



## **MetroGIS Technical Advisory Team Minutes: 2004-2013**

**Agenda**

**Thursday, November 18, 2004**  
**Centennial Office Building, Room 302**  
**658 Cedar Street, St. Paul, MN 55155**  
(Southeast of State Capitol Building)  
**2:00 to 4:00 PM**

**1. Call to Order****2. Approve Agenda****3. Approve Meeting Summary**

- a) November 6, 2004 - Previously approved by e-mail..... all

**4. Items Requiring Action or Discussion:**

- a) Elect a Team Chair ..... All  
b) TLG Street Centerlines - Potential Enhancements for E-911 ..... Jim Maxwell  
c) MetroGIS Mailing Label Application - Background and Brief Description ..... Alison Slaats  
d) MetroGIS Application Finder Concept ..... Mark Kotz  
e) 2005 Meeting Schedule ..... all

**5. Project and Workgroup Reports**

- a) Coordinating Committee and Policy Board Updates..... Randall Johnson  
b) Socioeconomic Information ..... Mark Kotz  
c) Address Workgroup ..... Mark Kotz

**6. Technical Presentations & Demonstrations**

- a) City of St. Paul Address Management Project (STAMP) ..... Bob Basques

**7. Information Sharing**

- a) Major MetroGIS Activity Update  
b) More Information Sharing

**8. Adjourn**

### 3. Approve Meeting Summary

November 6, 2003 (last meeting) summary was previously approved by e-mail. See [http://www.metrogis.org/teams/ta/meetings/m\\_11\\_06\\_03.pdf](http://www.metrogis.org/teams/ta/meetings/m_11_06_03.pdf)

### 4. Items Requiring Action or Discussion

#### 4a) Elect a Team Chair ..... All

A Technical Advisory Team chairperson must be elected for 2005. The responsibilities of the chair include presiding over the semi-annual meetings, helping staff to set the meeting agendas, and potentially reporting to the Coordinating Committee (although staff can do this too).

Nominations for chair:

Vote:

#### 4b) TLG Street Centerlines - Potential Enhancements for E-911 .....Jim Maxwell

The Metropolitan E911 Board would like to make use of the TLG street centerline dataset to meet its internal business needs. They have some specialized requests pertaining to the addition of new fields and possibly to field customization. Discussion, suggestions and input will be sought at the TAT meeting regarding a recommendation on how best to proceed with this given the likelihood that very few of the existing users of this dataset will desire these additions or changes. Not all potential customized data requests are known at this time, but it is known that there may be a desire by the E911 board to make some customizations to street names based on MSAG and phone record information rather than postal or municipal standards. Phone record addresses not related to actual road centerlines may also be desired.

#### 4c) MetroGIS Mailing Label Application - Background and Brief Description Alison Slaats

In 2002, the MetroGIS Policy Board adopted a 2003-2005 Business Plan for MetroGIS. It expanded MetroGIS's scope for satisfying common information needs beyond fostering regional data solutions to fostering regional geospatial applications. These applications will use regional datasets to satisfy priority common information needs.

At the suggestion of Anoka County Commissioner Kordiak, who serves as vice-chair of the MetroGIS Policy Board, the Board recognized a region-wide mailing label application as a good candidate through which to launch this broadened scope.

Subsequently, Carver County generously shared a mailing label web application, written by Peter Henschel, with MetroGIS to use as a basis for a regional application. MetroGIS then modified and expanded that application and made changes suggested by staff with several of the counties.

The resulting regional mailing label application allows users to select parcels using a PIN, address or interactively on a map. The selected parcel can be buffered to select the parcels within a user-input distance. Mailing labels can then be created from the selected parcels using owner, taxpayer or parcel address. Then the addresses are output into a text file or a PDF document.

The application will use the new (2005) Regional Parcel Dataset that includes both a polygon and points dataset. These datasets contains tax properties in the seven county metro area of the Twin Cities. The dataset does not contain every address in the metro area. For example, if an apartment building is located on a parcel, that parcel will only have one address, and not an address for each apartment. The parcel data in the application will be updated quarterly as they are provided from the counties to MetroGIS. Hopefully the parcel agreement will be in place in December.

The regional mailing label application is password protected and only available to licensed users of the Regional Parcel Dataset.

**4d) MetroGIS Application Finder Concept ..... Mark Kotz**

Early in its organizational development, MetroGIS defined as a central role the task of providing solutions to common information needs of the MetroGIS community. Up until this time, those solutions have focused primarily on geospatial data. However, as datasets have been developed and shared, MetroGIS has begun focusing on geospatial applications as an additional way of responding to common information needs.

To this end, MetroGIS staff have been developing a preliminary concept for a kind of “Application Finder” mechanism. This would be something similar to DataFinder, but would focus on geospatial applications. This very preliminary concept will be presented and staff will request ideas and feedback from TAT members.

**4e) 2004 Meeting Schedule ..... All**

Meeting dates need to be set for 2005. Should we continue to meet every 6 months? Should we continue with the 3<sup>rd</sup> Thursdays of May and November?

## **5. Project and Workgroup Reports**

**5a) Coordinating Committee and Policy Board Updates ..... Randall Johnson**

Information about activities of the MetroGIS Policy Board can be found in the meeting minutes and agendas at [http://www.metrogis.org/teams/pb/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/pb/index.shtml#agendas_minutes) . Information about the Coordinating Committee can be found at [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes) . No specific presentation of this material is planned for this TAT meeting, but Randy Johnson (MetroGIS staff) will be available for questions.

**5b) Socioeconomic Information ..... Mark Kotz**

The Phase I solution to MetroGIS’ Socioeconomic Characteristics of Areas Information Need focuses on the priority socioeconomic information needs of the MetroGIS community that can be satisfied with existing published data. These data are published by a number of organizations including federal, state, metropolitan, county, and non-profit authorities. To help the user community more easily locate data with specifications consistent with identified desired characteristics, MetroGIS facilitated the development and long-term maintenance of the Web-based Socioeconomic Resources Page at [http://www.datafinder.org/mg/socioeconomic\\_resources/index.asp](http://www.datafinder.org/mg/socioeconomic_resources/index.asp) .

The Minnesota Population Center at the University of Minnesota has accepted the regional custodian responsibilities of this information need solution.



## 5c) Address Information Needs Workgroup ..... Mark Kotz

The MetroGIS Address Information Needs workgroup began meeting in March of 2004.

### Purpose Statement

*Respond to unmet address information needs by recommending strategies to meet those needs. This includes identifying options for meeting the need where appropriate, as well as identifying the stakeholders (producers, users, partners) related to the address information needs.*

### Guiding Principles

1. Minimize duplication of effort.
2. Maximize consistency of data among the variety of producers and users.

### Scope

The following types of situs addresses are within the scope of the workgroup's activities:

1. Addresses for all occupiable units, including residential and non-residential units. This includes, but is not limited to, individual apartment units, stores in a strip mall, and business suites in an office complex.
2. All "official" addresses (addresses assigned by the official addressing authority for a particular jurisdiction) that are in addition to 1 above. This might include things like parks, cell towers and loading docks, depending on the jurisdiction.
3. Information about sublocations within the addresses defined in 1 and 2 above. The purpose of this would be to define a more specific location at an address, for features within the address that do not have their own official address (i.e. a loading dock at a commercial address, a free standing garage, a barn on a farm, a pavilion at a park).

In addition, the group should work on the following address-related tasks:

1. Define an appropriate way to reference places that don't have a situs address, such as through assignment of points or coordinates or other referencing systems (e.g. intersection, mile markers) and recommend a strategy to put in place best practices for the capture and management of such data.
2. Recommend a best practice to link (move between) assigned addresses and corresponding a) vanity and alias addresses and b) landmark names that could include a variety of business and place name options.
3. Recommend procedures to translate "situs" addresses into mailing addresses and corresponding coordinates and vice versa.

### Members

Membership in this workgroup has grown as the workgroup has progressed. Membership is currently as follows:

- Gordon Chinander, Metropolitan 911 Board
- John DeJung, Minneapolis
- Amy Geisler, City of Ramsey Planning
- Jeff Gottstein, Woodbury PD
- Pete Henschel, Carver County
- Deb Jones, Falcon Heights and liaison to Address Committee of the Ramsey County GIS Users Group
- Erin Naughton, Minneapolis
- Nancy Read, Metropolitan Mosquito Control District and liaison to Coordinating Committee
- Lyn Rohe, Scott County
- Scott Simmer, Hennepin County
- John Slusarczyk, Anoka County
- David Windle, City of Roseville and liaison MetroGIS Emergency Preparedness Workgroup
- Mark Kotz and Randall Johnson (MetroGIS Staff Support Team)

## Work Plan

Task	Description	Completed
<b>1</b>	<b>Finalize priority address-related information needs</b>	April 7, 2004
<b>2</b>	<b>Define preliminary priority mailing &amp; situs address types</b> , which are within the scope of this effort (e.g., occupiable units) to be refined as necessary following the interviews in Step 4d.	Tentatively April 28, 2004
<b>3</b>	<b>Identify or Define data standards</b> for the address types that are within scope.	Tentatively June 2, 2004
<b>4</b>	<b>Understand how addresses are created, changed and used at different levels</b> , (e.g. building permit application processes, county assessors, E911, parcel data, TLG, etc. )	
<b>a</b>	<b>Identify the different stakeholders</b> (i.e. various producers and users) and sources of address information	June 23, 2004
<b>b</b>	<b>Define objectives for interviewing stakeholders.</b> What do we want to learn from them.	June 23, 2004
<b>c</b>	<b>Create draft address flow diagrams for each county and other entities.</b>	November 8, 2004
<b>d</b>	<b>Agree on a list of interview candidates and interview process</b>	November 8, 2004
<b>e</b>	<b>Interview representatives</b> from each desired perspective	<i>December 15, 2004</i>
<b>f</b>	<b>Document existing processes</b> for creating and changing address data <b>by updating address flow diagrams.</b>	<i>December 15, 2004</i>
<b>5</b>	<b>Prepare standardized address flow diagrams</b>	<i>Mid January, 2005</i>
<b>6</b>	<b>Compile survey results and prepare draft report with analysis</b>	<i>Mid January, 2005</i>
<b>7</b>	<b>Identify address data that currently exist</b> and prepare examples to look at and talk about.	<i>Mid January, 2005</i>
<b>8</b>	<b>Define gaps</b> between what currently exists and capabilities needed to tackle unmet address needs.	<i>February, 2005</i>
<b>9</b>	<b>Identify strategies to fill the gaps.</b> Investigate and document the pros and cons of options to tackle unmet address-related information needs. Recommend appropriate regional strategies and best practices, including who should be involved, and roles and responsibilities.	<i>March, 2005</i>
<b>10</b>	<b>Promote understanding and use of adopted regional strategies:</b> Proactively take measures to inform those organizations, whose responsibility it is to produce and maintain situs address records, of the value of the adopted regional strategies and promote widespread use of them.	
<b>11</b>	<b>Establish a mechanism to evaluate progress.</b>	

## 6. Technical Presentations and Demonstrations

### 6a) City of St. Paul Address Management Project (STAMP) .....Bob Basques

The City of Saint Paul has spent a good portion of this past year implementing a consolidated address assignment and maintenance system. The key to bringing such a system into existence was the willingness of participants from each City Department to come together, research and build the system in a cooperative environment. The personnel assigned to the effort were in many cases on loan from their respective departments and gave each participant a sense of ownership of the system. Many pieces of the addressing dataset come from different data custodians in the City.

The end result will be a single Addressing service that will allow all City Personnel to more easily lookup, assign and maintain address related information. The beginning of the new year will see the unveiling of the Addressing systems core functionality. There are further enhancements planned in the months to follow.

## 7. Information Sharing

### 7a) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/a\\_10\\_27\\_04.pdf](http://www.metrogis.org/teams/pb/meetings/a_10_27_04.pdf), stating on page 12.

- a) Third Generation Data Sharing Agreement - *Status Update*
- b) Priority Common Information Need Solutions
  - *Regional Parcel Dataset Policy– Historical Versions Support Clarified*
  - *Address Workgroup*
  - *Emergency Preparedness Workgroup*
  - *Existing Land Use Workgroup*
  - *Lakes and Wetlands Workgroup*
  - *Socioeconomic Characteristics of Areas Workgroup*
  - *Highway and Road Networks*
- c) County Data Producers Workgroup
  - *Regional Parcel Dataset Policy – Access by Non-Profit Interests*

### 7b) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/a\\_10\\_27\\_04.pdf](http://www.metrogis.org/teams/pb/meetings/a_10_27_04.pdf), stating on page 16.

- a) Application Submitted for Harvard Innovations in Government Award
- b) MetroGIS an Example in 2004 Open Geospatial Consortium (OGC) Publication
- c) MetroGIS Experience Documented in Australian/New Zealand GIS Handbooks
- d) Presentations / Outreach / Studies
- e) Related Metro and State Geospatial Initiatives Update
- f) Related Federal/National Geospatial Initiatives Update
- g) September 29<sup>th</sup> Coordinating Committee Meeting Minutes

**Meeting Summary  
MetroGIS Technical Advisory Team  
Centennial Office Building – Room 302  
November 18, 2004**

**1. CALL TO ORDER**

Chairperson Maxwell called the meeting to order at 2:05 p.m.

Members Present: Bob Basques (City of St. Paul - Public Works), Dave Brandt (Washington County), Gordon Chinander (Metro 911 Board), Brad Rupert for Peter Henschel (Carver County), Rick Zellmer for Dan Falbo (ESRI), Rick Gelbmann (Metropolitan Council), Susanne Maeder (LMIC), Jim Maxwell (The Lawrence Group), Michael Munson (Metropolitan Council), Curt Peterson (Ramsey County), Bart Richardson (MN DNR), Scott Simmer (Hennepin County), John Slusarczyk (Anoka County), Kent Tupper (Dakota County), Tim Zimmerman (Hennepin County Community Health)

Support Staff: Mark Kotz, Steve Fester, and Randall Johnson (MetroGIS Staff Coordinator)

Visitors: Alison Slaats (MetroGIS DataFinder Manager)

**2. ACCEPT AGENDA**

The agenda was accepted as submitted, except that Item 6 would be presented before Item 5. Kotz asked that everyone introduce themselves. Team members, staff, and visitors stated their names and organizations represented.

**3. ACCEPT MEETING MINUTES**

The minutes of the November 6, 2003 meeting were approved via email earlier this year.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Elect a Team Chair**

Kotz gave a brief description of the Chair's roles and responsibilities. Johnson reminded the Team members that most of the Team's work in the past has been delegated to special purpose workgroups, such as the Address Workgroup, and that the Team now functions primarily in information-sharing and feedback capabilities.

After Chair Maxwell inquired if any current members would be interested in assuming the role of Chair, Basques volunteered for the position. No further nominations were put forth. The membership unanimously approved Basques as the new Team Chair for the next year.

**b) TLG Street Centerlines - Potential Enhancements for the Metro 911 Board**

Maxwell explained how the Metropolitan 911 Board is looking to make use of The Lawrence Group's (TLG) street centerline dataset to meet its internal business needs. He stated that this would involve a number of potential enhancements possibly including both graphic and attribute data, for instance:

- Adding EMS (Emergency Management Service) zone attributes,
- Adding addresses that do not necessarily correspond to a street, such as those found in shopping malls, dormitories, and other "vanity" address (i.e., "One 3M Drive"),
- Adding MSAG (Master Street Address Guide) attributes, insuring that street names are included that correspond to the names in the ALI (Automatic Location Information)/MSAG databases,
- Updating the regional dataset more often than quarterly, and
- Maintaining a consistent dataset over the entire seven county area. Chinander expressed concern that if local units of government elect to develop their own street centerline dataset that the regional needs might be compromised unless agreed upon standards are followed.

Maxwell then sought feedback from the Team members on how to move forward with the needed changes. He noted that TLG would consider providing a different product for 911 needs and/or distributing updates of the regional dataset more frequently than quarterly. Chinander stated that adding more attributes, such as MSAG compliant addresses, would be better than maintaining two separate data products. Gelbmann also encouraged the group to consider the full range of update preferences and then evaluate how to best handle the distribution/access options.

Johnson explained that in the past, MetroGIS had focused primarily on information needs required by many, but that now the time may be right to explore solutions that might be needed by a smaller number of stakeholders, but still be critical needs.

Kotz suggested that the maintenance of the data and the format in which it is distributed are two separate, but related, issues. TLG could potentially create different flavors of the dataset for different users from the master dataset.

Maxwell noted that phone companies' address data might not match very well with existing address data.

Chinander agreed to try to document the Metropolitan 911 Board's needs and specifications within the next two weeks (before a related meeting scheduled for December 2<sup>nd</sup>) and send this information to staff (Kotz) who will distribute it to the group.

### **c) MetroGIS Mailing Label Application - Background and Brief Description**

Alison Slaats, GIS Web Applications Developer for the Metropolitan Council and MetroGIS DataFinder Manager, described the need for and the development of a region-wide mailing label application using the MetroGIS-endorsed Regional Parcel Dataset. She explained that she had requested the metro-area counties test the application and has received some feedback from them. She then demonstrated the Web-based application, slides from which can be viewed in PDF format at <http://www.metrogis.org/teams/ta/meetings/041118/label.pdf>.

After the demonstration, there was general acknowledgement of the benefits of the subject application. A brief discussion ensued about the possibility of the following enhancements:

- Add a capability to use an existing feature, such as a watershed boundary, to select parcels for labels.
- Add a capability to select parcel along a road segment for labels.
- Add a capability to select parcels by querying the attributes for specified characteristics.
- Add the PIN to the label printout.

Slaats commented that a formal needs assessment was not conducted but rather the application was developed in response to an opportunity identified by Anoka County Commissioner Kordiak, a member of the MetroGIS Policy Board. She noted that the cited enhancements could be investigated when preparing for a subsequent version(s), assuming the community agrees that these enhancements are desired.

Several members asked if an audience wider than the counties had been asked to test the application. Johnson commented that a broader test audience is not possible until the 2004-2008 Parcel Data Sharing Agreement is in place for the Regional Parcel Dataset. In accordance with the data sharing policy established by the data sharing agreement, this application will be available only to licensed users of the regional parcel dataset. The licensure process is expected to begin in late December or January following county approval of the pending agreement.

Johnson noted that this presentation is proposed to be shared with the Policy Board at its January meeting as the GIS Technology Demonstration topic.

#### **d) MetroGIS “ApplicationFinder” Concept**

Kotz explained how MetroGIS has begun to provide solutions to common geospatial information needs in the form of applications, as opposed to solely focusing on data. To accommodate this move into the realm of applications, MetroGIS has begun developing an “ApplicationFinder” concept. This Web-based mechanism is very preliminary in nature, and Team members were asked to provide feedback on its scope and content and whether they were aware of any similar applications currently in operation. Kotz’s presentation slides can be viewed in PDF format at <http://www.metrogis.org/teams/ta/meetings/041118/app.pdf>. He commented that this proposal will be presented to the Coordinating Committee along with a recommendation to establish a workgroup to develop a recommendations for business and scope rules needed to move from concept to an operational application.

Maeder commented that individuals affiliated with state agencies have talked about this type of capability but that nothing has occurred beyond the early talking stage. Kotz commented that staff is unaware of a capability of this type in operation elsewhere. There was no opposition to MetroGIS pursuing the concept. In particular, Brandt noted that he receives a number of inquiries for general information about the existence of applications and believes a centralized information resource where a variety of applications are described with information about how to access them would save him and the callers substantial time and effort.

The following scope items were offered for consideration by the proposed workgroup:

- Should the proposed ApplicationFinder include custom software extensions?.
- Focus the scope, at least initially, on the identified priority information needs of the MetroGIS community, as opposed to the range that is otherwise possible.
- The group also cautioned to keep the different types of applications separate, i.e., those appealing to established GIS users vs. those appealing to the general public.
- Add a requirements section to the list of items to be explained in the standard description information
- Add a decision tree (wizard) to help the user decide the application/resource(s) that would best meet their particular need.

Richardson and Maeder volunteered to participated on the proposed workgroup, if established by the Coordinating Committee.

#### **e) 2005 Meeting Schedule**

Maxwell asked the group whether the proposed frequency of meeting every 6 months is acceptable. Chinander stated that he did not want to wait that long to get feedback on subjects such as the 911 Board’s need for street centerline data. Kotz replied that the existing Address Workgroup could address that issue.

It was agreed that the Team would meet on the 3<sup>rd</sup> Thursdays in both May and November of 2005. Meeting agendas will be sent via email approximately 1-2 weeks before meeting.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) City of St. Paul Address Management Project (STAMP)**

Basques described the addressing assignment and maintenance service that the City of St Paul has been developing over the past year. The goal is to have a single addressing service that will allow all City personnel to more easily lookup, assign and maintain address-related information.

The Ramsey County GIS Users Group will be looking at this application to determine its appropriateness for use by cities in Ramsey County to more easily work with their own address information.

## **5. PROJECT AND WORKGROUP REPORTS**

### **a) Coordinating Committee and Policy Board Updates**

Johnson summarized the actions of the Coordinating Committee and Policy Board at their recent meetings. Full summaries of both meetings are available at <http://www.metrogis.org/teams/cc/index.shtml> and <http://www.metrogis.org/teams/pb/index.shtml>.

### **b) Socioeconomic Information**

Kotz briefly showed the socioeconomic resources page that is linked to from the metadata on DataFinder.

### **c) Address Workgroup**

Due to a lack of time, the members were encouraged to read, on their own, the materials provided with agenda packet.

## **7. INFORMATION SHARING**

There was no discussion on the items contained in this section. Members were encouraged to review this information on their own time.

## **8. NEXT MEETING**

Pursuant to deciding to hold meetings on the 3<sup>rd</sup> Thursday in May and November, the next meeting will be Thursday, May 19, from 2:00-4:00 p.m., location to be determined.

## **9. ADJOURN**

Maxwell adjourned the meeting at 4:05 p.m.

Prepared by,  
MetroGIS Support Staff

**Agenda****Thursday, June 9, 2005****Centennial Office Building, Room 302****658 Cedar Street, St. Paul, MN 55155***(Southeast of State Capitol Building)***9:30 to 11:30 AM****1. Call to Order****2. Approve Agenda****3. Approve Meeting Summary**

- a) November 18, 2004 ..... all

**4. Items Requiring Action or Discussion:**

- a) DataFinder Café Aging Issues ..... Alison Slaats/Mark Kotz  
b) DataFinder Café User Survey ..... Mark Kotz

**5. Project and Workgroup Reports**

- a) Coordinating Committee and Policy Board Updates..... Randall Johnson  
b) E-911 Address and Street Centerline Workgroup ..... Mike Dolbow/Gordon Chinander  
c) Address Information Needs Workgroup ..... Mark Kotz

**6. Technical Presentations & Demonstrations**

- a) Demo of Geocortex Internet Mapping Framework ..... Dave Brandt

**7. Information Sharing**

- a) Major MetroGIS Activity Update  
b) More Information Sharing

**8. Adjourn**



### 3. Approve Meeting Summary

See <http://www.metrogis.org/teams/ta/meetings/041118/min.pdf>.

### 4. Items Requiring Action or Discussion

#### 4a) DataFinder Café Aging Issues ..... Alison Slaats/Mark Kotz

As the DataFinder Café ages, we are beginning to run into some problems with it. These problems stem primarily from the fact that the company from whom we purchased the Café is no longer in business, thus we have no support for the Café. As we upgrade to a new server and new version of ArcIMS, it is possible that the Café will no longer work.

Alison will explain the issue we are facing with the Café. No action is needed on this item, but it is important to make sure that the TAT is aware of the problems.

#### 4b) DataFinder Café User Survey ..... Mark Kotz

Because of the problems with the Café, we have decided to survey users of the Café to get input on the value of various types of functionality that it has. Mark will present the results of this survey.

### 5. Project and Workgroup Reports

#### 5a) Coordinating Committee and Policy Board Updates ..... Randall Johnson

Information about activities of the MetroGIS Policy Board can be found in the meeting minutes and agendas at [http://www.metrogis.org/teams/pb/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/pb/index.shtml#agendas_minutes). Information about the Coordinating Committee can be found at [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes). No specific presentation of this material is planned for this TAT meeting, but Randy Johnson (MetroGIS staff) will be available for questions.

#### 5b) E-911 Address and Street Centerline Workgroup ..... Mike Dolbow/Gordon Chinander

See attached “E911\_Centerlines\_Vision.doc”. This is the vision that was presented to the Policy Board on April 20<sup>th</sup>.

#### 5c) Address Information Needs Workgroup ..... Mark Kotz

See attached “Occupiable\_Units\_Vision.doc”. This is the vision that was presented to the Policy Board on April 20<sup>th</sup>.

### 6. Technical Presentations and Demonstrations

#### 6a) Demo of Geocortex Internet Mapping Framework ..... Dave Brandt

There are a number of third-party development tools to aid in building ArcIMS applications. The Geocortex internet Mapping Framework was one of the tools we recently evaluated. Using an application development framework allows you to save development time and present a consistent user interface for all applications. I will share what we have learned from our evaluations and demo some of the Geocortex product.

## 7. Information Sharing

### 7a) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/a\\_04\\_20\\_05.pdf](http://www.metrogis.org/teams/pb/meetings/a_04_20_05.pdf), starting on page 36.

- a) 2004 Annual Report and Promotional Brochure
- b) County Data Producer Workgroup (*pilot - non-profits parcel access policy*)
- c) Priority Common Information Need Solutions
  - *Emergency Preparedness Workgroup*
  - *Highway and Road Networks Workgroup*
  - *Lakes and Wetlands Workgroup*
- d) Strategic Direction Workshop and Business Plan Update

### 7b) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/a\\_04\\_20\\_05.pdf](http://www.metrogis.org/teams/pb/meetings/a_04_20_05.pdf), starting on page 41.

- a) Call for Regional GIS Project Proposals
- b) Letter of Support for LMIC
- c) Outreach Activities
- d) Related Metro and State Geospatial Data Initiatives Update
- e) Related Federal/National Geospatial Data Initiatives Update
- f) March 30, 2005 Coordinating Committee Meeting Minutes

# MetroGIS

Cooperation, Coordination, Sharing Geographic Data



**TO:** Policy Board

**FROM:** Coordinating Committee  
Chairperson: Nancy Read, Metropolitan Mosquito Control District  
Staff Contacts: Michael Dolbow (651-602-1812) and Gordon Chinander (651-603-0054)

**SUBJECT:** Vision – E911-Compliant Regional Street Centerline Dataset

**DATE:** April 7, 2005  
(For Apr 20<sup>th</sup> Meeting)

## **INTRODUCTION**

The Coordinating Committee requests comments from the Policy Board regarding a vision to achieve and sustain an E911-Compliant Regional Street Centerline Dataset. Along with fourteen major objectives stated below, a MetroGIS workgroup drafted the following vision statement:

*MetroGIS seeks a public sector, regionally seamless addressable and routable street centerline dataset that meets the needs of the E911 dispatching community in addition to the functionality provided by the currently endorsed street centerline dataset.*

The Metropolitan 911 Board is acknowledged as an organization with a significant need for the proposed regional solution. Thus the proposed vision is currently being vetted with the public safety community to ensure they are satisfied with the general proposal. The Metropolitan 911 Board Executive Committee is scheduled to comment on this vision on May 4.

This vision also creates the potential to incorporate locally-produced street data into the U.S. Census Bureau's TIGER datafile, which affects the broader MetroGIS community.

If both the Metropolitan 911 Board and the MetroGIS Policy Board conclude that the vision merits consideration, detailed strategies to achieve the technical and organizational components will be developed. These strategies are anticipated to evolve into a formal recommendation to the Policy Board, hopefully within the year.

## **RATIONALE FOR REQUESTING COMMENT AT THIS PHASE**

This proposal is more ambitious in terms of intergovernmental cooperation than those associated with previously endorsed regional solutions. Thus, comments on potential policy ramifications are sought from both the MetroGIS Policy Board and the Metropolitan 911 Board Executive Committee. These comments will influence several organizational components of the process, such as the 911 Board's willingness to assume the role as Regional Custodian of the centerline dataset.

MetroGIS Policy Board review is essential given the desired extensive involvement of local government officials as active participants in the regional solution. As with all MetroGIS endorsed solutions, participation would be voluntary. The vision calls for individuals who assign addresses and street names to simultaneously update the regional dataset alongside official permitting processes. A backup solution would be developed for circumstances where local officials are not involved, for whatever reason.

## **COORDINATING COMMITTEE ACTION**

At its March 30, 2005 meeting, the Coordinating Committee unanimously approved the above-cited vision and the associated fourteen major objectives cited below. Refer to the Reference Section for more information about the evolution of this proposal and the Committee's review.

## **JUSTIFICATION**

Most of the 27 Public Safety Answering Points (PSAPs) that serve the seven-county area use GIS mapping applications to accurately locate calls and dispatch emergency services, especially for wireless calls. Many PSAPs currently use or modify the regional centerline dataset endorsed by MetroGIS, which is created and maintained by The Lawrence Group (TLG). However, this dataset was not created for 911

uses and does not satisfy some of the 911 response community's business needs. One of the largest "needs gaps" is the data model's lack of compliance with the Master Street Address Guide (MSAG). Dispatchers and Emergency Responders also need the ability to locate emergency vehicles in areas that are not currently represented, such as private developments, utility access roads, and parking lots.

Presently, three counties and a core city have created or are considering creating and maintaining their own centerlines for a variety of reasons. Four of the counties, to our knowledge, do not have any immediate plans to move away from using the regional solution provided by TLG. The Metropolitan 911 Board recognizes the importance of MetroGIS's efforts to establish data standards that facilitate the integration of data from multiple producers.

The E911 Address & Street Centerline Workgroup has concluded that a regional solution should be pursued to resolve deficiencies in the endorsed regional street centerline dataset with respect to the needs of the E911 community. If possible, this regional solution should also further the integration of locally produced street centerline data into TIGER datafiles maintained by the US Census Bureau. Without the desired organizational interoperability, the following issues persist:

1. Costly duplication of effort pertaining to data capture, management, and customization for E911 dispatch solutions.
2. Difficulties in achieving cross-jurisdictional interoperability of accurate and trusted address **data**, which is critical when coordinating the dispatch of emergency services in a regional context.
3. Higher costs for other government stakeholders using the address data when regional consistency is not maintained – the reason for establishing the current regional solution in the first place.
4. Inconsistencies between the US Census TIGER data and locally produced street data lead to major inefficiencies, and hinder communications with the Census Bureau in regards to geography updates. The proprietary nature of the TLG street centerline dataset currently precludes integration into the TIGER dataset.

### **OVERVIEW OF THE VISION**

**The next-generation regional centerline solution is envisioned as a compilation of geographically separated datasets created and maintained by multiple counties and/or municipalities.** This would require establishing standards for both the spatial and attribute components to ensure compatibility across the seven-county region. The dataset would build upon the currently endorsed regional street centerline dataset created and maintained by The Lawrence Group. It would meet the needs of the E911 community and, if possible, be available for integration with the TIGER datafile maintained by the U.S. Census Bureau.

Before pursuing such a regional solution, a definition of "street centerlines" must be agreed upon. Previous discussions have led to a general consensus, but no definition has been committed in writing. The E911 Workgroup suggests the following definition as it applies to this initiative:

*A **street centerline** represents a discrete, linear, graded land surface navigable by at least one type of vehicle, with at least one established connection to a network of similar elements.*

This definition is highly tailored for E911 response purposes, allowing geographic centerlines to represent almost any location that can be reached by emergency vehicles, including:

- Public and private roads
- Access roads and trails to utilities, train tracks, and private facilities
- Perimeter roads *and* internal parking accessways for mall and shopping centers
- Graded and paved bicycle and/or walking trails navigable by small emergency vehicles
- Newly constructed dirt/gravel roads in new developments
- Navigable emergency easement surfaces for otherwise landlocked developments
- Restricted access turnaround connections on divided highways

The definition *excludes* other features, such as:

- “Platted” centerlines defined by right-of-way parcel boundaries that are NOT navigable due to existing buildings or other permanent obstructions
- Other surface transportation features that are restricted to certain types of vehicles, such as train tracks or water bodies
- Wilderness (non-graded) trails that are inaccessible to the typical emergency vehicle

While this definition expands upon the current TLG data model to include new “feature classes” and more elements from existing classes (such as private roads), it does not shift the paradigm of the data model itself. The main components of the data set are still roads and highways, and the added features “fit” within the established network.

As part of defining and establishing regional data standards, this project also proposes additional centerline attributes, changes to the centerline geography standards, and changes to the current maintenance requirements. The attribute standards are the minimum deemed necessary to standardize the regional data solution for emergency response purposes. Other attributes can be added by the data producers for internal or external use, producing a single product that still meets many business needs. Some attributes may not be required for certain data producers, who **would not** be asked to populate an attribute in the proposed standard unless they perceive an internal business need to do so.

In summary, the desired end product would be a compilation of multiple centerline datasets provided by local data producers, collected and re-assembled to form a seamless region-wide layer. It would utilize the data standards endorsed by the Metro911/MetroGIS communities to ensure MSAG compliance and compatibility between data producers.

