



EL DORADO COUNTY
CHIEF ADMINISTRATIVE OFFICE

MEMO

Date: January 19, 2016

To: Members of the Board of Supervisors

From: Larry T. Combs, Chief Administrative Officer

cc: Karl Weiland, Assessor
Joe Harn, Auditor-Controller
Cherie Raffety, Treasurer/Tax Collector

Subject: County Property Tax System

I have received the attached report regarding the current status of the County's mainframe-based property tax administration system from the Auditor-Controller, Treasurer/Tax Collector, and Assessor. I met with the Assessor and Treasurer/Tax Collector, Chief Technology Officer and members of my staff and the Information Technologies Department to discuss the report. It is the consensus of all involved that the current system must be replaced and the process begin as soon as possible.

The Assessor, Auditor-Controller, and Treasurer/Tax Collector have researched other systems in use in California, as discussed in the attached report, and have identified the two primary sources for a system that would meet the County's needs. We have agreed that they will work with David Russell, Assistant Director of Information Technologies, and our Procurement and Contracts Division to distribute the County's functional requirements for a new property tax administration system to the identified vendors, Thomson Reuters and Megabyte Systems Inc., and invite presentations from those vendors. After those presentations, we will evaluate the situation and make a recommendation to your Board. We anticipate that occurring in March or April of this year.

I will continue to keep you apprised of the situation. Please feel free to contact any of the report's authors, Sue Hennike, in my office, or me if you have any questions. Thank you.

Larry T. Combs



COUNTY OF EL DORADO

330 FAIR LANE PLACERVILLE, CA 95667

2015-12-02 11:28:40

December 2, 2015

From: C.L. Raffety, Treasurer/Tax Collector
Joe Harn, Auditor/Controller
Karl Weiland, Assessor

To: Larry Combs, Chief Administrative Officer

Re: Report of the Ad Hoc Property tax system

Dear Mr. Combs,

The purpose of this report is provide background information underlying a request that the Board of Supervisors immediately approve and fund a project to replace the County's Property Tax Administration system. This report is comprised of three parts, a description of the current system and the reasons for a project to replace the current system, a discussion of available systems capable of providing a replacement and the recommendation of the property tax administration department heads.

The Current System and the Need for replacement

The current Property Tax System was acquired during the 1980's in the aftermath of the passage of Prop 13. It became functionally operational by 1990 and has served its purpose effectively. It is an integrated system between the three departments charged with property tax administration, the Assessor, the Auditor and the Tax Collector. The current property system is written in an original IBM programming/database language, Model 204. It is a mainframe based system comprising over 3,000 distinct programs which together contain more than one million lines of code. The system maintains over 130 separate databases containing more than 35 million records. The main system is supported by hundreds of shadow systems running on servers and PC's throughout the three departments.

The County has provided mainframe based IT support since the mid 1960's. In the early 1970's the County spent over \$3 million to acquire an IBM system capable of supporting all County IT needs. Almost all of the County computer operations were located and ran on the mainframe. In the years since, there has been a steady migration of programs to other systems. Some were mandated by the State, as in Child Support, some for additional autonomy and security like the Sheriff and some because the new replacement programs will not run on a mainframe.

Currently, the mainframe hosts only a remaining handful of programs in addition to the property system. The Recorder is in the process of transferring all of the document imaging to the cloud. The Fenix project will transition the financial system to a server based environment. The new Land Management

System will transfer what few remaining programs run on the mainframe off to a server environment.

Between late 2013 and the spring of 2014, the mainframe and its supporting hardware exceeded end of life and needed replacement. After exploring several options to immediately migrate away from this platform, it was accepted that the County could not succeed and a new mainframe was acquired with a life expectancy of five to six years. The Chief Technology Officer subsequently gained conceptual approval from the Board to migrate all mainframe applications to a server based environment prior to the new mainframe end of life, based on the following identified issues:

1) The mainframe hardware, support and licensing costs over \$750,000 annually, along with roughly \$500,000 in dedicated support staff cost. This cost could be substantially reduced by moving to a server based computer environment.

2) As the technology refresh of legacy programs unrolls, the available replacement programs are not designed to operate in a mainframe environment. They are designed to run in a server based environment. The migration of these programs off the mainframe will reduce the mainframe costs recoverable via the OMB A-87 plan.

