



MetroGIS Addressing Work Group Meeting Minutes

Monday, February 23, 2015, 1pm-3 pm

Metro Counties Government Center, 2099 University Avenue, St Paul

[Draft Minutes]

Attendees:

Tanya Mayer, Metropolitan Council

Joe Sapletal, Dakota County

Pete Henschel, Carver County

Gordy Chinander, Metropolitan Emergency Services Board

Adam Iten, MN.IT Services

John Hoshal, MnGeo

Marcia Broman, Consultant to Metropolitan Emergency Services Board

Mark Kotz, Metropolitan Council (work group chair)

Dave Brandt, Washington County

Joel Koepp, City of Roseville

Matt Mclees, Scott County

Matt Koukol, Ramsey County

Jon Hoekenga, Metropolitan Council

Nancy Read, Metropolitan Mosquito Control District

Staff:

Geoff Maas, MetroGIS Coordinator

Agenda Item 1) Welcome & Introductions

Chair Kotz welcomed the members, and each participant introduced themselves.

Agenda Item 2) Approval of Agenda

Meeting agenda unanimously approved by the group;

Agenda Item 3) A Review of our Vision – Where are we now?

Chair Kotz gave a short presentation on the original vision of what was to be achieved by the Address Points Workgroup, the groups initial agreed upon definition of address points, revisited the initial vision of what was desired for the data and a brief overview of the current status of the address point dataset.

- Point location of every official address
- Data would come from the authoritative source
- Made up to date daily (eventually)
- Be available region-wide in a standardized format
- Freely available
- Sustainable solution (continual operation and availability)

Kotz reiterated the original roles of the various participants (city, county, regional and state)

Cities are generally in the role of the Official Address Authority

Having one “official” source for an address ensures it is authoritative, accurate and updates will be made in a timely manner;

County governments serve as partners with the cities, in some circumstances acting as Address Authority, but also to aggregate points from their cities and provide technical support/coordination as needed.

Regional and State partners serve in the role of coordination, aggregation and distribution with the Metropolitan Council funding the development and maintenance of the Address Point Editor Tool Application.

Current Status: At present, three (3) of the Metro Counties have assembled and published their address point data; these are Carver, Dakota and Ramsey counties. Region-side there are 70 cities with data, 31 organizations have contributed edits. Version 2.0 of the Address Point Editing Tool is in use in three contributing counties, with Version 3.0 of the tool currently being tested; to be available in mid-March. Additionally, the Metropolitan Council has been working with the DNR on improving the synchronization tool development, have been exploring the GDRS resources for its potential to be used to aggregate address point data.

Agenda Item 4) Maximizing Appropriate Use of the Data – Communicating Completeness

Jon Hoekenga, GIS Systems Administrator with the Metropolitan Council led the group through a brief presentation on measures of completeness exhibited by the address point data currently coming in from the city authorities and county aggregators.

He listed there was a strong need for being able to capture the number of individual units on each parcel, and conceded that this is challenging but remains a critical goal for the project.

As the currently available data from Carver, Dakota and Ramsey aggregation efforts reflects a mix of parcel centroids, quasi-complete and complete (authoritative) address points, there is the possibility to add a domain to the data to communicate how complete a given address point is.

Hoekenga presented an option of having a simple Yes/No option available, with:

Yes meaning: *“Address point represents a single address”*

No meaning *“Address point may represent multiple addresses within a parcel”*

These would help the data user make an informed decision about their use of the data points.

Hoekenga encouraged the group to comment on this proposed domain and its application and make suggestions.

N. Read: If we are going to carry a yes/no, wouldn't 'unknown' be the third option?

M. Kotz: The unknown category would likely act as a default; the main goal of this would be to letting the user know if the address point is an authoritative point and meets the full criteria and what that means.

M. Koukol: This would be better way to do it, most users are simply not going to go to the metadata and look up the condition of the point on a city by city basis.

J. Koepp: So this is essentially a kind of 'health' indicator of the point; we could have some kind of color code to represent the condition of the point, perhaps.

M. Kotz: We could potentially say something for the entire city, such as 'this city's data is in category 'x' with over 90% of its points authoritative, this city is in the next category with 80-90, and so on.

M. Koukol: Best we can do know at present is to indicate that 'yes, this city is actively adding good points to the system'.

M. Kotz: We can get to a point to where, they've hit a certain threshold of achievement. With the domains we Give the address authority, clear descriptions an dlet them pick the ones that represents the work they do.

