Minnesota Geospatial Advisory Council

Damage Assessment Data Standard

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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.

Introduction

Damage assessment is a key component of recovering from all disasters. Having standardized methods of collecting damage information makes the recovery process more efficient while providing decision-makers with the information they need to do their jobs effectively.

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

Purpose of this Standard

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

Applicability

Data producers may have unique methods, definitions, and criteria for capture and storage of damage assessment data that satisfy their own business requirements. This standard seeks to establish attribute specifications for data exchange purposes. It does not attempt to define internal data capture or storage specifications for data producers, though some may find benefit in storing data in this format. Organizations within Minnesota are encouraged to adopt this standard for purposes of data exchange.

Sources of this Standard

This standard is derived mainly from the following sources: the Damage Assessment model developed at the Minnesota Department of Public Safety, the Esri Damage Assessment data model, the Minnesota Building Official Disaster Preparedness manual, FEMA damage assessment publications and HSEM damage assessment publications.

Compliance Notes

Organizations in Minnesota are encouraged to adopt and comply with this standard for purposes of data exchange. A damage assessment dataset that fully complies with this standard will consist of geospatial points with attribute fields specified in this standard. It will also comply with the inclusion, mixed case, abbreviation and domain specifications of this standard. Some data producing organizations that choose to comply with this standard do not collect all data included in the standard. Such organizations may choose to work toward full compliance over time.

Inclusion

Inclusion is a term used to explain the requirement for a field to be populated in a dataset to comply with the standard. Three types of inclusion are possible: Mandatory, Conditional, and Optional.

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.

Not all structures or damaged locations will have livestock or natural assets that need to be inventoried.

The cause of the damage will also guide in 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.

Mixed Case

Like other GAC standards, all field values in this standard will use a mixed case format. Some end users may want an all-caps format for a specific purpose. Data may be converted to all caps by end users if desired. It is more difficult to automatically convert all caps back to mixed case.

Abbreviations

All field values in this standard must be spelled out unless specifically defined otherwise in the field description. This is done to remove ambiguity and better align with other existing standards.

Domains

Several domain tables accompany this standard in a spreadsheet available at this link. To comply with this standard, a damage assessment dataset must use the codes from specified domains but it does not need to include the domain tables with the data. If a local value exists that is not included in a domain (e.g. a business type), it may be submitted to the MN Geospatial Advisory Council, Standards Committee to be included in the domain. Domains will be updated on a periodic basis, as needed. The date of the most recent change to each domain table is included in the spreadsheet.

Assessment Type and Phase

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.

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.

Assessment Phase

Assessment Phase 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 assessment phases. Providing three phases of increasing detail gives the evaluating agency the opportunity to use this standard to deploy evaluators with the detail needed at that moment and not overwhelm them with heavily detailed forms that they are unable to effectively complete. The three assessment phase are: Windshield, Preliminary/Initial, and Detailed.

Windshield

This is the most basic phase of assessment 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 phase of data collection does not contain the minimum elements needed for reporting to FEMA or HSEM. This phase would be used once.

Preliminary/Initial

This phase of assessment meets the requirements for initial damage reports to FEMA and HSEM in the event of a disaster. This assessment phase would be used once, all subsequent assessments would be Detailed.

Detailed

This is the most detailed phase of assessment that asks for all possible data elements that could be requested by FEMA or HSEM 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. This phase may also be repeated several times as recovery efforts progress.

Data Element Details

Appendix A: MN GAC Damage Assessment Standard Schema Spreadsheet

Appendix A is a spreadsheet available at this link showing the schema for this standard. It includes all data elements in the standard, with field name, type, width and other important information about each data element.

1. Incident Elements

1.1 Feature ID

Database Name	FEATUREID		
Data Type	Text	**Inclusion**	Mandatory
Width	36	**Domain**	
Examples			
Description	The unique ID for each record.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

1.2 Incident ID

Database Name	INCIDENTID		
Data Type	Text	**Inclusion**	Mandatory
Width	30	**Domain**	
Examples	20170611, 2020-FLOOD01		
Description	The unique ID for the overall incident/event.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

1.2 Incident Name

Database Name	INCID_NAME		
Data Type	Text	**Inclusion**	Mandatory
Width	255	**Domain**	
Examples	June 2017 Hail Event, Spring 2020 March Flood		
Description	The name of the overall incident/event.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

