

# County of El Dorado

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# Legislation Details (With Text)

**File #**: 15-1443 **Version**: 1

Type: Agenda Item Status: Approved

File created: 12/4/2015 In control: Board of Supervisors

On agenda: 12/15/2015 Final action: 12/15/2015

Title: Information Technologies recommending the Board consider the following:

1) Approve a Purchase Order in an amount not to exceed of \$156,817 for the purchase of Dell server

equipment; and

2) Authorize the Purchasing Agent to sign the Purchase Order for same, pending Counsel and Risk

approval and minor revisions.

FUNDING: General Fund.

Sponsors:

Indexes:

**Code sections:** 

Attachments: 1. A - DRAFT PO and WSCA Agm No. MNWNC-108 12-15-15

Date	Ver.	Action By	Action	Result
12/15/2015	1	Board of Supervisors	Approved	Pass

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### **DEPARTMENT RECOMMENDATION**

The Board is being asked to 1) Approve a Purchase Order in the amount of \$156,817.99 for the purchase of Dell server equipment; and 2) Authorize the Purchasing Agent to sign the Purchase Order for same which includes the following critical purchases:

SERVER UPGRADE: Upgrade existing server speeds to increase our processing throughput capacity. This is necessary to support current requirements as well as to support future growth. Based on our current projections, an upgrade to the current physical environment is the most cost-effective path.

COMPELLENT STORAGE: The data storage capacity of our County IT infrastructure is approaching a critical threshold. With data requirements continuing to grow, we are nearing limits of both available space and data throughput. Adding the Compellent storage device will address immediate needs for data storage, and also give us expansion capability for longer-term future growth.

### **DISCUSSION / BACKGROUND**

SERVER UPGRADE: Most of the County's databases, files, and applications no longer run on dedicated physical servers. With our current Dell hardware and software, most of our servers run as

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virtual machines within a huge multi-processor environment. As is the case with our storage capacity, increasing demand from County agencies and departments has put us near the limits of our current physical environment. The physical server upgrade is necessary to enable our virtual environment to efficiently support current and upcoming needs. This upgrade will more than double the speed at which our physical processors can communicate and manage our virtual servers, and will enable us to grow into future requirements by also increasing the number of virtual servers we can provide.

COMPELLENT STORAGE: The Compellent storage solution includes many valuable capabilities for large-scale data storage. Most importantly, the device enables automatic tiering of data. That means that infrequently used data is automatically moved to slower-access space in the device. Frequently used data is kept in high-speed access space. This optimizes performance, and also is more economical. Low-speed space is less expensive (dollars and energy), so the overall cost per byte of storage capacity is less than if it were all high-speed space.

Any storage solution will be acceptable, but the deep discount from Dell, combined with the unique capabilities of the Compellent device makes this the best solution. Competitors do not offer the features of Compellent, and other suppliers have not been able to meet Dell's price.

#### **ALTERNATIVES**

#### SERVER UPGRADE:

- 1. Approve purchase of a new, additional blade server environment this would be much more expensive than an upgrade, but is a viable option.
- 2. Maintain our current server capacity this would severely limit future growth of County services, and will negatively impact the ability of departments to provide more and better services through technology.

#### COMPELLENT STORAGE:

- 1. Approve a different, less desirable solution this would possibly be more expensive for the reasons listed in the Background section, and would entail even more time, during which our situation would grow ever more critical.
- 2. Maintaining our current storage capacity this is only feasible if all County Departments embark on a major project to carefully examine and permanently delete many terabytes of files. It would also be necessary to absolutely restrict any future growth in IT capabilities, to include any new services or applications that would require additional data storage.

#### OTHER DEPARTMENT / AGENCY INVOLVEMENT

N/A

#### CAO RECOMMENDATION

Approve department recommendations.

#### FINANCIAL IMPACT

There is no change in Net County Cost. Funding for this purchase is available in the Information Technologies budget.

#### CLERK OF THE BOARD FOLLOW UP ACTIONS

N/A

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## STRATEGIC PLAN COMPONENT

N/A

## **CONTACT**

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