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Useful Links:

DPS-ECN

*Minnesota Department of Public
Safety – Emergency Communication
Networks GIS Information*

MnGeo

*Minnesota Geospatial Information
Office*

SECB

*Statewide Emergency
Communications Board*

NENA

*National Emergency Number
Association*

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2019-2021 Strategic Plan

The Minnesota Department of Public Safety Emergency Communication Networks division (DPS-ECN) and the Minnesota Geospatial Information Office (MnGeo) have finalized an updated strategic plan for the NG9-1-1 project.

The state has set a goal to complete the GIS data preparation phases for NG9-1-1 by September 2020. Once the NG9-1-1 data is collected, standardized, and aggregated, DPS-ECN and MnGeo will be working with the NG9-1-1 vendor to migrate to the Location Validation Function (LVF) and Emergency Call Routing Function (ECRF). The target date for the LVF/ECRF migration is December 2021.

In order to successfully meet these new target dates, our counties must continue to drive forward with their GIS data preparation. It is highly recommended that counties continue to progress through the GIS data preparation phases in the following order: Community Name Validation, Street Name Validation, Address Validation, Geospatial Validation, Edge Matching Validation, and Emergency Service Zone Validation.

To ensure that counties have the funding to complete the NG9-1-1 data preparation phases, ECN has applied for a multimillion-dollar federal grant opportunity. More specifically, Minnesota is eligible for just over \$3.2 million along with a required 40% match (which will be funded by ECN from the 9-1-1 Special Revenue fund), totaling about \$4.5 million. The funding will be available to PSAPs/counties/GIS support vendors once the Federal review and award process is complete. The NG9-1-1 project is prioritized in the grant request that ECN submitted. Exact terms and notice of award for the grant is uncertain, but as soon as ECN receives notification, the regional contacts will reach out to data providers.

DPS-ECN and MnGeo greatly appreciate the time and effort our GIS partners and PSAPs have dedicated towards GIS data preparation. The NG9-1-1 GIS project is a large undertaking for all our GIS partners, PSAPs, and vendors. As well, thank you all for working through the Edge Matching Touch Points Reviewer and for continuing to work with the DPS-ECN and MnGeo team in moving towards the deployment of the Minnesota NG9-1-1 system. Please remain devoted to this initiative so we are able to achieve a product that is both functional and that we can be proud of.

Best wishes for continued success,

Dana Wahlberg, Director, DPS-ECN

NG9-1-1 GIS Standards – Update

Road Centerline Data Standard

The Standards Committee of the Minnesota Geospatial Advisory Council (MGAC) has approved the Road Centerline Data Standard (RCDS). The RCDS has been thoroughly vetted by the GIS partners, NG9-1-1 Standards Workgroup, Metropolitan Emergency Services Board (MESB), and MnGeo. The multi-use RCDS has undergone two public review periods and has received significant feedback from the GIS community.

The first review period (60-day) was open to the public from April 9th to June 8th, 2018. All public review questions were reviewed by the MGAC Standards Committee on July 18th and October 25th of 2018. The second review period (45-day) was available to the public from January 28th to March 13th, 2019.

The RCDS is very important to the NG9-1-1 GIS project as well as the GIS community as it will be served as a multi-use standard. Maintaining the road centerline (RCL) data layer to align with the new RCDS is required for the NG9-1-1 system.

For more information on the proposed Road Centerline Data Standard, including the Road Centerline Data Standard Version 1.0, proposed schema, along with a sample road centerline dataset and frequently asked questions, see: <http://www.mngeo.state.mn.us/committee/standards/roadcenterline/index.html>.

Emergency Service Zone (ESZ), Public Safety Answering Point (PSAP), and Data Maintenance Boundary Standard

The ESZ/PSAP/Data Maintenance Boundary Standard, commonly referred to as the NG9-1-1 Polygon Standard, focuses on providing a single set of attribute specifications (field name, type, length and order) for transferring and aggregating NG9-1-1 polygonal spatial data. Understandably, many counties have their own methods or criteria for capturing and storing NG9-1-1 data to satisfy their own business requirements. This standard will seek to establish commonly accepted attribute specifications for data exchange purposes. The NG9-1-1 data specifications for this standard are derived from the National Emergency Number Association (NENA).

