

# NG9-1-1 Community Name Validation

## Overview

The first phase of Minnesota's Next Generation 9-1-1 data preparation effort focuses on the community names in three input data sets, which will be scrutinized for accuracy, continuity and adherence to state standards.

The three data sets to be evaluated for each PSAP and County are: Road Centerline (RCL), Address Points (ADP) and the Master Street Address Guide (MSAG). This process has been designed to address the following questions:

1. Is every community name in the MSAG represented in both the Road Centerline and the Address Point geospatial data files?
2. Under what conditions should a change to a Community Name in any of those input data sets be required?
3. Who should determine when a change should be made?
4. What process should the affected stakeholders take to assure a change is permanently reflected in their source data?

When Community Name conflicts and/or questions are identified, arriving at an unambiguous solution involves identifying and presenting differences – caused by naming conflicts – to appropriate 9-1-1 GIS Points of Contact, MSAG Coordinators and Address Authorities for resolution.

## Goals & Objectives

- Assure that every MSAG Community Name (CN) matches the corresponding Road Centerline CN
- Assure that every ADP CN matches the corresponding RCL CN
- Assure that when an ADP CN is also found in the MSAG, that the two CNs match.
- Generate and use a *Community Name Condition Report* to identify unique CNs in the current MSAG, RCL and ADP data files and highlight inconsistencies
- Clearly understand what CN standards or conventions are being used in each relevant data file
- Assure that CN consistency is enforced across data sets being scrutinized as part of this NG9-1-1 processing step. Where inconsistencies exist, authoritative resolution will be sought
- Identify where the same CN is not consistently used across all data files and to consider harmonizing those names as is required in the NG9-1-1 system

## Scope

Source data required for this processing step, NG9-1-1 data fields impacted by this processing step, possible conventions and standards which may be used to populate those data fields, and other data sets impacted by this process further down the development path are described below:

### Required Input Data for each PSAP

1. Parsed Road Centerline Data
  - a. Source: 9-1-1 GIS Point of Contact (POC)
  - b. Pre-processing: Run through SYSTEM Address Parsing Script
2. Parsed Address Point Data
  - a. Source: 9-1-1 GIS POC
  - b. Pre-processing: Run through SYSTEM Address Parsing Script
3. Parsed MSAG Data
  - a. Source: Tabular 9-1-1 Data Provider
  - b. Pre-processing: Strip out miscellaneous MSAG entries associated with shell records, etc.
  - c. Pre-processing: Run through SYSTEM Address Parsing Script
4. CTU Community Name Domain List (see *Common Community Naming Conventions* below)
5. Postal Community Name Domain List (see *Common Community Naming Conventions* below)

### Data Fields Affected

#### Road Centerline

Descriptive Name	Field Name	Mandatory, Conditional, Optional	Type	Description
City/Township/ Unorganized Territory Left	CTU_NAME_L	M	Text	The name of the city, township, or unorganized territory (CTU) on the left side of the road segment based on the digitized direction. Example: MAPLE GROVE
City/Township/ Unorganized Territory Right	CTU_NAME_R	M	Text	The name of the city, township, or unorganized territory (CTU) on the right side of the road segment based on the digitized direction. Example: MAPLE GROVE
Postal Community Name Left	POSTCOMM_L	O	Text	The Postal Community name on the left side of the street segment. Example: SANDSTONE
Postal Community Name Right	POSTCOMM_R	O	Text	The Postal Community name on the right side of the street segment. Example: BENSON
MSAG Community Name Left	MSAG_C_L	M	Text	MSAG Community name for the addresses on the left side of street based on the digitized direction of the street arc. Mandatory in Legacy/Transitional 9-1-1 Systems, but will not be used in a full NG9-1-1 implementation.
MSAG Community Name Right	MSAG_C_R	M	Text	MSAG Community name for the addresses on the right side of street based on the digitized direction of the street arc. Mandatory in Legacy/Transitional 9-1-1 Systems, but will not be used in a full NG9-1-1 implementation.