3) The cost of programs not transitioned to a server environment will become more expensive to maintain on legacy hardware and technology. License costs will increase. Program enhancements will be more difficult to justify and implement. Staff support resources will become less available as new technologies emerge. In-house development of legacy system programmers will be more expensive because we will be supporting old technology at new technology prices.

The decision to eliminate the mainframe from the County IT infrastructure is also a decision that the County's Property Tax Administration program must be replaced. Based on that decision, the property tax administration departments met in January 2014 to outline a plan for the acquisition and implementation of a new property system. After some discussion, the group decided to monitor potential replacement systems' development and investigate the available replacement systems over the next 12-18 months and discuss our needs with our colleagues from other counties.

During both the 2014 and 2015 budget hearings, the replacement of the property system and the need for funding was discussed but no action was taken to set aside funds.

In September of 2015, the group again convened and determined that we possessed sufficient information to bring a recommendation to the Board of Supervisors to transition by the current mainframe's end of life. All parties agreed that the replacement property system needed to meet the following criteria:

- Provide an integrated solution between all three property tax departments.
- Have one or more successful California implementations.
- Meet the implementation time constraints imposed by the decision to transition away from a mainframe platform

A discussion of current systems capable of replacing the existing property system

As recently as three years ago, there were a multiple of potential systems for consideration:

- **Manatron/Thomson Reuters-** Government Revenue management (GRM) is a property system developed by the Manatron Company and more widely used in the Midwest and on the East coast. Manatron contracted with Santa Cruz County in 2006 and the original system is up and running. Santa Cruz County has completed three assessment cycles on this system. Manatron was acquired by Thomson Reuters (TR) around 2010. Subsequently TR unveiled plans for a new and improved "Aumentum" system. Aumentum is an integrated system supporting all three property tax departments. At this time, the Santa Cruz GRM system is not available for purchase. Neither is a subsequent version of Aumentum which is partially installed for the Santa Barbara Auditor-Controller and Treasurer-Tax Collector (but not the Assessor). The version of California Aumentum currently available for sale is the installation in Riverside County which is two years behind schedule and several months from "go live". Current expectation is that the Riverside County installation will be completely through a business cycle in July 2018. TR has somewhere between eight and ten counties currently under contract and in various beginning stages of implementation. However, all appear dependent on a successful launch in Riverside County. Nevada County was the third county to sign a contract with Thomson Reuters in December of 2012 and as of August 2015, did not have a project manager assigned from TR.
- **True Automation** – In 2009, this Texas based company was under contract to produce a property system for Santa Clara County. True Automation cancelled the contract in early 2013.
- **The Megabyte System** – An integrated system supporting all three departments since 1985, Megabyte is currently used by 23 counties for Property Tax Administration and by several Counties for recorder systems. Most of the counties are similar in size to El Dorado. The company headquarters are located in Roseville, CA. The Megabyte solution comes with a core menu of programs that, according to the company provide fully integrated functionality over the entire spectrum of property tax assessment, extension, billing, collection, and apportionment. In addition, there are county-developed solutions that provide alternative processes that in some cases provide better functionality than the Megabyte system.
- **gTerra** – Developed by Art Green, the retired Nevada County Assessor, and his brother Ray, an IT manager. The system runs in the cloud. It is an Assessor only system with no support for the Auditor or Tax Collector functions.
- **Orange County** – The Orange County Assessor, Webster Guillory, came from the IT world and developed the Orange County property system into a robust and capable system. Webster was also the driving force behind other computer solutions for Assessors, including a centralized leasing company property reporting system, a web based online business property system filing solution and an server based statewide forms management project that provides participating Assessors with efficient forms management. Webster indicated that the Orange County system would be available to other counties. However, Webster was defeated in his 2014 reelection bid and his successor inherits a

system still not fully developed. It is an Assessor only system with no support for the Auditor or Tax Collector functions.

- **Crest** – Crest Software is located in Redding, CA. Crest provides a basic functional integrated system. The Crest system has been recently abandoned by four of the nine remaining user counties, all or most of whom have implemented the Megabyte system. Discussion with some of the counties indicated that the company was unwilling to provide upgrades needed to meet legislative requirements. The Crest system is projected to be abandoned by the remaining users as funding permits. Additionally, it is believed that El Dorado County's parcel count exceeds the Crest maximum capacity.
- **Grant Street** – The Kern County Treasurer/Tax Collector uses this system. There are rumors that Grant Street would like to enter the California property tax administration market for all three departments.

