

Minnesota Geospatial Advisory Council

Operational Procedures for Proposing, Approving and Revising Standards

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Introduction

About the GAC

The mission of the Minnesota Geospatial Advisory Council (GAC) is to act as a coordinating body for the Minnesota geospatial community. The GAC is authorized by legislation passed in 2009 and reauthorized in 2014 Minnesota Statutes (16E.30, subd. 8). It represents a cross-section of organizations that include city, county, regional, state, federal and tribal governments as well as education, business and nonprofit sectors.

As part of this mission, the GAC works with the Minnesota geospatial community to define and adopt standards needed by the community. GAC standards are developed and proposed by geospatial community subject matter experts. The GAC's Standards Committee administers a process to ensure community-wide public review and input for any proposed standards.

The GAC does not mandate or enforce standards. It offers the standards as a resource to the community. Organizations may choose to adopt the standards and require their use internally.

What are Geospatial Standards?

The International Organization for Standardization (ISO) describes standards as "documents that provide requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose."

The standards approved by the Minnesota Geospatial Advisory Council (GAC) align with this description by being documents and associated guidance materials that identify geospatial requirements and specifications, and by being created through an inclusive process that engages the geospatial stakeholder community to ensure that the standards meet the range of purposes and business needs of the stakeholders.

Why are Standards Important?

- Standards facilitate data sharing among organizations.
- Standards increase the interoperability of data among the user community.
- Standards facilitates inter-agency coordination and inter-jurisdictional data aggregation.
- Standards facilitate the development of automated data aggregation, validation, storage and publishing processes.
- Standards facilitate improvements in reliability, quality and authority of data.
- Standards provide a template for new-comers to create data for the first time.
- Standards help eliminate duplicate data creation.
- Standards enable data creators and users to save time, money and effort.

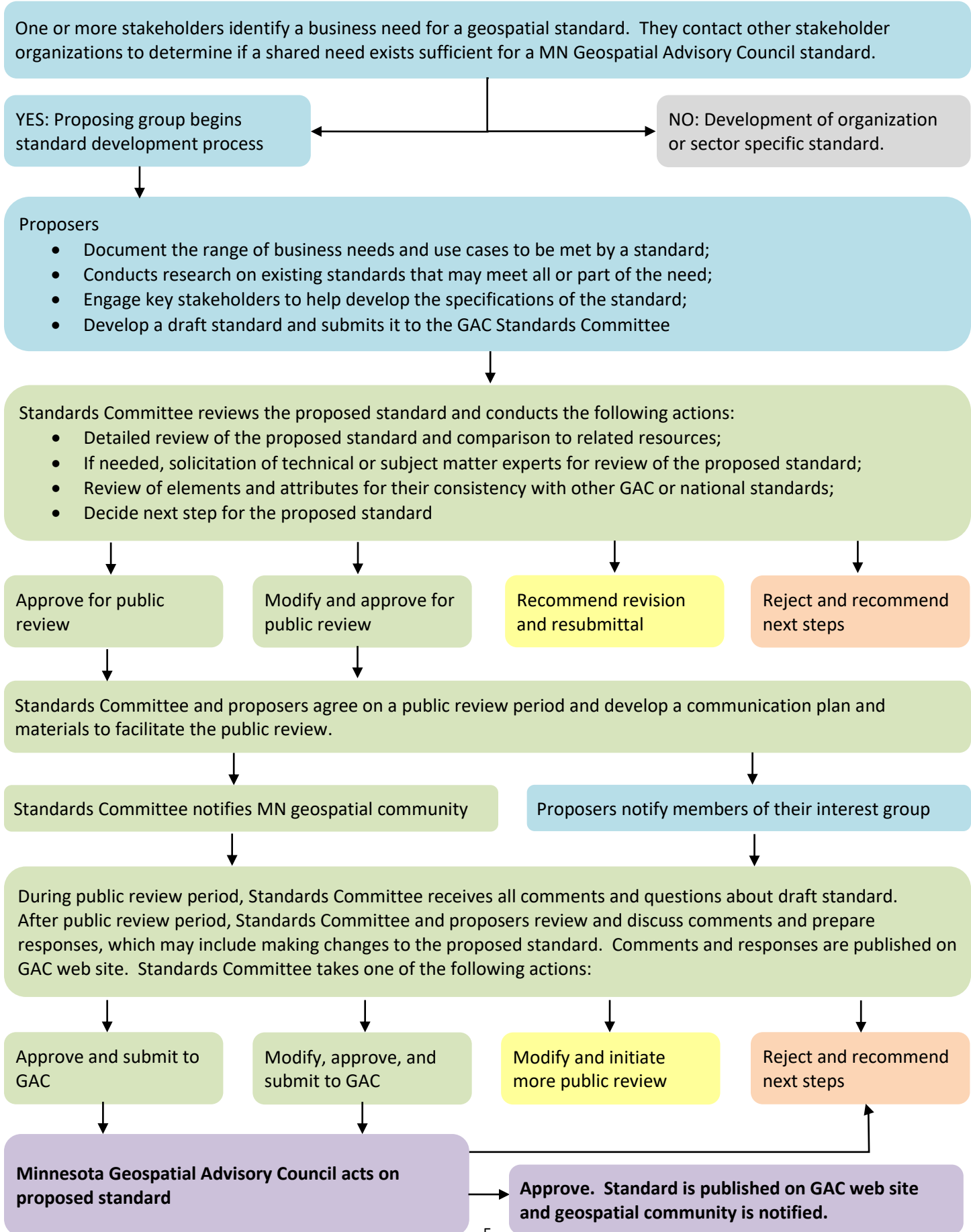
GAC Standards Approval Process

The GAC has established a transparent and inclusive process by which geospatial standards can be proposed, discussed, refined, adopted, and revised. This is done for two main reasons:

- To create an opportunity for awareness and participation by the entire stakeholder community;
- To leverage the extensive expertise and contributions of the professional community to refine and improve the standard.