## Address Point

Descriptive Name	Field Name	M/C/O	Type	Description
City/Township/ Unorganized Territory	CTU_NAME	M	Text	The name of the city, township, or unorganized territory (CTU) associated with the given address. Example: MONTEVIDEO
MSAG Community Name	MSAG_C	M	Text	The city name associated with the given address in the MSAG. Example: WINDOM
Postal Community Name	POSTCOMM	O	Text	The city name as defined by the US Postal Service in the <b>USPS City State File Product</b> <sup>1</sup> . Example: ST PAUL

## MSAG

Descriptive Name	Field Name	M/C/O	Type	Description
MSAG Community Name	COMMUNITY	M	Text	The city name associated with the given address in the MSAG. Example: WINDOM

## Common Community Naming Conventions

There may be one or more CN type present in the geospatial data sets. Three examples:

Convention Type	Description
CTU Community Name	A subset of the federal <b>Geographic Names Information System (GNIS)</b> <sup>2</sup> database containing all Minnesota entries for cities, townships and Census-defined unorganized territories (CTU), both active and historical
Postal Community Name	The U.S. Postal Service provides a default city name for all 5-digit postal zip codes in Minnesota in a database referred as the <i>City State File Product</i> . Those default names may have been used as Community Names in E9-1-1 systems.
MSAG Community	The Community Name provided in the corresponding Master Street Address Guide (MSAG). Note: In the MSAG (and ALI) there is a single CN field that could be populated with the Postal Community Name or the CTU Community Name.

## Dependencies

At this stage in NG9-1-1 data preparation processing, Community Name Validation involves three data stores: MSAG, Road Centerlines and Address Points. It is anticipated that future validation may also need to be performed on Community Name data fields within the ALI database and the Emergency Services Boundaries data set, including: Service Universal Resource ID (URI) and Agency vCard URI.

<sup>1</sup> See: **Minnesota Next Generation 9-1-1 GIS Data Standards: Appendices; Postal Code**, Page 15.

<sup>2</sup> <http://geonames.usgs.gov/>

## Stakeholders

### Roles & Responsibilities

The stakeholders directly involved in the CN validation process include:

PSAP Manager	The entity responsible for managing 9-1-1 Service for the communities within the PSAP Serving area, including communicating with Response Agencies, MSAG Coordinator(s), GIS Points of Contact, Address Authorities, and State/Regional/Local government agencies, as well as CAD, mapping, and other vendors, on 9-1-1 issues to ensure accurate and timely call routing, location identification, and response; Assures that the MSAG Coordinator, 9-1-1 GIS POC and Address Authorities are working together and making corrections in a timely manner.
9-1-1 GIS Point of Contact	The entity responsible for submitting geospatial data to the State of Minnesota to be used for NG9-1-1 service for a specified area. Responsible for receiving CN Condition Reports and consulting with Addressing Authorities to identify and make corrections to CNs in geospatial data. This is typically a county GIS department.
MSAG Coordinator	Upon request from the 9-1-1 GIS POC, reviews discrepancies between MSAG CNs and those in geospatial data and corrects them in the MSAG when necessary.
Addressing Authority	The final decision maker for discrepancies or changes to a CN if 9-1-1 GIS POC or MSAG Coordinator are unable to resolve
Spatial Integration Operator	Responsible for scrutinizing data sets, generating the CN Condition Reports, and identifying where CNs are different in GIS files vs. MSAG, facilitating their repair with 9-1-1 GIS POC. The current SIO for Minnesota's NG9-1-1 project is MnGeo.
SYSTEM	The automated processes developed to manage NG9-1-1 data. Developed and operated primarily by the Spatial Integration Operator.

### RACI Model

R	Responsible	Does the work
A	Accountable	Decision maker (only one role is accountable for a given task)
C	Consulted	Must be consulted prior to the work and provides input
I	Informed	Must be notified of the outcome

Task	PSAP Manager	MSAG Coordinator	Addressing Authority	9-1-1 GIS POC	SIO
Obtain street centerline and address point data sets				A	R
Obtain MSAG data set		A			R
Generate CN condition report	I			I	A
Review condition report for discrepancies in MSAG and GIS data and resolve GIS errors when necessary	I	C		A	I
Review condition report for discrepancies in MSAG and resolve them	I	R		A	I
Resolve discrepancies when 9-1-1 GIS POC or MSAG Coordinator cannot	I	I	R	A	I
If applicable, make changes to GIS data	I	I		A	I
If applicable, make changes to MSAG data	I	A		I	I