N. Read: Are there other sources we can compare them to?

P. Henschel: We can, and do, compare them against the data we acquire from utilities.

A. Iten: For 911, we still can grab land line 911 data, while that is in decline we still could compare it against that.

M. Koukol: We geocode MSAG (Master Street Address Guide) addresses where there is supposed to be an address present and they will effectively geocode, but they might not have all the attributes.

Action Item:

M. Kotz. We appear to have the need to **create some clear categories for cities to self-report on the condition of their data.**

J. Koepp: If possible, the number of choices (for these categories) needs to be small, but clear and meaningful.

N. Read: Would this [category] be an attribute on individual records?

M. Kotz: There is the potential that every point is a unique address and would carry the category designation.

M. Koukol: We would likely not be able to use the existing positional accuracy domain already available in the standard.

Agenda Item 5) Increasing Ease of Use – Opportunities for Domains

J. Hoekenga: We'd like to get some additional feedback on the potential addition of new domains to make the data more usable.

Meeting the National address standard which specifies mixed case usage, at present, inputs to the existing data are not consistent or standardized, this makes analysis tasks difficult. Expanding the use of domains in the data would help streamline this and make the data more useful to the end user.

For example, in our current [MetroGIS] standard, we have a simple Yes/No for the 'Mail able' category, but we receive a range of inputs such as No, NO, Unknown, UNKNOWN, y, Y, Yes, YES, YEST, and so on. This range of variations makes it difficult to so efficient analysis of the data.

We should explore creating domains to make data entry easy, comply with our standard. Some of these criteria reference the national standard and some don't, there are around 15 fields that would benefit from us defining and using a domain.

M Kotz: Regarding domains, some domains are implied, but not specifically developed in our standard or the national standard. Up to now, we have not had any formal validation process, so updating the standard with domains would make things work better.

Action Item:

We should go through the list of attributes in our existing standard and compile a list of the fields with would benefit from an established domain and values to populate that domain. Also we should be working through the issues/identifying a best practice for all caps vs. mixed case (USPS Standard and federal standard do not clearly align on this issue).

M. Koukol: With the Metro Regional Centerline Collaborative street centerline project, we have a domain set for street types and it is certainly possible to automate into all caps if data is put in originally in mixed case.

N. Read: Is there an acceptable list of municipal names that is being used?

M. Kotz: We are presently using the ID number and lookup table for city name.

D. Brandt: One of our challenges is that our tax system software is automatically populating the city names, we [in GIS] can't control that input.

N. Read: At present the township names are posing a real challenge to work with.

M. Kotz: The unique ID number solution to represent the city or township name could be generated at the regional aggregator level (counties or cities may want an official way to enter the information)

<<< *brief group discussion of variations of city names, including official name being City of Roseville or just Roseville, spelling out "St. Louis Park" vs. "Saint Louis Park", St. Paul vs. Saint Paul, etc. >>>*

J. Hoshal: the Secretary of State's office should have the record of the official names of each city.

Action Item:

Develop a solution for automating the correct city/township names and incorporating approved domains for street types (suffixes), including a look at how applicable federal standards handle street types.

Agenda Item 6) Updates to Data Specifications

M. Kotz: We have not visited the data specifications in some time and I would like to remove wording that doesn't fit with current progress and what we are working on including wording about the draft national standard. I proposed removing everything that has been struck-through in red:

MetroGIS Address Points Database Specifications

Latest version approved by MetroGIS Address Workgroup: ~~06/10/2010~~ 2/23/15

Address Points Database Standards

~~In February 2010 a new draft of the national standard was published and submitted to the Federal Geographic Data Committee as a proposed national standard.~~

~~<http://www.unisa.org/about/initiatives/addressstandard>. The FGDC has announced a formal public review period for this standard. The intention of the MetroGIS Address Workgroup is to review these specifications for possible modifications when and if a final national address data standard is approved.~~

~~See MetroGIS comments on the draft national standard~~

~~http://www.mngeo.state.mn.us/committee/standards/address/address_standard.html~~

~~The database format for the MetroGIS Address Points Dataset is derived primarily from the Content portion of the [United States Thoroughfare, Landmark, and Postal Address Data Standard](#). Some additional data elements have been added to satisfy data needs at the local level. November 2005 published draft national standard and the February 2010 published draft national standard, as well as the combined thought and experience of the MetroGIS Address Workgroup. In 2006 the Workgroup conducted a data pilot project to test a preliminary set of data specifications with real data in cities and counties. The results of that pilot suggested some modest changes to the data specifications, mainly with optional items, and also provided some comments on suggested changes and clarifications to the draft national standard. The specifications were modified again after the publishing of the 2010 draft national standard.~~

~~At this time, the MetroGIS specifications focus on the ability to encode address point data into a fairly simple, flat database file format (e.g. shapefile). An associated XML schema is under development. See Appendix B for a draft XML formatting template.~~

G. Chinander: Regarding the use of XML, NENA is pushing using XML for NextGen911.

M. Kotz: We can leave the XML as an appendix until that is formally decided by NENA; many users at present aren't using it in the way we anticipated it would be used.

