

# Capital Area Council of Governments Interlocal Agreement for 9-1-1 Geographic Information System Database Management FY 2025

## 1. Parties and Purpose

- 1.1. The Capital Area Council of Governments ("CAPCOG") is a regional planning commission and political subdivision of the State of Texas organized and operating under the Texas Regional Planning Act of 1965, as amended, chapter 391 of the Local Government Code. One of CAPCOG's functions includes the operation of the Capital Area Emergency Communications District ("CAECD" or "the District") a regional emergency communications district of the State of Texas organized and operating under Chapter 772, Subchapter G of the Health and Safety Code, as amended. On behalf of the District, CAPCOG desires to ensure the highest quality in its 9-1-1 Geographic Information System (GIS) data in order to ensure the success of the region's transition to Next Generation 9-1-1 emergency communications service within the District.
- 1.2. Williamson County ("PUBLIC AGENCY") is a Texas County that has agreed to participate in maintaining and updating the district's 9-1-1 GIS database and exercises its authority under Section 251.013 of the Texas Transportation Code to name public roads and assigning address numbers to property located in unincorporated areas of the county.
- 1.3. This Interlocal Agreement (ILA) is entered into between CAPCOG and PUBLIC AGENCY under Chapter 791 of the Texas Government Code in order to compensate the PUBLIC AGENCY for the work required to maintain and update the district's 9-1-1 GIS database.
- 1.4. For the purpose of carrying out CAPCOG's duties and obligations under this agreement, the parties understand and agree that references to CAPCOG includes its employees, officers, directors, volunteers, agents (including the Capital Area Council of Governments – CAPCOG), and their representatives, individually, officially, and collectively.

## 2. Goods and Services

- 2.1. PUBLIC AGENCY agrees to carry out the scope of work in Attachment A in accordance with the data requirements in Attachment B.

## 3. Cooperative Purchasing

- 3.1. CAPCOG may periodically identify opportunities to cooperatively purchase goods or services for the 9-1-1 GIS data for participating organizations.
- 3.2. If PUBLIC AGENCY chooses to participate in a cooperative purchase of 9-1-1 GIS goods or services organized by CAPCOG, PUBLIC AGENCY agrees that CAPCOG may deduct the cost of PUBLIC AGENCY's share of those goods or services from the contract price otherwise payable to the PUBLIC AGENCY.

4. Effective Date and Term of Contract

- 4.1. This contract takes effect October 1, 2024, and terminates on September 30, 2025, unless terminated earlier under Section 10.

5. Contract Price and Payment Terms

- 5.1. For work performed under this agreement, CAPCOG agrees to compensate PUBLIC AGENCY an amount not to exceed \$490,870.25.
- 5.2. PUBLIC AGENCY agrees to invoice CAPCOG as follows for deliverables as described in Attachment A for these quarters:

October 1, 2024 – December 31, 2024: \$122,717.56, invoice due by close of business, Monday, January 13, 2025;

January 1, 2025 – March 31, 2025: \$122,717.56, invoice due by close of business, Monday, April 7, 2025;

April 1, 2025 – June 30, 2025: \$122,717.56, invoice due by close of business, Monday, July 7, 2025; and

July 1, 2025 – September 30, 2025: \$122,717.57, invoice due by close of business, Monday, October 13, 2025.

Timely submission of invoices will be considered in CAPCOG's evaluation of PUBLIC AGENCY's performance of this ILA, and CAPCOG reserves the right to reject any invoice submitted more than 90 days after the end of each quarter.

- 5.3. PUBLIC AGENCY agrees to submit a performance report along with each invoice in accordance with the scope of work in Attachment A. If CAPCOG determines that PUBLIC AGENCY has not met performance expectations described in Attachment A, CAPCOG will provide a written explanation to PUBLIC AGENCY, and PUBLIC AGENCY agrees to provide, within five business days, a comprehensive explanation of the performance deficiency and a plan for achieving performance targets during the next quarter.
- 5.4. CAPCOG agrees to pay invoices within 30 days after receiving a correct invoice, after CAPCOG determines that the PUBLIC AGENCY has fulfilled its obligations for the quarter in accordance with Attachment A.
- 5.5. CAPCOG reserves the right to reject in whole or part a quarterly invoice in part or in whole if PUBLIC AGENCY has not adequately fulfilled its obligations under this ILA.

6. Compliance with Applicable Law and Policy

- 6.1. PUBLIC AGENCY agrees to comply with all applicable law and policy in carrying out this ILA.

7. Independent Contractor, Assignment, and Subcontracting

- 7.1. PUBLIC AGENCY is not an employee or agent of CAPCOG but furnishes goods and services under this ILA solely as an independent contractor.

- 7.2. PUBLIC AGENCY may not assign its rights or subcontract its duties without the written consent of CAPCOG. An attempted assignment or subcontract in violation of this section is void.
- 7.3. If CAPCOG consents to PUBLIC AGENCY's subcontracting of duties, each subcontract is subject to all of the terms and conditions of this ILA, and PUBLIC AGENCY agrees to furnish a copy of this ILA to each subcontractor and furnish, upon request, a copy of PUBLIC AGENCY's contract with any subcontractor to CAPCOG.
- 7.4. If PUBLIC AGENCY wishes to assign the role of project representative to anyone other than a PUBLIC AGENCY employee to serve as its project representative for this ILA, it shall provide documentation to CAPCOG that the subcontractor consents to serve in this capacity.

## 8. Records and Monitoring

- 8.1. PUBLIC AGENCY agrees to maintain records adequate to document its performance and costs of carrying out this ILA at PUBLIC AGENCY's offices.
- 8.2. Subject to additional requirements of section 8.3, PUBLIC AGENCY agrees to preserve the records for three fiscal years after receiving final payment under this ILA.
- 8.3. If an audit or information in the records is disputed or the subject of litigation, PUBLIC AGENCY agrees to preserve the records until the dispute or litigation is finally concluded, regardless of the ending or early termination of this contract.
- 8.4. Upon advance and reasonable notice to the PUBLIC AGENCY, CAPCOG is entitled to inspect and copy, during normal business hours at PUBLIC AGENCY's offices where they are maintained, the records maintained under this contract for as long as they are preserved. CAPCOG is also entitled to visit PUBLIC AGENCY's offices, talk to its personnel, and audit its records, all during normal business hours, to assist in monitoring its performance under this contract.
- 8.5. CAPCOG reserves the right to visit PUBLIC AGENCY's offices to monitor performance of this contract at least during the performance period to ensure compliance with applicable law and policy. If CAPCOG exercises this option, it will provide PUBLIC AGENCY with a written monitoring report within 30 calendar days of the visit. The report will describe any compliance issues and schedule a follow-up visit if necessary.
- 8.6. CAPCOG agrees to notify PUBLIC AGENCY at least 24 hours in advance of any intended visit under this Section other than as described in Section 8.5. Upon receipt of CAPCOG's notice, PUBLIC AGENCY agrees to notify the appropriate department(s) specified in the notice of CAPCOG's intended visit.

## 9. Nondiscrimination and Equal Opportunity

- 9.1. PUBLIC AGENCY shall not exclude anyone or entity from participating in PUBLIC AGENCY's duties under this ILA, deny benefits under this ILA, or otherwise discriminate against anyone in carrying out this contract because of any protected category under CAPCOG's personnel policies, which include race, color, religion, sex, age, disability, handicap, veteran status, national origin, sexual orientation, or gender identity.

- 9.2. If PUBLIC AGENCY procures goods or services with funds made available under this ILA, PUBLIC AGENCY agrees to comply with CAPCOG's affirmative action procurement policy, which is set out in CAECD's 9-1-1 Policies and Procedures Manual.

#### 10. Early Termination of Contract

- 10.1. If CAPCOG or PUBLIC AGENCY breaches a material provision of this ILA, the other may notify the breaching party describing the breach and demanding corrective action. The breaching party has five business days from its receipt of notice to correct the breach, or to begin and continue with reasonable diligence and in good faith to correct the breach. If the breach cannot be corrected within a reasonable time as agreed by the parties, despite the breaching party's reasonable diligence and good faith effort to do so, the non-breaching party may terminate the contract or may invoke the dispute resolution process of section 11.
- 10.2. If this ILA is terminated under this section, CAPCOG and PUBLIC AGENCY are entitled to compensation for goods and services provided the other before receiving notice of the suspension or termination. However, neither CAPCOG nor PUBLIC AGENCY is liable to the other for costs it paid or incurred under this contract made after or in anticipation of its receipt of notice of suspension or termination. The fraction of the maximum amount owed for each period described in sections 5.1 and 5.2 will be calculated based on the quarterly amount and fraction of CAPCOG business days during that quarter when the PUBLIC AGENCY carried out work pursuant to this ILA.
- 10.3. Termination for breach under Section 10.1 does not waive either party's claim for direct damages resulting from the breach, and both CAPCOG and PUBLIC AGENCY among other remedies may withhold from compensation owed the other an amount necessary to satisfy its claim against the other.
- 10.4. The termination of this contract does not affect PUBLIC AGENCY's duty to preserve its records and permit inspection, copying, and auditing of its records and visitation of its premises and personnel under section 8.

#### 11. Dispute Resolution

- 11.1. The parties desire to resolve disputes arising under this ILA without litigation. Accordingly, if a dispute arises, the parties agree to attempt in good faith to resolve the dispute between themselves. To this end, the parties agree not to sue one another, except to enforce compliance with this Section 11, toll the statute of limitations, or seek an injunction until they have exhausted the procedures set out in this Section 11.
- 11.2. At the written request of either party, each party shall promptly appoint one non-lawyer representative to negotiate informally and in good faith to resolve any dispute arising under this ILA. The representatives appointed shall promptly determine the location, format, frequency, and duration of the negotiations.
- 11.3. If the representatives cannot resolve the dispute within 30 calendar days after the first negotiation meeting, the parties agree to refer the dispute to the Dispute Resolution Center of Austin for mediation in accordance with the Center's mediation procedures by a single

mediator assigned by the Center. Each party agrees to pay half the cost of the Center's mediation services.

