

City of
Gainesville

Inter-Office Communication

August 30, 2005

TO: Audit and Finance Committee
Mayor Pegeen Hanrahan, Chair
Mayor-Commissioner Pro Tem Chuck Chestnut, Member

FROM: Brent Godshalk, City Auditor

SUBJECT: Review of Internet Access

Recommendation

The Audit and Finance Committee recommend that the City Commission:

- 1) Accept the City Auditor's report and the Interim City Manager's and General Manager's responses;
and
- 2) Instruct the City Auditor to conduct a follow-up review on recommendations made and report the results to the Audit and Finance Committee.

Explanation

In accordance with our Fiscal Year 2005 Annual Audit Plan, we have completed a review of internet access. Our report and the Interim City Manager's and General Manager's responses are attached.

We request that the Committee recommend the City Commission accept our report and the Interim City Manager's and General Manager's responses. Also, in accordance with City Commission Resolution 970187, Section 10, Responsibilities for Follow-up on Audits, we request that the Committee recommend the City Commission instruct the City Auditor to conduct a follow-up review on recommendations made and report the results to the Audit and Finance Committee.

City of
Gainesville

Inter-Office Communication

May 24, 2005

TO: Barbara Lipscomb, Interim City Manager
Michael L. Kurtz, General Manager for Utilities

FROM: Brent Godshalk, City Auditor

SUBJECT: Review of Internet Access

Barbara and Mike, as we discussed at our last Charter Officers' meeting, we have completed a Review of Internet Access, which was set forth in our Fiscal Year 2005 Annual Audit Plan. During our review, we conducted interviews with key staff, reviewed operating information and tested management controls. The attached report indicates where we believe further efforts are needed to strengthen management controls.

We would like to thank Computer Services Director Les Auerbach, GRU Information Systems Director George Arola and their staff for the courteous and cooperative treatment afforded us during our review. Our recommendations for improving procedures and controls have been reviewed with each of them.

In accordance with Commission Resolution 970187, Section 9, please submit your written responses to the recommendations presented in the attached report within 30 days and indicate an actual or expected date of implementation. Our final report, which will incorporate your written response, will then be submitted to the City Commission's Audit and Finance Committee for review and approval.

Please let me know if you would like to meet to discuss further the details of this report or if you have any comments or questions that will facilitate your response.

OBJECTIVES, SCOPE AND METHODOLOGY

In accordance with our Fiscal Year 2005 Annual Audit Plan, the City Auditor's Office has completed an audit of Internet Access. The primary focus of this review was to provide the City Commission with reasonable assurance on the adequacy of the system of management control in effect over internet usage. Management controls include the processes for planning, organizing, directing and controlling program operations, including systems for measuring, reporting and monitoring program performance. Management is responsible for establishing and maintaining effective controls that, in general, include the plan of organization, methods and procedures to ensure that goals are met. Specific audit objectives included evaluating the policies, procedures and internal controls related to internet access and determining whether General Government and Gainesville Regional Utilities (GRU) employees are using the internet as a business related tool to assist in fulfilling job related responsibilities and in compliance with City policies and procedures.

Our review was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and accordingly included such tests of records and other auditing procedures as we considered necessary under the circumstances. Our procedures included interviewing staff, reviewing procedures, analyzing internet usage records and other information and testing internal controls as needed to assess compliance with City policies and procedures. The scope of our testing was generally for the period from May 2004 through October 2004 for General Government and December 2004 for GRU. As part of our review, we also compared General Government and GRU internet usage policies, software filters and monitoring processes with other Florida local governments.

Based on the results of our review, we prepared specific issues and recommendations for improvement that were discussed with management. These recommendations, as well as management's written response, can be found in the following sections of this report.

BACKGROUND INFORMATION

The internet has become an extremely valuable and useful business tool in recent years enabling enhanced communications, information gathering and business transactions. Although the internet can greatly enhance employee productivity, it also can lead to reductions in employee productivity if used inappropriately for personal issues and as a source of entertainment and leisure. In addition to decreasing productivity, inappropriate internet use can create employer liability if lawsuits are filed by employees who are exposed to inappropriate or offensive material in the workplace. Several surveys regarding internet usage in the workplace indicate the following:

- The U.S. Department of Commerce found that workers spend an average of 21 hours per week online at the office as opposed to 9½ hours at home, that 64% of employees say they use the internet for personal interest during working hours and that 37% indicate they surf the internet constantly at work.
- The UCLA Internet Report indicates that 61% of employees with access to the internet use it for personal interest and 57% access their personal e-mail from work. It also indicates that approximately 45% of employers monitor their employees' internet use either somewhat or closely, while 28% do not monitor employees' usage at all.
- Monitoring by the U.S. Treasury Department indicated employees spent 51% of their time online at work. Included in their activities were personal e-mails, online chats, shopping and checking personal finances and stock accounts.

