

AIMS Coordinators Meeting Minutes

May 14, 2009

Host: Overland Park

Location: Overland Park

Announcements

- ESRI will be holding an informational seminar on “Creating Effective Web Maps” on May 21st at Overland Park Marriott. For more information, contact Brian Hiller, ESRI.

Presentations

Doug Johnson

Doug Johnson opened the session by going over Overland Park’s tiered use of ESRI’s ArcGIS Server technology. He broke the discussion into 3 sections.

1. Web ADF Template – He recommended this as easy to implement with the least amount of necessary programming knowledge. It is somewhat “kludgy” and does look like a template so there are some drawbacks when using this piece. They have produced a working, published, site with this method though.
2. Web ADF Custom Development – He showed an application they developed with this method. They are mainly using web services developed against the SOAP API to do the work in this and similar applications.
3. Flex API – Overland Park is following Lenexa’s lead in choosing the Flex API as their choice of the new web development platform from ESRI. He left the rest of this discussion until the end of the hour though.

Tim Fitzgibbons

Tim discussed the work Overland Park has been doing with Neighborhood Indicators. They have been working in this area since 1990 when they first developed their conservation program. They now have 33 neighborhood groups in the city. Tim provides statistics and mapping for the neighborhood website as well as doing analysis on the data. They have developed key indicators for the health of a neighborhood and apply these in their analysis.

1. Property Values
2. Part One Crimes (more serious personal violations)
3. Property Crimes
4. Property Maintenance Violations
5. Absentee Ownership

Tim has setup a model in ArcGIS to combine information from their codes database (Tidemark) and crime data to develop a series of maps showing the key indicator characteristics in the 33 neighborhoods.

So far the maps have been enough for their analysis, but the city has the following goals for the future of the project.

1. Allow the process to be database driven.
2. Perform raster analysis on the data to derive more informative visualizations.
3. Perform statistical examinations of the data to see if any relevant facts are being overlooked.
4. Produce a web dashboard to allow city leaders to easily get to the information.

Steve Brown

Steve presented information on the developing requirement changes related to stream corridor locations in the area. He presented some of the actions Overland Park has done, but also pointed out that these are federal mandates so every city in the county is going to be faced with the same situation. In a nutshell these are ways to preserve natural areas.

The city has instituted an Open Spaces program in cooperation with local developers to get developers to leave natural areas when designing a new area.

Steve has been using the traverse tool in the COGO extension to turn drawings of these Open Spaces into feature classes for use in ArcGIS. He also has plans to scan the original documents into a document management system for access to the authoritative data.

Mark Steger

Mark showed the work he has been doing to produce a 3D representation of the city. He has been using the free version of Google SketchUp to produce 3D buildings in the downtown section of town. He has taken digital photographs and stitched these into the 3D representations to give a façade to the buildings. The study area is roughly east of Metcalf Ave between W 79th St and W 80th St. The plan is to continue developing these structures in between other assignments and to develop the process to include photographs of all sides of the buildings for a realistic appearance.

Dave Fullerton/Mike Ross

Dave and Mike discussed Overland Park's Public Works use of AVL. Snow operations are one of the most important programs for the Public Works Department. Overland Park saw 17 snow events over the 2007-2009 time period.

Mike suggested that there are two ways of interfacing with AVL, building your own system where you have complete control over the interface and the data, or contract with a company that installs hardware and then controls the data for you. Overland Park

was more comfortable with the former and developed their own interface options. They have gone with wireless cards in the vehicles using Sprint's CDMA network. The Sprint cards cost \$18 a month per vehicle and transmit information via UDP packets. They have had a few challenges with the data types from two different vendor's hardware, ComponentTech sends their data in ASCII, but LTI sends their data in hexadecimal. Dave has written a test routine that sends a dummy packet through the system so they can gauge whether the system is functioning correctly. Dave has developed a web application that allows real-time viewing of the AVL information during an event, and a playback application that runs inside ArcMap to allow playback of any route driven during an event.

Doug Johnson

Doug went over Overland Park's use of the Flex API from ESRI. Overland Park is working with a consultant to completely revamp the City's websites. He feels that the Flex API gives them more concise and interactive applications than the older ADF products. In the words of the consultant it provides for "sticky sites" that bring people back again and again. The neighborhood centric application they displayed is designed around a simple interface that displays a map, but doesn't provide bothersome map controls. Doug believes that giving users too many options causes more confusion than the extra functionality is worth.

Dave is using web services extensively in this application as well. He found that you are not guaranteed to get the returns from web services in the same order as you send the requests so he has had to put in some intelligence to adjust for this. He also found a problem using the mouse-in and mouse-out procedures to interact with his grid. What he found was he needed to use the mouse-over procedure and let it be continually active to get the performance he needed.