

# MnGeo Priority Projects and Initiatives

April 1, 2015

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:

## Planned

### Statewide Addresses

Project Goal: To have building addresses and geo-locations for all structures in the State established and a mechanism created for ongoing data updating and maintenance. The data would be freely and publicly available.

Project Status: This effort will be related to Dept. of Public Safety's NG9-1-1 efforts and to the Street Centerline and Parcel projects described below. The NG9-1-1 GIS project regional kickoff meetings will begin in April, along with the distribution of a PSAP GIS survey. Results from the survey, which will indicate the statewide status of address point data, will be available in June.

Anticipated Completion and Milestones: The initial address point data assessment will begin in early summer 2015. This will be a 3 year effort. *In the meantime, MnGeo is conducting interim data collects. For further information see Parcels, Addresses and Centerlines Collect under the Next Generation 9-1-1 project below.*

Project Funding: TBD

Project Issues, Concerns and Risks: Issues, concerns and risks will be identified during the first phase of the effort once it begins.

Project Contacts: Dan Ross (MnGeo, Executive Sponsor), John Hoshal (MnGeo, GIS Project Lead)

## In Progress

### Aerial Imagery

Project Goal: Complete statewide coverage of spring leaf-off color and color infrared imagery at 0.5-meter resolution (orthoimagery and stereo), providing the opportunity for partners to buy-up to higher resolution in their areas of interest. Most recent partner counties include Beltrami, Polk and McLeod. For more information on the Spring Aerial Imagery Program, see the [SAIP webpage](#).

Project Status: On schedule

Anticipated Completion and Milestones: This project, which was initiated in 2009, is anticipated to be completed by the end of April. Spring 2014 imagery acquisition has been completed and processed and is currently undergoing final quality control checking.

Project Funding: State: \$1,100,000; Partners: \$1,000,000

Project Issues, Concerns and Risks: Over the long term, this project demonstrates an opportunity for significant leveraging of public funds if the state, working with Minnesota's counties, local governments, and tribal governments, establishes a cooperative, sustainable program to acquire, process and distribute aerial imagery on a predictable cycle that implements a fair cost-sharing model. Efforts are underway to develop a five-year statewide Master Services Contract for new imagery acquisition. The first project anticipated under that contract is a spring 2016 Twin Cities Metro aerial imagery acquisition.

Project Contacts: Chris Cialek (MnGeo); Steve Kloiber (DNR)

## ArcGIS Online for State Agencies

Project Goal: Create an authoritative, multi-purpose, public-domain site of maps and web applications from Minnesota State agencies. Assist state agencies in developing their ArcGIS expertise.

Project Status: The [governance document](#) was completed in mid-June. The [Minnesota Maps site](#) is open to the public and proper metadata has been created for the maps and apps available to the public on the site. The ArcGIS Online agency kickoff meeting on 6/3/14 highlighted the training needs of the agencies. A half day training session was held at the Mn.IT Symposium in December, 2014.

Anticipated Completion and Milestones: Training – Winter 2014/2015

Project Funding: There is no specific project funding for this effort. MnGeo has assigned a project lead who is working with other agencies to get their maps, web applications and metadata published on the site.

Project Issues, Concerns and Risks: Agencies are to use this site for their public-facing maps and web applications and use their own subscription for internal use. While discouraged, agencies may find it easier to publish on their own subscription. Some services available through the site use credits; however, there are not adequate tools to manage credit use by individuals. How does ArcGIS Online information and training get distributed within each ELA partner's agency especially for the non-traditional GIS user?

Project Contacts: Norm Anderson (MnGeo)

## Drainage Record Modernization

Project Goal: 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.

Project Status: A Service Authorization (SA) between BWSR and MnGeo has been executed; a project plan prepared; a contractor (Houston Engineering, Inc.) has been hired to assist with the creation of the template and standards; a Project Advisory Committee is being created.

Anticipated Completion and Milestones:

Project Milestone	Target Completion Date
Project Start	10/1/2014
Establish a project team and define the scope of products and data standards (e.g. GIS database template with its metadata and updated <i>Drainage Records Modernization Guidelines</i> publication)	8/7/2015
Develop GIS database template and its metadata for public drainage system records	2/4/2016
Update <i>Drainage Records Modernization Guidelines</i> publication	3/15/2016
Disseminate information about the GIS database template and guidelines	3/29/2016
Project Complete	June 30, 2016

Project Funding: \$230,000

Project Issues, Concerns and Risks: Because of the late start of the project it is behind by a couple months. However, there was some flexibility in the schedule so that it should still finish by the funding deadline of 6/30/2016.

Project Contacts: Greg Fetter (BWSR, Executive Sponsor), Al Kean (BWSR, Business Champion), Jim Krumrie (MnGeo, Project Manager)

## Geospatial Commons

**Project Goal:** 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. It is initially being designed as a coordinated, next-generation website that will allow users to find, view and download data; publish metadata and data; and find and use web services and applications. Additional proposed functions of the site include: web service ratings and monitoring; back-end broker functions that connect applications to web services; and user reviews of data and web services.

