

Background:

For the past several months, the ERP committee, under the direction of the City Manager, has been researching options for a new software system or Enterprise Resource Planning (ERP) system to address inefficiencies and meet constituent expectations for customer service. For the past 22 years the City has been using the same Caselle software for accounting, utility billing, accounts payable, accounts receivable, inventory and project management. Although the City has been maintaining the financial system up to date with current versions, gaps in system functionality result in significant staff spent on manual calculations, data entry, and manual tracking of information in addition to lost opportunities for customer service. Ultimately the tools supporting staff and residents is built on technology that is more than 20 years old.

Summary:

As part of its research, the City retained Baecore Group to conduct a basic assessment of the ERP system. Over the course of two-days of meetings with personnel from departments across the City, staff members identified a number of challenges and needs:

- No online portal for constituents to see and apply for permits
- Lack of online and mobile tools for citizen engagement/submission of requests and questions
- Time-consuming manual processes for permit inspection
- Duplication of staff effort and disjointed communications among staff for utility service orders
- No smart-meter integration resulting in time-consuming and costly manual process to provide requested consumption information for Industrial utility customers
- Staff time spent maintaining software clients on staff desktops to provide access to the system
- Manual tracking of information in excel spreadsheets across all departments
- Laborious manual utility billing processes
- No tools for grant management
- Lack of functionality to support applicant tracking and processing

During the assessment through evaluating the existing process challenges, the City identified there was a significant gap in the Public Works departments' ability to effectively communicate and collaborate to respond to citizen requests. This gap hinders City staff's ability to provide customer service as there is no way for departments to communicate, track and follow up on such requests across departments. The challenge to quickly and efficiently receive, communicate and address complaints, arises from the fact that the City has been using multiple separate stand-alone software programs for inventory, work orders, and asset tracking with none of them integrating with the ERP.

Although there are multiple systems, none were implemented to provide sufficient functionality to meet the needs of Streets, Electric, Water, Water Reclamation, and IT as an EAM (Enterprise Asset Management) system could. Even with the combination of systems the City does not have a comprehensive solution for all departments. Some departments do not have any tools to support their processes while others are struggling to get reporting and information out of the existing systems and have insufficient training.

Upon evaluation of its EAM system, the City identified that, in addition to the systems not providing the tools the City needs, the cost of the ongoing support and maintenance is out of line with the value provided, which includes the following gaps:

- Cost of maintenance of multiple systems to meet only some of the department needs
- Ongoing cost of an engineering firm for maintenance of the system – which would expand if more departments used the system
- Ongoing cost of an engineering firm for user training on the system – which would expand further for more departments
- Lack of integration with the financial (utility billing system) resulting in manual processes and duplication of staff effort
- Lack of capital planning and project management tools
- Time-consuming manual processes to develop budgeting for asset and capital projects
- Significant lack of capabilities for managing inventory

In an effort to close the customer service gaps and address the functionality issues in the existing system a City Wide EAM solution needed to be identified.

Using the information gained from the assessment and the subsequent review of its EAM system(s) as well as solutions available on the market, the City identified that the Incode ERP solution and VUEWorks EAM solution were the only products that met the City's requirements. Of the other solutions researched, the City identified that each provided some functionality, but only Incode and VUEWorks met all of the City's needs while controlling implementation cost as well as ongoing costs.

Differentiators:

Functionality and Benefits offered by Incode (ERP Solution) Not Available with other ERP Solutions

While some systems may provide *some* of the functionality outlined below, the Incode ERP solution is the only system that provides all of the below functionality to meet the City's needs and close gaps in its efficiencies and customer service.

- ✓ Online permitting portal to provide payment and application functionality for constituents
- ✓ Native mobile permit inspections & service orders to eliminate duplication of entry, reduce risk of error, and increase interdepartmental communications
- ✓ Integrated Citizen engagement app to provide convenient access for constituents to find information, submit requests and questions, and engage with the City
- ✓ Smart meter integration to eliminate time-consuming manual report to fulfill customer requests
- ✓ Automated utility consumption warnings and notifications to alert utility customers and City staff to potential issues
- ✓ Dashboards with smart card information for activity and SLA tracking
- ✓ Integrated applicant tracking processes to reduce staff time spent on manual and paper-based processes
- ✓ Integrated grant management tracking to eliminate manual tracking of information
- ✓ Integrated project accounting functionality
- ✓ Consolidated document management tools to centralize department access to supporting documentation and eliminate staff time spent on maintaining paper-based files
- ✓ Hosted solution on an HTML5 platform eliminated staff time spent on maintenance of desktop applications required to support the system
- ✓ No up-front costs for hardware or licensing to support the system