- 11.4. The parties agree to continue performing their duties under this contract, which are unaffected by the dispute, during the negotiation and mediation process.
- 11.5. If mediation does not resolve the parties' dispute, the parties may pursue their legal and equitable remedies.
- 11.6. A party's participation in or the results of any mediation or other non-binding dispute resolution process under this section or the provisions of this section shall not be construed as a waiver by party of: (1) any rights, privileges, defenses, remedies, or immunities available to a party; (2) a party's termination rights; or (3) other termination provisions or expiration dates of this ILA.
- 11.7. Nothing shall prevent either party from resorting to judicial proceedings if (a) good faith efforts to resolve a dispute under these procedures have been unsuccessful, or (b) interim resort to a court is necessary to prevent serious and irreparable injury to a party or to others.

## 12. Notice to Parties and Project Representatives

- 12.1. Notice to be effective under this ILA must be in writing and received by the party against whom it is to operate. Notice is received by a party: A) when it is delivered to the party personally; B) on the date shown on the return receipt if mailed or registered or certified mail, return receipt requested, to the party's address specified in 12.2 or 12.3 and signed for on behalf of the party; or C) three business days after its deposit in the United States mail, with first-class postage affixed, addressed to the party's address specified in Section 12.2 or 12.3.
- 12.2. CAPCOG's address is 6800 Burleson Road, Building 310, Suite 165, Austin, TX 78744, Attn: Executive Director
- 12.3. PUBLIC AGENCY's address is: 710 S Main St., Ste. 101, Georgetown, TX 78626, Attn: Judge Bill Gravell, Jr.
- 12.4. A party may change its address by providing notice of the change in accordance with Section 12.1
- 12.5. Rob Buckhouse, CAPCOG GIS Program Manager, is CAPCOG's Project Representative, who is authorized to give and receive communications and directions on behalf of CAPCOG. All communications including all payment requests must be addressed to the CAPCOG's Project Representative or his designee. CAPCOG's Project Representative or its Executive Director may indicate a designee through an e-mail to PUBLIC AGENCY's project representative. CAPCOG's Project Representative's phone number is (512) 916-6033, and his e-mail is rbuckhouse@capcog.org.
- 12.6. George Strebel is PUBLIC AGENCY's Project Representative, who is authorized to give and receive communications and directions on behalf of PUBLIC AGENCY. All communications must be addressed to the PUBLIC AGENCY's Project Representative or his designee. The PUBLIC AGENCY's Project Representative or the individual signing this contract for PUBLIC

AGENCY may indicate a designee through an e-mail to CAPCOG's project representative. PUBLIC AGENCY's Project Representative's phone number is (512) 943-1474, and his e-mail is gstrebel@wilco.org.

13. Miscellaneous

- 13.1. Each individual signing this contract on behalf of a party warrants that he or she is legally authorized to do so and that the party is legally authorized to perform the obligations undertaken. The undersigned warrants that he or she: A) has actual authority to execute this contract on behalf of the governing body identified in this agreement; and verifies the governing body, by either minute order, resolution, or ordinance approved this agreement as required by Texas Government Code Section 791, as amended
- 13.2. This ILA shall be construed and interpreted in accordance with the laws of the State of Texas. Venue for all disputes hereafter shall be solely in Travis County.
- 13.3. This ILA states the entire agreement of the parties, and may be amended only by a written amendment executed by both parties, except that any alterations, additions, or deletions to the terms of this ILA which are required by changes in Federal or State law or regulation are automatically incorporated into this contract without written amendment hereto and shall become effective on the date designated by such law or regulation.
- 13.4. The following Attachments are part of this ILA: A) Scope of Work; and B) Data Requirements.
- 13.5. This contract is executed in duplicate originals.

WILLIAMSON COUNTY

CAPITAL AREA COUNCIL OF GOVERNMENTS

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Chris Miller

Title \_\_\_\_\_

Executive Director

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date of County Governing Body Approval:

\_\_\_\_\_

# Attachment A: Scope of Work

## Overview

The goal of this scope of work is to facilitate the exchange of geospatial information between PUBLIC AGENCY and CAPCOG to help ensure efficient and accurate response to emergency calls and text messages in all areas of the Capital Area Emergency Communications District (CAECD). In order to accomplish this:

1. Calls and texts must be routed to the correct public safety answering point (PSAP)
2. The correct emergency service provider must be dispatched to the appropriate location
3. The emergency responders must be able to know the most efficient route to reach that location.

## Definitions

### Core 9-1-1 GIS data terminology:

1. **9-1-1 GIS Database:** The geospatial database maintained and updated by the PUBLIC AGENCY that includes, at a minimum, all address points (SSAPs), road centerlines (RCLs), PSAP boundaries, Emergency Service Boundaries (ESBs), Emergency Service Zones (ESZs) boundaries, and city limit (municipal) boundaries for the PUBLIC AGENCY's Provisioning Boundary.
2. **Data Layer:** Also known as a Feature Class, is a group of geographic features that reside in a table of information with corresponding locations on the earth (map) represented as either points, lines, or polygons.
3. **Feature Class:** See Data Layer.
4. **Address Points (SSAPs):** A data layer of points identifying sites or structures associated with a street address, or the location of access to a site or structure but may also represent landmarks.
5. **Road (Street) Centerlines (RCLs):** A data layer of lines estimating the centerline of a roadway that contains information such as road name, road classification, and address range.
6. **City Limit (Municipal) Boundary:** A polygon data layer representing the geographic extent of a city's administrative boundary, not including any extra-territorial jurisdiction. Updates to City Limit boundaries are used to update PSAP, ESB, and ESZ boundaries.
7. **Automatic Location Information (ALI) Database:** A tabular database of landline telephone numbers with associated location information used to route 9-1-1 calls to a PSAP.
8. **Legacy Master Street Address Guide (MSAG) Database:** A tabular database of street names and house number ranges within their associated communities defining ESZs and their associated Emergency Service Numbers (ESNs) to enable proper routing of 9-1-1 calls.
9. **Topology:** The spatial relationships between adjacent or neighboring features.
10. **Performance Standard Accuracy:** The minimum accuracy rate that must be achieved in each of the Data Hub, EGDMS, and CAPCOG quality control reports.
11. **Positional Accuracy:** The measure of how an object is accurately positioned on the map with respect to its true position on the ground or its intended designation.

### **Specialized NG9-1-1 GIS terminology:**

1. **Provisioning Boundary**: The authoritative polygon data layer that defines the PUBLIC AGENCY's geographic area of 9-1-1 GIS responsibility. This should be the entire extent of the PUBLIC AGENCY's administrative boundary, plus any other adjacent areas or minus areas within its administrative boundaries as agreed to between the PUBLIC AGENCY and another city or county. Provisioning boundaries may only be modified with express written concurrence between the PUBLIC AGENCY, adjacent PUBLIC AGENCIES, and CAPCOG.

The Provisioning Boundary should include the area that the PUBLIC AGENCY assigns address points and road names under its own authority, plus any other areas that the PUBLIC AGENCY does not have such authority, but with which it has entered into an exclusive agreement to obtain this information for the 9-1-1 GIS database. Situations that may warrant a change to a Provisioning Boundary include (but are not limited to): municipal annexations, disannexations, consolidation of two or more municipalities, formation of new municipalities, changes in PSAP service areas, and changes in emergency responder service areas.

2. **PSAP boundary**: The authoritative polygon data layer representing the geographic area within a Provisioning Boundary served by a single 9-1-1 call center (a PSAP), to which all emergency requests are initially routed.
3. **Emergency Service Boundary (ESB)**: A polygon data layer that represents the geographic area of responsibility for emergency response providers within the geographic extent of the Provisioning Boundary. Each 9-1-1 GIS database includes, at a minimum, a law ESB layer, a fire ESB layer, and an Emergency Medical Services (EMS) ESB layer.
4. **Emergency Service Zone (ESZ)**: A polygon data layer representing the area within a Provisioning Boundary served by a unique combination of police, fire, and EMS responders.
5. **Database Schema**: Also known as Data Model, is the database structure with regard to field properties, including data type, field value constraints, etc. Converting one database schema to another involves field-matching (field-mapping) and other compatibility considerations.
6. **Geo-MSAG**: A geospatially-based database that replaces the Legacy MSAG and is created and managed using a road centerline GIS dataset. A city or county must first transition from a traditional tabular MSAG to a Geo-MSAG before it can transition to NG9-1-1. In order to qualify to initiate the transition to a Geo-MSAG, a county must achieve at least 98% match between ALL to RCL records as described later in this document.
7. **Globally Unique IDs (GUIDs)**: A unique identifier that is assigned to each record (feature) in a PUBLIC AGENCY's 9-1-1 GIS database; a GUID uniquely identifies a feature both within the PUBLIC AGENCY's 9-1-1 GIS database Provisioning Boundary and across all 9-1-1 GIS databases.

### **Quality Control terminology:**

1. **Enterprise Geospatial Data Management System (EGDMS)**: A cloud-based quality control platform provided by AT&T/Intrado used for identifying critical errors that affect call and dispatch routing that will be used by the PUBLIC AGENCY to provision (determines acceptable) data to CAPCOG's NG9-1-1 system for call routing. EGDMS does not assess "significant" errors that affect dispatch.
2. **Data Hub**: a cloud-based quality control platform provided by GeoComm that, in addition to being able to identify critical errors, can also identify "significant" and "other" errors in a PUBLIC



AGENCY's 9-1-1 GIS database. Data Hub is the system that will provide data to a call taker's map display.

