MetroGIS 2018 Work Plan

Approved by the MetroGIS Coordinating Committee on March 1, 2018

MetroGIS
390 Robert Street North
St Paul, Minnesota 55101
www.metrogis.org

MetroGIS 2018 Work Plan

Table of Contents

Contact

Questions about this document may be directed to: *Geoff Maas, GISP*
MetroGIS Coordinator
390 Robert Street North
St Paul, Minnesota, 55101
geoffrey.maas@metc.state.mn.us
651.602.1638

What is MetroGIS?

MetroGIS is voluntary collaborative of government, private sector, non-profit and academic interests working to serve the on-going need for geospatial information in the Twin Cities metropolitan region. MetroGIS was formed in 1996 in response to the articulated need for maximizing the benefits of sharing geospatial data in the region.

The goal of MetroGIS is *to expand stakeholders' capacity to address shared geographic information technology needs through a collaboration of organizations that serve the Twin Cities metropolitan area.*

Relying entirely upon voluntary participation, MetroGIS realizes this mission by:
- *Identifying and defining shared geospatial information needs;*
- *Implementing collaborative regional solutions to address shared needs;*
- *Fostering widespread access and sharing of geospatial data;*
- *Fostering recognition of the value of GIS as a core business tool;*
- *Facilitating knowledge sharing relevant to the advancement of GIS technology;*

MetroGIS' Mission Statement

"To provide an ongoing, stakeholder-governed, metro-wide mechanism through which participants easily and equitably share geographically referenced data that are accurate, current, secure, of common benefit and readily usable."

- adopted February 1996

Sponsorship Statement

The work of MetroGIS is made possible and strengthened by the range of resources offered by its entire stakeholder community. Since MetroGIS' inception in 1996, the Metropolitan Council has provided the financial resources and administrative oversight to the collaborative, while other agencies, organizations and governments provide data, research, expertise, guidance, in-kind contributions and governance.

This blend of diverse resources is vital to the continuance of the MetroGIS collaborative to represent and serve the broad geospatial stakeholder community of the Twin Cities metropolitan region.

"MetroGIS", "MetroGIS DataFinder" and "Sharing Information Across Boundaries" and the MetroGIS logo and seal are registered service marks of the Metropolitan Council.

Introduction

The purpose of the MetroGIS Work Plan document is to provide a concise summary of the projects and activities to be undertaken in calendar year 2018 by the participants of the collaborative. The Work Plan is intended to be a living document and maybe subject to revisions and changes as recommended and approved by the MetroGIS Coordinating Committee.

Revision Procedure

The MetroGIS Coordinating Committee will formally revisit and edit the Work Plan once per year *(generally at the Fall Committee meeting)* to chart the progress of existing projects and include new projects which rise in priority and interest. The Annual Work Plan is then formally adopted by vote of the Coordinating Committee at is following meeting. The Work Plan is used as the primary instrument to direct activities and to program the annual MetroGIS budget.

Mid-Year Adjustments

Revisions and modifications to this Work Plan can be suggested by any member of the Coordinating Committee and be approved by vote at any quarterly meeting. For a new project recommendation, a Coordinating Committee member may propose the project at a quarterly meeting. Committee members are encouraged to indicate the following regarding their proposed project:

- A project <u>owner</u>: *A person who would serve in a leadership role for the project, to act as its spokesperson and steward;*
- A project <u>champion</u>: *A person at senior management or policy-maker level who can advocate for the benefits of the project and its outcomes;*
- A project <u>work team</u>: *A group of individuals committed to the work tasks, review, course correction and implementation of the project;*
- A business case summary or similar document outlining the need(s) for the project and an indication of the anticipated <u>benefit</u> of the proposed project;
- A recommendation as to <u>budget requirements</u> and possible <u>funding source(s)</u>;

Upon receiving project proposals, the Coordinating Committee may then decide to:

- Accept the project to be worked on in the current year and prioritize it relative to the other projects schedule for this year;
- Table, or 'put on hold' the proposal and request additional information be gathered or research to support the project be conducted.
- Direct the Committee members, other staff or duly appointed party to conduct further research on behalf of the project and bring their findings to the Committee.
- Create a work group to begin work, research or other activities;
- Postpone the project until the next annual planning cycle;

Publication and Availability of the Work Plan

Revision and re-publication of the Work Plan document is the responsibility of the MetroGIS Coordinator or a duly appointed designee by the Coordinating Committee.

A copy of the most current approved MetroGIS Work Plan will be made available to any member of the stakeholder community and public via **metrogis.org** or upon request submitted to the MetroGIS Coordinator.

