SALT LAKE CITY COUNCIL MEMO

DATE: February 15, 2005

SUBJECT: **Information Management Services (IMS) Division Briefing**

STAFF REPORT BY: Sylvia Jones

The Information Management Services Division is responsible for providing the following services to the public and City staff:

- Management of computer networks.
- Provision of telephone services including phone, voice mail, caller id, etc.
- Acquisition, development and support of software.
- Provision of support/services for the Internet and Intranet.
- Provision of software training.
- Citywide coordination, guidance and vision for existing and new technologies.

The Council staff did not have the opportunity to see the Administration's written materials prior to preparing this memo. Following are some potential questions that staff has identified based upon past observation:

1. The Council has been very interested in public notification. A key to this is the Geographic Information System. What resources would be needed to enhance the GIS system to assure its highest and best use?

2. Compared with other City's IMS divisions around the Country, are the resources available to our IMS about average, below average or above average?

3. What is the cost to IMS for filming a City event / meeting? Are there specific equipment enhancements that would streamline this process?

4. What are the current abilities to create content?

5. Is the City maximizing the use of the internet? What City services are currently available on-line?

6. How has IMS managed to bring SLCTV to its current state given the limited resources and funding?

7. What is the current state of the City network infrastructure? Where are we in relationship to other entities of our size and budget?
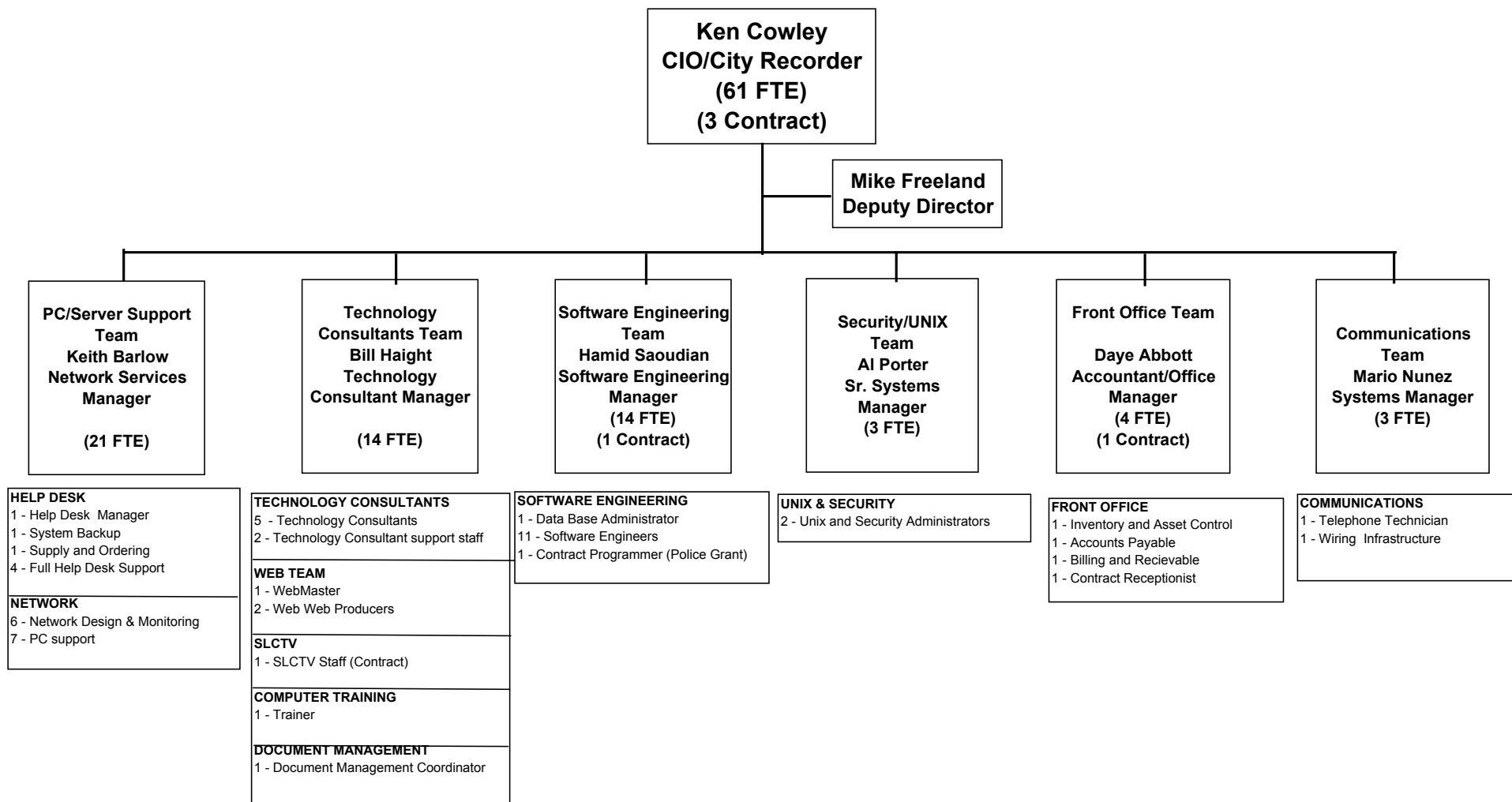
Council staff has provided a four-year budget history for Information Management Services Fund below.