2. Evaluator Elements

2.1 Evaluator Name

Database Name	EV_NAME		
Data Type	Text	**Inclusion**	Conditional
Width	40	**Domain**	
Examples			
Description	The name of the user assigned to the inspection activity.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

2.2 Evaluator Email

Database Name	EV_EMAIL		
Data Type	Text	**Inclusion**	Conditional
Width	50	**Domain**	
Examples			
Description	The email of the user assigned to the inspection activity.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

2.3 Evaluator Phone

Database Name	EV_PHONE		
Data Type	Text	**Inclusion**	Conditional
Width	12	**Domain**	
Examples	XXX-XXX-XXXX		
Description	The primary phone of the user assigned to the inspection activity.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

2.4 Evaluator Agency

Database Name	EV_AGENCY		
Data Type	Text	**Inclusion**	Conditional
Width	255	**Domain**	
Examples			
Description	The agency of the user assigned to the inspection activity.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

2.5 Evaluation Date

Database Name	EVAL_DATE		
Data Type	Date	**Inclusion**	Mandatory
Width	Default	**Domain**	
Examples			
Description	The date the evaluation was performed.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

2.6 Case Number

Database Name	CASE_NUM		
Data Type	Text	**Inclusion**	Optional
Width	20	**Domain**	
Examples			
Description	The case number assigned to a single site that is being evaluated for the larger incident/event, if used locally.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

2.7 Door Hanger Reference Number

Database Name	DOORTAG		
Data Type	Text	**Inclusion**	Optional
Width	20	**Domain**	
Examples			
Description	The reference number for door hangers, if used.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

3. Damaged Location Elements

3.1 Inaccessible

Database Name	NO_ACCESS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	Is the area to be assessed accessible?		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.2 Private Road

Database Name	PRIV_ROAD		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	Indicates if the private road to the damaged area is out and not passable. Leave field blank if the road is public.		
Assessment Type	Residential, Commercial		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.3 Type of Home

Database Name	HOME_TYPE		
Data Type	Text	**Inclusion**	Conditional
Width	22	**Domain**	ResidentialHomeType
Examples	Single Family Detached, Duplex/Townhome, Condominium		
Description	The type of home inspected.		
Assessment Type	Residential		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.4 Type of Business

Database Name	BUS_TYPE		
Data Type	Text	**Inclusion**	Conditional
Width	26	**Domain**	BusinessType
Examples	Retail, Grocery, Restaurant		
Description	The type of business inspected.		
Assessment Type	Commercial		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.5 Damaged Location/Address

Database Name	LOC_ADD		
Data Type	Text	**Inclusion**	Mandatory
Width	150	**Domain**	
Examples	14955 50th Avenue South, 1 Main Street, Lift Station #30, Open Space Lot #6		
Description	The address number and street of the location damaged, or other description of the location if no address is assigned or identified.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.6 Location Unit Number

Database Name	LOC_UNIT		
Data Type	Text	**Inclusion**	Conditional
Width	5	**Domain**	
Examples	101, 3A, 1000		
Description	The unit number of the damaged location if applicable.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

3.7 Location City

Database Name	LOC_CITY		
Data Type	Text	**Inclusion**	Mandatory
Width	100	**Domain**	CTUName
Examples	Hibbing, Saint Paul, Rochester		
Description	The city in which the damaged structure is located.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.8 Location County

Database Name	LOC_CTY		
Data Type	Text	**Inclusion**	Mandatory
Width	40	**Domain**	CountyName
Examples	Dakota, Olmstead		
Description	The County in which the damaged structure is located.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

3.9 Location State

Database Name	LOC_STATE		
Data Type	Text	**Inclusion**	Mandatory
Width	2	**Domain**	StateCode
Examples	MN, ND, IA, SD, WI		
Description	The state in which the damaged structure is located.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

3.10 Location ZIP Code

Database Name	LOC_ZIP		
Data Type	Text	**Inclusion**	Mandatory
Width	5	**Domain**	
Examples	56560, 55403, 56763		
Description	The zip code in which the damaged structure is located.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

3.11 Location Parcel ID

Database Name	PARCELID		
Data Type	Text	**Inclusion**	Conditional
Width	30	**Domain**	
Examples	58.575.0010, 39000100077000, 2702924230008		
Description	The tax parcel identification number used to uniquely identify real property on the tax roll, if available.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

3.12 Location USNG

Database Name	USNG_COORD		
Data Type	Text	**Inclusion**	Mandatory
Width	20	**Domain**	
Examples	14T PS 6993, 15T WJ 03		
Description	The USNG coordinate value of the location per FEMA Directive 092-5.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

