Minnesota Geospatial Advisory Council Meeting

3/2/2016

Blazing Star Room, Ground Floor, Centennial Office Building 658 Cedar St., St. Paul, MN 55155 11:00 a.m. – 2:00 p.m.

Agenda

 Call to order (Chair) Introductions (three new members!) Approval of agenda Approval of meeting minutes from 12/2/15 	11:00	20 min
2. Review and approval of committee and workgroup summaries (All)	11:20	10 min
3. Parcels and Land Records Committee update (Richardson)	11:30	5 min
4. Review charter and work plan of the Outreach Committee (Kne)	11:35	15 min
5. Governance and relationship with the GTC (Kotz, Ross)	11:50	10 min
6. Break Networking	12:00	30 min
7. Sector Reporting Discussion (Kotz)	12:30	10 min
8. Governor's Geospatial Commendation Award	12:40	5 min
9. MnGeo Image Server governance (Dolbow)	12:45	20 min
10. Legislative update (Ross)	1:05	10 min
 11. Updates on major initiatives (Ross and others) a. Next NG9-1-1 b. Others 	1:15	15 min
12. MnGeo priority projects (Ross)	1:30	15 min
13. Announcements or other business	1:45	15 min
14. Adjourn	2:00	

Agenda Item 1a. Three New Members

Ryan Anderson

Ryan has been the GIS Coordinator for the Leech Lake Band of Ojibwe's Division of Resource Management since 2010. He works with all departments on the Leech Lake Reservation regarding their geospatial needs, including analysis, database creation, and map production. They are currently integrating GIS components into all departments, with a heavy emphasis on creating a land database for the Tribe.

He has served as an adjunct GIS professor at the Leech Lake Tribal College since 2013 and at Bemidji State University during 2013. In his free time he works with his wife at their GIS consulting business integrating GIS mapping and permaculture design.

Ryan received Bachelor degrees in Wildlife Biology and Geography from Bemidji State University.

Andra Bontrager

Andra is the GIS Specialist at the Minnesota Center for Environmental Advocacy, where she provides support services for legal, policy, and scientific staff. Andra coordinates the GIS program, including geospatial data creation and collection, implementing spatial analyses, writing methodological technical reports, compiling cartographic illustrations, and developing web mapping applications.

Originally from Saint Paul, she earned her B.S. in Earth Sciences, Physical Geography option with an emphasis in Biogeography, from Montana State University (MSU) in 2004, where she worked as a dendroecological research assistant to climate science graduate students. Andra has over 10 years of conservation oriented GIS experience from working with the North America Program of the Wildlife Conservation Society as the GIS Projects Leader. Andra has also worked with municipal GIS systems, has facilitated GIS-focused community workshops, and has enjoyed consulting as an independent cartographer. She has completed post-graduate training in Landscape Ecology at MSU and is working toward her M.S. Degree in Cartography and GIS Development through the University of Wisconsin, Madison.

Annette Theroux

Annette Theroux is the President and CEO of Pro-West & Associates (PWA). A graduate of Bemidji State University, Annette has been involved in the GIS industry for 24 years. She is responsible for developing and implementing business strategies and policies for PWA. She facilitates project initiation and progress meetings with project stakeholders. She is also responsible for addressing daily GIS business concerns, project reports, ensuring resource allocation, assuring budget and schedule control, and working with clients to ensure contract compliance with all deliverables.

Annette works with federal, state, local and tribal government clients to understand their business activities, workflows, and needs; determine how GIS technology can help meet those needs and formulate and implement cost-effective GIS-based solutions.

Agenda Item 2. Review and approval of committee and workgroup summaries

Parcel and Land Records Committee

Date of Report: 2/24/2016

Accomplishments in last 6 months:

- The Parcel and Land Records Committee has decided to move forward with formally standardizing the original Digital Cadastral Data Committee's parcel attributes for data transfer (DCDATS). The Standards Committee is now reviewing the attributes.
- At the last GIS/LIS Conference, Dan Ross and Bart Richardson presented the status the parcel attribute standards and the creation of a statewide parcel feature class to be shared by all state government agencies. MnGeo is currently collecting data and exploring options for data processing and restricted sharing.
- The committee is working closely with the Arrowhead GIS group, following their work on standardizing a parcel fabric in the region, which includes PLS data and public land owner types.

Planned for the coming year:

- Continue to work closely with MnGeo on the development of statewide parcel data.
- Develop protocols and scripts to help counties export their parcel data into the attribute standard.
- Explore the development of a standardized parcel fabric framework to share with counties.

Meetings held and scheduled:

- 05/13/2014 new charter and work plan adapted
- 8/6/2014 review work plan
- 12/3/2014 review PRISM project
- 5/27/2015 decision to use DCDATS attributes

Charter and work plan:

The Committee has a modest work plan posted on the web http://www.mngeo.state.mn.us/committee/cadastral/index.html

Emergency Preparedness Committee

Report Date: February 24, 2016

Report Originator:

Stephen D. Swazee, Sr., Emergency Preparedness Committee (EPC) Chair, 1360 University Avenue West, Suite 455, St. Paul, MN 55104. 651-285-5015 (O), 612-239-6981 (M)

Past Meetings:

- December 10, 2015, 2-4:30 PM, Amherst H. Wilder Foundation. Featured talk: MnGeo Common Operating Picture Tiger Team Proposal, Lt. Col. Guy Konietzko (MNNG, Ret.), GeoComm.
- September 10, 2015, 2-4:30 PM, Metro Counties Government Center. Featured talk: GIS Use
 During the 2015 Minnesota Avian Flu Response, Lucinda Dahlberg, UM-VDL, Minnesota Poultry
 Testing Laboratory/MN Board of Animal Health in Willmar; Karl Hillstrom, MN.IT Services,
 Agriculture and Board of Animal Health; and Alison Slaats, MN.IT Services, Agriculture and Board
 of Animal Health.
- June 18, 2015, 2-4:30 PM, Metro Counties Government Center. Featured talk: Minnesota NG-911 Presentation/Question and Answer Session, Adam Iten, Minnesota Emergency Communication Network Next Generation 9-1-1 Project Manager.
- March 12, 2015, 2-4:30, Room 350, Learning and Environmental Sciences Building, University of Minnesota. Featured talk: Polar Geospatial Center Tour, Dr. Paul Morin and staff.

Next Meeting: March 10, 2016, 2-4:30 PM, Rice Street Library, St Paul, MN. Featured talk: Slippery Slope: Towards Better Understanding and Prediction of At-Risk Hillsides, Dr. Carrie Jennings, MN DNR.

Significant Developments:

Committee activities are conducted through Tiger Teams: (1) Steering – which oversees general
operations to include meeting development and oversight of committee functions, and (2) U.S.
National Grid (USNG) – which promotes awareness and implementation of USNG in MN. A select
group of individuals to include MN GIO Ross met on January 20, 2016, to discuss potential
standup of a third Tiger Team which would facilitate development and implementation of a
statewide Common Operating Picture (COP). Tiger Team documentation has been submitted
and is currently under review by the EPC Chair and Vice Chair (Randy Knippel, Dakota County).

Significant Issues:

- U.S. National Grid Adoption by FEMA:
 - Discussion: On October 15, 2015, FEMA issued Directive 092-5 (attached), Use of the
 United States National Grid (USNG) which requires all FEMA operations going forward to
 be conducted using USNG. Although through past EPC and related efforts Minnesota is
 better positioned than nearly all other states to efficiently and effectively align
 Emergency Services Sector (ESS) operations accordingly, it is the author's opinion that
 this development has far reaching structurally and financial implications for the state

that need to be considered in earnest. Some long-term impacted examples might include hazard and mitigation maps, disaster response funding, grant compliance, NG9-1-1, and ESS communications. Consequently, as the state's focal point for geospatial issues, the Minnesota Geospatial Advisory Council (MGAC) cannot be heads down on USNG and default to it being an EPC only issue. Instead, the implications of FEMA Directive 092-5 ultimately suggest a need to approach the state legislature for funding which would be used to support USNG education and implementation.

Recommendations:

- EPC to continue outreach and awareness training as it has in the past. Through
 Chair involvement in the Upper Midwest Geospatial Conference (UMGEOCON),
 arrangements have been made for a free National Alliance for Public Safety GIS
 sanctioned USNG workshop to occur at that event in La Crosse, WI on May 25.
 In addition, in-conference USNG presentations will be available on May 26.
- MGAC to stand up a special topic focused panel/workgroup to exam USNG related issues and report back to MGAC on potential steps forward.

Administrative Support:

- Discussion: Administrative support continues to be problematic due to all committee
 functional needs being carried out by volunteer efforts. In addition, a dearth of
 reasonably accessible, functional, effective meeting spaces with free parking has been
 especially impactful on the ability to execute on a statewide mission. In effect, the
 current logistic stream associated with maintaining the committee website, finding
 meeting spaces, sending out meeting notices, and other administrative actions has
 forced the committee into suspending some normal administrative functions and
 routinely using non-state assets.
- Recommendation: As applicable to all committees, MGAC needs to convene a panel/workgroup to consider solutions to the issues offered above.

Charter and work plan:

The Committee charter and work plan is posted on the committee web site: http://www.mngeo.state.mn.us/committee/emprep/index.html

Standards Committee

Accomplishments in last 18 months:

No proposed standards have been ready for the committee to review, so it has not met during this time.

Planned for the coming year:

- Elect a new chair at the next meeting of the Committee
- A revised cadastral data transfer standard is expected to be submitted to the Committee soon
- The committee may be asked to comment on standards being developed by the Next Generation 9-1-1 GIS Standards Workgroup.

Meetings held and scheduled:

None. Standards facilitation and communication has gone on outside of meetings.

Charter and work plan:

The Committee has a work plan posted on the web site:

www.mngeo.state.mn.us/committee/standards/index.html#workplan

Metadata Workgroup of the Standards Committee

Date of Report: 3/2/2016

The workgroup's original objectives were to:

- 1. Recommend methods for creating and editing metadata that are compatible with ArcGIS 10.
- 2. Recommend a metadata format for web services.
- 3. Recommend changes to the Minnesota Geographic Metadata Guidelines (MGMG) by evaluating new international standards.

Accomplishments in last 6 months:

- Presented "Next Generation Metadata Content for the Geospatial Commons" at the Minnesota GIS/LIS conference, October 9, 2015, in Duluth.
- Developed instructions for "Producing ArcCatalog 10 Metadata for the Minnesota Geospatial Commons". This fit with the workgroup's original Goal 1.
- Added to the Minnesota Metadata Editor FAQ.