IMS Budget

FY04-05 Adopted Budget	Percent Change	FY03-04 Adopted Budget	Percent Change	FY02-03 Adopted Budget	Percent Change	FY01-02 Adopted Budget
$7,539,285	(1.2%)	$7,629,125	1.5%	$7,514,004	4.0%	$7,222,287

The Administration has provided the following paperwork: (See attached.)

A.   A list of functions / services performed by the Division and an organizational chart, including the number of FTE's.
B.   Information on any service level measurements available (for example, x number of permits were issued last year, a 2 percent increase / decrease over the previous year).
C.   Responses to the following questions:

1. What successes has your Division achieved in the recent past, and what successes do you see in the near future?
2. What are the most significant challenges the Division will face in the near future?
3. Have the services provided by the Division increased / decreased or remained the same over the past 2 or 3 years, and do you anticipate that service levels will increase, decrease, or remain the same in the near future?
4. Are there service level improvements that could be made in your Division with a minimal investment of funding, or are there functions where additional resources may be needed in order to maintain current service levels?

Ken Cowley
CIO/City Recorder
(61 FTE)
(3 Contract)

Mike Freeland
Deputy Director

PC/Server Support Team
Keith Barlow
Network Services Manager

(21 FTE)

Technology Consultants Team
Bill Haight
Technology Consultant Manager

(14 FTE)

Software Engineering Team
Hamid Saoudian
Software Engineering Manager
(14 FTE)
(1 Contract)

Security/UNIX Team
Al Porter
Sr. Systems Manager
(3 FTE)

Front Office Team

Daye Abbott
Accountant/Office Manager
(4 FTE)
(1 Contract)

Communications Team
Mario Nunez
Systems Manager
(3 FTE)

HELP DESK
1 - Help Desk Manager
1 - System Backup
1 - Supply and Ordering
4 - Full Help Desk Support

NETWORK
6 - Network Design & Monitoring
7 - PC support

TECHNOLOGY CONSULTANTS
5 - Technology Consultants
2 - Technology Consultant support staff

WEB TEAM
1 - WebMaster
2 - Web Web Producers

SLCTV
1 - SLCTV Staff (Contract)

COMPUTER TRAINING
1 - Trainer

DOCUMENT MANAGEMENT
1 - Document Management Coordinator

SOFTWARE ENGINEERING
1 - Data Base Administrator
11 - Software Engineers
1 - Contract Programmer (Police Grant)

UNIX & SECURITY
2 - Unix and Security Administrators

FRONT OFFICE
1 - Inventory and Asset Control
1 - Accounts Payable
1 - Billing and Recievable
1 - Contract Receptionist

COMMUNICATIONS
1 - Telephone Technician
1 - Wiring Infrastructure

Information Management Services Division Briefing
February 17, 2005

I. Council Questions:

A. A list of functions/services performed by the division and an organizational chart, including the number of FTE's.

IMS helps ensure that Salt Lake City government makes effective use of technology and maintains the City's computers, telephone and computer networks:

a) Provides Citywide coordination, guidance and strategic planning for existing and new technologies.

b) Handles acquisition, development and support of software.

c) Supports the Internet and Intranet.

d) Manages and maintains the City's computer networks.

e) Manages and maintains our telephone services.

f) Provides computer training.

g) Supports the City's Cable Channel (SLCTV).

h) Provides audio and video recording, editing and production.

B. Information on any service level measurement available.

1. We completed 21 audio/video projects last year, an increase of 5 from the previous year.

2. 13,222 work orders were opened last year. IMS closed seventy five percent (75%) of these work orders within 24 hours. The Industry rates this as a sign of an extremely efficient and effective help desk (source, Gartner Group).

3. The City's Internet site has an average of 6.6 million hits per month which is up from 5.2 million hits per month last year. There was an average of 169,623 unique visits per month. Pages with the highest number of hits include Job Center, Online applications, Public Utilities and Police.

4. We detect an average of 34,105 attempts per month to infect the City's network with viruses. This is up from an average of

20,000 attempts per month last year.

5. We logged 25 million unauthorized attempts to enter our network last year. Most of these were computer generated attacks attempting to illegally access the City's network. This is an astounding increase over the 5.2 million unauthorized attempts the previous year.