3.13 Habitable

Database Name	HABITABLE		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate whether the structure is habitable.		
Assessment Type	Residential		
Assessment Phase	Preliminary/Initial, Detailed		

3.14 Primary Residence

Database Name	PRIM_RES		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if this is a primary residence.		
Assessment Type	Residential		
Assessment Phase	Preliminary/Initial, Detailed		

3.15 Seasonal Residence

Database Name	SEASNL_RES		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if this is a seasonal residence.		
Assessment Type	Residential		
Assessment Phase	Preliminary/Initial, Detailed		

3.16 Number of Occupants

Database Name	NUM_OCC		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples	1, 5, 34		
Description	The number of occupants that are currently residing at the structure.		
Assessment Type	Residential		
Assessment Phase	Detailed		

3.17 Low Income

Database Name	LOW_INCOME		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if this is a low-income property.		
Assessment Type	Residential		
Assessment Phase	Preliminary/Initial, Detailed		

3.18 Number of Floors

Database Name	NUM_FLRS		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples	1, 3, 57		
Description	The number of floors in the structure.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

3.19 Basement

Database Name	BASEMENT		
Data Type	Text	**Inclusion**	Mandatory
Width	15	**Domain**	Basement
Examples	Finished, crawl space, none, unfinished		
Description	Indicates if the structure has a basement and the general description.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

4. FEMA Elements

4.1 FEMA Category

Database Name	FEMA_CAT		
Data Type	Text	**Inclusion**	Conditional
Width	35	**Domain**	FEMA_Category
Examples	CAT A, CAT B, CAT C, CAT D, CAT E, CAT F, CAT G, CAT H		
Description	FEMA damage category for evaluation of structures and facilities for public assistance.		
Assessment Type	Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

4.2 FEMA Category Description

Database Name	FEMA_CDESC		
Data Type	Text	**Inclusion**	Optional
Width	255	**Domain**	
Examples	Trees fell and crushed the playground equipment, the culvert underneath the roadway completely plugged causing erosion and collapse of the shoulder from water running over the road surface, sandbagging around the loading dock of the county building, placement of detour signs for roads closed due to flooding		
Description	Describe the structure and the type of damage according to FEMA damage categories.		
Assessment Type	Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

4.3 Primary Cause of Damage

Database Name	DAM_CAUSE		
Data Type	Text	**Inclusion**	Mandatory
Width	15	**Domain**	CauseDamage
Examples	Earthquake, Wildfire, Structure, Flood		
Description	FEMA classification of the primary cause of damage.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

4.4 Degree of Damage

Database Name	DAM_DEGREE		
Data Type	Text	**Inclusion**	Mandatory
Width	15	**Domain**	DegreeDamage
Examples	Inaccessible, Affected, Minor, Major, Destroyed		
Description	FEMA classification used to identify the extent of the damage.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

4.5 Description of Damage

Database Name	DAM_DESC		
Data Type	Text	**Inclusion**	Optional
Width	255	**Domain**	
Examples	Roof missing, multiple windows shattered/broken, etc.		
Description	A general description of the cause and damage to the structure and contents.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

5. People Elements

5.1 Owned/Rented

Database Name	OWN_RENT		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	Owned
Examples	Owned, Rented, Unknown, NA		
Description	Indicates if the structure is owned or leased by the occupant(s).		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

5.2 Owner Name

Database Name	OWN_NAME		
Data Type	Text	**Inclusion**	Mandatory
Width	40	**Domain**	
Examples	John Doe, Jane Doe		
Description	The name of the property owner.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

5.3 Owner Address

Database Name	OWN_MADD		
Data Type	Text	**Inclusion**	Mandatory
Width	150	**Domain**	
Examples	1 Main Street, 45 King Avenue		
Description	The mailing address of the owner. Only the street address potion of the mailing address.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.4 Owner Unit Number

Database Name	OWN_MUNIT		
Data Type	Text	**Inclusion**	Conditional
Width	5	**Domain**	
Examples	1, 1A, 100		
Description	Only the unit number portion of the unit information (i.e., no “Suite”, “Apt”, “Unit”, etc.)		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.5 Owner City

Database Name	OWN_MCITY		
Data Type	Text	**Inclusion**	Mandatory
Width	100	**Domain**	
Examples	Cottage Grove, Duluth, Rochester		
Description	The mailing city of the owner.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.6 Owner State