Planned for the coming year:

Members are ready to provide any additional support or re-evaluation needed to move the "<u>Metadata Requirements for the Minnesota Geospatial Commons – Draft recommendation</u>" document forward. The recommendation was approved by the Statewide Geospatial Advisory Council at its June 24, 2015 meeting. It awaits final approval by the Geospatial Technical Committee.

Any other plans depend on determination of priorities and resources available. Options include:

- Finish creating a metadata training plan. It could include several hands-on workshops as well as online materials. This is beyond the original scope of the workgroup.
- Evaluate North Carolina's streamlined ISO metadata profile as a possible solution for updating MGMG. This would fit with the workgroup's initial Goals 2 and 3.
- Track issues with MME and evaluate the next version of the original software (EPA Metadata Editor (EME)); advocate for resources to maintain and improve this tool.
- Evaluate the ArcGIS Metadata Toolkit to see whether it could be used to customize the ArcGIS 10 Metadata Editor for MGMG.

Meetings held and scheduled:

• Work has gone on outside of meetings; no meetings are currently scheduled.

Charter and work plan:

Workgroup homepage; Charter; Original workplan (2011)

Agenda Item 3. Parcels and Land Records Committee Update

Parcel Data Attribute Transfer Standard

An accepted method for sharing and integrating parcel data in Minnesota Date Issued: _____ Introduction: This standard establishes a common set of attributes and field definitions to aid and encourage sharing and

This standard establishes a common set of attributes and field definitions to aid and encourage sharing and aggregation of parcel-based geospatial data in Minnesota.

Applicability:

Who cares about this standard?

This standard is important to all developers and users of cadastral data in Minnesota for both geospatial and tabular databases.

When do they apply? When do they not apply?

This transfer standard has been developed to improve and encourage the exchange of parcel data in Minnesota. It is understood that data producers have developed unique methods, definitions, and criteria for capture and storage of parcel data that satisfy their own requirements for data management. This standard only seeks to establish attribute specifications for data exchange purposes. It does not attempt to define internal data capture or storage specifications for data producers.

Use of this standard is *mandatory* when both of the following two conditions exist:

- a state agency is transferring parcel data to another entity, AND
- no other previously-agreed-to attribute data scheme has been designated.

Use of this data transfer standard by local government, the private sector and the public in general is strongly encouraged, but voluntary.

Purpose of this Standard:

The purpose of this standard is to provide a single, commonly accepted set of attribute specifications (field name, type, length and order) for transferring parcel data in Minnesota. It is primarily intended to be used when data are being transferred in any direction between counties, state agencies, and external customers. Its use will improve the ability to share data resources by reducing incompatibilities when acquiring, processing and disseminating parcel data.

Standard Requirements and Data Specifications:

To comply with this transfer standard, a transferred dataset must use the exact field names, types, lengths and order specified below and the COUNTY_ID and PIN fields must be populated for each record. Population of the remaining fields is optional.

These specifications are identical to the MetroGIS Regional Parcel Dataset specifications (http://www.datafinder.org/metadata/MetroGIS_Regional_Parcels_Attributes.pdf) with seven additional fields added at the end.

As an aid for those implementing this standard in an ArcGIS environment, a template file geodatabase can be downloaded from ftp://ftp.dnr.state.mn.us/pub/gisftp/barichar/parcels/

Field Name	Field Type	Field Length	Description	Comments
COUNTY_ID	text	3	Unique County ID	Three-character FIPS and State standard county code.
PIN	text	17	Unique Parcel ID	Unique statewide parcel ID comprised of the county PIN with the COUNTY_ID followed by a dash appended to the front.
BLDG_NUM	text	10	House Number	The building or house number of the parcel. Fractional house numbers should be included with this field.
PREFIX_DIR	text	2	Street Prefix Direction	Street prefix direction for the parcel. Domain = N, S, E, W, NE, NW, SE or SW (as defined in USPS Pub. 28 Appendix B http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf).
PREFIXTYPE	text	6	Street Prefix Type	Street prefix type (e.g., Hwy) for the parcel. Few data producers store this data separately.
STREETNAME	text	40	Street Name	Street name for the parcel. If the separate street data fields (direction, type, etc.) cannot be provided, they may be included as a combined data element in this field.
STREETTYPE	text	4	Street Type	Street type abbreviation for the parcel (as defined by USPS Pub. 28 Appendix C http://pe.usps.gov/text/pub28/pub28apc.html#508hdr2).
SUFFIX_DIR	text	2	Street Suffix Direction	Street suffix direction for the parcel. Domain = N, S, E, W, NE, NW, SE or SW (as defined in USPS Pub. 28 Appendix B http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf).
UNIT_INFO	text	12	Unit Information	Additional unit information for the parcel for condominiums, etc. (e.g., Unit 5B, Suite 8).
CITY	text	30	City (actual)	Name of city or township in which the parcel actually resides. This may differ from the mailing address city used by the USPS.
CITY_USPS	text	30	City (mailing)	The mailing address city for the parcel as defined by the USPS.
ZIP	text	5	ZIP Code	ZIP code for the parcel.
ZIP4	text	4	ZIP 4 Extension	The four-digit ZIP code extension for the parcel.
PLAT_NAME	text	50	Legal Description Plat Name	The legal description plat name. This is often synonymous with the subdivision name.
BLOCK	text	5	Legal Description Block	The legal description block identifier within the plat.
LOT	text	5	Legal Description Lot	The legal description lot number within the block.
ACRES_POLY	numeric	11 (2 dec)	Polygon Acreage	The calculated acreage of the polygon within the geospatial data (numeric field with two decimal places).