MetroGIS Coordinating Committee Membership (March 2018)

Matt Baker, Metropolitan Airports Commission
Andra Bontrager, Minnesota Center for Environmental Advocacy
David Brandt, Washington County, *Coordinating Committee Vice-Chair*
Hal Busch, City of Bloomington
Curtis Carlson, Independent Contractor
Marcia Broman, Metropolitan Emergency Services Board
Erik Dahl, Minnesota Environmental Quality Board, *Coordinating Committee Chair*
James Fritz, Xcel Energy
Eric Menze, Resource Data, Inc.
Brad Henry, University of Minnesota
Chad Riley, Carver County
Len Kne, University of Minnesota
Randy Knippel, Dakota County
Mark Kotz, Metropolitan Council
Matt Koukol, Ramsey County
Carrie Magnuson, Metro Chapter, Minnesota Association of Watershed Districts
Jared Haas, City of Shoreview
Jeff Matson, Center for Regional and Urban Affairs – University of Minnesota
Tony Monsour, Scott County
Nancy Read, Metropolitan Mosquito Control District
Dan Ross, Minnesota Geospatial Information Office
John Slusarczyk, Anoka County
Dan Tinklenberg, SRF Consulting Group
Gary Swenson, Hennepin County
Ben Verbick, Local Government Information Systems (LOGIS)
Hal Watson, Minnesota Department of Natural Resources
Norine Wilczek, Minnesota Department of Transportation

MetroGIS Staff:

Geoff Maas, MetroGIS Coordinator

Summary of Major Accomplishments in 2017

The last Work Plan cycle for the MetroGIS collaborative was from November 2016 through November 2017. The following summaries describe the progress of the various project work initiatives in progress.

Free + Open Public Geospatial Data Initiative

As of February 6, 2018, twenty-eight (28) of Minnesota's eighty-seven (87) counties are making their public geospatial data freely and openly available.

All Seven Metropolitan Counties adopted free and open public geospatial data resolutions between February 2014 and October 2015. The research, deliberation, and action on free and open data in the metropolitan region has led to significant attention and action in Greater Minnesota, with counties around the state opening their data, standing up data portals, contributing their data to the Minnesota Geospatial Commons or at very least, beginning to examine the merits of moving toward a free and open data position. MetroGIS staff and participants have remained active in presenting to regional user groups around the state on the topic of free and open data during calendar year 2017.

MetroGIS Regional Parcel Dataset and the New Memorandum of Agreement.

On December 31, 2016, the long-standing Parcel Data Sharing Agreement between the Seven Metropolitan Counties and the Metropolitan Council sunset. This agreement has been replaced by a new Memorandum of Agreement and contract. Under this new MOA and accompanying contract, the Metropolitan Council will continue to remunerate each participating metropolitan county at the rate of $4000/year to configure its various shared datasets (roads, address points and parcels) into approved regional and state standards. The new MOA and contract went into effect on January 1, 2017 with an expiry data of December 31, 2018. The MOA and contract contains provisions for two (2) one-year extensions which would take the contract period out to December 31, 2020.

NCompass Centerline Dataset

In late 2017, MetroGIS facilitated the renewal of the contract between the Metropolitan Council and private data vendor NCompass for road centerline data. MetroGIS continues to facilitate and oversee this agreement, and has extended its present contract with NCompass through December 31, 2019. This agreement provides access to the NCompass Street Centerline and Landmarks data, at no fee, to all State and Local Government agencies as well as all colleges and universities in Minnesota. The Metropolitan Council has funded the licensing of these data for use and manages the licenses for use of qualified users. As of December 31, 2017, there remain over 70 registered users of the NCompass Centerline Dataset.

On-Going Support for the Minnesota Geospatial Commons

In Fall 2017, the MetroGIS Coordinating Committee agreed (by electronic vote) to commit $4,071 its 2017 budget to the Commons project for maintenance and back-end development support.

Metro Regional Centerline Collaborative (MRCC)

In May 2014, partners in the metropolitan region including the Seven Metropolitan Counties, the Metropolitan Emergency Services Board and the Metropolitan Council kicked off a regionally focused initiative to define core road data needs and work toward meeting them by developing an authoritatively-sourced, publicly available road centerline data solution. Through 2016 and into early 2017, the MRCC effort has revised its data schema to an agreed upon Version 1.7. The MRCC Version 1.7 will remain the definitive version of the schema and dataset for the foreseeable future. Key accomplishments related to the advance of the MRCC in 2017 include:

- Publishing of the first publicly-available version to the Minnesota Geospatial Commons of the aggregated and standardized MRCC dataset on April 21, 2017. This first version had 80-90% of its attribution completed and was made available in MRCC Version 1.6;

- MRCC Build Team and Core Team approval of Version 1.7 of the schema which aligns the MRCC schema to the Address Point Data Standard attribution and accommodates attribution to serve the specific business needs of NextGen9-1-1;

- Development of validation and aggregation scripts and processes for the assembly, error-checking and publication of the standardized road data set;

- Research and materials developed for the forthcoming Best Practices and Resource Guide;

In February 2018, the MRCC partners published a set of the data in Version 1.7 to the Commons for public use. The MRCC team seeks to continue to clean up the data, refine the aggregation and validation processes and work toward more streamlined automated work processes to deliver and publish the data.

Address Points Aggregation

At present, staff at the Seven Metropolitan Counties aggregate data from their constituent municipalities which is collected twice per year (April and October) by MetCouncil GIS Staff and published this data on the Geospatial Commons. The Metropolitan Council intends to leverage the work done on validation and aggregation for the MRCC centerlines project toward a similar solution for address points. This will work toward being more automated as the participating counties of the metro make use of the GAC-approved Address Point Data Standard.