Database Name	OWN_MSTATE		
Data Type	Text	**Inclusion**	Mandatory
Width	2	**Domain**	StateCode
Examples	MN, FL, CO, TX		
Description	The two-letter abbreviation for the mailing state of the owner.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.7 Owner ZIP Code

Database Name	OWN_MZIP		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	
Examples	55122, 5506-6300		
Description	The mailing ZIP Code of the owner. Can include ZIP+4 digits, if available.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.8 Owner Primary Phone

Database Name	OWN_PRI_PH		
Data Type	Text	**Inclusion**	Conditional
Width	12	**Domain**	
Examples	XXX-XXX-XXXX		
Description	The primary phone number of the owner.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

5.9 Owner Secondary Phone

Database Name	OWN_SEC_PH		
Data Type	Text	**Inclusion**	Optional
Width	12	**Domain**	
Examples	XXX-XXX-XXXX		
Description	The secondary phone number of the owner.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.10 Owner Email

Database Name	OWN_EMAIL		
Data Type	Text	**Inclusion**	Optional
Width	50	**Domain**	
Examples	jdoe@gmail.com		
Description	The email address of the owner.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

5.11 Tenant Name

Database Name	TEN_NAME		
Data Type	Text	**Inclusion**	Conditional
Width	40	**Domain**	
Examples	John Q. Public		
Description	The name of the tenant if the person living at the structure is not the owner.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

5.12 Tenant Primary Phone Number

Database Name	TEN_PRI_PH		
Data Type	Text	**Inclusion**	Conditional
Width	12	**Domain**	
Examples	XXX-XXX-XXXX		
Description	The primary phone number of the tenant.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

5.13 Tenant Secondary Phone Number

Database Name	TEN_SEC_PH		
Data Type	Text	**Inclusion**	Conditional
Width	12	**Domain**	
Examples	XXX-XXX-XXXX		
Description	The secondary phone number of the tenant.		
Assessment Type	Residential, Commercial		
Assessment Phase	Detailed		

5.14 Tenant Email

Database Name	TEN_EMAIL		
Data Type	Text	**Inclusion**	Conditional
Width	50	**Domain**	
Examples	johnq@hotmail.com		
Description	The email address of the tenant.		
Assessment Type	Residential, Commercial		
Assessment Phase	Detailed		

5.15 Number Evacuated

Database Name	NUM_EVAC		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples	1, 2, 4		
Description	The number of persons evacuated from the structure or on the property.		
Assessment Type	Residential, Commercial		
Assessment Phase	Detailed		

5.16 Evacuation Location

Database Name	EVAC_LOC		
Data Type	Text	**Inclusion**	Conditional
Width	200	**Domain**	
Examples	Temporary Red Cross Shelter 1 Main Street, Central High School Auditorium, Stepping Stones Shelter, Crossings Church		
Description	The facility name and address of where evacuees are sheltered.		
Assessment Type	Residential, Commercial		
Assessment Phase	Detailed		

6. Damage Elements

6.1 Damage Observed

Database Name	DAMAGE_OBS		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A “Yes” or “No” flag to indicate if damage is observed.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

6.2 Main Floor Water Depth (inches)

Database Name	MAIN_WAT_D		
Data Type	Integer	**Inclusion**	Mandatory
Width	Short	**Domain**	
Examples	1, 13, 36		
Description	The depth of water on the main floor in inches rounded to the nearest whole number. No fraction or decimals is allowed. For example, 1.2 would be 1, 12.75 would be 13.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.3 Basement Water Depth (inches)

Database Name	BAS_WAT_D		
Data Type	Integer	**Inclusion**	Mandatory
Width	Short	**Domain**	
Examples	1, 13, 36		
Description	The depth of water in the basement in inches rounded to the nearest whole number. No fraction or decimals is allowed. For example, 1.2 would be 1, 12.75 would be 13.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.4 Duration of Flood Inundation

Database Name	DUR_FLOOD		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples	5, 20, 63		
Description	The number of days flood inundation has persisted.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Detailed		

6.5 Water Service Disruption

Database Name	WAT_DISRUP		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if water service has been disrupted.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.6 Sewer Service Disruption

Database Name	SEW_DISRUP		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if sanitary sewer service has been disrupted.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.7 Electrical Service Disruption

Database Name	ELEC_DISRUP		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if electrical service has been disrupted.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.8 Sewage Damage