## Assumptions

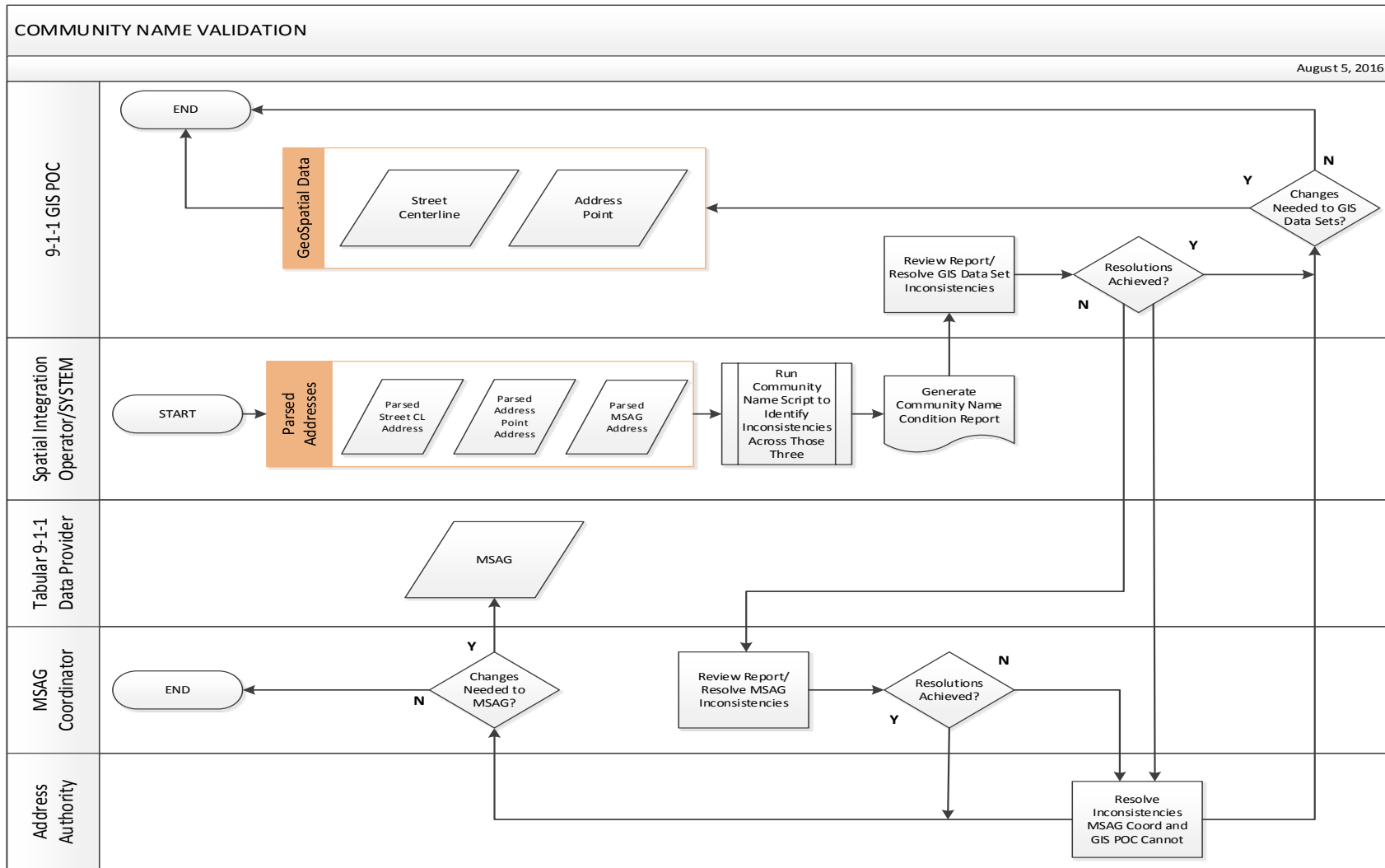
- Community name validation involves name usage only. An authoritative boundary is not being used to spatially identify a community's areal domain in this process.
- Long-term intent of this effort includes
  - Moving toward the standardization and normalization of Community Names in all data sets internal to Minnesota's NG9-1-1 system (for use in LVF and ECRF functions)
  - The development of a standardized geospatial boundary data set for Cities, Townships and Unorganized Territories (CTU) for all of Minnesota's civil divisions.
- MSAG CN will be captured and retained in GIS data sets for use during the transition to NG9-1-1

