The Proposed

Minnesota Geospatial Advisory Council Road Centerline Data Standard Version 0.6

Overview and Frequently Asked Questions

Introduction. Road Centerlines are a foundational geospatial dataset for many types of analysis, mapping and applications development including emergency response and public safety, transportation planning and modeling, geocoding, and many other uses.

The origin of road centerlines. Road centerlines originate from authoritative sources including: local governments, tribal nations and federal partners.

The Road Centerline Data Standard being proposed is intended to be a common ***reference*** and ***resource*** for Minnesota's our professional geospatial community. This document seeks to answer many common questions about what the proposed standard is, who is advancing it, why the standard is being proposed, as well as how stakeholders in the data producer and data consumer community can provide comments and input on the standard. Links to other resources and contacts are provided at the end of this document.

How can I provide comments and input on this proposed Road Centerline Data Standard?

Please send questions, comments, or recommendations for improving this proposed standard to the Standards Committee by 4:30 pm, Wednesday, March 13, 2019. Send comments by email to ***gisinfo.mngeo@state.mn.us***

After the 45-day comment period the Standards Committee will review all comments approve a response to each comment and make changes to the standard where appropriate. All comments and responses will be published on the GAC web site.

What is the proposed Road Centerline Data Standard?

As noted above, the proposed Road Centerline Data Standard is intended be a ***reference*** and ***resource*** for the sharing, integration and aggregation of geospatial road centerline data in Minnesota. It establishes a common set of attributes and field definitions to encourage the efficient use, aggregation and exchange of road centerline data among geospatial data users. The range of attributes contained in the proposed standard is intended to facilitate its use for a wide variety of purposes.

Is the proposed standard a mandate on how to prepare road centerline data?

No. The GAC does not mandate or enforce standards. It offers standards as a resource to the community. Organizations may choose to adopt the standards and require their use internally.

What are the benefits of using this standard?

Use of the proposed standard would provide significant benefit and efficiency to anyone using road centerline data which comes from more than one source in Minnesota. When datasets have standardized attribute names, types, lengths, order, etc. the data is easier to combine, compare, aggregate and work with providing value and efficiency to end users and consumers.

There are many instances of users who need to consume geospatial data from more than one source. A few examples include:

- *Counties who wish to consume the road centerline data of their neighboring counties;*
- *Emergency services providers;*
- *Federal, state and regional agencies using road centerline data sourced from many authoritative sources or encompassing numerous jurisdictions;*
- *Private sector businesses who cover a larger service area covering many jurisdictions;*
- *Academic and research institutions who us the data in analysis and research efforts*

Road centerline data can change frequently, therefore roads are continuously being created, changed or removed. An agreed upon standard for road centerline data serves to streamline the process of sharing and merging data allowing for aggregated datasets to more easily be kept up-to-date. Anyone creating new road centerline data can also make use of this standard as a template to assist them. For example, a municipality that does not yet have road centerline data could have an established standard to follow without having to research or create one from scratch.

Where did this road centerline data standard come from?

The data specifications for this standard are derived from three primary sources:

1. the Metro Regional Centerline Cooperative (MRCC), which is a joint project created by the Seven Metropolitan Counties (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington), the Metropolitan Emergency Services Board (MESB) and the Metropolitan Council.
2. the Next Generation 9-1-1 (NG9-1-1) road centerline standard which was produced by the NG9-1-1 Standards Workgroup drawing from the National Emergency Number Association (NENA) geospatial data standards, Federal Geographic Data Committee (FGDC) *United States Thoroughfare, Landmark, and Postal Address Data Standard* and other sources.
3. Comments from the first round of public review of the proposed GAC standard and subsequent modifications by the GAC Standards Committee.

The MRCC officially kicked off in May 2014 to document core business needs among its partners. From then on, the MRCC project team has developed and enhanced several iterations of its road centerline standard to meet the various needs of the data producer and user community.

In 2015, the state NG9-1-1 effort began to develop data standards to help satisfy the needs of the emergency services sector using the NENA (National Emergency Number Association) data standards as their starting point.