Latitude: Numeric, width = double

2.4.2.4 Address Longitude: *The latitude of the address location, in decimal degrees. Example: 33.77603207*

~~What datum is assumed for the lat/lon? NAD83 or WGS84? This is yet to be determined.~~

~~Note: USNG coordinates will be considered for inclusion in a later version of these specifications.~~

M. Kotz: Also, I am proposing we clean up the language about latitude/longitude and datum and I am proposing we can remove the USNG coordinate statement as well as it is, at present, not one of our considerations.

G. Chinander: Regarding coordinate system, NENA recommends the use of WGS84 (World Geodetic System 1984)

<< *Group assent that WGS84 is a suitable solution*>>

J. Sapletal: I wouldn't dismiss this; we're [Dakota County GIS] working pretty well with numerous partners with the USNG material.

M. Kotz: I don't disagree; we can revisit it and add in USNG coordinates in a later version of the specifications.

G. Chinander: There are a number of extra fields from NENA data model as well, these include:

- Country
- Emergency Service Number
- MSAG Community Name
- Postal Community Name
- Also, our field widths will need to meet those in NENA (when it is finalized)

D. Brandt: I don't want to overwhelm our municipalities with too many attributes.

M. Koukol: If these [NENA features] are available in code form, we should look to keep in code form in our address data.

N. Read: How do the postal community attributes work? I would assume that the US Postal Service would have the data? And are they using the USPS place name or a [numerical] code?

M. Kotz: All these are good comments, once NENA standard is finalized and available we can revisit ours to align it.

Action Items:

- **Update Existing Address Standard to include WGS84.**
- **Determine if USPS maintains a type of numerical code for representing postal communities.**

Agenda Item 7) Help with Meeting the Specifications – Do We Want a Validation Tool?

J. Hoekenga: At present, with the data coming in, we [Metropolitan Council] have been gathering the data and checking it manually. However, we'd like to develop a Python script to compare against established domains. We have a validation tool like this that we are using for parcels now and we're interested in something like it for address points.

M. Kotz: It might be more efficient, we could avoid numerous rechecking if cities or county-aggregators had something like this to run.

J. Hoekenga: Our question is to the Counties, if we created something like this, would you be willing to make use of it?

J. Sapletal: I'd recommend you check with Todd Lusk in Dakota County, he might be already doing this and may have already created something

Action Item:

J. Hoekenga to contact T. Lusk (Dakota Co.) and determine if they have a validation tool in production or under development that could be proto-typed or expanded.

Agenda Item 8) Address Point Aggregation Update

J. Hoekenga: We had a separate meeting focused specifically on the aggregation of the points in 2014, working to agree to a way to bring everything together, looking at the readiness and development of the GDRS and the ability to aggregate up to the Commons eventually. We know the tools are being developed at the state, and if these are the way we want to go (using state tools and state conversion) go beyond the metro region, cooperative aggregation strategy from metro usable to the state as well.

Our next step will be to re-convene the aggregation work group and make some determination of the best way to move forward.

Action Item:

When needed, re-convene aggregation group to decide on a way forward, if a mid-term or intermediate step is needed before full commitment to the GDRS is needed.

A. Iten: If this is working well for metro so far, it would probably work well for Greater Minnesota as well. We will need to perform some kind of high-level quality assurance testing when the [locally-created address point] data comes in, and then another quality-assurance check on it so it is validated before it reaches the 911 systems that will use it.

