



COUNTY ADMINISTRATOR
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TO: Barbara Levin Bergman, Chair
Ways & Means Committee

THROUGH: Robert E. Guenzel
County Administrator

FROM: Dale Vanderford, Director
Support Services Technology & Operations

DATE: August 6, 2008

SUBJECT: Data Center Consolidation Project

BOARD ACTION REQUESTED:

It is requested that the Board of Commissioners authorize the County Administrator to sign the Statement of Work with EMC in the amount of \$325,000 to undertake a project to consolidate the data centers of the City of Ann Arbor and Washtenaw County into one comprehensive data center that supports the operations and technology of both organizations.

BACKGROUND:

In recognition that the current location of Washtenaw County's data center is not suitable in the long term, as described in the 2005 Space Plan, new locations were explored. The data center, which used to be referred to as a computer room, is located in the basement of 220 N. Main Street Administration building. The room includes all of the equipment that powers County applications, such as email, the financial systems, electronic storage, and internet connectivity. It is also home to the "Core" of our county network. The "Core" is the place where all connections for outlying county buildings and external connections to the State of Michigan and others reside. The data center has been located in the 220 N. Main Street building since the mid-1980's and since that time has become obsolete and no longer suitable for this location since there have been incidents such as flooding in that area and due to the fact that computing environments have changed considerably since that time. One example is that the data center used to house mainframe operations and now is home to over 90 servers and various other pieces of telephone and network equipment. It was never intended or designed for this type of use.

Cost estimates for relocating the data center to an existing County facility (such as 705 N. Zeeb Rd. or a location within the Hogback Service Center) were developed through a Cornerstone Consulting study. Cornerstone Consulting is a company that specializes in data center construction and design and provided a report that provided the costs for these options as a part of a network feasibility study. These costs were estimated in 2006 at between \$1.6 million to relocate the data center within an existing building, to constructing a new building on existing county land at over \$3.0 million.

Discussions with the City of Ann Arbor in the context of the Shared Services project, which was a project initiated by County and City Administration to look at both organizations and determine where consolidation or collaboration was possible between the organizations and their respective departments. Over 70 initiatives were identified in the series of meetings between several departments, with the data center consolidation picked as one of the first three to be undertaken. In November 2007, Plante Moran was engaged to produce a cost estimate for moving the county's operations to Ann Arbor City Hall. The total county portion of the cost of the move will be \$397,000. This amount includes other move related expenses outside the EMC contract, such as new server racks, room preparation, and additional servers that will help make the move more efficient and reduce the time that the servers and network of the county will be unavailable to the users. Ongoing costs for occupying the space in city hall are \$32,000 per year for rent, with an agreement to equally split the utilities in the Data Center space.

DISCUSSION

It is proposed that Washtenaw County and the City of Ann Arbor consolidate their respective existing data centers in one location. The consolidation project would begin in November of 2008. The consolidated data center would be located in the City of Ann Arbor's current data center location (City Hall, 100 N. Fifth Avenue), and would subsequently be incorporated into the new Ann Arbor Municipal Center, which is planned to be ready for occupancy in 2011. This initial move is much more expensive than the one to the new site in 2011, because much of the planning work that is being done at this time as a result of this contract will be re-used after it is updated by the County in 2011. It is expected that the cost of the second move will be less than \$75,000 and will be related to equipment that will be needed, not consulting services.

The City of Ann Arbor and Washtenaw County have a shared interest in reducing both capital and operating expenses. Consolidating Information Technology infrastructure is an effective way to manage the operating and capital technology costs for both organizations. Consolidation enables us to share computing investments that both organizations have made and to consolidate common programs and infrastructure, such as firewalls and storage area networks. This project also provides an excellent opportunity to identify and collaborate on disaster recovery technologies to ensure high-availability services are functional during events. This is possible because the city has built an alternative site at the newly constructed Wheeler Transportation Center on Stone School Road. We are able to take advantage of this additional room to continue operations in the case of a major disaster in downtown Ann Arbor.

It is requested that a statement of work be authorized with EMC Corporation to move the County's existing center to the City of Ann Arbor's data center at 100 N. Fifth Avenue. The statement of work consists of in-depth analysis of the existing county's data center configuration, including validating existing information that the county maintains and determining interdependencies of county servers, networks, and configurations. EMC is also being retained as a part of this work to provide a detailed plan to determine in what order equipment and servers must be moved to minimize disruption to the organization. This statement of work also includes de-installation, moving and re-installation of the equipment at the City site. The EMC engagement is for a total 9 weeks of onsite work by a staff of 5.

EMC was chosen to perform this work because of their extensive knowledge of these operations and because they have a specialized national team whose only purpose is these engagements. Additionally, Washtenaw County's entire infrastructure of its storage area network and backup systems are running EMC equipment and they must be used to complete the move of this equipment to preserve the warranties associated with these technologies. It is for these reasons that we are not bidding this engagement and request that EMC awarded the contract as a sole source.