Address Point Editor Tool v. 4.0

A prior version (v. 3.0) of the Address Editor Tool was completed and made available in March 2015 containing expanded tools and functionality from prior versions. After extensive use of this version, additional functionality and features were sought by the city and county data creators. The Metro Address Work Group has undertaken the task of documenting those needs to be satisfied in a new version of the tool. This version will feature added functionality to meet the

documented needs of the metro partners, with members of the Metro Address Work Group will lead project team on the initiative. In late 2017, the Metropolitan Council has executed a contract for $15,200 with North Point Geographic Solutions of Duluth, Minnesota for the development of Version 4.0 of the Address Point Editor Tool. Dakota County staff will be working in partnership to develop additional functionality for the tool. The tool is anticipated to be complete in Spring 2018.

Metro Regional Stormwater Data Project (Research)

In calendar 2017, MetroGIS in partnership with the Hennepin County GIS Office has made plans to hold a stakeholder engagement event on March 6, 2018 – the Metro Stormwater Geodata Summit—for self-identifying participants to convene and share their various business needs for standardized stormwater data. As of November 2017, twenty-three (23) stakeholder agencies have been interviewed and their general business cases documented. A list of additional agencies have been identified that need to be interviewed. This work builds upon the initial work started by MetroGIS in 2008 through 2010 and additional research conducted from 2012 through 2015. Significant technical, policy and business case documentation remains to be done in the development and maturation of this project.

Geodata Standards Development

MetroGIS staff and members of its constituent participating agencies have been deeply involved in the refinement, review, advancement and approval of statewide geospatial data standards.

> ***Address Point Data Standard.*** On December 6, 2017, the Geospatial Advisory Council approved the statewide Address Point Data Standard at its regular quarterly meeting. This approval is the culmination of a substantial, multi-year effort that found its origin in the work of the Metro Address Work Group in 2004 to create a standard for address points. Effort from 2015 to the present were bolstered by the business need for address point data to support NextGen9-1-1 use cases.

> ***Parcel Data Transfer Standard.*** Throughout 2017, outreach to, and input from, stakeholders statewide had taken place. A final round of public review occurred between Jan 8, 2018 and Feb 9, 2018 with the Standards Committee to review this final round of input on February 26, 2018 and decide upon what is needed next. The candidate statewide Parcel Data Transfer Standard is largely based on the original Metro parcel standard originally started in 1999 and adopted by metro partners for use in 2002.

> ***Road Centerline Standard.*** The NextGen9-1-1 Standards Work Group is preparing to submit a candidate road centerline standard to the GAC Standards Committee. This proposed standard carries at its core approximately 96% of the same attributes of the MRCC data standard that was developed by the metro in 2014-2017.

MetroGIS Sustaining Activities

Advocacy and Outreach

MetroGIS provides a platform for advocacy for geospatial needs and initiatives and conducts outreach on the benefits of geospatial technology to government.

MetroGIS Outreach Efforts in 2017

To demonstrate the value and benefits its efforts in interagency collaborative work, development of specifications and sharing of geospatial data in the metro, MetroGIS collaborative participants frequently speak, present and participate in events and to report on the progress and results of our work. The following presentations were conducted in 2017 by various members of the MetroGIS collaborative community:

Ramsey County GIS Users Group – MetroGIS, Standards Development and Stormwater Update
January 5, 2017, Shoreview (Magnuson, Maas)

Metropolitan Council – Community Development Department – MetroGIS Update
January 26, 2017, St Paul (Maas)

LOGIS – MetroGIS Update and Overview of Geospatial Organizations in Minnesota
February 8, 2017, Golden Valley (Verbick, Maas)

Metro Cities Executive Team – MetroGIS Program Overview and Update
February 16, 2017, St. Paul (Maas)

Arrowhead Regional GIS Group – Parcel Data Transfer Standard Development
March 14, 2017, Duluth (Maas)

University of Minnesota – GIS Student Organization Career Day
March 21, 2017, Minneapolis (Maas)

Pine-To-Prairie GIS Group/West Central Initiative – Parcel Data Transfer Standard Development
April 5, 2017, Fergus Falls (Maas)

MRCC Data Development and Project Alignment Meeting with Chisago County
April 11, 2017, Center City, Chisago County (Broman/Maas)

Pine-To-Prairie GIS Group/West Central Initiative – Parcel Data Transfer Standard Development
April 5, 2017, Fergus Falls (Maas/Dolbow)

Metro MAWD – MetroGIS and Stormwater Geodata Project Status Update
April 18, 2017, St. Paul (Maas)

Goodhue County GIS Office and Survey Staff – Free + Open Data Overview
May 24, 2017, Red Wing (Maas)

Hennepin County GIS Users Group – MetroGIS Update and Stormwater Project Overview
May 25, 2017, Minnetonka (Maas)

Southeast Minnesota GIS Users Group Meeting – Parcel Data Transfer Standard Overview
June 20, 2017, Red Wing (Maas)

South Central Minnesota GIS Users Group Meeting – Parcel Data Transfer Standard Overview
June 22, 2017, Mankato (Maas)

Taking the Pain Out of Data Standards – MN GIS/LIS Consortium Conference
October 4, 2017, Bemidji (Maas)

The Geospatial Advisory Council and Why It's Fabulous – MN GIS/LIS Consortium Conference,
October 5, 2017, Bemidji (Kne, Knippel, Kotz, Maas)

Arrowhead Regional Development Commission – Parcel Data Transfer Standard Update
December 11, 2017, Duluth (Maas)

Maintenance Actions

MetroGIS assumes a core maintenance role for a variety of activities serving the geospatial community of the metropolitan region.