3. **New Error**: Any error present in the PUBLIC AGENCY's 9-1-1 GIS database update for the first time.
4. **Legacy Error**: Any error in the PUBLIC AGENCY's 9-1-1 GIS database update that was also present in a preceding update.
5. **Accuracy Rate**: The percentage of features that Data Hub, EGDMS, and CAPCOG quality control reports each indicate are free of critical or significant errors and match a related database.
6. **Error Rate**: The percentage of features that Data Hub, EGDMS, and CAPCOG quality control reports indicate have critical or significant errors, or that do not match a related database.
7. **Critical Error**: Any error in the PUBLIC AGENCY's 9-1-1 GIS database assessed by EGDMS or Data Hub that cause, or have a potential of causing, a critical fault in the routing of a 9-1-1 emergency service request call or text to the correct PSAP; the EGDMS system prevents data with critical errors from being uploaded to the NG9-1-1 system. Examples include (but are not limited to) gaps and overlaps between several of the data layers described above.
8. **Significant Error**: Any error in the PUBLIC AGENCY's 9-1-1 GIS database update found by GeoComm's Data Hub quality control software that cause, or have a potential of causing, a critical fault in Computer-Aided Dispatch (CAD) mapping platforms or other related systems.
9. **Other Error**: Any error in the PUBLIC AGENCY's 9-1-1 GIS database identified by GeoComm's Data Hub quality control software other than a "critical" or "significant" error.
10. **Quality Control Reports**: Any of the reports generated by Data Hub, EGDMS, or CAPCOG that evaluates a Feature Class provided by Public Agency and indicates critical, significant, or other errors as well as additional information that evaluates the quality of the data entered relative to requirements for NG9-1-1.
11. **Comprehensive Performance Report**: A monthly CAPCOG produced report that details accuracy and error rates as they relate to the defined performance standards for critical and significant errors. The report will also provide metrics for ALI to RCL and SSAP match rates, legacy errors, and unique features with errors.

### **General Terminology**

12. **Submission Window**: The period of time during which Public Agency can upload Feature Class datasets to CAPCOG to be included in the 9-1-1 database. It is defined as ending at the end of the first day of each month and beginning at the start of the day five days prior to the first day of the month.
13. **Quarterly Report**: A report provided by Public Agency each quarter that indicates the work performed on the 9-1-1 GIS database over the course of the previous quarter. This report is used in conjunction with the Public Agency's invoice in order for CAPCOG to provide reimbursement to the Public Agency.

## **Task 1: Basic Work**

Task 1 involves information gathering and data preparation needed for the 9-1-1 GIS database.

Task 1.A: PUBLIC AGENCY shall constantly maintain a comprehensive record of 9-1-1 related information needed for complete and updated 9-1-1 GIS database records in the formats specified for each Feature Class in Attachment B for all areas within the PUBLIC AGENCY's Provisioning Boundary consisting of:

1. Street Addresses
2. Roads
3. Municipal boundaries
4. Police ESB
5. Fire ESB
6. Emergency Medical Service ESB
7. ESZs

Data submitted by PUBLIC AGENCY must adhere to requirements for Feature Class datasets specified in Attachment B.

Task 1B: PUBLIC AGENCY shall enter into and maintain agreements with all other local governments with the authority to assign address points, assign road names and address ranges, alter municipal boundaries, or change the geographic coverage of emergency service providers in order to ensure that these entities provide such data to PUBLIC AGENCY in a timely manner. When such changes occur, PUBLIC AGENCY shall provide CAPCOG with adequate advance notice of any substantive changes that could or should affect PSAP boundaries, ESB boundaries, provisioning boundaries, or any sub-contracting in order for an orderly transition as a result of any pending new agreement, amendment, or agreement termination. PUBLIC AGENCY shall submit a copy of each of these agreements to CAPCOG no later than October 7, 2024.

Task 1.C: If CAPCOG identifies any situations in which a road centerline is coincident with a Provisioning Boundary, PUBLIC AGENCY is responsible for coordinating with any adjacent agencies sharing responsibility for that road centerline to determine which agency will be responsible for maintaining which portions of the road centerline data to avoid duplication.

Task 1.D: At least once a month, PUBLIC AGENCY shall back up the 9-1-1 GIS database and store it in a secure place. PUBLIC AGENCY shall include a record of the dates the database was backed up in the activity reports that are required to be submitted with quarterly invoices.

Task 1E: PUBLIC AGENCY shall be responsible for conveying any relevant information from CAPCOG regarding 9-1-1 GIS database integrity to other local governments and governmental entities partially or wholly within its Provisioning Boundary.

Task 1F: PUBLIC AGENCY shall provide to CAPCOG information from any County Commissioners' Court meetings or City Council meetings that would affect PUBLIC AGENCY's performance of this contract, including (but not limited to) changes to PSAPs, ESBs/ESZs, annexation, or subcontracting. PUBLIC AGENCY's Project Representative is expected to keep track of County Commissioners Court and City Council meeting agendas to determine if an item may affect the performance of this contract, and notify CAPCOG's project representative of any such issues as soon as possible, but no later than 2 days prior to the Commissioners Court or City Council meeting. Such information includes, but is not limited to, annexation notices, disannexation notices, and interlocal agreements related to emergency services and coverage areas. To the extent possible, CAPCOG will use the ESB and ESZ data submitted by the PUBLIC AGENCY in the 9-1-1 system. However, CAPCOG reserves the right to make adjustments to these data and/or reinstate prior versions if the data submitted by PUBLIC AGENCY are found to have errors. Regardless of any such changes made by local governments within their Provisioning Boundary, those changes will not be made in the 9-1-1 system until this information is provided to CAPCOG, CAPCOG accepts the information, and makes the corresponding changes in the 9-1-1 system. CAPCOG shall make

PUBLIC AGENCY aware of any required changes to these boundaries within three business days of being provided with the polygon data. Note that changes to these data may be sent to CAPCOG at any point during the month.

Task 1.G: PUBLIC AGENCY shall send at least one representative to each scheduled 9-1-1 GIS User Group meetings (GMUG) and at least one training workshop hosted by CAPCOG during the performance period of this agreement.

Task 1.H: By October 7, 2024, PUBLIC AGENCY shall submit to CAPCOG a listing of which agencies are responsible for assigning 9-1-1 addresses within all areas of their Provisioning Boundary.

## **Task 2: Feature Class Quality Control**

Task 2 involves uploading the Feature Class datasets to designated quality control services one or more times a month in order to check the integrity of the data for the purpose of ensuring that it is accurate for 9-1-1 use, meets the requirements for an NG9-1-1 system, and gives Public Agency the opportunity to correct errors before submitting the monthly upload required in Task 3.

Task 2.A: Public Agency must download the ALI extract data from the site provided by CAPCOG within seven days of being notified by CAPCOG that it is available.

Task 2.B: Public Agency must upload Feature Class datasets to Data Hub to obtain Quality Control Reports at least once a month, and not more frequent than once per week. The roads (RCL) and street addresses (SSAP) need to be included in every upload. The Municipal Boundaries, Emergency Service Zones (ESZ), Police (ESB), Fire (ESB), and Emergency Medical Service (ESB) Feature Classes only need to be uploaded when the Feature Class has changed since the previous month. The downloaded ALI extract data specified in Task 2.A must be included with at least one of the uploads per month.

Task 2.C: Public Agency must upload Feature Class datasets to EGDMS to obtain Quality Control Reports at least once a month. There is no limit to the number of times that Public Agency can upload data to EGDMS. The roads (RCL) and street addresses (SSAP) need to be included in every upload. The Municipal Boundaries, Emergency Service Zones (ESZ), Police (ESB), Fire (ESB), and Emergency Medical Service (ESB) Feature Classes only need to be uploaded when the Feature Class has changed since the previous month.

Task 2.D: Public Agency must correct any errors that are indicated in the Quality Control Reports obtained by performing Tasks 2.B and 2.C. as soon as possible.

Task 2.E: PUBLIC AGENCY shall address any other discrepancies identified by authorized stakeholders including, but not limited to, PSAP 9-1-1 call-takers and CAPCOG staff.

## **Task 3: GIS Work for PSAP Map Updates**

Task 3 involves GIS work needed for directly maintaining and updating the 9-1-1 GIS database for use in monthly updates to PSAP mapping applications. CAPCOG's expectation is that this work would be performed by a person, either on staff or subcontracted by the PUBLIC AGENCY, with responsibilities, knowledge, skills, education, and experience comparable to the state's "Geographic Information Specialist II" job description.<sup>1</sup> Task 2 includes the following sub-tasks:

---

<sup>1</sup> Available online at: <http://www.hr.sao.texas.gov/CompensationSystem/JobDescriptions/>

Task 3.A: PUBLIC AGENCY must maintain at least one ESRI ArcGIS software license in order to carry out this work.

Task 3.B: PUBLIC AGENCY shall submit to CAPCOG all information required under Task 1.A that corresponds to GIS data layers in the 9-1-1 GIS database at least once a month in ESRI File geodatabase format (.gdb) pursuant to the specifications in Attachment B and any other CAPCOG guidance during the Submission Window. The latest submission that complies with the Performance Standard Accuracy will be used for the 9-1-1 database update.

Task 3.C: In addition, PUBLIC AGENCY shall maintain the ALI database within the PUBLIC AGENCY's Provisioning Boundary. This includes, but is not limited to, correcting telephone number database errors, maintenance and quality-control of an accurate 9-1-1 call location map.

## **Task 4: Updates for Call-Routing**

In a NG9-1-1 environment, the GIS database is used not only for PSAP mapping applications, but also to route both cell and landline phone calls to the proper PSAP.

Task 4.A: PUBLIC AGENCY shall submit the most recent 9-1-1 road (RCL) and street address (SSAP) Feature Class datasets to EGDMS at least once during the Submission Window. CAPCOG will assess compliance with Performance Standard Accuracy indicated for each Feature Class in Attachment B based on the last submission during the Submission Window. Road (RCL) updates submitted by PUBLIC AGENCY to EGDMS will automatically update PUBLIC AGENCY's GeoMSAG.

Task 4.B: Public Agency must correct any errors that are indicated in the Quality Control Reports obtained by performing Tasks 3.A prior to the next monthly submission. Failure to make progress in correcting critical errors identified in the prior month's submission will be noted in CAPCOG's Comprehensive Performance Reports and must be noted and explained in Quarterly Reports submitted by PUBLIC AGENCY when submitting an invoice to CAPCOG.

