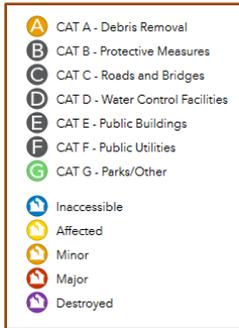


# Minnesota Geospatial Advisory Council

## Damage Assessment Data Standard

### Frequently Asked Questions



**Introduction.** This standard establishes a common set of attributes and field definitions for local government to utilize for the collection of damage assessment information in Minnesota.

The Damage Assessment Data Standard is intended to be a reference and resource for the professional geospatial community in Minnesota. This FAQ document seeks to answer many common questions about the standard and how it can be used to benefit geospatial work here in Minnesota.

### What is the Damage Assessment Data Standard?

The purpose of this standard is to provide a single, commonly accepted set of attribute specifications for the collection of damage assessment information in the event of a disaster to help guide local government entities in data collection that is required to support a request for State or Federal assistance.

The standard simply includes and describes these damage assessment data attributes. It does not direct best practices, collection method, or which GIS format or projection system should be used.

### What are the benefits of using this standard?

This damage assessment data standard will help local governments in Minnesota to collect the required information necessary to satisfy FEMA and HSEM requirements in the event of a disaster. Some of the fields listed as conditional or optional are not required to be populated.

When datasets have standardized attribute names, types, field widths, and order, they can be combined and used more efficiently. In this case, standardized damage assessment data would be a great benefit to HSEM and to FEMA.

- *Promote accuracy by clearly defining the information and documentation that should be collected to assess damage after a disaster*

- *Promote consistency by standardizing the criteria used to assess damage to commercial and residential structures and providing guidance on assessing damage to public infrastructure*
- *Promote efficiency by empowering emergency management at all levels with the structure and information needed to streamline damage assessment efforts*

## **Where did this standard come from?**

During the Minnesota Geospatial Advisory Council's (GAC) annual survey of Statewide Geospatial Projects and Initiatives in the Fall of 2016, the need for a Minnesota data standard for collecting rapid 'post-event' damage assessment information was identified. It scored 8<sup>th</sup> out of the 17 projects ranked in the survey.

Several local government representatives on the Council expressed interest in this project, citing a need for a data standard that would help them if they needed to quickly collect the damage assessment information that would satisfy State HSEM and FEMA requirements.

An initial Workgroup was formed early in January 2017 and has been working continually since that time to prepare a draft and engage stakeholders with a known need for this resource.

## **Who is guiding the development and review of this standard?**

The Workgroup developing this standard is the Damage Assessment Tiger Team of the Emergency Preparedness Committee of the Minnesota Geospatial Advisory Council (GAC). The Damage Assessment Tiger Team, in partnership with the GAC Standards Committee, published a draft version of the standard as it was developed and sought input from stakeholders after a Panel Discussion session at the Fall 2017 Minnesota GIS/LIS Conference in Bemidji.

## **Were FEMA or Minnesota HSEM involved in creating this standard?**

The Damage Assessment Workgroup began talking with HSEM early in the development of this standard after learning that HSEM was putting together a list of fields that it wanted to collect for Damage Assessment. The Damage Assessment Workgroup put its efforts on hold for much of 2018 in order to collaborate with HSEM on a new and improved version of the standard. It was re-written to align with the much larger list of attribute fields in the HSEM version.

The Damage Assessment Data Standard now defines the recommended data attributes to collect during the first, second, and third rounds of field inspections. Each successive step collects information in greater detail and increased inspector experience.

## **Does adoption of this standard by the Geospatial Advisory Council represent a mandate to collect damage assessment data?**

No. The GAC does not mandate or enforce standards. It offers the standards as a resource to the community. Organizations are encouraged to follow the standard for more efficient data transfer amongst one another, and when providing data to the State and to FEMA.

## **Our organization has its own set of attributes it uses to meet our internal needs. Are we required to change how we capture and store our data?**

No. This standard does not seek to define how any local government captures or stores its damage assessment data. It defines a consistent order, name, type, and width for each attribute to streamline the transfer and aggregation of damage assessment data for FEMA and HSEM forms.

This standards document is valuable to local government entities for collecting damage assessment attributes even if they are submitted on paper forms.

## **We may not have all the attribute data listed in the standard. Are we required to complete or populate all fields?**

No, there are only a handful of attributes which are identified as mandatory. The 'mandatory' designation for compliance is intended to establish a baseline or critical-minimum criteria for inclusion in the standard. It is understood that organizations create or collect their data in a variety of ways using a variety of sources, and that not all the attributes can be populated. The attribute fields in the standard simply provide a place to put data that your organization may already collect. If your organization does not collect data for a conditional or optional field it may simply be left blank.

These three categories for the attribute fields are defined as follows:

### **Mandatory**

Field must be populated for each record in accordance with FEMA reporting requirements to be eligible for reimbursement, and to be compliant with Standard. Null values are not allowed.

