

## **Excerpt from the April 20, 2005 MetroGIS Policy Board Meeting Summary:**

### **c) Vision - Regional Occupiable Units Data Solution**

Read explained that the proposed vision calls for the creation of a regional database with a data point for every occupiable unit – residential and non-residential – that exists in the entire seven county area. She also noted that the utility representative to the Coordinating Committee expressed interest, on behalf of the broader utility community, in an opportunity to participate in the discussions to develop the detailed implementation strategies.

Read commented that most organizations support multiple address databases that do not always talk to one another and many times have different, if not conflicting, information for the same address. Another reason for proposing creation of this database, she explained, is that there is a widespread business need for information related to occupiable units, in particular by the E911 community, and that the proposed regional solution offers the only means to effectively manage and access the desired information. Read concluded her remarks by stating that the City of St. Paul has completed Phase I of its STAMP project, which provides useful insight into the obstacles that will have to be overcome to achieve the proposed regional vision, and introduced Mark Kotz, member of the MetroGIS Staff Support Team and lead staff to this visioning effort, to explain the vision's key objectives.

Kotz began his presentation by illustrating differences between street centerline and parcel data and explaining why neither of those data types provides the additional level of detail desired and which is possible to acquire only via the proposed regional occupiable unit database. He then summarized the process through which the proposed vision was developed, emphasized that local procedures for assignment of street names and unit numbers are NOT within the scope of this project, summarized the justification for pursuing the proposed vision, and then explained the following key objectives of the proposed vision (refer to the slides at [http://www.metrogis.org/teams/pb/meetings/05\\_0426/kotz.pdf](http://www.metrogis.org/teams/pb/meetings/05_0426/kotz.pdf) for more information):

- Define a single official source for address data for each distinct area throughout the Metro Area.
- Provide multiple avenues to input address data to the regional solution at the time produced by local officials and accept varying levels of spatial accuracy provided the method of data creation is documented.
- Implement a data transfer standard - a key to success.
- Synchronize the proposed regional solution with the 911 community's Master Street Address Guide (MSAG)
- Clearly define appropriate organizational roles and responsibilities for all participants, including the regional custodian, which the Metropolitan 911 Board has expressed interest in assuming with the understanding that a solution to a 911-compatible street centerline dataset (Item 5b) is a higher priority.
- Implement an outreach plan to ensure timely communication with local producers of address data.

Chinander commented that the ability to attach attribute (descriptor) information at the unit level would be greatly beneficial to the E911 community, noting that the availability of AEDs (Automated Electronic Defibrillators), as well as the existence of and type of any hazardous materials, could be maintained as a component of the information associated with each unit and, thus, provide valuable and potentially lifesaving information for E911 dispatchers in the event a call is received for an emergency involving that unit. Additionally, landmark, alias, and common building names for particular addresses could also be identified, which could improve routing information and related applications.

Member Schneider affirmed his earlier comment for the need to regularly revisit communities that initially elect to opt out (of the opportunity to participate as a primary producer of address data) to give them an opportunity to regularly reevaluate their decision in the event their circumstances change.

The presenters were thanked for their work on the proposed vision and for their enthusiasm.



**TO:** Policy Board  
**FROM:** Coordinating Committee  
Chairperson: Nancy Read, Metropolitan Mosquito Control District  
Staff Contacts: Mark Kotz (651-602-1644) and Gordon Chinander (651-603-0054)  
**SUBJECT:** Vision - Regional Occupiable Units Data Solution  
**DATE:** April 8, 2005  
(For Apr. 20 Meeting)

### **INTRODUCTION**

Policy Board comment is requested regarding a vision endorsed by the Coordinating Committee to pursue a regional point dataset comprising all occupiable units (residential and non-residential) within the seven-county Metropolitan Area.

The proposed project scope involves defining and agreeing on a regional strategy to capture and maintain “situs” (rather than mailing) addresses for all occupiable units (both residential and non-residential) and any other officially designated addresses, whereby the data can readily be shared among government interests that serve the seven-county, Minneapolis-St. Paul region. The ultimate goal of this solution is to minimize duplication of effort and maximize consistency of address data needed by MetroGIS stakeholders. A special effort has been made to collaborate during the visioning effort with those responsible for supporting the address needs of Public Safety Answering Points (PSAPs), which dispatch emergency responders serving the seven county Metro Area.

