

PROJECT TIMELINE ANALYSIS

City of Philadelphia, Computer Assisted Mass Appraisal (CAMA) Project

Summary

The capital project to modernize the technology and associated business processes of the City of Philadelphia's Office of Property Assessment (OPA) is already underway. OPA, with project management from the Office of Property Data (OPD) and the Office of Innovation & Technology (OIT), has undertaken a complete review of the processes associated with assessing real property in the City of Philadelphia. This review has culminated in the identification of a preferred provider of a CAMA system based on a thorough analysis of the needs of the City, the marketplace, the associated costs, and required timeline for implementation.

A comprehensive planning effort was completed that achieved the following:

- Developed a comprehensive list of business requirements that a new system must be able to perform to meet the needs of OPA
- Interviewed industry experts for recommendations on how to ensure a best-in-class CAMA implementation
- Completed site visits to other municipalities that have recently implemented or upgraded CAMA systems to see how various systems perform live and to solicit lessons learned from peers
- Issued an RFP that went to the best vendors in the field and asked them to give their best estimate of a timeline and cost. The RFP put no restrictions on cost, but instead required respondents to tell us what a full build-out would look like based on previous installations they have completed.
- Assembled a projected timeline that is consistent with or faster than that of other similar projects in other jurisdictions.

Cost

There are a limited number of vendors that offer CAMA software systems, and the City received responses from all but one of the top-tier vendors. Responses ranged from 5 year investments of \$486,691 to \$10,933,987, although the lowest price bid was submitted by a vendor that wasn't actually a CAMA provider. Vendor-proposed timelines for implementation ranged from a low of 18 months to a high of 30 months. By December 2015, the prospective vendors were narrowed to two finalists, Tyler Technologies and Thomson Reuters. Although the two vendors offered solutions that vary widely in architecture and approach, the solutions both adequately support the assessing function needs of the City of Philadelphia. As expected, vastly different solutions resulted in different associated costs which are outlined here.

5-Year Cumulative Investment

Estimated Costs

Total Cost by Year					
Vendor	Year 1	Year 2	Year 3	Year 4	Year 5
Thomson Reuters	\$ 4,016,000	\$ 771,000	\$ 794,130	\$ 817,954	\$ 842,493
Tyler	\$ 5,570,060	\$ 984,000	\$ 1,003,680	\$ 1,043,828	\$ 1,040,580

Cumulative Cost by Year					
Vendor	Year 1	Year 2	Year 3	Year 4	Year 5
Thomson Reuters	\$ 4,016,000	\$ 4,787,000	\$ 5,581,130	\$ 6,399,084	\$ 7,241,576
Tyler	\$ 5,570,060	\$ 6,554,060	\$ 7,557,740	\$ 8,601,568	\$ 9,642,148

Assumptions
1. Support and Maintenance: it is assumed that maintenance/support services will occur upon final acceptance of the solution and project by the City. For the purpose of this analysis, unless otherwise specified by the vendor, maintenance costs begin in year 2 following project completion.
2. All one-time costs are incurred in year 1, with the exception of Tyler who has specified a detailed payment schedule for SaaS Fees that will span over 30 months.
3. Inflation is estimated at 3% annually for ongoing costs, unless a cost schedule has otherwise specified by the vendor.
4. Payment schedules are determined during contract negotiations, the timing of these payments are subject to change.

After thoroughly vetting the vendors and solutions, the CAMA Project Steering Committee recommended the selection of Thomson Reuters as the preferred vendor. Subsequently, Project Sponsor Michael Piper, Chief Assessment Officer, Office of Property Assessment and Project Director Saskia Thompson, Deputy Director of Finance and Executive Director of the Office of Property Data, concurred in making the final decision. The choice was made based on the quality of Thomson Reuters' proposal and on their ability to get the project done quickly and effectively.

Approach

The two vendors both proposed projects that incorporate standard methodologies in order to minimize risk and maximize the chance of success.

	Thomson Reuters	Tyler Technologies
Time Period	505 days (~24 months)	30 months
Approach	0. Phase 0 1. Project start-up 2. Base configuration 3. Initial data conversion 4. Business process analysis 5. City configuration 6. Full conversion 7. UAT configuration 8. UAT conversion 9. Implementation Engineering 10. UAT 11. Client Training	The vendor adheres to the PMI-proven, 5-phase methodology for project management and has a project approach tailored to its product. This methodology is made up of requirements management, interface and integration assistance, conversion strategy, testing, training, business process support and change management.

Issues Affecting Timeline

Data Conversion

The conversion of data from OPA's four legacy systems (VSAM, Oracle, MS Access, and MS Excel) to the new system is key to the success of the project. Thomson Reuters has acknowledged this and has enhanced its estimated project timeline to include a Phase 0 where OPA, OPD, OIT, and vendor resources can analyze and document legacy data in a data dictionary, perform data quality reviews, identify and fix incorrect data, and transform data into a format suitable for loading into the new database. Due to the depth and breadth of the analysis required (over a thousand data tables) and the volume of data to be reviewed (millions of rows of data), this process, inclusive of identifying and onboarding the appropriate resources, could take a calendar year and will occur in tandem with contract negotiations.

Business Process Redesign

All of the project stakeholders agree that the CAMA project is a business process redesign effort with a technology upgrade component. The current workflow in use at OPA relies heavily on paper processes and disparate technology platforms that hinder the accurate and timely update of real property data. Additionally, there are over 30 processes in place that will require reengineering to conform to the way the new system will operate and align OPAs operations with industry standard best practices.

Staffing Requirements

The current systems in place at OPA are antiquated and formatted in technology language that is not used in the private sector. A successful CAMA implementation will require significant time commitments by existing OPA staff that are intimately familiar with the current technology and can determine how to extract and convert information out of the old system. Additionally, we will require significant private-sector resources that have deep expertise in modern CAMA systems and can move us to a new platform. Our implementation timeline takes into consideration the need for both categories of resources.