The three NG9-1-1 polygonal spatial datasets are:

- 1) *Emergency Service Zone Boundary*: The ESZ layer defines the geographic area for the primary providers of response services. Each of these layers is used by the ECRF to perform a geographic query to determine which Emergency Service Providers are responsible for response. The set of Emergency Service Zone Boundaries must include law enforcement, fire, and emergency medical services (at a minimum).
- 2) *Public Safety Answering Point (PSAP) Boundary*: The PSAP layer routes calls and emergency requests for NG9-1-1. This layer is used by the ECRF to perform a geographic query to determine the PSAP that has primary responsibilities for an emergency request.
- 3) *Data Maintenance Boundary*: This layer defines the area of GIS data provisioning responsibility. This Data Maintenance/Provisioning Boundary must be agreed to by all adjoining data providers.

The ESZ/PSAP/Data Maintenance Boundary Standard's timeline will potentially be shorter than the Minnesota Address Point and Road Centerline Data Standard since it will not be used for multi-use purposes and will be NG9-1-1 specific. This next standard will go through the Statewide Emergency Communications Board (SECB) standard approval process, which is projected to be completed by fourth quarter of 2019.

Data Preparation – Update

Regional Meetings

By the end of July 2019, DPS-ECN and MnGeo will be meeting with each region to strengthen relationships and discuss NG9-1-1 project status, objectives, challenges, and funding opportunities. DPS-ECN is requiring attendance of primary GIS staff from each county, as well as the county PSAP manager for your county to be eligible for future grant funds related to NG9-1-1 work. DPS-ECN and MnGeo conducted regional meetings in the following regions: NE (3/26), SW (5/22), SC (5/23), Central (5/30), and SE (6/6). We look forward to meeting with the NW region soon.

New Data Preparation Target Dates

The new strategic plan is targeting September 2020 for all counties to complete their NG9-1-1 data. It is very important that we collectively continue to prioritize our time and resources towards the development of our statewide geospatial dataset for 9-1-1. GIS is the foundation of NG9-1-1 and we need to continue to push forward so we can finish by the new target date.

Understandably, many of our counties have limited resources to work on the NG9-1-1 GIS project. For our counties with available resources, it is recommended that our GIS partners and PSAPs consider the following target dates:

- Community Name Validation: Q1 2019
- Street Name Validation: Q2 2019
- Address Validation: Q3 2019
- Geospatial Validation: Q4 2019
- Edge Matching Validation: Q1 2020
- Emergency Service Zone Validation: Q2 2020

MnGeo has developed a Street Name Report, Address Range Report, and Geospatial Validation Report which are designed to help counties understand where the discrepancies are in their GIS-related data. In addition, MnGeo launched the Touch Points Reviewer for Edge Matching Validation to help counties align boundaries with their adjoining counties.

Edge Matching/Touch Points Reviewer

This application provides a method for data providers to propose touch points at which they will align their NG9-1-1 datasets to, facilitating the creation of an aggregated statewide dataset. Currently, the state-accepted Public Safety Answering Point (PSAP) boundaries serve as the alignment boundaries. If data providers disagree with having to align their data to the current PSAP boundary, or if they'd like to specify a location along the PSAP boundary for road centerline (RCL) snapping, they may propose alternative points at which to align their data. The pre-populated points displayed along these boundaries are derived from each county's RCL endpoints. The RCL points may serve as possible locations for these proposed points, or a data-provider may use other sources to inform the placement of proposed points.

If there are major changes being proposed, it is highly recommended that the PSAP manager be informed. Data providers can overlay their own reference data in the application to use as a guide. Also, it is recommended that data providers use the state standard projection (NAD 1983 UTM Zone 15N) if they are exploring this route. For proposed

changes to be incorporated into the state PSAP boundary layer, the suggested touch point must be accepted by the adjacent PSAP.

The final Touch Points Reviewer WebEx meeting was conducted on April 26th, 2019. Thank you all for your attendance!