M. Kotz: Is there at present any automating of data occurring at MnGeo?

J. Hoshal: Not that I'm aware of, none at present; this may come to the fore with the road centerline work eventually.

J. Sapletal: One last point with the address data: Open Addresses (<http://openaddresses.io/>) is pulling the data from our sites and aggregating it nationally and internationally;

Agenda Item 9) Web Editing Tool Version 3.0 Update and Demo

T. Mayer: The Metropolitan Council has been managing the contract for the third version of the Address Editor tool; we had collected the 'wish list' of desired attributes from those using Version 2.0. The project team included the following participants:

Dakota County:

- Joe Sapletal
- Todd Lusk

North Point Geographic Solutions:

- Jesse Adams
- Caroline Adams
- Kris Johnson

Carver County:

- Nate Christ
- Pete Henschel

Hennepin County:

- Eric Hanson
- Doug Breedon
- Ann Houghton

MESB

MetroGIS

- Tanya Mayer

This team decided upon seven (7) functional requirements for the Version 3.0 of the tool, these included:

1. Support Address-Change report building
2. Add functionality to allow the Add New Points tool to stay active for all multiple point add situations
3. Add functionality to allow for the ability to page through item attributes of multiple selected points
4. Modify user interface with a larger comments field and make scrollable or pop-out window
5. Support checks for duplicate addresses
6. Add a calculate 'hypothetical address' tool
7. Add functionality to allow for proposed address point selection, map display and report building

Joe Sapletal (Dakota County) gave a PowerPoint presentation detailing the look, feel and function of each of the newly added seven (7) requirements added to Version 3.0 of the Editor Tool. This presentation is available as an appendix to these notes.

T. Mayer: Version 3.0 still testing at the moment. Staff at both Hennepin County and Carver County Hen and Carver have tested it, we are working to resolve all final issues and the Metropolitan Council will be

closing out the contract with North Point Geographics in mid-March (2015), we anticipate being able to make the Version 3.0 editor available then.

M. Koukol: Do they anticipate problems with ArcMap 10.3?

J. Sapletal: We have tested it already, seems to be working fine.

T. Mayer: We did encounter an issue with Internet Explorer 11, but North Point was able to resolve that pretty quickly.

J. Sapletal: Also we know a number of users will be transitioning from http to https; we haven't encountered any issues with that change either.

A. Iten: Can the State of Minnesota get access to this tool?

T. Mayer: Yes, our contract is set up so all governments in Minnesota can have access to this tool, however, North Point Geographics retains the right to sell the tool outside of Minnesota.

J. Sapletal: We will want to start thinking how to get things to be mobile friendly as well; the City of Burnsville is out verifying addresses using mobile devices, we (Dakota County) needed to set up a separate interest for their collection.

N. Read: One of our earlier points with the MetroGIS geocoder was that we'd eventually run it on regional address points, currently it is still running on parcel [centroid] points, and it is still getting around 1,000 hits a week, I am wondering what the group's thoughts are on that? I know the airport [Metropolitan Airports Commission] is thinking of using it, it remains a good regional resource, is anyone else running into the need for a free regional geocoder?

M. Koukol: Certainly possible to add it in as part of a higher-level compositor.

N. Read: Related to that as well, the TLG (NCompass) data has kind of fallen by the wayside of late, I know that contract is ending this year, but we need a solution like it in our geocoder.

M. Kotz: At the Council, we are using parcel points internally plus whatever we have available, we had to make one specifically for our Metro Transit trip planner application, and we tuned it specifically for transit landmarks and transit users.

J. Sapletal: At Dakota County, we run through nineteen (19) of our own data layers of Dakota layer and then against the NCompass data at the end;

J. Hoshal: At the state as well, we are using the NCompass data along with parcel points, we are using an Arc engine for that in a nine (9) tier system, with several databases in use.

Agenda Item 10) Review Action Items

Action Item:

Create some clear categories for cities to self-report on the condition of their data.

Action Item:

We should go through the list of attributes in our existing standard and compile a list of the fields with would benefit from an established domain and values to populate that domain. Also we should be working through the issues/identifying a best practice for all caps vs. mixed case (USPS Standard and federal standard do not clearly align on this issue).

Action Item:

Develop a solution for automating the correct city/township names and incorporating approved domains for street types (suffixes), including a look at how applicable federal standards handle street types.

Action Items:

- *Update Existing Address Standard to include WGS84 (approved coordinate system)*
- *Confirm and perform suggested text edits to existing standard as advanced by M. Kotz (pp. 5-6)*
- *Determine if USPS maintains a type of numerical code for representing postal communities.*

Action Item:

J. Hoekenga to contact T. Lusk (Dakota Co.) and determine if they have a validation tool in production or under development that could be proto-typed or expanded.

Action Item:

When needed, re-convene aggregation group to decide on a way forward, if a mid-term or intermediate aggregation step is needed before full commitment to the GDRS is needed.

Agenda Item 11) Adjournment

Chair Kotz adjourned the meeting at 2:15 pm