Database Name	SEW_DAM		
Data Type	Text	**Inclusion**	Mandatory
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if there is damage caused by sewage.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.9 Damage to Land

Database Name	LAND_DAM		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if there is damage to the land at the site.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.10 Damage to Natural Assets

Database Name	NAT_DAM		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if there is damage to the natural assets of the site.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

6.11 Damage to Livestock

Database Name	LIVESTK_DAM		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if livestock was harmed.		
Assessment Type	Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

7. 911 Elements

7.1 Pre-Disaster Value

Database Name	PRE_VALUE		
Data Type	Real	**Inclusion**	Mandatory
Width	Double	**Domain**	
Examples	250650.54, 15423.90, 76000.00		
Description	The value of the structure before damage occurred.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

7.2 Estimated Structural Loss Amount

Database Name	STRUC_LOSS		
Data Type	Real	**Inclusion**	Conditional
Width	Double	**Domain**	
Examples	10000.00, 26300.70, 13100.56		
Description	The estimated loss in value to the structure.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

7.3 Estimated Content Loss Amount

Database Name	CONT_LOSS		
Data Type	Real	**Inclusion**	Conditional
Width	Double	**Domain**	
Examples	15000.00, 6500.50, 750.00		
Description	The estimated loss in value to the contents of the structure.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

7.4 Property Damage Repair Estimate

Database Name	REPAIR_EST		
Data Type	Real	**Inclusion**	Conditional
Width	Double	**Domain**	
Examples	10000.00, 26300.70, 13100.56		
Description	The estimated cost to repair damage to physical property.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Detailed		

7.5 Inventory Loss Estimate

Database Name	INV_LOSS		
Data Type	Real	**Inclusion**	Conditional
Width	Double	**Domain**	
Examples	6500.50, 750.00, 51.76		
Description	The estimated cost of inventory lost to damage.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Detailed		

8. Insurance Elements

8.1 Insured Structure/Facility

Database Name	STRUC_INS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate if the structure is insured.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

8.2 Insured Contents

Database Name	CONT_INS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate if the contents of the structure are insured.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

8.3 Renter's Insurance

Database Name	RENT_INS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate whether the renter's contents within the structure are covered under insurance.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

8.4 Flood Insurance

Database Name	FLOOD_INS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate whether additional coverage is available for flooding events.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

8.5 Wildland Fire Insurance

Database Name	WLDFRE_INS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate whether the structure/property is covered by wildland fire insurance.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

8.6 Insurance Deductible

Database Name	INS_DEDUCT		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate there is an insurance deductible.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

8.7 Business Continuity Coverage

Database Name	BUS_COVER		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if the business has continuity coverage.		
Assessment Type	Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

9. Service Elements

9.1 Service Disruption

Database Name	SERV_LOST		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag used to indicate if the structure is insured.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

9.2 Hours of Service Lost

Database Name	TIME_LOST		
Data Type	Integer	**Inclusion**	Conditional
Width	Long	**Domain**	
Examples	100, 256, 310		
Description	The estimated number of hours of service lost.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Detailed		

9.3 Total Number of Employees

Database Name	NUM_EMPLYE		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples	5, 50, 350, 751		
Description	The number of employees/volunteers that are normally present; includes full time, part time, seasonal, temporary.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

9.4 Business Open

Database Name	BUS_OPEN		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if the business is open at the time of evaluation.		
Assessment Type	Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

9.5 Business Closed Due to Disaster

Database Name	BUS_CLOSE		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if the business has closed due to the disaster.		
Assessment Type	Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

9.6 Number of Business Days Lost

Database Name	DAYS_LOST		
Data Type	Integer	**Inclusion**	Conditional
Width	Long	**Domain**	
Examples	10, 364, 12, 32		
Description	The number of operating business days lost due to the disaster.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

9.7 Estimated Sales Lost

Database Name	SALES_LOST		
Data Type	Real	**Inclusion**	Conditional
Width	Double	**Domain**	
Examples	6500.50, 750.00, 51.76		
Description	The estimated sales lost due to disaster in US Dollars.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

9.8 Disruption to Production Capacity

Database Name	PROD_DISRP		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate the business is disrupted because of damage to public infrastructure.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

9.9 Infrastructure Damage Disrupting Access

Database Name	INFRA_DISRP		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate access to the business being disrupted by damage to public infrastructure.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