## Risks

- Developing and adhering to a single, well-defined CN standard has been identified as a long-term goal during this phase of the project. Currently, the community name contained in MSAG files may be the Postal CN, the CTU name, something else altogether, or a combination thereof. The conventions used for MSAG CNs vary between 9-1-1 systems and 9-1-1 service providers throughout the State. The MSAG Community designation, therefore, does not constitute a reliable statewide standard.
- MnGeo has championed a statewide CTU code and name list, but has never systemically tested the results for completeness or kept it up-to-date.
- Maintenance of the statewide CTU code and name list requires persistent synchronization with federal (i.e.: USGS and Bureau of the Census) offices.<sup>3</sup>

<sup>3</sup> A good example might be the difficulty the MN Office of the State Demographer had determining when/if federal codes had been created for the City of Rice Lake, St. Louis County, which was incorporated in October 2015.

# Business Processes



## Process

### Processing required prior to Community Name Validation

1. Access to the following PSAP data sets is required by the SIO:
  - 1.1. Road Centerlines      9-1-1 GIS POC
  - 1.2. Address Points      9-1-1 GIS POC
  - 1.3. MSAG      Tabular 9-1-1 Data Provider
2. Miscellaneous records in MSAG related to shell records, etc. are removed by the SIO
3. An Address Parsing Script is run by the SIO with appropriate output fields identified for each of the three input data sets

### Processing that is part of Community Name Validation

#### Kickoff Condition Report

1. A Community Name script is run by the SIO against the three parsed files described above that looks only at CNs and generates a unique list of community names found in each data set and generates a KICKOFF CONDITION REPORT with the following outputs:
  - 1.1. **TAB: COVER PAGE:** Report Title, Sponsoring Agencies and list of summary statistics for the following evaluation criteria in the study area:
    - 1.1.1. Number of MSAG Community Names
    - 1.1.2. MSAG Community Names that are not in Centerline Data
    - 1.1.3. MSAG Community Names that are not in Address Point Data
    - 1.1.4. Number of Address Point Community Names
    - 1.1.5. Address Point Community Names that are not in Centerline Data
    - 1.1.6. Address Point Community Names that are not in MSAG Data
    - 1.1.7. Number of Centerline Community Names
    - 1.1.8. Centerline Community Names that are not in Address Point Data
    - 1.1.9. Centerline Community Names that are not in MSAG Data
  - 1.2. **TAB: COMPARE**
    - 1.2.1. MSAG COMMUNITY NAMES: a complete list of MSAG CNs according to the MSAG data field labeled "COMMUNITY"
      - 1.2.1.1. With no duplicates
      - 1.2.1.2. Sorted alphabetically
      - 1.2.1.3. Including misspellings

- 1.2.1.4. With table cells highlighted in red where no MSAG CN corresponds with CNs in either the RCL or ADP CN fields
  - 1.2.2. CENTERLINE COMMUNITY NAMES: a complete list of RCL CNs from the appropriate source data field(s). In the KICKOFF REPORT, a separate column is presented for each field in the source file that contains RCL CNs
    - 1.2.2.1. Aligned in the same row as the corresponding MSAG name, if there is a match
    - 1.2.2.2. With table cells highlighted in red where no RCL CN corresponds with CNs in either the MSAG or ADP CN fields
  - 1.2.3. ADDRESS POINT COMMUNITY NAMES: a complete list of ADP CNs from the appropriate source data field(s) listed (in the KICKOFF REPORT, a separate column is presented for each field in the source file that contains ADP CNs)
    - 1.2.3.1. Aligned in the same row as matching entries in previous two lists, if there are matches
    - 1.2.3.2. Highlight any empty cells in the ADP CN list that represent names missing in this list but existing in the MSAG and/or RCL lists
  - 1.2.4. CTU COMMUNITY NAME:
    - 1.2.4.1. The NG9-1-1 system will include a national standard Community Name adapted from the U.S. Board on Geographic Names for features in the Geographic Names Information System (GNIS) Feature Class = CIVIL (primarily cities, townships, unorganized territories (CTUs) and tribal lands)
    - 1.2.4.2. If a formal CTU CN is found within any of the preceding CN lists, that CTU name is captured in this column on the same line as corresponding CNs from any previous lists
    - 1.2.4.3. If there is no matching CTU found, the blank table cell is highlighted red
  - 1.2.5. POSTAL COMMUNITY NAME:
    - 1.2.5.1. If there is a legitimate Preferred Postal CN as defined by the USPS within any of the preceding CN lists, that Postal name is captured in this column on the same line as a corresponding CN
    - 1.2.5.2. If there is no matching Postal CN found, the blank table cell is highlighted grey
  - 1.2.6. CONDITION: Each line in the Condition Report will contain one or more of seven (7) Condition Codes, which are described in a table located on the Report's LEGEND tab
  - 1.2.7. 9-1-1 GIS POC RESOLUTIONS (ACTION TAKEN): This column is reserved for remarks from the 9-1-1 GIS POC regarding action taken in response to the condition codes described in 1.2.6 above
- 1.3. **TAB: UNIQUE\_NAMES** – Alphabetized lists of unique CNs found in the following categories for the County/PSAP being tested:
- 1.3.1. MSAG COMMUNITY NAMES: all unique CNs found in the County's MSAGs



