Present: Ray Stevens, Larry Hudkins, Doug Emery, Bob Workman, Bernie Heier, Deb Schorr, Jon Camp and Gene Carroll

Absent: Jonathan Cook, Jayne Snyder, John Spatz and Adam Hornung,

Others Present: Jeff McReynolds, GIS Program Manager and Ken Kuszak, Interim Information Services Director

Chair Commissioner Ray Stevens opened the meeting at 8:30 am.

1. Approval of Common Meeting Minutes of Tuesday, October 13, 2009: There was not a quorum the minutes will be approved at the January 5, 2010 Common Meeting.

1. Virtual Desktops (Thin Computers)
Ken Kuszak, Interim Information Services Director brought a thin computer for the County Commissioners and the City Council to exam. Thin computers are a replacement for PC’s (personnel computer), that depend on servers, located in Information Services, for storage and processing power. End users are encouraged to store all they files on the server. Files that are stored on the PC’s are not backed up and the data is lost if the hard drive failed. The Thin Computers do not have hard drives so all end user files would be stored on the servers and thus backed up daily.

Thin computer performance is highly dependent on the servers, however this also introduces a single point of failure. Generally one server can support 40 - 50 end-users. Due to the possibility of the server failing, Kuszak suggested that for every 4 - 5 servers there would be one spare server to take over in the event the main server was down.

Even though thin computers do not possess a disk drive or any other type of storage, there is a USB port where external devices maybe plugged into. These USB ports can be left open or disabled. For security purposes, many companies disable the USB ports. Since there are no moving parts they require far less maintenance and repair than PC’s. The life span of a PC ranges from 3 - 4 years, however, the thin computer should last 6- 7 years.

Kuszak stated the pricing for thin computers start around $200 - $900 but thought the Counties’ range would be in the $220 - $300. There are certain applications such as GIS or heavy video editing where a thin computer would not be appropriate. They are much better suited for lighter applications such as word processing, spreadsheets and terminal emulation. GIS could be installed on the server, however it would use up large amounts of CPU power robbing it from other consumers.
According to Microsoft, thin computers could cut administration cost by 55% and less informal administration such as co-workers helping other co-workers can be cut by 14% and lower hardware cost by 13%. Vendors indicate approximately 40-50 thin computers can operate on one server, however, server cost would be anywhere from $6,000 - $7,000 a piece. For every 5 servers there would need to be one spare server for backup. Studies have shown thin computers use 50-80% less energy than PC’s.

Kuszak indicated there could be resistance from end uses moving to thin computers as Information Services would have full control over desktop modifications, installation of programs and applications as they would run through the server. Currently there are approximately 15 thin computers within the City and County. Youth Services and the County Treasurer each have 5. Information Services is looking at changing the software that is currently being used by them.

Commissioner Hudkins inquired if one of the advantages of using thin computers would be none access to data if it was stolen. Kuszak concurred and added that another advantage is the ability to log on as yourself at any location where a thin computer is available within the County. Gary Lacey inquired if Open Source software could be used on the thin computer. Kuszak indicated yes they can use what is called Open Office which there is no charge. It does resemble Microsoft word, excel, etc, however, some of the formatting might not come over clean. Commissioner Schorr inquired if having all information stored on the server would be of any value to TRIM and document retention. Kuszak indicated it would and stated that if information is stored on the PC rather than the server each individual PC would need to be locally searched to find documents. Commissioner Stevens inquired how the departments such as the County Treasure were approached and encouraged to try the thin computers. Kuszak responded the departments wanted to replace some PC’s so IS suggested they try thin computers and if they did not like them the PCS’ would be replaced. However, they’ve had the thin computers for well over a year with very little problems. Councilman Camp stated that if thin computers were installed and since they require less maintenance and upkeep this would show as a decrease in budgets. Kuszak indicated yes, if there were a large number purchased. Commissioner Heier requested Kuszak speak with Mike Thurber regarding the new jail. Commissioner Stevens inquired when IS could be ready to start installing thin computers if there was an executive decree from the City Council, County Board and the Mayor. Kuszak responded they might be ready in 3-4 months. However, he wants to make sure they have the best software that manages them prior to new installations. Discussion took place on whether lap tops could be cut back on if thin computers were available in conference rooms to use. Commissioner Schorr requested IS to test the Open Source software. Councilman Carol stated he would have the IS Committee review thin computers and bring a report back to the Commons. Commissioner Schorr invited Kuszak to speak at the next Management Team Meeting.