### **MAJOR OBJECTIVES**

This broad vision incorporates the following major objectives, which outline a process to define the technical and organizational components necessary for an interoperable, multiple-use “centerline” product. *(Not intended to be listed in any order of priority. The numbering is provided only to facilitate comment):*

1. Continue to pursue the concept of a “single official” source of street centerline data for any given jurisdiction, or “Core Geographic Division”. This was a core objective of MetroGIS’s 1998 endorsement of the TLG Street Centerline Dataset as the preferred geocoding solution for the metropolitan area. Defining a “single source” of street centerline data for a given Core Geographic Division reduces the potential for inaccurate/inconsistent addresses and streamlines the process of mitigating anomalies, as they arise. Within a Core Geographic Division, this authority needs to maintain a relationship with both Emergency Responders and the other personnel involved in (and affected by) the efforts outlined in this vision.
2. Each Core Geographic Division (based on county, PSAP response area, and/or city jurisdictions) would readily nest with adjoining core geographies to achieve interoperable street centerline data across the entire seven-county metropolitan area. In many cases, Core Geographic Divisions could include multiple municipalities.
3. The Metropolitan 911 Board would serve as the Regional Custodian for E911 purposes, monitoring user satisfaction and supporting desired modifications to practices and policies. Depending on the result, the community may wish to ask the Metropolitan Council to continue as Regional Custodian for non-E911 centerline data business needs.
4. Organizations and their personnel responsible for local government procedures pertaining to approval of new streets (public and private) would be encouraged to serve in the capacity of a Primary Producer. As new streets are approved, a Primary Producer would either directly add and modify street data (geography and attributes) for the Core Geographic Division’s datafiles or work closely with a Third Party to maintain the currency of the data. The vision currently assumes the Metropolitan 911 Board, as Regional Custodian, would be responsible for coordinating such efforts. A funding allocation structure for compensating third parties has not yet been determined.
5. The datafile for each Core Geographic Division would be accessible by an individual(s) with read/write privileges from each jurisdiction that has authority and GIS capabilities to modify street

- data within that jurisdiction. Each authorized individual would have the ability (and responsibility) to modify, add, or delete data within their jurisdiction as necessary.
6. The proposed vision assumes multiple avenues for creating, maintaining and storing centerline data, and providing periodic updates to the Regional Custodian. For example, some individual cities might maintain local databases for just their jurisdiction, and other larger government units (PSAPs or Counties) might maintain data for multiple cities and townships. However, this will require significant negotiation, as overlapping jurisdictions with differing topologic requirements will have a conflict with this procedure.
  7. The Regional Custodian would be responsible for overseeing aggregation of the Core Geographic Divisions into a seven county datafile for stakeholders who need simultaneous access to multiple Core Geographic Divisions. *This may be a virtual aggregation as it is currently for access to the regional parcel dataset.*
  8. The proposed solution needs to have an outreach component to inform all affected and relevant interests about its benefits, and to grow participation in reporting anomalies as they are identified.
  9. Procedures for maintenance of street centerline data would be fully coordinated with procedures to maintain the proposed Regional Occupiable Unit Regional Dataset. (See Agenda Item 5c.)
  10. Some mechanism (likely a new attribute field) would be incorporated into the data model to handle new public and/or private streets that are being built under existing construction contracts, but are not yet “platted” by the local government. These centerline elements would be added to the Core Geographic Divisions as “Streets under Construction”, in anticipation of their imminent navigability.
  11. The vision requires reconciling the regional GIS centerline database with the MSAG database to ensure data compatibility and correct any errors that may be found. The centerline dataset uses a completely different addressing standard (USPS) than the MSAG, which hinders current dispatch efforts. Once this reconciliation is complete, a software solution, such as “Graphic MSAG”, could be used to simultaneously maintain both databases (MSAG & GIS). However, it is important to prevent MSAG formatting requirements from conflicting with locally established procedures. (See the Background Section for more information about MSAG conventions.)
  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. Achieving the vision requires compliance with the Attribute, Topology and Maintenance specifications presented in the document reviewed by the Coordinating Committee on March 30, 2005 and entitled: “General Specifications for an Addressed Centerline Map Layer for Local Public Safety Agencies”. These specifications build upon the current procedures of many E911 and emergency response data producers. They can be reviewed at [http://www.metrogis.org/teams/workgroups/e911\\_streets/specs.pdf](http://www.metrogis.org/teams/workgroups/e911_streets/specs.pdf).
  14. Any privacy and access issues must be appropriately addressed.

#### **RECOMMENDATION**

No action is requested. 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 MetroGIS E911 Address and Street Centerline Workgroup initial met on December 2, 2004. The participants learned of two counties and Minneapolis' efforts to develop their own street centerline datasets because the endorsed regional solution was not meeting their Emergency Response needs. The participants concurred that a regional solution to the need for an E911 compliant regional street centerline dataset should be pursued. As such, the project was included in MetroGIS's 2005 workplan and a formal workgroup was established by the Coordinating Committee at its December 2004 meeting.
2. Survey of E911 Technology Requirements and Specifications: in January 2005, the Workgroup decided to survey the 10 vendors who provide E911 CAD/GIS software and services to the PSAPs in the Metropolitan Area. The survey was developed by listing the general requirements of an E911 system that is well known by the staff at LOGIS, and asking vendors to identify those specifications as required, not required, or prohibitive to their solution. Seven of the ten vendors replied, and while many of them had similar requirements, none of the specifications were listed as prohibitive to their solution. Thus, the results of the survey have been integrated into the General Specifications document.
3. The workgroup's membership, meeting agendas and summaries, findings of investigations, etc. can be viewed at [http://www.metrogis.org/teams/workgroups/e911\\_streets/index.shtml](http://www.metrogis.org/teams/workgroups/e911_streets/index.shtml).
4. Michael Dolbow of the MetroGIS support team and Gordon Chinander, GIS Coordinator for the Metropolitan 911 Board are co-facilitating the workgroup. Participants in the workgroup include:
  - Ben Verbick, LOGIS
  - Erin Naughton, City of Minneapolis
  - Scott Simmer, Hennepin County
  - Kent Tupper, Dakota County
  - Dan Pfeffer, Scott County
5. On March 30, 2005, the Committee unanimously recommended that the MetroGIS community pursue the vision outlined herein. The details 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[1]).

### **MASTER STREET ADDRESS GUIDE (MSAG)**

"MSAG compliant" is defined as meeting the Master Street Address Guide to road naming conventions and Proper address ranges. This standard is endorsed by NENA (National Emergency Number Association). This organization creates national E911 GIS data standards.

A better definition and description of the MSAG and its connection to E911 processes and GIS/CAD solutions will be included in the white paper to be produced as part of this project.



**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.

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Centennial Office Building – Room 302**  
**June 9, 2005**

**1. CALL TO ORDER**

Chair Basques called the meeting to order at 9:37 a.m., and then asked that everyone introduce him or herself. Team members, staff, and visitors stated their names and organizations represented.

Members Present: Bob Basques (City of St. Paul - Public Works), Dave Brandt (Washington County), Gordon Chinander (Metro 911 Board), Brad Rupert and Peter Henschel (Carver County), Dan Falbo (ESRI), Rick Gelbmann (Metropolitan Council), Susanne Maeder (LMIC), Jim Maxwell (The Lawrence Group), Curt Peterson (Ramsey County), Bart Richardson (MN DNR), Scott Simmer (Hennepin County), John Slusarczyk (Anoka County), Brian Huberty (U.S. Fish and Wildlife Service), Tim Zimmerman (Hennepin County Community Health).

Support Staff: Mike Dolbow, Mark Kotz, Steve Fester, Alison Slaats and Randall Johnson (MetroGIS Staff Coordinator)

Visitors: Carla Coates (Ramsey County) and Mary Hagerman (Dakota County).

**2. ACCEPT AGENDA**

The agenda was accepted as submitted.

**3. ACCEPT MEETING SUMMARY**

The summary of the November 18, 2004 meeting was accepted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) DataFinder Café Aging Issues**

Alison Slaats explained the aging issues that are facing the Café. These problems stem primarily from the fact that the company who developed the Café is no longer in business. This eliminates the possibility of future support for the Café. It is possible that the Café will no longer work once its server is upgraded and a newer version of ArcIMS is deployed.

Huberty commented that it would be nice to have OGC compliant WMS available from any new version of the Café.

**b) DataFinder Café User Survey**

Because of the problems with DataFinder Café, a survey of users of the Café was recently conducted to get input on the value of its various types of functionality. Kotz summarized the results of the survey. The survey showed that many people use the Café to get quarterly updates of certain datasets. Many of the comments received were not specific to the Café, but rather to DataFinder in general. The survey also showed that users thought metadata are important.

Johnson announced that there would be a call at the June 29 Coordinating Committee meeting to create a workgroup to propose upgrading the Café. Basques suggested asking administrators what is important to them. Huberty added that users are becoming more interested in using online resources to actually do some GIS analysis and querying, as opposed to just downloading the data.

## **5. PROJECT AND WORKGROUP REPORTS**

### **a) Coordinating Committee and Policy Board Updates**

Johnson briefly discussed the actions of the Coordinating Committee and Policy Board at their recent meetings. Full summaries of both meetings are available at <http://www.metrogis.org/teams/cc/index.shtml> and <http://www.metrogis.org/teams/pb/index.shtml>.

### **b) E911 Address and Street Centerline Workgroup**

Dolbow summarized the E911 Address and Street Centerline vision that was presented to the Policy Board on April 20, 2005. Discussion after his presentation included a comment from Curt Peterson regarding mileposts, noting that they would be useful to E911 response. Dolbow agreed, noting that participation from Mn/DOT in the future would be extremely beneficial, and they would be the best source of that data. Maxwell commented that he felt there was a lot of duplication of effort, and a lack of communication surrounding the project, evidenced by several independent meetings between TLG and various public agencies, including the Metropolitan 911 Board. Dolbow apologized for any perceived lack of communication and ensured the group that avoiding duplication of effort was an overarching goal of the project. Basques added a comment in regards to jurisdictional problems that would complicate the effort.

### **c) Address Information Needs Workgroup**

Kotz summarized the vision endorsed by the Coordinating Committee and presented to the Policy Board at its April 20, 2005 meeting. The vision calls for a regional point dataset comprising all occupiable units (residential and non-residential) within the seven-county Metropolitan Area.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) Demo of Geocortex Internet Mapping Framework**

Dave Brandt, Washington County GIS, provided a demonstration of Geocortex Internet Mapping Framework (IMF). Geocortex IMF is an enterprise Internet mapping solution that provides a consistent interface for ArcIMS-based spatial web mapping from a variety of departments within an organization. The County evaluated several other products before deciding on Geocortex. Brandt's presentation slides can be viewed at <http://www.metrogis.org/teams/ta/meetings/050609/geo.pdf>.

## **7. INFORMATION SHARING**

There was no discussion on the items contained in this section. Members were encouraged to review this information on their own time.

## **8. NEXT MEETING**

The next meeting will be Thursday, November 17, 2005, from 2:00-4:00 p.m. at the Centennial Office Building (LMIC), 658 Cedar St., St. Paul, Room 302

## **9. ADJOURN**

Basques adjourned the meeting at 11:30 a.m.

Prepared by,  
MetroGIS Support Staff

**Agenda****Thursday, November 17, 2005****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****2:00 to 4:00 PM****1. Call to Order****2. Approve Agenda****3. Approve Meeting Summary**

- a) June 9, 2005 ..... all

**4. Items Requiring Action or Discussion:**

- a) 2:05 Trails Data ..... Curt Peterson

**5. Project and Workgroup Reports**

- a) 2:20 Coordinating Committee and Policy Board Updates ..... Randall Johnson
- b) 2:25 E-911 Address and Street Centerline Workgroup Update..... Gordon Chinander
- c) 2:35 Address Information Needs Workgroup Update ..... Mark Kotz

**6. Technical Presentations & Demonstrations**

- a) 2:45 State GIS Enterprise Conceptual Architecture Design..... Robert Maki, DNR
- b) 3:25 Leveraging Open Source GIS Technology ..... Brian Fischer, Houston Engineering

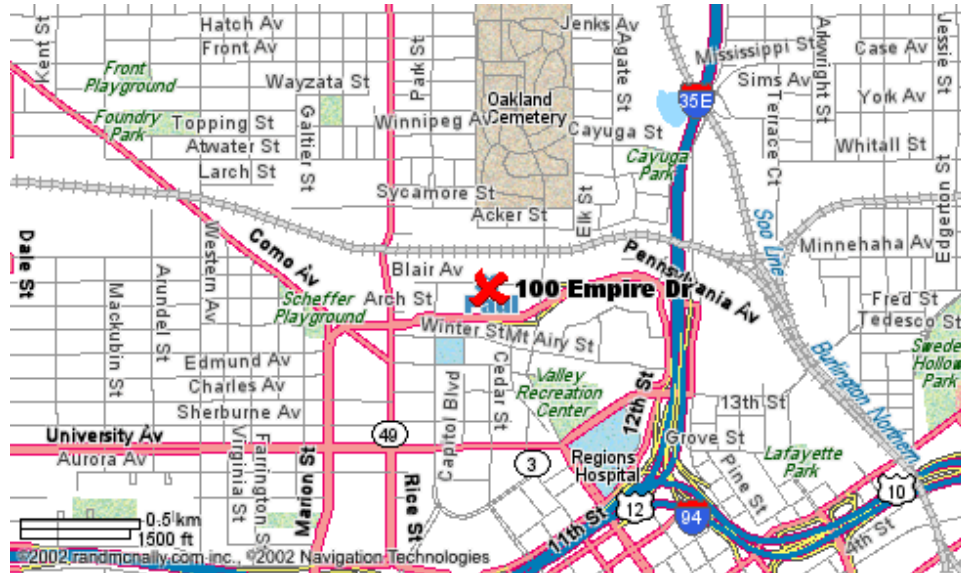
**7. Information Sharing**

- a) 3:45 Round Table Information Sharing
- b) Major MetroGIS Activity Update (see link to web site)
- c) MetroGIS Information Sharing (see link to web site)

**8. Adjourn**

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Located six blocks north of the Capitol Complex, just minutes from downtown.



**If you are traveling on I-94 eastbound --** Exit at Marion Street. Turn Left. Stay on Marion Street past University Avenue and Como Avenue. Marion Street is now Pennsylvania Avenue. Stay on Pennsylvania Avenue past Rice Street and take the next left. This is Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-94 westbound --** Exit at Marion Street. Turn right. Stay on Marion Street past University Avenue and Como Avenue. Marion Street is now Pennsylvania Avenue. Stay on Pennsylvania Avenue past Rice Street and take the next left. This is Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-35E Northbound --** Exit at Kellogg Boulevard. Turn Left. Take a right on John Ireland Boulevard. Then take the next left onto Rice Street. Take Rice Street to Pennsylvania Avenue. Take a right. Take the first left onto Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-35E Southbound --** Exit at Pennsylvania Avenue and go right. Take the Jackson Street exit. At the stop sign go straight and you will be on Empire Drive. We are the last building back on Empire Drive. You will drive straight into our lot. Parking is to the left.

See [www.mcit.org](http://www.mcit.org) for more information

### 3. Approve Meeting Summary

See attached document.

### 4. Items Requiring Action or Discussion

4a) Trails Data ..... Curt Peterson

### 5. Project and Workgroup Reports

5a) Coordinating Committee and Policy Board Updates ..... Randall Johnson

Information about activities of the MetroGIS Policy Board can be found in the meeting minutes and agendas at [http://www.metrogis.org/teams/pb/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/pb/index.shtml#agendas_minutes) . Information about the Coordinating Committee can be found at [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes) . No specific presentation of this material is planned for this TAT meeting, but Randy Johnson (MetroGIS staff) will be available for questions.

5b) E-911 Address and Street Centerline Workgroup ..... Gordon Chinander

5c) Address Information Needs Workgroup ..... Mark Kotz

### 6. Technical Presentations and Demonstrations

6a) State GIS Enterprise Conceptual Architecture Design.....Robert Maki, DNR

The conceptual design was developed by the Geospatial Architecture Committee of the Minnesota Governor's Council on Geographic Information. The presentation will describes a system of data and application resource sharing within the State of Minnesota Geographic Information System (GIS) community. The envisioned system would promote interoperability among data and application providers, reducing long-term costs in data resource and software application development for the participants.

6b) Leveraging Open Source GIS Technology .....Brian Fischer, Houston Engineering

## 7. Information Sharing

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/05\\_1019/packet.pdf](http://www.metrogis.org/teams/pb/meetings/05_1019/packet.pdf), starting on page 22.

- a. Regional GIS Project Proposals
- b. Priority Business Information Needs Solutions
- c. Non-Government Prospective Forum and Strategic Direction Workshop
- d. Modification to Operating Guidelines
- e. County Data Producer Workgroup Activities
- f. View-Only, Web-Based Access Policy Investigated for Parcel Data

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/05\\_1019/packet.pdf](http://www.metrogis.org/teams/pb/meetings/05_1019/packet.pdf), starting on page 27.

- a. Non-Profit Member Resigns from Committee
- b. Presentations/Outreach/Studies
- c. Related Metro and State Geospatial Data Initiatives Update
- d. Related Federal/National Geospatial Data Initiatives Update



**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Centennial Office Building – Room 302**  
**June 9, 2005**

**1. CALL TO ORDER**

Chair Basques called the meeting to order at 9:37 a.m., and then asked that everyone introduce him or herself. Team members, staff, and visitors stated their names and organizations represented.

Members Present: Bob Basques (City of St. Paul - Public Works), Dave Brandt (Washington County), Gordon Chinander (Metro 911 Board), Brad Rupert and Peter Henschel (Carver County), Dan Falbo (ESRI), Rick Gelbmann (Metropolitan Council), Susanne Maeder (LMIC), Jim Maxwell (The Lawrence Group), Curt Peterson (Ramsey County), Bart Richardson (MN DNR), Scott Simmer (Hennepin County), John Slusarczyk (Anoka County), Brian Huberty (U.S. Fish and Wildlife Service), Tim Zimmerman (Hennepin County Community Health).

Support Staff: Mike Dolbow, Mark Kotz, Steve Fester, Alison Slaats and Randall Johnson (MetroGIS Staff Coordinator)

Visitors: Carla Coates (Ramsey County) and Mary Hagerman (Dakota County).

**2. ACCEPT AGENDA**

The agenda was accepted as submitted.

**3. ACCEPT MEETING SUMMARY**

The summary of the November 18, 2004 meeting was accepted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) DataFinder Café Aging Issues**

Alison Slaats explained the aging issues that are facing the Café. These problems stem primarily from the fact that the company who developed the Café is no longer in business. This eliminates the possibility of future support for the Café. It is possible that the Café will no longer work once its server is upgraded and a newer version of ArcIMS is deployed.

Huberty commented that it would be nice to have OGC compliant WMS available from any new version of the Café.

**b) DataFinder Café User Survey**

Because of the problems with DataFinder Café, a survey of users of the Café was recently conducted to get input on the value of its various types of functionality. Kotz summarized the results of the survey. The survey showed that many people use the Café to get quarterly updates of certain datasets. Many of the comments received were not specific to the Café, but rather to DataFinder in general. The survey also showed that users thought metadata are important.

Johnson announced that there would be a call at the June 29 Coordinating Committee meeting to create a workgroup to propose upgrading the Café. Basques suggested asking administrators what is important to them. Huberty added that users are becoming more interested in using online resources to actually do some GIS analysis and querying, as opposed to just downloading the data.

## **5. PROJECT AND WORKGROUP REPORTS**

### **a) Coordinating Committee and Policy Board Updates**

Johnson briefly discussed the actions of the Coordinating Committee and Policy Board at their recent meetings. Full summaries of both meetings are available at <http://www.metrogis.org/teams/cc/index.shtml> and <http://www.metrogis.org/teams/pb/index.shtml>.

### **b) E911 Address and Street Centerline Workgroup**

Dolbow summarized the E911 Address and Street Centerline vision that was presented to the Policy Board on April 20, 2005. Discussion after his presentation included a comment from Curt Peterson regarding mileposts, noting that they would be useful to E911 response. Dolbow agreed, noting that participation from Mn/DOT in the future would be extremely beneficial, and they would be the best source of that data. Maxwell commented that he felt there was a lot of duplication of effort, and a lack of communication surrounding the project, evidenced by several independent meetings between TLG and various public agencies, including the Metropolitan 911 Board. Dolbow apologized for any perceived lack of communication and ensured the group that avoiding duplication of effort was an overarching goal of the project. Basques added a comment in regards to jurisdictional problems that would complicate the effort.

### **c) Address Information Needs Workgroup**

Kotz summarized the vision endorsed by the Coordinating Committee and presented to the Policy Board at its April 20, 2005 meeting. The vision calls for a regional point dataset comprising all occupiable units (residential and non-residential) within the seven-county Metropolitan Area.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) Demo of Geocortex Internet Mapping Framework**

Dave Brandt, Washington County GIS, provided a demonstration of Geocortex Internet Mapping Framework (IMF). Geocortex IMF is an enterprise Internet mapping solution that provides a consistent interface for ArcIMS-based spatial web mapping from a variety of departments within an organization. The County evaluated several other products before deciding on Geocortex. Brandt's presentation slides can be viewed at <http://www.metrogis.org/teams/ta/meetings/050609/geo.pdf>.

## **7. INFORMATION SHARING**

There was no discussion on the items contained in this section. Members were encouraged to review this information on their own time.

## **8. NEXT MEETING**

The next meeting will be Thursday, November 17, 2005, from 2:00-4:00 p.m. at the Centennial Office Building (LMIC), 658 Cedar St., St. Paul, Room 302

## **9. ADJOURN**

Basques adjourned the meeting at 11:30 a.m.

Prepared by,  
MetroGIS Support Staff

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**2:00-4:00 PM, Room 205**  
**November 17, 2005**

**1. CALL TO ORDER**

Chair Basques called the meeting to order at 2:05 p.m.

Members Present: Bob Basques (City of St. Paul - Public Works), Eltayeb Elhassan (Washington County), Gordon Chinander (Metro Emergency Services Board), Brad Rupert (Carver County), Kent Tupper (Dakota County), Jim Bunning (Scott County), Travis Saladino for Dan Falbo (ESRI), Curt Peterson (Ramsey County), Robert Maki for Bart Richardson (MN DNR), Scott Simmer (Hennepin County).

Support Staff: Mark Kotz, Steve Fester

Visitors: John Carpenter (Excensus, LLC), Brian Fischer (Houston Engineering).

**2. ACCEPT AGENDA**

The agenda was accepted as submitted.

Basques was unanimously elected to a second term as Team Chair for 2006.

**3. ACCEPT MEETING SUMMARY**

The summary of the June 9, 2005 meeting was accepted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Trails Data**

Peterson gave an overview of the Active Living Ramsey County (ALRC) program, which was developed to promote a healthier, less obese population in Ramsey County. A kickoff meeting was held on September 29 as explained in a handout provided to the group. Peterson explained how GIS is being used to develop a data layer that can be used by local government units in the County to help them identify all trails, pathways, and sidewalks, and where gaps might exist in this network. He also noted the importance of a common data file structure (standards), as has been developed by MetroGIS, given the many units of local government in the area.

**5. PROJECT AND WORKGROUP REPORTS**

**a) Coordinating Committee and Policy Board Updates**

Kotz noted that summaries of both meetings are available online at <http://www.metrogis.org/teams/cc/index.shtml> and <http://www.metrogis.org/teams/pb/index.shtml>.

**b) E911 Address and Street Centerline Workgroup Update**

Chinander updated the Team on the efforts of the E911 Address and Street Centerline Workgroup. Topics discussed included the issuance of a Request for Proposals (RFP) for a metro-wide street centerline dataset for the entire metro area. More information on this workgroup can be found at [http://www.metrogis.org/teams/workgroups/e911\\_streets/index.shtml](http://www.metrogis.org/teams/workgroups/e911_streets/index.shtml).

**c) Address Information Needs Workgroup Update**

Kotz gave an update on this workgroup's recent activities, the most substantial of which was a presentation of the group's "vision" to the Minnesota GIS/LIS Conference the previous month (October 4, 2005.) The MetroGIS Address Information Needs Workgroup is comprised of city, county and

regional government staff from throughout the metro area. In April 2005, the MetroGIS Policy Board endorsed achieving this vision as a priority for the MetroGIS community. This vision is also supported by many county and municipal government officials. For more information on the Workgroup's efforts, see [http://www.metrogis.org/data/info\\_needs/street\\_addresses/add\\_wkgrp.shtml](http://www.metrogis.org/data/info_needs/street_addresses/add_wkgrp.shtml).

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) State GIS Enterprise Conceptual Architecture Design**

Robert Maki, GIS Manager with the Dept. of Natural Resources, described for the group the conceptual design of a statewide system of data and application resource sharing within the Minnesota GIS community. As with the Address Information Needs Workgroup "Vision" (item 5c above), this was also originally presented at the statewide GIS/LIS Conference in early October. Maki explained that the emphasis at this stage is to focus on roles, relationships and capabilities rather than specifics (implementation, software, etc.)

### **b) Leveraging Open Source GIS Technology**

Brian Fischer of Houston Engineering was invited to demonstrate to the group how different organizations have leveraged open-source GIS technology via web-based applications. Fischer's presentation slides, which include links to the applications described during the presentation, can be viewed at <http://www.metrogis.org/teams/ta/meetings/051117/osgis.pdf>.

## **7. INFORMATION SHARING**

### **a) Round Table Information Sharing**

John Carpenter, with Excensus, LLC, shared some information regarding daytime population trends in the metro area.

## **8. NEXT MEETING**

The next meeting will be Thursday, March 9, 2006, from 2:00-4:00 p.m. at the Minnesota Counties Insurance Trust offices, 100 Empire Drive, St. Paul.

## **9. ADJOURN**

Basques adjourned the meeting at 4:02 p.m.

Prepared by,  
MetroGIS Support Staff

**Agenda****Thursday, March 9, 2006****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***2:00 to 4:00 PM****1. Call to Order****2. Approve Agenda****3. Approve Meeting Summary**

- a) November 17, 2005 ..... all

**4. Items Requiring Action or Discussion:**

- a) 2:10 None ..... all

**5. Project and Workgroup Reports**

- a) 2:10 Coordinating Committee and Policy Board Updates ..... Randall Johnson  
b) 2:15 E-911 Address and Street Centerline Workgroup Update..... Gordon Chinander  
c) 2:25 Address Information Needs Workgroup Update ..... Mark Kotz  
d) 2:35 DataFinder Café Upgrade Workgroup Update ..... Alison Slaats

**6. Technical Presentations & Demonstrations**

- a) 2:50 On The Map Web Application ..... John Carpenter, Excensus  
b) 3:20 Open Source Web Mapping ..... Bob Basques, St. Paul

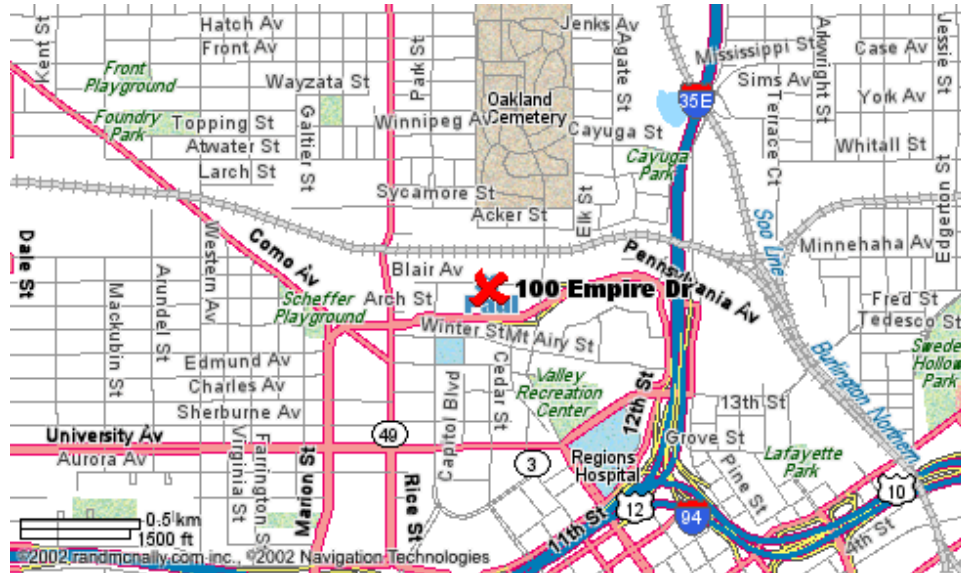
**7. Information Sharing**

- a) 3:50 Round Table Information Sharing  
b) Major MetroGIS Activity Update (see link to web site)  
c) MetroGIS Information Sharing (see link to web site)

**8. Adjourn**

## How to find the MCIT Building:

Located six blocks north of the Capitol Complex, just minutes from downtown.



**If you are traveling on I-94 eastbound --** Exit at Marion Street. Turn Left. Stay on Marion Street past University Avenue and Como Avenue. Marion Street is now Pennsylvania Avenue. Stay on Pennsylvania Avenue past Rice Street and take the next left. This is Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

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**If you are traveling on I-35E Northbound --** Exit at Kellogg Boulevard. Turn Left. Take a right on John Ireland Boulevard. Then take the next left onto Rice Street. Take Rice Street to Pennsylvania Avenue. Take a right. Take the first left onto Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-35E Southbound --** Exit at Pennsylvania Avenue and go right. Take the Jackson Street exit. At the stop sign go straight and you will be on Empire Drive. We are the last building back on Empire Drive. You will drive straight into our lot. Parking is to the left.

See [www.mcit.org](http://www.mcit.org) for more information

### 3. Approve Meeting Summary

See attached document.

## 5. Project and Workgroup Reports

### 5a) Coordinating Committee and Policy Board Updates ..... Randall Johnson

Information about activities of the MetroGIS Policy Board can be found in the meeting minutes and agendas at [http://www.metrogis.org/teams/pb/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/pb/index.shtml#agendas_minutes) . Information about the Coordinating Committee can be found at [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes) . No specific presentation of this material is planned for this TAT meeting, but Randy Johnson (MetroGIS staff) will be available for questions.

### 5b) E-911 Address and Street Centerline Workgroup ..... Gordon Chinander

### 5c) Address Information Needs Workgroup ..... Mark Kotz

Next steps for Address Workgroup:

1. ~~Define a database standard based on our previous work and draft national standard~~
2. Outline roles and responsibilities of participants
3. Contact potential participants and ask if they want to participate
4. Assist participants on converting data to regional standard
5. Evaluate pilot dataset, define key implementation issues and document
6. Get feedback from participants and document
7. Present to workgroup to develop MetroGIS regional strategy

### 5c) DataFinder Café Upgrade Workgroup ..... Alison Slaats

#### DataFinder Update

- Website appearance changes: The look of web pages is being changed slightly. The color scheme is remaining for “brand” recognition, but the HTML files are being modified to make better use of CSS. The front page is changed to make it more apparent to user how to get data via FTP and via new Café. The FAQ and Links pages are being added to/changed/deleted as needed. Also set up system to review this page quarterly for changes.
- DataFinder Café Update anticipated in early summer. The DataFinder Café workgroup met and provided valuable input into evaluating and ranking user and survey input from Café users. The result of these workgroup meetings was to give MetroGIS staff the latitude to take the information from the group and make a decision on replacement software for the DataFinder Café. It was decided to purchase Latitude Geographics’ Geocortex IMF software. This met most of the DataFinder Café core requirements at a reasonable cost. Additionally, the IMF support and maintenance program was a big selling point for maintaining and enhancing future versions of the Café. In addition to the base software, we are purchasing some custom tools to meet DataFinder needs. We have made it part of the contract that these tools will be shared, for free, with other Geocortex users via their User Forum. The status of the Café upgrade is as follows:
  - Geocortex IMF purchased – February 2006
  - New web server purchased, but not yet “live.” Anticipated to be online in April (delayed due to Metropolitan Council’s move)
  - New DataFinder Café release – early summer?
- Future questions for DataFinder workgroup and/or TAT to consider:
  - Would it be useful for the MetroGIS community if DataFinder offered KML format map layers for use in Google Earth?



## 6. Technical Presentations and Demonstrations

### 6a) On The Map ..... John Carpenter, Excensus LLC

John Carpenter from Excensus LLC will demo “On the Map”, a web-based mapping application they recently developed for the US Census Bureau. The application details the home-to-work travel patterns and demographics characteristics of workers in Minnesota and 13 other pilot states. The application uses block-to-block worker origin-destination data derived from state UI tax records and US Census demographics.

Using the application, users can define study areas as small as a neighborhood or as large as a state economic development region. This MapServer-based application features a tool set that permits users to select a geographic study area either freehand or by defined layer to answer questions about worker travel patterns. Confidentiality is strictly protected even at detailed geographic levels through the use of state-of-the-art disclosure avoidance methods. This is the first product released by the Census Bureau that uses partial synthetic data in place of data suppression. The result is high-definition labor and commute-shed mapping.

### 6b) OpenSource Web Mapping ..... Bob Basques, St. Paul

Public Works' newest web mapping product, Open Source Web Mapping engine, is based on MapServer. The User Interface is designed to be simple yet powerful and is easy to configure and run. Emphasis was placed on the data management, both for the data owners, who manage their respective datasets, and the Data users who get up to date datasets to work with. The Data behind the scenes is managed by the responsible data owners down to the individual layer. This is a departure for most Mapping types of web services in that the data owners are handling the upkeep of their respective datasets themselves, vs. handing the data off periodically to system admin for publication.

The system is also very flexible with regard to talking to other systems. It can be configured to both receive and send external command links from or to other web based services. This easy integration is all made possible by building the User Interface with XML which affords much in the way of integration.

## 7. Information Sharing

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/06\\_0118/packet.pdf](http://www.metrogis.org/teams/pb/meetings/06_0118/packet.pdf), starting on page 32.

- a) Modification of Operating Guidelines – Between Meeting Decision Procedures
- b) Status of 2005 Regional GIS Project Proposals
- c) Critique 2005 Regional GIS Project Program / Prepare 2006 Guidelines
- d) Priority Business Information Need Solutions and User Satisfaction Forums
- e) Pilot Project – Policy Investigation for Access to Parcel Data by Non-Profits Entities
- f) Pilot Project - View-Only, Web-based Access Policy Investigation for Parcel Data

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/06\\_0118/packet.pdf](http://www.metrogis.org/teams/pb/meetings/06_0118/packet.pdf), starting on page 42.

- a) Thank you letter to Dr. Zorica Nedovic-Budic
- b) Coordinating Committee Officers for 2006
- c) Presentations / Outreach / Studies
- d) Metro and State Geospatial Initiatives Update
- e) National/Federal Geospatial Initiatives Update
- f) December 14, 2005 Coordinating Committee Meeting Summary



**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**2:00-4:00 PM, Room 205**  
**March 9, 2006**

**1. CALL TO ORDER**

Chair Basques called the meeting to order at 2:06 p.m.

Members Present: Bob Basques (City of St. Paul - Public Works), David Brandt for Eltayeb Elhassan (Washington County), Jim Bunning (Scott County), John Carpenter (Excensus, LLC), Gordon Chinander (Metropolitan Emergency Services Board), Susanne Maeder (MN Land Management Information Center), Jim Maxwell (The Lawrence Group), Brad Rupert (Carver County), Scott Simmer (Hennepin County), and Ron Wencil (US Geological Survey).

Support Staff: Mark Kotz, Steve Fester and Alison Slaats.

Visitors: Jim Klassen and Dan Little (City of St. Paul).

**2. ACCEPT AGENDA**

The agenda was accepted as submitted.

**3. ACCEPT MEETING SUMMARY**

The summary of the November 17, 2005 meeting was accepted as submitted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

No items were on the agenda for today's meeting.

**5. PROJECT AND WORKGROUP REPORTS**

**a) Coordinating Committee and Policy Board Updates**

Randall Johnson, MetroGIS Staff Coordinator, was unable to attend to present updates from the most recent Coordinating Committee and Policy Board meetings. Kotz noted that summaries of both meetings are available online at <http://www.metrogis.org/teams/cc/index.shtml> and <http://www.metrogis.org/teams/pb/index.shtml>.

**b) E911 Address and Street Centerline Workgroup Update**

Chinander updated the Team on the recent efforts of the E911 Address and Street Centerline Workgroup. The Workgroup's most recent meeting was held earlier today, March 9. Chinander noted that the Metropolitan Council now has the authority to pursue a sole source contract with The Lawrence Group to go forward with developing an E911-compatible street centerline database.