**Project Status:** The initial goal of this effort – to stand up a single geospatial resource distribution website – was achieved on July 1, 2014. The new application is now being stocked with geospatial resources (data, software, applications). The migration of all significant state geospatial resources currently provided in the Data Deli, Minnesota Geographic Data Clearinghouse, Data Finder and other independent state government portals is now occurring in phase 2 of this effort. On February 28, the DNR announced the complete migration of its popular Data Deli application to the Geospatial Commons. On March 2, MnGeo ceased operation of its GeoGateway search tool and is completing migration of all current resources available through that application to the Commons. As of March 30, the count of published resources accessible through the Commons exceeds 200:

Organization	Published Resources
DNR	106
MnGeo	59
MPCA	17
Agriculture	15
MnDOT	7
Metropolitan Council	6
Education	3
Lake County	3
Revenue	2
Health	2
Total	220

**Anticipated Completion and Milestones:** On March 18, MN.IT announced the “hard launch” of the Commons, which ushers in a new project phase emphasizing the active inclusion of partner organizations outside the initial group of seven state agencies. While those first agencies continue to add resources to the Commons, a number of counties and other organizations will be encouraged to publish their geospatial resources in order to grow the size and value of the application. Participation of remaining state agencies and local governments will be pursued through the current phase of the project which runs through June 30, 2015.

**Project Funding:** There are no dedicated funds for this effort. MnGeo is providing a full time Project Manager, technical and administrative support. Staff members from several State agencies (most notably: DNR, Agriculture and MPCA) have been assigned to this project. Other resources are expected to be made available by MN.IT Services as needed.

**Project Issues, Concerns and Risks:** Complications in processing published resources provided by partner organizations external to state agencies have slowed down the addition of the Met Council’s resources to the Commons. The project team is working diligently to resolve these issues.. Success in implementing this

process is important because it may provide an attractive option for some new external partners, such as counties and municipalities.

Project contacts: Dan Ross (Executive Sponsor), Chris Cialek (Project Manager)

### **Next Generation 9-1-1**

Project Goal: 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 project Scope Statement was formally approved by all stakeholders on March 24.

Regional project kickoff meetings will begin in April, along with the distribution of a PSAP GIS survey.

Anticipated Completion and Milestones: 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 2017. Below is a list of current project tasks with estimated completion dates.

- **Project Scope and Work Plan** – completed March 2015
- **Regional Kickoff Meetings** – begin in April 2015
  - **NE region** – April 9
  - **Metro region** – April 16
  - **Other regions TBD:** NW, Central, SW, South Central, SE
- **PSAP GIS Survey** – begin distribution in April 2015
- **Outreach to PSAPs and GIS Sources** – ongoing
- **Initial GIS Data Assessment** – begin early summer 2015
- **MN NG9-1-1 GIS Standards** – complete October 2015

Project Funding: TBD

Project Issues, Concerns and Risks: Issues, concerns and risks will be identified during the first phase of the project which begins this month.

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

### **Parcels, Street Centerline and Address Point Collection**

Project Goal: 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.

Project Status: The [parcels project](#) 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, and passage of legislation in May 2013 for the exchange of geospatial data between governmental entities at no cost) much work remains to be completed. Work has been started on a process that MnGeo will use to acquire parcel, centerline and address point data from

counties and make it available to all State agencies and other governmental entities. MnGeo continues to work with the MN Department of Revenue to determine how the Parcels Project complements Revenue’s [PRISM \(Property Record Information System of Minnesota\) Project](#).

Anticipated Completion and Milestones:

Milestones	Anticipated Due Date
Collect all available data	September 2015
Standardize the three layers	December 2015
Aggregate the three layers into single statewide datasets	March 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 although an FGDC CAP grant provided funding to assist in developing the Business Plan.

Project Issues, Concerns, and Risks: 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.

Project Contacts: Dan Ross (Executive Sponsor), Jim Krumrie (Project Lead)

**Street Centerlines**

Project Goal: 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.

Project Status: The MnDOT tools were recently put into production internally. MnGeo is working with MnDOT to set up an external version of the editing tools and associated data for partner use. MnDOT has a consultant on board that will train the partners in the use of the tools. MnDOT has obtained some match-based funding from Federal Highways to assist in building a work process for the data from the authoritative road source.

Anticipated Completion and Milestones: Specific dates will be determined by the project management team with input from the pilot participants and MnDOT. Anticipated completion of the pilot is now planned for December 2015.

Project Funding: MnGeo and the MnDOT are providing part-time staff; MnDOT is providing project funding.

Project Issues, Concerns and Risks: The project is heavily dependent on tools being provided for the MnDOT LRS project. The project scope needs to be well defined. Concrete goals and objectives are developed; dates must be determined.

Project Contacts: Peter Morey (MnDOT); Geoff Maas (MetroGIS); Gordy Chinander (Metropolitan Emergency Services Board); Dan Ross (MnGeo); Teresa Lieser and Joe MacPherson (Benton County); Perry Clark (Carver County); Jon Large (Mahnommen County); Matt Koukol (Ramsey County); Jeffrey Miller and Chad Martini (Stearns County); Burny Tibbets and Dawn Sherk (White Earth Nation).