### **PARTNERSHIP WITH METROPOLITAN 911 BOARD**

The Metropolitan 911 Board is acknowledged as an organization with a significant future need for this regional solution, given the importance to the daily operations of PSAPs. “Future” means following the realization of an E911-compliant street centerline solution (see Agenda Item 5b). As such, the proposed vision is currently being vetted with the Metropolitan 911 Board and emergency responders to ensure they are satisfied with the general proposal before work on detailed strategies is initiated. The Metropolitan 911 Executive Committee is scheduled to comment on this vision on May 4.

Assuming that both the Metropolitan 911 Board and the MetroGIS Policy Board conclude that the proposed vision warrants further consideration, detailed strategies to achieve the technical and organization components will be pursued in coordination with related work necessary to achieve an E911-compliant street centerline dataset.

### **COORDINATING COMMITTEE ACTION**

At its March 30, 2005 meeting, the Coordinating Committee unanimously approved the conclusion and recommendation of its Address Workgroup’s that a regional occupiable units dataset for the seven-county Metropolitan Area as outlined herein is warranted and that it should be collaboratively created and maintained, on the basis that:

1. Nearly all government organizations need addresses for occupiable units to carry out their business functions,
2. Multiple uncoordinated address-related procedures and authorities are resulting in costly duplication of effort and perpetuation of data discrepancies, and
3. A collaborative effort is warranted to achieved desired efficiency and accuracy improvements:

Refer to the Reference Section for a summary of the Address Workgroup’s efforts.

### **COMPONENTS OF PROPOSED VISION – FOR A REGIONAL OCCUPIABLE UNITS DATA SOLUTION**

The following concepts and decision rules should guide next steps to define technical and organizational components necessary to achieve the vision (*not intended to be listed in any order of priority. The numbering is provided only to facilitate comment*):

1. The concept of a “single official” authority for address data for any given jurisdiction is desirable to all government entities. Its existence would reduce the creation of inaccurate or inconsistent addresses. It would also streamline the process of mitigating anomalies, as they arise.

2. Local procedures and rules pertaining to naming of streets and assignment of address numbers must be recognized as they exist and are not within the scope of the proposed regional solution. The regional solution would begin with the data created by those many and varied processes. (*Note: This acknowledgement does not apply to the format in which the data are maintained (database) but to the decisions about actual naming of names and assigning of address numbers via established local processes.*)
3. The preliminary conceptual regional database design would include (but is not limited to) the following entities for each occupiable unit within the seven county area:
  - ✓ The unit address components
  - ✓ The point geography
  - ✓ Some mechanism to relate the point to parcel data
  - ✓ Some categorization of the point type to indicate how it relates to the parcel (e.g. single structure on one parcel, one of many buildings on a parcel, an apartment unit or office suite, etc.)
4. “Occupiable unit” has been preliminarily defined by the Workgroup as any residential or non-residential occupiable space for which a government entity issues a permit to create. Office spaces that have movable walls and which do not require a permit to reconfigure will not be included in this recommendation. Such matters can be considered in the future if practical. As the project design evolves, this working definition is expected to become more specific.
5. The proposed vision for the initial regional solution assumes multiple avenues for creating, maintaining and storing address point data, and providing it to a regional dataset. For example, some individual cities would maintain the data locally in their custom database and provide updates to the regional dataset periodically. Other larger government units (PSAPs, or Counties) might also maintain data for multiple cities and townships and provide periodic updates to the regional dataset.
6. A standardized address data transfer format will be needed to implement this solution. Such a standard may have implications for local address database formats. A pilot study(ies) is recommended to frame any compatibility issues and identify viable solutions. Related work currently in progress by the Ramsey County GIS User Group should be supported and closely tracked.
7. Once desired custodial roles and responsibilities are defined, organizational candidates with matching internal business needs and abilities will be contacted to determine their interest in participating in the management of the proposed occupiable units point dataset. An agreement-in-principle on broad custodial responsibilities must be reached by key entities before a final recommendation can be considered by the Policy Board.
8. The vision includes the potential for an Internet-based application that would allow cities, which do not have their own GIS capability, to maintain such a dataset (geographic features and related address data) via this application. The data itself could reside with one or more aggregators of data. (The workgroup believes the technology, such as Web Feature Services, is stable enough to consider this as a serious option.)
9. The final proposal must include a process, acceptable to affected parties, to make sure that the address ranges of the Master Street Addressing Guide (MSAG) database remain consistent with the individual addresses of the proposed address point dataset.
10. It is desirable to be able to relate the subject point address data to street centerline data.
11. Privacy and access issues must be appropriately resolved.
12. The final proposal needs to recommend accuracy guidelines and procedures as regional best practices. A variety of positional accuracies may be acceptable if they are clearly documented.
13. The proposed solution needs to have an outreach component to inform all affected and relevant interests about the benefits of the solution and grow participation. This effort should also describe how to report anomalies as they are identified.