A flow chart of the approval process is shown below.

Geospatial Advisory Council Standard Development Flow Chart



Role of the Proposers

As shown in the flow chart above, the GAC expects that a standard will be proposed by a coalition of stakeholders with a shared need for the standard. The proposers will typically communicate with the Standards Committee during the process of developing a proposed standard to ensure an understanding of the process and continuity with other standards.

The Standards Committee will include one or more representatives of the proposing group when reviewing the proposed standard for modification and/or advancement.

The Role of the Standards Committee

As defined in the Committee's [charter](#), the purpose of the Standards Committee is:

- To provide a transparent and inclusive process by which geospatial 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;

The Public Review Process

Once a proposed standard has been approved by the Standards Committee, it will undergo a formal public review process.

The Standards Committee will ensure that the public review process is publicized to the MN geospatial community. This is typically done through the email list of the MN GIS/LIS Consortium, the MnGeo announcement email list and other channels. It is the responsibility of the proposers to ensure that the public review process is publicized to other key stakeholders that would not be reached by the channels used by the Standards Committee. This may involve sector or industry specific communication channels.

The public review period for a newly proposed standard will be a minimum of 60 days and a maximum of 90 days. If a standard has a second round of public review, or if an approved standard is being modified requiring public review, the review period will be a minimum of 30 days and a maximum of 90 days. The exact duration of the public review will be determined by the Standards Committee depending on the complexity of the standard or related changes to the standard.

The Minnesota Geospatial Information Office will collect comments during the public review period and forward them to the Standards Committee. At the conclusion of the review period, the Standards Committee will create a document showing all comments with the name and affiliation of each commenter. The Committee will then review the comments and prepare a response to each comment. The response may include actions to make changes to the proposed standard. The comments and responses, once approved by the Standards Committee, will be published on the GAC web site for a period of time along with the standard.

Changing Approved Standards

Who can Propose a Change?

Any Minnesota stakeholder who believes that the MN geospatial community would benefit from a modification to an approved GAC standard may propose a change. This is done by contacting the Standards Committee and providing the information describe below. For minor changes (e.g. spelling error, broken link) or for changes to domain or lookup tables, the Standards Committee can be contacted more informally.

Change Petition

To propose a revision to an adopted GAC standard, contact the Chair or Vice Chair of the Standards Committee via email and provide the following information:

- Petitioner's name, contact information and affiliation
- The name of the standard to be revised
- A detailed description of the proposed change
- The reason for the change. How would the change benefit the geospatial community?

While it is not required, it is recommended that petitioners reach out to other members of the geospatial community to determine if others share the same need to change the standard. A petition that documents support by multiple stakeholder organizations will have a greater chance of succeeding.

Once a petition is received by the Committee chair or vice chair, they will bring it to the attention of the Committee for further action. The Committee may reach out to the petitioner for more information. Once a decision is made, the Standards Committee will communicate back to the petitioner. If a change is approved by the Committee, it may require approval by the GAC and may also require a public review process depending on the significance of the change.

Numbering Scheme for Standards

GAC standards use a 1.1.1 type numbering scheme to identify versions. A proposed standard will have a zero in the first spot (e.g. version 0.6) until it is approved by the GAC. As proposed versions are modified, the number in the second spot will be incremented as needed by the Standards Committee.

The initial version approved by the GAC will be 1.0. If changes are made after the initial version, the numbering scheme will be incremented in the first, second or third spot depending on the degree of the change. A major change to a standard will result in a change in the first spot (e.g. from version 1.2 to 2.0). A medium change that modifies the schema of a standard compliant dataset will receive an increment to the second spot in the version number (e.g. from version 1.2 to 1.3). A minor change that does not affect the schema of the standard (e.g. clarifying an attribute description) will receive an increment in the third spot (e.g. from version 1.2 to 1.2.1).

Any change to a GAC approved standard that results in a modification to the schema of a dataset that complies with the standard will be forwarded to the GAC for approval (major and medium changes). Notice of changes approved by the GAC will be published in the MN GIS/LIS Consortium email list. Minor changes that do not affect the schema of standard compliant datasets may be approved by the Standards Committee

without needing approval of the GAC. Very minor changes like fixing spelling errors or updating hyperlinks will be made with approval of the Standards Committee chair or vice chair without a formal vote by the Committee and will not receive a new version number.

Each new published version and the date approved will be listed on the first page of each standard.

Changes to domain tables and lookup tables for standards do not require changes to the version number of a standard itself. Changes to domain tables and lookup tables do not require approval by the GAC.

Supporting Materials for GAC Standards

Domains and Lookup Tables

Some GAC standards have associated domain and lookup tables which are available from the [GAC Standards web page](#). These resources are maintained somewhat separately from the standards themselves. Domain and lookup tables may be changed without a change to the standard version number and do not require a public review process or approval by the GAC. To request a change to a domain or lookup table (e.g. missing value), contact the Committee chair or vice chair.

Best Practices Guides

As resources allow, the Standards Committee may create best practices guides to help stakeholders understand and implement GAC standards. These guides will be available from the [GAC Standards web page](#). As of March 2019, multiple best practices guides are in development, but none of have been completed.

Standard Document Template

All GAC approved standards are to use the same Word document template for a consistent look and feel. The template may be modified by the Standards Committee as needed.