## **Content of Quarterly Reports**

Along with each quarterly invoice, PUBLIC AGENCY will submit an activity report using the templates provided by CAPCOG that contains all of the following information related to activities that occurred in the quarter:

- For each applicable governmental entity with administrative boundaries within PUBLIC AGENCY's Provisioning Boundary, PUBLIC AGENCY shall provide a summary of actions taken each month relevant to the 9-1-1 GIS database, including any new records added since the last update and errors corrected.
- The date and time of the PUBLIC AGENCY's last backup of its 9-1-1 GIS database.
- Dates and basic summaries (such as total number of features) of data submissions to CAPCOG.
- A summary of any work that involved resolution of boundary issues with other entities, correction of errors and resolution of any other issues related to this contract
- An explanation for any performance issues during the quarter and corrective action that will be taken to address and prevent such issues in the future, including:
  - Late or incomplete data submissions;

- Failure to meet performance expectations for ALI to RCL match accuracy rates, critical error accuracy rates, or significant error rates; and
- Any other issue identified by CAPCOG in a Comprehensive Performance Report.

## Operational Timeline

The following timeline should be used by PUBLIC AGENCY in planning its submission of data to DataHub and CAPCOG for PSAP map updates (Task 3) and to EGDMS for and call-routing updates (Task 4):

Month	Submission Window	Error Correction Window	CAPCOG Pushes out PSAP Map Update
Oct 2024	2024-09-24 – 2024-10-01	2024-10-02 – 2024-10-07	2024-10-09
Nov 2024	2024-10-25 – 2024-11-01	2024-11-02 – 2024-11-07	2024-11-12
Dec 2024	2024-11-21 – 2024-12-02	2024-12-03 – 2024-12-06	2024-12-10
Jan 2025	2024-12-20 – 2025-01-02	2025-01-03 – 2025-01-08	2025-01-10
Feb 2025	2025-01-27 – 2025-02-03	2025-02-04 – 2025-02-07	2025-02-11
Mar 2025	2025-02-24 – 2025-03-03	2025-03-04 – 2025-03-07	2025-03-11
Apr 2025	2025-03-25 – 2025-04-01	2025-04-02 – 2025-04-07	2025-04-09
May 2025	2025-04-24 – 2025-05-01	2025-05-02 – 2025-05-07	2025-05-09
Jun 2025	2025-05-23 – 2025-06-02	2025-06-03 – 2025-06-06	2025-06-10
Jul 2025	2025-06-24 – 2025-07-01	2025-07-02 – 2025-07-08	2025-07-10
Aug 2025	2025-07-25 – 2025-08-01	2025-08-02 – 2025-08-07	2025-08-11
Sep 2025	2025-08-26 – 2025-09-02	2025-09-03 – 2025-09-08	2025-09-10

## Review of Deliverables and Invoices

Upon receipt of each quarterly invoice, CAPCOG will divide payment into sixths, reflecting the submission of a complete road centerline and address point database in each of the three months that is useable in that month's PSAP map update:

1. Month 1: complete, updated road centerline database provided usable for map update by 5<sup>th</sup> business day of the month: 1/6 of quarterly invoice
2. Month 1: complete, updated address point database provided usable for map update by 5<sup>th</sup> business day of the month: 1/6 of quarterly invoice
3. Month 2: complete, updated road centerline database provided usable for map update by 5<sup>th</sup> business day of the month: 1/6 of quarterly invoice
4. Month 2: complete, updated address point database provided usable for map update by 5<sup>th</sup> business day of the month: 1/6 of quarterly invoice
5. Month 3: complete, updated road centerline database provided usable for map update by 5<sup>th</sup> business day of the month: 1/6 of quarterly invoice
6. Month 3: complete, updated address point database provided usable for map update by 5<sup>th</sup> business day of the month: 1/6 of quarterly invoice

## **CAPCOG Guidance and Direction**

In addition to the Comprehensive Performance Reports identified in Task 3.B, CAPCOG may issue technical guidance or direction to PUBLIC AGENCY's Project Representative that provides further clarification, interpretation, and details. Failure to follow any such guidance would constitute a performance deficiency for this agreement.

# Attachment B: CAPCOG Next Generation 9-1-1 GIS Data Requirements Version 2 (October 2024)

## 1 Summary

The following geospatial data and corresponding attribute specifications are required to be regularly maintained by each county for Mapped Automated Location Information (ALI) and use in a Next Generation 9-1-1 system which relies on GIS data for call and dispatch routing through the Emergency Call Routing Function/Location Validation Function (ECRF/LVF) as defined in the *NENA Master Glossary of 9-1-1 Terminology* (see the Reference Documents section at the end of this document).

This document is referenced in the Capital Area Council of Governments Interlocal Agreement for 9-1-1 Geographic Information System Database Management and is commonly called "Attachment B".

The GIS Data requirements in this document are a condensed version of, and based upon, data standards created by NENA (National Emergency Number Association) as they are developed and evolve over time. These data model standards should be more thoroughly reviewed in *NENA Standard for NG9-1-1 GIS Data Model* (see the Reference Documents section at the end of this document).

Specifics regarding address point placement methodologies should be reviewed in *NENA Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1* (see the Reference Documents section at the end of this document).

To the extent possible, CAPCOG will use the ESB and ESZ data submitted by Public Agency in the 9-1-1 system. However, CAPCOG reserves the right to make adjustments to these data or reinstate prior versions if the data submitted are found to have errors. CAPCOG shall make PUBLIC AGENCY aware of any changes it makes to these boundaries within three business days of being provided with the polygon data. Note that changes to these data may be sent to CAPCOG at any point during the month. The local jurisdiction is responsible for downloading and using the latest authoritative version of the ESZ/ESB files used in the 9-1-1 system from CAPCOG at the beginning of each month to avoid repetition of errors if they have occurred.

## 2 Feature Class Schema Guidelines

The schema for each required dataset includes fields with specific names, data types, and widths. Some fields require a value, others require a value only under certain conditions, some can optionally contain a value or not contain a value, and others must not contain a value. The tables provided in this document in the "Database Format" section for each Feature Class indicate these preferences as well as a description of the values that need to be provided for the field. Additionally, a descriptive name is provided for each field that can be used to easily refer to it in conversation.

The name, data types, and widths are specific to each field and must follow the exact guidelines outlined in the tables for each dataset. When creating datasets, fields must be kept in the same order as listed in the tables.

The tables of field definitions that are included in the “Database Format” section for each Feature Class include the same five columns: FIELD NAME, REQUIRED, TYPE, DESCRIPTION / VALID ENTRIES, and DESCRIPTIVE NAME. A description of each is provided below.

**FIELD NAME:** The required name for the field that must be entered exactly as it appears in the table. Some field names are all UPPER CASE and some use CamelCase.

**DESCRIPTIVE NAME:** A name that can be used in conversation to refer to the field that is more easily understandable than the actual field name. The common name is not used in any other context.

**REQUIRED:** This indicates if the field is required to contain a value, or not. The column indicates one of the following four choices to indicate the value requirement:

- YES – The field MUST contain a non-NULL value and cannot be blank.
- CONDITONAL – The field must contain a non-NULL value if the attribute information exists in the real world. If no value exists for the feature, the individual value is left:
  - NULL without an empty space (if TEXT),
  - o (if LONG), or
  - o.o (if FLOAT)
- NO – An optional value can be entered or can be NULL, or
- EMPTY – The field value must be NULL.

**TYPE:** The **TYPE** column indicates the data type required for the field.

- TEXT – string of printable UTF-8 characters including any combination of alphabetical letters, numbers, and printable special characters plus spaces. Non-breaking spaces and non-printable characters are not included.
- DATE – Date and time using ISO 8601 compliant formats which are in the format of YYYY-MM-DD HH:MM:SS
- DOUBLE – double precision floating point numeric values with decimals
- LONG – whole numeric values ranging from -2,147,483,648 to +2,147,483,647 without decimals

**WIDTH:** the number of allowable characters for each field having a TEXT data type.

**CASE:** the case requirements for the value entered into the field. Allowable cases are:

- UPPER: all characters must be in uppercase
- MIXED: characters should be entered using both uppercase and lowercase as deemed appropriate by Public Agency

**DESCRIPTION / VALID ENTRIES:** A description of the value that is expected in the field including any required formatting, references to standards to use, valid values if limited to a determined set, required value if it is to be constant across records, and other helpful information.

### 3 NENA Globally unique IDS (NGUID)

In this version of the NG9-1-1 GIS Data Model, the format of the NENA Globally Unique ID (NGUID) has changed. The changes make the form of these IDs match other similar IDs in *NENA i3 Standard for Next Generation 9-1-1* (see the Reference Documents section at the end of this document). Like the changes



in i3, this change lets a user see what kind of data the ID is from (GIS data), what layer it is from, and which organization created the data. Converting from the NGUID in CAPCOG GIS Data Model Version 1 is simple. A layer-sensitive string precedes the existing data and the "@" sign is replaced with a colon. Additionally, the new format allows a host name containing the agency identifier to be used after the final colon, although using only the agency identifier is acceptable. The extra information in the host name allows more than one system or instance in an agency to create identifiers without a risk of a duplicate identifier. For example, one system could use "system1.example.com" and another could use "system2.example.com."

NGUIDs SHALL be generated and maintained within a GIS database by concatenating "urn:emergency:uid:gis:[Layer Indicator]:[Local Unique ID]:[Agency Identifier/Host Name]" where the elements are defined as:

- urn:emergency:uid:gis – standardized unique prefix that defines this class of IDs associated with GIS data.
- Layer Indicator – the shorter name for the GIS data layer the feature is associated with as defined by the GIS Data Layers Registry in NENA-STA-010 [3]. See section 7.2 in this document for Layer Indicator values.
- Local Unique ID – a GIS Data Provider generated "locally assigned ID," which can be numeric and/or text. This local ID MUST be unique within the GIS Data Provider's dataset for all features associated with a specific Agency Identifier.
- Agency Identifier/Host Name – a fully qualified domain name (FQDN) representing the GIS Data Provider, which is an "Agency." Agency and Agency Identifier are as defined in NENA-STA-010 [3]. The domain name is obtained from any Domain Name System (DNS) registrar.

Each NGUID MUST be unique as an aggregated NGUID following the structure described in this section.

The combination of the Local Unique ID with the rest of the values that construct the NGUID, provides a unique NGUID when multiple Public Agency submissions are aggregated. The NGUID SHOULD be stable for as long as possible, so that it supports the reporting and resolution of errors from a quality control process, including the discrepancy reporting. The consistency of the ID between submissions also assists with managing downstream data sets.