Recommendation of the three Property tax Administration department heads

Based on the requirements for an integrated system that is deliverable within the time constraints by a viable vendor with at least somewhat of a track record in California property tax administration, there is only one system that meets those criteria, and that is the Megabyte system. For a while it appeared that the Aumentum system had potential, and indeed it may turn out to be a great system. Unfortunately, even if we got in line today, a realistic implementation would be beyond the remaining four to five year life of the mainframe. And although it might be possible to stretch additional years out of the system, three other constraints must be considered:

- 1) The mainframe based property system is supported by County IT database and Model 204 programming staff. This staff is highly experienced in the unique configuration of the property system and routinely performs the business process analysis and program modification/ development necessary to accomplish and meet the needs of property tax administration. These key IT staff, critical to a successful conversion have been around for a number of years and all are at or within striking distance of retirement. One of the biggest critical tasks of any system implementation is the migration of existing data from the current system to the new system. The property tax system is no different, and it will be a substantial task to migrate the information from the current property inventory into a new format while preserving all of the database relationships necessary to have the information in a useful format to the new system. The current staff in IT will be invaluable in this effort and every effort should be made to insure these resources remain available during the data migration and program transition. Even more importantly, should we delay and begin the project without the benefit of existing staff, the project cost will increase significantly along with an increased risk of additional delay, excessive cost or outright failure. In other words, we need to finish this project before these key staff retire.
- 2) Each of the three property tax administration departments are currently staffed by seasoned, knowledgeable managers, supervisors and staff that collectively form the backbone of the system management. Attrition in this valuable resource due to project delay will negatively impact the project and increase costs.
- 3) The County general fund, schools, cities, and about 55 other taxing jurisdictions in the county depend on property tax revenues to fund

service delivery. Property tax generates over \$330 million in revenues. As the statutory administrator, the County must insure the change-over is successful and minimize the risk to the revenue stream upon which so many depend.

In conclusion:

- The County has conceptually approved the elimination of the mainframe as a computing environment. The property system will not transition and must be replaced.
- A project to replace the property system is constrained by the end of life of the hardware and the retirement of key staff.
- The only property tax system which is readily obtainable within the timeframe and provides an integrated solution with a proven track record is the Megabyte system.
- The transition from our current system to any selected replacement cannot be delayed without increasing risk to the property tax revenue stream.

Based on the above information, we would like to meet with you in the coming weeks to discuss how we can move this project forward in a presentation to the board that accomplishes the following:

1. Formally acknowledges that it is the County's intention to migrate all systems off the mainframe environment and that this migration requires the replacement of the property tax system.
2. Accept a preliminary cost estimate of between \$1.8 and \$2.6 million, broken down as follows.

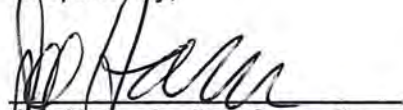
Element	Low Estimate	High Estimate
Software Cost	\$850,000	\$850,000
Hardware Costs - Note 1	50,000	100,000
Vendor Consulting Fees - Note 2	100,000	150,000
Additional Programming/ other project costs - Note 3	150,000	250,000
Cost of extra help or interim employees in affected departments to back fill behind key staff diverted to project implementation - Note 4	400,000	500,000
Allowance for contingencies	500,000	1,000,000
Total Preliminary Cost Estimate	<u>\$ 2,050,000</u>	<u>\$ 2,850,000</u>

- a. Note 1 – Includes backup and recovery provisions.
- b. Note 2 - Vendor consulting fees for data conversion at a rate of \$100 per hour with a maximum set in contract with vendor.
- c. Note 3 – Megabyte charges for additional features or customization, additional costs for project consulting,


management and other expenditures necessary to a successful implementation. Billed at \$100 per hour.

- d. Note 4 – Contingency costs reflect the uncertainty of both data and program conversion, including limited term employees.
 - e. In addition to the cost estimate above, there are annual maintenance costs of around \$300,000-\$350,000 beginning when the system is accepted (go live) and dependent on any additional optional features such as web based information etc.
3. Provide direction to the affected department heads, the administration and procurement to return with a recommendation for the acquisition of a replacement property tax system, based on the board's direction regarding process.

Respectfully,



Joe Harn, Auditor Controller



C.L. Raffety, Treasurer/Tax Collector



Karl Weiland, Assessor