LOS ANGELES COUNTY

COUNTY OF LOS ANGELES
Internal Services Department
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Los Angeles, California 90063

Dave Lambertson
Director

To enrich lives through effective and caring service.

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June 9, 2005

Agenda Date: June 21, 2005

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

REQUEST FOR APPROVAL TO ACQUIRE EQUIPMENT NECESSARY TO ESTABLISH A LOCAL RECOVERY CAPABILITY IN THE ORANGE COUNTY DATA CENTER
(ALL SUPERVISORAL DISTRICTS - 3 VOTES)

CIO RECOMMENDATION:
(X) APPROVE ( ) APPROVE WITH MODIFICATION ( ) DISAPPROVE

IT IS RECOMMENDED THAT YOUR BOARD:

Authorize the Director of the Internal Services Department (ISD) to purchase computer equipment at an estimated total purchase cost of $1,500,000 including sales tax. Total costs include a one-time cost of $650,000 and a financed cost of $975,000, for a total equipment expenditure of $1,625,000 for use at ISD's Local Recovery Center.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of these actions is to enable ISD to establish a local recovery capability in Orange County's data center located in Santa Ana, CA. The Orange County space lease has been submitted separately by the CAO for Board approval. The Local Recovery Center will allow data for critical systems to be copied in real time to Orange County from the Downey Data Center. In the event of a major outage at Downey, processing could continue for critical applications from Orange County's data center with minimal downtime. Some of these critical applications include the Sheriff's

Automated Justice Information System, the Trial Court Information System, the Property Tax Assessments and Payment System, the Mental Health Management Information System, and eCAPS. The Local Recovery Center will also enable ISD to perform more frequent and comprehensive disaster recovery testing.

The purchase of computer equipment is required for the Local Recovery Center. The County Equipment Policy approved by the Board of October 16, 2001, requires departments to obtain Board approval to purchase or finance equipment with a unit cost of $250,000 or greater. Therefore, we are requesting approval to purchase a mainframe computer, tape storage, and disk storage systems for use in a Local Recovery Center.

ACS, the facilities manager for the Orange County data center, will provide services at the Local Recovery Center on an "as needed" basis. These services include the installation of equipment, relocation of servers, tape handling and providing power feeds and cables. We plan to acquire the services through the Board-approved Information Technology Support Services Master Agreement (ITSSMA). ISD will not have any staff located at Orange County. ISD has also requested an increased daytime security presence in the front lobby of the Orange County data center. ACS has agreed to share in the cost for the increased security.

Implementation of these actions allows ISD to complete the remaining recommendations from the Auditor-Controller's June 2002 Review of ISD's Disaster Recovery Plan.

Implementation of Strategic Plan Goals

The Local Recovery Center promotes the Board-approved Strategic Plan Goals of Service Excellence, Organizational Effectiveness, and Fiscal Responsibility.

The recommended action supports the County's Strategic Plan No. 3 of Organizational Effectiveness by providing the ability to restore computing services to County departments and clients if a loss of computing ability occurs at the Downey Data Center.

FISCAL IMPACT/FINANCING

Adequate funding has been budgeted in the FY 2005-06 budget to cover the "as-needed" services to be provided by ACS.

The acquisition of the computer, tape system and disk storage system will be awarded through a bid process with an estimated cost of $1,500,000. The Fixed Asset payment has been budgeted in fiscal year 2004-05. The LAC-CAL monthly payments have been requested in ISD's fiscal year 2005-06 budget. ISD will request appropriation in subsequent fiscal years for ongoing LAC-CAL payments.

The estimated payments by Fiscal Year through FY 2008-09 for equipment are shown below:

Equipment Type	Estimated Purchase Price	FY 2004-05 Fixed Asset Cost	FY2005-06 LAC-CAL Cost	FY 2006-07 LAC-CAL Cost	FY 2007-08 LAC-CAL Cost	FY 2008-09 LAC-CAL Cost	Total Costs
IBM Computer	400,000		112,000	150,000	150,000	38,000	450,000
Tape Storage	450,000		130,000	175,000	175,000	45,000	525,000
Disk Storage	650,000	650,000					650,000
Total	$1,500,000	$650,000	$242,000	$325,000	$325,000	$83,000	$1,625,000

The costs will be 100 percent offset by income received from ISD customer computer utilization and there is no additional net County cost associated with this request.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

On October 16, 2001, your Board adopted a policy whereby departments must obtain Board approval to purchase or finance equipment with a unit cost of $250,000 or greater prior to submitting their requisitions to Purchasing.