Basques asked what other parties would be able to do with their own data in the development process. Kotz noted that the idea under discussion is for other cities to be able to supply their own data, but it would be supplemented with TLG data. Basques also stated that staff within the City of St Paul has been discussing this topic as well. The Workgroup plans to meet next in late March or early April to decide next steps. More information on this workgroup can be found at [http://www.metrogis.org/teams/workgroups/e911\\_streets/index.shtml](http://www.metrogis.org/teams/workgroups/e911_streets/index.shtml).

**c) Address Information Needs Workgroup Update**

Kotz stated that the Workgroup's activities have been placed on hold lately due to limited staff time of Metropolitan Council staff supporting the team. He also mentioned the possibility of a web-based application that would be available to smaller cities that have fewer GIS resources. Chinander mentioned that the recently-endorsed vision created by the Workgroup (see below) will also have a benefit to the E911 community (example: responding to an emergency in an area of new construction without established streets.)

Note: The MetroGIS Address Information Needs Workgroup is comprised of city, county and regional government staff from throughout the metro area. In April 2005, the MetroGIS Policy Board endorsed achieving this vision as a priority for the MetroGIS community. This vision is also supported by many county and municipal government officials. For more information on the Workgroup's efforts, see [http://www.metrogis.org/data/info\\_needs/street\\_addresses/add\\_wkgp.shtml](http://www.metrogis.org/data/info_needs/street_addresses/add_wkgp.shtml).

#### **d) DataFinder Café Upgrade Workgroup Update**

Slaats updated the Team members on the progress of updating the DataFinder Café, the new release of which is tentatively scheduled for summer 2006. She noted that the upgrade took into account the preferences of Café users via a series of online surveys conducted in 2005. Certain little-used features of the original Café were excluded from the new version, while other features will be given more prominence.

In regards to the popularity of Google Earth and similar applications, Slaats asked the group if it would be worthwhile placing a KML version of certain data online, and if others had had similar requests. Chinander noted that Randy Knippel, Dakota County GIS Manager had tried this and raised some concerns about positional accuracy. Maeder noted having one such request. Brandt had received over a dozen requests, but had also found some positional accuracy concerns with viewing their data within the Google Earth environment. However, Chinander did note that such availability would likely be useful and educational to the broader public. It was decided to wait until the next TAT meeting to pursue this item further.

### **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

#### **a) "On the Map" Web Application**

Carpenter presented to the Team an overview and online demonstration of "On The Map", the web-based mapping application his company, Excensus, LLC, recently developed for the U.S. Census Bureau. Carpenter's presentation slides, which include a link to the actual online application, can be viewed at <http://www.metrogis.org/teams/ta/meetings/060309/onthemap.pdf>.

#### **b) City of St. Paul Open Source Web Mapping**

Basques presented a demonstration of St. Paul Public Works' newest web mapping product, Open Source Web Mapping engine. The application is currently only available internally to St. Paul city employees. The code itself will possibly be available for public download pending management approval.

### **7. INFORMATION SHARING**

#### **a) Round Table Information Sharing**

Chinander offered information to the Team regarding a GIS data management project for reconciling the Master Street Address Guide (MSAG) and GIS street centerline database that MESB (Metro Emergency Services Board) staff has been working on.

Wencl stated that the USGS will soon be acquiring orthoimagery for Hennepin and Ramsey counties. The imagery will eventually be posted on the Seamless Data server in Sioux Falls, SD.

### **8. NEXT MEETING**

The next meeting will be Thursday, July 13, 2006, from 2:00-4:00 p.m.

### **9. ADJOURN**

Basques adjourned the meeting at 3:55 p.m.

Prepared by,  
Steve Fester  
MetroGIS Support Staff

**Agenda****Thursday, July 13, 2006****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****2:00 to 4:00 PM****1. Call to Order****2. Approve Agenda****3. Approve Meeting Summary**

- a) March 9, 2006 ..... all

**4. Items Requiring Action or Discussion:**

- a) 2:10 Feedback on June 1 Imagining Possibilities Forum ..... all
- b) 2:40 Federal Enterprise Architecture, Geospatial Profile – Direction from CC ..... all

**5. Project and Workgroup Reports**

- a) 2:50 E-911 Street Centerline Workgroup Update ..... Gordon Chinander
- b) 3:00 Address Information Needs Workgroup Update ..... Mark Kotz
- c) 3:10 DataFinder Café Workgroup Update ..... Alison Slaats
- d) 3:20 Coordinating Committee and Policy Board Updates ..... See info on web

**6. Technical Presentations & Demonstrations**

- a) 3:20 Beyond MapServer: An Introduction to Open Source GIS Applications ..... Paul Wickman

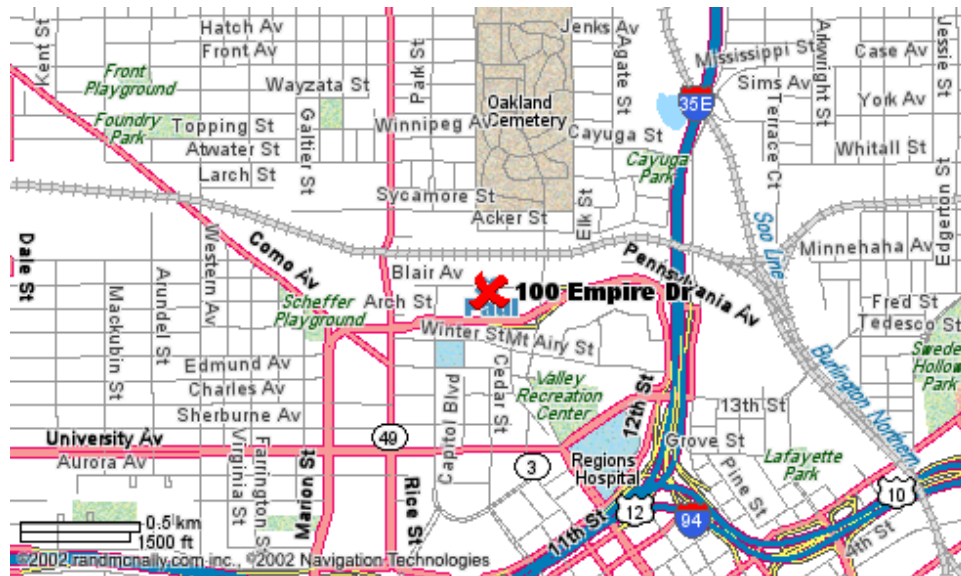
**7. Information Sharing**

- a) 3:50 Round Table Information Sharing
- b) Major MetroGIS Activity Update (see link to web site)
- c) MetroGIS Information Sharing (see link to web site)

**8. Adjourn**

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**See [www.mcit.org](http://www.mcit.org) for more information**

### 3. Approve Meeting Summary

See attached document.

### 4. Action/Discussion Items

#### 4b) Feedback on June 1 Imagining Possibilities Forum ..... All

MetroGIS staff has asked the Technical Advisory Team to review the draft document at [http://www.metrogis.org/specialevents/techpossibilities/FinalForumSummary\\_Web.pdf](http://www.metrogis.org/specialevents/techpossibilities/FinalForumSummary_Web.pdf) and identify any missing or misstated “big ideas”. This is a 57 page document, but most of it is appendices. Please refer to the following pages for summaries containing the “big ideas”.

Page 1 = Executive summary

Page 3 = Summary of Michael Liebhold’s presentation

Pages 4-5 = Summary of Clint Brown’s presentation

Page 6 = Synthesized big ideas from both presentations

Pages 10-11 = Summary of Mark Reichardt’s presentation

Pages 14-15 = Summary of Ian Masser’s presentation

#### 4b) Federal Enterprise Architecture – Geospatial Profile – CC Direction ..... All

From June 28 Coordinating Committee agenda packet

##### 5g) Federal Enterprise Architecture - Geospatial Profile Version 1.1

The purpose of this report is to bring to the Committee’s attention a document entitled “Federal Enterprise Architecture - Geospatial Profile Version 1.1”. At the June 1 “Imagining Possibilities” Forum, Mark Reichardt, President of the Open Geospatial Consortium, commented that he believes this document would be a valuable resource for MetroGIS’s efforts.

##### BACKGROUND

An article that provides a high level overview can be viewed at

[http://www.directionsmag.com/article.php?article\\_id=1966&trv=1](http://www.directionsmag.com/article.php?article_id=1966&trv=1). The complete document (158 pages) can be reviewed and downloaded at

[http://colab.cim3.net/file/work/geocop/ProfileDocument/FEA\\_Geospatial\\_Profile\\_v1\\_1.pdf](http://colab.cim3.net/file/work/geocop/ProfileDocument/FEA_Geospatial_Profile_v1_1.pdf).

##### RECOMMENDATION

That Coordinating Committee request the Technical Advisory Team to review and comment prior to the Committee’s September meeting on the relevance to MetroGIS of the guidance provided in subject document, in particular any issues/opportunities that are likely to be discussion points at the pending Strategic Directions Workshop.

From Coordinating Committee meeting notes

##### 5g. Federal Enterprise Architecture – Geospatial Profile Version 1.1

The group concurred with staff’s suggestion to request the Technical Advisory Team to evaluate the subject document and offer a recommendation for consideration by the Committee at the September meeting as to what, if any, action MetroGIS should take in response to the policies and direction set forth in this document, in particular any issues/opportunities that are likely to be discussion points at the pending Strategic Directions Workshop.

## 5. Project and Workgroup Reports

5a) E-911 Address and Street Centerline Workgroup ..... Gordon Chinander

5b) Address Information Needs Workgroup ..... Mark Kotz

5c) DataFinder Café Upgrade Workgroup ..... Alison Slaats

5d) Coordinating Committee and Policy Board Updates ..... ?

Information about activities of the MetroGIS Policy Board can be found in the meeting minutes and agendas at [http://www.metrogis.org/teams/pb/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/pb/index.shtml#agendas_minutes) . Information about the Coordinating Committee can be found at [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes) . No specific presentation of this material is planned for this TAT meeting, but Randy Johnson (MetroGIS staff) will be available for questions.

## 6. Technical Presentations and Demonstrations

### Beyond MapServer: An Introduction to Open Source GIS Applications

Paul Wickman

Geospatial Services Coordinator, GIS Analyst

Emmons & Olivier Resources, Inc.

While most GIS users are familiar with the MapServer open source platform, many other tools and applications are also available. From simple map creation to advanced geospatial analysis, web-based and desktop-based open source GIS applications can fulfill many vital roles as well as (and sometimes better than) expensive commercial software. Paul Wickman will provide an overview of several open source applications that Emmons & Olivier Resources are currently evaluating for their own needs.

GeoServer is a web-based GIS server platform providing WMS and WFS services to other GIS applications, including the ability to edit features. Desktop software such as Quantum GIS, GRASS, and MapWindow GIS can combine these services with legacy GIS file formats to create professional quality maps and perform advanced geospatial analysis. Finally, PostGIS is a widely adopted relational database platform serving as the foundation for many enterprise GIS solution.

## 7. Information Sharing

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/06\\_0628/Agenda06\\_0628a.pdf](http://www.metrogis.org/teams/cc/meetings/06_0628/Agenda06_0628a.pdf) starting on page 51.

- a) June 1 Imagining Possibilities Forum
- b) MetroGIS DataFinder Café – Upgrade Project
- c) Priority Business Information Need Solutions and User Satisfaction Forums
- d) County Data Producer Workgroup Activities
- e) Quarterly Performance Measures Anomaly Report (*postpone due to lack of staff support*)

### **7c) More information Sharing**

Updates on the following information sharing topics can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/06\\_0628/Agenda06\\_0628a.pdf](http://www.metrogis.org/teams/cc/meetings/06_0628/Agenda06_0628a.pdf), starting on page 57.

- a) Metropolitan Council Evaluation of MetroGIS
- b) MetroGIS 2005 Annual Report
- c) Presentations / Outreach / Studies
- d) Metro and State Geospatial Initiatives Update
- e) Federal Geospatial Initiatives Update
- f) Other News

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**2:00-4:00 PM, Room 205**  
**July 13, 2006**

**1. CALL TO ORDER**

Chair Basques called the meeting to order at 2:03 p.m.

Members Present: Bob Basques (City of St. Paul), David Brandt (Washington County), Jim Bunning (Scott County), Gordon Chinander (Metropolitan Emergency Services Board), Dan Falbo (ESRI), Jim Maxwell (The Lawrence Group), Bart Richardson (Minnesota DNR), Brad Rupert (Carver County) and John Slusarczyk (Anoka County).

Support Staff: Mark Kotz, Polly Townes

Visitors: Bruce Milligan (Autodesk)

**2. ACCEPT AGENDA**

The agenda was accepted as submitted.

**3. ACCEPT MEETING SUMMARY**

The summary of the March 9, 2006 meeting was accepted as submitted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Feedback on June 1 Imagining Possibilities Forum**

Mark explained that Randy Johnson wanted feedback on whether the draft Summary included all of the “Big Ideas.” All agreed that the “big ideas” were all included correctly. David Brandt commented that many of the questions asked at the forum weren’t answered and wondered what an appropriate follow-up would be. There was some comment that the Notes from the forum should be combined into one section rather than listed in separate areas of the Summary – the current arrangement is confusing.

**b) Federal Enterprise Architecture, Geospatial Profile – Direction from CC**

The Coordinating Committee requested that TAT review this document with attention to the questions: Does it have any relevance to GIS? Should any action be taken? If so, what?

Most had not read the document. Mark Kotz suggested that a sub-committee be formed to review it and offer recommendations to the Coordinating Committee before the Strategic Directions Workshop in September. Volunteering for the sub-committee were Bob Basques, Mark Kotz and Ron Wencl (who had sent an e-mail saying he was interested in being on this workgroup). Mark suggested that the sub-committee work with the Governor’s Council Geospatial Architecture Committee on this.

Basques suggested that that a link be created from the TAT web page to the Governor’s Council Geospatial Architecture Workgroup and to the FEA Geospatial Profile.

**5. PROJECT AND WORKGROUP REPORTS**

**b) Address Information Needs Workgroup Update**

Mark Kotz reported on the pilot project in which some cities, counties and other organizations will be testing putting a sample of their occupiable unit address point data into the National Street Address Standard. The deadline for this project was July 7, 2006 – but pilot datasets continue to trickle in. In response to a question, Kotz commented that it is less important what the data look like, and more important to get feedback on the issues participants encountered when attempting to comply with the standard. Kotz also noted that the draft National Street Address Standard will be submitted to the FGDC soon and will then undergo a final broad public review. Estimated completion data is November.



a) E-911 Street Centerline Workgroup Update

Gordon Chinander reported that the workgroup met on June 30<sup>th</sup>. At that meeting the group's workplan was finalized as was a set of specification for the next generation regional street centerlines dataset that will also be used by the Metro Emergency Services Board for 911 purposes. These specification will then be sent to policy makers for each potential data producer to determine which might be participants in the development/maintenance of the new regional dataset now and in the future.

c) DataFinder Café Workgroup Update

Alison Slaats was not present. Mark Kotz reported on her behalf that Alison went to Vancouver to train for GeoCortex. Council staff are still working on getting the new server up and running. Work has been hampered by the loss of GIS staff at the Council.

Basques asked if WMS and WMF had been discussed as services that could be produces/distributed from the new DataFinder Café. Brandt responded that the map services had received a very low response on the use and needs survey conducted by the workgroup, but that the workgroup had decided to make them a high priority anyway. Kotz reported that WMS is a requirement in the design of the new Café, but he wasn't sure WMF was going to happen, at least in the first phase.

d) Coordinating Committee and Policy Board Updates – There was no report other than some discussion about links to websites. Mark Kotz reported that the Coordinating Committee approved two regional GIS projects. \$20,000 was approved the registry and catalog of geospatial services, work that will be conducted by LMIC. \$21,000 was approved for a needs assessment for a potential regional occupiable units online editing application that would be intended for small cities (address authorities) that do not have internal GIS capabilities. These proposals go the to Policy Board next week.

## **7. INFORMATION SHARING**

### **a) Round Table Information Sharing**

Basques told the committee that they are one week away from making GISmo publicly available as open source.

Kotz noted that the Metropolitan Council's 2005 Generalized Land Use dataset is now available on DataFinder.

Brad Rupert said that Scott, Carver and Dakota Counties recently went through training for their grant project to emulate the North Carolina website.

Bart Richardson said that they have received an LCMR grant of \$250K to complete the Minnesota Land Cover Classification system in the metro area. This will be used in Scott, Hennepin, Carver and Washington Counties. One purpose is to update the MNRRRA corridor and both sides of the St. Croix River corridor.

Gordon Chinander mentioned that there is a request from law enforcement people that deal with emergencies on rivers to establish clear jurisdictional boundaries on the Mississippi and St. Croix Rivers. There is no accurate information on boundary line between Minnesota and Wisconsin since the records are from 1845-1847 and are unclear. LMIC instructions are to follow the 1847 main channel but no-one knows how to define that with all the changes which have occurred in the river boundary since then. This involves legal questions of concurrent jurisdiction on the water and on islands.

Bob asked if there were any ideas for future technical presentations.

Brandt said that there has been interest in new soil surveys in Ramsey and Washington Counties.

Gordon – would like a presentation on the National Weather Service new program for SmartWeather – more precise location of storms, etc. Brandt noted that Washington County had tried that system and found the satellite connection to be problematic. Basques mentioned a new system from NOAA which involves only a 6-7 minute delay. He suggested that a presentation/demo be arranged.

**6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

**a) Beyond MapServer: An Introduction to Open Source GIS Applications**

The scheduled presenter, Paul Wickman, cancelled so Basques presented a few of the currently available open source applications including the Open Layers Project, GPS Visualizer, uDig, GeoServer and MapServer.

**9. ADJOURN**

Basques adjourned the meeting at 3:16 p.m.

Note: The next meeting will be Thursday, November 16, 2006, from 2:00-4:00 p.m.

Prepared by,  
Polly Townes and Mark Kotz  
MetroGIS Support Staff

**Agenda****Thursday, November 16, 2006****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****2:00 to 4:00 PM****1. Call to Order****2. Approve Agenda****3. Approve Meeting Summary**

- a) 2:00 July 13, 2006 ..... all

**4. Items Requiring Action or Discussion:**

- a) 2:10 Election of Chair for 2007 ..... all
- b) 2:15 2007 Meeting Schedule ..... all
- c) 2:20 Preparation for MetroGIS Strategic Directions Workshop ..... Johnson
- d) 2:30 Federal Enterprise Architecture Geospatial Profile – Direction from CC ..... Kotz
- e) 2:35 Beyond Government Users – Assistance with “Opportunities Statements” ..... Johnson
- f) 2:40 Serving KML services from DataFinder ..... Slaats

**5. Project and Workgroup Reports**

- a) 2:45 Address Information Needs Workgroup Update ..... Mark Kotz
- b) 2:55 Coordinating Committee and Policy Board Updates ..... See info on web

**6. Technical Presentations & Demonstrations**

- a) 3:00 The New DataFinder Café, WMS and Statistics Module ..... Alison Slaats
- b) 3:30 The MOOSE is out the door ..... Bob Basques

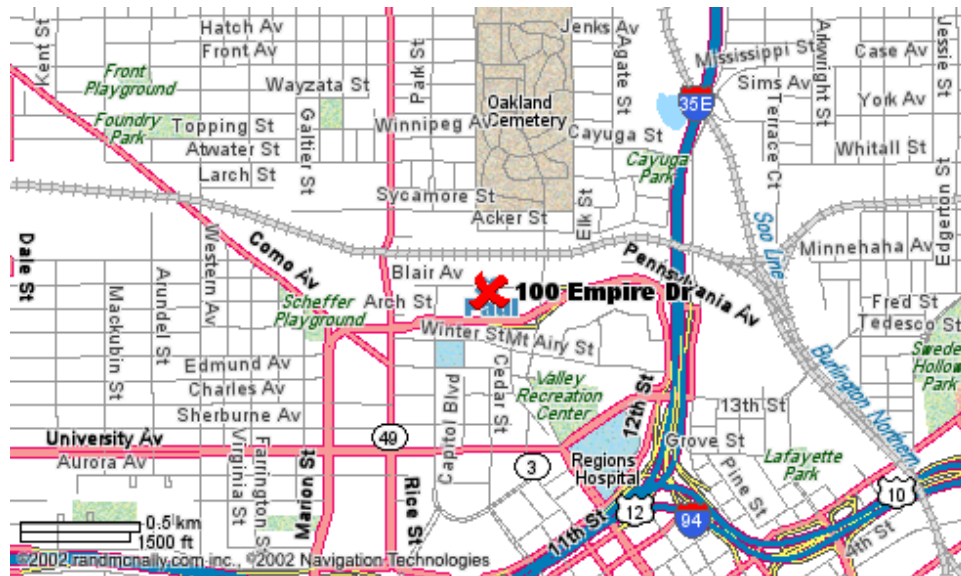
**7. Information Sharing**

- a) 3:50 Round Table Information Sharing
- b) Major MetroGIS Activity Update (see link to web site)
- c) MetroGIS Information Sharing (see link to web site)

**8. Adjourn**

## How to find the MCIT Building:

Located six blocks north of the Capitol Complex, just minutes from downtown.



**If you are traveling on I-94 eastbound --** Exit at Marion Street. Turn Left. Stay on Marion Street past University Avenue and Como Avenue. Marion Street is now Pennsylvania Avenue. Stay on Pennsylvania Avenue past Rice Street and take the next left. This is Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-94 westbound --** Exit at Marion Street. Turn right. Stay on Marion Street past University Avenue and Como Avenue. Marion Street is now Pennsylvania Avenue. Stay on Pennsylvania Avenue past Rice Street and take the next left. This is Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-35E Northbound --** Exit at Kellogg Boulevard. Turn Left. Take a right on John Ireland Boulevard. Then take the next left onto Rice Street. Take Rice Street to Pennsylvania Avenue. Take a right. Take the first left onto Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

**If you are traveling on I-35E Southbound --** Exit at Pennsylvania Avenue and go right. Take the Jackson Street exit. At the stop sign go straight and you will be on Empire Drive. We are the last building back on Empire Drive. You will drive straight into our lot. Parking is to the left.

**See [www.mcit.org](http://www.mcit.org) for more information**

### 3. Approve Meeting Summary

See attached document.

### 4. Action/Discussion Items

#### 4b) 2007 Meeting Schedule

In 2006 we had three meetings in March, July and November, always Thursday afternoon from 2:00 to 4:00

#### 4c) Preparation for MetroGIS Strategic Directions Workshop

Are there any issues or opportunities that the TAT wishes to inject into the list of candidate topics for discussion?

##### **ROLE OF STRATEGIC DIRECTIONS WORKSHOP**

The primary purpose for the Strategic Directions Workshop is to establish clear direction for the MetroGIS Business Plan Update process, which is scheduled to begin immediately following the Workshop. Following completion of the Business Plan Update, MetroGIS's Performance Measurement Plan is also proposed to be updated to insure it is in lockstep with the next-generation Business Plan. The goal is to present the Updated Business Plan for adoption by the Policy Board at its July 2007 meeting and present the updated Performance Measurement Plan to the Board for adoption at its October 2007 meeting.

- **SCOPING THEMES:** Several policy themes have been identified as having strategic importance to MetroGIS identity and perceived value:
  - 1) Guiding philosophy (What changes, if any, are desired to the MetroGIS's underpinning principles?  
Should MetroGIS continue to view local and regional government as its core stakeholders?)
  - 2) Are we done? Do we just maintain what we have in place or are there more opportunities to explore?
    - Adequacy of currently defined common business information needs (Should the list of common information needs be reviewed for possible deletions or additions?)
    - Regional geospatial data solutions to common needs (Should solutions continue to be pursued for yet unresolved common information needs?)
    - Beyond regional data solutions (Should MetroGIS identify applications (mapping services) and opportunities that should be addressed in the Business Plan? Should MetroGIS foster collaborative solutions to common application/web services needs?)
    - Competencies (What resources are needed to maintain the status quo? To go beyond the status quo?)
  - 3) Stakeholders and Non-traditional users (What deliverables are needed by stakeholders to remain engaged? What are stakeholders able to contribute to MetroGIS? What functions are best served by MetroGIS versus its stakeholders? What role should MetroGIS play in facilitating access to geographic information by:
    - a) Interests other than local and regional government, i.e. non-profits and/or private sector;
    - b) Users in fields beyond community development and environmental services; and
    - c) Less technically-inclined users, who are increasingly able to utilize GIS due to improvements in technical tools?)
  - 4) Should MetroGIS pursue a strategy to encourage fostering of statewide collaboration on common geospatial needs and if so, who should be the target organizations/individuals?
  - 5) Do we need to change how we do business, how we get things done?
  - 6) Geographic extent (How should MetroGIS work with interests beyond the seven county Metropolitan Area (e.g., collar counties) – directly or by promoting needed collaboration policies through Mn Governors Council on Geographic Information and other relevant institutions?)
  - 7) Intellectual/Digital Property Rights (What role should MetroGIS play to set standardized best practices/ intellectual rights policy related to derivative datasets, access to data and information via the Internet, etc?)

#### **4d) Federal Enterprise Architecture, Geospatial Profile – Direction from CC**

From July meeting summary:

The Coordinating Committee requested that TAT review this document with attention to the questions:  
Does it have any relevance to GIS? Should any action be taken? If so, what?

Most had not read the document. Mark Kotz suggested that a sub-committee be formed to review it and offer recommendations to the Coordinating Committee before the Strategic Directions Workshop in September. Volunteering for the sub-committee were Bob Basques, Mark Kotz and Ron Wencl (who had sent an e-mail saying he was interested in being on this workgroup). Mark suggested that the sub-committee work with the Governor's Council Geospatial Architecture Committee on this.

Basques suggested that that a link be created from the TAT web page to the Governor's Council Geospatial Architecture Workgroup and to the FEA Geospatial Profile.

#### **4e) Beyond Government Users – Assistance with “Opportunities Statements”**

Is anyone interested in assisting the 3-person "Non-Government" workgroup in refining several "opportunities statements" to forward to the Policy Board.

## 5. Project and Workgroup Reports

### 5b) Address Information Needs Workgroup ..... Mark Kotz

#### **Occupiable Unit Address Data Pilot Project Results:**

##### **Is the MetroGIS Occupiable Unit Address Dataset Vision Realistic?**

**All participants said Yes, but not without challenges.**

##### **Issues and Challenges with the National Standard Format**

**Address ID** will be a big issue. How should it be constructed? How can we be sure it is unique regionally or nationally? Will the address authorities really maintain it? What are the rules and procedures for maintaining it (retire old IDs when the address changes, etc.)

Many databases do not have **individual address elements parsed out**. It could be a very timely and expensive process in some places to do this.

**Street directionals and types** in many existing address DB **are abbreviated**, but if they have their own field and are consistent, it is not hard to output to full word for a transfer file. If they are not in their own field, it may be difficult.

Needs to handle **multiple occupancy type/ID pairs** (which the latest version of the standard allows).

An **implementation guide** would be very helpful (e.g. explains how to handle some of the odd situations).

It would be VERY beneficial to allow **two word pre types like County Road** or State Highway instead of limiting pre types to just one word. Note: ESRI's geocoder currently can only handle one word pre-types, but that is a software issue. If the national standard allows "County Road", then the ESRI software should follow.

##### **Issues and Challenges for the proposed Regional Addresses of Occupiable Units Dataset**

We will need to take a closer look at the **LSO codes to make sure they are clear to people**. There seems to be some confusion about what code to use for what. Also, LSO codes will be very time consuming to enter for anything except single family homes (which could mostly be automated). Most participants did not have the time to put into this for the pilot project, or did the best they could with available time.

Parcel ID is also an issue. **Which PIN to use for complicated areas?** Do we really expect cities to maintain this? Address data is city, but PIN is county. Runs into the whole problem of trying to maintain someone else's data redundantly. Spatial relate to parcel polygon could work in many places, but not for some places like condos. This needs more thought and maybe some testing to see what is realistic.

### 5c) Coordinating Committee and Policy Board Updates ..... ?

Information about activities of the MetroGIS Policy Board can be found in the meeting minutes and agendas at [http://www.metrogis.org/teams/pb/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/pb/index.shtml#agendas_minutes) . Information about the Coordinating Committee can be found at [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes) . No specific presentation of this material is planned for this TAT meeting.

## 6. Technical Presentations and Demonstrations

### DataFinder Presentation Title

Alison Slaats, Metropolitan Council

DataFinder has a couple of new features - an updated DataFinder Cafe and the addition of OGC-compliant map services. An overview of these features will be provided at the TAT meeting.

The DataFinder Café is an interactive tool for viewing and downloading GIS datasets. It allows you to download datasets by custom geographic extents or selections. The old version of Cafe was having aging issues and so a workgroup was setup to help plan a migration path. Alison will provide a summary of the work done by this group, and also show the features of the new Cafe.

MetroGIS has been working on providing map services for several years now. This fall DataFinder released both WMS and WFS services of all the datasets that are publicly downloadable on DataFinder. Alison will show the map service page that describes them. Also, she will briefly explain how MetroGIS plans to measure the Cafe and map service use by using the Geocortex Statistics product .

### Moose Presentation Title

Bob Basques, City of St. Paul

## 7. Information Sharing

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/06\\_0913/Agenda060913packet.pdf](http://www.metrogis.org/teams/cc/meetings/06_0913/Agenda060913packet.pdf) starting on page 31.

- a) Business Plan Update (Phase II “Beyond Government Users” input initiative)
- b) 2006 Regional GIS Projects
- c) MetroGIS DataFinder Café – Upgrade Project
- d) Quarterly Performance Measures Anomaly Report
- e) Priority Business Information Need Solutions and User Satisfaction Forums
- f) County Data Producer Workgroup Activities

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/06\\_0913/Agenda060913packet.pdf](http://www.metrogis.org/teams/cc/meetings/06_0913/Agenda060913packet.pdf) starting on page 37.

- a) Testimonial – U of M
- b) Presentations / Outreach / Studies
- c) Metro and State Geospatial Initiatives Update
- d) Federal/National Geospatial Initiatives Update (Blue Book)
- e) Other News



**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**2:00-4:00 PM, Room 205**  
**November 16, 2006**

**1. CALL TO ORDER**

Chair Basques called the meeting to order at 2:01 p.m.

Members Present: Bob Basques (City of St. Paul), Jim Bunning (Scott County), Gordon Chinander (Metropolitan Emergency Services Board), Dan Falbo (ESRI), Bart Richardson (Minnesota DNR), Brad Rupert (Carver County) and Charlie Teff (Anoka County), Rick Gelbmann (Metropolitan Council), Kent Tupper (Dakota County), Ron Wencil (USGS).

Visitors: Alison Slaats and Matt McGuire (Metropolitan Council) and James Klasser (City of St. Paul).

Support Staff: Mark Kotz and Randall Johnson

**2. ACCEPT AGENDA**

Kotz suggested adding a new Item 4f, Serving KML Services from DataFinder. The agenda was accepted, as modified.

**3. ACCEPT MEETING SUMMARY**

The summary of the July 13, 2006 meeting was accepted, as submitted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Election of Chair for 2007**

Tupper nominated Bob Basques to serve another year as Chair of the Technical Advisory Team. There were no other nominations. Basques accepted the appointment.

**b) 2007 Meeting Schedule**

The group agreed to have three meetings again in 2007, on Thursdays afternoons in the months of March, July and November. Chair Basques noted that if the need arises, a special meeting of the Team may also be called. MetroGIS staff will setup the meeting dates and inform the members.

**c) Preparations for MetroGIS Strategic Directions Workshop**

Johnson summarized the information provided in the agenda packet, noting that the proposed Strategic Directions Workshop is scheduled for February 8, 2007, calling special attention to the scoping themes that have been identified. He encouraged TAT members to offer suggested additions or modifications that they would like included in the facilitation scope of work.

Chair Basques commented on scoping themes 6 – Geographic Extent and 7 – Intellectual Property Rights as follows:

Theme 6: Encourage MetroGIS participants not to limit their data contributions to their respective jurisdictions if they maintain data that goes beyond their jurisdictional boundaries. This comment led to a brief comment from Johnson about the desire for MetroGIS to be a component of statewide solutions for common data needs – that is, attain a capability where the user can obtain data they need for multiple jurisdictions across the state that are fully interoperable, current, and reliable.

Theme 7: Data should be freely available to any user that wishes access. MetroGIS should pursue buyouts of data that are proprietary to enable widespread access. If a buyout is not possible, he believes

there should be a sunset on cost recovery stipulated in data subject to licensure so that at a certain point the data convert to public domain.

No other comments were offered.

**d) Federal Enterprise Architecture, Geospatial Profile – Direction from CC**

Kotz commented that at the July meeting three members of the Team had expressed interest in reviewing this document but that the review had not occurred because higher priorities existed. Chair Basques noted that he continues to believe the proposed philosophy is on the right track but that since there is no tangible application it is difficult to justify time to review and comment given other higher priorities and limited resources.

Wencl commented that there is an individual within the USGS organization that gives workshops on the proposed philosophy but that his travel expenses must be reimbursed. This comment led to investigating the possibility to seek endorsement of this topic as a GIS/LIS workshop item.

Ultimately the consensus was that until one or more of the Team's members recognizes a compelling need to review the subject philosophy, the matter will remain tabled.

**e) Beyond Government Users – Assistance with “Opportunities Statements”**

Johnson described the efforts of the Workgroup that is summarizing public-private partnering opportunity statements to present for consideration at the pending Strategic Directions Workshop, noting the five themes for which a recommendation is being developed:

- *Expand Policy Board membership to include non-government interests*
- *Foster a Marketplace for Geospatial Data Resources*
- *Foster an Open Source Data Model*
- *Foster statewide adoption of Principles that Underpin MetroGIS.*
- *Implement ApplicationFinder concept*

No comments were received.

**f) KML and DataFinder**

McGuire summarized a proposal he authored to investigate adding a capability to DataFinder that would allow data distributed via DataFinder to be viewed in Google Earth. Among the options offered for consideration to explore were Mapdex

(<http://www.mapdex.org/search/search.cfm?serverkeyword=datafinder&tab=svr&type=svr>) and an extension that will be provided in ArcGIS 9.2, both of which allow distributing KML as a web service.

The group voiced some concerns about data accuracy problems that have been experienced using Google Earth but all believed that it is valuable to test this technology. Falbo agreed to report back to MetroGIS staff the details of its licensing of its KML serving extension, which is integrated into ArcGIS 9.2.

The group concurred that MetroGIS staff should proceed with the suggested evaluation and report back at the next meeting.