(1) Regional Parcel Dataset

MetroGIS provides on-going support and maintenance for the Metro Regional Parcel Dataset. Maintenance and publication of the Metro Regional Parcel Dataset, this includes:

- This maintenance of the Memorandum of Agreement and its supporting contract between the Seven Metropolitan Counties and the Metropolitan Council;
- The quarterly collection of the parcel data produced by the Seven Metropolitan Counties;
- Documentation and response to feedback and input from the data user community;
- Maintenance and publishing of archival parcel data back to 2002;

(2) Regional Address Point Dataset

MetroGIS provides a bi-annual collection, aggregation, and publication to the Geospatial Commons of the Regional Address Point Dataset. As production of this data becomes more automated, the Seven Metropolitan Counties and Metropolitan Council endeavor to provide more frequently updated data.

(3) The 'metrogis.org' website

MetroGIS maintains the 'metrogis.org' website as a resource for a variety of audiences including MetroGIS stakeholders, governance participants, and researchers looking for data, standards and related information.

(4) MetroGIS Governance

MetroGIS maintains two permanent governance bodies, the Policy Board (comprised of elected officials, appointed officials, CIOs and administrative-level decision makers) and the Coordinating Committee (comprised of lead technical and management-level professionals). The MetroGIS Coordinating Committee also has the option to create and activate task-specific work groups as it sees fit.

(5) Hosting of educational/data sharing forums

MetroGIS maintains a role in participating in, promoting, hosting and facilitating educational, data sharing and related forums for the geospatial community of the Twin Cities metro region and Greater Minnesota.

(6) Participation in statewide geospatial initiatives

MetroGIS endeavors to work collaboratively with all levels of government. The MetroGIS Annual Work Plan is to be aligned as closely as feasible to other complementary initiatives at the state level to reduce duplication of effort and leverage collaborative opportunities.

(7) Data sharing advocacy and collaboration resources

MetroGIS serves as a resource to the academic community as well as other governments in the operational procedure, funding, management and governance on the topic of inter-agency geospatial data sharing and inter-jurisdictional projects. MetroGIS takes an active interest in the legal and legislative aspects of data development, data sharing and public data availability and supports efforts which facilitate these activities.

MetroGIS Projects for 2018

The following pages provide a one-page synopsis of each anticipated MetroGIS 2018 project; a short summary of the inactive projects is also provided.

Project Prioritization Brief

As a volunteer collaborative with limited fiscal and human resources, MetroGIS needs to be judicious when selecting the projects and initiatives it will proceed with.

The table of projects on the following pages is drawn from:
- The prior MetroGIS Work Plan cycle;
- The results of the membership survey (Conducted during September 2017)
- The suggested project proposals from members of the Coordinating Committee;

This list is inclusive of initiatives already underway. Projects were prioritized by the Coordinating Committee on September 21, 2017 and priority ranking is based on several factors including:

- Clearly identified and itemized stakeholder business needs;
- The presence of key project owners, manager and work team members;
- The likelihood of success, and;
- The availability of funding (if needed).

A more detailed description of the prioritization methodology used by the Coordinating Committee is available in Appendix B of this document.

Project priorities identified for the 2018 Work Plan work cycle are as follows:

Project	Work on in 2018	Committee Ranking	Priority Score
Address Points Aggregation	Yes	1	484
Metro Regional Centerlines (MRCC)	Yes	2	400
Metro Park & Trail Dataset/Data Standard	Yes	3	400
Address Point Editor Tool (v. 4.0)	Yes	4	377
Addressing Resource Guide	Yes	5	290
Statewide Centerlines Initiative	Yes	6	270
Regional Stormwater Data Project	Yes	7	168
Free + Open Public Geospatial Data*	Maintenance	M	516*
Support of the Geospatial Commons*	Maintenance	M	418*
MetroPlus Free Geocoder	No	Inactive	108
Increased Frequency of Parcel Updates	No	Inactive	66
Creation of Regional Basemap Services	No	Inactive	42

*Both the **Free + Open Public Geospatial Data** initiative and **Support for the Geospatial Commons** efforts were deemed as priorities, however, neither of these activities require significant direct staff time or effort on the part of MetroGIS participants. Despite scoring as the #1 and #2 priorities they have been reclassified as 'Maintenance' activities to be worked on as needed.

Detailed descriptions of projects and role of those involved are outlined in the following pages.

Priority #1 - Address Points Aggregation

Project Brief	The development and maintenance of a workflow process and technical solutions for the creation, validation, aggregation, and publishing of standardized address points.
Critical Stakeholders	All stakeholders needing authoritative address points Addressing Authorities (primarily cities) Data aggregators (County Governments, Metropolitan Council, MnGeo)
Priority Level	1st – Highest Priority
Budget	Staff time and In-kind services of participating agencies; $15,200 of MetroGIS funding in 2018 for upgrading the Editor Tool from Version 3.0 to Version 4.0 (See Priority #4);
Benefit to Stakeholders	Stakeholders will have access to more accurate data for geocoding services. PSAPs will have more accurate and current data with which to dispatch and route emergency vehicles. Cities will be able to track individual units for planning and other purposes and will be able to create mailing labels to individual units/residences, not just to parcels. Metropolitan Council will have better growth monitoring data.
Project Owner	Mark Kotz, Metropolitan Council
Project Champion	(No policy level champion has been identified)
Project Team	MetroGIS Address Work Group members; County GIS Staff serving as data aggregators within their county; Metropolitan Council staff developing aggregation and validation scripting tools and workflows to move toward automation; NextGen911 stakeholder interests;
Expected Timeline	Continued work through 2018 and beyond as needed;
Key Steps & Milestones	>> Aggregated address point data has been collected and published for at least five (5) of the metropolitan counties since 2016. >> Geospatial Advisory Council has approved a statewide Address Point Data Standard on December 6, 2017; >> Successes with other parallel efforts such as the MRCC project can be leveraged to develop aggregation, validation and publishing workflows for the Address Points Aggregation work.
Policy Implications	County GIS Offices developing and maintaining good relationships and to execute contracts (as needed) with their constituent cities to ensure the continuous flow of authoritatively created address point data; Ensuring the aggregated data meets the needs of NextGen9-1-1 use cases;
Notes:	Project is expected to continue through 2018 and beyond;