Above the need to vacate our current data center because of the issues, this project provides multiple opportunities for further Ann Arbor/Washtenaw County collaboration and expense-sharing. For instance, efforts are already underway to create a three-year strategic plan in which to consolidate identical programs, such as email, and to leverage investments already made in equipment by the City and the County, such as network equipment, firewalls, and other software that is not identical, but share the same function, such as permitting.

In addition, initiatives are currently underway involving the City's purchase of a portion of the County's new imaging system, server virtualization system, and to study the possibility of a shared financial system. This will result in less money being spent by each organization to maintain these products separately. One example of this is the imaging system. Ann Arbor will be paying us over \$25,000 per year for their share of maintenance on this system. This is a cost that the County has paid on its own until Ann Arbor was willing to collaborate with us. More of these projects will alleviate future county costs and save the taxpayers of Washtenaw County money in the coming years.

Ann Arbor is paying \$60,000 of the cost of this engagement. The reason that we are not splitting this equitably is that the Ann Arbor engagement is limited to only inventorying what they have, how it is connected together and what the interdependencies are. It is addition to our engagement and does not have to be done in order to make this move. They do need to do it for future integration opportunities and adding it to our Statement of Work means that there will be consistency in how the information is gathered and presented. Our engagement is much more complex in that in addition to the work that they are doing for Ann Arbor, they have to go much further and determine what needs to be moved with what and in what order. They must then de-install it from our location, move it, and re-install it at the Ann Arbor location.

After the move, as the integration progresses, those systems that the city "shares" with the county will be an equitable split.

IMPACT ON HUMAN RESOURCES:

None

IMPACT ON BUDGET:

The total cost is \$325,000, of which the City of Ann Arbor assumes \$60,000. The county's portion of the funding is \$150,000 budgeted in the technology plan, with \$115,000 planned use of fund balance from the technology plan..

IMPACT ON INDIRECT COSTS:

None

IMPACT ON OTHER COUNTY DEPARTMENTS OR OUTSIDE AGENCIES:

This action is taken in partnership with the City of Ann Arbor and will assist the County in obtaining a solution to our data center space problem, while maximizing the collaboration and partnership opportunities. This Statement of Work also will enable careful planning of the data center move and minimize the unavailability of computers for county staff, so as to not disrupt normal Washtenaw County operations unnecessarily.

CONFORMITY TO COUNTY POLICIES:

This project conforms with the County Policies and Procedures.

ATTACHMENTS /APPENDICES:

- Business Plan
- Statement of Work
- Resolution

A RESOLUTION AUTHORIZING THE ADMINISTRATOR TO SIGN THE STATEMENT OF WORK WITH EMC IN THE AMOUNT OF \$325,000 FOR THE DATA CENTER MIGRATION PROJECT WITH THE CITY OF ANN ARBOR

WASHTENAW COUNTY BOARD OF COMMISSIONERS

August 6, 2008

WHEREAS, Washtenaw County continues to explore partnerships that will provide opportunities for reducing how the County does business while maximizing resources already purchased; and

WHEREAS, Washtenaw County's existing data center is located in the basement of the Administrative Building in downtown Ann Arbor; and

WHEREAS, there are significant areas of concern relative to the County's existing data center location; and

WHEREAS, Washtenaw County desires to locate their datacenter from the lower floor of 220 N Main Street to the City of Ann Arbor's existing data center which is located at 100 N. Fifth Avenue; and

WHEREAS, the move is recommended due to the deficiencies in the existing building and prohibitive costs associated with retrofitting the existing space; and

WHEREAS, the move in November of 2008 would be a temporary move as the City is moving its datacenter to the new Ann Arbor Municipal Center, planned for the area directly west of City Hall in the middle of 2011; and

WHEREAS, both Information Technology organizations have a strong desire to reduce both capital and operating expenses. Sharing and consolidating IT infrastructure together is an effective way to manage the operating and capital technology costs for both organizations; and

WHEREAS, in addition this provides an opportunity for identifying and collaborating on disaster recovery technologies to ensure high-availability services are functional during an event; and

WHEREAS, the cost estimates for the two Alternative approaches were based on a Cornerstone study conducted on January 24th, 2008; and

WHEREAS, the cost estimates for the City of Ann Arbor collaboration were derived from, a Plante Moran study conducted on November 2007; and

WHEREAS, the City of Ann Arbor will allocate \$60,000 towards the analysis and statement of work for EMC; and

WHEREAS, this matter has been reviewed by Corporation Counsel, the County Administrator's Office, the County Finance Department and the Ways & Means Committee

NOW THEREFORE BE IT RESOLVED that the Washtenaw County Board of Commissioners hereby authorizing the County Administrator to sign the Statement of Work with the EMC in the amount of \$325,000 as on file with the County Clerk.