**5. PROJECT AND WORKGROUP REPORTS**

**b) Address Information Needs Workgroup Update**

Mark Kotz reported on the results of pilot project focused on data conversion and formatting. Nine cities and counties participated. All concluded that the vision for a regional occupiable units dataset is realistic from a data perspective, but that several challenges will need to be resolved to realize the vision. Kotz, summarized the findings and a proposed recommendation to modify the National Street Address Standard to accommodate two-word pre-types.

Kotz also summarized the status of the MetroGIS Regional Project to assess the viability of a proposed web editing application for occupiable units. The assessment will determine how many small communities would use the application and what functionality it would need to entice them to use it. Kotz noted that three consultant proposals had been received to conduct the viability assessment and hopes a decision will be made in the next week or so.

b) Coordinating Committee and Policy Board Updates – There was no report other than some discussion about links to websites.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) The New DataFinder Café, WMS and Statistics Module**

Alison Slaats, DataFinder Technical Manager, summarized the changes that have been made recently to DataFinder and its Café component. She explained that the changes were needed because the previous platform was failing. The improvements that have been made were in response to the results of a user survey conducted in 2005. (See the slide presentation at [http://www.metrogis.org/documents/presentations/tat\\_datafinder\\_café\\_wms.pdf](http://www.metrogis.org/documents/presentations/tat_datafinder_café_wms.pdf) for the specific improvements that were made.) Chinander offered that he is very pleased that the new site is noticeably quicker and more user friendly to navigate. Others concurred.

Slaats commented that the current Café interface has been limited to only those features that support data discovery and downloading. Some out-of-the-box functions in the GeoCortex software have been removed, for example graphical markup tools. Gelbmann reported that a conscious decision was made not to include these features until the matter is vetted at a policy level. Gelbmann commented that the reason is that those functions, while useful to some, are out of the original data distribution scope of DataFinder. He believes that the scope of DataFinder should not be changed without clear MetroGIS policy direction. Turning on these functions could also lead to the need for increased staff resources to support Café.

received that acknowledges that additional resources will be needed to support a “data use” tool as opposed to continuing restrict Café to essentially a “data finder/access” tool.

These comments led to a wide ranging discussion regarding benefits and concerns of supporting broader functionality for Café, as a data viewing tool/online GIS tool. Several members commented that MetroGIS’s own survey results indicate that many users of Café have been using its data browsing capabilities as opposed to its data downloading functions. Others noted that multiple applications will be required to address the variety of data viewing business needs within MetroGIS and that no one application (e.g., Café) will suffice. Others commented that if the tools exist, they should be turned on unless their use would negatively affect performance.

Slaats concluded her presentation with a summary of next steps for further improvements (see slide presentation for specifics).

### **b) The MOOSE is out the door**

Klasser and Chair Basques demonstrated MOOSE (Map Objects Open Source Environment), a web portal that they have developed to provide access to Geospatial data maintained for the St. Paul. A significant amount of the discussion revolved around the use of SVN protocol that permits a federated data maintenance model through which the custodians of the web portal are no longer involved in data maintenance, mapping symbology, etc. The data producers, of which there are many, now update the data on the site as part of their responsibilities. This protocol also supports version stamping. For more information see ([URL](#)). The group concurred that this site provides proof that a federated data maintenance model can work.

## **7. INFORMATION SHARING**

### **a) Round Table Information Sharing**

Chair Basques commented that St. Paul now needs a policy on which data will be public domain and which will be subject to cost recovery. Johnson commented that MetroGIS is seeking a policy that distinguishes public domain access via WMS from downloading a copy of the source datafile or obtaining it via WFS.

Chinander – MESB is continuing to work with Mn Department of Public Safety to promote statewide standards for data critical to emergency services management.

Bunning noted that Carver and Scott Counties will be pursuing collaborative solutions to common geospatial needs as part of a comprehensive evaluation of how the counties can collaborate.

Gelbmann encouraged the members to fill out the Map Services Survey currently being administered by LMIC in cooperation with a Governor's Council o Geographic Information initiative.

Kotz welcomed Charlie Teff who was recently hired onto the GIS staff at Anoka County.

Falbo commented that on December 19 there will be workshop/debriefing on a shared services project underway between MnDOT and Mn Department of Health. Ramsey County's reorganization of its IT function, including GIS, will also be a topic of discussion.

#### **8. ADJOURN**

Basques adjourned the meeting at 4:00 p.m. noting that the next meeting will be in March 2007. Kotz agreed to set the date via email.

Prepared by,  
Randall Johnson and Mark Kotz  
MetroGIS Support Staff Team

**Agenda****Thursday, March 8, 2007****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****1:00 to 3:30 PM****1. Call to Order, Welcome, Introductions****2. Approve Agenda****3. Approve Meeting Summary**

- a) 1:10 November 16, 2007 ..... all

**4. Items Requiring Action or Discussion:**

- a) 1:15 MetroGIS Strategic Directions Workshop Summary ..... Randy Johnson  
b) 1:20 MetroGIS Geocoding Services Discussion ..... All

**5. Project and Workgroup Reports**

- a) 1:45 Occupiable Units Editing Application Viability Assessment Update ..... Matt McGuire  
b) 1:50 Service Broker Regional GIS Project Update ..... Fred Logman

**6. Technical Presentations & Demonstrations**

- a) 1:55 Hennepin County Multiple Address Project ..... Brad Roman  
b) 2:20 DataFinder RSS ..... Jessica Deegan & Matt McGuire  
c) 2:40 OSGEO Offerings ..... Pericles Nacionales  
d) 3:00 SketchUp Overview ..... TBD

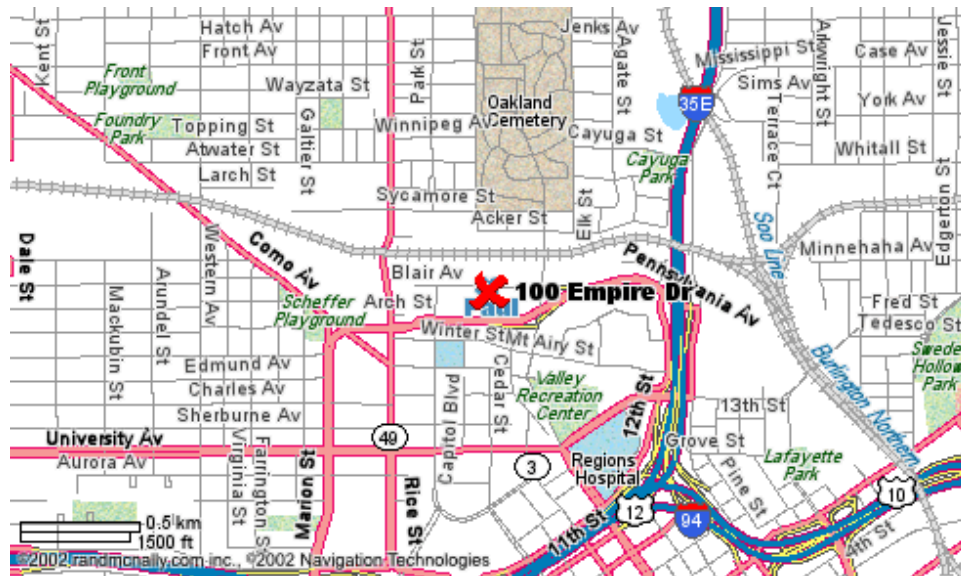
**7. Information Sharing**

- a) 3:20 Round Table Information Sharing  
b) Major MetroGIS Activity Update (see link to web site)  
c) MetroGIS Information Sharing (see link to web site)

**8. Adjourn     Next meeting is July 19<sup>th</sup>, 1:00 pm**

## How to find the MCIT Building:

Located six blocks north of the Capitol Complex, just minutes from downtown.



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**See [www.mcit.org](http://www.mcit.org) for more information**

### **3. Approve Meeting Summary**

See attached document.

## **4. Action/Discussion Items**

### **4a) MetroGIS Strategic Directions Workshop Summary**

See attached document Strategic Directions Workshop Summary.doc

### **4b) MetroGIS Geocoding Services Discussion**

Web services have been a hot topic in the GIS world. Both the Minnesota Governor's Council on Geographic Information and MetroGIS have include web services as topics in their strategic planning efforts. One particular type of service that is generating considerable discussion locally is a web-based geocoding service. Many have expressed an interest in such a service that could use one or all of the following datasets

- TLG Street Centerlines
- Regional Parcel Dataset
- proposed Regional Occupiable Units Point Dataset

Many organizations already have internal geocoding capabilities, but they are not web enabled. Multiple efforts exist to create web services using one or more of these datasets. This raises several issues.

- What are the needs?
- What are the technical opportunities and challenges?
- How do the license restrictions of these datasets affect what can be made available?
- How can we coordinate our efforts, organizationally and technically?
- What additional web applications could make use of such a geocoding service?

## 5. Project and Workgroup Reports

**5b) Occupiable Units Editing Application Viability Assessment Update** ..... Matt McGuire

**5c) Service Broker Regional GIS Project Update** ..... Fred Logman

Project scope: Develop a first generation version of a web based services delivery and brokering function that builds on the Governor's Council on Geographic Information shared services survey and catalog. The broker function will consist of a web based library of services populated with a few routines to act as a demonstration project illustrating the potential value of developing an expanded library of shared services for MetroGIS.

## 6. Technical Presentations and Demonstrations

### Hennepin County Multiple Address Project

Brad Roman, Hennepin County

Hennepin County is currently conducting a pilot project to develop multiple address data collection and maintenance processes. A brief overview of multiple address data and the pilot project will be given. A demonstration of current data processing, geolocation, and custom ArcGIS 9.x utilities will follow the presentation.

### DataFinder RSS

Jessica Deegan and Matt McGuire, Metropolitan Council

DataFinder now has an RSS feed that provides notification of new or updated datasets or related news items. The primary benefit of RSS is that frequent users of DataFinder data can be alerted of data changes automatically. There are multiple clients that allow a user to subscribe to RSS feeds, including Google reader, Bloglines, My Yahoo, etc. If a user does not wish to subscribe to the RSS, they have the option to simply view the feed on the DataFinder website in a format consistent with the overall site using stylesheets (XSL) to format the RSS feed.

### OSGEO Offerings

Pericles Nacionales

The Open Source Geospatial Foundation has been created to support and build the highest-quality open source geospatial software. The foundation's goal is to encourage the use and collaborative development of community-led projects. To support the development of open source geospatial software, and promote its widespread use. Some Projects under the OSGEO Umbrella: MapBender, MapBuilder, MapGuide Open Source, MapServer, OpenLayers.

### SketchUp Overview

TBD, City of St. Paul

SketchUp is a free (and pay for) 3D visualizing tool. The City of St. Paul architectural section uses it quite a bit for 3D modeling and visuals. It ties in nicely with GIS mapping. See <http://www.sketch3d.de/index.htm?/program/screenshots.htm> It's put out by Google (since they bought the company) and reads KML among other things. You can build 3D objects with it for insertion into Google Earth for example.



## 7. Information Sharing

### 7a) Round Table

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/06\\_1221/061221\\_meeting\\_packet.pdf](http://www.metrogis.org/teams/cc/meetings/06_1221/061221_meeting_packet.pdf) starting on page 37.

- a) Upgraded DataFinder Operational in October
- b) 2006 Regional GIS Projects
- c) Business Plan/Performance Measurement Plan Updates
- d) Priority Business Information Need Solutions and User Satisfaction Forums
- e) County Data Producer Workgroup Activities

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/06\\_0913/Agenda060913packet.pdf](http://www.metrogis.org/teams/cc/meetings/06_0913/Agenda060913packet.pdf) starting on page 38.

- a) New Testimonial – U of M
- b) Technical Advisory Team (TAT) – November 16<sup>th</sup> Meeting Summary
- c) Presentations / Outreach / Studies
- d) Metro and State Geospatial Initiatives Update
- e) Federal Geospatial Initiatives Update
- f) Other News

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:30-3:30 PM, Room 205**  
**March 8, 2007**

**1. CALL TO ORDER**

Mark Kotz called the meeting to order at 1:35 p.m.

Members Present: Bob Basques (City of St. Paul), Mark Basten (City of St. Paul), Gordon Chinander (Metropolitan Emergency Services Board), Rick Gelbmann (Metropolitan Council), Joshua Gumm (Scott County), Peter Henschel (Carver County), Brad Henry (URS, Inc.), Eero Kilkson (City of Minneapolis), Fred Logman (LOGIS), Todd Losk (Dakota County), Doug Matzek (Washington County), Jim Maxwell (The Lawrence Group), Bob Moulder (Hennepin County), Jim Murphy (City of Minneapolis), Nancy Read (Metropolitan Mosquito Control District), Brad Roman (Hennepin County), Charlie Teff (Anoka County), Rick Gelbmann (Metropolitan Council), Pericles Nacionales (University of Minnesota).

Visitors: Jessica Deegan, Alison Slaats, and Matt McGuire (Metropolitan Council).

Support Staff: Mark Kotz, Randall Johnson, and Chris Kline.

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the November 16, 2006 meeting was accepted, as submitted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) MetroGIS Strategic Directions Workshop Summary**

Johnson introduced the topic, explaining that the Strategic Directions Workshop was a day-long retreat on February 8, 2007 to gather information and ideas regarding the future of MetroGIS. The outcome of the Workshop, as analyzed so far, has indicated seven focus areas: Support/Develop Applications, Expand/Diversify Stakeholders, Improve Marketing/Advocacy, Develop/Refine Regional Data Needs, Advancing Infrastructure, and Provide a Forum for Knowledge Sharing. He continued, requesting that persons interested in participating in workgroups focusing on the infrastructure and forum aspects contact him.

A general discussion on the definition of infrastructure and its meaning to MetroGIS and the GIS community ensued, but no definite concept was agreed upon. Johnson then called for volunteers for a workgroup to establish the criteria.

**b) MetroGIS Geocoding Services Discussion**

Kotz introduced the topic and provided a background regarding web services, stating that the general consensus is that a geocoding service would be valuable to the MetroGIS community and a logical focus for MetroGIS. Maxwell informed the team that The Lawrence Group a preliminary plans for a web service in which applications could submit an address to them, and receive X/Y coordinates and the grid cell based off the King's Atlas.

Read suggested that someone contact David Bitner of the Metropolitan Airports Commission and obtain his geocoding source code. Slaats followed up, suggesting that the TAT investigate applicable standards for a geocoding service. Chinander mentioned that the regional 911 center used a standard. Chair Basques stated that standardization would work well and would be an idea for a regional GIS project.

## **5. PROJECT AND WORKGROUP REPORTS**

### **b) Occupiable Units Editing Application Viability Assessment Update**

McGuire introduced the topic, stating that an assessment is being worked on by URS, Inc. Several workshops are being planned for cities to determine if there is a need/want for the application, and what functionality the cities would desire in the application.

b) Service Broker Regional GIS Project Update – Logman introduced the topic, stating that volunteers are needed for the test phases of the project. Kotz requested that volunteers either verbally or electronically inform Logman of their intent. Slaats offered her assistance in testing the project.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) Hennepin County Multiple Address Project**

Brad Roman of Hennepin County introduced the topic and provided a demonstration of the capabilities of the application he has developed.

### **b) DataFinder RSS**

Jessica Deegan and Matt McGuire of the Metropolitan Council demonstrated that new RSS capability has been added to DataFinder. A brief conversation regarding the nature of RSS and how to access it followed.

### **c) OSGEO Offerings**

Pericles Nacionales explained what OSGEO is and how its open source model is highly popular throughout the world.

### **d) SketchUp Overview**

Mark Basten provided overview of the application and its usage in the City of St. Paul. Chair Basques indicated that the entire sewer and water network of St. Paul had been placed in the program.

## **7. INFORMATION SHARING**

No discussion of this item occurred.

## **8. ADJOURN**

Basques adjourned the meeting at 3:45 p.m.

Prepared by,  
Randall Johnson, Mark Kotz, and Chris Kline  
MetroGIS Support Staff Team

**Agenda****Thursday, August 2, 2007****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****1:00 to 3:00 PM****1. Call to Order, Welcome, Introductions****2. Approve Agenda****3. Approve Meeting Summary**

- a) 1:10 March 8, 2007 ..... all

**4. Items Requiring Action or Discussion:**

- a) 1:15 Draft Strategies – Business Plan ..... Randy Johnson  
b) 1:30 Technical Items in Glossary for Next Generation Business Plan ..... Randy Johnson

**5. Project and Workgroup Reports**

- a) 1:45 Address Workgroup Update ..... Mark Kotz  
b) 2:00 MetroGIS Geocoder Update ..... Nancy Read

**6. Technical Presentations & Demonstrations**

- a) 2:15 Metropolitan Council Maps Web Site ..... Alison Slaats  
b) 2:30 Changes to GEOMOOSE ..... Bob Basques

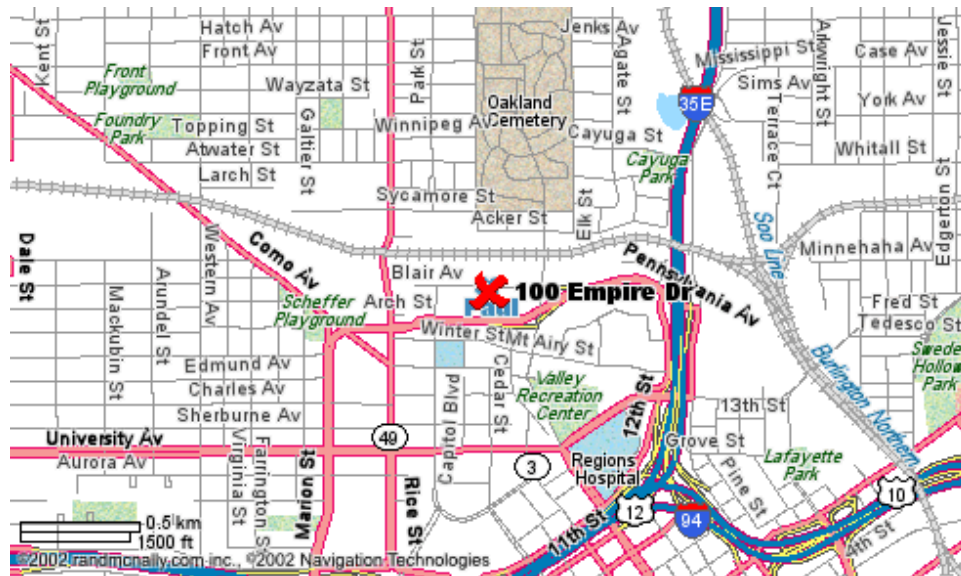
**7. Information Sharing**

- a) 2:45 Round Table Information Sharing  
b) Major MetroGIS Activity Update (see link to web site)  
c) MetroGIS Information Sharing (see link to web site)

**8. Adjourn      Next meeting is November 8<sup>th</sup>, 1:00 pm**

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**See [www.mcit.org](http://www.mcit.org) for more information**

### 3. Approve Meeting Summary

See attached document.

### 4. Action/Discussion Items

#### 4a) Draft Strategies – Business Plan

This item is to update the TAT on the next round of the review process. A second round of comment will be invited via a SharePoint site, hopefully the week of July 30. No TAT members responded to the previous survey/request for comment. It is hoped that the members can be encouraged to weigh in as the strategies are finalized, particularly those relating to technical matters. These strategies will frame MetroGIS's efforts for the next 3-5 years, so it is important that TAT members speak up if something is missing that is believe to be an important objective.

#### 4b) Technical Items in Glossary for Next Generation Business Plan

Staff would appreciate the TAT's advice/counsel on the development of definitions for technical items to be included in the Glossary for the Next-Generation Business Plan (see attached document GLOSSARY\_template.doc).

### 5. Project and Workgroup Reports

5a) Address Workgroup Update ..... Mark Kotz

5b) MetroGIS Geocoder Update ..... Nancy Read

## 6. Technical Presentations and Demonstrations

### Metropolitan Council Maps Web Site

Alison Slaats, Metropolitan Council

In June, the Metropolitan Council released a beta version of their new *Maps* web pages. The *Maps* pages offer applications and tools that provide maps and information about communities in the Twin Cities Seven County Metro Area.

Our goal is to integrate geographic data with other datasets to provide information that is pertinent and useful for the public, planners and GIS professionals.

Please visit our new pages: <http://gis.metc.state.mn.us/maps>. This is a beta site and we value and encourage your feedback and suggestions ([maps@metc.state.mn.us](mailto:maps@metc.state.mn.us)).

### Changes to GEOMOOSE

Bob Basques, City of St. Paul

## 7. Information Sharing

### 7a) Round Table

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/07\\_0725/07\\_0725a.pdf](http://www.metrogis.org/teams/pb/meetings/07_0725/07_0725a.pdf) starting on page 41.

- a) Parcel Data Cost Recovery Policies – Estimate of Net Revenue Realized
- b) 2006 Regional GIS Project (Status Reports)
- c) Performance Measurement
- d) DataFinder Upgraded
- e) Priority Business Information Need Solutions and User Satisfaction Forums

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/07\\_0725/07\\_0725a.pdf](http://www.metrogis.org/teams/pb/meetings/07_0725/07_0725a.pdf) starting on page 46.

- a) Report on LOGIS Option – Municipal Representative to Policy Board
- b) Presentations / Outreach / Studies
- c) Metro and State Geospatial Initiatives Update
- d) National/Federal Geospatial Initiatives Update
- e) June 27, 2007 Coordinating Committee Meeting Summary

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:00-3:00 PM, Room 205**  
**August 2, 2007**

**1. CALL TO ORDER**

Bob Basques called the meeting to order at 1:05 p.m.

Members Present: Bob Basques (City of St. Paul), Dave Brandt (Washington County), Rick Gelbmann (Metropolitan Council), Joshua Gumm (Scott County), Bart Richardson (Minnesota DNR), Nancy Read (Metropolitan Mosquito Control District), Brad Rupert (Carver County).

Visitors: Jim Klassen and Dan Little (City of St. Paul), Jessica Deegan and Alison Slaats (Metropolitan Council)

Support Staff: Mark Kotz, Randall Johnson, and Chris Kline.

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the March 8, 2007 meeting was accepted, as submitted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Draft Strategies – Business Plan**

Johnson introduced the topic, providing an overview of the Policy Board's discussion of the Business Plan on July 25, 2007 and of the Business Planning Oversight Team's work on the proposed strategies and tactics. He noted that the current strategies are posted on the MetroGIS Sharepoint site (hosted by Dakota County). Johnson noted that the Policy Board wants to pursue data interoperability with organizations outside of the seven-county metropolitan area and requested comments from the Technical Advisory Team.

Johnson explained that Policy Board desired to fast-track the creation of a Technical Coordinator resource; in order to support this function until a final determination on the nature of the Technical Coordinator's position, he asked if any TAT members be interested in serving on a new Steering Committee for Technical Leadership, as related to applications. Kotz stated that if there was a more defined nature of the goals and the expectations of members of the proposed Steering Committee, there may be more people willing to participate.

Gelbmann elaborated that the position's definition has not been fully defined and it may be a single individual, or a body of individuals with a variety of expertise. The focus should be on developing a framework with respect to application services, similar to the process that was used for developing regional data sets.

**b) Technical Items in Glossary for Next-Generation Business Plan**

Johnson began, explaining the purpose of the glossary in the business plan. He asked that the TAT review the technical items provided, and offer feedback on their definitions using the Sharepoint site. Basques asked how many items needed TAT definition. Johnson stated it was fewer than ten. Basques asked that the list of terms requesting definition be emailed to TAT members to solicit their feedback. Johnson replied that the purpose of the Sharepoint site is so everyone can collaborate on the definitions if there is any disagreement. The TAT eventually decided to perform both functions, with Basques



receiving an email of the terms while the entire TAT will be issued access to the Sharepoint site to participate in the creation of definitions if necessary.

## **5. PROJECT AND WORKGROUP REPORTS**

### **a) Address Workgroup Update**

Kotz explained that the workgroup had met the previous week, at which time it reviewed the results of the recent web editing application viability assessment and formed a technical subgroup to focus on a recommendation for implementation of such an application. The workgroup also talked about the database standard and desired update frequency of the proposed address points dataset. Kotz concluded by noting that the workgroup plans to give a recommendation to the Coordinating Committee at its September 12 meeting.

### **b) MetroGIS Geocoder Update**

Read introduced the topic, indicating that a Request for Proposals would be issued after the meeting to potential contractors. She asked that if any of the TAT members had suggestions of anyone not on the provided list that should be sent the RFP to please let her know.

Gelbmann suggested that the Geocoder Team contact Tanya Mayer and Kathy Elhenz-Matson at the Metropolitan Council for input from their work on geocoding in recent weeks using the Regional Parcel Dataset and the TLG Street Centerlines. Dave Brandt also noted that Washington County has done considerable work on cascading geocoding.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) Metropolitan Council Maps Web Site**

Alison Slaats of the Metropolitan Council provided an overview of the background of GIS data on the Council's website and the desire to have a dynamic way of providing information about communities to the public. The new Maps application that will be issued with the Council's redesigned website will have community profiles, links to pre-made maps, statistical data, and the ability to create a custom map with access to over 100 datasets.

She added that the presentation was made to the Policy Board, where they asked about incorporating local datasets into the application. This query will be common in the future, she predicted, once the Maps application is launched. Slaats stressed standards are necessary to facilitate integration of data into a variety of applications that are being created.

### **b) GeoMOOSE**

Dan Little of the City of Saint Paul introduced GeoMOOSE and demonstrated that the installation is quite simple using the stand-alone client. He provided an overview of the tools included with the application, showing that each aspect of the program is modular and can be modified. GeoMOOSE is based off accessing web services and various components can be added with ease. Since the program is modular and based off XML, each data layer used in the application is also a separate service.

## **7. INFORMATION SHARING**

### **a) Round Table Information Sharing**

Gumm informed the TAT that Carver, Dakota, and Scott Counties have each purchased licenses to WebGIS Solutions and were collaboratively working to implement the systems in their respective counties.

Read noted that the Metropolitan Mosquito Control District's website was featured on television and that the video can still be located on the news agency's website.

Richardson asked if anyone knew of any contacts for statewide parcel datasets. Various members of TAT recommended that the DNR investigate the process that MetroGIS used to acquire the Regional Parcel

Dataset. They provided feedback and asked that they would be available for advisement when the DNR proceeds with their project.

**8. ADJOURN**

Basques adjourned the meeting at 3:06 p.m.

Prepared by,  
Randall Johnson, Mark Kotz, and Chris Kline  
MetroGIS Support Staff Team

DRAFT

**Agenda****Thursday, November 8, 2007****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***1:00 to 3:00 PM****1. Call to Order, Welcome, Introductions****2. Approve Agenda****3. Approve Meeting Summary**

- a) 1:05 August 2, 2007 ..... all

**4. Items Requiring Action or Discussion:**

- a) 1:10 Elect a chair for 2008 ..... Mark Kotz  
b) 1:20 Meeting schedule in 2008 ..... All  
c) 1:25 Implications of the Approved MetroGIS Business Plan ..... Nancy Read  
d) 1:45 Options & Considerations for Using and Protecting TLG Data on the Web ..... Jim Maxwell

**5. Project and Workgroup Reports**

- a) 2:05 Address Workgroup Update ..... Mark Kotz  
b) 2:15 MetroGIS Geocoder Update ..... Nancy Read  
c) 2:25 Geospatial Services Catalog Update ..... Chris Cialek

**6. Technical Presentations & Demonstrations**

- a) 2:35 Centralized GIS Applications – Washington County Show and Tell ..... Dave Brandt

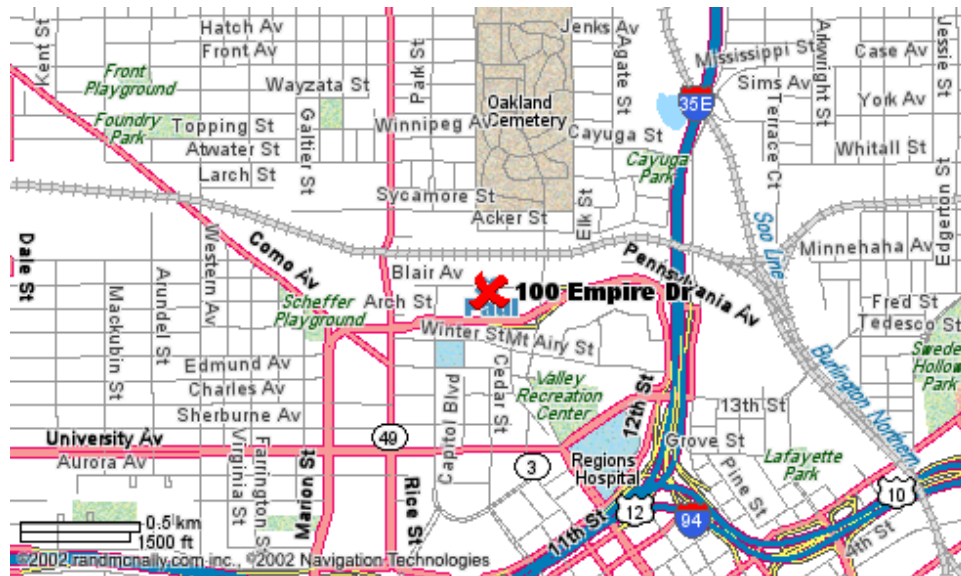
**7. Information Sharing**

- a) 2:55 Round Table Information Sharing  
b) Major MetroGIS Activity Update (see link to web site below)  
c) MetroGIS Information Sharing (see link to web site below)

**8. Adjourn      Next meeting is ????, 1:00 pm**

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**See [www.mcit.org](http://www.mcit.org) for more information**

## 6. Technical Presentations and Demonstrations

### Centralized GIS Applications – Washington County Show and Tell

Dave Brandt, Washington County

Through IMS and the Geocortex framework, Washington County has eliminated 35 seats of ArcView and the need to install GIS applications on each machine. The presentation will focus on the functions that were required to meet the need as well as the back office Python scripts that are used to process and deliver the content to the IMS sites.

## 7. Information Sharing

### 7a) Round Table

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/07\\_1017/07\\_1017p.pdf](http://www.metrogis.org/teams/pb/meetings/07_1017/07_1017p.pdf) starting on page 55.

- a) Business Plan Update
- b) Performance Measurement
- c) 2006 and 2007 Regional GIS Project Updates
- c) Priority Business Information Needs solutions
- e) County Data Producer User Group

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/07\\_1017/07\\_1017p.pdf](http://www.metrogis.org/teams/pb/meetings/07_1017/07_1017p.pdf) starting on page 57.

- a) Twin Cities Regional Economic Development Web Site
- b) Debrief Event Proposed – GIS Involvement in Response to I-35W Bridge Collapse
- c) Status Report – Filling City Representative Seat on Policy Board
- d) Description of MetroGIS Added to Wikipedia
- e) Real Estate Appraisal Conference
- f) Presentation/Outreach/Studies
- d) Related Metro and State Geospatial Initiatives Update
- e) Related Federal/National Geospatial Initiatives Update
- f) Other News – Australian Court Decision

**Meeting Summary  
MetroGIS Technical Advisory Team  
Minnesota Counties Insurance Trust Building, St. Paul, MN  
1:00-3:00 PM, Room 205  
November 8, 2007**

**1. CALL TO ORDER**

Bob Basques called the meeting to order at 1:05 p.m.

Present: Bob Basques (City of St. Paul), Dave Brandt (Washington County), Zach Christoff (Hennepin County), Chris Cialek (MN LMIC), Dan Falbo (ESRI), Jim Fritz (Xcel Energy), Rick Gelbmann (Metropolitan Council), Joshua Gumm (Scott County), Matt McGuire (Metropolitan Council), Jim Maxwell (The Lawrence Group), Curt Peterson (Ramsey County), Nancy Read (Metropolitan Mosquito Control District), Brad Rupert (Carver County), Alison Slaats (Metropolitan Council), Ron Wencil (USGS).

Support Staff: Mark Kotz (Metropolitan Council)

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the August 2, 2007 meeting was accepted, as submitted.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Elect a Chair**

Dave Brandt was unanimously elected chair for 2008

**b) Meeting Schedule in 2008**

The group agreed to a schedule of 3 meeting approximately every 4 months as has been done in the last few years. Kotz will setup the meetings and notify the group.

**c) Implications of the Approved MetroGIS Business Plan**

Nancy Read gave an overview of the approved MetroGIS business plan, including major milestones, mission statement, expanded scope, and 8 major activity areas. For details please see [http://www.metrogis.org/teams/pb/meetings/07\\_1017/07\\_1008\\_businessplan\\_final.pdf](http://www.metrogis.org/teams/pb/meetings/07_1017/07_1008_businessplan_final.pdf).

Read also mentioned that MetroGIS has launched a Technical Leadership Steering Workgroup that will focus on defining future direction for MetroGIS with respect to shared application needs. The group will select a consultant to conduct a forum to help MetroGIS understand and plan for this opportunity area. The forum will likely be held in January 2008, and TAT members are encouraged to attend. Read said that the Technical Leadership Steering Workgroup differs from the TAT in that it has a fairly focused mission and will end as soon as that mission is completed in 2008. It remains to be seen what work might be assigned to the TAT stemming from this effort.

**d) Options & Considerations for Using and Protecting TLG Data on the Web**

Jim Maxwell describe that TLG data has been available to MetroGIS participants for many years. As online applications have continually increased in importance, TLG has been asked to allow the use of their data in web applications. TLG has been in discussion with the Metropolitan Council about doing this and testing a web use licensing process. TLG will be proceeding on a case by case basis for applications. It is important for TLG to know who the users will be, what the functionality of the applications will be, and what spatial extent will be involved. TLG will need to evaluate if a potential

application would conflict with its own business practices. Maxwell didn't think would be a common problem with government web applications.

McGuire asked how one would begin this conversation with TLG. Maxwell responded that a license agreement for web use has been created which includes an attachment that requests pertinent information about the web application. Once that is completed and submitted to TLG, the conversation begins. This is still in draft form now as the process is being tested with Metropolitan Council.

Much discussion ensued about what is currently permitted on the web. Maxwell noted that some organizations have TLG data on the web for viewing only and have discussed this with TLG. Maxwell said that TLG has found instances in the past where their data was in a web application and they were able to download it, which was not an intended purpose of the application. Kotz noted that the idea of the license is to clearly define in a technical sense what is permissible and what is not. With so many different web technologies and environments, it is not practical to make one set of specific technical rules, thus the idea to view them on a case by case basis.

## **5. PROJECT AND WORKGROUP REPORTS**

### **a) Address Workgroup Update**

Kotz explained that the workgroup had met twice since the last TAT meeting. The group has made significant progress on defining the draft database specification. The big focus of the group was to propose a full "regional solution" to the Coordinating Committee and Policy Board, but this cannot be done until an organization is willing to accept the role of regional custodian. And the responsibilities of the regional custodian are still unclear. The biggest issue surrounds the need for the proposed address points dataset to be updated on a daily basis. To this end the Workgroup has received funding from MetroGIS to support a project by Carver County to create a working address point data synchronization mechanism. The \$20,000 project will be funded half by MetroGIS and half by Carver Co. It is expected to be completed in early 2008 and provide the methodology and a working example for synchronizing such data on a daily basis between individual address authorities and county and regional aggregators.