In May-June 2017, the NG9-1-1 Standards Work Group published their standards for a third round of review and comment. All comments received from this round related to road centerlines were considered for the proposed statewide Road Centerline Standard.

In November 2017, an MRCC version 1.7 schema and dataset was published that aligned with the Minnesota Address Point Data Standard (adopted on December 6, 2017 by the Geospatial Advisory Council). Additionally, the NG9-1-1 Standards Workgroup chose to adopt the MRCC version 1.7 schema with the addition of a select fields and domain entries that addressed their specific needs, expanded them statewide and met needs for NG9-1-1 alignment.

The Geospatial Advisory Council's Standards Committee reviewed the NG9-1-1 draft standard at its meeting on February 26, 2018 and approved its release to the stakeholder community for a formal 60-day review period beginning on April 9, 2018 and concluding on June 8, 2018.

How can my organization translate our data to this format?

There are numerous state and regional governments engaged in developing scripts to help automate the process of data aggregation and standardization. As these agencies develop these scripts, they are willing to share their code with city and county partners who create road centerline data.

To assist the stakeholder community with their review and analysis of the proposed standard, a geodatabase template is available here:
https://www.mngeo.state.mn.us/committee/standards/roadcenterline/index.html

How does a data producer handle inclusion of the MSAG Community attribute?

MSAG stands for Master Street Address Guide. A Master Street Address Guide is a database of street names and building number ranges within a community which facilitates the proper routing of emergency 9-1-1 calls. The MSAG Community attribute should match the community name provided in the corresponding MSAG in use in your jurisdiction. In an MSAG, there is a single community name field that can be populated with a Postal Community name, a CTU name (City, Township, Unorganized Territory), or whichever name is commonly in use and associated with your 9-1-1 system.

Who is guiding the development and review of this standard?

This standard has emerged in response to the need to create **a single road centerline data exchange standard that meets the core needs of the data user community.** One of the primary needs is for the NG9-1-1 effort, however many other business needs can also be satisfied by data in this proposed standard. The standard put forth for publication is sponsored by the NG9-1-1 Standards Work Group.

The Standards Committee of the Minnesota Geospatial Advisory Council is tasked with ***facilitating the process*** by which geospatial standards such as this Road Centerline Standard can be developed, reviewed and published in a transparent, inclusive, and stakeholder-driven way.

This process includes:

- *Understanding, defining, and documenting the business needs to be met by a standard;*
- *Developing and documenting the attributes needed to meet those needs;*

- *Publishing and disseminating documentation back to the stakeholders;*
- *Providing on-going outreach and facilitating communication among the stakeholders;*
- *Providing stakeholders an opportunity to submit comments on developing standards;*

The Standards Committee Charter, as approved by the Geospatial Advisory Council in March 28, 2018, clearly indicates the role of the Committee as the following:

- *To provide a transparent and inclusive process by which geospatial data standards can be proposed, discussed, refined, developed, communicated, adopted, and revised to the benefit of the geospatial profession in the State of Minnesota;*

- *To develop materials, resources, and paths of communication to promote the development, adoption and use of standards within the geospatial community of Minnesota;*

- *To advise the state geospatial community about relevant standards issues and facilitate the creation and adoption of such standards within Minnesota;*

- *To serve as liaisons to standards initiatives at the Federal government level;*

Contact information for key individuals involved with the Standards Committee are available on the GAC web site.

Why is this standard being published for a second round of public review?

Because this is a significant and complicated standard and because many changes were made to the standard after the first round of public review, the Standards Committee felt a second public review period was needed. It will allow opportunity for stakeholders to review changes to the proposed standard and provide comments back to the Standards Committee on how to modify or improve the proposed standard.

The Committee greatly values the comments it receives from our professional community and takes these comments into serious consideration for potential revisions, changes and additional review. The Standards Committee fully documents the comments received as part of the official record of a standard's development. Once the review period is complete, the Committee will review all comments approve a response to each comment and make changes to the standard where appropriate.