Priority #2 – Metro Regional Centerlines Collaborative

Project Brief	Development of a road data standard and dataset to meet documented business needs and the development of workflows for the validation, aggregation and publication of standardized road centerline data;
Critical Stakeholders	Stakeholders at all levels of government, non-profit sector, private sector and academic interests needing authoritative road centerline data in the Twin Cities metro region;
Priority Level	2nd
Budget	Staff time & "in kind" services of participating agencies
Benefit to Stakeholders	Stakeholders will have access to up-to-date authoritative road centerline data that meets a core set of shared identified business needs.
Project Owner(s)	MRCC Core Team (County GIS Managers)
Project Champion	*(No individual project champion has been identified)*
Project Team	MRCC Build Team (County GIS Staff) Hennepin County GIS Office providing project management Metropolitan Council providing aggregation, validation and publishing services; MetroGIS Staff is providing research/resources as needed; MESB providing NextGen9-1-1 compliance review;
Expected Timeline	Begun in May 2014 Version 1.6 of data published to the public in April 2017 Version 1.7 of MRCC Standards approved in Sept 2017 On-going into 2018 toward maintenance and automation
Key Steps & Milestones	Public release of first dataset on April 21, 2017, data to be updated to Version 1.7 during Q2 of 2018 with updates published daily; Anticipated moving toward a nightly-automated data update;

Priority #3 – Metro Park & Trail Dataset/Data Standard

Project Brief	The development of a regional data standard for park, trail and recreational lands and an on-going sustainable maintenance model for the generation, validation, aggregation and publication of standardized data. in the data standard. This data and data standard is intended to satisfy a wide group of core stakeholder needs.
Critical Stakeholders	All stakeholders needing standardized park, trail and recreational land geospatial data for their business needs in the Twin Cities metro.
Priority Level	**3rd**
Budget	Staff time & "in kind" services of participating agencies
Benefit to Stakeholders	The availability of standardized park, trail and recreational land geospatial data across the metro region for their business needs.
Project Owner(s)	Metro County Managers/Coordinators
Project Champion(s)	(No project champion has been identified)
Project Team	Metro Park and Trail Core and Build Team technical staff from all Seven Metropolitan Counties, Hennepin County providing lead technical and project management; Metropolitan Council to provide validation/aggregation MetroGIS to provide support as needed, research and facilitation as needed;
Expected Timeline	On-going through 2018
Key Steps Milestones	Version 1.1 of the data standard has been approved in 2017, a first cut of the dataset is anticipated to be published in 2018.
Policy Implications	County GIS offices working with their constituent city agencies for integration and federation of park, trail and recreational land data
Notes	This project will be on-going through 2018

Priority #4 – Address Point Editor Tool (Version 4.0)

Project Brief	The upgrade of the existing Address Point Editor from Version 3.0 to 4.0 to satisfy the functionality requirements and upgrades identified by the user community.
Critical Stakeholders	All stakeholders needing authoritative address points Addressing Authorities (primarily cities) Data aggregators (County Governments, Metropolitan Council, MnGeo)
Priority Level	**4th**
Budget	Contract signed with vendor for work on tool upgrade during 2018 $15,200 of MetroGIS funding in 2018 committed to the project. Version Other resources included staff time and In-kind services of participating agencies for testing of tool;
Benefit to Stakeholders	Data creators will have available a tool that enables them to quickly and efficiently create address points directly into the GAC-adopted Address Point Data Standard. Stakeholders will have access to more accurate data for geocoding services. PSAPs will have more accurate and current data with which to dispatch and route emergency vehicles. Cities will be able to track individual units for planning and other purposes and will be able to create mailing labels to individual units/residences, not just to parcels. Myriad uses for Census, permit tracking, delivery, etc.
Project Owners	Joe Sapletal, Dakota County Mark Kotz, Metropolitan Council Tanya Meyer, Metropolitan Council
Project Champion	*(No policy level champion has been identified)*
Project Team	Metro Address Work Group County GIS Staff serving as data aggregators within their county Participating interests from NextGen911 stakeholder interests
Expected Timeline	Work on Editor Tool Version 4.0 to take place in 2018
Key Steps & Milestones	Prior versions of the tool enabled users to identify additional needed functionality for Version 4.0;
Policy Implications	Encouraging address authorities in the metro region (mostly cities) to use the tool; Ensuring the aggregated data meets the needs of NextGen9-1-1 use cases;
Notes:	On-going through 2018 and beyond