Roman mentioned that Hennepin County has stepped away from creating a web application for collecting address point data and instead is working directly with some cities that are actively maintaining this data.

Kotz reported that the draft National Street Address Standard is expected to be submitted to the Federal Geographic Data Committee in the next few months, at which time it will be made available for a public review. The Address Workgroup will coordinate a review of this standard through MetroGIS.

### **b) MetroGIS Geocoder Update**

Read described that the geocoder project is in full swing. A consultant has been hired to create the geocoder. The consultant previously worked on the PAGC geocoder engine ([www.pagcgeo.org](http://www.pagcgeo.org)) and is very experienced. The geocoder will use fairly sophisticated algorithms and applicable standards. Once completed the geocoder will accept an address or intersection, desired street offset (if needed) and max number of matches, and return the following:

- The original input
- Number of candidate matches
- Array, including for each candidate match:
  - A standardized output address
  - A point location in decimal degrees
  - Match score
  - Dataset that was used for the match (e.g. address points, parcels or streets for a cascading geocoder)

The geocoder will not include reverse geocoding or landmarks at this time. It is expected to be available in April. LMIC has agreed to use the geocoding engine to host a geocoding service on the web that will allow single but not batch geocoding. The geocoding engine will be made freely available, so

organizations could implement it in-house to do batch geocoding. If you are interested in participating or observing the development, sign up for the PAGC developers list at “e-mail lists” link on pagcgeo home page, or browse the list archive at [https://sourceforge.net/mail/?group\\_id=66325](https://sourceforge.net/mail/?group_id=66325).

#### **c) Geospatial Services Catalog Update**

Cialek explained that the geospatial services catalog project is at the point of defining a standard for documenting (metadata) such services. They are creating a documentation scheme based on the ISO 19115 metadata standard, which includes metadata for geospatial services. The workgroup expects to have a draft catalog up and running to show the steering committee next week. The idea is to have an online application in which one could login and create documentation for geospatial services and applications. The documentation would then be reviewed by an expert acting as a sort of broker. It would be posted if completed OK, or possibly sent back for clarification. The group is also on it's second draft of a project report.

### **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

#### **a) Centralized GIS Applications – Washington County Show and Tell**

Dave Brandt gave a demonstration of several centralized applications that Washington County field staff use. Brandt had a notebook computer with a wireless card to connect back to the server in Stillwater through Citrix. Brandt said that these applications were necessitated by the fact that so many staff were previously using ArcView 3x and had the data loaded on each computer. It was both a licensing constraint and a data update constraint to have so many computers to keep running those applications. So Washington Co. created internal web applications to provide this functionality, using ArcIMS and the Geocortex client. Brandt reported that the performance is generally good with some rare exceptions (e.g. an appraiser is in a basement).

Brandt demoed one of the most used applications by field staff, which a parcel search that appraisers use frequently. 20 staff members are now using this implementation and the county just bought 50 more notebooks to deploy. Brandt showed some of the tools developed for the appraisers, for example a COGO drawing tool. Squad cars are also using similar technology but without the wireless connection to the data and application on the server. For the squad cars, the applications are on each computer and the data is updated automatically when they park in a hotspot at the office at night. The coordinates of the squad care are sent wirelessly to the dispatch.

### **7. INFORMATION SHARING**

#### **a) Round Table Information Sharing**

Wencl reported that Homeland Security is close to contracting for aerial photography and LIDAR data to support the 2008 Republican National Convention.

### **8. ADJOURN**

Basques adjourned the meeting at 3:12 p.m.

Prepared by,  
Mark Kotz



**Agenda****Thursday, April 17, 2008****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****1:00 to 3:00 PM****1. Call to Order, Welcome, Introductions****2. Approve Agenda****3. Approve Meeting Summary**

- a) 1:05 November 8, 2007 ..... all

**4. Items Requiring Action or Discussion:**

- a) 1:10 Meeting Shared Geospatial Needs Beyond Data – Report and Recommendations Read/Kotz
- b) 1:40 Method for Defining and Prioritizing Shared Application & Web Service Needs Kotz/Read
- c) 2:00 Mailing List/discussion group/forum for TAT ..... All
- d) 2:10 OGC Membership ..... Alison Slaats
- e) 2:30 The National Grid Dataset on DataFinder ..... Matt McGuire

**5. Project and Workgroup Reports**

- a) 2:40 Address Workgroup Update ..... Mark Kotz
- b) 2:45 MetroGIS Geocoder Update ..... Nancy Read

**6. Technical Presentations & Demonstrations**

- a) None

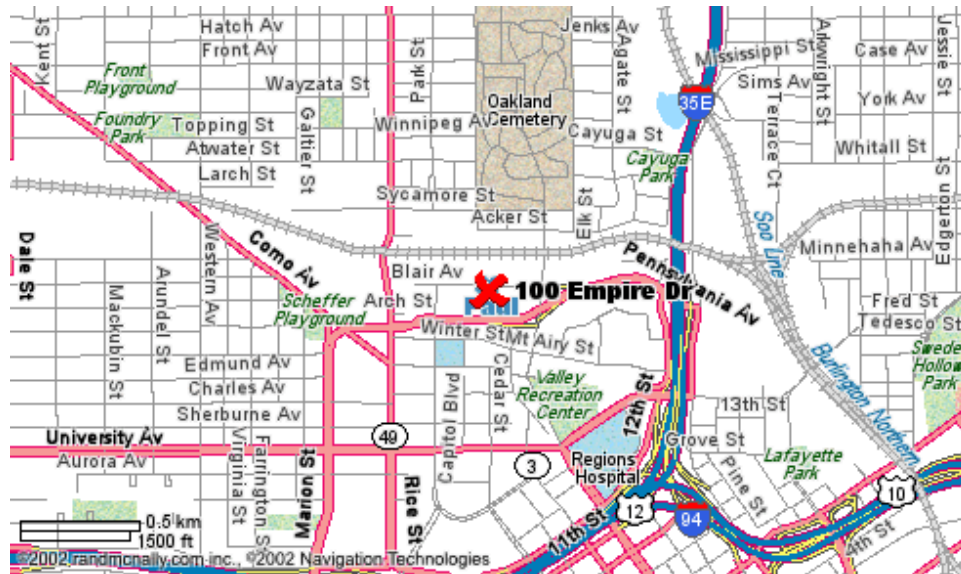
**7. Information Sharing**

- a) 2:55 Round Table Information Sharing
- b) Major MetroGIS Activity Update (see link to web site below)
- c) MetroGIS Information Sharing (see link to web site below)

**8. Adjourn      Next meeting is July 31<sup>st</sup>, 2008, 1:00 pm**

## How to find the MCIT Building:

Located six blocks north of the Capitol Complex, just minutes from downtown.



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**If you are traveling on I-35E Southbound --** Exit at Pennsylvania Avenue and go right. Take the Jackson Street exit. At the stop sign go straight and you will be on Empire Drive. We are the last building back on Empire Drive. You will drive straight into our lot. Parking is to the left.

**See [www.mcit.org](http://www.mcit.org) for more information**

## 7. Information Sharing

### 7a) Round Table

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/cc/meetings/08\\_0327/3\\_27\\_08Packet.pdf](http://www.metrogis.org/teams/cc/meetings/08_0327/3_27_08Packet.pdf) starting on page 85

- a) View-Only Access to TLG Dataset Authorized
- b) Regional Emergency Preparedness Solution – Communication Strategy
- c) Next-Generation Parcel Data Sharing Agreement - Negotiations to begin in April
- d) Data Synchronization Mechanism – Carver County Project Lead
- e) 2007 Regional Project – Regional Geocoder Application (MMCD Project Lead)
- f) Emergency Access to Licensed Data - EP Workgroup
- g) Priority Business Information Need Solutions and User Satisfaction Forums

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/cc/meetings/08\\_0327/3\\_27\\_08Packet.pdf](http://www.metrogis.org/teams/cc/meetings/08_0327/3_27_08Packet.pdf) starting on page 89.

- a) Technical Administrative Assistant Leaves MetroGIS – Anticipated Impacts
- b) \$50,000 CAP Grant Awarded for Emergency Preparedness Strategy
- c) MetroGIS Represented on New National Geospatial Advisory Committee (NGAC)
- d) 2008 Annual Report
- e) Twin Cities Economic Development Web Site
- f) Presentations / Outreach / Studies
- g) Metro and State Geospatial Initiatives Update
- h) Federal Geospatial Initiatives Update

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:00-3:00 PM, Room 205**  
**April 17, 2008**

**1. CALL TO ORDER**

Dave Brandt called the meeting to order at 1:07 p.m.

Present: David Brandt (Washington County), Dan Falbo (ESRI), Rick Gelbmann (Metropolitan Council), Matt McGuire (Metropolitan Council), Jim Maxwell (The Lawrence Group), Curt Peterson (Ramsey County), Chad Riley (Carver County), Alison Slaats (Metropolitan Council), Kent Tupper (Dakota County) Ron Wencil (USGS).

Support Staff: Mark Kotz (Metropolitan Council), Randall Johnson (MetroGIS)

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the November 8, 2008 meeting was accepted with one minor typo change.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Meeting Shared Geospatial Needs Beyond Data**

Kotz began by talking about the definitions of “applications” and “web services” and how to convey the difference to policy makers. He tested an illustration that could be presented to the Policy Board. Some suggestions for enhancing the illustration were given.

- Clarify that data does not need to be downloaded or stored when using web mapping services, but that applications just use the piece of data they need when they need it.
- Use an analogy of a stock ticker like a web service.
- Stress that the same service can be used in multiple applications. Perhaps illustrate the geocoder being used by many different applications in different organizations.
- Consider showing a business application as the client and the internet, as a cloud, in the middle of the diagram.

Kotz then gave an overview of the Technical Leadership Workgroup’s efforts and the next steps and recommendations that were approved by the Coordinating Committee at its March 27<sup>th</sup> meeting. See presentation and handout for details.

Falbo asked about an apparent contradiction in the survey results, one question saying that MetroGIS’s role with development of applications and web services was ranked low and another question showing writing web-based services as a top ranking. Kotz explained that the first question asked what role MetroGIS should play, with the response being that doing the actual development work for applications and services is not a high priority for MetroGIS as an organization. The other question asked what MetroGIS should promote or facilitate. In this case, the development of web-based services by other organizations was ranked high. Thus, MetroGIS should promote and facilitate the development of services, but not be in the business of creating them itself.

Johnson suggested that with respect to next step #5, in addition to exploring methods to establish trust with web services, we will need to identify the issues involved with that trust.

**b) Method for Defining and Prioritizing Shared Applications & Web Service Needs**

Kotz explained that the Coordinating Committee has directed the forming of a workgroup to oversee the process of identifying and prioritizing shared application and web service needs. This effort could be somewhat similar to what was done in 1996 with information needs that lead to data priorities. Kotz asked if anyone was interested in participating on this workgroup. There were no volunteers. Slaats asked if the original information needs from 1996 would be used as a starting point. The group's consensus was that yes, this should definitely happen. The group was asked if it had any ideas or comments about the process that might be used to define and prioritize these needs. None were offered.

**c) Mailing List/Discussion Group/Forum for TAT**

Kotz commented that the Coordinating Committee has directed the Technical Advisory Team to test the potential for it to expand its scope as principally a knowledge sharing vehicle to oversee a "mail list or list serve" mechanism as the initial strategy to foster partnering in addition to knowledge sharing. The group discussed the potential for this. Tupper concurred that a centralized collaboration resource of some kind would be valuable. Others noted that we would need to make it something that would be easy to maintain and not require everyone to continually update what they are doing. Something that notifies subscribers of new information was considered more effective than a site people would have to check periodically to see if anything has changed. Thus an e-mail function of some kind was thought to be a useful aspect. Kotz noted that a number of free sites are available (e.g. Google and Yahoo groups), but involve advertising. It was agreed that someone would need to have the time dedicated to administer the site. It was not thought to be something that would require finding. Falbo suggested that the University might be an appropriate organization to act in the role of the manager of such a site. It was agreed that oversight of this capability should be a responsibility of the Technical Coordinator position proposed to be added to the MetroGIS staff support team. No specific next steps were decided.

**d) OGC Membership**

Slaats and Johnson explained that MetroGIS has been approached by the Open Geospatial Consortium and offered an opportunity to join OGC as a *voting* aggregate member at a substantial discount of the standard fee to test the value of regional collaborative organizations, such as MetroGIS, participating in OGC's processes. The OGC is an international industry consortium of 348 companies, government agencies and universities participating in a consensus process to develop publicly available interface specifications. (See <http://www.opengeospatial.org/> )

An aggregate member votes at the technical committee level and is defined as:

Aggregate Membership provides a way for a group of local, provincial, state or other subnational government agencies, not-for-profit, academic and research institutions with a common interest to collectively join the OGC as a single voting member. Together, as an OGC Aggregate Member, these "component organizations" can pool both their requirements and their resources to optimize their participation in OGC programs.

The group was asked if anyone would be interested in participating in this aggregate membership. Annual membership would cost an estimated \$250. The OGC representative estimated that participation might involve 10% to 20% of one's time to participate effectively.

Gelbmann commented that he would like to have more information about the potential benefits that would be likely for a participant and their organization, noting that a 10 percent-plus time commitment will be difficult to justify given the complexity of the several of the projects proposed for MetroGIS during 2008-2009.

Falbo mentioned that OGC has recognized the importance of more effectively working with the consumers to meet their needs. They are doing a good job of creating test beds for potential standards.

He suggested that perhaps the TAT should ask the Coordinating Committee to see if they consider the opportunity to be valuable.

Brandt said that this is an intriguing idea, but probably too cutting edge for a government organization to spare the 10 to 20 percent time resources.

(Editor's note: Following the meeting, Chairperson Brandt forwarded this proposal to all of the members of the TAT to ensure that everyone has an opportunity to offer their comment before a decision is made.)

#### **e) The National Grid Dataset on DataFinder**

McGuire gave an overview of the National Grid standard, noting that it is not specifically a data standard, but a standard for cartographic display of the grid. He said that the Metropolitan Council was proposing to add it to DataFinder. Two shape files, 1000 meter and 100 meter grid cells, are suggested. McGuire asked for comments about this proposal and if anyone in the group is actively using the National Grid.

Tupper said that Dakota County is investigating use of the national grid for emergency preparedness. Wencil said that using it could be a big benefit when working across boundaries, particularly the state boundary into Wisconsin where they use a different coordinate system. Kotz gave an overview of the value of the grid for field work with recovery situations and creates a standard grid that can be used in different areas. Gelbmann mentioned that it might also be used for other purposes as a standard grid for aggregation things like crime or demographic data for modeling purposes. Brandt said that there may be use of the grid at Washington County in the future and, if so, it would be good to have the cartographic templates setup ahead of time.

The group agreed that both line and polygon data should be available on DataFinder. Peterson asked if it would be possible to obtain a point coordinate from a given National Grid location. The group agreed that this capability would be valuable and should be pursued.

### **5. PROJECT AND WORKGROUP REPORTS**

#### **a) Address Workgroup Update**

Kotz reported that the workgroup has not met since the last TAT meeting, awaiting the results of the "data synchronization" pilot project that Carver County has agreed to conduct. The pilot is tentatively scheduled to begin around May 1.

Kotz also commented that he had attended the URISA/NENA Addressing Conference in Portland the week of April 7. He noted that the vision promoted in the MetroGIS model of relying upon local addressing authorities to maintain address points data and compiling these data to the county and state level was promoted by both keynote speakers and by other presenters. Kotz spoke with the members of the national address data standard workgroup about the progress of the standard. They are hoping to forward it to the FGDC within a few months. They said that they have modified the street pretype attribute to make it more flexible in accordance with previous comments from the MetroGIS Address Workgroup.

#### **b) MetroGIS Geocoder Update**

Member Read, the project manager, was unable to attend the meeting.

### **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

No technical presentations or demonstrations were scheduled for this meeting.

### **7. INFORMATION SHARING**

#### **a) Round Table Information Sharing**

Brandt noted that he shared both MetroGIS parcel data standards and draft address points standards with MCCC (Minnesota County Computer Consortium). They are in the process of revising their taxing system.

Peterson asked if any counties were getting their address data directly from cities. Riley noted that Carver County is working with Chaska to get address data updated and validated by the city.

Peterson also asked if there is any effort to develop a geocoding standard that leverages the national address data standard. Kotz responded that the national standard is still in draft form, but expected this would happen once the standard is approved.

Jim Maxwell asked if anyone was aware of a state wide database/table containing the new and old GNIS codes for cities. MetroGIS has such a table, but only for the metro area. Kotz mentioned that one can download a GNIS table that has FIPS codes that could be used to convert to the new code.

Wencl reported that the Imagery for the Nation (IFTN) program will be flying 1 meter imagery in 2010 and will be looking to partner with state and local government to buy up to higher resolutions. He noted that for example a county could buy up to 6 inch resolution and keep the 6 inch photos and sell them and the feds would still only distribute the 1 meter data. Gelbmann said that the Council will likely be participating and encouraged others to consider it. Brandt and Peterson said that their counties are looking to get imagery in 2009. Johnson commented that the IFTN will be a discussion topic at the June 4 National Geospatial Advisory Committee and encouraged members to offer suggestions to him as to how to improve the program.

Brandt asked if anyone was working on providing online, real time election results. No one was.

## **8. ADJOURN**

Brandt adjourned the meeting at 3:12 p.m.

Prepared by,  
Randall Johnson and Mark Kotz

**Agenda****Thursday, July 31, 2008****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment****(See attached map & directions)****1:00 to 3:00 PM****1. Call to Order, Welcome, Introductions****2. Approve Agenda****3. Approve Meeting Summary**

- a) 1:05 April 17, 2008 ..... all

**4. Items Requiring Action or Discussion:**

- a) 1:10 Three MetroGIS Regional Projects Approved..... Nancy Read
- b) 1:20 Geospatial Architecture Workgroup Formed..... Mark Kotz
- c) 1:25 Next Generation Parcel Data Sharing Agreement ..... Randy Johnson

**5. Project and Workgroup Reports**

- a) 1:35 MetroGIS Geocoder Update ..... Nancy Read
- b) 1:45 Address Workgroup Update ..... Mark Kotz
- c) 1:55 Parcel Point Data Synchronization Project..... Peter Henschel

**6. Technical Presentations & Demonstrations**

- a) 2:00 Web Application Development using ArcGIS Server 9.3, utilizing the REST and JavaScript API ..... Brian Fischer and Peter Henschel
- b) 2: 25 Dakota/Carver/Scott Collaboration Project ..... Mary Hagerman, Joshua Gumm

**7. Information Sharing**

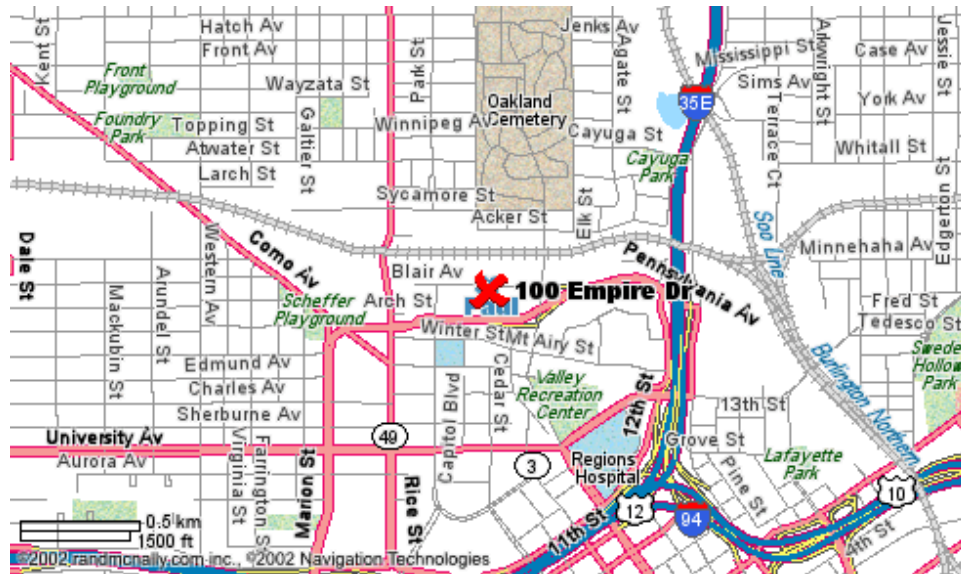
- a) 2:50 Round Table Information Sharing
- b) Major MetroGIS Activity Update (see link to web site below)
- c) MetroGIS Information Sharing (see link to web site below)

**8. Adjourn      Next meeting is November 20, 2008, 1:00 pm**



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**See [www.mcit.org](http://www.mcit.org) for more information**

## 6. Technical Presentations

### 6a) Web Application Development using ArcGIS Server 9.3, utilizing the REST and JavaScript API

Carver County's GIS office has contracted with Houston Engineering Inc. and GeoDecisions to create a Parks and Trails Web Mapping Application. The application is being created to promote active living within Carver County by providing citizens with an interactive web map highlighting the County's parks and trails system. Since the application is being built for citizen use, the application design needs to be easy to use and have similar functionality as other popular internet mapping applications. A customized web interface was created based upon these design specifications.

The application was built using ArcGIS Server 9.3 technology, utilizing the new REST and JavaScript API. The application functionality includes address search with option to find all parks and trails within a specified distance. Other common tools include trail locator, map tips, measure, photo points and printing. The application uses tiled map caches for basemap layers to speed up performance at predefined scales, which is important to keep the user's attention. This presentation will focus on the experiences we gained in developing the application using ArcGIS Server 9.3. Topics will include targeted audience expectations, performance, customization, geoprocessing services and map caches. The application will also be demonstrated for attendees.

Brian Fischer, CFM  
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### 6b) Dakota/Carver/Scott Collaboration Project

The mapping application is a collaborative effort on the part of Dakota, Carver and Scott Counties. The goal is to have a common web mapping interface for users and eliminate the need to learn a new application when working in different Counties. The new mapping application provides advanced functionality such as enhanced drawing tools, custom parcel buffer selection, custom themes for specific interests and more robust measuring/area calculation tools. In addition, internal County and City staff members have the ability to create custom mailing labels, select properties by specific parcel criteria and exporting their selection to an Excel spreadsheet for use in further analysis.

The collaboration advantage and benefits have essentially become a "win-win-win" situation. Dakota, Carver and Scott Counties are able to pool their resources and essentially triple their development capability by sharing code and knowledge. These collaborative efforts have opened the door for future initiatives by further bridging an invaluable relationship between the staff members at the three neighboring Counties.

Mary Hagerman, Dakota County

Joshua Gumm, Scott County

## 7. Information Sharing

### 7a) Round Table

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/08\\_0723/08\\_0723\\_packet.pdf](http://www.metrogis.org/teams/pb/meetings/08_0723/08_0723_packet.pdf) starting on page 34

- a) Technical Coordinator Position Update
- b) Addressing Shared Application Needs – Phase II
- c) Concept of Private Sector Coordination Committee Investigated
- d) Next-Generation Parcel Data Sharing Agreement
- e) Data Synchronization Mechanism – Carver County Project Lead
- f) Regional Geocoding Pilot Project - MMCD Project Lead
- g) Leadership Development Plan
- h) Modifications to Outreach Plan
- i) Priority Business Information Need Solutions and User Satisfaction Forum

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Policy Board meeting packet at [http://www.metrogis.org/teams/pb/meetings/08\\_0723/08\\_0723\\_packet.pdf](http://www.metrogis.org/teams/pb/meetings/08_0723/08_0723_packet.pdf) starting on page 49.

- a) National Geospatial Advisory Committee (NGAC) – June Meeting
- b) Newest Benefits Testimonial to MetroGIS's Efforts
- c) Presentations / Outreach / Studies
- d) Metro and State Geospatial Initiatives Update
- e) National/Federal Geospatial Initiatives Update
- f) June 2008 Coordinating Committee Meeting Summary

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:00-3:00 PM, Room 205**  
**July 31, 2008**

**1. CALL TO ORDER**

Chair Dave Brandt was unable to attend. Mark Kotz acted as chair for the meeting. Kotz called the meeting to order at 1:07 p.m.

Present: Chris Cialek (LMIC), Dan Falbo (ESRI), Brian Fischer (Houston Engineering), Rick Gelbmann (Metropolitan Council), Joshua Gumm (Scott County), Mary Hagerman (Dakota County), Peter Henschel (Carver County), Matt McGuire (Metropolitan Council), Jim Maxwell (The Lawrence Group), Curt Peterson (Ramsey County), Nancy Read (MMCD), Alison Slaats (Metropolitan Council), Charlie Teff (Anoka County).

Support Staff: Mark Kotz (Metropolitan Council)

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the April, 2008 meeting was accepted with no changes.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Three MetroGIS Regional Projects Approved**

Nancy Read described the three regional projects that were recently approved for funding by the Policy Board.

1. Address Points Editing Tool:

Read described that this would be a tool targeted for smaller cities to use (cities that don't have significant GIS resources). It was recommended by the address workgroup and a previous study indicated it would be well used. The project was funded for 13,500 and will include some project management by the contractor because no MetroGIS participant had sufficient need to provide resources for that effort. Funding estimate is based on an open source solution, but we have not decided that is how we would go.

Curt Peterson asked if it would work with ESRI databases. Kotz replied that it had not yet been determined, but that it might only need to kick out an XML transfer file, so it could be sort of vendor neutral.

2. Geocoder Enhancement to Handle Landmarks:

This MetroGIS regional project proposal is to enhance the geocoder to handle landmarks data. The funding is \$5000. This has raised questions about where to find the best landmarks data. Several organizations have landmarks datasets. They are not currently coordinated. If anyone is interested in working on landmarks data issues, contact Nancy Read.

Read said that the geocoder is intended to work off of a landmark name. Jim Maxwell suggested it would be good to indicate the city too, because some landmark names are common. Chris Cialek suggested looking at GNIS as a format and feature type example. Slaats mentioned that some organization (e.g. Metro Transit) have extensive landmarks datasets, but never purge old landmarks that no longer exist.

Peterson asked if the geocoder does street intersections. Yes it does.

3. Mailing Labels Service:

Third project was presented to the Policy Board by Randy Knippel. It is to create a service for making mailing labels from the MetroGIS Regional Parcel Dataset. It was funded for \$5000.

**b) Geospatial Architecture Workgroup Formed**

Kotz mentioned that a workgroup has formed to look at a geoservices broker and web service trust issues. At the moment it is called the Geospatial Architecture Workgroup. It is a joint group of MetroGIS and the Governor's Council on Geographic Information.

**c) Next Generation Parcel Data Sharing Agreement**

Rick Gelbmann described that the current parcel data agreement with the counties expires at the end of this year. MetroGIS is looking to renew it and expand on the degree to which data fields are populated in the regional dataset. Read asked about the update process being more frequent and also about having parcels available in a service. Gelbmann mentioned that because the parcel data is licensed, the Met. Council is not allowed to serve the data through a service.

Josh Gumm mentioned that there are ways to serve data securely. Slaats mentioned that there are ways to serve data only to certain IP addresses.

**5. PROJECT AND WORKGROUP REPORTS**

**a) MetroGIS Geocoder Update**

Read described that the geocoder is an open source software designed to work with MetroGIS TLG streets and county parcel data. It was funded by a MetroGIS regional project last year. She noted that DNR is now using the geocoding service provided by LMIC using the MetroGIS geocoder software. She described how MMCD is using the geocoder to meet business needs. Read showed how the service request is made and what the XML that is returned contains. A MetroGIS page about the geocoder is under development and should be available soon.

**b) Address Workgroup Update**

Kotz reported that the Address Workgroup met recently specifically to talk about the proposed address points editing tool. See 4a above.

**c) Parcel Point Data Synchronization Project Update**

Peter Henschel reported that Carver County is working on putting address points into the XML transfer standard. They are using data stored in SDE and are focusing on the detailed design now. They will start building code in August and expect testing in September and rollout in November. The project deliverables include install instructions and 5 hours of support for each county to help them set it up.

**6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

**a) Web Application Development using ArcGIS Server 9.3, Utilizing the REST and JavaScript API**

Brian Fischer and Peter Henschel

Henschel gave an overview of the background for the TRIP (Trail and Recreation Information Portal). It stems from an Active Living initiative at Carver County Public Health Dept. It is an online mapping application that allows citizens to find information about parks and trails. They can select from lists of parks and trails, or can enter an address and search for facilities within a buffer distance. They can also select and identify features and other functionality. This has spurred cities to want to collect more information about parks and trails so they can put that information in the application.

The map has two different cached views. One has aerial photos, the other has no photos, but includes streets and other features.

Gumm asked if the application was shareable. Henschel responded that Carver has the right to modify the code, but it doesn't own the code, so it cannot be shared.

Fischer explained some of the technical points. It was built by Houston Engineering and GeoDecisions. Requirements were Windows OS and .NET environment. They decided to use the Javascript API.

ArcGIS Server 9.3 has a new REST API. They took advantage of that to create five published services (3 are MapCache). The application uses all SDE layers, but also works with shape files.

## **b) Dakota/Carver/Scott Collaboration Project**

Mary Hagerman and Joshua Gumm

Gumm gave an overview of collaborative GIS efforts at the three counties. The intention was for all three to web applications with a common look and feel so users do not have to learn a new application when they go to another county. It also allowed the counties to pool development resources. I was a \$12,000 project.

Gumm showed how the interface looks in each county. They are very similar, but with small variations to meet each county's needs. He provided a wish list of additional functionality they would like to develop.

Compared to previous web tools, this has better drawing tools, ability to select graphics, custom themes and other function available to city/county staff.

The three counties had a joint, daylong GIS retreat at a county park that was very useful.

Hagerman gave a demo of the application. It is running live in Dakota County now, but it has not been promoted yet. They will begin promotion soon at the Dakota County Fair. It does a parcel search off of the MetroGIS parcel data format so that it works in each county. Some functionality is available internally only. It has many useful functions like measurement tools, pictometry, graphics, comparables, etc. The desire is to eventually make this the desktop GIS tool for most people at the city and county.

See presentation slides at

[http://www.metrogis.org/teams/ta/meetings/08\\_0731/Dakota-Carver-Scott\\_Collaboration.pdf](http://www.metrogis.org/teams/ta/meetings/08_0731/Dakota-Carver-Scott_Collaboration.pdf)

## **7. INFORMATION SHARING**

### **a) Round Table Information Sharing**

Slaats: Met. Council made a SOAP wrapper for the geocoder and put a download now button on the DataFinder Catalog.

Falbo: An ArcGIS 9.3 rollout seminar will be held in September sometime.

Gumm: Implementing SharePoint now. Trying to figure out how to create custom web parts that are GIS related.

Gelbmann: Governors Council on Geographic Information update: Drive to Excellence is working on redefining how GIS is coordinated in state government, but also involving county and local governments because there is so much interaction. An update meeting will occur August 19<sup>th</sup>. It is invitation only, so contact David Arbeit for more information.

Peterson: Ramsey County just got Pictometry. They got standard orthophotos with 4 inch resolution. Very pleased with the spatial accuracy of the data. Also have been busy with RNC.

**8. ADJOURN**

Kotz adjourned the meeting at 3:12 p.m.

Prepared by,  
Mark Kotz

**Agenda****Wednesday, December 10, 2008****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***10:00 to 12:00****1. Call to Order, Welcome, Introductions****2. Approve Agenda****3. Approve Meeting Summary**

- a) 10:05 July 31, 2008 ..... all

**4. Items Requiring Action or Discussion:**

- a) 10:10 Meeting Schedule for 2009 ..... Dave Brandt  
b) 10:15 Elect Chair for 2009 ..... Mark Kotz  
c) 10:20 Applications and Web Services Needs Forum – Results and Recommendations  
Mark Kotz & Chris Cialek

**5. Project and Workgroup Reports**

- a) 10:50 MetroGIS Geocoder Update ..... Nancy Read  
b) 11:00 Address Points Editing Tool Update ..... Mark Kotz  
c) 11:05 Parcel Point Data Synchronization Project..... Peter Henschel & Nicole Roepke

**6. Technical Presentations & Demonstrations**

- a) 11:30 Developing with the Geocoder ..... Steve Jakala, Brian Fischer, others?

**7. Information Sharing**

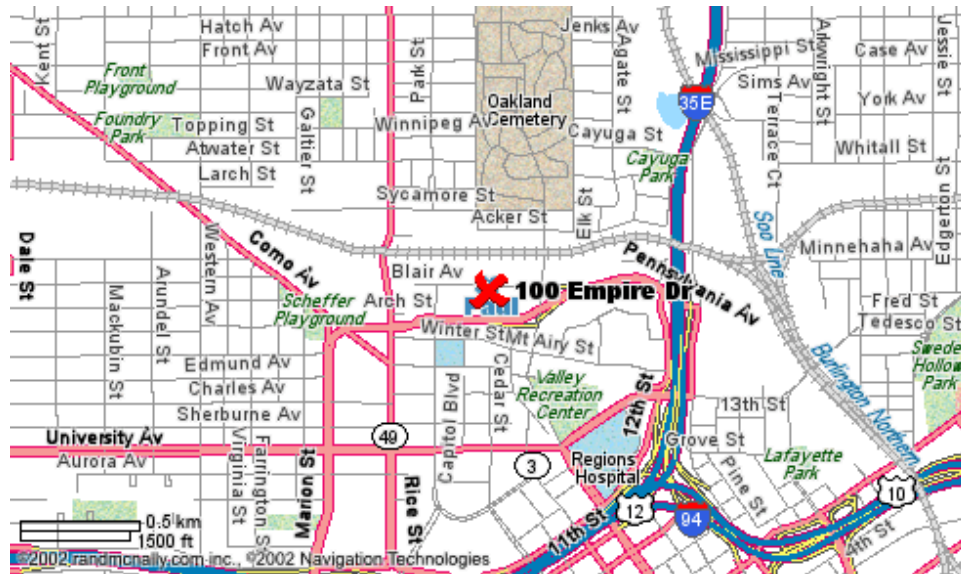
- a) 11:50 Round Table Information Sharing  
b) Major MetroGIS Activity Update (see link to web site below)  
c) MetroGIS Information Sharing (see link to web site below)

**8. Adjourn      Next meeting is TBD**



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**If you are traveling on I-35E Southbound --** Exit at Pennsylvania Avenue and go right. Take the Jackson Street exit. At the stop sign go straight and you will be on Empire Drive. We are the last building back on Empire Drive. You will drive straight into our lot. Parking is to the left.