**Example NGUID:**

urn:emergency:uid:gis:RCL:{AD873541-F41C-409E-A0BE-1B0C583902A4}:wilco.org

In the example above, the parts of the NGUID are:

<b>URN</b>	urn:emergency:uid:gis
<b>Layer Indicator</b>	RCL
<b>Local Unique ID</b>	{AD873541-F41C-409E-A0BE-1B0C583902A4}
<b>Agency Identifier</b>	wilco.org

**Layer Indicators**

The possible values for the Layer Indicator component of the NGUID must be the one appropriate for the Feature Class as indicated in the table below.

Feature Class	Layer Name
Road Centerline	RCL
Site Structure Address Point	SSAP
Police ESB	Pol
Fire ESB	Fire
EMS ESB	Ems
Incorporated Municipalities	A3

## 4 Road Centerlines (RCL)

**Type of Data:** Line

**Performance Standard Accuracy:** 98%

**Positional Accuracy:** Street centerlines must be within +/- 5 feet of the center of the roadbed.

This dataset represents road networks in the CAPCOG region. This layer includes the street names and address ranges used to assign an address.

### 4.1 Graphic (Spatial) Edits

Each named street needs to be represented in the GIS graphically and include attribution for all database fields listed below. All unnamed streets included in the street centerline layer are required to have the designation "Driveway" entered in the St\_Name field, "DRVW" entered in the LSt\_Name and FULL\_NAME fields, and have any other relevant attribute information completed, including the 'CLASS' field. When a street centerline is created or edited, several sources and methods can be used, including current aerial imagery, georeferenced survey plats, computer-aided design (CAD) files, parcels, mapping-grade GPS units in the field, or other authoritative sources or methods. The roadbed is defined as the part on which vehicles travel, noting that when roadways are divided (i.e., by a median) the roadbeds on each side should have a centerline drawn. In all cases each street centerline will need to be split, or checked for gaps, at each jurisdiction and ESN line/boundary intersection.

### 4.2 Database Format

The following table details the data format requirements for the RCL database.

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
DiscrpAglID	Discrepancy Agency ID	YES	TEXT	100	MIXED	Agency that last updated the record. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson</b>
DateUpdate	Date Updated	YES	DATE	N/A	N/A	Date of last update using ISO 8601 format
Effective	Effective Date	NO	DATE	N/A	N/A	Date the new record information goes into effect in ISO 8601 format
NGUID	NENA Globally Unique ID	YES	TEXT	254	MIXED	Globally Unique ID for each road segment. Ex. urn:emergency:uid:gis:RCL:{AD873541-F41C-409E-A0BE-1B0C583902A4}:wilco.org

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
AdNumPre_L	Left Address Number Prefix	CONDITIONAL	TEXT	15	MIXED	Part of an address preceding the numeric address on Left
AdNumPre_R	Right Address Number Prefix	CONDITIONAL	TEXT	15	MIXED	Part of an address preceding the numeric address on Right
COUNTRY	Country	YES	TEXT	2	UPPER	The value must be: <b>US</b>
FromAddr_L	Left FROM Address	YES	LONG	N/A	N/A	Left address number at the FROM node
ToAddr_L	Left TO Address	YES	LONG	N/A	N/A	Left address number at the TO node
FromAddr_R	Right FROM Address	YES	LONG	N/A	N/A	Right address number at the FROM node
ToAddr_R	Right TO Address	YES	LONG	N/A	N/A	Right address number at the TO node
Parity_L	Parity Left	YES	TEXT	1	MIXED	Valid values are: <b>E</b> = Even, <b>O</b> = Odd, <b>B</b> = Both, <b>Z</b> = Zero (if the range is o to o)
Parity_R	Parity Right	YES	TEXT	1	MIXED	Valid values are: <b>E</b> = Even, <b>O</b> = Odd, <b>B</b> = Both, <b>Z</b> = Zero (if the range is o to o)
St_PreMod	Street Name Pre Modifier	CONDITIONAL	TEXT	15	MIXED	Word or phrase separate from type and direction that precedes St_PreDir! e.g., <b>Access, Alternate, Business, Connector, Extension, Scenic, Spur, Ramp Underpass, Overpass</b>
St_PreDir	Street Name Pre Directional	CONDITIONAL	TEXT	10	MIXED	Spelled out leading directional prefix. Valid values are: <b>North, South, East, West, Northwest, Northeast, Southwest, Southeast.</b>
St_PreTyp	Street Name Pre Type	CONDITIONAL	TEXT	50	MIXED	Spelled out word or phrase that precedes and identifies a type of thoroughfare. Must be fully spelled out, e.g., "Farm to Market Road" instead of "FM". Restricted values found in <a href="#">NENA Registry of Street Name Pre Types and Street Name Post Types</a> (see the Reference Documents section at the end of this document).
St_PreSep	Street Name Pre Type Separator	CONDITIONAL	TEXT	20	MIXED	A preposition or prepositional phrase between St_PreTyp and St_Name, e.g., "of the" in "Avenue of the Stars". Restricted to values found in <a href="#">NENA Registry of Street Name Pre Type Separators</a> (see the Reference Documents section at the end of this document).
St_Name	Street Name	YES	TEXT	254	MIXED	Legal street name as assigned by local addressing authority. The street name does not include any street types, directionals, or modifiers, e.g., "Fifth" in "Fifth Avenue" or "2224" in "Farm to Market Road 2224" The value must be "Driveway" for unnamed streets.

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
St_PosTyp	Street Name Post Type	CONDITIONAL	TEXT	50	MIXED	Word or phrase that follows the St_Name element and identifies a type of thoroughfare in a complete St_Name, e.g., "Parkway" in "Ocean Parkway". Restricted to values found in <a href="#">NENA Registry of Street Name Pre Types and Street Name Post Types</a> (see the Reference Documents section at the end of this document).
St_PosDir	Street Name Post Directional	CONDITIONAL	TEXT	10	MIXED	Trailing directional suffix. Valid values are: <b>North, South, East, West, Northwest, Northeast, Southwest, Southeast.</b>
St_PosMod	Street Name Post Modifier	CONDITIONAL	TEXT	25	MIXED	Word or phrase separate from type and direction that follows St_Name, e.g., "Number 5" in "Fire Road Number 5"; "Northbound" in "North Interstate 35 Northbound"
LSt_PreDir	Legacy Street Name Pre Directional	CONDITIONAL	TEXT	2	UPPER	Leading directional prefix. Valid values are: <b>N</b> = North, <b>S</b> = South, <b>E</b> = East, <b>W</b> = West, <b>NW</b> = Northwest, <b>NE</b> = Northeast, <b>SE</b> = Southeast, and <b>SW</b> = Southwest.
LSt_Name	Legacy Street Name*	CONDITIONAL	TEXT	75	UPPER	Legal street name as assigned by local addressing authority. The value must be "DRVW" for unnamed streets.
LSt_Typ	Legacy Street Name Type*	CONDITIONAL	TEXT	4	UPPER	Type of street following the street name, valid entries on USPS Pub 28, e.g., RD, ST, TRL.
LSt_PosDir	Legacy Street Name Post Directional*	CONDITIONAL	TEXT	2	UPPER	Trailing directional suffix. Valid values are: <b>N</b> = North, <b>S</b> = South, <b>E</b> = East, <b>W</b> = West, <b>NW</b> = Northwest, <b>NE</b> = Northeast, <b>SE</b> = Southeast, and <b>SW</b> = Southwest.
FULL_NAME	Full Street Name	YES	TEXT	125	UPPER	Full street name, should be a concatenation of 4 fields: LSt_PreDir, LSt_Name, LSt_Type and LSt_PosDir with no trailing or leading spaces
ESN_L	ESN Left	YES	TEXT	5	N/A	5-digit Emergency Service Number as identified by ESN on Left. If the ESN number has fewer than 5 digits, it must include leading zeros
ESN_R	ESN Right	YES	TEXT	5	N/A	5-digit Emergency Service Number as identified by ESN on Right. If the ESN number has fewer than 5 digits, it must include leading zeros.
MSAGComm_L	MSAG Community Name Left*	CONDITIONAL	TEXT	30	UPPER	Valid service community as identified by MSAG on Left
MSAGComm_R	MSAG Community Name Right*	CONDITIONAL	TEXT	30	UPPER	Valid service community as identified by MSAG on Right
Country_L	Country Left	YES	TEXT	2	UPPER	Value must be: <b>US</b>
Country_R	Country Right	YES	TEXT	2	UPPER	Value must be: <b>US</b>

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
State_L	State or Equivalent Left (A1)	YES	TEXT	2	UPPER	Value must be: TX
State_R	State or Equivalent Right (A1)	YES	TEXT	2	UPPER	Value must be: TX
County_L	County or Equivalent Left (A2)	YES	TEXT	100	MIXED	Fully spelled county name on the left side of the road. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson.</b>
County_R	County or Equivalent Right (A2)	YES	TEXT	100	UPPER	Fully spelled county name on the right side of the road. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson.</b>
AddCode_L	Additional Code Left	CONDITIONAL	TEXT	6	MIXED	A code on the left side of the road that specifies a geographic area
AddCode_R	Additional Code Right	CONDITIONAL	TEXT	6	MIXED	A code on the right side of the road that specifies a geographic area
IncMuni_L	Incorporated Municipality Left (A3)	YES	TEXT	100	MIXED	Name of municipality on Left, if none populate with <b>"Unincorporated"</b>
IncMuni_R	Incorporated Municipality Right (A3)	YES	TEXT	100	MIXED	Name of municipality on Right, if none populate with <b>"Unincorporated"</b>
UnincCom_L	Unincorporated Community Left (A4)	NO	TEXT	100	MIXED	The unincorporated community, either within an incorporated municipality or in a unincorporated portion of a county, or both, on the left side of the street, e.g., Del Valle, Kingsland.
UnincCom_R	Unincorporated Community Right (A4)	NO	TEXT	100	MIXED	The unincorporated community, either within an incorporated municipality or in a unincorporated portion of a county, or both, on the right side of the street, e.g., Del Valle, Kingsland.
NbrhdCom_L	Neighborhood Community Left (A5)	NO	TEXT	100	MIXED	Name of neighborhood or subdivision on Left
NbrhdCom_R	Neighborhood Community Right (A5)	NO	TEXT	100	MIXED	Name of neighborhood or subdivision on Right
PostCode_L	Postal Code Left	NO	TEXT	5	MIXED	The ZIP code on the left side of the street
PostCode_R	Postal Code Right	NO	TEXT	5	MIXED	The ZIP code on the right side of the street
PostComm_L	Postal Community Name Left	NO	TEXT	40	MIXED	City name for the ZIP code of an address, as given in the USPS on Left
PostComm_R	Postal Community Name Right	NO	TEXT	40	MIXED	City name for the ZIP code of an address, as given in the USPS on Right