*Example: Incident ID is a Mandatory field in this standard. If Incident ID values are missing, the database does not comply with the Damage Assessment Standard.*

### **Conditional**

Each field must be populated with a non-null value for each record that is applicable to the

feature or for which a specified condition exists. When the condition is present, this field will be used for reporting requirements to be eligible for reimbursement.

*Examples: Not all addresses will have unit numbers associated with them; when a unit number is present, the field should be populated to ensure the accuracy of records associated with a damaged location.*

*FEMA category only applies to public infrastructure that meets the Public Assistance Damage Assessment Criteria as published by FEMA.*

*The cause of the damage will also guide which fields will need to be populated. Events that involve flooding will have the fields related to flood damage populated; however it is not necessary to populate flood-related fields when the event has no presence of flooding or conditions where flooding caused the damage.*

### **Optional**

Field is not required to be populated and if populated would be for organizational use above and beyond elements required for reimbursement eligibility.

## **What is the purpose of Assessment Type?**

Assessment Type is a term used to categorize the structure or facility being evaluated which affects the level and type of assistance available. The assistance mechanisms require different types of data to be collected and reported for each assessment type. Three assessment types are possible: Residential, Commercial, and Public Infrastructure. These three types align with HSEM attributes developed for their damage assessment tool.

### **Residential**

Structures or facilities with the primary use as residential shall use the fields that are flagged for the assessment type Residential.

### **Commercial**

Structures or facilities with a primary use for business, industrial, non-profit or other types of operations that would be considered commercial in nature shall use the fields that are flagged for the assessment type Commercial.

### **Public Infrastructure**

Structures or facilities that belong to State or local government; public entity; town, village or rural community; Tribal government; or eligible private non-profit shall use fields that are flagged for the assessment type Public Infrastructure.

## **Why are there three Assessment Timing levels of detail and do I need to use all of them?**

Assessment Timing is a term used to explain what elements must be collected depending on the level of detail appropriate for the damage assessment survey being conducted. During an event it is

not always possible to collect detailed information on the damage to a structure or facility due to hazards, weather, and access to property information, active evacuation or other situations. Also, it may be necessary to revisit a site multiple times due to changing conditions that affect the data being collected, e.g., rising or receding flood waters.

Users of this data standard may choose to use one, two or all three of the timing levels. Providing three levels of timing with increasing detail gives the evaluating agency the opportunity to use this standard to deploy evaluators with the attributes needed at that moment and not overwhelm them with heavily detailed forms that they are unable to effectively complete. The three levels of assessment timing are: Windshield, Preliminary/Initial, and Detailed.

### **Windshield**

This is the most basic level of assessment timing where evaluators will note where damage has occurred with very little detail. This will provide a path of damage after a disaster to aid responders and emergency management personnel in initial response. This level of data collection does not contain the minimum elements needed for reporting to FEMA or HSEM.

### **Preliminary/Initial**

This is a mid-level of assessment timing where the data elements specified meet the requirements for initial damage reports to FEMA and HSEM in the event of a disaster.

### **Detailed**

This is the most detailed level of assessment that asks for all possible data elements that could be asked for when summarizing the impacts of a disaster on the community. The collection of the elements flagged as Detailed will meet the reporting requirements for financial assistance at the State and/or Federal level.

## **Why was this Damage Assessment standard published for a 90-day review and comment period?**

A 90-day review period for any proposed standard is essential. It provides a formal opportunity for stakeholders to fully review the proposed standard and most importantly, to provide comments back to the Damage Assessment Workgroup on how to modify or improve the proposed standard. The Workgroup greatly values the comments it receives from the professional community and takes these comments into serious consideration for potential revisions, changes and additional review. The comments received will be fully documented by the Workgroup as part of the official record of a standard's development.

The proposed Damage Assessment standard is intended to provide a consistent structure to data collected in damage assessment situations; however, it is not intended to dictate the creation or maintenance of mobile or desktop applications for the collection of damage assessment data. The standard may be referenced to inform and improve related work such as operational procedures, best practices and the layout and content of digital forms; however, it is not intended to be prescriptive in nature.

**From page 21 of the FEMA document: Evaluating Damage and Impact for FEMA Public Assistance Program:**

**Identifying Damaged Facilities**

When a disaster occurs, damage should be identified as quickly as possible. FEMA will consider related damage to any building, works, system, or equipment, built or manufactured, or improved and maintained natural feature that a potential applicant has legal responsibility to restore.

The location of all damage sites should be documented as specifically as possible using street addresses and/or GPS coordinates. FEMA damage assessment personnel should capture damage locations by documenting the USNG location.

(FEMA Directive 092-5)

**Who can I contact if I have additional questions?**

**For questions about the creation, review and adoption of standards, please contact**

Mark Kotz, Chair  
Geospatial Advisory Council  
[mark.kotz@metc.state.mn.us](mailto:mark.kotz@metc.state.mn.us)

Questions about the Damage Assessment Data standard can be submitted via email to:  
[gisinfo.mngeo@state.mn.us](mailto:gisinfo.mngeo@state.mn.us)

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