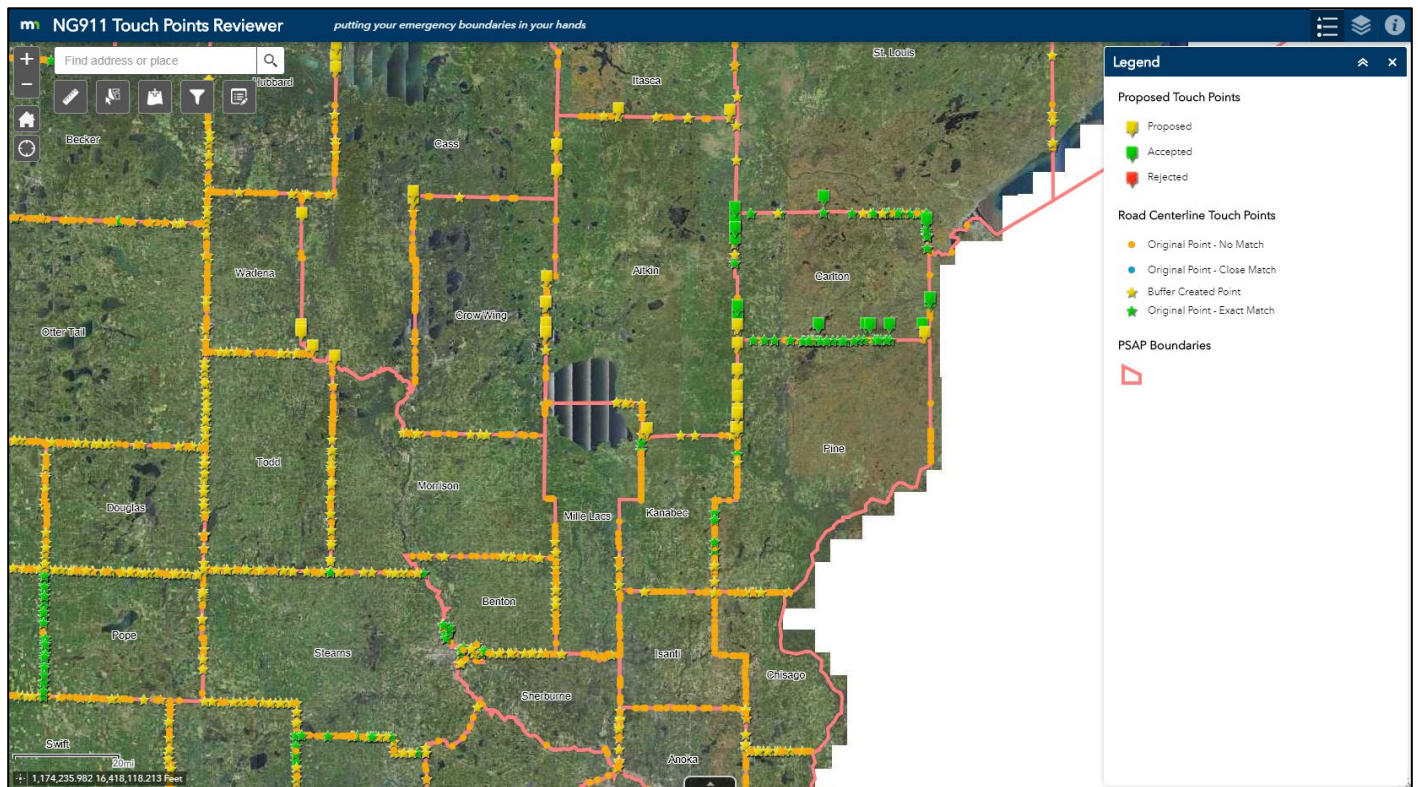


Figure 1: Touch Points Reviewer shows proposed touch points in the NE region. Please note the status of the touch points will change as counties work along their PSAP boundary.

Interactive GIS Status Map

The interactive GIS status map has been a great tool for counties to track general progress of their GIS data preparation. The completion percentages are based on the GIS data each county submits to their MnGeo regional GIS representative. The layers are hosted on ArcGIS Online and are updated on a weekly basis.

Counties have shown significant improvement in GIS data preparation. The Street Name Validation percentages are high and Address Validation is coming along nicely. The interactive GIS status map is available on the DPS-ECN website at <https://dps.mn.gov/divisions/ecn/programs/911/Pages/interactive-gis-status-map.aspx>.