6. We blocked an average of 26,000 spam messages per day last year. This is up from the 12,000 in the previous year.

C. Responses to the following questions:

1. What successes has your division achieved in the recent past, and what successes do you see in the future?

    a) IMS Received the following awards in 2004:
        (1) Communication Awards:
            (a) SLC Public Library Promotional Spot
            (b) Bad Dog Arts Show Spot
        (2) Marcom Golden Finalist Award for Windows XP Training.
        (3) 12th in the nation for Web Services – Brown University.

    b) Viruses and network intrusion attempts did no significant damage to the network.

    c) We beat our goal of adding 2 Internet systems per year and added 6 major systems last year.

    d) We completed major software maintenance and upgrades on 21 systems last year.

    e) We made considerable improvements to SLCTV.

2. What are the most significant challenges the Division will face in the near future?

    a) SLCTV has gone from a scrolling menu screen to full production videos. We currently can create and air high quality videos on an as needed basis. We have done live broadcasts of special council meetings, videos for Transportation and Emergency Preparedness and taped delayed broadcasts of meetings and events for the Mayor's Office and the Council. By using the internet, we have expanded our viewing audience from those residents of Salt Lake City who have cable TV to anyone in the world with an Internet connection. Demand for audio/video recordings has grown well beyond expectations and will continue to grow.

b) The IMS Digital Forensics Team works under the direction of the Attorney's office and Human Resources assisting in their investigations of Internet and e-mail abuse. This group consists of existing IMS staff, deployed on an as needed basis. This Team has developed a good reputation with the Attorney's Office and Human Resources by providing thorough computer investigations resulting in successful case outcomes. Additionally, the IMS Digital Forensics Team has been instrumental in preparing evidence for clear and successful presentations in court hearings. The Digital Forensics Team has also been a valuable resource in helping departments ensure that City computer resources are appropriately and legally used.

c) The network continues to become more complex as we improve programs to fight spam, viruses, and protect against intrusion. We continue to add new Internet services. There is increased demand for graphic applications (maps, pictures, video, etc.) that require higher speed and more capacity than our past applications. Online video training and video meetings also require higher speed and more capacity. Tools to help monitor the network are needed to resolve problems that are difficult to detect. The infrastructure of our network needs to be kept current and flexible.

d) We currently get GIS updates from the County on a monthly basis. This leaves the City with data that is not current and could be at least a month out of date. We must develop a system to allow for more frequent GIS updates so that our information is as current as possible.

e) We are striving to maintain the current Internet applications and add new services with existing staff and resources.

3. What services provided by the Division increased/decreased or remained the same over the past 2 or 3 years and do you anticipate that service levels will increase/ decrease or remain the same in the near future?

a) The requests for audio and video taping for the SLCTV team have tremendously increased over the past year. We expect this trend to continue.

b) The number of computer forensic investigations of internet and e-mail abuse that we have done for the Attorney's Office and Human Resources has caused us to shift existing staff from other projects.

c) Because we are always trying to find better ways to make our services more accessible to our citizens (online, walk-in, over the phone, via mail, etc.), the demand for new or improved services is constantly increasing.

d) We saw a 58% increase in attempts to infect our network with computer viruses. We expect that to continue to increase.

e) We saw the attempts to intrude and damage our network increase five fold last year. We expect these attempts to increase.

f) We saw huge increases in spam mail and expect the trend to continue to increase.

4. Are there service level improvements that could be made in your Division with a minimal investment of funding or are there functions where additional resources may be needed in order to maintain current service levels?

a) SLCTV has been a tremendous success as noted above. However, when we contracted with CDI Corporation for this service, it was expected to be only a few hours a week. This past year, it was necessary to use the contract service full time. Contracting is no longer the best or most cost effective method. Our suggestion is to fund and authorize one FTE for the exclusive purpose of continuing or improving the level of service we are currently providing. The estimated ongoing cost for salary and benefits is approximately $45,000 per year and a one time cost of $17,500 to

$31,400 for some necessary equipment and software.

b) The Computer Forensic team (assisting the Attorney's Office and Human Resources in their investigations of Internet and e-mail abuse) has also been a tremendous success. For the current level of service to continue, we need approximately $6,000 in one time funds for software, equipment and training. We are not requesting additional staffing, but we are reallocating current staff members from other projects four to eight hours per week.

c) To provide a stable computer network and avoid service interruptions, slowdowns, and increases in demand, we will need to make a small increase in the rates that we charge for the computer infrastructure.

d) We are developing the possibility of using a web service with the County to update the GIS data on a daily basis. This solution is just in the beginning stages and meetings with Salt Lake County representatives are scheduled to discuss the ramifications of this recommendation.