- 1.3.2. CENTERLINE COMMUNITY NAMES: all unique CNs found in the RCL file provided by the County's 9-1-1 GIS POC
  - 1.3.3. ADDRESS POINT COMMUNITY NAMES: all unique CNs found in the ADP file provided by the County's 9-1-1 GIS POC
  - 1.3.4. CTU COMMUNITY NAMES: the domain list of all CTU names provided in the federal GNIS, but in a format following the **Minnesota Next Generation 9-1-1 GIS Data Standards**
  - 1.3.5. POSTAL COMMUNITY NAMES: the list of USPS Preferred Community Names discovered in the three source files being analyzed.
- 1.4. **TAB: LEGEND** for Condition Codes (See Item 1.2.6 above)
- 1.4.1. 1. Okay  
This Community Name appears to be valid and synchronized among the MSAG, RCL, and ADP files
  - 1.4.2. 2. Wildcard or misspelling  
This MSAG Community Name is not found in the county geospatial data or in either the CTU or Postal CN domains and may be a unique customized (wildcard) name; It is also possible this MSAG CN may be misspelled
  - 1.4.3. 3. CTU or Postal Name Outside County  
This Community Name is a valid CTU or Postal CN, which does not exist in this county
  - 1.4.4. 4. No MSAG Name or Invalid 9-1-1 name in RCL or ADP  
This Community Name is in the RCL and/or the ADP, but:  
    - there is no matching CN in the MSAG, or
    - it is not used for 9-1-1 addressing. (Note: This cannot be determined until the county confirms they include non-911 CNs in their GIS files. This condition type will go away after the non-911 CNs migrate to RCL and ADP fields not validated for 9-1-1 use)
  - 1.4.5. 5. No RCL Name Matching ADP  
This Community Name was found in the ADP, but there is no matching CN in the RCL
  - 1.4.6. 6. Name missing in RCL or ADP  
Community Name missing in RCL or ADP
  - 1.4.7. 7. Add CTU Name  
No CTU found for this record. Add valid CTU name in CTU Community Name column

## Response to the Kickoff Condition Report

2. The following process will be used to validate and synchronize Community Names:
  - 2.1. The SIO will present a CN Condition Report to the appropriate 9-1-1 GIS POC to address a specific set of inconsistencies
  - 2.2. The 9-1-1 GIS POC will review condition codes in that report and determine a course of action to resolve the flagged situation. Once a decision is made that requires a change in the source data, that information is returned to the SIO in one of the following ways:
    - 2.2.1. 9-1-1 GIS POC makes the change directly in the data sets, which is presented to the SIO for reprocessing
    - 2.2.2. 9-1-1 GIS POC sends a written description of their change decision to the SIO (see 1.2.7 above)
  - 2.3. If a decision cannot be made, the 9-1-1 GIS POC will consult the MSAG Coordinator and Addressing Authority
    - 2.3.1. The Addressing Authority will be requested to provide a decision
    - 2.3.2. When a decision has been arrived at, the Addressing Authority will send the results to the MSAG Coordinator and the 9-1-1 GIS POC
  - 2.4. If a satisfactory decision cannot be achieved for a particular CN, then:
    - 2.4.1. The reason for the variation will be documented
    - 2.4.2. An agreeable alternative CN will be determined, and
    - 2.4.3. The MSAG Community Name domain list will be amended to include the new entry (See page 10 of the Minnesota Next Generation 9-1-1 GIS Data Standards)
  - 2.5. Add new Fields to RCL and ADP files
    - 2.5.1. If they don't already exist, the 9-1-1 GIS POC will add and populate Municipality and MSAG Community Name fields to its RCL and ADP geospatial data files
    - 2.5.2. If it doesn't already exist, the 9-1-1 GIS POC may add and populate a Postal Code Community Name field to its RCL and ADP geospatial data files at its discretion
  - 2.6. Updated data files will be retested and issued a new report – a Follow-up Condition Report