ACRES_DEED	numeric	11 (2 dec)	Deeded Acreage	The deeded acreage of the parcel (numeric field with two decimal places).
USE1_DESC	text	100	Use Type 1	Description of use type 1.
USE2_DESC	text	100	Use Type 2	Description of use type 2.
USE3_DESC	text	100	Use Type 3	Description of use type 3.
USE4_DESC	text	100	Use Type 4	Description of use type 4.
MULTI_USES	text	1	Multiple Uses	Flag (Y/N) to indicate if multiple uses exist.
LANDMARK	text	100	Landmark/Business Name	Name of the predominant landmark or business on this parcel.
OWNER_NAME	text	100	Owner Name	The full name of the owner. The format should be last name first where available. Inclusion of multiple owners is optional.
OWNER_MORE	text	100	Additional Owner Name	Field for additional owner information where available (e.g., joint owner or additional first name first format).
OWN_ADD_L1	text	100	Owner Address Line 1	Mailing address of the owner. Up to three lines may be used. Typically line1 is street address and line2 is city, state and ZIP, but other variations exist.
OWN_ADD_L2	text	100	Owner Address Line 2	
OWN_ADD_L3	text	100	Owner Address Line 3	
OWN_ADD_L4	text	100	Owner Address Line 34	
TAX_NAME	text	100	Taxpayer Name	The full (first and last) name of the taxpayer. The format (e.g., last name first or last name last) and inclusion of multiple taxpayers is up to each data provider.
TAX_ADD_L1	text	100	Taxpayer Address Line 1	Mailing address of the taxpayer. Up to three lines may be used. Typically line1 is street address and line2 is city, state and ZIP, but other variations exist.
TAX_ADD_L2	text	100	Taxpayer Address Line 2	
TAX_ADD_L3	text	100	Taxpayer Address Line 3	
TAX_ADD_L4	text	100	Taxpayer Address Line 4	
HOMESTEAD	text	1	Homestead Status	Homestead status (Y = yes, N = no, P = partial). Note: The inclusion of this field will allow parcel data users to assume the owner is the occupant for these parcels. Not all producers have this data as a Y/N type field.
EMV_LAND	numeric	11	Est. Market Value - Land	Land estimated market value.
EMV_BLDG	numeric	11	Est. Market Value - Buildings	Building estimated market value.
EMV_TOTAL	numeric	11	Est. Market Value - Total	Total estimated market value.

TAX_CAPAC	numeric	11	Tax Capacity	Tax capacity of the parcel.
TOTAL_TAX	numeric	11	Total Tax	Total tax of the parcel.
SPEC_ASSES	numeric	11	Special Assessments	Special assessment value due and payable in the current year.
TAX_EXEMPT	text	1	Tax Exempt Status	Tax exempt (Y/N). Note: The data producers that have this information tend to have it imbedded in other code fields. Additional processing may be necessary to convert the data to this Y/N format.
XUSE1_DESC	text	100	Exempt Use 1	Description of exempt use type 1.
XUSE2_DESC	text	100	Exempt Use 2	Description of exempt use type 2.
XUSE3_DESC	text	100	Exempt Use 3	Description of exempt use type 3.
XUSE4_DESC	text	100	Exempt Use 4	Description of exempt use type 4.
DWELL_TYPE	text	30	Dwelling Type	Type of dwelling (e.g., single family, duplex, etc.).
HOME_STYLE	text	30	Home Style	Home style description (e.g., rambler, split entry, etc.).
FIN_SQ_FT	numeric	11	Square Footage	Finished square footage.
GARAGE	text	1	Garage	Garage (Y/N).
GARAGESQFT	text	11	Garage Square Footage	Garage square footage.
BASEMENT	text	1	Basement	Basement (Y/N).
HEATING	text	30	Heating	Type of heating in use.
COOLING	text	30	Cooling	Type of cooling in use.
YEAR_BUILT	numeric	4	Year Built	Year built.
NUM_UNITS	text	6	Number of Units	Number of residential units.
SALE_DATE	date	8	Last Sales Date	Date of last sale.
SALE_VALUE	numeric	11	Last Sales Value	Value of last sale.
SCHOOL_DST	text	6	School District	Unique four-character school district number as defined by the MN Dept. of Education and listed at http://education.state.mn.us/Directories/report_c4.jsp
WSHD_DIST	text	50	Watershed District	Watershed district or watershed management organization name.
GREEN_ACRE	text	1	Green Acres	Green acres status (Y/N).
OPEN_SPACE	text	1	Open Space	Open space status (Y/N).
AG_PRESERV	text	1	Agricultural Preserve	Agricultural preserve status (Y/N).
AGPRE_ENRD	date	8	Ag. Preserve Enrolled	Agricultural preserve enrolled date.
AGPRE_EXPD	date	8	Ag. Preserve Expiration	Agricultural preserve expiration date.