2. Approval of 2010 Common Meeting Schedule:
Commissioner Stevens reminded everyone the 2010 Common meeting schedule was included with the agenda and the minutes. He asked the committee to review them. He also pointed out the next meeting is Tuesday, January 5th.
3. **2010 Imagery Project for Lincoln and Lancaster County:**
Jeff McReynolds, Geographic Information Systems (GIS) Program Manager, introduced himself to the Commissioners and Council Members and gave an update on the 2010 Imagery Project for Lincoln/Lancaster County. The GIS Program is administered by and funded through 7 agencies, consisting of: Planning, County Assessor, Building and Safety, Lower Platte South NRD, Lincoln Electric System, Public Works and Utilities and County Engineering. The GIS Program goals include:
- Development of GIS Data Sets
- Reduce duplication of Data
- Licensing
- GIS Integration
Representing Lincoln/Lancaster County regarding GIS to:
- GIS/LIS(Land Information System) Association
- State GIS Council
- NIROC Selection Committee

McReynolds stated NIROC stands for: Nebraska Iowa Regional Orthophotography Consortium.

The following products are now available:

**Aerial Photography**
- Color Infra-Red

**LiDAR**
- Light Detection and Ranging
- “Elevation date”

**Oblique**
- Emergency Response
  - Police, Fire, Emergency Management
- Change Finder
  - County Assessor
  - Building and Safety
- Building Footprint Update

McReynolds indicated the Color Infra-Red allows them to do an analysis on the imaginary and pull out vegetation or non-vegetation areas for watershed management. With LiDAR the plane sends a laser point down to the ground every three to four feet across the entire county to get an elevation point. Within the Oblique imagery it looks at the ground from a 45 degree angle. As part of this product, there are tools that allow change analysis and the ability to view the oblique imagery. Particular to the Oblique imagery while under a two year contract with the vendor, they will do one capture. However, if a natural disaster occurs in the area, such as an F4 tornado or above, the vendor would be back out within 24 - 48 hours to reply that particular area of emergency. This allows for a comparative analysis.

Councilman Camp inquired how the aerial photos are taken, and is the project hired out? McReynolds responded the NIROC Committee and MAPA created an RFP for the project and a vendor was selected, which is Pictures for the aerial photography and American Company for the LiDar data. The two vendors combine together for one response. Councilman Camp also asked if there were efforts being made to coordinate the projects so there is not unnecessary expense?
McReynolds responded that yes this is being coordinated locally but also including the state agencies, and other agencies such as the department of roads, Nebraska Health and Human Services, the state of Iowa is part of this through the MAPA Group, and USGS. Councilman Camp also inquired if any concerns have been voiced regarding invasion of privacy? McReynolds responded that much of this is public available data via Goggle maps. His office has received a couple of inquires of this nature but no major issues or concerns. Commissioner Workman inquired if Goggle would obtain any of this information and would they have to participate in any of the cost? In the past Goggle has not been willing to participate cost wise, but, sometimes it’s a good idea, just for the public standpoint, to share information back with Goggle. However, it is up to each individual agency to do this. Commissioner Stevens inquired as to the cost of doing this and how often should it be done. The time-frame is every two to three years in order to see what has been developed or changed. The Graphic Information Systems Department is looking to roll this information out to the Public through the County Assessors web site.

Overall NIROC Project Costs, the core area which consists of Omaha, Douglas County, Sarpy County, Southeast Nebraska and the outlying parts of the state total project cost are estimated at $1.6 million. MAPA is the contract holder with the vendor and will be over two fiscal years, with December 1, 2009 as the deadline. They are planning to have the contract finalized in late January or early February 2010 from the MAPA standpoint. The local cost is approximately $500,000 with the split being:

- City of Lincoln - $226,000
- Lancaster County - $144,000
- Other - $164,000 (LPSNRD, LES, UNLPD & USGS)

The intent of the project is not to be a one time big expenditure but to try and obtain small funds over time so the department can spend on the product every two to three years and then keep it as a concurrent project and receive the aerials and information that is needed through these types of analysis. Councilman Camp inquired if the data received has to be processed prior to making it available. McReynolds responded that as part of the contract, there will be minimal staff time involved and a usable product will be delivered. With the Oblique product the vendor says from the day it is flown to the time the data is back to the department should be 45 - 60 days.

The next meeting will be Tuesday, January 5, 2010, 8:30 a.m. in Room 113.

The meeting was adjourned at 9:20 a.m.