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
RoadClass	Road Class	NO	TEXT	15	UPPER	See valid Road Class I Types in Section 4.3
CLASS	Road Class Code	YES	TEXT	4	UPPER	Street type designation code (See Road Class Codes in Section 4.4)
OneWay	One-Way	NO	TEXT	2	UPPER	Valid values are: <b>B</b> = Both, <b>FT</b> = FROM node to TO node, <b>TF</b> = TO node to FROM node
SpeedLimit	Speed Limit	NO	LONG	N/A	N/A	Posted speed limit in MPH
Valid_L	Validation Left	NO	TEXT	1	UPPER	Indicates if the address range on the left side of the road segment, relative to the FROM node, should be used for civic location validation. A value of "Y" MAY be entered if any Address Number within the address range on the left side of the road segment should be considered by the LVF to be valid. A value of "N" MAY be entered if the Address Number should only be validated using the SiteStructureAddressPoint layer. If not present, a value of "Y" is assumed.
Valid_R	Validation Right	NO	TEXT	1	UPPER	Indicates if the address range on the right side of the road segment, relative to the FROM node, should be used for civic location validation. A value of "Y" MAY be entered if any Address Number within the address range on the right side of the road segment should be considered by the LVF to be valid. A value of "N" MAY be entered if the Address Number should only be validated using the SiteStructureAddressPoint layer. If not present, a value of "Y" is assumed.
NOTES	Notes	NO	TEXT	75	UPPER	Additional information

### 4.3 Road Class I Types

The following list of codes are used in the "RoadClass" field in the RCL Database:

- **PRIMARY**
- **SECONDARY**
- **LOCAL** (City, Neighborhood, or Rural Road)
- **RAMP**
- **SERVICE** (usually along a limited access highway)
- **VEHICULAR TRAIL** (4WD, snowmobiles)
- **WALKWAY** (Pedestrian Trail, Boardwalk)
- **ALLEY**
- **PRIVATE** (service vehicles, logging, oil fields, ranches, etc.)
- **PARKING LOT**
- **TRAIL** (Ski, Bike, Walking / Hiking Trail)

#### 4.4 Road Class Codes ('Street Type') Designation

The following list of codes are used in the "CLASS" field in the RCL Database:

- **IH** – Interstate
- **US** – US highways
- **SH** – State highways
- **FM** – Farm to Market, Ranch Road, Ranch to Market
- **LS** – City Street, County Road, Park Road, Recreational, Frontage Road
- **AC** – Access Road, Crossover
- **PVT** - Private Road
- **TR** – Toll Road
- **RAMP** - On-ramp, Off-ramp
- **DW** – Driveways

### 5 Site / Structure Address Points (SSAP)

**Type of Data:** Point

**Performance Standard Accuracy:** 98%

**Positional Accuracy:** Structures or designated site locations must be within +/- 25 feet of their true location or intended designation.

This dataset represents addressable sites, structures, or property entrances that exist within the CAPCOG region.

#### 5.1 Graphic (Spatial) Edits

All addressed site/structures must be represented in the address point layer. When a site/structure point is created or edited, several sources and methods can be used, including aerial imagery, georeferenced survey plats, computer-aided design (CAD) files, parcels, mapping-grade GPS units in the field, or other authoritative sources and methods. When the actual structure location is known, the symbol should represent the general center of the structure. In other cases, please refer to the *NENA Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1* (see the Reference Documents section at the end of this document).

#### 5.2 Database Format

The following table details the data format requirements for the SSAP database.

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
DiscrpAgID	Discrepancy Agency ID	YES	TEXT	100	MIXED	Agency that last updated the record. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson</b>
DateUpdate	Date Updated	YES	DATE	N/A	N/A	Date of last update using ISO 8601 format

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
Effective	Effective Date	NO	DATE	N/A	N/A	Date the new record information goes into effect in ISO 8601 format
NGUID	NENA Globally Unique ID	YES	TEXT	254	MIXED	Globally Unique ID for each road segment. Ex. urn:emergency:uid:gis:SSAP:{AD873541-F41C-409E-A0BE-1BoC583902A4}:wilco.org
Country	Country	YES	TEXT	2	UPPER	The value must be: <b>US</b>
State	State	YES	TEXT	2	UPPER	The value must be: <b>TX</b>
County	County	YES	TEXT	100	MIXED	Fully spelled county name. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson</b>
AddCode	Additional Codd	CONDITIONAL	TEXT	6	N/A	A code that specifies a geographic area
AddDataURI	Additional Data URI	CONDITIONAL	TEXT	254	N/A	URI for additional data associated with the address point
Inc_Muni	Incorporated Municipality	YES	TEXT	100	MIXED	Name of municipality, if none populate with " <b>Unincorporated</b> "
Uninc_Comm	Unincorporated Community	NO	TEXT	100	MIXED	The unincorporated community, either within an incorporated municipality or in a unincorporated portion of a county, or both
Nbrhd_Comm	Neighborhood Community	NO	TEXT	100	MIXED	Name of neighborhood or subdivision where the address is located
AddNum_Pre	Address Number Prefix	CONDITIONAL	TEXT	15	N/A	Part of an address leading the numeric address
Add_Number	Address Number	YES	LONG	N/A	N/A	Numeric identifier of a location along a thoroughfare
AddNum_Suf	Address Number Suffix	CONDITIONAL	TEXT	15	N/A	Part of an address following the address number, e.g., 1/2, B
St_PreMod	Street Name Pre Modifier	CONDITIONAL	TEXT	15	MIXED	Word or phrase separate from type and direction that precedes St_Pre_Dir, e.g., Access, Alternate, Business, Connector, Extension, Scenic, Spur, Ramp Underpass, Overpass
St_PreDir	Street Name Pre Directional	CONDITIONAL	TEXT	10	MIXED	Leading directional prefix. Valid values are: North, South, East, West, Northwest, Northeast, Southwest, Southeast. <b>MUST</b> be fully spelled out.
St_PreTyp	Street Name Pre Type	CONDITIONAL	TEXT	50	MIXED	Spelled out word or phrase that precedes and identifies a type of thoroughfare. <b>MUST</b> be fully spelled out, e.g. "Farm to Market Road" for "FM". Restricted values found in <a href="#">NENA Registry of Street Name Pre Types and Street Name Post Types</a> (see the Reference Documents section at the end



FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
						of this document)
St_PreSep	Street Name Pre Type Separator	CONDITIONAL	TEXT	20	MIXED	A preposition or prepositional phrase between the Street Name Pre Type and Street Name. Ex. "of the" in "Avenue of the Stars". Restricted to values found in <a href="#">NENA Registry of Street Name Pre Type Separators</a> (see the Reference Documents section at the end of this document).
St_Name	Street Name	YES	TEXT	254	MIXED	Legal street name as assigned by local addressing authority. The street name does not include any street types, directionals, or modifiers. Ex. "Fifth" in "Fifth Avenue" or "2224" in "Farm to Market Road 2224"
St_PosTyp	Street Name Post Type	CONDITIONAL	TEXT	50	MIXED	Word or phrase that follows the St_Name element and identifies a type of thoroughfare in a complete street name. Ex, "Parkway" in "Ocean Parkway". Restricted values found in <a href="#">NENA Registry of Street Name Pre Types and Street Name Post Types</a> (see the Reference Documents section at the end of this document)
St_PosDir	Street Name Post Directional	CONDITIONAL	TEXT	10	MIXED	Trailing directional suffix. Valid values are: North, South, East, West, Northwest, Northeast, Southwest, Southeast.
St_PosMod	Street Name Post Modifier	CONDITIONAL	TEXT	25	MIXED	Word or phrase separate from type and direction that follows St_Name, e.g., "Number 5" in "Fire Road Number 5"; "Northbound" in "North Interstate 35 Northbound"
LSt_PreDir	Legacy Street Name Pre Directional	CONDITIONAL	TEXT	2	UPPER	Leading directional prefix. Valid values are: <b>N</b> = North, <b>S</b> = South, <b>E</b> = East, <b>W</b> = West, <b>NW</b> = Northwest, <b>NE</b> = Northeast, <b>SE</b> = Southeast, and <b>SW</b> = Southwest.
LSt_Name	Legacy Street Name	CONDITIONAL	TEXT	75	UPPER	Legal street name as assigned by local addressing authority
LSt_Typ	Legacy Street Name Type	CONDITIONAL	TEXT	4	UPPER	Type of street following the street name, valid entries on USPS Pub 28, e.g., RD, ST, TRL.
LSt_PosDir	Legacy Street Name Post Directional	CONDITIONAL	TEXT	2	UPPER	Trailing directional suffix. Valid values are: <b>N</b> = North, <b>S</b> = South, <b>E</b> = East, <b>W</b> = West, <b>NW</b> = Northwest, <b>NE</b> = Northeast, <b>SE</b> = Southeast, and <b>SW</b> = Southwest.
FULL_NAME	Full Street Name	YES	TEXT	125	UPPER	Full street name, must be identical to the site's related road FULL_NAME in the RCL