CONTRACTING PROCESS

The equipment is a commodity purchase under the statutory authority of the County Purchasing Agent. The purchase will be requisitioned through and accomplished by the Purchasing Agent in accordance with the standard County's Purchasing policies and procedures. Since the ACS services were not solicited, there was no posting on the County's website.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The recommended Services Agreement and equipment will provide ongoing system support and greatly improved recovery services for ISD's IBM and Mid-range systems.

CONCLUSION

Your approval will allow ISD to acquire the resources necessary to support critical computer systems with minimal downtime in the event of a major outage at the Downey Data Center.

Respectfully submitted,

Dave Lambertson
Director

Reviewed by:

Jon W. Fullinwider
Chief Information Officer

DL:SD:sd

Attachment (1 – CIO Analysis)

c: Chief Administrative Officer
County Counsel

CIO ANALYSIS

REQUEST FOR APPROVAL TO PURCHASE EMC DISK STORAGE, STORAGETEK VIRTUAL TAPE SYSTEM AND AN IBM HOST PROCESSOR FOR THE LOCAL RECOVERY CENTER (ALL SUPERVISORIAL DISTRICTS – 3 VOTES)

CIO RECOMMENDATION: ☒ APPROVE ☐ APPROVE WITH MODIFICATION ☐ DISAPPROVE

Contract Type:
☒ New Contract ☐ Contract Amendment ☐ Contract Extension
☐ Sole Source Contract

New/Revised Contract Term: Base Term: NA # of Option Yrs _____

Contract Components:
☐ Software ☒ Hardware ☐ Telecommunications
☐ Professional Services

Project Executive Sponsor: Dave Lambertson, Director, Internal Services Department

Budget Information :

Y-T-D Contract Expenditures	$
Requested Contract Amount	$1,625,000
Aggregate Contract Amount	$

Project Background:

Yes	No	Question
☐	☒	Is this project legislatively mandated?
☐	☒	Is this project subvented? If yes, what percentage is offset?

Strategic Alignment:

Yes	No	Question
☒	☐	Is this project in alignment with the County of Los Angeles Strategic Plan?
☒	☐	Is this project consistent with the currently approved Department Business Automation Plan?
☒	☐	Does the project's technology solution comply with County of Los Angeles IT Directions?
☒	☐	Does the project technology solution comply with preferred County of Los Angeles IT Standards?

Project/Contract Description:

This action is in direct support of the County's initiative to establish and operate a viable local recovery data center at an alternate location within the Southern California region (the Orange County Data Center). Specifically, this request will support the acquisition of an IBM mainframe computer and Virtual Tape Storage (VTS) for the IBM computing environment as well as the acquisition of a Storage Area Network (SAN) disk system that would be used to recover the Midrange UNIX environment in the event of a disaster.

The Virtual Tape System will handle most tape activity by simulating actual physical drives and tape cartridges. The proposed VTS would ensure that our tape environment is sufficiently backed up off-site. With much of our IBM batch environment still tape based, this would allow for continued batch processing and Disaster Recovery at the Local Recovery Center (LRC). The IBM processor would operate in standby mode at the LRC and be activated during testing exercises and in the event of an actual disaster. The SAN storage would be used to replicate UNIX data for critical applications within the Downey Data Center's UNIX environment.

The Director of the Internal Services Department (ISD) proposes to purchase the computer equipment describe above to support the development of the LRC at a total purchase cost of $1,500,000 including sales tax. The acquisition will encompass a one-time cost of $650,000 and a LAC-CAL financed cost not to exceed $975,000 over 36 months. The requested action complies with the County Equipment Policy which requires Board approval of the acquisition of equipment with a unit cost of $250,000 or greater.

