

Minutes for the Burlington County GIS User Group meeting

Date: December 22, 2003

Members attending the Meeting: Mukesh Patel; Jennifer Bulava; Merrilee Torres; Tina Travers; Medha Gosavi; Cephas Green; Gina Berg; Thomas Fox; Seth Van Aken; Don Meisel; Dina Cirillo; Barbara Fegley; Monica Lallo; Elissa Commins; Steven Robertson; Ankhi Ganguly; David Dietsch; Chuck Mattern; Brett Ingram; Russ Davis; Thalia Kay; Werner Nitschmann; Mike Wisnosky; Gary Schroeder; Alan Feit; Steve Corcoran; Edwin Wood; Joseph Latigona; Doug Cramer; Lynn Heinold;

Minutes:

The meeting started with **Welcome** by Merrilee Torres followed by introduction by each member. In her introduction Merrilee mentioned that the Office of Data Processing is now called Department of Information Technology and the change will be reflected in all communication. The minutes from March 21, 2003 meeting were approved.

Edwin Wood from Medford Township was nominated for the position of vice-chair of Burlington County's User Group. The nomination was seconded and he was elected the vice-chair.

The first presentation titled "Using GIS to address the proposed NJDEP stormwater rules" was by Seth Van Aken from ESRI. Seth briefly explained the proposed stormwater regulations due in spring 2004. The regulations aim to reduce non-point source pollution. To acquire Tier A permits from NJDEP, the townships need to have a stormwater management plan, adequate long-term operations and maintenance, storm drain labeling and retrofitting, mapping all outfalls, eliminating illicit connections and creating ordinances for waste and litter. Seth outlined the way GIS can be used to meet these requirements. He briefly talked about the ESRI stormwater model that can be used to build a stormdrain database. GIS can also be used for automating field inventory and inspection thereby reducing operation costs, for tracing the source and spread of contaminants, for map production and reporting, as well as public education.

Seth then talked about the ESRI technology - desktop GIS, field GIS and different models, especially the water utilities model. Desktop technology can be used for editing and maintaining the data using different tools like tracing, editing and map production. Field Collection application can be used for updating and editing right in the field and checking it back into the main database.

A demonstration of this technology followed the presentation. Seth used data from Chatham Township and demonstrated the utility network analyst tools like

tracing, hotlinking, editing, exporting data to ArcPad and using the data on ArcPad.

This was followed by a presentation on “What is GPS and How does it Work? Review of Trimble’s Mapping Products” by George Allport Sr. from Keystone Precision Instrument. George started his presentation by explaining what GPS is and how it works. He explained the way signals are transmitted from the satellites to the GPS unit to get coordinates. He then explained the need for differential correction using base files and explained the advantages of radio beacon transmission and Wide Area Augmentation System (WAAS) for real-time differential correction.

George then showed the different Trimble products for GPS. The Pathfinder ProXR with a half-meter accuracy has a backpack unit with a receiver, antenna and a data collection device. Although the old data collection device has a proprietary operating system, the latest devices operate on Windows CE operating system. He then displayed the GeoXT, a handheld GPS receiver with submeter accuracy. It also has a small attachable antenna for better reception of satellite signals especially in case of an obstruction. The GPS Pathfinder pocket, also a small unit has an accuracy of 2-5 meters. The vertical accuracy for all these units is 1.5 to 2 times the horizontal accuracy.

George then demonstrated the Pathfinder Office software. He showed the quick-plan feature in the software for planning data collection based on satellite availability.

After these two presentations, Merrilee announced a few details about the upcoming MAC-URISA conference. The conference will be held at Busch Campus of Rutgers University on March 17th and 18th. Merrilee also announced a Remote Sensing workshop to be held on May 14th. The workshop is open to government agencies only. Merrilee will be sending details about these two events soon.

Prizes for the GIS Day Map Contest were awarded at the end of the meeting.