**See [www.mcit.org](http://www.mcit.org) for more information**

## 7. Information Sharing

### 7b) Major MetroGIS Activity Update

Updates on the following major MetroGIS activities can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/08\\_1210/08\\_1210\\_packet.pdf](http://www.metrogis.org/teams/cc/meetings/08_1210/08_1210_packet.pdf) starting on page 58

- a) 2008 Regional GIS Projects – *Address Editing Tool, Landmarks Extension to Regional Geocoder Service and Mailing Label Service*
- b) Next-Generation Parcel Data Sharing Agreement
- c) Leadership Development Plan
- d) Performance Measurement Plan Update
- e) Exploring Shared Needs with Non Government Interests
- f) Add Technical Coordinator to Staff Support Team
- g) Fostering Collaboration With Adjoining Jurisdictions
- h) Outreach Plan Update
- i) Priority Business Information Need Solutions and User Satisfaction Forums

### 7c) More information Sharing

Updates on the following information sharing topics can be found in the MetroGIS Coordinating Committee meeting packet at [http://www.metrogis.org/teams/cc/meetings/08\\_1210/08\\_1210\\_packet.pdf](http://www.metrogis.org/teams/cc/meetings/08_1210/08_1210_packet.pdf) starting on page 70.

- a) National Geospatial Advisory Committee - October 4-5 Meeting Results
- b) Hennepin County Commissioner Johnson Recognized as GIS Hero
- c) Presentations / Outreach / Studies
- d) Metro and State Geospatial Initiatives Update
- e) Federal and National Geospatial Initiatives Update

**Meeting Summary  
MetroGIS Technical Advisory Team  
Minnesota Counties Insurance Trust Building, St. Paul, MN  
10:00-12:00, Room 205  
December 10, 2008**

**1. CALL TO ORDER**

Chair Dave Brandt called the meeting to order.

Present: Dave Brandt (Chair), Washington County; Alison Slaats, 1000 Friends of MN; Steve Jakala, Scott County; Josh Gumm, Scott County; Pete Henschel, Carver County; Nicole Roepke, Carver County; Brian Fischer, Houston Engineering; Bob Basques, St. Paul; John Slusczarchek (SP); Anoka County; Curt Peterson, Ramsey County; Rick Gelbmann, Met. Council; Bart Richardson, DNR; Ron Wenzl, USGS;

Support Staff: Mark Kotz (Metropolitan Council). Randy Johnson, MetroGIS.

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the July, 2008 meeting was accepted with no changes.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Meeting Schedule for 2009**

It was agreed to setup the next meeting for late February or early March and then meet every 3 months after that. Kotz agreed to schedule the meetings.

**b) Elect Chair for 2009**

Dave Brandt was unanimously elected as chair of the TAT for 2009.

**c) Applications and Web Services Needs Forum – Results and Recommendations**

Mark Kotz presented the results of the recent Geospatial Applications and Web Services Forum conducted by the MetroGIS Technical Leadership Workgroup. The same presentation would be given to the Coordinating Committee that afternoon. The turnaround document from the forum can be found here: [http://www.metrogis.org/teams/workgroups/shared\\_app/forum\\_11-20-08/Forum\\_Turnaround\\_Document.pdf](http://www.metrogis.org/teams/workgroups/shared_app/forum_11-20-08/Forum_Turnaround_Document.pdf). Kotz's presentation can be found here [http://www.metrogis.org/teams/ta/meetings/08\\_1210/TLW\\_Recommendations\\_Presentation.pdf](http://www.metrogis.org/teams/ta/meetings/08_1210/TLW_Recommendations_Presentation.pdf)

**5. PROJECT AND WORKGROUP REPORTS**

**b) Address Points Editing Tool Update**

Kotz reported that the Address Points Editing Application project is moving along. Proposals were received and a proposer was chosen. The project will begin in 2009 and a prototype application is hoped to be ready by summer of 2009. Nancy noted that the planned solution requires ArcGIS Server Enterprise Advanced.

**c) Parcel Point Data Synchronization Project**

Peter Henschel introduced the project. Nicole Roepke then gave a technical presentation on the synchronizer project. She gave an overview of how the synchronization process was developed and how it works and how the services interact. The application assumes the use of SDE, SQL Server and .NET framework. The service uses the MetroGIS Address Workgroup draft data specifications.

The process provides feedback to the local source organization to indicate the status of the updates, including, who sent update, sent and received date, does it match the schema, and a more detailed data

validation rules (for example status field can only be A,P or H). It sends one email for every file that it attempts to synchronize. Each submitting organization must be put into the system with an email contact so the application can send them notices of update status. It includes information about errors found. It can also send emails to administrators for certain kinds of errors found.

Next steps: To move forward, a regional host is needed to verify that the synchronization really works as designed. Additional next steps are:

- Regional host configuration
- Final functional validation between Carver and regional host
- Final compilation and last deployment package build
- Submitters work on data mapping

Roepke's presentation can be found at [http://www.metrogis.org/teams/ta/meetings/08\\_1210/MetroGIS-Synchronizer\\_Presentation-20081210.pdf](http://www.metrogis.org/teams/ta/meetings/08_1210/MetroGIS-Synchronizer_Presentation-20081210.pdf)

Questions.

Curt Peterson asked how do we handle it if a county has data it wants to submit, then a city comes in later as the official address authority with data for the same area?.

Mark Kotz noted that was an excellent question. The Address Workgroup vision wants data from the official address authority, but it might be better to have some data from the county than no data if the address authority is not providing it. Ultimately it would be great if cities and counties agreed how they want to proceed.

Roepke: The synchronizer was built to be flexible and allows authority for a particular address point to change.

Read: Does the submitter need SDE or just need to create the XML?

Roepke: submitter just needs to provide a specific schema of XML.

Basques: Does it allow additional address attributes?

Roepke: It uses the MetroGIS Address Workgroup data specifications.

#### **a) MetroGIS Geocoder Update**

Nancy Read provided a report on the MetroGIS Geocoder. The project got started over a year ago. It uses the Postal Address Geo-Coder (PAGC). There is quite a bit of interest in PAGC nationally and internationally as an open source product. The MetroGIS geocoder service will geocode on parcels and TLG streets. It is geared to use address points when they are available. A service is now running at LMIC. There are some issues with inconsistent parcel data that we are working on. MetroGIS web site has a page with info about the Geocoder. <http://www.metrogis.org/data/apps/geocoder/index.shtml>

Use: you can use LMIC's service or download the software and create your own internal service. The service could be setup to use frequently updated data, not just quarterly updates. The workgroup is looking at the idea of more frequent updates of TLG data.

The next step is to look at geocoding landmarks, which is a project funded by MetroGIS for 2009.

#### **Using the Geocoder**

It gives feedback for geocoded address, for example, it will tell you if it got the match from parcels or TLG, the match score and the parcel ID from the parcel it matches. The web site has a sample form and technical documents.

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) Developing with the Geocoder**

**Brian Fischer, Houston Engineering:** What does the geocoder mean to people using an application? Brian showed how the geocoder was programmed into the MMCD web application. The users like that it

quickly gets a result from a known dataset. Brian would like it to be a little more selective. It seems to return more hits than it needs to. The street intersection geocoding is very useful too. Fischer explained many technical details of the application.

Basques mentioned that St. Paul is creating a batch process for geocoding. Peterson is interested in a batch geocoder for his county.

**Steve Jakala, Scott County:**

Jakala created a tool to use the geocoder in ArcMap. One can drag and drop the tool icon into the ArcMap toolbar and then use it. There is also an online help page to further explain how to use it. You can get there from the MetroGIS Geocoder web page <http://www.metrogis.org/data/apps/geocoder/index.shtml>. The tool was built using Visual Studio. Steve showed the code.....

Questions: Nancy: How do you decide what part of what is entered is house number or street name, etc. Both used everything in front of first space as the house number.

Folks suggested a number of ideas for enhancements

**7. INFORMATION SHARING**

**a) Round Table Information Sharing**

Bob B. mentioned that there is discussion around the geocoder functionality on many different forums on the national level.

**8. ADJOURN**

Brandt adjourned the meeting at 12:00

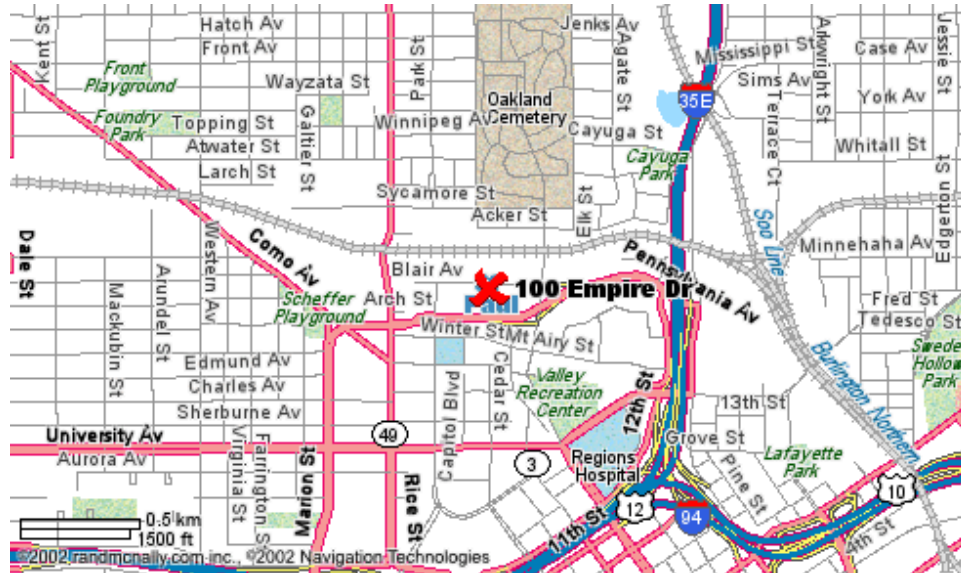
Prepared by,  
Mark Kotz

**Agenda****Wednesday, June 17, 2009****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***10:00 to 12:00**

1. **Call to Order, Welcome, Introductions** ..... Substitute Chair Pete Henschel
2. **Approve Agenda** ..... all
3. **Approve Meeting Summary**
  - a) 10:05 December 10, 2008 ..... all
4. **Items Requiring Action or Discussion:**
  - a) 10:10 Technical Leadership Workgroup recommendations for funding ..... Mark Kotz
5. **Project and Workgroup Reports**
  - a) 10:20 Best Image Service Workgroup ..... Matt McGuire
  - b) 10:40 Proximity Finder Workgroup ..... Bob Basques
  - c) 11:00 Feature Services Workgroup..... Alison Slaats
6. **Technical Presentations & Demonstrations**
  - a) 11:20 LOGIS GGOV Application..... LOGIS
7. **Information Sharing**
  - a) 11:45 Two new state geospatial standards ..... Kotz
  - b) 11:50 Round Table Information Sharing
  - c) Major MetroGIS Activity Update and Information Sharing Items:  
..... see [http://www.metrogis.org/teams/cc/meetings/09\\_0625/09\\_0625packet.pdf](http://www.metrogis.org/teams/cc/meetings/09_0625/09_0625packet.pdf)
8. **Adjourn**      **Next meeting is September 16**

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**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**10:00-12:00, Room 306**  
**June 17, 2009**

**1. CALL TO ORDER**

Acting Chair Pete Henschel called the meeting to order.

Present: Pete Henschel (acting chair), Carver County; Alison Slaats, 1000 Friends of MN; John Slusarczyk (SP); Anoka County; Bart Richardson, DNR; Matt McGuire, Metropolitan Council; Bob Moulder, Hennepin County; Brad Roman, Hennepin County; Ben Verbick, LOGIS; Kent Tupper, Dakota County;

Support Staff: Mark Kotz (Metropolitan Council).

**2. ACCEPT AGENDA**

The agenda was accepted.

**3. ACCEPT MEETING SUMMARY**

The summary of the previous meeting was accepted with no changes.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

**a) Technical Leadership Workgroup recommendations for funding**

Mark Kotz explained that the Technical Leadership Workgroup would be recommending 2 new projects for finding, Best Image Service, and a combined project called “Proximity Finder” for Government Services Finder and Point in Polygon service needs. While the TLW is not recommending the Feature Services for all layers workgroup for funding, they are going to recommend that the Policy board consider the application contest idea. The TLW is also recommending \$1000 for tweaks to the existing Geocoder.

**5. PROJECT AND WORKGROUP REPORTS**

**a) Best Image Service**

McGuire described the recommendations of the Best Image Service Workgroup.

Questions

Q: Can counties contribute their high resolution imagery to the best image service?

A: Yes if they are willing to make it publicly available

Q: Where would the data come from?

A: Any freely available source.

Q: Will you be soliciting imager or looking for sources of it?

A: No. The best image service will only evaluate known, freely available sources. We expect that these will already be included in the LMIC/MGIO image service

Q: What if a county was willing to contribute older (2005) 6” resolution data. Would that be wanted?

A: It may or may not be considered “best” by the governance group. However, you can already give it to LMIC/MGIO if you are willing to make it freely available. Then they could include it in their existing image service.

Q: How is “best” defined? Currentness or resolution.

A: Both will be considered by the governance group on a case-by-case basis.



### **c) Feature Services Workgroup**

Slaats described the Feature Services workgroup recommendation that MetroGIS sponsor a public web application contest..

The contest would solicit people to build applications using public web services. This would have many benefits including:

- Encouraging organizations to publish more data as services
- Add value to our existing investment in quality data development and publishing

The idea was taken from a similar contest held in Washington DC, which claims to have gained over a million dollars in developed applications.

Questions:

Q: Would WFS violate existing parcel license agreement?

A: Probably. The contest would not make WFS available. It would encourage data producers to make WFS available.

Q: Did DC generate any revenue?

A: Unknown

Comments –

GIS/LIS would be a good venue for something like this.

### **b) Proximity Finder**

Kotz described the proximity finder workgroup's recommendation. It would fill two service needs:

- 1) Government Service Finder
- 2) Jurisdictions at a particular point

Proposal is to build a prototype that would allow authoritative data owners to contribute data. There might be a data mess if there are multiple contributors for the same dataset.

The recommendation consists of:

- An Application to simplify data contribution
- Registry of data
- Service that reports what's nearby
- Application to interface.

Comments: Dakota County has a service like that. It's a SOAP service that takes a location and returns the nearest place to get multiple types of services. The County has been hesitant to provide service finding for other's services due to data accuracy concerns. So far we've been pointing people to other's services finder (eg. Secretary of State where do I vote application).

## **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

### **a) LOGIS gGov Application**

Verbick Presented the public web map application they developed to replace their aging ArcIMS application. See attached presentation.

This app will be available to the 13 cities in the LOGIS consortium. Cities did not want to copy Google, Yahoo, etc... they want something they have control of on the back end that is specific to their needs. The application uses SQL Server 2008. There is a back end content management system that uses SQL server to change the interface. The consortium members share a single SQL Server database. The application leverages as much existing information as possible. E.g. the application links to the existing parks pages, rather than reproduce park information content in the application.

Basemap is a tiled map service covering the service area. Imagery is an ArcGIS service wrapped around the LMIC Geospatial Imagery service.

The development environment is ASP.NET using the Javascript API.

Each City determines what map layers they are showing.

Cache takes 30 hours to rebuild. Have not had success doing incremental rebuilds.

There are a total of three services. We expect it to start out at about 10,000 hits per day. For this load we have two ArcGIS Servers using a Coyote Point failover, and a separate database server.

## **7. INFORMATION SHARING**

### **a) Two new state geospatial standards**

Mark Kotz told the group about two new Governor's Council on GIS approved GIS standards:

- 1) CTU Codes: LMIC/MGIO put together a new web page and database with a lookup table. The standard says that State Agencies must be able to export CTU information with the GNIS code.
- 2) USNG: State standard adopts the FGDC standard and promotes and recommends formatting of maps following this standard.

See attached document.

### **b) Round Table Information Sharing**

Roman described a bug in ArcGIS Desktop 9.3.1 Exporting data with null values through the geoprocessor is very slow.

Slusarczyk announced that Anoka County will have a web map application by the end of the year.

Bart Richardson noted that DNR is upgrading its Land Records System by replacing an AS400 database with an Oracle and Geodatabase solution.

Also the DNR is collecting county parcel datasets. Right now they have 40 counties with about 2.5 million polygons. It is being served internally via WMS and SDE.

Kotz announced that a state government ESRI enterprise license agreement has been finalized and the Metropolitan Council is included .

## **8. ADJOURN**

Henschel adjourned the meeting at 12:00

Prepared by,  
Matt McGuire

## Handouts

June 17, 2009 MetroGIS TAT Meeting

### MetroGIS Technical Leadership Workgroup Recommendations to the Coordinating Committee

#### INTRODUCTION

The Technical Leadership Workgroup is requesting Coordinating Committee approval of funding for *three* project proposals, for a total of \$35,000, to address shared application/web service needs defined in workshop last November.

#### BACKGROUND

1. On November 20, 2008, MetroGIS hosted a forum entitled “*Geospatial Applications and Web Services Needs Forum*”. High priority needs were:

<b><i>App/Service Idea</i></b>	<b><i>Result</i></b>
Free parcel WFS	Data need
<b>USPS address verifier</b>	Workgroup formed
Statewide geocoding service	Data need
<b>Best image service</b>	Workgroup formed
<b>Feature services for all data</b>	Workgroup formed
Critical infrastructure data service	Data need
<b>Jurisdictions at a point</b>	Workgroup formed
<b>Government service finder</b>	

2. The Technical Leadership Workgroup (TLW) accepted responsibility to synthesize recommendations of these workgroups into a cohesive strategy for the Coordinating Committee’s June 25, 2009 meeting.
3. MetroGIS’s approved “foster collaboration” budget for 2009 allocates \$35,000 for Regional GIS Projects. In the past, a call for project proposals has been made for these funds. For 2009, the Policy Board concurred with the Committee’s recommendation that these funds should be used to act on priorities defined at the November 20 forum. The TLW developed proposal submittal guidelines and invited each workgroup to submit a proposal.

#### OVERVIEW OF PROPOSALS

Proposals for four priority needs defined at the November 20 Forum were received by the TLW. The TLW met on June 2 to consider them and craft the recommendation presented here.

Proposals were received from the Geocoder, Best image service, Feature services for all data, and Jurisdictions at point / Government services finder workgroups, for a total ask of \$76,500. The TLW asked for adjustments to some of the proposals (see next section) to reduce the total ask for recommended projects to the \$35,000 in available funding. A summary of the funding requested, relative to that recommended by the TLW, is presented in the table on the following page:

## CANDIDATES FOR 2009 REGIONAL GIS PROJECT FUNDING

Project Description	Requested Funding	Recommended Funding
<b>Best Image Service</b> - single imagery web service that shows the “best” imagery available	\$20,000	\$15,250
<b>Feature Services</b> – Contest to promote the publishing and use of OGC compliant feature services for geospatial data	\$24,000	\$0
<b>Proximity Finder</b> - a prototype framework and service that would enable finding the appropriate or nearest government service or jurisdiction for a point based on available government services and jurisdiction data	\$25,000	\$18,750
Refinements to <b>Geocoder</b> Service	\$7,500	\$1,000
<b>TOTALS</b>	<b>\$76,500</b>	<b>\$35,000</b>

### TECHNICAL LEADERSHIP WORKGROUP’S RATIONALE

The TLW’s rationale for the recommendation outlined in the table above is as follows.

- Given \$76,500 in proposed funding, **the TLW focused on projects that it felt would be of the highest benefit to the MetroGIS community AND would be ready to move forward as soon as funding is available. All projects were deemed to be of high value.**
- The TLW felt that the feature services contest was the most interesting project and had the potential to bring significant gains to MetroGIS. However, the group agreed that such a contest must be administered and promoted very well or not at all. The consensus view was that MetroGIS would not be ready to proceed with this project in 2009. The TLW recommends that MetroGIS pursue this project in 2010, possibly with state partners.
- The TLW asked the remaining project proposers to consider what they could do with a reduced funding amount to try to still accomplish all three with the \$35,000. All agreed that they could do significant work with less funding than requested.
- The Best Image Service project was reduced by 25%, with the difference coming in in-kind services provided by the MGIO (formerly LMIC)
- Under the TLW recommendations, the Geocoder proposal removes the \$5000 PAGC restructuring request and will receive \$1000 funding toward testing tuning parameters for MetroGIS data used in the Geocoder. The project will ask for in-kind services from the U of M.
- The Proximity Finder proposal is also reduced by 25% and would move forward with a reduced scope.
- The TLW believes this funding recommendation will provide MetroGIS with the biggest payback for its applications and services funding dollars.

### RECOMMENDATION

That the Coordinating Committee:

1. Find that each project for which this funding is sought will address an application/ web service need that has value across sectors in accordance with the “shared application needs” objective set forth in the 2008-2011 MetroGIS Business Plan.
2. Recommend that the Policy Board endorse the Technical Leadership Workgroup’s recommendation to fund the projects specified herein, totally up to \$35,000, and constituting the 2009 Regional GIS Projects program.
3. Understand and discuss the idea of a web feature services contest and bring the idea to the Policy Board for discussion.

## **Two New State Geospatial Standards**

The Minnesota Governor's Council on Geographic Information has adopted two new state geospatial standards.

### **Codes for the Identification of Cities, Townships and Unorganized Territories**

The purpose of this standard is to provide a single, common coding scheme to identify all cities, townships and Census Bureau-defined unorganized territories in Minnesota. It is intended to be used primarily when data are being transferred between a state agency and some external customer.

This standard provides a set of codes that uniquely identify more than 2700 cities, townships and unorganized territories (CTUs) within the state of Minnesota. These codes originate from the U.S. Geographic Names Information System and are recognized as a formal federal standard. This standard is important to all developers of public databases containing information about cities, townships and unorganized territories in Minnesota.

All Minnesota CTU codes are available for searching or download from the Minnesota CTU Database page at <http://www.lmic.state.mn.us/CTU/>

### **U.S. National Grid**

The purpose of this state standard is to encourage the use of the United States National Grid (USNG) on all appropriate map products in the state and to specify how the USNG should be presented on maps when it is used.

The USNG provides an efficient way to specify location information at different levels of detail anywhere in the United States. It is based on a universally defined geographic coordinate and grid system. It is intended to improve interoperability across all national jurisdictions especially in crisis situations. It is also intended to help people use location services such as GPS in conjunction with printed maps to find and communicate location information.

See the U.S. National Grid resources page of the GCGI Emergency Preparedness Committee at <http://www.gis.state.mn.us/committee/emprep/download/USNG/index.html>

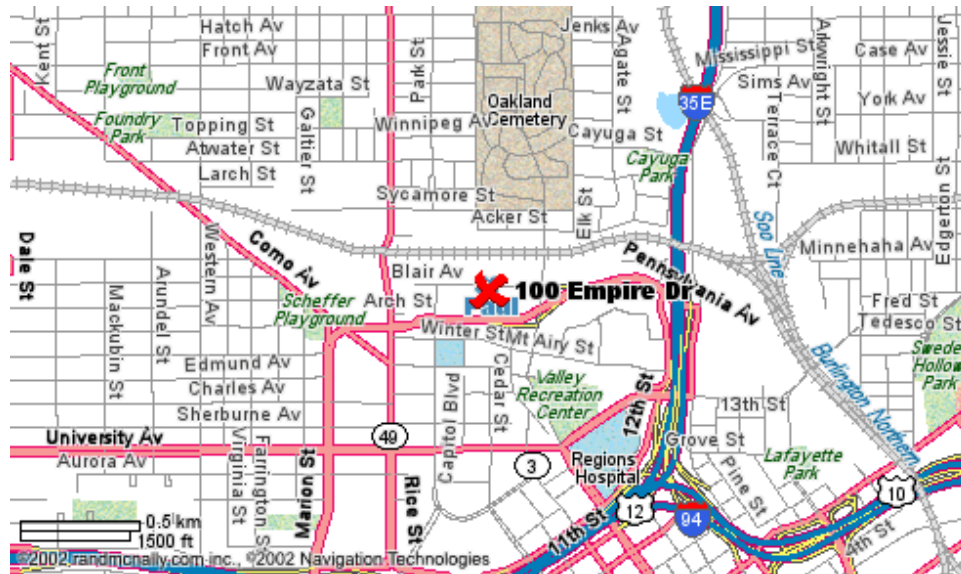
For more information, contact Mark Kotz Co-Chair, Standards Committee, Governor's Council on Geographic Information at [mark.kotz@metc.state.mn.us](mailto:mark.kotz@metc.state.mn.us) or 651-602-1644.

**Agenda****Wednesday, September 16, 2009****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***10:00 to 12:00**

1. **Call to Order, Welcome, Introductions** ..... Chair David Brandt
2. **Approve Agenda** ..... all
3. **Approve Meeting Summary**
  - a) 10:05 June 17, 2009 ..... all
4. **Items Requiring Action or Discussion:**  
None
5. **Project and Workgroup Reports**
  - a) 10:10 Address Workgroup ..... Mark Kotz
  - b) 10:15 Status of Application and Services Projects ..... Mark Kotz
  - c) 10:20 Other Technical Items from Coordinating Committee Meeting ..... Dave Brandt
6. **Technical Presentations & Demonstrations**
  - a) 10:30 **Parks Editing and Community Fact Finder Online Tools** ..... Jennifer Strahan
  - b) 10:50 **Metropolitan Council Base Map Service** ..... Jessica Deegan & Matt McGuire
  - c) 11:10 **Carver, Dakota, Scott, Washington Counties Base Map Effort** .....  
..... Joe Sapletal, Josh Gumm, David Brandt, Chad Riley
  - d) 11:30 **General discussion of MetroGIS's role with respect to base map service development and coordination** ..... all
7. **Information Sharing**
  - a) 11:50 Round Table Information Sharing
  - b) Major MetroGIS Activity Update and Information Sharing Items:  
....see [http://www.metrogis.org/teams/cc/meetings/09\\_0910/09\\_0910p.pdf](http://www.metrogis.org/teams/cc/meetings/09_0910/09_0910p.pdf) starting on page 75
8. **Adjourn**      **Next meeting is December 9**

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**See [www.mcit.org](http://www.mcit.org) for more information**

## **6a: Parks Editing and Community Fact Finder Online Tools**

GreenInfo Network is developing a parks editing tool to assist with gathering feedback on the California Protected Areas Database (<http://www.calands.org>). The technology behind the application is OpenLayers, FeatureServer and PostGIS.

The Community FactFinder is an online tool that was developed for the California State Parks Office of Grants and Local Services. The application allows a potential grantee to specify a park project location on the map and generate a report of community demographics and park acreage within the project area. State Parks uses the information to determine whether the project meets eligibility requirements. This application framework may be easily adapted to display summary information for any number of purposes (Watershed FactFinder, Services Finder, etc). Technology for this application is PostGIS, MapServer, Google Maps API

Demo version available for testing at <http://www.mapsportal.org/factfinder/>

## **6b: Metropolitan Council Base Map Service**

The Metropolitan Council Base Map Services currently comprise two cached services for the Twin Cities Metro Area. One is in UTM (Zone 15N) Projection and the other in Web Mercator Projection. The services were developed in and are distributed via ArcGIS Server. The services can be viewed in ArcMap, or used in ArcGIS Web ADF applications or other applications that allow for the javascript API (such as OpenLayers). The Base Maps were developed for internal business needs to have a general purpose background map that is up to date, has local information, and is quickly accessible for use in web applications

For more information, see GeoService Finder:

UTM: <http://www.lmic.state.mn.us/GeoServiceFinder/GeoServiceFinderDisplay.html?Id=249>

Web Mercator: <http://www.lmic.state.mn.us/GeoServiceFinder/GeoServiceFinderDisplay.html?Id=248>



**Meeting Summary  
MetroGIS Technical Advisory Team  
Minnesota Counties Insurance Trust Building, St. Paul, MN  
10:00-12:00, Room 205  
September 16, 2009**

**1. CALL TO ORDER, WELCOME, INTRODUCTIONS**

Chair David Brandt called the meeting to order.

**Present:**

Dave Brandt (Chair), Washington County  
Matt McGuire, Jessica Deegan, Rick Gelbmann, Metropolitan Council  
Bob Moulder, Hennepin County  
Kent Tupper, Joe Sapletal, Dakota County  
Alison Slaats, 1000 Friends of MN  
Jim Maxwell, NCompass Technologies  
Chad Riley, Carver County  
Nancy Read, Mosquito Control District  
Brian Fisher, Houston Engineering  
Charlie Teff, Anoka County  
Chris Ulrich, Carla Coates, David Wilford; Ramsey County  
Josh Gumm, Scott County

**Support Staff:** Mark Kotz, Metropolitan Council; Randy Johnson, Metropolitan Council/MetroGIS

**2. APPROVE AGENDA**

The agenda was accepted, removing the Parks Editing presentation because the presenter was unable to attend.

**3. APPROVE MEETING SUMMARY**

The summary of the previous meeting was approved with no changes.

**4. ITEMS REQUIRING ACTION OR DISCUSSION**

None.

**5. PROJECT AND WORKGROUP REPORTS**

**a) Address Workgroup**

Kotz reported several items from the Address Workgroup

- The Met. Council has offered to be the regional custodian of the dataset. If approved by MetroGIS, this could be long term, or short term with the possibility of MnGeo taking over as a state custodian.
- The online editing application contract with Applied Geographics is still awaiting review in the Met. Council legal department. Ugh!
- The workgroup is adding a new element to the database specifications that would indicate if the address is for a residence. This is an optional element.
- Next steps are:
  - Define liability disclaimer language that cities will like. We plan to work with the LMC Insurance Trust on this.
  - Counties and cities work together to resolve issues of county ownership of some aspects of some cities' address points data (from parcel points).
  - Provide policy statement with roles and responsibilities to Policy Board in January.

- Begin distributing an open access version of the dataset via FTP for those cities and counties that wish to begin.
- In 2010 move to full implementation with synchronizer and web editing application.

Brian Fisher mentioned that new ESRI editing tools will be coming out in version 9.4 and may provide good tools for address point editing. He suggested that MetroGIS might consider waiting for that.

#### **b) Application and Services Projects**

The Policy Board approved three projects, as recommended by the Technical Leadership Workgroup and the Coordinating Committee

- Best Image Service status: Interagency agreement with MnGeo being developed.
- Proximity Finder status: Will go out for bids later in September.
- Geocoder Tweaks status: Funding approved and sent to Mosquito Control

#### **c) Other Technical Items from Coordinating Committee Meeting**

Brandt mentioned Will Craig's efforts to update the Socioeconomic Indicators part of DataFinder. See Coordinating Committee packet here for details

[http://www.metrogis.org/teams/cc/meetings/09\\_0910/index.shtml](http://www.metrogis.org/teams/cc/meetings/09_0910/index.shtml)

Alison Slaats explained the concept for the **applications and services contest** that is being discussed within MetroGIS. The purpose is to increase the number of geo services available within the community and advertise them. The contest idea comes from a contest held in Washington DC. We hope it will result in a number of new applications that would be in the public domain.

The idea was liked by the Policy Board, but no funding was approved. A workgroup was created by the Coordinating Committee to move the idea forward. Slaats invited anyone to be part of the workgroup. Nancy Read said this would be a wonderful and exciting opportunity.

Slaats said that the workgroup is at the stage of building a coalition to support the contest. Then perhaps a consultant would be hired to run the contest. Randy Johnson suggested that the workgroup should submit a proposal to the Coordinating Committee in December.

Maxwell and Sapletel suggested having recognition as a prize and that monetary prizes might not be needed. Slaats said that those decision have not been made and encouraged people to be part of the workgroup to help provide ideas and make decisions.

Maxwell agreed to be part of the workgroup.

### **6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS**

#### **b) Metropolitan Council Base Map Service**

Deegan explained that the Met. Council is now putting out a base map service in two projections, UTM and Web Mercator. They services are deployed from ESRI's ArcGIS Server.

The base map was created to meet internal business need for good cartography on a standard base map for many purposes. They also wanted a standard look and feel for all of their mapping applications.

The Council considered just using Google maps, but did not for two reasons.

1. Council believes that local metro data is better (e.g. Google never remove I35W bridge when it was down)

2. Google does not allow the use of their service for non-public applications and the Council wanted to use it on some internal sites.

Why a service? It is much more flexible to use in many applications built in different programming environments.

One specific business need was to use it for the MetroTransit NexTrip application that shows live bus route data.

### **Development:**

Cartography was created with ArcGIS desktop. Many decisions were made to make things similar to other existing, common web base maps like Google. For example, tile size and scale levels are the same. A lot of work went into the cartography, taking the best from various existing services including Google, Microsoft and Yahoo maps. The MetroTransit graphic designers also provided excellent input.

Matt McGuire talked about server resources:

- Expect 3000 hits per hour on peek use with Metro Transit
- The cache is about 5 GB on disk and 3 million files in 2700 folders.
- It takes at least two days to process the cache on the server. It takes a week to do it on the desktop.
- It also take a long time (days) to move the cache into a different network environment in the DMZ
- Serving the cache consumes relatively little resources because they are just PNG files.

Now what?

- Council need requires a very fast base map to serve multiple applications
- Best performance is realized from a public base map because there are no aspects to slow it down
- Council doesn't know how much others will use it or exactly what issues that might raise
- Council will track up time and the number of tile requests to assess use
- Council requests that you cite NCompass technology for the roads data if you use the service
- Will continue to work on streamlining the process
- Additional services planned for the future are a hybrid service that will include the future Best Image Service and a separate transit specific cache

Lessons Learned so far

- Labels are unpredictable. Annotation would solve this, but is much more work to maintain.
- Copying a large number of files is a challenge
- Graphic designers have very valuable input to a public cartographic product
- Understand projections
- Use monitoring tools

### **Questions:**

Fischer: will styles be made available? McGuire: Sure.

Deegan is working on documenting developer resources, e.g. How to use the service, etc.

### **c) Carver, Dakota Scott, Washington Counties Base Map Effort**

Joe Sapletal described some of the background and purpose of the multi-county collaboration.

- It will be valuable to collaborate because we each know some things that others don't know.

- In January Carver, Dakota and Scott Counties decided to do some collaboration with the Java Script API. They created a development team and basic goals and requirements. Washington County is attending meetings and Anoka County has just become involved too.
- New parcel search application was the driving force that got things started. The goal is a user friendly interface and quick rendering, with similar look and feel in each county.
- The key to this work is parameterizing the code so each county can easily turn things on or off for a particular application. Developers are approaching it this way.
- Counties are using SharePoint very effectively as a collaboration tool.

Chad Riley described some of the technical aspects.

- Used Carver's effort as a starting point
- Wiki created for detailed layer descriptions
- Counties have many agreed upon base map layers
- Counties used Google, Yahoo, etc. as examples for developing base map
- Counties did not attempt to line up cache with Google tile sizes. Purpose was to make it work well with parcel mapping application.
- As more counties are added, may want to revisit tiling scheme.
- Started with JPEG, which worked well in many ways, but does not support transparency
- Changed to PNG32

Slaats: What projection are you using? Riley: Each county is currently using county coordinates, but that may be revisited so all use the same projection.