## Follow-up Condition Report

3. The Community Name script is run again by the SIO to check changes made as a result of recommendations in the Kickoff Condition Report and a new and different report, the FOLLOW-UP CONDITION REPORT, is generated with the following outputs:
  - 3.1. **TAB: COVER PAGE:** Report Title, Sponsoring Agencies, and list of summary statistics for the following evaluation criteria in the study area:
    - 3.1.1. MSAG Community Name Statistics
      - 3.1.1.1. Total number of MSAG Community Names
      - 3.1.1.2. Number of Road Centerline Community Name mismatches

- 3.1.1.3. Number of Address Point Community Name mismatches
  - 3.1.2. CTU Community Name Statistics
    - 3.1.2.1. Number of Road Centerline mismatches with CTU List
    - 3.1.2.2. Number of Address Point mismatches to CTU List
    - 3.1.2.3. Number of Address Point mismatches to Road Centerline
  - 3.1.3. Postal Community Name Statistics
    - 3.1.3.1. Number of Road Centerline mismatches to Postal List
    - 3.1.3.2. Number of Address Point mismatches to Postal List
    - 3.1.3.3. Number of Address Point mismatches to Road Centerline
- 3.2. **TAB: MSAG CN**
  - 3.2.1. MSAG COMMUNITY NAMES (see 1.2.1 above)
  - 3.2.2. CENTERLINE MSAG COMMUNITY NAMES (see 1.2.2 above)
  - 3.2.3. ADDRESS POINT MSAG COMMUNITY NAMES (see 1.2.3 above)
  - 3.2.4. CONDITION (see 1.2.6 above)
  - 3.2.5. 9-1-1 GIS POC COMMENTS – This field is reserved for comments provided by the 9-1-1 GIS POC at its discretion
- 3.3. **TAB: CTU CN (MUNICIPALITY)**
  - 3.3.1. CTU COMMUNITY NAMES (see 1.2.4 above)
  - 3.3.2. CENTERLINE CTU COMMUNITY NAMES (see 1.2.2 above)
  - 3.3.3. ADDRESS POINT CTU COMMUNITY NAMES (see 1.2.3 above)
  - 3.3.4. CONDITION (see 1.2.6 above)
  - 3.3.5. 9-1-1 GIS POC COMMENTS (see 3.2.5 above)
- 3.4. **TAB: POSTAL CN**
  - 3.4.1. POSTAL COMMUNITY NAME (see 1.2.5 above)
  - 3.4.2. CENTERLINE POSTAL COMMUNITY NAME (see 1.2.2 above)
  - 3.4.3. ADDRESS POINT POSTAL COMMUNITY NAME (see 1.2.3 above)
  - 3.4.4. CONDITION (see 1.2.6 above)
  - 3.4.5. 9-1-1 GIS POC COMMENTS (see 3.2.5 above)
- 3.5. **TAB: UNIQUE\_NAMES** – Alphabetized lists of unique CNs found in the following categories for the County/PSAP being tested:
  - 3.5.1. MSAG COMMUNITY NAMES: all unique CNs found in the County’s MSAGs

- 3.5.2. CENTERLINE COMMUNITY NAMES: between one and three columns, each column containing all unique CNs found in the RCL file provided by the County's 9-1-1 GIS POC grouped by type: MSAG community name, CTU community name, Postal community name
- 3.5.3. ADDRESS POINT COMMUNITY NAMES: between one and three columns, each column containing all unique CNs found in the ADP file provided by the County's 9-1-1 GIS POC grouped by type: MSAG community name, CTU community name, Postal community name
- 3.5.4. CTU COMMUNITY NAMES: the domain list of all CTU names provided in the federal GNIS, but in a format following the Minnesota Next Generation 9-1-1 GIS Data Standards
- 3.5.5. POSTAL COMMUNITY NAMES: the list of USPS Preferred Community Names discovered in the three source files being analyzed.
- 3.6. **TAB: LEGEND** describing the Condition Codes referenced in 3.2.4, 3.3.4, and 3.4.4. above (see 1.4 above)