PARC_CODE	numeric	2	Parcel Polygon to Parcel Point and PIN Relationship Code	This field is used to provide information about the relationship between parcel polygons, parcel points and unique tax parcel identifiers (PINs). Guidance on how to populate this field can be found in the MetroGIS specifications. See the detailed explanation of this field at the end of the MetroGIS specifications document.
SECTION	text	2	PLSS Section	Section number.
TOWNSHIP	text	3	PLSS Township	Township number.
RANGE	text	3	PLSS Range	Range number.
RANG_DIR	text	1	PLSS Range Direction	0 = west, 1 = east (Cook Co. only), 2 = indicates a west half township or west half range
LEGAL_DESC	text	256	Legal Description	Abbreviated legal description.
EDIT_DATE	date	8	Maintenance Date of Parcel	The date on which the spatial or tabular data for an individual parcel polygon was last updated or edited.
EXPORT_DATE	date	8	Export Date of the Polygon	The date the entire dataset was exported from the producer's GIS for external delivery.
ORIG_PIN	text	17	County's Parcel ID	The county's unaltered parcel ID used to reference county information and documents

Compliance:

What constitutes compliance?

In cases where a state agency's databases include parcel data, that agency must be capable of creating an export dataset consistent with this standard for the purpose of exchanging data between organizations. Agencies may continue to structure and store data using alternate data schemas as they see fit, provided the capability exists to readily output a format that complies with this standard if requested to do so by a data sharing partner. It is recommended that agencies integrate this standard into new database designs whenever possible.

How will compliance be measured?

Evidence of compliance will be determined based on reports of satisfactory data transfers from receiving customers.

References and Sources of More Information:

Further information about this standard may be obtained from MnGeo, 658 Cedar Street, Room 300, St. Paul, MN 55155; phone: 651-201-2499; e-mail: gisinfo.mngeo@state.mn.us.us

The MetroGIS Regional Parcel Dataset specifications:

http://www.datafinder.org/metadata/MetroGIS Regional Parcels Attributes.pdf

Parcel and Land Records Committee: http://www.mngeo.state.mn.us/committee/cadastral/

Agenda Item 4. Review charter and work plan of Outreach Committee

Minnesota Geospatial Advisory Council Outreach Committee Charter DRAFT 2/15/2016

Mission: Promote the value and importance of the geospatial infrastructure by actively engaging public policy makers and stakeholders.

Objectives/Visions: As a committee of the Minnesota Geospatial Advisory Council, the Outreach Committee will promote the priorities of the Council. Examples of the Committee's work include:

- Find and document compelling geospatial stories useful to government (all levels), private sector, professional associations, related professions, and citizens of the state;
- Tell those stories in venues where they can inform and influence policy makers and others seeking to improve government operations, economic development, and quality of life in Minnesota.

Duration: A permanent standing committee of the Minnesota Geospatial Advisory Council.

Report Line: Directly to the Minnesota Geospatial Advisory Council with annual review.

Membership: Members shall be drawn from the Minnesota Geospatial Advisory Council and larger geospatial community. The chair of the committee shall be a current member of the Minnesota Geospatial Advisory Council. The committee will maintain a list of members that will be reviewed and revised as needed.

Member Responsibility: Each member is responsible for active participation in the committee meetings and activities. Members not able to actively participate may be asked to resign their position on the committee. People need not be members of the committee to contribute a story.

Schedule: The committee will do most of its work via email and online meetings. Face-to-face meetings will be held as needed and could be held in conjunction with one of the advisory council meetings.

Minnesota Geospatial Advisory Council Outreach Committee Work Plan DRAFT 2/15/2016

Committee Members:

Brad Anderson
Will Craig
Scott Freburg
Kari Geurts (co-chair)
Andrew King-Scribbins
Len Kne (co-chair)
Geoff Maas
John Mackiewicz
Victoria Reinhardt
Cory Richter
Gerry Sjerven
Alison Slaats
Michelle Trager

Set priorities: This work plan will be used to guide the activities of the committee. It is a living document and will be regularly updated as tasks are completed and new priorities emerge.

Next Meeting: March 2nd at 10am in the Centennial Building Cafeteria.

Current Tasks:

- Review the draft charter and take to full Council for approval completed 2/23
- The Committee is not ready to take on the responsibility of the free and open data initiative.

As a newly formed committee, we would like to focus on defining our workflow, rather than committing to the large task of free and open data. If another committee (or workgroup) is charged with the implementation of free and open data, this committee would support that effort in marketing and promotion.

- Define list of priorities to take to the full Council. The Committee will be meeting on March 2 to discuss priorities. Some possible topics include:
 - o Funding statewide lidar data collection
 - NextGen 911
 - Statewide parcel
 - Geospatial education in K-12
 - o It is tempting to include the entire MnGeo priority list, however the Council includes stakeholders and interests beyond state agencies.
 - Update how <u>air photos</u> and <u>LiDAR</u> pages.
 - Update or replace the communication plan.
 - Update the list of relevant organizations based on priorities.
 - Update or replace the one page <u>strategic plan statement</u> based on priorities.
 - Execute the communication plan.

Committee Member Email Addresses:

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Agenda Item 8. Governor's Geospatial Commendation Award

We will form an award evaluation team for the Governor's Geospatial Commendation Award.

MnGeo seeks nominations for a Certificate of Commendation from the Governor for activities that exemplify a commitment to "coordinated, affordable, reliable and effective" use of GIS to improve services within Minnesota. The award honors organizations that have gone the extra mile to deliver products and services, improve government responsiveness, promote public access to information, and demonstrate the benefits of collaboration that encourage, by example, others to do the same.

