INFORMATION SYSTEMS COMMITTEE

Information Services Billing Methods
360 Fair Lane, Placerville

Reason for the Report

The Grand Jury selected Information Services (IS) Billing Methods as one of its general reviews for 2002/03.

Scope of the Investigation

The members of the Grand Jury:

- Made an announced visit to the Information Services Department on December 4, 2002;
- Collectively interviewed the following IS representatives; Information Services Director, IT Manager/Contracts; IT Manager/ PC; and the Fiscal Administrative Manager ;
- Was briefed on the various operations of the department;
- Reviewed policies on Purchasing Operating Practices;
- Reviewed the El Dorado County Charter and Policies and Procedures Manual.

Background

In 1995, the County voted to implement Policy and Procedures B-8, called the "Intra-County Services Charges Policy." It established the billing methodology for capturing the cost of applications running on the County's mainframe computer. The amount IS charges to a particular department is based upon central processing unit (CPU) minutes, as determined by a 3270 Emulation Session by the mainframe. Thus, all costs associated with the operations and maintenance of the mainframe system are allocated to departments by IS, according to their CPU usage. Missing from the equation, however, are cost applied charges for departmental requests of mainframe-generated reports, and hard-drive space.

In 1998, Information Services introduced the "County Wide-Area Network" (WAN) to the County. WAN added Internet capabilities to existing departmental computers through a web browser, and thus improved access to information throughout the County. However, departments soon discovered that using the web server to access the County's mainframe bypassed cost applied charges from IS. Departments accessing the mainframe through the 3270 Emulation Session are easily identifiable and charged accordingly for their CPU minutes. However, departments accessing the mainframe through a web browser cannot be identified, and accumulated CPU minutes from those sessions are alternatively allocated across the board to all

County departments. Thus, there is an incentive for departments to avoid cost applied charges by accessing the mainframe through their web browser.

Another problem with WAN is that although improving upon data delivery via the mainframe-based system, it's growth and popularity has rendered the billing methodology under County Policy B-8 obsolete. This is the result of the mainframe's inability to track WAN related charges through the 3270 Emulation Session, and by departments, using the web server loopholes previously mentioned. Departments that frequently access the mainframe through the WAN cannot be differentiated among those departments that are infrequent users. In addition, there are the inquiries generated by the public through the Internet. Thus, all accumulated mainframe CPU minutes via the WAN must be allocated in some method. The only available means at the present is through mainframe cost applied charges, which results in a misallocation of costs.

Findings

F1.   With the addition of the County Wide-Area Network (WAN), there is no current billing methodology to accurately capture the costs of mainframe-based CPU minutes, and properly allocate these charges to those accessing the data.

F2.   Departments are only billed for Central Processing Unit (CPU) minutes when accessing the mainframe for data, and are not charged for hard-drive storage, or for requests of printed reports.

F3.   It appears departments are emphasizing the usage of Web browsers to access the mainframe over the cost applied billing methodology that easily identifies the user. This results in less identifiable mainframe CPU minutes through the 3270 Emulation Sessions, and more CPU minutes through the unidentifiable user-based web browser, WAN.

F4.   Public access to the mainframe accrues CPU minutes that are indistinguishable from departmental inquiries using WAN. Since these charges are allocated to departments in accordance with mainframe cost applied charges (Policy B-8), the current billing methodology discourages departments from posting and uploading information for the Public to access.

Recommendations

R1.   The Board of Supervisors should create new Policies and Procedures that provide for a workable billing methodology for the "County Wide-Area Network" (WAN), and should amend Policy and Procedure B-8 to include charges for measurable uses of resources from Information Services (IS).

R2.   New County Policy and Procedures should establish methodologies that account for all the costs associated with WAN, or network related charges, and properly allocate these costs to the users of the system. The Board of Supervisors should work with IS to come up with a solution for this accountability problem.

R3.   County Policy and Procedures B-8 should be amended to allow for the collection of revenues by IS, for measurable uses of resources, such as print copy, and the utilization of mainframe hard drive space by certain departments. The Board of Supervisors should work with IS to resolve this accountability problem.

Responses Required for Findings

F1 through F4   El Dorado County Chief Administrative Officer
                                   El Dorado County Board of Supervisors
                                   El Dorado County Director of Information Services
                                   Department

Responses Required for Recommendations

R1 through R3   El Dorado County Chief Administrative Officer
                                   El Dorado County Board of Supervisors
                                   El Dorado County Director of Information Services
                                   Department