowest. The table below illustrates the average score for each product for each criterion. Scores below do not include MNP scoring.

Product/Vendor	# of evaluations	Simplicity	Efficiency	Learnability	Satisfaction	Utility
Cloudpermit	3	7.7/9 = 85%	8.3/9 = 93%	5.3/6 = 89%	8.3/9 = 93%	3 passes
Cityview/ Harris Computer Systems	3	6.3/9 = 70%	6.3/9 = 70%	4.3/6 = 72%	6.7/9 = 74%	3 passes
Cityworks PLL/ ESRI Canada	3	4.7/9 = 52%	5.0/9 = 56%	3/6 = 50%	3.7/9 = 41%	2 fails, 1 pass

Based on the results of the demonstration, Cityworks PLL should be dropped from further consideration.

Performance-Price Analysis – Land Development Permitting

Performance/Price scores were obtained by dividing the technical score from the Functional Requirements Weighted Analysis combined with the Usability score from the demonstrations by the **five year total cost of licensing and maintenance in thousands**. While the technical score is a very rough measure based on vendor responses to the RFI, combined with the demonstration results, this assessment does provide a guide to "value for money" – functionality and usability that is provided per dollar.

Assessment Criteria	Cloudpermit	Cityview
Annual Software-as-a-Service subscription (County and Townships)	vendor proprietary information	Vendor proprietary information
Maximum escalation factor for years 2 to 5	0%	Not-provided (assumed 2%)
One-time implementation services	vendor proprietary information	Vendor proprietary information
5 Year Total Cost of Ownership	\$514,000	\$1,252,581
Functional Score (out of 428)	409	406
Usability Score (out of 33)	29.7	23.7
Performance/Price Score (functionality & usability equally weighted, pts per \$1000)	1.54	0.57
Cityview 5 yr TCO for equivalent P/P Score		Approx. \$463,000

Observations – Land Development Permitting

Cloudpermit has confirmed in writing their commitment to providing the features listed below within 1-2 years.

- bi-directional data exchange with ArcGIS (currently Cloudpermit can only consume data from ArcGIS)
- offline mode for inspections on mobile app in 2022
- MS Office 365 integration, particularly Sharepoint

This will address all of the functional limitations that were identified through the RFI process and demonstrations

In addition, the Cloudpermit solution was highly applicable to the Ontario context. The product demonstrated support for data exchange with MPAC and compliance with Planning Act requirements in the design of application forms.

Note that the Cloudpermit costs on the previous slide include the current annual subscription for future years for the 2 Townships currently using the system. Cloudpermit has offered a discounted subscription for the third Township.

Cityview

- While functional and will meet all the requirements, was deemed by the evaluators to have an outdated look and feel and was significantly less usable than Cloudpermit.

Cityworks PLL

- Not user-friendly
- Workflows were cumbersome
- Does not support Bluebeam for markups
- Document management seemed awkward
- MPAC report not currently available, will be available next year

Recommendation – Land Development Permitting

Cloudpermit should be selected based on the overall high functional score, significantly higher rating by the evaluation team in terms of usability at the demonstrations and significantly lower five year Total Cost of Ownership.

A sole source negotiated contract with Cloudpermit will allow the County and Townships to conclude the most beneficial arrangement with the vendor in an efficient and expedited manner. It may be possible to negotiate reductions in current annual subscription for the Townships that currently use the Building module of Cloudpermit.

Demonstration Results – Work Order/Asset Management

The demonstrations were scored independently by each member of the County and Township team on five criteria listed below. Cityworks AMS and Citywide scored higher on almost all criteria. EAM scored the lowest. The table below illustrates the average score for each product for each criterion. Scores below do not include MNP scoring.

Product/Vendor	# of evaluators	Simplicity	Efficiency	Learnability	Satisfaction	Utility
Asstetic/Dude Solutions	7	6.4/9 = 71%	6.1/9 = 68%	4.4/6 = 74%	5.4/9 = 60%	6 passes, 1 fail
Citywide/ PSD Citywide	8	6.4/9 = 71%	7.5/9 = 83%	4.5/6 = 75%	7.0/9 = 78%	8 passes
Cityworks AMS/ ESRI Canada	8	6.6/9 = 74%	7.0/9 = 78%	4.8/6 = 79%	7.0/9 = 78%	8 passes
EAM/ Centralsquare	7	6/9 = 67%	5.9/9 = 65%	4.5/6 = 75%	4.9/9 = 54%	2 passes, 5 fails

Cityworks AMS, Citywide and Asstetic scored high on the usability criteria and should move forward to the price-performance analysis. While EAM was judged to have an excellent user interface, there were significant gaps in functionality and should be dropped from consideration. It should be noted that In general, evaluators provided similar scores. However, one of the evaluators scored EAM highest across the board.

Performance-Price Analysis – Work Order/Asset Management

Performance/Price scores were obtained by dividing the technical score from the Functional Requirements Weighted Analysis combined with the Usability score from the demonstrations by the **five year total cost of licensing and maintenance in thousands**. While the technical score is a very rough measure based on vendor responses to the RFI, combined with the demonstration results, this assessment does provide a guide to "value for money" – functionality and usability that is provided per dollar .