#### Response to the Follow-up Condition Report

- 4. The following process will be used to validate and synchronize Community Names:
  - 4.1. The SIO will present a CN Follow-up Condition Report to the appropriate 9-1-1 GIS POC
  - 4.2. The 9-1-1 GIS POC will review all condition codes in that report and determine a course of action to resolve each flagged situation.
  - 4.3. Once a decision is made that requires a change in the source data, the 9-1-1 GIS POC makes the change directly in the data sets.
  - 4.4. After all flagged conditions have been addressed, the 9-1-1 GIS POC will present the modified geospatial data files to the SIO for reprocessing.

#### Issues

- 1. In the past, MSAG and local Road Centerline and Address Point data sets have not been governed by an explicit Community Name domain. Because of this uncontrolled situation, it has been possible for more than one Community Name to represent a single geography. The NG9-1-1 environment will work more efficiently if this ambiguity is eliminated.
- 2. Upper case and proper case discrepancies exist – this is an issue that cannot easily be standardized because local GIS agencies may need both.
- 3. The delineation of Unorganized Territories differs modestly between the federal Geographic Names Information System (GNIS) and individual Minnesota Counties that manage those regions. An accepted statewide resolution should lean heavily toward the needs of the affected counties.
- 4. PSAP serving areas may extend beyond county borders and, as a result, may include community names in their MSAG for areas outside the extent of the county GIS datasets. Similarly, there may be communities within a county GIS dataset that may be served by other than that county's PSAP.

## Deliverables

- Appropriate and consistent Community Name field content (CTU Name, MSAG Community, and Postal Community) in the geospatial data files used for NG9-1-1.
- Updated community name domains for NG9-1-1

## Approvals

The purpose of this document is to provide all NG9-1-1 stakeholders involved in Community Name data preparation with detailed processing and conflict resolution instructions. It is intended to help reach a satisfactory level of mutual agreement between stakeholders, the project manager and the project sponsors on the objectives, procedures and results for this phase of the project before significant resources are committed and expenses incurred.

Signed approval below signifies acceptance of the content of this document and also indicates agreement that satisfactory accomplishment of the items stated herein agree with the project's scope and plan.

Role	Name	Signature	Date

## Document History

Date	Version ID	Description	Author
4/22/2016	0.1	Notes taken at exploratory meeting with Iten, Haferman and Cialek on this topic	C. Cialek
4/26/2016	0.2	Expanded draft document prepared for review	C. Cialek
5/3/2016	0.3	After 5/3/16 edit session with Haferman and Kim, updated draft document prepared for review	C. Cialek
5/6/2016	0.4	After 5/5/16 final edit session with Haferman and Kim, updated draft document, including basic requirements	C. Cialek
5/16/16	0.5	After 5/12/16 conversation with Haferman and Kim, updated Business Process diagram	C. Cialek
5/27/16	0.6	Incorporated Iten's comments. Incorporated Ross's comments except those referencing expanded processing in anticipation of clarifying meeting scheduled for 05/31.	A. Iten, D. Ross, C. Cialek
7/8/2016	0.7	Incorporated edits discussed at 7/1 Kick-Off meeting document discussion with Iten	C. Cialek
7/18/2016	0.8	Incorporated all edit changes coming about through detailed discussions with Iten and Haferman	A. Iten, J. Haferman, C. Cialek
8/1/2016	0.9	MESB reviews document	M. Broman
8/10/2016	1.0	MESB edits incorporated in final version 1	A. Iten, J. Haferman, C. Cialek
10/7/2016	1.1	Edits to PROCESS section incorporating new Condition Report format; addition of Condition Report response section; addition of detailed Approvals section; Deletion of Requirements section (to be maintained under different cover)	A. Iten, C. Cialek
10/13/2016	2.0	Edits complete	A. Iten, C. Cialek
11/23/2016	2.1	Edits to add Follow-up Condition Report instructions to Process; reduce number of condition codes from 8 to 7	A. Iten, J. Haferman, D. Sajevic, C. Cialek
12/05/2016	2.2	Edits made from supplemental November 29 review meeting	C. Cialek
12/28/2016	3.0	Edit made to 1.4.2 on Page 9 and footnote inserted to reference USPS City State File Product on Page 3	C. Cialek