

Meeting Summary
MetroGIS Data Users Forum
June 3, 1998

Topic: The Lawrence Group Street Centerlines and TLG Related Data Sets

1. Call to order

Coordinating Committee Chairperson Brad Henry welcomed users at 8:30 a.m. The meeting was held at the Earle Brown Conference Center on the U of M St. Paul campus.

Data Users: David Arbeit (LMIC), Keith Ehrlichman (Brooklyn Park), Becky Blue (SEH), Dan Carlson (SHE), David Claypool (Ramsey County), David Windle (Roseville), Will Craig (U of M - CURA), Nancy Read (Mosquito Control), Kristen Funk (Center for Energy and Environment), Jeremy Johnson (Anoka County), Dick Carlson (TIES), Steve Hoiium and Steve Wu (Minneapolis), Larry Nybeck and John Baer (Washington County), Bruce Dreier (Scott County), Tim Ogg BWSR), Bart Richardson (MnDNR), Jan Vanderwall (Roseville School District), Rick Gelbmann (Metropolitan Council), and Wayne Becker (SEH).

Meeting Sponsors/Staff: Brad Henry (Minneapolis); Randall Johnson (MetroGIS); Larry Charboneau, Jim Maxwell, John Carpenter and Jason Wolf (The Lawrence Group); and Craig Skone (Metropolitan Council).

2. Information Items

2a. Overview Uses of Street Centerline Data

Jim Maxwell, Vice President with The Lawrence Group, briefly reviewed the centerline agreement to provide the 9 metro-region counties, and the spatial accuracy standards used to create the database. Maxwell's presentation focused on the following possible uses for the centerline data:

- Address matching as used for: Incident Mapping, Criteria Mapping, Crime analysis, Planning, Marketing, and Demographic analysis.
- Route Planning for emergency dispatch and response, delivery service and public transit.
- Roadway management relational sets for use in traffic metering, pavement management, plowing/sweeping.
- Map Creation

2b. Demonstration of Current Uses

Rick Gelbmann, Metropolitan Council GIS Coordinator, showed a newly developed address matching application designed to perform standardized tasks and allow individuals to address match at their convenience. The application was developed in ArcView for non-GIS and non-technical users and can match addresses to TLG centerlines, zip+4, or latitude longitude. At this point Mr. Gelbmann introduced Craig Skone, the application developer, to demonstrate application functionality and ease of use.

Jan Vanderwall, Transportation Coordinator Roseville Area Schools and WATS, demonstrated a version of EDULOG software which automates bus routes for student pickups and automates student enrollment boundary planning. The software also displays route, student, and stop information. By implementing the program, route-planning time has been reduced from 6 months when planning was done by hand on paper maps, to 2 weeks with the current setup. Although the costs are high, \$25,000 for Roseville and up to \$1million for Minneapolis, the Roseville school district projects savings over \$100,000 on its \$2.1 million budget.

Keith Ehrlichman, Engineer/GIS Coordinator, City of Brooklyn Park. This presentation focused on Crime analysis application of address mapping and graphically reflected as neighborhood crime patterns. Linking these locations with demographic factors, such as neighborhood household turnover, shows additional patterns. Discussion ensued on geocoding issues involved with ArcView. This included .cls file alterations to specific street naming patterns and conventions in the community as well as the feasibility of global .cls conventions.

Also discussed during this presentation were issues revolving around pavement management as it pertains to street centerlines. In particular, the need for specific software functionality to efficiently address the synchronization of pavement type changes with the centerline segments.

3. Break

4. Identify Desired Enhancements/ Improvements

Roundtable discussion ensued amongst all participants – experienced users of the data set as well as those attending for educational purposes. Each individual was given the chance to discuss one or more issues related to the street centerline data set. The combined list of ideas is as follows:

Suggestions, Questions, Issues, Concerns, Ideas, etc.

1. Unique IDs on points of interest or, if unique, could the point ID's remain consistent with each release.
2. What are possibilities with street annotation? Could TLG provide something or are there any good automated alternatives? What scale dependant issues are there?
3. Provide a field for Interstate, Highway, County Road "Numbers" - to make populating of sign symbology easier.
4. Comment (help) page on Metro GIS web site
 - a. projection files- from UTM to various county coordinates (.prj)
 - b. street center line data newsletter
5. Alias table for address matching to alternate names or points of interest; e.g., IDS Center.
6. Steps to clip areas out of original data set
 - a. cuts of data- i.e. municipality bounds
 - b. possible script
7. Is the feature class definition breakdown sufficient?
8. Positional accuracy issues. What data sets to use for verification – especially for counties not yet having quality digital parcel base data.
9. Could a field, or fields, be added to reference the sources of line segments and/or associated attribute information.
10. Possibly provide the data on the ftp site by county as well as region-wide. Would a buffered county work?
11. Number of lanes on multi lane streets as an item
12. Can this data be provided or made available on the ftp site in formats other than ArcInfo export format. Or, if not, could the ArcInfo format be defined for database developers or programmers.
13. Possibility of providing TLG with good address data sets (as some organizations are currently doing) to allow for quality address matching in order to assist in improving the centerline set where necessary. This may also assist with identifying problems with existing database addresses at various organizations.
14. Do programs exist that may assist with standardizing existing address databases to improve address matching efforts against the TLG street centerline data set?
15. Provide a site on the Web or ftp site that users could provide amls, avenue scripts, extensions, helpful hints, etc. for public use. This would help eliminate a lot of duplication of effort – the core idea behind MetroGIS.

5. Closing

Brad Henry closed the meeting at 11:25 a.m.

Additional Feedback

4x6 note cards were passed out for additional comments, these were collected and reflected several ideas. These are summarized below followed by the number of users (if more than one) desiring the enhancements.

Addition of adjacent Wisconsin centerlines
Annotation point coverage to aid in map creation (2)
Add missing attributes to segments
Address all county roads and state highways with theoretical ranges
Field that identifies the level of accuracy of the source data
Alias table for address matching (4)
Field to identify number of lanes on each centerline - ability to calculate lane mileage (2)
E-mail users when new features or items of interest are available
Describe a process to clip out areas, or script to do this
Positional accuracy to match 1997 aerial flight
Indexing for use with MapInfo geocoding
Like areas and points of interest
What requirements may there be for integration with Trapeze/PASS translation software?
Expand street type codes to a further level of detail
Can data be provided in a format that is not dependent on ArcView/ArcInfo?

Actions

MetroGIS and The Lawrence Group will review these issues in order to develop answers to questions as well as to make decisions on all ideas presented. Some of the ideas may be able to be incorporated in the near term, others over time, and other ideas are more user driven or may require additional discussion. Although not all questions and ideas will be resolved at the same time, MetroGIS and TLG would like to provide feedback to users as the actions regarding these issues are resolved or achieved.

Prepared by:

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