#### **RECOMMENDATION**

No action is requested by the Policy Board. Comment is, however, encouraged regarding any aspect(s) of the vision that raises doubts from a policy perspective.

## REFERENCE SECTION

### BACKGROUND ON WORKGROUP

1. The need for addresses of all occupiable units was established in 1996 as a priority common information need, a need that was corroborated by the Phase I Socioeconomic and the Existing Land Use Workgroups. Creation of a Phase II Socioeconomic Workgroup is on hold until a regional solution to the occupiable unit need has been satisfactorily met.
2. This occupiable units information need was also recognized to be a formidable task in its own right, so the Committee created the Address Workgroup in March 2004. The recommendation set forth in this report was unanimously agreed upon by the Workgroup on March 16, 2005. The members also agreed that they would prefer to continue to serve as the proposed next-phase Workgroup to determine necessary organization roles and responsibilities and identify candidate organizations to carry out those roles.
3. The workgroup's purpose, membership, workplan, meeting agendas and summaries, findings of investigations, etc. can be viewed at [http://www.metrogis.org/data/info\\_needs/street\\_addresses/add\\_wkgrp.shtml](http://www.metrogis.org/data/info_needs/street_addresses/add_wkgrp.shtml).
4. Mark Kotz of the MetroGIS support team is providing lead staff support to this workgroup.
5. On March 30, 2005, the Committee unanimously concluded that the MetroGIS community should pursue the vision set forth in this document. A summary of the Committee's discussion can be viewed at [http://www.metrogis.org/teams/cc/meetings/m\\_03\\_30\\_05.pdf](http://www.metrogis.org/teams/cc/meetings/m_03_30_05.pdf) (Agenda item 5b[3]).

### WORKGROUP METHODOLOGY

1. Definitions/Scope: The workgroup concluded, after substantial consideration, that the scope of its efforts should be limited to the primary situs address, for each occupiable unit, not including the mailing address. Occupiable unit was defined to include all residential and non-residential units created or modified via an official government permit/authorization. The Workgroup is expected to add more specificity to the scope of the address dataset in the next phase of the project (e.g. should things like barns and outbuildings be included?)
2. Process and Data Flow Models: Key to the workgroup's recommendation was its investigation of how and by whom addresses are created, changed and used at different levels within the jurisdictions of each of the seven counties. This investigation involved numerous interviews with county and city personnel who are responsible for processes involved in the capture and maintenance of address data records. The following major conclusions were reached from this exercise:
  - Most addresses are created at the local (city) level.
  - This results in many, many address authorities with many different processes.
  - Address authorities seem to update their address records (digital or paper) right away.
  - Address data flow is fairly complicated and is different in every location.
  - Address data do not flow consistently from different sources (e.g. cities to a school district)
  - There is a desire at the county level (and beyond) for a single source for address data.
  - Many authorities mentioned wanting a standard process.
  - A single best source for address data would benefit many people.
3. Identify Process and Data Gaps: The workgroup compared the existing data processes and structures with the data needs identified by the MetroGIS community, to identify gaps between existing data and needs.