The standards are high for this award. The awards, recommended by the Statewide Geospatial Advisory Council since 2010 and the Minnesota Governor's Council on Geographic Information from 1996 through 2009, use a peer-review process guided by well-defined criteria that reflect one or more of the following principles:

- Promote effective investments in geospatial information
- Promote geospatial information as a shared public resource
- Support the establishment and use of geospatial standards and guidelines
- Champion collaboration among geospatial practitioners and related stakeholders
- Educate and inform policymakers related to the value and use of geospatial technology
- Provide a forum for ideas and issues to be shared and acted upon by the geospatial community
- Encourage geospatial education at all levels

Awards are presented in October at the annual MN GIS/LIS Consortium conference. The next nomination deadline will be Spring 2016, date to-be-determined.

Agenda Item 12. MnGeo Priority Projects

MnGeo Priority Projects and Initiatives

March 2, 2016

While there are many worthwhile geospatial projects and endeavors, MnGeo is focusing its efforts and its limited resources on a few projects in order to make meaningful progress. All of these projects are in collaboration with other organizations and are either underway or anticipated to be initiated in the coming months. In alphabetic order, MnGeo's priority projects are:

Drainage Record Modernization

<u>Project Goal</u>: Produce a GIS database template and accompanying data standards for Minnesota's public drainage system records. The database template will be available to interested parties statewide and its use will be required for drainage authorities to receive competitive drainage records modernization cost-share, when available. In addition, the Board of Water and Soil Resources (BWSR) publication, *Drainage Records Modernization Guidelines* will be updated to reflect the creation of the GIS template and standards.

<u>Project Status</u>: An amendment to the original LCCMR work plan was approved in January, 2016 that adds additional tasks and extends the project timeline until the end of December, 2016.

The contractor, Houston Engineering, Inc., has created a draft/prototype geodatabase template and outline of the updated guidelines document. Both are currently under review by the Project Team and will be discussed at the next PAC (Project Advisory Committee) meeting on March 10th.

Anticipated Completion and Milestones:

Project Milestone	Target Completion Date
Project Start	10/1/2014
Specify template objectives & requirements	1/29/2016
Outline of template and metadata prepared by contractor	9/30/2015
Update Drainage Records Modernization Guidelines publication	6/30/2016
Disseminate information about the GIS database template and	12/30/2016
guidelines	
Project Complete	12/30/2016

Project Funding: \$230,000

<u>Project Issues, Concerns and Risks</u>: One of the additional tasks added to the amended LCCMR work plan entails training at least two drainage authorities to use the geodatabase template and to upload their data to the Geospatial Commons. Two drainage authorities willing to share their data via the Geospatial Commons may not be found.

<u>Project Contacts</u>: Greg Fetter (BWSR, Executive Sponsor), Tim Gillette (BWSR, Business Champion), Jim Krumrie (MnGeo, Project Manager), Brian Fischer (Houston Engineering Inc., Contractor), Al Kean (BWSR, State Consultant)

Geospatial Commons

<u>Operations</u>: The long-range objective of the Commons is to be the best source for the widest variety of geospatial data, services, information, ideas and news in Minnesota. Now fully operational, it allows users to find, view and download data; publish metadata and data; and find and use web services and applications. Operations are headed by MnGeo and supported by MN.IT staff who serve Agriculture, DNR, MnGeo, and MPCA.

Status:

MnGeo and the support team are moving to implement operational improvements that:

- 1. Stabilize the system's ability to respond to increased demand
- 2. Add capacity for new publishers and resources
- 3. Reduce excessive or unwanted duplication and replication to agency file servers ("GDRS nodes")
- 4. Diversify available methods for publishers to provide resources

These improvements will take place over the next year and a half, and are slated behind other projects in terms of timing and priority. During that time, the team continues to focus on governance issues and adding content from new and existing publishers.

Over 20 resources have been published since our last report, and one new publisher (MVTA). As of February 22, the count of published resources accessible through the Commons totals 520:

Organization	Resource Count
Metropolitan Council	141
Natural Resources Department	139
Geospatial Information Office	74
Dakota County	45
Agriculture Department	27
Minnesota Geological Survey	26
Pollution Control Agency	18
MetroGIS	17
Transportation Department	11
Health Department	5
Board of Water and Soil Resources (BWSR)	4
University of Minnesota, Twin Cities	4
Education Department	3
Lake County	3
Revenue Department	2
Minnesota Valley Transit Authority	1

<u>Funding</u>: Agencies currently provide funding for the operations of the MN Geospatial Commons. Currently there are no dedicated funds for enhancements to the site, although a small amount of project funding may be provided this biennium for a series of small improvements. MnGeo is providing a quarter time Operations Manager, technical and administrative support. Staff members from several State agencies (most notably: DNR, Agriculture and MPCA) have committed to assisting with operational support. Other resources are expected to be made available by MN.IT Services as needed.

<u>Issues, Concerns and Risks</u>: Several issues that will likely require future input from leadership and advisory Councils/Committees have arisen, including a precise definition of *how* those decisions are made, and *when* leadership input is required. These issues include, but are not limited to:

• Scope of allowable data formats (such as CAD data)

- Stewards for federal agency datasets (customized for MN) and datasets that do not have an "obvious" steward
- Large data set replications to multiple GDRS nodes
 - o Related: do we continue to store/serve/host "purely local" data, or do we aggregate first?