Background:

In June 2002, the Auditor Controller (A-C) conducted a review of ISD's Disaster Recovery Plan and noted a number of deficiencies in the comprehensiveness of their disaster recovery capability. Many of the A-C's recommendations have already been completed. This action allows ISD to complete the remaining recommendations identified by the A-C to strengthen the County's data processing data center and provide provisions to continue operations of the County's mission-critical applications in the event of a disaster.

In the fall of 2003, the CAO and CIO initiated a countywide Business Continuity Planning (BCP) program. County departments are now responsible for developing Business Continuity Plans to cover their critical services. Included among these services are:

- Critical health, public health and mental health services
- Emergency and fire services
- Criminal prosecution, jails, and supervision
- Maintenance of roads and dams, etc.

Many of these high priority services identified by County departments are dependent on ISD's data center being available during such emergencies. The proposed equipment would enable many key County services to continue during an outage affecting the Downey Data Center.

Project Justification/Benefits:

The requested equipment together with existing disk storage will allow the development of a complete remote hot site recovery solution for the IBM mainframe environment. ISD's IBM recovery center testing would be expanded from just four (4) days (most of which is taken up with tape recoveries) to ten (10) days each year. There will now be sufficient time to test all IBM mainframe applications as opposed to the testing of only 10% of these applications.

The VTS system will provide a tape replication capability for all tape activity taking place in the IBM data center. The newly acquired Virtual Tape System will be installed and will remain in Downey while the existing (older) system will be relocated to the LRC. The newer VTS will have about three (3) times the storage capacity of the existing system. This should reduce ISD's usage of physical tapes as many more tape images can reside in the Virtual System. The LRC located VTS can provide electronic tape vaulting that could reduce the need to manually send tapes to the current offsite storage vendor.

The Storage Area Network disk will provide an offsite mirroring capability for the UNIX systems. The LRC located mirrored data will be nearly current, thus reducing the potential for lost data and extended recovery times if data center data becomes unavailable. Future plans are to install standby UNIX servers at the Local Recovery Center in order to create a complete remote hot site capability for selected UNIX applications. These plans also include the installation of backup server and Storage Area Network disk systems for the Microsoft server environment.

Project Metrics:

This system will be considered complete when it is installed with system testing and data replication successfully completed.

Impact If Proposal Is Not Approved:

Currently our business recovery testing consists of loading tapes and testing a minimal number of productions applications. The result is that most applications remain untested. Delaying this purchase would result in increased risk that applications will remain untested and that critical data may be partially or totally unrecoverable in an actual disaster.

There is an additional concern regarding the availability of our current IBM contracted hot site in the event of a disaster. The hot site recovery service is based on a first-come, first-served basis. Therefore in a widespread disaster there is no guarantee that we would be given sufficient resources to recover our production systems. Approval of a LRC with the hardware identified and installed would ensure that resources would be available to restore our production environment in a timely manner.

This purchase is part of ISD's Strategic Plan ITS Objective C1 to "Implement remote DASD mirroring for IBM Data Center". The requirements are for an IBM processor and Virtual Tape that will be used to replicate data from similar systems used in the Downey Data Center. A

recent acquisition was comprised of two disk arrays with one of these to be used to complete the IBM mirroring solution.

Alternatives Considered:

The equipment proposed is compatible with the existing hardware and operating software.

Project Risks:

Project risks are minimal due to the use of standard hardware and software. Failure to implement the proposed solution will result in higher costs and lack of disaster recovery capabilities which will impact the operational viability of the County in the event of an extended outage or loss of facilities at the Downey Data Center.

Risk Mitigation Measures:

Proper planning and careful implementation activities will be established to minimize risk. Performance validation will be conducted to ensure that the SAN Disk, Virtual Tape System and IBM processor work as planned.

Financial Analysis:

The Virtual Tape System and IBM processor will be financed via a 36 month LAC CAL transaction. The $650,000 Disk Storage System will be a non-financed purchase. The appropriation available for this purchase is within the existing ISD FY 2004 - 2005 budget.

CIO Concerns:

None

CIO Recommendations:

Recommend Board approval of the proposed acquisition.

CIO APPROVAL

Date Received: May 10, 2005

Prepared by: Al Brusewitz

Date: June 7, 2005

Approved: Patricia S. Wilson

Date: 6/07/2005