



Yolo County Housing

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DATE: December 9, 2010

TO: YCH Board of Commissioners

FROM: Lisa A. Baker, Executive Director

PREPARED BY: Alberto Castillo, IT Manager

SUBJECT: **Presentation - Yolo County Housing Transition to Cloud Computing**

RECOMMENDED ACTIONS:

That the Board of Commissioners receive the Presentation on Yolo County Housing (YCH) transition to Cloud Computing.

BACKGROUND/DISCUSSION

Cloud computing is the concept of migrating certain administrative functions such as E-Mail, Calendars, Messaging, Virus Scanning, Spam filtering and Shared Documents to a web based application. Cloud computing is using software as a service with the majority of hardware needs provided by the vendor. In Cloud Computing, the software on-site is owned by the client, while the service and hardware are rented and remotely provided.

YCH is in the implementation planning stage to migrate the next phase of its functions to the web based commercial Google Apps application software. In YCH's first phase, it migrated its data back-ups to secure servers through our main housing software provider and replaced its phone system. In this stage, YCH has saved over \$500,000 in costs. This service has been in place for over a year now and staff continues to be extremely pleased with performance. In its second phase, it migrated email backup and spam service to cloud computing through Webroot.

As part of the transition to a web based administrative function application, staff will be replacing Microsoft Office with the software suite included in Google Apps. This document suite is open source and, thus, more accessible to constituents and to our client base. In addition, this software suite is compatible with all versions of Word, PowerPoint and Excel. These functions would be available via a web browser from anywhere where there is internet access. YCH will be retaining Microsoft Office applications for high use functions (such as Excel in Finance and Administration). This new office suite of programs will reduce costs in the short and long term as well allowing telecommuting and uptime in the event of emergencies.

YCH continues to be committed to the safety and security of its data. As part of that commitment, YCH will not be moving employee and client data to Google Apps. Current data will remain onsite with its current security and firewall protections, as well as secure backup through its software provider. For Google Apps itself, security is 128-bit encryption which is the same type used by banks and military facilities. All applications would be available 99.9% of the time and have multiple redundancies. In 2010, Google Apps has received data safety certification from the U.S. Government and is the first and only cloud computing application package to receive this certification.

YCH is motivated to move on this next phase for several reasons – the Agency’s Exchange Server and software have reached end of life and software will no longer be supported. YCH data needs continue to increase, which means that YCH needs to invest in additional hardware. In addition, current desktops for the majority of YCH users are obsolete and no longer supported. Current Word versions are not compatible with new Microsoft Word Docx extensions. Upgrading to new Microsoft Office Desktops would cost \$300 in annual licensing fees per program, per year that is not currently required. In addition, this will allow YCH to provide internal users with intranet capabilities and will facilitate the move to our new domain – ych.ca.gov – without additional expense.

FISCAL IMPACT

The annual cost of this service is \$50.00 per user. At this time, YCH uses Webroot as its spam center and emergency backup email system. The annual cost for this service is \$25.00 per user per year. This system would be eliminated since Google Apps uses Postini as its spam filter service. Postini is a reliable service used by other PHA’s. The elimination of Webroot would pay ½ of total costs to migrate to the new system. Currently YCH maintains an Exchange Server which is due for replacement in the next fiscal year at a cost of \$7,000-\$10,000. In addition each desktop computer will require upgraded Microsoft Office software which will cost \$300 per desktop annually under the current Microsoft Licensing schedules. Other savings would be the energy savings of running an additional server, staff time to maintain, backup and run periodic software updates to the operating system. Conservative estimates for Return on Investment are \$36,000 in the first year.

CONCLUSION:

Computing in the “Cloud” is the wave of the future and has been introduced to YCH in a phased in approach. It is green and represents a significant cost savings in hardware software and energy costs. Upgrades and downtime will be mitigated; flexibility and mobility will be enhanced. Emergency operations will be enhanced due to the remote features of Google Apps. Security is addressed by using military grade encryption and protocols, passwords will be managed by the IT Manager and will represent the “Strong” password method of creating passwords. The introduction of this new system is to further promote the mission statement of “Working together to provide quality affordable housing and community development services for all.”