Contact: Mike Dolbow (Operations Manager)

Master Contract for Aerial Imagery

<u>Project Goal</u>: To provide a list of experienced pre-approved vendors from which State Agencies and Cooperative Purchasing Venture (CPV) member organizations can contract for medium-to-high resolution orthoimagery and planimetric mapping services in a streamlined process through individual custom work orders.

<u>Project Status</u>: Evaluations of the twelve Master Contract proposals received in response to October's RFP were completed in December. Nine vendors were ultimately selected. Master contracts were executed with each by January 15, 2016. Vendors selected include:

Aerial Services, Inc. (ASI)
 Cedar Falls, Iowa

Ayres Associates
 Madison, Wisconsin

• Continental Mapping Consultants Sun Prairie, Wisconsin

Geophex Surveys
 Raleigh, North Carolina

GRW Lexington, Kentucky

Mapping Resources Group, Inc. (MRG Zimmerman, Minnesota

Quantum Spatial Lexington, Kentucky

Sanborn Colorado Springs, Colorado

• Surdex Corporation Chesterfield, Missouri

The Metropolitan Council issued the first Work Order Solicitation associated with the Aerial Imagery Master Contract on January 20, 2016. Nine responses were evaluated and the winning vendor was selected in mid-February to acquire Metro-wide 4-band, 30-cm imagery this spring. Four Metro counties are currently negotiating to buy-up to 15-cm (6-inch) imagery in conjunction with this Work Order.

Cialek presented on the status of this Master Contract to the Southeast Minnesota GIS Users Group (SEMNUG) in Rochester on February 25, 2016.

<u>Anticipated Completion and Milestones</u>: This master contract is in force for two years, with an option to extend those contracts for three additional years. Any number of specific Work Orders are permitted during that time. <u>Project Funding</u>: No dedicated funding has been identified for this master contract. Each organization creating specific Work Orders is expected to fund its own individual projects.

<u>Project Issues, Concerns and Risks</u>: Coordinating the contract efforts, while simultaneously informing potential beneficiaries of this project, requires more resources than the project currently has available.

Project Contacts: Chris Cialek (MN.IT Services), Dan Ross (MnGeo)

Next Generation 9-1-1

<u>Project Goal</u>: NG9-1-1 implementation will depend on current and accurate GIS data. Geospatial data will be used for location validation, call routing and emergency response. With the Minnesota Department of Public Safety

serving as the lead state agency for NG9-1-1, MnGeo will identify, inventory and collaborate with the public-safety answering points (PSAPs) and 9-1-1 entities to obtain, develop and distribute core geospatial data required to support the program. To succeed, this effort will require several critical, statewide data sets:

- Street centerlines, with address ranges (described below)
- Address points (described below)
- PSAP boundary polygon(s)
- Emergency response law enforcement, fire and EMS boundary polygon(s)
- Authoritative boundary polygon(s) GIS data authority for a given area

All GIS data will need to be validated with legacy E9-1-1 data.

Project Status:

- The second issue of the NG9-1-1 GIS project newsletter was distributed in February to all project stakeholders. The newsletter is also available on the ECN website: https://dps.mn.gov/divisions/ecn/programs/911/Pages/gis-information.aspx
- MnGeo is collecting and assessing all required NG9-1-1 GIS datasets from counties in the Metro and Northeast regions for use in NG9-1-1. The Metro and NE are considered to be pilot regions for developing the necessary data assessment and preparation plans. The assessment findings are being compiled into Data Readiness Assessments for each County/PSAP, which will be shared back with each County/PSAP upon completion.
- Development is underway for the MN NG9-1-1 GIS Standards, which will serve as a guide for preparing and maintaining GIS data for NG9-1-1 in Minnesota. The Standards Workgroup has been meeting weekly since the beginning of September 2015. The Standards WG has been tasked with recommending and developing standards needed to integrate locally collected and maintained GIS data into statewide layers deemed critical for the Emergency Call Routing Function (ECRF) and Location Validation Function (LVF) of NG9-1-1. An extract of the DRAFT MN NG9-1-1 GIS Data Standards is currently being reviewed by the Metro GIS stakeholders. The extract will be distributed to all Minnesota GIS stakeholders for review and comment later in March.
- Finally, the repeatable NG9-1-1 GIS data workflow is currently being planned and designed. This workflow
 includes accepting GIS data uploads from local GIS sources and then standardizing, validating, and
 aggregating the local datasets into the statewide NG9-1-1 datasets. Other workflow tasks include
 generating and distributing condition/error reports, and provisioning the ECRF and LVF.

<u>Anticipated Completion and Milestones</u>: Although an official completion date has yet to be established, it is anticipated that geospatial data will need to be ready for NG9-1-1 deployment in 2018. Below is a list of current project tasks with estimated completion dates.

