

## **AIMS Coordinators Meeting Minutes**

Johnson County Administration Building

July 17, 2003

### **Agenda:**

#### **Business Meeting Topics**

|              |                                |
|--------------|--------------------------------|
| 9:00 – 9:10  | Introductions/Announcements    |
| 9:10 – 9:15  | Planimetric/Centerline Updates |
| 9:15 – 9:20  | GIS Day                        |
| 9:15 – 11:00 | ESRI Conference Notes          |

### **Announcements:**

1. Longview and Maple Woods Community Colleges are now offering a GIS Certificate Program. First class is Introduction to GIS to be taught by Tony Perkins. They are working on an Associates degree curriculum. Further information can be found on their website at <http://kcmetro.edu>.

### **Planimetric Update – Shannon Porter**

The planimetric update timeline has been pushed back – there are problems with missing DTM data. Attempts to recover old data with previous vendor (Sanford) have been unsuccessful. M.J. Harden has provided pilot data in the Gardner area that is being QC'd now. Starting in this area, the DEM will be updated to finalize the orthophotography.

### **Centerline Update – Matt Wennstedt**

Nodes at intersections of city boundaries have been created and are now published.

### **GIS Day – Amber Shultz**

Suggested going out to schools in the metro area and using standardized ESRI presentations for conformity. She has a contact who can help put us together with interested teachers.

### **ESRI Conference Notes**

#### **ArcGIS – Keith Shaw**

##### ***Version 8.3***

1. Labeling
  - can set reference scale to make it act like annotation
  - can nest custom tags to develop a label expression
  - able to automatically convert labels to annotation
  - Follow Feature option lets you set global parameters for following features

2. Geocoding
  - ESRI recommends creating a new geodatabase to fix standardization problems
  - .lot files located in the Locator folder are user editable
  - various samples and tools are available to customize geocoding
  - the name of geocoding services will be changed to Address Locators in 9.0
3. Advanced Editing
  - bulk snap command
  - custom snapping agents can be built to perform required operations
  - editor extensions to listen for edit changes and modify geometry automatically
  - component category manager to register components interactively
4. Topology
  - constrained to a feature dataset
  - always adjust geometry with nodes not edges to keep it correct
  - shapefile users can use map topology but can't set it up as file-based
  - 25 topology rules included with 27 more to be shipped in future releases
  - errors can be marked as temporary exceptions and can be skipped while cleaning
5. Scripting
  - everything runs through the new geoprocessing object
  - scripts are essentially standalone
  - doesn't support geometry object so can only modify attributes
  - ESRI recommending Python as the language to use

***Version 9.0*** – Where everything will be fixed!

- Geoprocessing = a tool with input and output – 400+ geoprocessing tools will be available for both layers and feature classes
- Multiple inputs for union and intersect along with input rankings
- Command line that uses Intellisense, AML forms for parameters
- Toolbox dockable inside ArcMap, can perform ArcCatalog tasks within ArcMap as well

***ArcPad***

- can create custom user input forms
- will support attribute but not geometry rules
- remote display controller
- tablet PC converts handwriting to text

***ArcModeler***

- allows users to add geoprocessing tools, data sets, variables etc. to an object model
- able to save models out as scripts

## **ArcGIS Extensions – Matt Wennstedt**

### ***New Extensions***

1. ArcScan – converts rasters to vector format, includes raster preprocessing, raster snapping, tracing and cleanup tools
2. Survey Analyst – storage of survey data in geodatabase, combines GIS technician and surveyor tools
3. MapPlex – high-end cartographic extension for creating quality labeling and text annotation for map generation. Available in 9.0

### ***Existing Extensions***

1. 3D Analyst – ArcGlobe will be available in 9.0, includes visualization from a globe-wide perspective and can accept data on-the-fly without preprocessing
2. Spatial Analyst – no new updates
3. ArcGIS Publisher – converts .mxd files to .pmf files which are instructions about location and symbology of datasets. Used with ArcReader. New features include security settings
4. ArcGIS Reader – read, view and print .pmf files
5. ArcPress – postscript-based RIP for fast and high-quality printing and exporting. Rewriting for 9.0.
6. Image & Stereo Analyst – sold and supported by Leica Geosystems. Available on a 30-day trial period
7. Network Analyst – uses geographic networks to solve problems, will ship at some point after the 9.0 release

## **ArcIMS – Amber Schultz**

1. Web services – 2 services out now, holding off on anything more at this time
2. Next release is 4.2 (or 9.0). Working on stability, quality, rendering tools and speed; error messages will be more explicit
3. .log files – Perl script log analyzer
4. Don't draw > 100 features per layer, SDE group layers – lose attributes, some features too detailed
5. no .NET connector in IMS 9.0
6. Out-of-the-box users of ArcIMS are a lot less satisfied than customizers

## **Land Records/Parcel Management – Travis Smith**

1. Geodatabase Diagrammer in ArcScripts – creates a Visio diagram of your database
2. Relationship classes – on-the-fly joins, referential integrity and rules
3. Subtypes – lightweight feature classes, use liberally to incur less overhead, efficient data storage
4. Parcel data models pushing move to 8.3

5. Editor Extension will appear in 9.1 – saves environment variables, allows batch editing
6. Workflow manager – there is a developers sample that automates editing procedures
7. Shortcut keys added to the editor – look in knowledge base to find these
8. Versioning – reconcile disconnected editing, choose which edits to use

### **Data Models – Jay Heermann**

1. Evolving definition of Enterprise GIS
2. Models standardize data, they are used to build and share geographic information and establish integrity rules – flexible and continually evolving
3. Industry-specific created templates

### **SQL/SDE/Geodatabase – Dan Steen**

#### ***SQL Server***

1. 2003 Server out and available with many performance enhancements on back end
2. SQL Server 64-bit is not for everyone, designed for memory-intensive uses, doesn't yet support ArcSDE
3. Yukon – next version, can run code and debug within SQL Server, mostly back end enhancements
4. Don't know yet if SQL Server will support spatial data types

#### ***ArcSDE***

1. Not great satisfaction from users, focus from ESRI will be tuning for performance, mitigating conflicts and education for 9.0 release
2. Direct vs. standard connections – issues with memory and user conflicts
3. Always index joined columns
4. 3 ways to migrate data – through ArcObjects, ArcSDE, or RDBMS – do not cross-create, delete or update between the three
5. Security – grant, revoke, deny access rules to control what the users see

#### ***Geodatabase***

1. Trace or profile applications to see what is happening behind-the-scenes
2. Majority of performance problems arising from client applications
3. Each piece of GDB will slow down performance of SDE (i.e. topology, versioning, etc.)

## **Other Stuff**

### ***ArcGIS Engine***

1. Desktop programming environment
2. ArcObjects code contains everything to deploy standalone applications, only need one license, licensable runtime
3. Standard Edition – can read all file types except Street Map, and write to shapefile and personal geodatabase
4. Standard controls that consolidate procedures into a coarse grained object, 150 prebuilt commands and tools

### ***ArcGIS Server***

1. Server based geoprocessing accessed with web and desktop clients
2. Multi-user, centralized, main focus is for enterprise application writing
3. Same as Engine except with web controls
4. Relegates ArcIMS to more of a high-end geopublishing tool

### ***Conclusions***

1. Sessions focused on solving user issues and problems with existing products rather than introducing new products
2. with 9.0, migration to a totally re-engineered architecture will be complete (supposedly!)