Priority #5 – Addressing Resource Guide

Project Brief	The research, compilation, editing and publication of an Addressing Resource Guide. This guide is intended to help geospatial and non-geospatial professionals in Minnesota understand the origins, technical details and importance of correct address creation and maintenance.
Critical Stakeholders	All stakeholders creating or using address data Addressing Authorities (primarily cities), including non-geospatial professionals Data aggregators (County Governments, Metropolitan Council, MnGeo)
Priority Level	**5th**
Budget	No funds needed; in-kind services of MetroGIS staff and other staff as needed for review and editorial advice.
Benefit to Stakeholders	A concise, clear and easy-to-use resource for stakeholders to refer to for common techniques and terminology.
Project Owners	Geoff Maas, MetroGIS Coordinator
Project Champion	Melissa Reader, CIO, League of Minnesota Cities
Project Team	Geoff Maas, lead researcher and editor MetroGIS Address Work Group and participating interests from NextGen911 stakeholder interests to serve as content review and editorial contributors.
Expected Timeline	First draft is planned for Summer 2018
Key Steps & Milestones	Research begun in late 2017, compilation and preparation of first draft to continue through spring 2018.
Policy Implications	It is hoped this resource can be leveraged by addressing authorities (cities) to put into place best practices for the creation and maintenance of addresses.
Notes:	On-going through 2018 and potentially beyond

Priority #6 – Statewide Centerlines Initiative

Project Brief	Development of a statewide centerline data set to meet multiple agency core needs;
Critical Stakeholders	All stakeholders creating, needing or using road centerline data
Priority Level	**6th**
Budget	No funds are allotted from MetroGIS to this initiative at this time;
Benefit to Stakeholders	Access to authoritatively-sourced, standardized road centerline data
Project Owners	NextGen9-1-1 Standards Work Group
Project Champion	Dan Ross, GIO, MnGeo
Project Team	NextGen9-1-1 Standards Workgroup
Expected Timeline	The NextGen9-1-1 Standards Workgroup is anticipated to deliver a candidate statewide centerline standard proposal in mid-February 2018 to the GAC Standards Committee;
Key Steps & Milestones	Submittal of a candidate Statewide Centerline Standard to the Standards Committee by the NextGen9-1-1 Standards Workgroup is anticipated in February 2018.
Policy Implications	Integration of existing work flows of centerline data among and between partners may require more formal agreements or legal instruments to clearly define their parameters
Notes:	On-going through 2018 and beyond

Priority #7 – Regional Stormwater Data Project

Project Brief	Determination if there is suitable interest among partners at all levels of government and among private sector, academic and non-profit sectors to work toward the creation of a metro regional stormwater data standard and dataset.
Critical Stakeholders	All stakeholders who create or consume stormwater system data in the Twin Cities metro region
Priority Level	**7th**
Budget	No funds are allotted from MetroGIS to this initiative at this time; In-kind contributions of staff time from participating agencies are anticipated to be the primary resource for the early stages of this project;
Benefit to Stakeholders	A clear understanding of the challenges to the acquisition, access, standardization and availability to authoritatively-sourced, standardized stormwater system geospatial data
Project Owners	Carrie Magnuson, Ramsey-Washington Metro Watershed District Alex Blenkush, Hennepin County GIS Office Geoff Maas, MetroGIS Coordinator
Project Champion	Hennepin County Commissioner Debbie Goettel
Project Team	A call for the creation of a Stormwater Steering Team will take place on March 6, 2018. A six to ten-member Steering Team is sought to convene during 2018 to fully scope and develop the project.
Expected Timeline	Stormwater Data Summit in March 2018 Formation of Steering Team during Spring 2018 is anticipated
Key Steps & Milestones	A Metro Stormwater Geodata Summit is planned for March 6, 2018. Key tasks and next steps for the initiative will be discovered and documented during this process.
Policy Implications	Examination of existing range of policies regarding availability of stormwater data among current data producers.
Notes:	On-going through 2018 and beyond

In Maintenance: Support for the Minnesota Geospatial Commons

Project Brief	The MN Geospatial Commons is a single location on the web where members of the geospatial profession can find and share geospatial resources to make us a stronger, more productive and more effective geospatial community and to increase that capacity of each participant. The State will own this project and MetroGIS will be a supporting participant.
Critical Stakeholders	Geospatial data producers and consumers in the State of Minnesota
Priority Level	Maintenance Activity
Budget/Fiscal Needs	Staff time commitments and in-kind contributions of stakeholders MetroGIS contributed $4,071 of its budget in 2017 to the Commons.
Benefit to Stakeholders	Having a single, trusted source for publicly available geospatial resources in Minnesota, and having a data sharing portal solution for those organizations that do not maintain their own portal
Project Owner(s)	Minnesota Geospatial Commons work team comprised of staff from MnGeo, MnDNR, MPCA and Metropolitan Council and other partners
Project Champion(s)	Dan Ross, State Geographic Information Systems Officer Tom Baden, MN CIO (until February 2018)
Project Team	Minnesota Geospatial Commons work team comprised of staff from MnGeo, MnDNR, MPCA and Metropolitan Council and other partners
Expected Timeline	First public version was made available in July 2014 Formally launched in July 2015; All former 'datafinder.org' resources folded into the Geospatial Commons by in December 2015;
Key Steps Milestones	As of February 6, 2018, there are 29 organizations contributing their data to the Commons ; As of February 6, 2018, there are 726 resources available from the Minnesota Geospatial Commons;
Policy Implications	Possible policy implications for finding and sustaining a long-term funding mechanism to ensure the Commons remains in place;