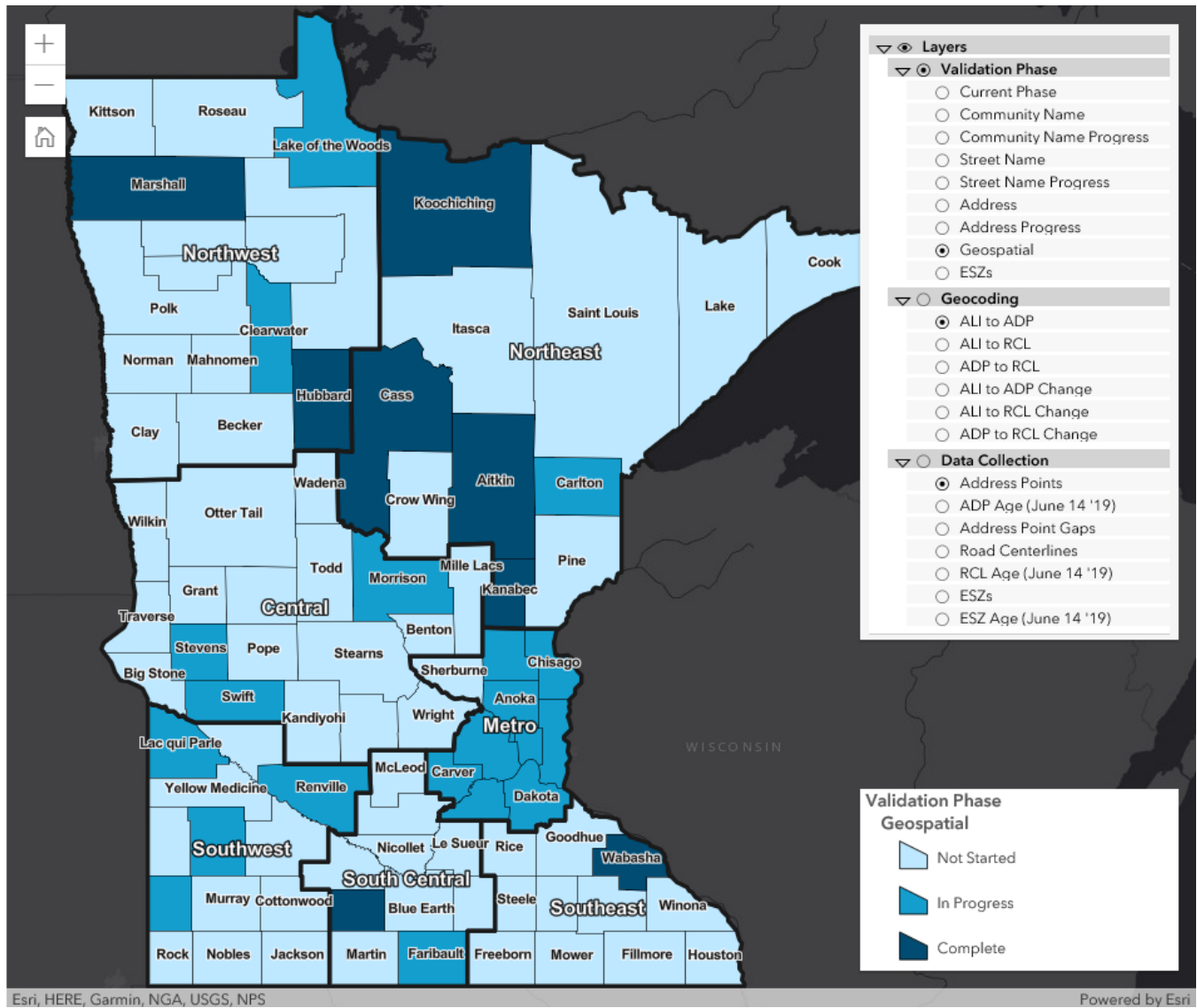


Figure 2: Interactive Status Map shows the Geospatial Validation phase as of June 18th, 2019. Please note that the status of counties changes frequently.

Upcoming Events

Notable upcoming DPS-ECN and MnGeo NG9-1-1 GIS events:

- ❖ July 11th: NG9-1-1 GIS Subcommittee meeting
- ❖ July 17th: NG9-1-1 Committee meeting
- ❖ July 24th: NW Regional Meeting
- ❖ August 8th: NG9-1-1 GIS Subcommittee meeting
- ❖ August 14th: Metro Counties NG9-1-1 Collaboration meeting

Neighboring States

For more information about NG9-1-1 efforts in the states surrounding Minnesota, visit:

- [Iowa Enhanced 9-1-1](#)
- [North Dakota ND911](#)
- [South Dakota 9-1-1](#)
- Wisconsin (*In planning phase. See [NENA status map](#).*)

If you have a NG9-1-1 newsletter topic that you would like to share in future issues, please contact:

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