9.10 Private Property Damage Disrupting Access

Database Name	PRIVP_DISRP		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate access to the business being disrupted by private property damage.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

9.11 Staff Disruption Due to Disaster

Database Name	STAFF_DISRP		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if there has been a disruption in staffing due to the disaster.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

10. Casualty Elements

10.1 Number of Dead

Database Name	NUM_DEAD		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples			
Description	The number of fatalities in the structure or on the property.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

10.2 Number of Injured

Database Name	NUM_INJURE		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples			
Description	The number of injuries in the structure or on the property.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

10.3 Number of Missing

Database Name	NUM_MISSNG		
Data Type	Integer	**Inclusion**	Conditional
Width	Short	**Domain**	
Examples			
Description	The number of missing who reported to be in the structure or on the property.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

11. Assistance Elements

11.1 Applied for SBA Loan Assistance

Database Name	APP_SBA_LN		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate that SBA loan assistance has been applied for.		
Assessment Type	Residential, Commercial		
Assessment Phase	Detailed		

11.2 Applied for Quick Start

Database Name	APP_QKSTRT		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate that a Quick Start has been applied for.		
Assessment Type	Residential		
Assessment Phase	Detailed		

11.3 Applied for FEMA-IA

Database Name	APP_FEMAIA		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate the FEMA-IA has been applied for.		
Assessment Type	Residential		
Assessment Phase	Detailed		

11.4 Request for State Assistance

Database Name	REQ_STASST		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate state assistance has been requested.		
Assessment Type	Commercial, Public Infrastructure		
Assessment Phase	Detailed		

11.5 Request for Federal Assistance

Database Name	REQ_FD_ASST		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate that federal assistance has been requested.		
Assessment Type	Public Infrastructure		
Assessment Phase	Detailed		

11.6 Request for MN DEED

Database Name	REQ_DEED		
Data Type	Text	Inclusion	Conditional
Width	10	Domain	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate that technical assistance has been requested from the Minnesota Department of Employment and Economic Opportunity.		
Assessment Type	Commercial		
Assessment Phase	Detailed		

12. Site Action Elements

12.1 Muck Out

Database Name	MUCKOUT		
Data Type	Text	Inclusion	Mandatory
Width	10	Domain	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if cleaning the muck out is needed.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

12.2 Debris Removal

Database Name	DEBRIS_REM		
Data Type	Text	Inclusion	Mandatory
Width	10	Domain	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate debris removal is needed.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

12.3 Sheltering

Database Name	SHELTERING		
Data Type	Text	Inclusion	Mandatory
Width	10	Domain	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate sheltering is needed.		
Assessment Type	Residential		
Assessment Phase	Preliminary/Initial, Detailed		

12.4 Outreach

Database Name	OUTREACH		
Data Type	Text	Inclusion	Mandatory
Width	10	Domain	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate outreach assistance is needed.		
Assessment Type	Residential, Commercial		
Assessment Phase	Preliminary/Initial, Detailed		

12.5 Sandbags Placed

Database Name	SANDBAGS		
Data Type	Text	**Inclusion**	Conditional
Width	10	**Domain**	YesNoUnknown
Examples	Yes, No, Unknown		
Description	A flag to indicate if sandbags were placed.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

12.6 Number of Sandbags

Database Name	NUM_SANDBG		
Data Type	Integer	**Inclusion**	Conditional
Width	Long	**Domain**	
Examples	500, 10,000		
Description	A count of sandbags placed.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Preliminary/Initial, Detailed		

13. Business Elements

13.1 Comments

Database Name	COMMENTS		
Data Type	Text	**Inclusion**	Optional
Width	255	**Domain**	
Examples			
Description	A general comments field for additional notes.		
Assessment Type	Residential, Commercial, Public Infrastructure		
Assessment Phase	Windshield, Preliminary/Initial, Detailed		

Appendix A: MN GAC Damage Assessment Data Standard Schema

Appendix A is a spreadsheet available at this link showing the schema for this standard. It includes all the data elements in the standard, with field name, type, width and other important information about each data element.

Appendix B: MN GAC Standards Domains

Appendix B is a spreadsheet available at this link showing all the domain tables used in Minnesota Geospatial Advisory Council standards. It includes a tab showing when each domain table was last updated.

Appendix C: MN GAC Standard Lookup Tables

Appendix C is a spreadsheet available at this link showing all the lookup tables used in Minnesota Geospatial Advisory Council standards. It includes a tab showing when each table was last updated.