Assessment Criteria	Assetic	Citywide	Cityworks AMS
Annual Software-as-a-Service subscription (County & Townships)	vendor proprietary information	Vendor proprietary information	vendor proprietary information
Maintenance	NA	vendor proprietary information	NA
Maximum escalation factor for years 2 to 5	2.5% to 3.5% (assumed 3%)	3.5% on maintenance	Yr 2 – add \$2726 Yr 3 – add \$2376 CPI escalation for Yr 3-5 (assumed 2%)
One-time implementation services	vendor proprietary information	Vendor proprietary information	vendor proprietary information
5 Year Total Cost of Ownership	\$1,105,880	\$847,939	\$938,004
Functional Score (out of 880)	791	759	831
Usability score (out of 33)	22.4	25.4	25.4
Performance/Price Score (functionality & usability equally weighted, pts per \$1000)	1.26	1.69	1.61
TCO for equivalent P/P Score	\$820,492		\$890,528

Observations – Work Order/Asset Management (1)

All vendors recommended an export/import process for transferring time and cost information to GP and other payroll systems. Automated generation of journal entries in GP is doable and proven but requires additional implementation services.

Note that pricing provided is for budgetary purposes and could vary after discovery conversations with the selected vendor.

Cityworks AMS:

- Proposed solution comprises 1 instance of Cityworks AMS and IDS Asset Optimizer for 4 tenants (County and 3 Townships)
- GIS-centric product
- Provides the most comprehensive inventory control solution of all the assessed products.
- Uses a third-party product (IDS Optimizer) for Capital Asset Planning. Will have to periodically import asset registry into IDS Optimizer and will have a separate log-in.
- ESRI Canada has provided pricing for a “turnkey” versus a “knowledge transfer” implementation approach as well as separate pricing for an API-based direct integration with financial and payroll systems versus an export/import-based data exchange . The pricing analysis on the previous slide assumes a “turnkey” implementation approach and an export/import approach to integration with GP & Keystone.
- Since export/import integration approach is selected, the Workorder Extended API is not included in the subscription price. If it were included, annual subscription would be \$25,195 higher with the 5 year cost of ownership at **\$1,065,500**.
- ESRI Canada has provided pricing for hosted or on-premise options. The pricing analysis assumes a hosted solution.
- Software subscription for Cityworks AMS is \$90,780 – year 1, \$92,650 – year 2, \$94, 170 – year 3 with a Consumer Price Index (CPI) based escalation factor from year 4 onwards. Also includes pricing for Citizen Engagement API (\$3,980), Cityworks Online Managed Service Fee (\$7125). IDS Optimizer subscription is \$42,800 with a CPI based escalation factor from year 2 onwards.

Observations – Work Order/Asset Management (2)

All vendors recommended an export/import process for transferring time and cost information to GP and other payroll systems. Automated generation of journal entries in GP is doable and proven but requires additional implementation services.

Note that pricing provided is for budgetary purposes and could vary after discovery conversations with the selected vendor

Citywide:

- Comprehensive, integrated and functional solution that addresses all the requirements with no third-party add-ons. In general, functionality is a little less deep than Cityworks or Assetic. Scored almost identical to Cityworks on usability.
- Approximately \$18,000/year cheaper than Cityworks AMS over a 5-year period based on initial budgetary pricing.
- Vendor has provided details on multiple approaches for integration/data exchange with ArcGIS and with Great Plains.
- Vendor has provided a clear product roadmap as to what new functionality is expected to be available by end of 2022.
- Vendor has confirmed that OSIM-compliant inspection data can be captured.
- Time tracking functionality allows for non-work order time (such as vacations, sick time etc) to be captured and transferred to Great Plains and provides approval/rejection capability.
- Vendor has provided details about back-up and security for their data centre.

Assetic:

- While functional and comprehensive, it was deemed less usable than the other two shortlisted products.
- There was some concern about level of support for road patrol.
- Timesheet approval seemed awkward

Recommendation – Work Order & Asset Management

Cityworks AMS and Citywide are the two best scoring solutions. In addition to the demonstration results, they also had very similar scores on vendor capability and delivery approach. Cityworks AMS has richer functionality. However, it will likely be more complex to implement. Citywide is somewhat cheaper, meets the requirements, and will be less complex to implement since it appears to be more aligned to the needs of smaller municipalities. However, it is less of a market leader than Cityworks AMS.

Cityworks should be selected if there is a clear preference for a GIS-centric, market leading comprehensive solution. Citywide should be selected if depth of functionality is less important than cost and implementation complexity.

The County should follow up with provided references before finalizing the selection.

Implementation Recommendations:

- Regardless of which vendor is selected, the County should undertake a brief Proof of Concept engagement to confirm that the required integration/data exchange with Great Plains, Keystone, Easypay will work.
- Sequencing of implementation activities should be aligned with legislative mandates, internal capacity, and ease of implementation. Keeping these in mind, a sequence such as : (1) Land Development, (2) Engineering & Design; (3) Facilities Management and Fleet, (4) Operations could be considered.
- Realizing full value for money will occur when the new systems replace legacy systems which can then be decommissioned. The Work Order/Asset Management solution should replace Worktech 6, Worktech Pearl, Mesh and Maintenance Care. The financial saving could be potentially \$216,000 over 5 years, in addition to the operational improvements.
- Both recommended solutions provide the ability to capture employee time for work orders as well as other “administrative” time. Various methods are available for transferring time data to Great Plains, Keystone or Easy Pay for payroll processing. The replacement of legacy systems with a new system does not place payroll processing at risk.

MNP

Thank you



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