

AIMS Coordinator meeting minutes

October 9, 2008

Hosted by the City of Shawnee

11110 Johnson Drive

Shawnee, KS 66203

Announcements

Brian Hiller announced that acquisition and QC of 2008 oblique imagery is nearly complete. Similarly, 2008 orthophotography should be available by late October or early November.

Next meeting

November 13, 2008, City of Olathe

Heritage Center at the Mahaffie Farmhouse (Ridgeview & Old Kansas City Rd)

Stormwater Infrastructure Database – Doug Hemsath

With the assistance of the Peridian Group, Shawnee recently completed a five year project to capture the location and basic attributes of the 10,000+ stormwater nodes (manholes, curb inlets, etc.) and conduits in the city. By merging this newly collected data with county stream data they were able to create a “geometric network” (i.e., a system of interconnected lines and points, along with connectivity rules) that enables performing trace operations (e.g., trace upstream from a point, trace downstream from a point, find connections from a point, find path).

In addition, they have related “inspection” data and digital photos to each node. This capability facilitates retrieval of this information from a map interface. Doug spoke of a couple enhancements are currently working on: 1) They are attempting to relate “repair” data to nodes, and 2) They are georeferencing “plan sheets” (images).

ArcPad 7.1 – Doug Hemsath

Doug has been quite impressed with the enhancements that ESRI has made to ArcPad at 7.1. He demonstrated the most significant enhancement, its tight (and efficient) integration with the geodatabase. Domains and related tables are honored when data is checked out from the geodatabase, and updates made in the field to related tables are easily checked back in to the geodatabase.

Internet Maps – Doug Hemsath

Shawnee’s GIS/mapping presence on the city’s web site has evolved from PDFs to GeoPDFs to, most recently, making KMZ files available to Google Earth users.

Understanding that not all users will want to view Shawnee geospatial data via Google Earth, Doug has chosen to leave the PDF maps and GeoPDFs in place (see <http://www.cityofshawnee.org/connect/maps.html>). Many of the PDF files use the multi page feature to link to legends or other images. A GeoPDF must be downloaded as the object data tool will not appear within a browser.

Using ArcMap's "Layer to KML" and "Map to KMZ" tools, Doug has exported a number of Shawnee geospatial datasets (e.g., CIP, Parks, Restaurants) and posted them to the web for use within Google Earth (see http://www.cityofshawnee.org/google_maps.html). When a user clicks on one of these links in a web browser, Google Earth opens, "flies" to Shawnee, and displays the geospatial data (adds it to your Temporary Places folder). If Google Earth is already open when you open a file the map will fly to the extent of the new file. You can add as many files as you would like to a session of Google Earth.

Pavement Management – Doug Hemsath

Doug described Shawnee's experience with pavement management, including a recently abandoned attempt at implementing GBA software. They have decided to move forward with PASER, a method for rating roads developed by the College of Engineering at the University of Wisconsin (see <http://www.engr.wisc.edu/industry/atwork/vol3/road.html>) for more information.

3D Modeling using Google SketchUp – Jamie Roberts

Jamie related his experience using Google SketchUp — a piece of free software that you can use to create, modify and share 3D models — to model a proposed Holiday Inn at I-435 and Midland. Using hardcopy plans, Jamie modeled the proposed building (both exterior and interior) and then was able to export as KMZ and view in Google Earth. He indicated that the learning curve on the software was shortened by the purchase of two relatively inexpensive training DVDs (which he offered for loan).

Terrains – Doug Hemsath

Doug explained how he took lidar data and created a terrain of the city. For improved performance, he divided the city into four separate terrains instead of a single terrain. They are using the terrain to help to visualize flows when examining their stormwater network. To foster broader use of the terrain, Doug discovered that he could publish a PMF file from 3D Analyst and thus make the terrain accessible to the large number of Shawnee staff that use "Shawnee Viewer", an ArcReader application.

Training Certificate Program – Doug Hemsath

Over the years Doug has established a GIS training program for city staff. He has always been concerned with the degree to which persons, once trained, continue to make use of the software and the datasets that he and Jamie continue to build and enhance. To address that concern and to continue to encourage ongoing training, Doug has instituted a more formalized program in which persons who attend training, and pass a final test, obtain a "training certificate". This certificate allows an employee to lay claim to a specific, recognized training accomplishment during their performance evaluation

process. Doug indicated that he currently has a “level 1” program in place and anticipates establishing “level 2” and “level 3” classes in the future.

Time Animation Series – Doug Hemsath

Doug demonstrated an animation of residential building by year. He related that the experience of creating an animation in ArcGIS 9.3 is quite easy.