- ✓ No need to budget for hardware/software refreshes on a 5-year rotation
- ✓ Reduced staffing costs resulting from the following processes/costs managed by the vendor:
 - Software upgrades and maintenance
 - System back up
 - DBA costs (Database Administrator)
 - Simplified remote support capabilities due to physical access to the system to perform any necessary tasks
- ✓ Robust disaster recovery
- ✓ On-demand interactive training to improve internal training efficiencies and ease of access to the system for City staff
- ✓ Integration with EAM system to improve customer service, increase inter-department communication and streamline resolution of customer requests

Functionality and Benefits offered by VUEWorks

As with the ERP system, some EAM systems may provide some of the below functionality. However, the VUEWorks EAM solution is the only solution that meets all of the City's needs.

- Integration with the ERP system to eliminate duplication of entry, improve interdepartmental communication, and increase customer service
- Integration with the citizen engagement application to improve customer service (providing a single location to submit requests) and eliminate manual processing by City staff
- A single system that can be used across the City in all departments without additional cost
- Inventory management system with reporting for the finance department
- Asset valuation tracking
- Asset risk tracking & failure forecasting to improve access to information and identification of assets for repair or replacement
- System automation for development of capital project budgets and budget tracking
- Native mobile applications for work orders, asset inspections, and access to complete asset history in the field
- Detailed asset maintenance, condition, and valuation tracking
- Eliminate ongoing system maintenance costs by outside engineering firm
- Reduced staff time on system maintenance through consolidation into a single solution
- Eliminate reliance and costs associated with training provided through an outside engineering firm through access to online training tools, videos, and documents
- Dashboard views and advanced reporting tools to eliminate staff time spent manually searching for asset and work order information and manual creation of reports
- Web-based/hosted solution with disaster recover
- Personal equipment assignment tracking
- Software vendor implements and supports own software
- No need to budget for hardware/software refreshes on a 5-year rotation
- Reduced staffing costs resulting from the following processes/costs managed by the vendor:
 - Software upgrades and maintenance

- System back up
- Disaster recovery
- DBA costs
- Simplified remote support capabilities due to physical access to the system to perform any necessary tasks

Cost:

Based on the research and investigation of the City, and the fact that the Incode and VUEWorks solutions were the only systems available that met all of the City’s requirements, the committee recommends the above as sole source solutions pending legal review. Implementation, conversion, consulting, training and contingency costs for the solutions are:

- Year 1 - \$585,262 (ERP \$278,789 and EAM \$306,473)
- Year 2 - \$296,305 (ERP \$189,323 and EAM \$106,982)

Future year costs are limited to support fees of \$67,458 for the ERP solution and \$27,000 for the EAM solution. Neither of the recommended solutions will require hardware costs due as both solutions are SaaS or Software as a Service solutions.

For your reference below is a comparison of the current systems and the proposed solutions costs.

Software Maint and Support Cost	Current Annual Expenses	Future Annual Expenses Post Implementation	Annual Expenses Implementation	Annual Expenses Implementation
			Year	Year
			2021	2022
ERP System	\$ 36,000	\$ 67,548	\$ 169,365	\$ 119,611
Consulting		Not needed	\$ 89,424	\$ 44,712
Contingency		N/A	\$ 20,000	\$ 25,000
Smart Meters	Not Available	Included		
Content Management System	Not Available	Included		
CD System	Not Available	Included		
Citizen App	Not Available	Included		
Online and Mobile Tools	Not Available	Included		
Inventory	Non Functioning	Included		
Online Training	Not Available	Included		
EAM	\$ 20,000	\$ 27,000	\$ 217,000	\$ 62,000
Consulting			\$ 49,473	\$ 32,982
Contingency			\$ 40,000	\$ 12,000
Engineering Support EAM	\$ 26,520	Not needed		
Disaster Recovery	Not Available	Included		
Maint & Upgrades	6,000	Included Above		
Total EAM	\$ 52,520	\$ 27,000		
Total ERP	\$ 36,000	\$ 67,548		
Grand Total	\$ 88,520	\$ 94,548	\$ 585,262	\$ 296,305