In Maintenance: Free & Open Public Geospatial Data Initiative

Project Brief	Continued assistance, research and support to metro and state stakeholder agencies and jurisdictions at all levels on the benefits of making their public geospatial data freely and openly available.
Critical Stakeholders	Entire MetroGIS stakeholder community (all data users); All Authoritative Data Producers presently charging fees or requiring licenses for use of and access to their geospatial data;
Priority Level	Maintenance Activity
Budget	Funding not needed; the research and outreach is conducted in the course of the duties of the staff involved.
Benefit to Stakeholders	Authoritative public geospatial data available for download and unrestricted usage without cost or a license agreement;
Project Owner(s)	Len Kne, Co-Chair, MNGAC Outreach Committee Kari Guerts, Co-Chair MNGAC Outreach Committee Geoff Maas, MetroGIS Coordinator, Data Policy Researcher Randy Knippel, Dakota County GIS Manager/Work Group Chair
Project Champion(s)	Victoria Reinhardt, Ramsey County Commissioner Debbie Goettel, Hennepin County Commissioner
Project Team(s)	MNGAC Outreach Committee MetroGIS Data Producers Work Group
Expected Timeline	On-going into 2018
Milestones	As of December 2017, twenty-eight (28) counties in Minnesota are making their public geospatial data freely and publicly available without fee or licensure.
Policy Implications	The project precipitates a significant change in existing county data access policy in Minnesota changing from fees and licensure to free and open data;
Notes	All seven metropolitan counties adopted free and open data resolutions in 2014-2015. Work through 2018 will entail continuing to partner with city-level governments as well as interested agencies and jurisdictions in Greater Minnesota on issues of data policy as well as legal and technical aspects as well as demonstrating the on-going value to governments of free and open data.

Inactive Project List

The following projects did not meet the requisite criteria for inclusion in active Work Plan projects during calendar 2018.

These projects can be revisited in Fall 2018 for potential inclusion in 2019 Work Plan or removed from consideration at the recommendation of the Coordinating Committee.

Remaining Projects	Brief Description
MetroPlus Free Geocoder	*Not identified by the Coordinating Committee as a priority in the 2018 Work Plan cycle; at present, there is no work team, owner, champion or fully articulated business need;*
Increase frequency of Parcel Data Updates	*Not identified by the Coordinating Committee as a priority in the 2018 Work Plan cycle; at present, there is no work team, owner, champion or fully articulated business need;*
Development of Regional Base Map Services	*Not identified by the Coordinating Committee as a priority in the 2018 Work Plan cycle; at present, there is no work team, owner, champion or fully articulated business need;*

MetroGIS 2018 Budget

MetroGIS' core financial support is provided by the Metropolitan Council in the form of an annual budget allotment. Until 2018, MetroGIS budget was $86,000/year. In 2018, MetroGIS' budget has been reduced to $50,000/year by the Metropolitan Council Information Services Department.

Formal programming for available funds is decided upon by the Coordinating Committee. This budget can be amended by actions of either the MetroGIS Coordinating Committee, MetroGIS Policy Board or the Information Services Department of the Metropolitan Council.

2018 Rank	Project/Expense	2018	2017	2016	2015	2014	2013	2012
	MetroGIS Budget	50,000	86,000	86,000	86,000	111,000	86,000	86,000
CC	Seven Metro Counties & MetCouncil Memo of Agreement & Data Contract	28,000	28,000	28,000	28,000	28,000	28,000	28,000
CC	MetroGIS Website Kentico CMS Upgrade to Version 10.0	(n/a)	2,800	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)
E	MetroGIS Misc. Expenses (a) - Allotted	2,000	2,000	2,000	2,000	4,500	4,500	4,500
E	MetroGIS Misc. Expenses - Total Spent	---	0	328	1,897	113	775	2,990
1	Address Points Aggregation	0	0	0	0	0	0	0
2	Metro Regional Centerlines (MRCC)	0	0	0	0	0	(n/a)	(n/a)
3	Metro Park & Trail Dataset/Data Standard	0	0	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)
4	Address Editor Tool (v. 4.0)	15,200	0	0	5,680	0	20,080	13,760
5	Addressing Resource Guide	0	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)
6	Statewide Centerlines Initiative	0	0	0	0	0	(n/a)	(n/a)
7	Regional Stormwater Data Project	0	0	0	0	(n/a)	(n/a)	(n/a)
M	Free + Open Public Geospatial Data Initiative	0	0	0	0	0	0	(n/a)
M	Support for the Geospatial Commons	0	4,071	14,110	0	14,000	(n/a)	(n/a)
C	Historic Aerial Imagery Mosaic & Archive Project	(n/a)	(n/a)	4,775	(n/a)	(n/a)	(n/a)	(n/a)
C	2016 Aerial Imagery Coordination	(n/a)	(n/a)	0	(n/a)	(n/a)	(n/a)	(n/a)
C	New MetroGIS Website	(n/a)	(n/a)	(n/a)	(n/a)	59,995	25,000(b)	(n/a)
	Committed or Already Spent for 2018	**43,200**	**34,871**	**47,213**	**35,577**	**102,108**	**48,855**	**44,750**
	Remaining/Unspent/Unused for 2018	**6,800**	**51,129**	**38,787**	**50,423**	**8,892**	**37,145**	**41,250**