- Outreach to PSAPs and GIS Sources ongoing
- Project Scope and FY15 Work Plan completed March 2015
- Regional Kickoff Meetings completed early June 2015
- FY16 Work Plan completed late June 2015
- PSAP Request for Information and Summary Report completed late August 2015
- MN NG9-1-1 GIS Standards complete and approve by late 2016
- GIS Data Assessment and Data Readiness Profiles complete by late 2016
- Develop SIF/ELT (Spatial Information Function/Extract Load Transform) complete by late 2016

Project Funding: \$700K per year for 3 years

<u>Project Issues, Concerns and Risks</u>: Issues, concerns and risks will be identified during the first phase of the project. <u>Project Contacts</u>: Dan Ross (Executive Sponsor), Adam Iten (Project Manager), John Hoshal (GIS Project Lead)

Parcels, Street Centerline and Address Point Collection

<u>Project Goal:</u> To collect, standardize and aggregate county parcel, street centerline and address point data into statewide datasets for use by NG9-1-1 as well as for other state agency purposes. MnGeo asks for parcel, centerline and address point data in a single request to counties.

Project Status:

Parcels

The <u>parcels project</u> has been underway for several years. While significant progress has been made (e.g., survey of all 87 counties, development of a Parcel Business Plan, generation of a proposed parcel attribute data exchange standard) there is much work yet to complete. MnGeo is well underway collecting data from local partners and has collected parcels for 47 counties to date.

MnGeo continues to work with the MN Department of Revenue to determine how the Parcels Project complements Revenue's <u>PRISM (Property Record Information System of Minnesota) Project</u>; however, based on timing and the need to move forward, the Parcels and Land Records Committee has recommended proceeding with an updated version of the <u>DCDATS</u> proposed standard in the interim.

Anticipated Completion and Milestones:

Milestones	Anticipated Due
	Date
Collect all available data	June 2016
Standardize the three layers	August 2016
Aggregate the three layers into single statewide datasets	September 2016

While we do not expect to be able to obtain complete statewide coverage, we do anticipate we will be able to obtain and aggregate many counties. It is hoped that complete statewide parcel, centerline and address point data layers will be available in 2 years.

Project Funding: There are no dedicated funds for this project.

<u>Project Issues, Concerns, and Risks</u>: Project success is dependent on counties developing and sharing both spatial and attribute data. Issues include: some counties may be reluctant to share their data, data content and quality can vary between counties (and in some cases within counties), no established standard for parcel, address or centerline data in MN, and time/personnel needed to complete collection, standardization and aggregation processes. Currently MnGeo is running into many of the above issues.

Project Contact: Dan Ross (Executive Sponsor)

Street Centerlines

<u>Project Goal</u>: Create an authoritative, multi-purpose, public-domain centerline spatial dataset representing the entire state of Minnesota that can be relied upon to accurately represent (to the best extent possible) the actual roadway assets of the state. This data layer is to be collaboratively built and maintained to reduce cost, eliminate redundant efforts, facilitate better data capture, provide inter-agency reporting and address a variety of needs from roadway data consumers.

<u>Project Status</u>: The MnDOT LRS tools were recently put into production internally. MnGeo is working with MnDOT to define data workflows that provide data updates from both non-state road authorities and state agencies. The project team is currently working on implementing a database model within MnGeo that will meet the needs of NG9-1-1 that can be shared with non-state participants. The team has agreed to use the data model created from the Next Generation 9-1-1 effort for centerlines which is based on the Metro Region Centerline Collaborative work. MnGeo will be responsible for bringing data together from MnDOT, other state and non-state road authorities. <u>Anticipated Completion and Milestones</u>: The goal is to have the first draft of the standard and data model set up within the MnGeo instance of the tools by April. MnGeo is working on a data flow and repository to support moving data from non-state road authority data into the shared centerline (NG9-1-1) repository.

<u>Project Funding</u>: DPS and MnGeo are covering staff time and infrastructure to build out the repository, data model, and work flow as the data and system will be used for NG9-1-1.

<u>Project Issues, Concerns and Risks</u>: The project is heavily dependent on requirements, tools and standards being provided for the NG9-1-1 project. The project scope needs to be well defined. Concrete goals and objectives are developed; more specific dates must be determined.

Project Contacts: Dan Ross (Executive Sponsor), Adam Iten (Project Manager), John Hoshal (GIS Project Lead)

Address Point Collection – Developed and completed as part of the Next Generation 9-1-1 effort.

<u>Project Goal</u>: Create an authoritative, multi-purpose, public-domain address point dataset representing the entire state of Minnesota that can be relied upon to accurately represent (to the best extent possible) the actual location of addresses in Minnesota. This data layer is to be collaboratively built and maintained to reduce cost, eliminate redundant efforts, facilitate better data capture, provide inter-agency reporting and address a variety of needs from address data consumers.

<u>Project Status</u>: MnGeo is working with PSAP (Public Safety Answering Points) and local authorities to define data standards that will be used to build out a standard statewide data set.

<u>Anticipated Completion and Milestones</u>: The goal is to have the first draft of the standard and data model available for review by stakeholders by April. MnGeo is working on a data flow and repository to support moving data from partners into the NG9-1-1 repository.

<u>Project Funding</u>: DPS and MnGeo are covering staff time and infrastructure to build out the repository, data model, and work flow as the data and system will be used for NG9-1-1.

<u>Project Issues, Concerns and Risks</u>: The project is heavily dependent on requirements, tools and standards being provided for the NG9-1-1 project. The project scope needs to be well defined. Concrete goals and objectives are developed; more specific dates must be determined.

Project Contacts: Dan Ross (Executive Sponsor), Adam Iten (Project Manager), John Hoshal (GIS Project Lead)