

# MEETING MINUTES

## DEKALB COUNTY/CITY OF AUBURN GIS COMMITTEE

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**Meeting Date and Time:**  
05-25-99 @ 9:30 a.m.

**Meeting Type:** Special, Full Committee

**Meeting Location:**  
Commissioners Court

**Members Present:**

*DeKalb County:*  
Damerall, Bruce – Technical Resource Coordinator, Data Processing  
Strong, Mark – County Surveyor  
Stump, Brad – Building Commissioner, Plan Commission

*City of Auburn:*  
Bowles, Scott – Information Technology Technical Committee Chair  
Bruns, Steve – City Civil Engineer  
Schweitzer, Chris – Planner, Dept of Building, Planning, and Development

**Others Present:**

Ross, Drew - Project Manager, ASI  
Thomas, Tim - Senior GIS Analyst, ASI

**Meeting Minutes By:**

Chris Schweitzer

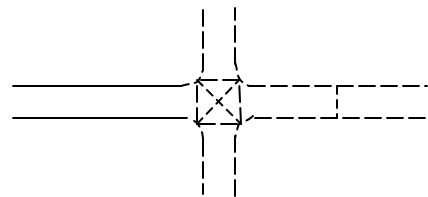
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**Items Discussed**

1. ASI and the County and City conducted the Landbase contract kickoff meeting. This meeting was held to accomplish the following goals:
  - 1.1. Review project scope and schedule
  - 1.2. Discuss preliminary database design
  - 1.3. Discuss quality assurance parameters and methods
  - 1.4. Discuss administrative issues
  - 1.5. Discuss Miscellaneous Issues
    - 1.5.1. City's Existing Control Discrepancies
    - 1.5.2. ASI's IDB product vs MrSID
    - 1.5.3. Software Vendor consultation for datamodel and design
2. *Review of Project Scope and Schedule.* Drew went over the purpose of the meeting and a recap of where the project stood. He handed out a moderately revised project schedule. The control survey was completed, the AT work was about to begin, and the pilot project was to be delivered in August. The project kickoff meeting was the initial effort in planning for the pilot and subsequent data deliverables.
3. *Preliminary Database Design.* The group discussed, by feature, the parameters and general intent of the features captured. Tim stated that this database design would help shape the settings and workflows of feature capture for the ASP (ASI's compilation environment), however, the final database design was not critical at this stage. Regardless of the target data model, ASP would compile the features and build sound topological features, which would be ported out to the destination software environment.

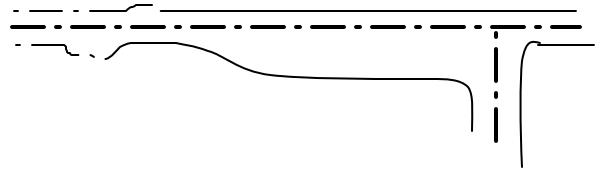
The group discussed and understood that the final design of the database was determined by the intended application of the features. The City and County concurred that, while the data could be delivered in two database designs to fit the differing needs of the County and City, it would be more beneficial from an administrative standpoint to agree on a "vanilla flavor". By doing so, each user could, if needed, shape the data into a form usable for the specific application. This common ground was a goal of the City and County.

- 3.1. *Digital Orthophoto Imagery.* 6" pixel res urban, 12" pixel res rural. City and County to determine file schema and parameters (ie 2 miles by 1 mile, 5000' by 5000', etc). Deliver in two formats - IDB and TIF World or GeoTIF.
- 3.2. *Edge of Pavement.* Options for collecting edge data - edge of pavement; edge of traveled way. The most sensible from both the county and City perspectives was the edge of pavement. The features would be polygonal as defined by asphalt, concrete, or gravel surface. How to treat the polygons at intersections was a question for further review. Street name, surface type, and ID are the basic attribute data to be converted.



- 3.3. *Street Centerline*. The street centerline would be a function of center of traveled way, thus excluding edge of pavement items like accel/decel lanes, islands, and turn lanes. The address model (left/right/from/to and point models) would be built upon this linear network model. Conflation of TIGER data onto the street network was discussed, but the accuracy and usefulness of the TIGER data is questionable. The costs and benefits of building our network from this TIGER data needs to be weighed. Chris shared with ASI and the County that the City of Auburn had hired an intern to compile an accurate address inventory of the entire city during the summer of 1999. This data would be used to construct the address database. Address model, street name, and segment ID are the basic attribute data to be converted.

Post-Meeting Thoughts: It is likely a good idea the City and County build their street centerline network model from the ground up, disregarding the TIGER data, in an effort to mitigate tainting of the data model. If an application arises in which we need to use TIGER info, it is recommended that the TIGER data be used in conduction with our linear network. Lets not taint our investment with inaccuracies.