ISSUE 1

Internet Usage Policies, Monitoring and Filtering

Discussion

City of Gainesville Internet Usage Policies

Both General Government and GRU have established administrative guidelines regarding internet usage by employees. The General Government administrative procedure indicates that office computers are to be used for business purposes only. The policy:

- Limits e-mail to work related correspondence.
- Limits internet access to users needing it to perform their job responsibilities.
- Specifies that internet users should avoid chat room, shopping, pornographic, memorabilia collectible and sports sites, unless specifically related to work responsibilities.
- Provides specific examples of inappropriate e-mail activity such as advertising personal items for sale, invitations for personal parties and sending pictures or documents that may be deemed offensive.
- Indicates that random and directed inspections will be completed in order to ensure compliance with stated policies.

The GRU administrative guideline indicates that access to the internet is not provided for personal use, nor is it encouraged. However, it allows limited personal use of the internet provided that specifically prohibited uses are avoided, the use is of a “de minimus” nature and there is minimum impact to GRU’s business operation. The policy:

- Generally defines acceptable use as communication and information exchange directly related to the mission, charter or work tasks of GRU and provides specific examples.
- Generally defines unacceptable uses as any purposes that violate federal or state law or City or GRU policy and provides specific examples such as accessing or distributing indecent or obscene material or harassing or threatening communications, accessing or distributing computer games that have no bearing on GRU’s mission and interfering with or disrupting network users, services or equipment.
- Places the burden of responsibility on the user to inquire as to acceptable and unacceptable use prior to use and indicates that compliance with acceptable use restrictions is mandatory.
- Indicates managers and supervisors are expected to maintain and enforce the policy.

All City employees with access to a personal computer at work are required to read and comply with the applicable internet standards. General Government requires employees to indicate monthly that they have read and will comply with the automation standards. GRU indicates in their policy that employees are responsible for informing themselves and complying with the policy.

Internet Usage Monitoring and Filtering

The General Government Computer Services Department has created a monitoring report, documenting individual employee’s website visits, which is provided to department managers on a monthly basis. The data supporting the report is saved until there is no longer space available on the system and includes all

internet hits by employee, except for City of Gainesville internet addresses. The report can be cumbersome for reviewers because it simply lists all website hits in chronological order by website address. The information is not categorized or summarized and the report does not provide the length of time that sites were viewed by users. It also makes no distinction between requested sites and those that may not have been specifically requested by the user such as pop-up advertisements.

Based on discussions with General Government department managers, these limitations make it difficult to review these reports and effectively monitor employee internet usage, especially in larger departments. The Computer Services Department occasionally reviews these reports to determine if websites are being accessed that do not appear to be within policy guidelines for internet usage. If a concern is noted, Computer Services first contacts individual employees and, if questionable activity continues, the department manager is contacted. Although Computer Services does not use software filtering devices to prevent inappropriate sites from being accessed, it does manually exclude access to inappropriate sites when noted.

The GRU Information Systems Department does not routinely create internet usage monitoring reports nor use software filtering devices to prevent inappropriate sites from being accessed. The Information Systems Department maintains website history files for a rolling seven day period and indicates that ad hoc monitoring reports can be created if a department manager believes an employee may be using the internet for other than business purposes during work hours.

During our review, we discussed internet usage with a GRU supervisor who indicated that he currently has no way of knowing when employees are accessing the internet for personal viewing versus work related viewing, even though the GRU internet policy states that managers and supervisors are expected to maintain and enforce the policy. He indicated that effective monitoring reports would assist him and other supervisors in overseeing employee internet use.

Summary of Audit Testing

During our review, we obtained six months of historical internet usage data from General Government and seven days of website history files from GRU. Utilizing audit software to categorize and summarize the internet activity by employee, we reviewed in greater detail the activities of the ten highest internet users for both General Government and GRU for the respective periods.

We found that six of the ten General Government users evaluated appeared to have multiple personal website visits, contrary to the General Government policy. Personal interest sites visited included home improvement, sports, news, internet e-mail and vacation-oriented sites.

For GRU, we found that nine of the ten users evaluated appeared to have multiple personal website visits, including visits to sports, entertainment, music, shopping and vacation-oriented sites. However, GRU's internet policy allows "de minimus" personal internet use as long as there is minimum impact to business operations and the user avoids specifically prohibited uses. Because data analyzed includes pop-up advertisements and does not include duration of visits, we were unable to definitively determine how long personal interest websites were viewed. However, in the instances noted, employees visited personal interest sites on multiple occasions and such visits appeared to be sustained throughout the day with a few employees apparently accessing the internet for personal use only.

For one of the ten GRU users evaluated, multiple visits occurred to sites that were clearly prohibited uses based on GRU policy and another employee had visits to sites that would typically be deemed offensive. Further analysis of the seven days of website history files indicated that several other employees were also accessing sites with similar prohibited uses.