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
						Feature Class
FULL_ADDR	Full Address	YES	TEXT	170	UPPER	Full address, should be a concatenation of AddNum_Pre + Addr_Number + AddNum_Suf + FULL_NAME with no extra, leading or trailing spaces
ESN	ESN	YES	TEXT	5	N/A	Emergency Service Number associated with the address and community name preceded by leading zeroes if digits are fewer than 5
MSAGComm	MSAG Community Name	YES	TEXT	30	UPPER	Valid service community associated with the location of the address, e.g., Del Valle, Kingsland.
Post_Comm	Postal Community Name	NO	TEXT	40	MIXED	City name for the ZIP code of an address, as given in the USPS
Post_Code	Postal Code	NO	TEXT	5	N/A	5-digit numeric ZIP code area
PostCodeEx	Postal Code Extension	NO	TEXT	4	N/A	ZIP code + 4 extension
Building	Building	NO	TEXT	75	N/A	One among a group of buildings that have the same address
Floor	Floor	NO	TEXT	75	N/A	A floor, story, or level within a building
Unit	Unit	NO	TEXT	75	N/A	A suite or group of rooms within a building that share the same entrance
Room	Room	NO	TEXT	75	N/A	A single room within a building
Seat	Seat	NO	TEXT	75	N/A	A place where a person sits within a building, e.g., cubicle
Addt_Loc	Additional Location Information	NO	Text	225	N/A	A part of the sub-address that is not a building, floor, room, or seat
LandmkName	Complete Landmark Name	CONDITIONAL	TEXT	150	MIXED	The name by which a prominent feature is publicly known or vanity address
Milepost	Milepost	CONDITIONAL	LONG	N/A	N/A	A posted numeric measurement from a given beginning point
Place_Type	Place Type	NO	TEXT	50	MIXED	Type of feature identified by the address, e.g. residential, office, store, school
Placement	Placement Method	NO	TEXT	25	MIXED	Methodology used for placement of the address point. Restricted values found in <a href="#">NENA Address Point Placement Registry</a> (see the Reference Documents section at the end of this document)
Longitude	Longitude	YES	DOUBLE	N/A	N/A	Longitude of point in decimal degrees using EPSG: 4326
Latitude	Lattitude	YES	DOUBLE	N/A	N/A	Latitude of point in decimal degrees using EPSG: 4326
Elevation	Elevation	NO	DOUBLE	N/A	N/A	Height above Mean Sea Level in meters

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
ST_ALIAS	Street Alias	CONDITIONAL	TEXT	125	UPPER	Entire alias street name assigned to related street segment
NOTES	Notes	NO	TEXT	254	MIXED	Additional location information, which is not a building, floor, unit, room, or seat

## 6 Emergency Service Zones (ESZ)

**Type of Data:** Polygon

**Performance Standard Accuracy:** 100%

**Positional Accuracy:** ESZ boundaries must adhere to the specifications of CAPCOG's QC systems and have no gaps or overlaps within a topology tolerance of 3,600 sq meters.

This dataset consists of the intersection of law enforcement, fire district, and emergency medical service and telephone exchange boundaries in the CAPCOG region.

### 6.1 Graphic (Spatial) Edits

These areas need to accurately reflect the boundaries of each geographically unique combination of fire, police, EMS responder zones, and telephone exchange boundaries. This layer is created and maintained by overlaying with some combination of street centerlines, municipal (i.e. city limit) boundaries, parcels boundaries, or other data to determine each jurisdiction's emergency response service areas. As new emergency response services are added to, or change in an area, this boundary file will need to be modified accordingly.

Communications must be regularly preserved with all fire, police, and emergency medical responders to obtain the information required to maintain updated ESZ boundaries. **In addition, it is very important that all features with identical attribute information are merged into one multipart polygon.**

### 6.2 Database Format

The following table details the data format requirements for the ESZ database.

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
SOURCE	Source	YES	TEXT	75	UPPER	Agency that last updated the record. Valid values are: <b>BASTROP, BLANCO, BURNET, CALDWELL, FAYETTE, HAYS, LEE, LLANO, TRAVIS, WILLIAMSON.</b>
PROVIDER	Provider	EMPTY	TEXT	75	UPPER	The name of the regional 911 authority <i>CAPCOG will populate</i>
LAST_MOD	Last Modification	YES	DATE	N/A	UPPER	Date of last update using ISO 8601 format
EFF_DATE	Effective Date	No	DATE	N/A	UPPER	Date the new record information goes into effect in ISO 8601 format
ES_UNQID	Emergency Service Unique ID	EMPTY	TEXT	100	UPPER	ID for each emergency service polygon - <i>CAPCOG will populate</i>
POLICE	Police	YES	TEXT	60	UPPER	Name of police service provider

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/VALID ENTRIES
FIRE	Fire	YES	TEXT	60	UPPER	Name of fire service provider
MEDICAL	Medical	YES	TEXT	60	UPPER	Name of medical service provider
COUNTRY	Country	YES	TEXT	2	UPPER	The value must be: <b>US</b>
STATE	State	YES	TEXT	2	UPPER	The value must be: <b>TX</b>
COUNTY	County	YES	TEXT	40	UPPER	County name fully spelled out. Valid values are: <b>BASTROP, BLANCO, BURNET, CALDWELL, FAYETTE, HAYS, LEE, LLANO, TRAVIS, WILLIAMSON.</b>
URI	URI	YES	TEXT	254	UPPER	URN/URL for routing. Example: sip:sos@ausxtxem1.travis.tx.us
URN	URN	NO	TEXT	50	UPPER	The URN for the Emergency Service or other Well-Known Service (Example: "urn:service:sos" for a PSAP or "urn:service:sos.ambulance" for an ambulance service)
ESN	ESN	YES	TEXT	5	UPPER	ESN of the responding agency preceded by '0' if number of digits are fewer than 5.
TANDEM	Tandem	YES	TEXT	3	UPPER	911 Selected Router Code
TANDEM <sub>2</sub>	Tandem 2	CONDITIONAL	TEXT	3	UPPER	911 Selected Router Code
ESSID	ESSID	EMPTY	TEXT	2	UPPER	Unique tandem routing code <i>CAPCOG will populate</i>
ESNGUID	ESN GUID	EMPTY	TEXT	8	UPPER	Concatenation of ESN and ESSID separated by a single backslash "/" <i>CAPCOG will concatenate</i>
AVCARDURI	AV Card ID	CONDITIONAL	TEXT	254	UPPER	URI for the vCARD of contact information

## 7 Emergency Service Boundaries (ESB)

**Type of Data:** Polygon

**Performance Standard Accuracy:** 100%

**Positional Accuracy:** Emergency Service Boundaries must adhere to the specifications of CAPCOG's QC systems and have no gaps or overlaps within a topology tolerance of 3,600 sq meters.

This dataset consists of Emergency Service Boundary layers that define the geographic area for the primary providers of response services in the CAPCOG region.

### 7.1 Graphic (Spatial) Edits

Each of these layers is used to determine which Emergency Service Providers are responsible for providing service to a location in the event a selective transfer is desired, to direct an Emergency Incident Data Document to a secondary PSAP for dispatch, or to display the responsible agencies at the PSAP. In addition, Emergency Service Boundaries are used by PSAPs to identify the appropriate entities/first responders to be dispatched. Each Emergency Service Boundary layer may contain one or more polygon boundaries that define the primary emergency services for that geographic area. **In addition, it is very**

important that all features with identical attribute information are merged into one multipart polygon

There MUST be a separate Emergency Service Boundaries Feature Class for each type of service. At a minimum, the following Emergency Service Boundaries Feature Classes MUST be included:

- Police;
- Fire; and
- Emergency Medical Services (EMS).

Other Emergency Service Boundaries layers that MAY be included, are:

- Poison Control;
- Forest Service;
- Animal Control; and
- Any other boundary of an emergency service provider that provides service within PUBLIC AGENCY’s Provisioning Boundary.

## 7.2 Database Format

The following table details the data format requirements for the ESB database.

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/ VALID ENTRIES
DiscrpAgID	Discrepancy Agency ID	YES	TEXT	100	MIXED	Agency that last updated the record. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson</b>
DateUpdate	Date Updated	YES	DATE	26	N/A	Date of last update using ISO 8601 format
Expire	Expiration Date	EMPTY	TEXT	26	N/A	Unique tandem routing code <i>CAPCOG will populate</i>
Effective	Effective Date	NO	TEXT	26	N/A	The date and time when the information in the record is no longer considered valid.
NGUID	NENA Globally Unique ID	YES	TEXT	254	N/A	Globally Unique ID for each road segment. Ex. urn:emergency:uid:gis:[xxx]:{AD873541-F41C-409E-A0BE-1B0C583902A4}:wilco.org [xxx] must be replaced with <b>Pol, Fire, or Ems</b> for the corresponding Feature Layer.
State	State	YES	TEXT	2	UPPER	The value must be: <b>TX</b>
Agency_ID	Agency Identifier	YES	TEXT	100	MIXED	A Domain Name System (DNS) domain name which is used to uniquely identify an agency. Ex. austintexas.gov
ServiceURI	Service URI	YES	TEXT	254	N/A	URN/URL for routing. Example: sip:sos@ausxtxem1.travis.tx.us
ServiceURN	Service URN	YES	TEXT	50	N/A	The URN for the Emergency Service or other Well-Known Service*
ServiceNum	Service Number	YES	TEXT	15	N/A	The numbers that would be dialed on a 12-digit keypad to reach the emergency service appropriate for the location. Ex: <i>911</i>

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/ VALID ENTRIES
AVcard_URI	AV Card URI	CONDITIONAL	TEXT	254	MIXED	URI for the vCARD of contact information
DsplayName	Dsiplay Name	YES	TEXT	60	UPPER	Name of the service provider that offers services within the area of an Emergency Service Boundary

## 8 Municipal Boundaries

**Type of Data:** Polygon

**Performance Standard Accuracy:** 100%

**Positional Accuracy:** Municipal boundaries must adhere to the specifications of CAPCOG’s QC systems and have no gaps or overlaps within a topology tolerance of 3,600 sq meters.

This dataset represents municipal boundaries in the CAPCOG region.

### 8.1 Graphic (Spatial) Edits

When city limits change due to annexations, metes and bounds surveys or other related information must be acquired to update the city limit boundaries. Coordinate geometry (COGO) – is one of the preferred methods for calculating coordinate points from surveys and can be used to update the city limit boundaries.

### 8.2 Database Format

The following table details the data format requirements for the Municipal Boundary database.