- Riley demoed some applications that used the base map showing different levels of detail.
- The counties use the same tools on the screen to give each county the same look and feel in the apps.
- Joe said that their planners are very interested in using the basemap for their work.
- Additional base maps that have been created are:
  - Orthophotos
  - Terrain (contours)
  - USNG (infant stages)

Read: Are these available to the public? Riley: Yes, but they are not advertised. Sapletal: And they are still being worked on, so may change at any time.

McGuire: Are counties sharing the same caches or implementing independently? Sapletal: We are implementing independently due to differing business needs and deadlines.

Sapletal said they plan to advertise on GeoService Finder once the services are in production mode. They are still under development now even though they are externally accessible.

#### **d) General discussion of MetroGIS's role with respect to base map services**

Brandt: What is the role of MetroGIS related to base maps, etc. For example, could MetroGIS be a source of a failover option?

McGuire: The Council has space and may be willing to allow more caches on their server if it doesn't take a lot of Council resources.

Gelbmann: Goal for MetroGIS should be defining what the common needs are for the region and trying to provide that. For example, cities and counties may not have the same needs as Met. Council.

Brandt: People are now used to seeing high quality cartography. How does that translate to parcel mapping.

Johnson: MetroGIS can perhaps set some standards to help everyone work together.

McGuire: Sharing of the cartographic definitions is a great idea and will be helpful.

Johnson: Any reason there should not be multiple services?

Sapletal: That would be OK, but there may be ways to get more current data and it would be nice to have all serving the most current data.

Deegan: Getting data published on DataFinder will help everyone have the most current data.

Maxwell observed that Council is planning to update quarterly, but counties will update more frequently.

Slaats: It would be great to have one best base map for the region instead of having to go to multiple sources depending which county the community is in.

Brandt: Perhaps we need to define core base map cartography needs of the community like we did many years ago with data needs for MetroGIS. The audience is different than what we had for data needs. It is a more general level of users. So we may get a different response from those who are not technical people.

Much discussion occurred about to what degree we should standardize cartography or combine services. There was some general agreement that there is a need for multiple services for each organization's business need, but also that there are opportunities to coordinate with look and feel through standard cartographic parameters.

**There was general consensus that the role of MetroGIS would be to facilitate defining common needs and providing a mechanism to more easily publish and share the cartographic specifications.**

McGuire: Council has been asked where is WMS for this since MetroGIS advocates open standards. Council has no need for it. Role for MetroGIS could be to provide guidance on documenting and publishing cartographic standards.

Kotz: Hearing that MetroGIS role could be provide a web place or mechanism for collaboration, posting documentation and specifications for sharing, as well as defining community needs. ....

McGuire also maybe a place to host or mirror services.

## **7. INFORMATION SHARING**

### **a) Round Table Information Sharing**

Brandt: County is changing from maintaining parcels in AutoCAD to a Geodatabase instead. New tax system, Manatron, is also providing some challenges for Washington and other counties that use the same system to be able to retrieve a parcel data extract.

Tupper: Dakota is looking at ArcIMS application and moving that to ArcGIS Server. Also, plat checking is being done in coverage format and want to move that to an SDE geodatabase.

Maxwell: Talking with Nancy Read about getting weekly updates of street centerlines to the MetroGIS geocoder.

Read: Programmer is working on the landmarks addition to the geocoder.

Gelbmann: MnGeo TAT is moving along with filling the state wide advisory council. Many positions on the council have applicants. Still need state agencies and a tribal representative.

## **8. ADJOURN**

Brandt adjourned the meeting at 12:03

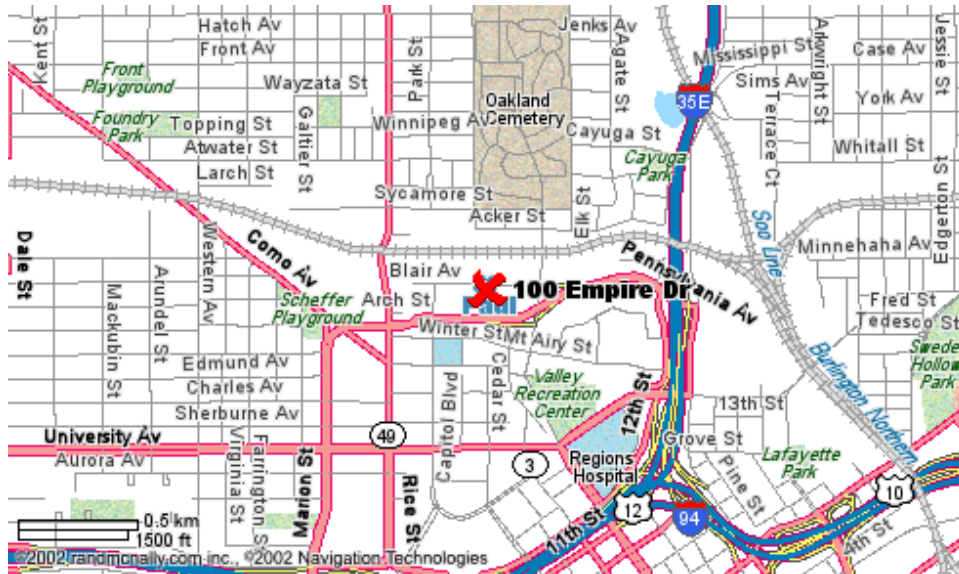
Prepared by,  
Mark Kotz

**Agenda****Wednesday, October 27, 2010****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***1:00 to 3:00**

1. **Call to Order, Welcome, Introductions** ..... Chair David Brandt
2. **Approve Agenda** ..... all
3. **Approve Meeting Summary**
  - a) 1:05 June, 2010 ..... all
4. **Meeting Schedule for 2011** ..... all
  - a) 1:05 How about May and November? ..... all  
2010 was June & October  
2009 was June and September
5. **Project and Workgroup Reports**
  - a) 1:10 Geocoder ..... written update from Nancy Read
  - b) 1:10 Address Workgroup ..... Mark Kotz
  - c) 1:15 Geospatial Commons ..... Mark Kotz
  - d) 1:30 Best Image Service ..... Matt McGuire
  - e) 1:40 Proximity Finder ..... Jessica Fendos
  - f) 1:55 Other Technical Items from Coordinating Committee Meetings ..... Dave Brandt
6. **Technical Discussions**
  - a) 2:05 **OpenStreetMap – How can we engage?** ..... Matt McGuire
  - b) 2:20 **Pictometry and Aerial Photos Discussion** ..... Dave Brandt
7. **Technical Presentations**  
none
8. **Information Sharing**
  - a) 2:40 **Round Table Information Sharing** ..... all
  - b) Major MetroGIS Activity Update and Information Sharing Items, see:  
[http://www.metrogis.org/teams/pb/meetings/10\\_1020/z7%20info%20sharing%20%20webpage%20only\\_.pdf](http://www.metrogis.org/teams/pb/meetings/10_1020/z7%20info%20sharing%20%20webpage%20only_.pdf)
9. **Adjourn**      **Next meeting is ??**

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**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:00-3:00, Room 205**  
**October 27, 2010**

**1. CALL TO ORDER, WELCOME, INTRODUCTIONS**

Chair David Brandt called the meeting to order.

**Present:**

David Brandt, Washington, County – TAT Chair  
Chris Cialek, MnGeo  
Jessica Fendos, DEED  
Rick Gelbmann, Metropolitan Council  
Josh Gumm, Scott County  
Jim Maxwell, NCompass Technologies  
Matt McGuire, Metropolitan Council  
Curt Peterson, Ramsey County  
Charlie Teff, Anoka County  
Ron Wencil, USGS

**Support Staff:** Mark Kotz, Metropolitan Council

**2. APPROVE AGENDA**

The agenda was approved .

**3. APPROVE MEETING SUMMARY**

The summary of the previous meeting was not distributed. It will be sent by email for e-approval.

**4. MEETING SCHEDULE FOR 2011**

The consensus was that Kotz should schedule 3 meetings similar to this year and they can be cancelled as needed.

**5. PROJECT AND WORKGROUP REPORTS**

**a) Geocoder**

No update. It was asked that Nancy submit a written update to be included with meeting notes

From: Nancy Read [mailto:nancread@mmcd.org]  
Subject: Geocoder Update for TAT

We have two contractors, one is Steve Woodbridge who will be working on a "universal one-line parser" to allow requests to the service to come in as one line instead of already split into micro (house# + street) and macro (city, state, zip) parts, and the other is again Walter Sinclair who will be restructuring the underlying PAGC geocoder code so that it can use other kinds of databases for its internal storage in addition to the current choice, Berkeley DB level 4.1-4.4 (a relatively old version in this business). Not much else to report yet.

**b) Address Workgroup**

Kotz reported that the MetroGIS Address Points Dataset is now live on DataFinder with one city. Contributions by more cities would be welcome. He also reported that the Web Editing Application project is under with Applied Geographics. Must be done by the end of the year. The national address data standard is expected to be approved by mid January. They seem to be incorporating the changes suggested by the Address Workgroup.

Maxwell asked how cities are being pursued to contribute. Kotz said their has been very little promotion of the project so far.

### **c) Geospatial Commons**

Kotz gave a presentation about the Commons. It will have 4 functional areas, Find, Evaluate, Share and Administer. MnGeo is hosting a test implementation using the ArcGIS 9.3 Geoportal Extension. The project is being worked on by MnGeo, Met Council, DNR, MnDOT, DEED and Scott County. Phase 1 is wrapping up and a test version is expected to be available in November or December. Then a project plan will be proposed for a production version.

Kotz also reported that the funding for the clip, zip and shop project will not be used. The workgroup was not ready for this project and there was no one available to be the project manager.

### **d) Best Image Service**

McGuire reported that workgroup has come up with a proposed definition of what “best” means. It will be a service hosted by MnGeo. The contract for the project was just signed and MnGeo expects to have something up by the end of the year. At small scales it will be Landsat imagery and at larger scales it will switch to aerial photography. At 1:10,000 it will switch to metro area 1 foot resolution.

Moving forward, a workgroup will meet annually to determine changes to the best image service.

Can counties contribute their imagery to the service?

The process is that any imagery available in the MnGeo imager server will be considered. To get imagery in the Best Image Service, first submit it to MnGeo to make it a publicly available web service.

### **e) Proximity Finder**

Jessica Fendos provided a handout giving highlights of the Proximity Finder project’s second demo. She then gave a presentation on the project status. She said the project is close to completion. The project is to support two use cases:

- What’s near me?
- What city am I in?

Jessica gave history of the project and said that most information is available on the project web site through SharedGeo and Houston Engineering.

<http://proximity.houstoneng.net/webpage/proxfinder.html>

There is a proximity finder service for the application and another for the data uploader.

Interaction with the Finder service is in LAT/LON - LL84 - EPSG:4326, but the Loader service can use others and tries to detect the coordinate system of the uploaded file by looking in the \*.prj SHP file and will re-project to WGS84 (EPSG:4326) while it is loading if necessary.

Jessica demoed the What’s Near Me and What City Am I In functions of the project.

This is the phase 1 deliverable.

The project will be presented to the MetroGIS Coordinating Committee on December 16<sup>th</sup>.

The project will then need a permanent host and will need to define what layers it should have.

Wencl asked how this project relates to the structures data work being done through MnGeo? Some of the "starter" datasets from the MN Structures Collaborative were used as sample data sets in this project. The service could be used in conjunction with those data sets or potentially with the application developed by SharedGeo for MnGeo to allow users to edit that data.

It was clarified that the project deliverable is the software to create these services and not a hosted service itself. There currently is no defined host for the proximity finder service. The software will be freely available to anyone that wants to host it.

**f) Other Technical Items from coordinating Committee Meeting**

None

**6. TECHNICAL DISCUSSIONS**

**a) OpenStreetMap – How can we engage?**

Matt came up with three ways in which we could engage the OSM community

1. Experiment technically with OSM moving OSM data to traditional GIS datasets.  
Matt has a plan to pull OSM data into a geodatabase, but has not found any type of easy conversion tool yet.
2. Experiment thematically with different datasets in OSM  
Post a small area of data or a specific theme for the metro area (e.g. pharmacies) in OSM and see what happens to the data. Could download it and see what has changed and what has not and evaluate changes to the data.
3. Have a MetroGIS OSM mapping party  
These parties generally involve having people getting together on a weekend and people go out and map a small area. MetroGIS might want to instead to work on a theme instead of all themes for a small area.  
There are one to two dozen open street map editors in the twin cities area. Thus, MetroGIS could be a majority input into OSM.

Discussion:

How much is the OSM data used? This is important for deciding how much effort should be put into putting data into OSM.

It might be a good way to get data updated. It would be a good experiment.

What imagery does OSM use? They have an agreement to use Yahoo imagery for viewing.

To have a party, it would be important to first have the theme specified. Different folks would have different opinions about what would be most valuable.

It is wise to be mindful of what theme might be tested in OSM so we don't duplicate data in OSM and so we don't duplicate data development efforts going on now.

## **b) Pictometry and Aerial Photos Discussion**

Brandt led a discussion on this topic. In Washington County there is an interest in getting aerials and Pictometry updated annually, though it may be unrealistic in terms of cost. But they are looking at options for updated such data more frequently, for example doing oblique imagery one year and vertical imagery the next. He noted that there is a discount for Pictometry if 5 counties order at the same time. Brandt wondered if other counties are interested in pursuing Pictometry next year.

Peterson said they are considering if Pictometry high resolution data might allow them to develop planimetric data and rely less on traditional aerial imagery.

Wencl said that from the national perspective there has not been much luck getting Pictometry data, due to positional accuracy concerns. At the national level there has been much less interest in the oblique data. The feds are mainly interested in the vertical data. NGA has just recently given a green light to the quality of a new Pictometry product. Apparently they have improved positional accuracy.

MnGeo said that they have been contacted by Pictometry recently and have scheduled an informational meeting for November. MnGeo has no defined need for Pictometry data.

Brandt said that GIS managers from several metro counties plan to get together to discuss opportunities for coordinating the acquisition of imagery.

## **7. TECHNICAL PRESENTATIONS**

None

## **8. INFORMATION SHARING Round Table**

Bart R. from DNR reports that the DNR has adopted the MetroGIS 65 parcel attributes as the standard for stitching together a statewide parcel datasets.

Wencl reports that LiDAR will be flown in the spring for part of east central MN and the arrowhead.

Cialek: The ortho imagery project will expand to 36 counties in southern MN for this spring photography.

Maxwell asked about lakes data and who has what data within the Met. Council and DNR. Kotz said that the Met. Council maintains a dataset of open water features which is posted on DataFinder. It uses open water boundaries as viewed from aerial photography and not the hydrologic boundary. Thus marsh lands are often not included in the polygon. DNR distributes several different lake boundary datasets and has an internal dataset that attempts to track the ordinary high water mark, though this dataset is not available on the Data Deli. Kotz has requested it several times but has yet to receive it.

## **9. ADJOURN**

Brandt adjourned the meeting at 3:00

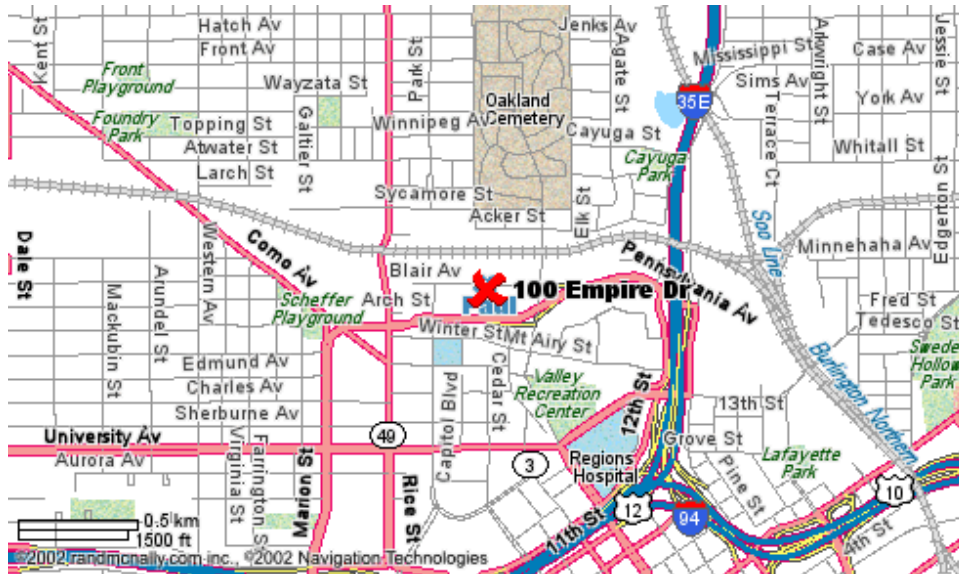
Prepared by,  
Mark Kotz

**Agenda****Wednesday, June 23, 2010****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***1:00 to 3:00**

1. **Call to Order, Welcome, Introductions** ..... Chair David Brandt
2. **Approve Agenda** ..... all
3. **Approve Meeting Summary**
  - a) 1:05 Sept. 2009 ..... all
4. **Project and Workgroup Reports**
  - a) 1:10 Address Workgroup ..... Mark Kotz
  - b) 1:15 Proximity Finder ..... Jessica Fendos
  - c) 1:20 Best Image Service ..... Mark Kotz
  - d) 1:20 Geospatial Commons ..... Mark Kotz
  - e) 1:25 Other Technical Items from Coordinating Committee Meeting ..... Dave Brandt
5. **Technical Discussions**
  - a) 1:30 **OpenStreetMap as a Potential Landmarks Data Source**..... Matt McGuire
  - b) 1:50 **Home Grown Street Centerlines: Does it make sense to have a standard?** ..Dave Brandt
6. **Technical Presentations**
  - a) 2:10 **Anoka County's Public Property Information Map Applications** .....  
Charlie Teff and Jeremy Moore
  - b) 2:30 **US National Grid Mapping in Minnesota** .....Randy Knippel
7. **Information Sharing**
  - a) 2:50 Round Table Information Sharing
  - b) Major MetroGIS Activity Update and Information Sharing Items, see:  
[http://www.metrogis.org/teams/cc/meetings/10\\_0617/z6\\_activityupdates.pdf](http://www.metrogis.org/teams/cc/meetings/10_0617/z6_activityupdates.pdf)  
[http://www.metrogis.org/teams/cc/meetings/10\\_0617/10\\_0617.infosharing.pdf](http://www.metrogis.org/teams/cc/meetings/10_0617/10_0617.infosharing.pdf)
8. **Adjourn**      **Next meeting is October 27**

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**If you are traveling on I-35E Southbound --** Exit at Pennsylvania Avenue and go right. Take the Jackson Street exit. At the stop sign go straight and you will be on Empire Drive. We are the last building back on Empire Drive. You will drive straight into our lot. Parking is to the left.

See [www.mcit.org](http://www.mcit.org) for more information

### **5a OpenStreetMap as a Potential Landmarks Data Source**

Discussion led by Matt McGuire, Metropolitan Council

This discussion of OpenStreetMap as a potential source of Landmarks data will explore the nature of OpenStreetMap data vs traditional GIS Data including the challenges of getting data into and out of OpenStreetMap. We will also talk about the community surrounding OpenStreetMap; whether there is value in MetroGIS becoming part of that community, and if so how to pursue that relationship.

### **5b Home Grown Street Centerline: Does it Make Sense to Have a Standard?**

Discussion led by Dave Brandt, Washington County

While Washington County has maintained street centerlines for 20+ years, we are now looking to add fields to allow them to better serve our next generation 911 and other application needs. There are some fields that are required for analysis, but how those are handled is not consistent across the existing centerline providers. Which 'standard' should we use?

### **6a Anoka County's Public Property Information Map Application**

Presenters: Charlie Teff, Anoka County and Jeremy Moore, Houston Engineering

This presentation will demonstrate Anoka County's new public mapping application. It was designed to provide the public with a modern and easy to use interactive map. This ultimately gives the public access to the County's parcel and survey data. It will also discuss GeoPRIME, the ArcGIS Server and FLEX API framework solution used to develop the application. Finally the presentation will give an example of the flexibility and tools GeoPRIME gives them and lessons learned in implementing the application.

### **6b US National Grid mapping in Minnesota**

Presenter: Randy Knippel, Dakota County

The US National Grid (USNG) provides a cartographic foundation for creating interoperable maps across jurisdictions and a common language for describing locations across professional disciplines, especially in disaster situations. It became a Minnesota standard in March, 2009. What has happened since then? This presentation will give a status update, highlight statewide maps currently available, and identify related activities in the MetroGIS community.

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:00-3:00, Room 205**  
**June 23, 2010**

**1. CALL TO ORDER, WELCOME, INTRODUCTIONS**

Chair David Brandt called the meeting to order.

**Present:**

David Brandt, Washington, County – TAT Chair  
Bob Basques, City of St. Paul  
Chris Cialek, MnGeo  
Jessica Deegan, Metropolitan Council  
Dan Falbo, ESRI  
Jessica Fendos, DEED  
Rick Gelbmann, Metropolitan Council  
Randy Knippel, Dakota County  
Matt Koukal, Ramsey County  
Jim Maxwell, NCompass Technologies  
Matt McGuire, Metropolitan Council  
Jeremy Moore, Houston Engineering  
Curt Peterson, Ramsey County  
Chad Riley, Carver County  
Alison Slaats, 1000 Friends of Minnesota  
Charlie Teff, Anoka County

**Support Staff:** Mark Kotz, Metropolitan Council

**2. APPROVE AGENDA**

The agenda was approved adding one more project report for the metro orthoimagery.

**3. APPROVE MEETING SUMMARY**

The summary of the previous meeting was approved with one little change.

**4. PROJECT AND WORKGROUP REPORTS**

**a) 2010 Metro Orthoimagery**

Chris Cialek passed out a handout showing the status of the Metro Orthoimagery project. The project extends somewhat beyond the 7 county area. There are 3 different resolutions being collected. Brandt asked if there was a plan to fly the metro again on a regular cycle. Cialek replied that it would be a great idea, but nothing yet has been set. A discussion followed related to coordinating future flights, costs, etc.

**b) Address Workgroup**

Kotz reported that the MetroGIS Address Points Dataset is now live on DataFinder with one city. A few other cities and counties are working toward contributing data to the dataset. He also reported that the Web Editing Application project is under way with a kickoff meeting scheduled for next week. Finally, the workgroup worked jointly with the MnGeo Standards Committee to submit comments to the draft national address data standard.

**c) Proximity Finder**

Jessica Fendos provided a handout giving highlights of the Proximity Finder project. See handout.



**d) Best Image Service**

Kotz reported that there is nothing new to report except that the Met. Council is now working on creating a contract with MnGeo to start the project.

**e) Geospatial Commons**

Kotz reported that the Commons workgroup was formed jointly by MetroGIS and the MnGeo Standards Committee. Deegan reported that the ESRI Geoportal Extension is installed and the implementation team is working on configuring and customizing the test Commons.

**f) Other Technical Items from coordinating Committee Meeting**

Brandt mentioned the Quantifying Public Value grant project.

He also mentioned an idea from the Coordinating Committee meeting to create a metro wide stormwater system dataset. Kotz mentioned that this idea came partially out of an effort led by MNPCA and others to create a stormwater data exchange standard.

**5. TECHNICAL DISCUSSIONS**

**a) OpenStreetMap as a Potential Landmarks Data Source**

The Met Council has a need for landmarks data as do many organizations. The Council has several different landmarks datasets that are not coordinated. Several other sources of landmarks data exist, including NCompass, Cyclopath, OpenStreetMap and other sources. See presentation.

Discussion:

McGuire: Is this a valuable data source for MetroGIS?

Maxwell: Is this the best option you have seen?

McGuire: It could allow us to get a lot of information without doing a lot of work. But there may be drawbacks.

Maxwell: Are there some really good owners of thematic data e.g. restaurants? Libraries?

McGuire: Probably. How do we get all of that in one place and updated?

Brandt: In our county we track some kinds of landmarks closely and others not at all. Eg. County inspects restaurants and we have those, as well as schools, but not other things.

McGuire: How can we get benefit from all of the people who are editing OSM.

Peterson: How do you get a consistent set of attributes behind the landmarks. E.g. what kind of restaurant? What level of ball field? This seems to be a drawback of OSM.

Kotz: It is possible that we could agree on a set of attributes ("tags" in OSM) for landmarks and agree to use them. Under that scenario we could all contribute and have more detailed attributes.

Knippel: I think it is not a matter of if we use OSM but when we use OSM. Could the MetroGIS community come together and be active contributors?

Slaats: This is a big opportunity and an elegant way to proceed. Many doubted Wikipedia, but now it is a main stream site. The same could be true for OSM.

More discussion followed.

Action Item: Have an update at the next TAT – 1 to 3 ways we as a community could begin to engage with OSM.

**b) Home Grown Street Centerlines: Does it make sense to have a standard?**

Washington County uses NCompass street centerline data, but it doesn't meet all needs. They already create their own centerlines with names, but don't have the attributes to do geocoding or networking. They are considering doing more to maintain their own local data. Most counties seem to use the data for geocoding and routing. In particular there is a need for next generation E911, pavement management, etc.

Koukal: At Mn/DOT we did everything for dynamic segmentation, but now realize that isn't necessarily a big focus for others like counties.

Maxwell: We do make changes you ask for quickly (e.g. 3 days) but it may take a quarter to get posted on the MetroGIS FTP site.

Gelbmann: Is there a reason to have a regional dataset?

Brandt: Yes, we use the NCompass data outside our county all the time, for mapping/geocoding and for even responding to emergencies beyond the county.

Gelbmann: Met Council is in the process of contracting for regional street centerlines again. The previous contract expires at the end of the year. The Council is really interested in getting feedback from others on ways we can make a regional dataset that meets the most needs.

Brandt: There is no action item here, but wanted to make sure others were aware of the topic and thought a discussion would be important.

**6. TECHNICAL PRESENTATIONS**

**a) Anoka county's Public Property Information Map Application**

Jeremy Moore and Charlie Teff gave a presentation on the application developed for Anoka County's parcel viewer application. See presentation.

Demonstration provided of the application, built using GeoPRIME ([www.geodecisions.com/geoprime](http://www.geodecisions.com/geoprime)). The application includes five services, aeriels, general base map, buildings, parcels, roads and labels. The application also includes benchmarks and section corners for the surveyors. Simple tools, identify parcels, links (will link) to property tax file, also links to half sections and plats as well as schools (websites) and pictometry. Mailing label functionality embedded, with a variety of selection tools to generate list of parcels.

Riley asked if the mailing label feature limited returns, Yes, 500 limited parcel returns for labels.

Jeremy Moore demonstrated GeoPRIME, which is a developer interface that sits on top of ArcGIS Server, offering basic configuration tools. Configuring an application via user interface creates a FLEX application for ArcGIS Server.

Alison Slaats asked about costs for GeoPRIME. Jeremy noted that the price can vary for each application depending on customization needs.

Maxwell: are tools standardized? Jeremy noted that some customized tools get added via JavaScript. Wizard interface gives initial basic tools.

Application will be live at end of month.

#### **b) US National Grid Mapping in Minnesota**

Randy Knippel presented on the USNG, GIS for Emergency Management, and also had several handouts. See presentation. More US National Grid info can be found here <http://gis.co.dakota.mn.us/content/dakco/usng/er/maps.htm>

Fire Map Books in County drove need for USNG mapping. These books contain line and ortho maps (one sample provided – for City of Burnsville). Randy noted that USNG is really just an abbreviation of UTM.

Currently there is an effort through MnGEO to create state-wide series of 22x24” 10K using USNG. The maps are meant to be easily tiled together for first responders and in emergency situations. Can use the basic map series (orthos and grid lines) and overlay emergency specific data, which then can be merged via pdf. Merging can be scripted using Python (pyPDF used to script pdf merging).

Knippel demonstrated a basic html image map that was generated through python to provide spatial index, having all on a jump drives offers a mobile GIS for the field.

Maxwell: How is this coming along in the Metro? Does each city’s fire department have book of maps?

Knippel: Up to them to decide when they transition to USNG. Those that don’t use it are transitioning at some point. Thinks the GIS community can be more proactive. Giving presentations to several organizations.

## **7. INFORMATION SHARING**

Maxwell: (to Brandt) are you looking for input on how to resolve the street centerline issues from the MetroGIS TAT?

Brandt: If there is enough broad interest, yes.

Peterson: is interested in a sub group

Maxwell: also interested in being part of a sub group

Gelbmann: would like to have a Metro Council representative on the group as well.

Brandt: will get something going and invite all county folks.

### **a) Round Table Information Sharing**

No round table due to over time

## **8. ADJOURN**

Brandt adjourned the meeting at 3:20

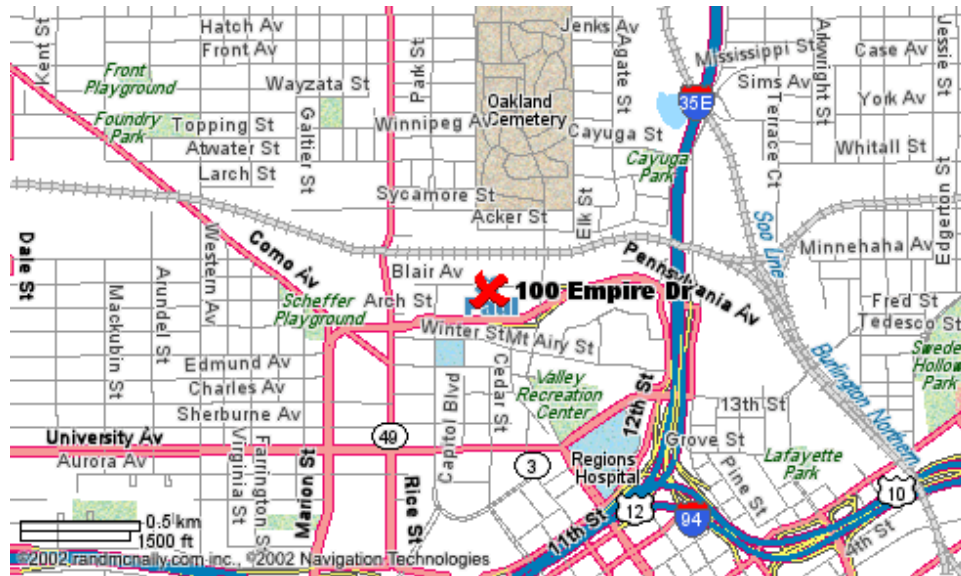
Prepared by,  
Mark Kotz and Jessica Deegan

**Agenda****Wednesday, June 29, 2011****MCIT Building****100 Empire Drive, St. Paul****Check posting in lobby for room assignment***(See attached map & directions)***1:00 to 3:00**

- 1. Call to Order, Welcome, Introductions** ..... Chair David Brandt
- 2. Approve Agenda** ..... all
- 3. Approve Meeting Summary**
  - a) 1:05 October, 2010 ..... all
- 4. Project and Workgroup Reports**
  - a) 1:10 Address Workgroup ..... Mark Kotz
  - b) 1:15 Geospatial Commons ..... Mark Kotz
  - c) 1:15 Best Image Service ..... Matt McGuire
- 5. Technical Presentations**
  - 1:25 Park and Recreation App for Counties ..... Brian Fischer
- 6. Information Sharing**
  - a) 2:05 Next Generation 911 progress - Washington County.....David Brandt
  - b) 2:15 **Round Table Information Sharing** ..... all
  - c) Major MetroGIS Activity Update and Information Sharing Items, see:  
[http://www.metrogis.org/teams/cc/meetings/11\\_0623/index.shtml](http://www.metrogis.org/teams/cc/meetings/11_0623/index.shtml)
- 7. Adjourn**      **Next meeting is November 2nd**

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**See [www.mcit.org](http://www.mcit.org) for more information**

**Meeting Summary**  
**MetroGIS Technical Advisory Team**  
**Minnesota Counties Insurance Trust Building, St. Paul, MN**  
**1:00-3:00, Room 205**  
**June 29, 2011**

**1. CALL TO ORDER, WELCOME, INTRODUCTIONS**

Chair David Brandt called the meeting to order.

Present:

David Brandt, Washington, County – TAT Chair  
Brian Fischer, Houston Engineering  
Josh Gumm, Scott County  
Susanne Maeder, MnGeo  
Matt McGuire, Metropolitan Council  
Bart Richardson, DNR  
Charlie Teff, Anoka County  
Dan Och, NCompass Technology/Guide K12

Support Staff: Mark Kotz, Metropolitan Council

**2. APPROVE AGENDA**

The agenda was approved .

**3. APPROVE MEETING SUMMARY**

The October 2010 meeting summary was approved with no changes.

**4. PROJECT AND WORKGROUP REPORTS**

**a) Address Workgroup**

Kotz reported that the MetroGIS Address Points Dataset still has only data for one city, although several counties are now very interested in getting the data available for NG 911. LOGIS and Dakota Co. have expressed interest in hosting the prototype web editing application to test it with a few address authorities. MetroGIS Coordinating Committee recently indicated that developing enhancements to the editor is one of their higher priorities and that some funding could be available for it yet this year. The national address data standard was approved by the FGDC in early 2011.

Brandt said that at the NENA conference NENA is also planning to comply with the national standard as a transfer format.

**b) Geospatial Commons**

Kotz reported that the test implementation was completed. It includes out of the box ESRI Geoportal Extension 9.3 tools with minimal customization. The workgroup tested metadata from multiple agencies and evaluated customization needs. It also launched metadata workgroup to recommend changes to MGMG, especially for web services. The four sponsoring agencies (MnGeo, DNR, Mn/DOT and the Met Council) are putting together a project plan for a production version of the Commons. More information about the project is available here

<http://www.mngeo.state.mn.us/workgroup/commons/index.html>

**c) Best Image Service**

McGuire reported that the service is up and running now. Met Council is using it in production web sites. The new title is the “composite image service”. A group will need to be formed to make decisions about what imagery will be added to the service once new imager is available. Metadata has been created for the

service: [www.mngeo.state.mn.us/chouse/composite\\_image.html](http://www.mngeo.state.mn.us/chouse/composite_image.html) The metadata page includes the service URL.

Scott Co. sent their 6" data to MnGeo to make it publicly available. Unclear if it is included in the composite image service, but it should be eventually.

Has there been any thought of creating a map or vector dataset of the footprint of each data source? A map exists, but not a dataset. The footprint changes at different zoom levels.

## **5. TECHNICAL PRESENTATIONS**

### **a) Park and Recreation Application for Counties - Brian Fischer**

Houston Engineering has create 4 very similar applications for a number of counties, some individually and some as groups. See presentation file.