Surveys of Other Government Agencies

As part of our review, we requested information from comparable Florida local government agencies regarding their internet usage policies and controls. Based on the responses received and further follow-up discussions with these agencies, we noted the following:

- One out of four responding agencies, Alachua County, indicated that their internet usage policy expressly allows personal use of the internet at work during non-work hours. The others generally indicated that although they exclude personal use as part of their policy, in practice, department managers may allow personal use on a minimal basis, as long as sites visited do not fall into their policy's definition of inappropriate sites.
- One agency, the City of Lakeland, indicated that they use purchased software to provide internet usage reports to department managers summarizing activity by areas within the organization, by website categories (i.e. travel, sports, weather, gambling, sexual content, hacking, pop-ups, advertisements, etc.) and by the length of viewing time spent on the sites. These reports enable managers to review their department's overall activity and then review each employee's specific activity to identify concerns or inappropriate internet usage.
- One agency, the City of Melbourne, monitors internet usage within the information systems department, informs departmental management when employees access inappropriate sites and manually restricts access to such sites when noted.
- Two responding agencies, Kissimmee and Lakeland, use filtering software and indicated that they have been able to specifically develop parameters that support their internet usage policies. If the software should filter out sites that a department needs, the information systems departments can unblock those sites so as not to interrupt a department's productivity.

Conclusions

We commend management for their efforts to establish policy guidelines regarding appropriate and inappropriate internet usage by employees at work. We also commend the General Government Computer Services Department for their efforts to establish a system of monitoring and controlling internet usage. However, based on the results of our review, we believe that further efforts are needed to provide reasonable assurance that employees are using the internet to assist in fulfilling job related responsibilities and in compliance with City policies and procedures.

Current internet usage monitoring and logging tools do not provide information for department managers to effectively determine what types of internet websites employees are accessing and for how long. Internet filtering software can limit the types of sites viewed, assist in enforcing internet policies and help to reduce the City's potential legal liability. Employees who are exposed to inappropriate or offensive material in the workplace have sued companies for fostering and condoning a hostile workplace environment. Although the City has not had any such complaints filed, inquiries regarding inappropriate internet access have been made to the Equal Opportunity Office.

The City of Gainesville is also susceptible to productivity losses by employees who use the internet for personal issues during work hours. Vault.com®, a career information website, reported that 24 percent of employees surveyed admitted to spending more than an hour each day and 47 percent between 10 minutes and an hour each day surfing non-work related sites during work hours. Based on current numbers of

employees and salary levels, if City employees average 15 minutes a day surfing non-work related internet sites during work hours, it would cost the City approximately \$2.7 million in productivity losses.

Recommendations

We recommend management:

1. Evaluate and/or develop more effective internet usage monitoring systems. The systems should enable supervisors and managers to more easily determine if employees are accessing appropriate internet sites and include information to determine how long an employee is viewing a site and the time in which the website was viewed. In addition, management should provide guidance to reviewers on commonly used websites that may appear frequently but are not work related or are not an acceptable use of the internet. GRU management should also consider strengthening their internet use policy to clarify what is considered “de minimus” personal use.
2. Evaluate filtering software that could be configured to meet General Government and GRU guidelines. Filtering devices can be defined for specific departments enabling departments such as GPD to enter sites for investigative purposes that may not be appropriate for other departments.

Management’s Response

General Government

Management agrees that improved reporting will be a benefit to managers reviewing their department’s web activity. Staff has already purchased an upgraded version of an existing reporting tool to test its improved capabilities, and anticipates continued testing through the first quarter of FY 06. If the tool fails to provide the necessary functionality, staff will investigate potential management replacement reporting packages. Management believes that an improved reporting tool will alleviate the majority of the concerns identified in the Auditor’s report, thus the focus on reporting and not on filtering. Staff will, however, review Internet filtering packages for a possible future implementation if our reporting improvement efforts fail to bring about the desired results.

GRU

Management agrees that improved reporting is appropriate. At present, GRU has provided department managers with a basic but cumbersome capability for online viewing, drilling down and archiving employee internet activity. GRU will work closely with General Government as they implement their upgraded reporting tool and will consider similar implementation if the proposed tool achieves the necessary functionality. GRU agrees with General Government that an emphasis on improved management reporting will result in minimal internet policy violations, significantly reducing any value added by filtering software. As such, GRU will also focus its efforts on reporting.

The appropriate level of “de minimus” personal use requires judgment and may vary substantially from time to time and situation to situation. It may be near zero for a customer service representative during student rush. However, it would increase for someone completing college homework on their breaks or lunch and may be even higher for someone who is waiting to give a presentation at a public meeting at 8:00P.M. After implementation of a more functional reporting tool, as described above, GRU will be better able to evaluate if the “de minimus” guideline requires additional clarification.