FIELD NAME	DESCRIPTIVE NAME	REQUIRED	TYPE	WIDTH	CASE	DESCRIPTION/ VALID ENTRIES
DiscrpAgID	Discrepancy Agency ID	YES	TEXT	100	MIXED	Agency that last updated the record. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson.</b>
DateUpdate	Date Updated	YES	DATE	N/A	N/A	Date of last update using ISO 8601 format
Effective	Effective Date	NO	DATE	N/A	N/A	Date the new record information goes into effect in ISO 8601 format
NGUID	NENA Globally Unique ID	YES	TEXT	254	MIXED	Globally Unique ID for each road segment. Ex. urn:emergency:uid:gis:A3:{AD873541-F41C-409E-AoBE-1BoC583902A4}:wilco.org
Country	Country	YES	TEXT	2	UPPER	The value must be: <b>US</b>
State	State	YES	TEXT	2	UPPER	The value must be: <b>TX</b>
County	County	YES	TEXT	40	MIXED	County name fully spelled out. Valid values are: <b>Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, Williamson</b>
AddCode	Additional Code	NO	TEXT	6	N/A	A code that specifies a geographic area
Inc_Muni	Incorporated Municipality (A3)	YES	TEXT	100	MIXED	Name of municipality e.g., “ <b>Austin</b> ”

## 9 Version 1 to Version 2 Field Mapping Guide

To convert from Version 1 to Version 2, it is necessary to add some fields which did not exist in Version 1. Some of these new fields are effectively renamed versions of the Version 1 fields with no change to the field's attributes. Some of the new fields have a new name and revised attributes, but the data stored in the field is essentially the same as a field in Version 1. The tables below indicate each Version 2 field that is replacing a Version 1 field and indicates if the attributes for the new field remain the same as the attributes for the original field in Version 1.

### 9.1 RCL Fields

Version 1 Field Name	Version 2 Field Name	Attributes Change
SOURCE	DiscrpAglID	YES
LAST_MOD	DateUpdate	NO
EFF_DATE	Effective	NO
RCL_UNIQID	NGUID	YES
COUNTRY <sup>2</sup>	Country_L	NO
	Country_R	NO
L_STATE	State_L	NO
R_STATE	State_R	No
L_COUNTY	County_L	NO
R_COUNTY	County_R	NO
L_MUNI	IncMuni_L	NO
R_MUNI	IncMuni_R	NO
L_MUNI_DIV	UnincCom_L	NO
R_MUNI_DIV	UnincCom_R	NO
L_NBRHOOD	NbhrdCom_L	NO
R_NBRHOOD	NbhrdCom_R	NO
RF_ADDR	From_Addr_R	NO
RT_ADDR	To_Addr_T	NO
LF_ADDR	From_Addr_L	NO
LT_ADDR	To_Addr_L	NO
L_RNG_PRE	AdNumPre_L	No
L_RNG_PRE	AdNumPre_R	NO
L_PARITY	Parity_L	NO
R_PARITY	Parity_R	NO
L_POST_COM	PostComm_L	NO

Version 1 Field Name	Version 2 Field Name	Attributes Change
R_POST_COM	PostComm_R	NO
L_ZIP	PostCode_L	NO
R_ZIP	PostCode_R	NO
PRE_MOD	St_PreMod	NO
PRE_DIR	St_PreDir	NO
	LSt_PreDir	NO
PRE_TYPE	St_PreTyp	NO
ST_NAME	St_Name	YES
	LSt_Name	NO
ST_TYPE	St_PosTyp	YES
	LSt_Typ	NO
POST_DIR	St_PosDir	YES
	LSt_PosDir	NO
ONE_WAY	OneWay	NO
SP_LIMIT	SpeedLimit	NO
RDCLS_TYP	RoadClass	NO
POST_MOD	St_PosMod	YES
L_MSAG	MSAGComm_L	NO
R_MSAG	MSAGComm_R	NO
L_ESN	ESN_L	NO
R_ESN	ESN_R	NO

<sup>1</sup>While the COUNTRY field is being mapped to Country\_L and Country\_R, the COUNTRY field will remain.

## 9.2 SSAP Fields

Version 1 Field Name	Version 2 Field Name	Attributes Change
SOURCE	DiscrpAgID	YES
LAST_MOD	DateUpdate	NO
EFF_DATE	Effective	NO
SITEUNIQID	NGUID	YES
COUNTRY	Country	NO
STATE	State	NO
COUNTY	County	NO
MUNICIPAL	IncMuni	NO
NBRHOOD	NbhrdCom	NO



Version 1 Field Name	Version 2 Field Name	Attributes Change
ADDNUM_PRE	AddNum_Pre	NO
ADDR_NUM	Add_Number	NO
ADDNUM_SUF	AddNum_Suf	NO
PRE_MOD	St_PreMod	NO
PRE_DIR	St_PreDir	YES
	LSt_PreDir	NO
PRE_TYPE	St_PreTyp	NO
ST_NAME	St_Name	YES
	LSt_Name	NO
ST_TYPE	St_PosType	YES
	LSt_Typ	NO
POST_DIR	St_PosDir	YES
	LSt_PosDir	NO
POST_MOD	St_PosMod	YES
MSAG_COM	MSAGComm	NO
POSTAL_COM	Post_Comm	NO
ZIP	Post_Code	YES
ZIP4	PostCodeEx	NO
BLDG	Building	NO
FLOOR	Floor	NO
UNIT	Unit	NO
ROOM	Room	NO
SEAT	Seat	NO
LANDMARK	LandmkName	NO
MILEPOST	Milepost	NO
SITE_TYPE	Place_Type	NO
POINT_X	Longitude	NO
POINT_Y	Lattitude	NO
ELEVATION	Elevation	NO

### 9.3 ESZ Fields

Version 1 Field Name	Version 2 Field Name	Attributes Change
LAW	POLICE	NO

### 9.4 ESB Fields

No fields to map.

## 9.5 Municipal Boundaries Fields

Version 1 Field Name	Version 2 Field Name	Attributes Change
SOURCE	DiscrpAglID	YES
LAST_MOD	DateUpdate	NO
EFF_DATE	Effective	NO
MUNIUNIQID	NGUID	YES
COUNTRY	Country	NO
STATE	State	NO
COUNTY	County	NO
MUNI_NM	Inc_Muni	NO

## 10 Fields No Longer Required

In addition to the fields listed in the Field Mapping Guide above, the following fields that were required in Version 1 are not required in Version 2. Fields that are not required may remain in the Feature Class dataset. They will be ignored during Data Hub, EGDMS, and CAPCOG uploads.

### 10.1 Road Centerlines (RCL)

- PROVIDER
- SEGMENTID
- ST\_ALIAS

### 10.2 Site / Structure Address Points (SSAP)

- PROVIDER
- SITE\_ID

### 10.3 Emergency Service Zones (ESZ)

No deleted fields

### 10.4 Emergency Service Boundaries (ESB)

No deleted fields

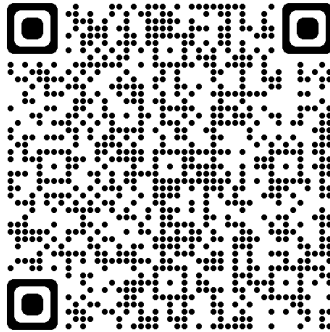
### 10.5 Municipal Boundaries

- PROVIDER
- POLY\_ID

## 11 Reference Documents

### 11.1 NENA i3 Standard for Next Generation 9-1-1

[https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-sta-010.3d-2021\\_i3\\_stan.pdf](https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-sta-010.3d-2021_i3_stan.pdf)



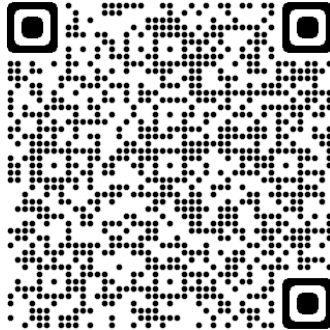
### 11.2 NENA Standard for NG9-1-1 GIS Data Model

[https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-sta-006.2a\\_ng9-1-1\\_gis\\_.pdf](https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-sta-006.2a_ng9-1-1_gis_.pdf)



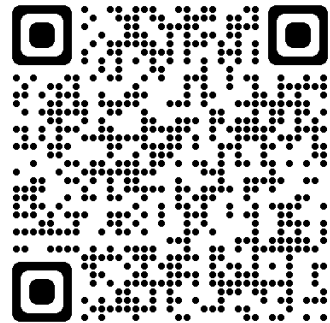
### 11.3 NENA Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1

[https://cdn.ymaws.com/www.nena.org/resource/resmgr/Standards/NENA-INF-014.1-2015\\_SSAP\\_INF.pdf](https://cdn.ymaws.com/www.nena.org/resource/resmgr/Standards/NENA-INF-014.1-2015_SSAP_INF.pdf)



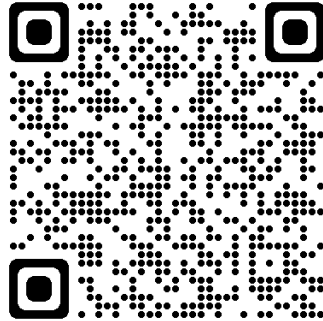
### 11.4 NENA Master Glossary of 9-1-1 Terminology

<https://kb.nena.org/wiki/Category:Glossary>



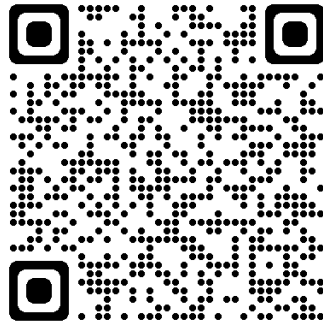
### 11.5 NENA Registry of Street Name Pre Types and Street Name Post Types

<http://technet.nena.org/nrs/registry/StreetNamePreTypesAndStreetNamePostTypes.xml>



### 11.6 NENA Registry of Street Name Pre Type Separators

<http://technet.nena.org/nrs/registry/StreetNamePreTypeSeparators.xml>



### 11.7 NENA Address Point Placement Registry

<http://technet.nena.org/nrs/registry/SiteStructureAddressPointPlacementMethod.xml>