- 3.4. *Points of Access*. The City is the only body compiling driveway access points. This feature will be captured from edge of pavement/driveway intersection to intersection. Ultimately, the City would also like to capture driveway approaches (polygons), in addition to access points.
- 3.5. *Hydrography*
  - 3.5.1. *Lakes*. The group agreed water bodies greater than 10 acres was by default defined as a lake, unless otherwise noted.
  - 3.5.2. *Ponds*. The group agreed water bodies less than 10 acres was by default defined as a pond, unless otherwise noted.
  - 3.5.3. *Rivers*. The group noted the only River in DeKalb County was the St. Joseph River.
  - 3.5.4. *Streams/Ditches*. The polygonal features would be captured for the edge of bank, and not the surface water edge. The width requirement to be captured as a polygonal feature was 10-12 ft @ 600 negative scale and 20-24 ft @ 1200 scale. When a contiguous feature crosses scale boundaries, ASI will edge match appropriately. Linear centerline features would also be captured with Name and ID attribute. Where polygonal features are not captured, centerlines will be captured.
  - 3.5.5. *Wetlands*. Wetlands will be defined by the photogrammetry process, and not correlated or referenced to any published wetland inventory or their definition. Any wetland 1/3 acre or greater will be captured.
- 3.6. *Building Footprints*. Polygonal. Equal to or greater than 100 sq ft. (Different from contract, but ASI insists, City agrees). Easy enough.
- 3.6.1. Post Meeting Thoughts: Topologically clean? ID?
- 3.7. *Sidewalks*. Polygonal. Easy enough.
- 3.7.1. Post Meeting Thoughts: Topologically clean? ID?
- 3.8. *Visible Utilities*. The City stated a margin existed between the electric service boundaries and the data capture territory. The City and ASI entertained the notion of not capturing utilities outside of the service boundary (thus not owned by Auburn Electric). Further discussion required.
  - 3.8.1. *Hydrants*. Dumb point feature. To be further enhanced during utility conversion.
  - 3.8.2. *Transformer Pads*. Dumb polygon. To be further enhanced during utility conversion.
  - 3.8.3. *Manholes*. Dumb point feature. To be further enhanced during utility conversion.
  - 3.8.4. *Poles*. Dumb features, distinguished by utility and light use. If it is both, classify as utility. To be further enhanced during utility conversion.
- 3.9. *Contours*. Standard delivery - spot elevation, break lines, contours, etc). ASI to deliver DEM to both City and County (means county can generate contours, but not guaranteed ASPRS accuracy).
- 3.10. *Rail Road Centerlines*. Linear features. ID, Name. Dual tracks mean individual linear segments.

- 4. *Quality Assurance (QA/QC)*. The City and County explained the proper workflows for review and QC of the data was being discussed. However, the review methods and criteria were not yet defined, as it was the intention ASI would assist in this area. Drew explained that, because much of data quality is subjective, a predefined understanding is necessary and helpful. ASI has compiled an ASI Rating System to help clients define expectations of "good data". Drew stated he would forward this document.

Chris asked as to the timeline for delivering the City and County's independent coordinates ASI for use during the AT solution. Drew stated that anytime prior to the completion of the AT work would be adequate (July). The City and County noted the need to obtain these points in a timely fashion.

5. *Administrative Issues*.

- 5.1. Project Work Plan. Drew explained that a detailed "Project Work Plan" would be prepared to fully document expectations and outline necessary action items of ASI and the City and County.
  - 5.2. Drew reviewed the need to forward "Notices to Proceed" before and after the pilot project. Acceptance statements should come after every deliverable (survey report; AT report; photo prints; digital orthos; etc).
6. *Miscellaneous Issues/Topics*
- 6.1. *1997 City Control Work vs. 1999 ASI Control Work Discrepancies.* Chris noted that the survey report from ASI indicated that 5 of the 21 1997 GPS points sampled had unacceptable discrepancies, while the remaining points all had consistent error. This meant that over 23 percent of the sampled points were "questionable". This concerned the City as those 5 points degraded the comfort level of using the 1997 GPS work. Chris stated the City believed that the five points were likely questionable due to human error in communications (the city sending the wrong data, or the City or ASI paneling and observing a "wrong" monument. Chris noted that the City would look into possibilities of human error, but requested ASI formulate a recommendation of action if human error did not contribute to the discrepancies. Drew said he would speak with the proper survey contacts with ASI. Chris stated this was a very high priority that the City wanted to remedy ASAP.
  - 6.2. *MrSID (Multi-resolution seamless image database) vs. ASI's IDB (Image Database).* The City and County asked ASI to explain the difference between MrSID and IDB. Drew explained that IDB used a quad-tree database hierarchy to efficiently store and retrieve multiple resolution image data sets. The use of the IDB product was proprietary in nature, however. Brad asked about the City and County's ability to give the IDB technology away with our image data. Drew stated he would investigate.
 

Drew explained that MrSID was a compression technology that resampled images on the fly, and therefore did not store multiple resolution data sets. The compression technology apparently does not cause degraded image quality. Members noted that it appeared the IDB product returned images slightly quicker than MrSID. The verdict is still out and a decision will be made with more info.
  - 6.3. *Software Vendor/ASI Collaboration.* Chris explained the City and County's intention to have the selected software provider collaborate with ASI and the City and County during database design and implementation, as no one would know the data model and software architecture better than those that develop it. Chris emphasized this would be especially important if the City and County selected Arc/Info version 8 with the new GeoObject data model. ASI concurred.
  - 6.4. Drew asked what media the data should be delivered on. The group concurred compact disc.
  - 6.5. The group inquired about feature capture rates for all said features. ASI to forward feature capture rates, by scale, to City and County.
7. *Post-Meeting Thoughts:*
- 7.1. Need to discuss Metadata standards with ASI.
  - 7.2. UPDATE: Discussions with ESRI indicate that ASI should deliver ALL data in Coverage format, as the City can then simply suck the data into the GeoDatabase on site. This allows the data to be cleanly delivered in tiles and mitigates unneeded confusion. ESRI still to participate in database design and assist City/County.

#### **Action Items**

1. City of Auburn Action Items:
  - 1.1. Deliver description of Electric Utility service area.
  - 1.2. Discuss amending contract (possibly, per ASI) to include data entry of Address info collected during summer of 1999.
2. County Action Items:
3. ASI Action Items:
  - 3.1. Include flight map with contact prints deliverable.
  - 3.2. Investigate the ability for clients to give away the IDB technology with image data.
  - 3.3. Forward feature capture rates, by scale, to City and County.
  - 3.4. ASI to develop preliminary database design to facilitate further discussion.

#### **Upcoming Meetings**

- 06-03-99 Regular Meeting @ Commissioners Court @ 1:00.