(a) Allotted for Miscellaneous Expenses, not contractually committed;

(b) 2013 funds carried over into 2014 budget to fund the new metrogis.org website;

CC = Contractual Commitment

E = Expense

M = Maintenance project

C = Completed project

Appendix A:
Comparison of MetroGIS project priorities to
Geospatial Advisory Council project priorities for 2018

MetroGIS Ranking	MetroGIS Work Plan Item Project Name	Geospatial Advisory Council Project Name	GAC Ranking
1	Metro Address Points Aggregation	Statewide Address Points Data	3
2	Metro Regional Centerlines (MRCC)	Statewide Centerlines Initiative	4
3	Metro Park & Trail Dataset/Data Standard	Park and Trail Dataset/Data Standard	13
4	Address Editor Tool (v. 4.0)	Statewide Address Points Data	3
5	Addressing Resource Guide	No comparable GAC Priority	X
6	Statewide Centerlines Initiative	Statewide Centerlines Initiative	4
7	Regional Stormwater Data Project	No comparable GAC Priority	X
M	Free + Open Geospatial Data Initiative	All public geospatial data freely open	1
M	Support for the Geospatial Commons	No comparable GAC Priority	X
X	No comparable MetroGIS project	Maintenance of MnGeo Imagery Service	2
X	No comparable MetroGIS project	Improvements to Imagery Service	5
X	No comparable MetroGIS project	Policy for Archiving/Preserving Geodata	6
X	No comparable MetroGIS project	Statewide Parcel Data (Incl. Data Standard)	7
X	No comparable MetroGIS project	Updated/aligned boundary data	8
X	No comparable MetroGIS project	Archived aerial imagery resource	9
X	No comparable MetroGIS project	Emerg. Mgmt. Damage Assessment Data	10
X	No comparable MetroGIS project	Advance standards for LiDAR and hDEM	11
Inactive	Metro-level basemap services	Statewide Base Map Services	12

The Minnesota Geospatial Advisory Council conducts an annual prioritization ranking of its current project priorities. The table above compares the ranked MetroGIS projects with their closest Geospatial Advisory Council -equivalent for the 2018 work cycle.

Appendix B: Project Prioritization Methodology

This appendix describes the process used to identify and prioritize MetroGIS Work Plan items.

It is designed to assess three important criteria:

- Value of projects to MetroGIS stakeholders;
- Likelihood of project success, and;
- Collective wisdom of the MetroGIS Coordinating Committee.

Project Prioritization Steps

Task 1 - Create a list of proposed projects

1.1   Provide a list of all previously proposed projects to the Coordinating Committee and ask for any additions;

1.2   Created a final list of proposed projects;

Task 2 - Assess the value of each project (via web survey to CC members) Questions:

2.1   Create a **web survey** and distribute to Committee membership, for most projects that help stakeholders directly (e.g. address points) query them with direct questions such as:

"How great is your organization's business need for the results of this project?"

Provide answers options such as   High
                                          Medium
                                          Low
                                          No business need

2.2   For MetroGIS specific items determine the answer to the following:

"For MetroGIS to function effectively, serve its stakeholders and support its mission, how great is MetroGIS's need to complete this project?"

Provide answers options such as   High
                                          Medium
                                          Low
                                          No business need

2.3   A few additional questions will be asked (e.g. your name, are you willing to be project owner or part of project work team?)

Task 3 - Assess likelihood of success of each project

3.1 Follow up with involved stakeholders to assess key factors related to likelihood of success such as

- What is estimated effort to complete project? (Person/hour categories)
- Is funding required? If so, is it available and from what source?
- Does a committed project owner exist?
- Does a committed project team exist (if needed)?
- Does an active, high-level project champion exist (if needed)?

Task 4 - Calculate preliminary priorities based on results

4.1   Create a prioritization matrix (spreadsheet) to calculate scores and create preliminary priorities.

4.2   Methodology notes: guide for weighting for scoring potential projects

Roles and Funding:	Funding exists	= 2 pts.
	Funding questionable	= 1
	Funding doesn't exist	= 0
Project Owners	Project owner exists	= 3
	Owner questionable	= 1
	Owner doesn't exist	= 0
Effort (Person/Hours)	1 to 100 hours	= 3 (Low Effort, Easiest)
	100 – 200 hours	= 2 (Medium Effort)
	200+ hours	= 1 (High Effort, Most Difficult)

Likelihood of **Success Score** (Sum of the above scores)

Value Score = Sum of all responses from of responses from Coordinating Committee members

Need for Project	High Need	= 3
	Medium Need	= 2
	Low Need	= 1
	No Need	= 0

Priority Score = Value score multiplied by **Success Score**

Task 5 - Coordinating Committee Adjusts the Priority Ranking

5.1 At Committee meeting, show the spreadsheet & get corroboration form members;

5.2 Identify and address any errors;

5.3 Priority Rank will initially be the same as Priority Score;

5.4 Committee can discuss and adjust priority rankings if desired based on other factors (group wisdom);

5.5 Committee should also decide which projects to completely remove from the work plan;

5.6 Where a project is important, but missing roles or funding, Committee can re-evaluate in the future;