Brian then demoed a wide variety of functionality in the web applications, the feature editor and a mobile version of the application. The mobile app is now available on the Android Market.

Questions:

How similar are the data models between counties? Fairly similar, but the relationships between features are different. A standard was created and some counties use it.

Did you consider doing this in something like MapServer? No, all counties already had ArcGIS Server, so it was not an option.

## **6. INFORMATION SHARING**

### **a) Next Generation 911 progress – Washington Co.**

Brandt: NG 911 will be GIS based, but our county, and other counties may not have all of the data needed to support it.

The software chosen by Washington County is dictating that we have to modify street centerlines in a way that does not make using the NCompass street centerlines feasible. This is problematic and requires us to create our own dataset to work with 911, but we still need NCompass to work outside the county. On the positive side, bringing the centerline maintenance in-house has allowed for greater data control with numerous street and address corrections being made to the centerlines and the tax database. Address point data will ultimately be the first data set queried for location with the centerline serving a backup geocoding role but still required for routing.

### **b) Round Table.**

Och: NCompass Technologies has changed its name to Guide K12.

Och: The MetroGIS geocoder does not have updated parcel data. How can we get that included?

Kotz: no one has volunteered to converting the updated parcel data into the format needed by for the geocoder. Susanne said that MnGeo will do this if someone can provide documentation about what needs to be done. Kotz said that Met Council has some documentation that can be sent to MnGeo.



Richardson: The MnGeo Digital Cadastral Data Committee is trying to get a statewide parcel attribute transfer standard established. Bart has converted all of the parcel data that DNR has (about 60- counties) into a single feature class with the MetroGIS set of attributes. DNR has upgraded to ArcGIS 10 and all DRSEs are now in geodatabase format, so no more ArcInfo Library tile schemes or shape files.

## **7. ADJOURN**

Brandt adjourned the meeting at 2:50.

Meeting notes prepared by,  
Mark Kotz

Appreciates

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## **Presentation Slides**

### **Park and Recreation Application for Counties**

# **Developing Park and Recreation Web Mapping Applications**



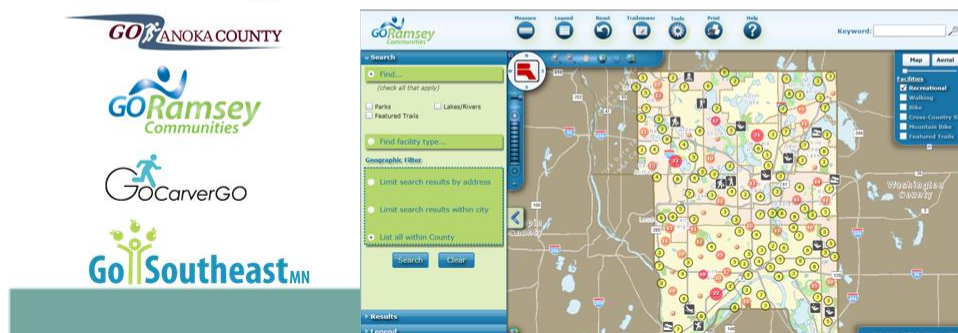
***Presented by:***  
***Brian Fischer***  
***GIS Manager***

***June 29, 2011***



## Outline

- Background
- Silverlight Application Demo
- Feature Editor Demo
- Mobile Application Demo



## Background

- Past 9 Months HEI contracted to develop 4 applications
  - Anoka County
  - Carver/Scott County
  - Ramsey County
  - 11 Southeast MN Counties
- Projects funded by Statewide Health Improvement Program grants



## Background

- Counties and Cities collected all data and developed data model
- Collaborative effort between Public Health, Parks and Rec, GIS and IT departments
- Champions within each county leading project



## Goals

- Promote active living and recreation opportunities
- Easy to use web mapping application to discover recreation facilities
- Strive towards similar interfaces and data models
- Leverage development costs



## Technology Overview

- ArcGIS Server 9.3.1 and 10.0
- ESRI Silverlight web mapping API
- Misc. Details
  - Use of feature services
  - Cluster algorithm
  - Custom print widget
  - Custom measure tool
  - Highly custom search tools



## Silverlight Application Demo

- GoAnoka – <http://www.goanokacounty.org/>
- GoCarver - <http://gocarvergo.org/>
- GoRamsey - <http://goramsey.org/>
- SE MN (under development) –
- <http://76.10.117.11/SoutheastSite/index.html>



## Feature Editor Demo

- Currently only developed for Ramsey County and SE MN Counties
- Only allows edit of point features and attributes
- Configuration Files
- <http://76.10.117.11/ramseybeta/goramsey.html>

```
<editLayer Name="ArcheryRange"
  EnglishName="Archery Range"
  DefaultValues="FeatureCode|AR,StateFIPS|27,CountyFIPS|123"
  ReadOnlyFields="FeatureCode,StateFIPS,CountyFIPS,FeatureID,FeatureUniqueID"
  HiddenFields="LastEditedBy,LastEditedDate"
  ImgUrl="http://76.10.117.11/ArcGIS/rest/services/Ramsey/EditLayers2/FeatureServer/0/images/A27C91A4"
  Url="http://76.10.117.11/ArcGIS/rest/services/Ramsey/EditLayers2/FeatureServer/0" />
```

## Mobile Application Demo

- Currently only developed for SE MN Counties
- Apps available for Android and Apple devices
- Developed with ESRI Flex API, ArcGIS Server and Flash Builder
- Designed for smartphones and tablet devices
- Goal is to allow public to discover and learn about recreation opportunities in their area



## Challenges

- Large stakeholder groups
- Experimental features
- Limitations of Silverlight
- Experience levels with ArcGIS Server and SDE
- Differences in data models and data collected
- Configuration of application in HTTPS and mixed environments



## Questions?

- GoAnoka – <http://www.goanokacounty.org/>
- GoCarver - <http://gocarvergo.org/>
- GoRamsey - <http://goramsey.org/>
- SE MN (under development) – <http://76.10.117.11/SoutheastSite/index.html>

**Presented by:**  
Brian Fischer  
GIS Manager  
[bfischer@houstoneng.com](mailto:bfischer@houstoneng.com)





# MetroGIS Technical Advisory Team

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**Wednesday, November 7, 2012**  
**Metro Counties Government Center, Board Room**  
**New Location: 2099 University Avenue, St. Paul**  
**1:00 to 3:00 p.m.**

## Agenda

1. **Call to Order, Welcome, Introductions** ..... Chair David Brandt
2. **Approve Agenda** ..... all
3. **Election of TAT Chair**
4. **Project and Workgroup Reports**
  - a. 1:10 - Geospatial Commons ..... Mark Kotz
  - b. 1:15 - Address Workgroup & Web Editing Application ..... Mark Kotz
  - c. 1:25 - Street Centerlines ..... Geoff Maas
  - d. 1:30 - Information Sharing Round Table ..... All
5. **Technical Presentations and Discussions**
  - a. 1:45 - Mobile Development for Smartphone and Tablets ..... Brian Fischer
  - b. 2:15 - Esri Local Government Data Model ..... Dan Falbo, Walter Potts
6. **Next Meeting – TBD**
7. **Adjourn**

# MetroGIS Technical Advisory Team

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**Wednesday, November 7, 2012**  
**Metro Counties Government Center, Board Room**  
**2099 University Avenue, St. Paul**  
**1:00 to 3:00 p.m.**

## Meeting Summary

### **1. Call to Order, Welcome, Introductions**

Chairperson Brandt called the meeting to order at 1:02 p.m.

#### **Attendees:**

Charlie Teff, Anoka County  
Joshua Gumm, Scott County  
Brian Fischer, Houston Engineering  
Jeremy Bixby, Houston Engineering  
Rick Gelbmann, Metropolitan Council  
Bart Richardson, MnDNR  
Adam Seamans, Esri  
Dan Och, GuideK12/NCompass  
Bob Basques, City of St. Paul  
Cory Karsten, City of St. Paul  
Todd Lusk, Dakota County  
Nate Christ, Carver County  
Dan Falbo, Esri  
Doug Matzek, Washington County  
Geoff Maas, MetroGIS/Metropolitan Council  
David Brandt, Washington County  
Nancy Rader, MnGeo  
Nancy Read, MMCD  
Mark Kotz, Metropolitan Council  
Gordy Chinander, MESB  
Ron Wencil, USGS

### **2. Approve Agenda**

Agenda was approved

### **3. Election of TAT Chair**

Brian Fischer was elected as the new chair of the Technical Advisory Team.



#### 4. **Project and Workgroup Reports**

##### **Geospatial Commons**

Kotz gave an update on the Geospatial Commons project which was initiated several years ago jointly by MetroGIS and the MnGeo Standards Committee. MnGeo has taken ownership of the project and has stated that it is one of their highest priorities. A workgroup composed of representatives from 5 state agencies and the Met Council have worked on estimating the cost. MnGeo is now working on strategies to find funding for the project.

##### **Address Workgroup & Web Editing Application**

Kotz gave a short [presentation](#) about and demo of the MetroGIS address points web editing application that is being developed.

The application is intentionally basic. It has several tabs:

- Address information
- Parcel information
- Legend
- Layers
- Find address
- Find parcel

Cities will be the end users. Through a login, they will only be allowed to edit points that they own (in their jurisdiction). Users can add new points, move points, change addresses, etc. They can also give away authority of points in their jurisdiction in cases of an annexation.

##### **Street Centerlines**

Geoff Maas, MetroGIS Coordinator reported that MetroGIS just completed an in-depth, 2-day forum in late October. The forum was focused on identifying user needs related to street centerline data. Users included local, regional and state government entities in MN. MnDOT is helping to lead the effort of defining needs in conjunctions with MnGeo. The forum tried to identify the breadth and depth of all stakeholder needs, and then to define the core shared needs. Esri is also working with the group to try to pilot some potential solutions that bridge across stakeholders.

This will be a long term effort. Stay tuned for more information as the project moves forward.

##### **Information Sharing Round Table**

- Josh Gumm. Scott Co. is working on 2 applications related to address points and fiber locations. Also trying to migrate off of IMS technology.
- Rick Gelbmann: New GIS project manager to start on the 13<sup>th</sup>.
- Bart Richardson: The MnGeo Digital Cadastral Data Committee has a proposed state parcel attribute data transfer standard out for public review. Kotz chairs MnGeo Standards Committee.
- Bob Basques: City of St. Paul is getting ready to work with the new LiDAR dataset that is available. Data has points every 8 inches across the city. It's a lot of data and a good problem to have.
- Cory Karsten: St. Paul is also working on AVL projects, particularly for snow plowing. Also working with the county to collaborate on QA/QC with address data.

- Gordy Chinander: NENA just released some data standards documents for review. Also working on data consistency issues with local governments.
- Todd Lusk: Dakota Co. is working on getting the beta address points editor up and running for testing to get feedback to the address workgroup.
- Nate Christ: Carver County is re-architecting ArcGIS infrastructure to include some VM servers.
- Doug Matzek: Washington Co. is deploying a new public facing parcel viewing app to be hosted on Amazon cloud.
- Geoff Maas: MetroGIS is updating its work plan and web site.
- Nancy Rader: The LiDAR data is available from MnGeo's web site.
- Nancy Read: MMCD is reviewing NWI data

## 5. Technical Presentations and Discussions

### **Mobile Development for Smartphones and Tablets**

Jeremy Bixby gave a [presentation about Creating Awesome Mobile Experiences](#)

### **Esri Local Government Data Model**

Adam Seamans gave a [presentation on Esri's Local Government Information Model and ArcGIS for Local Government](#).

## 6. Next Meeting

Meetings for 2013 will be scheduled for May and November.

The group briefly discussed the purpose of the TAT since it did not seem to be advising MetroGIS on technical issues anymore. It was agreed that this should be a discussion topic at the next meeting.

## 7. Adjourn

The meeting was adjourned at 3:15.



# MetroGIS Technical Advisory Team

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**Wednesday, November 6, 2013**

**Metro Counties Government Center, Board Room  
2099 University Avenue, St. Paul  
1:00 to 3:00 p.m.**

## **Agenda**

1. **Call to Order, Welcome, Introductions** ..... Matt McGuire
2. **Approve Agenda** ..... all
3. **Technical Presentations and Discussions**
  - a. 1:05 – Street Centerlines presentation ..... Geoff Maas
  - b. 1:20 - Street Centerlines discussion ..... Gordon Chinander
    - i. Local Maintenance workflow processes
    - ii. Standardized attributes
    - iii. Centerline edge matching between coincident counties
    - iv. Process/ workflow for a regional seamless centerline dataset
  - c. 2:00 – How does your agency use centerlines? ..... Geoff Maas
4. **Next Meeting – TBD**
5. **Adjourn**



**MetroGIS**

## **Technical Advisory Team Meeting Minutes**

**Wednesday, November 6, 2013**

Metropolitan County Government Office  
2099 University Avenue, St. Paul, MN

**Attendees:**

Charlie Teff, Anoka County	Kevin Etherton, NCompass
Matt McClure, Scott County	Chad Riley, Carver County
Kent Tupper, Dakota County	Bart Richardson, MnDNR
Matt McGuire, MetCouncil, proxy chair	Brent Lund, MnGeo
Todd Lusk, Dakota County	Doug Matzek, Washington County
Jim Fritz, Xcel Energy	Gordy Chinander, Metro Emergency Services Board

**Staff:**

Geoff Maas, MetroGIS

**1 ) Proxy Chair McGuire called the meeting to order at 1:05 pm**

**2 ) Agenda was approved by the group**

**3 ) Technical presentations and discussions**

**3a ) Statewide Centerlines Initiative presentation**

*MetroGIS Coordinator Maas gave a short presentation on the Statewide Centerlines Initiative (the same presentation that he and Dan Ross presented at the MN GIS/LIS conference in October) as an introductory piece for the group.*

**3b ) Centerlines Issues Discussion**

*MESB GIS Coordinator Chinander led a discussion on the various issues surrounding the needs of the Next Gen 911 initiative and the emergency services community;*

**3b.i) Local Maintenance Work Flow**

Chinander: I want to stress that this is all much more than just a MESB issue, it is a county issue as well, sync-ing up the 911 data with the GIS centerline data, tightening up the data and taking care of the backend work to make sure that everything works together, building something we all can use.

*Chinander cited several specific examples of data out of sync with the features it represented including historical addresses, when a road is vacated, 'stranded' properties (no access via passable roadway to the address) and how these issues impact response times for emergency services.*

Chinander: Has anyone started working on address maintenance issues in their county? I know that Ramsey has started.

Riley: Yes, we've started in Carver.

If every county, in the metro at least has ArcGIS Server + SDE (*all at the table confirmed that they did*) we can push the data up, set it up as a service through MnDOT or MnGeo or whoever is going to host the work; XML tags could be employed for E911 compliance needs.

### **3b, ii ) Standardized Attributes**

Chinander: The address ranges are important for us, but need to come from the cities. There are other kinds of data that folks have talked about wanting carried with the data.

Group discussion of various attributes:

Need for pavement information or not, right of way data tied to the information is not always the case, they might help in some situations, cite if the source is city, county, state or other

Maas: In the Centerlines workshop we had back in October of 2012, we assembled a solid core set of desired attributes, it is likely not a complete set but remains a core part of that discussion about what local road data users want out of the data.

Richardson: Do the 911 requirements make the distinction or need specific representations for single centerlines vs. dual centerlines? Is there an issue with that?

Chinander: We want geometry that matches what's on the ground, however, one difficulty is that CAD (Computer Aided Dispatch) can't consume dual lines data;

County staff representatives: We tend to maintain dual carriageways as separate lines: we need to maintain consistency with our geometry, keeping two sets of data becomes a problem.

Chinander: Another consideration is dual carriage way *with a barrier between it vs. dual carriage way with no barrier* (e.g. emergency vehicles could reverse direction to the other lane with no barrier)

### **3b, iii ) Edge Matching**

Chinander: If we are going to move into a regional dataset, we need to look at the edge matching as well, get the counties tied into each other. We probably need some kind of agreement between counties about where on a given bridge they meet, etc.

Hosting issue discussion:

We (stakeholders) need to pin down who could host the data until the state is ready to do that (no decision made on how to handle hosting in the immediate discussion), the data needs to always be available (24/7) for it to be useful to the emergency response users.

Chinander: The FDGC E911 standard has been recalled/withdrawn which has slowed things down for us, other contributing groups are still trying to finalized their materials.

## **How Current is the data?**

Chinander: We always need the most current data as quickly as we can get it, things like new developments, planned, preliminary plats, final plats but not yet built, etc. We desired 'updates before the updates' on a daily or weekly schedule; monthly is the absolute minimum. Ideally counties would aggregate this data, do quality checking on it.

Riley: We could possibly be distributing it through the GDRS, pushing it out, getting it back in return.

Group discussion: How does GDRS function independently of a local LRS system? (more questions than answers)

Etherton: At NCompass, I'm working on the data constantly, we are getting to the point where everyone wants to 'drive their own' some areas of the state are very up to data and sophisticated, while some parts of Greater Minnesota don't even have data. We are less able to meet the needs in the Greater Minnesota area as there are fewer GIS professionals, and some general apathy of the local governments toward this work. Even those who are in authority, this isn't an issue they care about.

Group discussion: People (local officials) who are often the authority, assigning addresses, this not something they care about, not really an issue on their minds. How do we make them aware that this needs to happen?

Lusk: Counties don't have the authority, this comes from the cities, they assign addresses, this part of the work especially needs to be collaborative, and revisions and error corrections, once an address is assigned local jurisdictions are reluctant to change it.

Chinander: This will be a big part of it, especially where there are issues that you need to change it, in order to use NextGen911 you will sometimes have to make them change it.

Lusk: In Dakota County dispatch, we need to change many errors in the local system; we make formal recommendations but cannot force them to change it.

Chinander: It helps to engage the local fire chief or police chief; get their support and backing. For NextGen 911 compliance, we (E911) really need to have this data soon;

Etherton: We are willing to help and partner with this if there is role for us.

Richardson: Practical implementation remains a difficult issue for this. Implementing a Joint Powers Agreement between cities and counties might be the way to go;

Chinander: One challenge is that there is no 'address authority' called out in statute, the term 'road authority' is in use, and in the statute but it is a vague term, anything can be interpreted to be a 'road authority'.

Richardson: The big issue will be maintenance on the system and keeping it current.

Chinander: We will need a committee or a work group like this to move forward. Each have a member;

Addressing/Address Range discussion:

Key points of where we derive our addresses, parcel address, calculated address, address point put in by the 'authority'?

Riley: In Carver County, our centerlines derived off of the LRS we've created, still have a need for node-segment even with the LRS

Richardson: This is also our issue; we do want a single segment to work with.

Group agreement: We need the same base model, we don't want to specialize in one way for one jurisdiction and something else for another

Riley: Stick with LRS in mind, the benefits of that system are significant, we can derive a lot from out of that, In Carver County GIS gets its data from Survey (Dept), which tend to be segmented at intersections.

Chinander: We need a transition model, we still have to cover today's model until NextGen, it will be in a standard node-segment different layer; CAD may or may not use this stuff right now; compatibility with CAD is the challenge. We need to address what is being put into the 911 system and what is being put into the Centerline mode, so they are being submitted at the same time, go live and become available at the same time, there is a timing issue.

Other topics:

Public Works and GIS are still not fully integrated in many cases.

NextGen 911:

GIS is very much on the backside of this effort;

GIS is part of the call process, gets plotted via ECRF (Emergency Call Routing Function)

*(ECRF is a real time database that allows authorized service providers to query for the next hop in 9-1-1 call delivery. This next hop may be to the IP gateway for the PSAP who should receive the call or it may be the IP gateway of the next network in the path towards the PSAP. In the case of the latter, the targeted network IP gateway performs a similar query to a more regionalized ECRF. This process continues until the call is actually delivered to the appropriate PSAP.)*

Group needs:

Need form a work group that addresses this, perhaps use the TAT as that group?

Attachments (provided by G. Chinander)

**DRAFT NENA STANDARDS FOR NG9-1-1 DATA MODEL (9 pages)**

Other GIS data layers in this document complete the minimum recommended GIS data for NG9-1-1. The data field names are unimportant. While a descriptive name is provided in the GIS data layers tables below for the “Field Name” the local entity may label the “Field Name” whatever best suits their existing systems and needs. However, the data fields, XML tags, and associated attribute data within that field must adhere to the attribute descriptions provided in the tables below. The XML tags MUST be used when sharing this information and when provisioning the data to the ECRF and LVF functional elements.

### 3.6 Road Centerlines

Field Name	XML Element	M/C/O	Type	Attribute Description
Source of Data	dataSource	M	A	Agency that last updated the record, usually the name of the 9-1-1 Authority – Agency ID (the domain name of the 9-1-1 Authority Ex. Vermont911.st.us.gov
Date Updated	lastUpdate	M	D	Date of last update using ISO 8601 format Ex. 2010 Ex. 2010-10-12T01:01Z
Effective Date <sup>1</sup>	EffectiveDate	M	D	Date the new layer information goes into effect using ISO 8601 format Ex. 2010 Ex. 2009-11-18T01:01Z
RCL_Unique_ID	segmentID	M	A	Unique ID for each Road Segment, with domain of agency included. ID’s, not to be reused when road is split or deleted Ex. 123@houston.eoc.tx
Country	country	M	A	The name of a country represented by its two letter ISO 3166-1 English country alpha-2 code elements in capital ASCII letters Ex. US

Field Name	XML Element	M/C/O	Type	Attribute Description



<b>State Left<sup>2</sup></b>	stateProvinceLeft	M	A	State Name, or State equivalent, on the Left <sup>12</sup> side of the road segment, completely spelled out, as given in INCITS 31:200 Ex. TX
<b>State Right<sup>2</sup></b>	stateProvinceRight	M	A	State Name, or State equivalent, on the Right <sup>13</sup> side of the road segment, completely spelled out, as given in INCITS 31:2009 Ex. TX
<b>County Left<sup>3</sup></b>	countyLeft	C	A	County Name, or equivalent, on the Left <sup>12</sup> side of the road segment, completely spelled out, as given in INCITS 31:2009
<b>County Right<sup>3</sup></b>	countyRight	C	A	County Name, or equivalent, on the Right <sup>13</sup> side of the road segment, completely spelled out, as given in INCITS 31:2009
<b>Municipality Left<sup>4</sup></b>	municipalityLeft	C	A	Name of the Municipality on the Left <sup>12</sup> side of the road segment. Only used if a named municipality. Ex. Chicago
<b>Municipality Right<sup>4</sup></b>	municipalityRight	C	A	Name of the Municipality on the Right <sup>13</sup> side of the road segment. Only used if a named municipality, otherwise leave blank. Ex. Chicago
<b>Municipality Division Left</b>	municipalityDivisionLeft	O	A	Name of the Municipality Division - on the Left <sup>12</sup> side of the road segment. Only used if a named municipality with a defined boundary
<b>Municipality Division Right</b>	municipalityDivisionRight	O	A	Name of the Municipality Division - on the Right <sup>13</sup> side of the road segment. Only used if a named municipality with a defined boundary
<b>Neighborhood Left<sup>5</sup></b>	neighborhoodLeft	O	A	Neighborhood or other informal designation for a part of a city on the Left <sup>12</sup> side of the road segment
<b>Field Name</b>	<b>XML Element</b>	<b>M/C/O</b>	<b>Type</b>	<b>Attribute Description</b>
<b>Neighborhood Right<sup>5</sup></b>	neighborhoodRight	O	A	Neighborhood or other informal designation for a part of a city - on the Right <sup>13</sup> side of the road segment

<b>Address Range Prefix Left<sup>10</sup></b>	addressRangePrefixLeft	O	A	That part of an address preceding the numeric address, on the Left <sup>12</sup> side of the road segment. Ex. "101-" in 101-123 Grid Way Dr
<b>Address Range Prefix Right<sup>10</sup></b>	addressRangePrefixRight	O	A	That part of an address preceding the numeric address, on the Right <sup>13</sup> side of the road segment. Ex. "2N3W-" in 2N3W-124 Township Dr
<b>Left FROM Address</b>	leftFromAddresses	M	N	The address on the Left <sup>12</sup> side of the road segment at the FROM node. NOTE: This address can be higher than the "Left TO Address"
<b>Left TO Address</b>	leftToAddress	M	N	The address on the Left <sup>12</sup> side of the road segment at the TO node. NOTE: This address can be lower than the "Left FROM Address"
<b>Right FROM Address</b>	rightFromAddress	M	N	The address on the Right <sup>13</sup> side of the road segment at the FROM node. NOTE: This address can be higher than the "Right TO Address"
<b>Right TO Address</b>	rightToAddress	M	N	The address on the Right <sup>13</sup> side of the road segment at the TO node. NOTE: This address can be lower than the "Right FROM Address"
<b>Parity Left</b>	parityLeft	C	A	Parity of Address Range on the Left <sup>12</sup> side of the road segment. Valid entries: E,O,B,Z for Even, Odd, Both, or Zero (if the range is 0 to 0).
<b>Field Name</b>	<b>XML Element</b>	<b>M/C/O</b>	<b>Type</b>	<b>Attribute Description</b>
<b>Parity Right</b>	parityRight	C	A	Parity of Address Range on the Right <sup>13</sup> side of the road segment. Valid entries: E,O,B,Z for Even, Odd, Both, or Zero (if the range is 0 to 0).



<b>Postal Community Left</b>	PostalCommunityLeft	C	A	Postal Community name completely spelled out, as identified on the Left <sup>12</sup> side of the road segment
<b>Postal Community Right</b>	PostalCommunityRight	C	A	Postal Community name completely spelled out, as identified on the Right <sup>13</sup> side of the road segment
<b>Postal Code Left<sup>6</sup></b>	postalCodeLeft	C	A	Postal Code of Road Segment on the Left <sup>12</sup> side of the road segment. Do not include any ZIP plus 4 in this field.
<b>Postal Code Right<sup>6</sup></b>	postalCodeRight	C	A	Postal Code of Road Segment on the Right <sup>13</sup> side of the road segment. Do not include any ZIP plus 4 in this field.
<b>ESN Left<sup>7</sup></b>	ESNLeft	C	A	Emergency Service Number on the Left <sup>12</sup> side of the road segment
<b>ESN Right<sup>7</sup></b>	ESNRight	C	A	Emergency Service Number on the Right <sup>13</sup> side of the road segment
<b>MSAG Community Left<sup>7</sup></b>	MSAGCommunityLeft	C	A	Valid service community name as identified by the MSAG on the Left <sup>12</sup> side of the road segment
<b>MSAG Community Right<sup>7</sup></b>	MSAGCommunityRight	C	A	Valid service community name as identified by the MSAG on the Right <sup>13</sup> side of the road segment
<b>Street Pre-Modifier</b>	PRM	O	A	A word or phrase that precedes the primary street name and is not a leading street direction. Street Pre-Modifier is only used when the Street Prefix Directional is also used. Valid Entries include but are not limited to: Old, Access, Alternate, Business, Bypass, Connector, Extended, Extension, Loop, Private, Public, Scenic, Spur, Ramp, Underpass, Overpass.
<b>Prefix Street Direction</b>	PRD	C	A	Street direction preceding the Street Name. Valid Entries: N <sub>2</sub> , S <sub>2</sub> , E <sub>2</sub> , W <sub>2</sub> , NE <sub>2</sub> , NW <sub>2</sub> , SE <sub>2</sub> , SW
<b>Street Type Prefix<sup>10</sup></b>	STP	O	A	The type of street preceding the street name element. Must always be spelled out. Not used in most applications

<b>Street Name</b>	RD	M	A	The legal street name as assigned by the local addressing authority
<b>Street Type Suffix</b>	STS	C	A	The type of street following the street name. Valid entries are limited to the abbreviations listed in USPS Publication 28 Appendix C1
<b>Suffix Street Direction</b>	POD	C	A	Street direction following the Street Name. Valid entries: N, S, E, W, NE, NW, SE, SW
<b>Street Post-Modifier</b>	POM	C	A	A word or phrase that follows the street name and is not a Street Type Suffix or Suffix Street Direction. Valid entries include, but are not limited to: Access, Alternate, Business, Bypass, Connector, Extended, Extension, Loop, Private, Public, Scenic, Spur, Ramp, Underpass, Overpass
<b>Speed Limit</b>	speedLimit	O	N	Normal Posted Speed in mph
<b>One-Way</b>	oneWay	O	A	One-way direction of travel. <b>B or Blank</b> – travel in both directions allowed <b>FT</b> – One-way traveling from FROM node to TO node (in direction of segment) <b>TF</b> – One way traveling from TO node to FROM Node (opposite direction of segment)
<b>Road Class<sup>8,9</sup></b>	roadClassType	O	A	<b>Primary</b> <b>Secondary</b> <b>Local</b> (City, Neighborhood, or Rural Road) <b>Ramp</b> <b>Service</b> (usually along a limited access highway) <b>Vehicular Trail</b> (4WD, snowmobile) <b>Walkway</b> (Pedestrian Trail, Boardwalk) <b>Alley</b> <b>Private</b> (service vehicles, logging, oil fields, ranches, etc.) <b>Parking Lot</b> <b>Trail</b> (Ski, Bike, Walking / Hiking Trail) <b>Other</b>



**3.9 Site /  
Structure  
Layer**

Field Name	Label	M/C/O	Type	Attribute Description
<b>Source of Data</b>	dataSource	M	A	Agency that last updated the record – Agency ID (the domain name of the 9-1-1 Authority)
<b>Date Updated</b>	lastUpdate	M	D	Date of last update using ISO 8601 format Ex. 2010-08-30T15:52+05
<b>Effective Date<sup>1</sup></b>	effectiveDate	M	D	Date the new layer information goes into effect using ISO 8601 format Ex. 2010 Ex. 2009-11-18T01:01Z
<b>Site_Unique_ID</b>	segmentID	M	A	ID that is guaranteed to be unique in a set of aggregated data. This could be a combination of the segment ID with 9-1-1 Authority's domain name. Ex. 207@city.state.us
<b>Country</b>	country	M	A	The name of a country represented by its two letter ISO 3166-1 English country alpha-2 code elements in capital ASCII letters. Ex. US
<b>State<sup>2</sup></b>	A1	M	A	Two alpha-character U.S. State, or equivalent, or Canadian province abbreviation as defined by USPS Publication 28. Ex. TX (Texas), ON (Ontario)
<b>County<sup>3</sup></b>	A2	C	A	County Name, or equivalent, completely spelled out , as given in INCITS 31:2009
<b>Municipality<sup>4</sup></b>	A3	C	A	The name of the incorporated municipality or other general-purpose local governmental unit (if any) where the address is located

<b>Municipality Division</b>	A4	C	A	The name of a portion of a municipality with a defined border. Ex: township, ward, district
<b>Neighborhood</b>	A5	C	A	Neighborhood or other informal designation for a municipality or unincorporated area of a county or portion of a tribal nation with an undefined boundary
<b>Address Number Prefix<sup>10</sup></b>	HNP	O	A	An extension of the address number that precedes it and further identifies a location along a thoroughfare or within a defined area. Ex. "101-" in 101-123 Grid Way Dr
<b>Address Number</b>	HNO	C	N	The numeric identifier of a location along a thoroughfare or within a defined community.
<b>Address Number Suffix</b>	HNS	C	A	An extension of the address number that follows it and further identifies a location along a thoroughfare or within a defined area. Ex. 101 1/2, 345B
<b>Street Pre-Modifier</b>	PRM	O	A	A word or phrase that precedes the primary street name and not a leading street direction. Street Pre-Modifier is only used when the Street Prefix Directional is also used. Valid Entries: Access, Alternate, Business, Bypass, Connector, Extended, Extension, Loop, Private, Public, Scenic, Spur, Ramp, Underpass, Overpass.
<b>Prefix Street Direction</b>	PRD	C	A	Leading street direction prefix. Valid Entries: N S E W NE NW SE SW
<b>Street Type Prefix<sup>10</sup></b>	STP	O	A	The type of street preceding the street name element. Must always be spelled out. Not used in most applications



<b>Street Name</b>	RD	C	A	The legal street name as assigned by local addressing authority
<b>Street Type Suffix</b>	STS	C	A	The type of street following the street name. Abbreviations listed in USPS Publication 28 Appendix C1
<b>Suffix Street Direction</b>	POD	C	A	Trailing street direction suffix. Valid Entries: N S E W NE NW SE SW
<b>Street Post-Modifier</b>	POM	O	A	A word or phrase that follows the street name and is not a street suffix or trailing street direction. Valid Entries include, but are not limited to: Access, Alternate, Business, Bypass, Connector, Extended, Extension, Loop, Private, Public, Scenic, Spur, Ramp, Underpass, Overpass.
<b>ESN<sup>3</sup></b>	ESN	C	A	Emergency Service Number associated with this House Number, Street Name and Community Name <sup>3</sup>
<b>MSAG Community</b>	MSAGCommunity	C	A	MSAG Community name associated with the location of the address.
<b>Postal Community</b>	PCN	M	A	The name of the post office from which mail is delivered to the address, completely spelled out.
<b>Postal Code</b>	PC	C	A	Postal or ZIP code Ex. 05421 Format: AAAAA
<b>ZIP Plus 4</b>	PC4	O	A	The ZIP plus 4 code (without the dash) Ex. 1234
<b>Building</b>	BLD	O	A	The Building Name Ex. DuPont Hotel, Shiloh Church
<b>Floor</b>	FLR	O	A	The Floor the location is associated with

<b>Unit</b>	UNIT	O	A	Unit, apartment, suite designation
<b>Room</b>	ROOM	O	A	Room designation.
<b>Seat</b>	SEAT	O	A	Seat, cubicle, etc...
<b>Landmark</b>	LMK	O	A	Landmark or Vanity address
<b>LOC</b>	LOC	O	A	Additional location information Ex. SW corner of warehouse
<b>Place Type</b>	PLC	C	A	Type of place Ex. office, store, school, residential
<b>Longitude</b>		O	N	In decimal degrees
<b>Latitude</b>		O	N	In decimal degrees
<b>Elevation</b>		O	N	Height above Mean Sea Level in meters

### 3.10 States or Equivalents

Field Name	Label	M/O/C	Type	Attribute Description
<b>Source of Data</b>	dataSource	M		Agency that last updated the record – Agency ID (the domain name of the 9-1-1 Authority)
<b>Date Updated</b>	lastUpdate	M	D	Date of last update using ISO 8601 format. Ex. 2010-08-30T15:52+05
<b>State_Unique_ID</b>	segmentID	M	A	ID that is guaranteed to be unique in a set of aggregated data. This could be a combination of the feature ID with 9-1-1 Authority's domain name. Ex. 5@houston.eoc.tx
<b>State<sup>2</sup></b>	A1	M	A	Two alpha-character U.S. State or Canadian province abbreviation as defined by USPS Publication 28. Ex. TX (Texas), ON (Ontario)