

The State of Oklahoma Geographic Information NG911 and Addressing Standard

Oklahoma GI Council / Office of Geographic Information / Oklahoma 9-1-1 Authority



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Version 2.2

Oklahoma Address Standards

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Article I. Introduction

This document shall serve as the primary reference document for Next Generation 911 (NG911) Geographic Information System (GIS) Components and Address Standards in the State of Oklahoma regarding GIS based addressing. The standard set forth is to be maintained, utilized, and distributed under the authority of the Oklahoma 9-1-1 Management Authority, the Oklahoma Geographic Information Council and the Oklahoma Office of Geographic Information. This standard is mandatory for NG911 purposes in the State of Oklahoma. The following guidelines should be incorporated into all addressing applications, both geospatial and tabular, to ensure interdisciplinary compatibility.

Article II. Background

Section 2.01 History

The Oklahoma Geographic Information Council (further known as GI Council) has continually adapted to the technological advancements within the GIS profession to provide the State of Oklahoma the best possible collective GIS resource since its inception in 1994. The current GI Council of 19 members and the Office of Geographic Information (OGI) represent a professionally diverse cross section of the existing GIS community in Oklahoma and operate under the following legislative authority.

The Oklahoma 9-1-1 Management Authority (further known as 911 Authority) was created on November 1st, 2016 and developed a technical subcommittee that would oversee the deployment of NG911 in the State. A partnership was formed between the 911 Authority and the GI Council with the goal of developing a Statewide GIS standard that will meet or exceed National Emergency Number Association (NENA) requirement for NG911 (NENA i3 standard).

Below are the legislative initiatives that support the overall goal of the GI Council and 911 Authority partnership:

- 1994 **SB 722** Created the State GIS Council of 11 members under the Conservation Commission serving as the Chair
- 1995 **HB 1964** Added 3 members to the State GIS Council
- 2001 Amendment adding 1 member to the State GIS Council
- 2003 **Interim Study H2003-105** considered a State-wide Coordinator, adding more members to the State GIS Council, & the authority to set policies / standards.
- 2004 **HB 2457** Changed the name of the State GIS Council to the State GI Council, added 4 new members, created the Office of Geographic Information (OGI) and corresponding positions in the OGI, along with specifying duties for the OGI and the GI Council

NG911 Standard Update - Oklahoma 9-1-1- Management Authority History

- 2016 ***HB 3126** Created the Oklahoma 9-1-1- Management Authority and the position of State 9-1-1- Coordinator. Wireless 911 Bill passed to change funding and require the NENA Location Services Standard for all 911 centers to follow.

Section 2.02 Legislative Duties

As set forth in 2004 Regular Session of the Oklahoma State Legislature by **§82-1501-205.1** and **§82-1501-205.3 HB 2457** includes the following duties for the GI Council and the Office of Geographic Information. The GI Council developed this address standard under the following legislation. Below are the specific excerpts from existing State Statute.

- **§82-1501-205.1**
 - A. The duties of the Council shall include overseeing the Office of Geographic Information concerning the following:
 - 1. Development, adoption, and recommendation of standards and procedures that may be applied to geographic information and Geographic Information Systems to promote consistency of data elements;
- **§82-1501-205.3**
 - (A) There is hereby established an Office of Geographic Information in the Oklahoma Conservation Commission.
 - (D) The Office shall:
 - 6. Develop, maintain, update, and interpret Geographic Information System standards under the direction of the Council and working with state and local agencies;

NG911 Standard Update- Oklahoma 9-1-1 Management Authority Legislative Duties

- ***§63-2864**
 - The powers and duties of the Oklahoma 9-1-1 Management Authority created in Section 3 of this act shall be to:
 - (4) Direct the Oklahoma Tax Commission to escrow all or any portion of funds collected pursuant to the Oklahoma 9-1-1 Management Authority Act attributable to a public agency, if the public agency fails to:
 - (b) meet standards of the National Emergency Number Association (**NENA**) limited to call-taking and caller-location technology or comply with an improvement plan to meet such standards as directed by the Authority,

Section 2.03 Need for a Standard

Addresses today are the primary reference commonly accepted as the indexing system used to represent specific geospatial locations in an easily searchable tabular format. The increasing integration of geospatial information into every aspect of daily operations has led to the need for a statewide address standard. Throughout Oklahoma there are many authorities that assign addresses within their respective jurisdiction. The development of addressing systems throughout the state without an existing single point reference document has led to diversity in the datasets. In accomplishing the required tasks of the assigning agencies multiple methods have been employed to accommodate the unique functionality or overcome existing limitations. While many of the limitations that once constrained the development of addresses are no longer applicable today, there are several that are still very much a consideration for the assigning agency. The development of Oklahoma's address standard ensures the fundamental minimum requirements needed to accurately depict an address are met within any current accepted system today while preparing for future development. The development and integration of NG911 relies primarily on GIS data to accurately determine the location of the caller in order to route the call to the proper Public Safety Answering Point (PSAP) and dispatch the necessary emergency services. All GIS data that is utilized in NG911 applications must adhere to the requirements as set forth in this standard.

Section 2.04 Workgroup Formation

(a) **Initial Workgroup** -In response to the increasing need for address standardization the GI Council formed the Address Standard Workgroup on **April 1, 2011** to research, develop, and submit an address standard for adoption by the GI Council. The primary focus of this group was to research what address standards were being utilized in Oklahoma currently and develop a simple custom set of fundamental address standards that adhered to current industry standards. A fundamental provision from the start of the workgroup was to consider existing formats that currently are operational. While an address assigning jurisdiction may add certain elements to their data the focus of this workgroup was to isolate on the commonalities across the jurisdictions that are required for addressing. After this assessment a fundamental schema and associated documentation was to be built that could either be utilized to create a new address dataset, incorporate an existing, or enhance an older dataset with added functionality.

(b) **NG911 Standard Workgroup** – The additional requirement beyond the scope of the initial State of Oklahoma Geographic Information Address Standards constituted a need to form another workgroup between the GIS and 911 professionals. In an effort to meet the overall goal and enhance the end product the 911 Authority and the GI Council worked together through a joint GIS Technical Workgroup. This workgroup updated the existing State of Oklahoma Geographic Information Address Standards (Version 1.0 - September 5, 2014) to meet and exceed the required NENA standard for NG911.

Section 2.05 Address Data Formats

Addresses generally exist in one of three formats

- (a) A single address field or possibly set of fields in a tabular database
- (b) A specific address associated with a point feature
- (c) An address range associated with a linear feature such as a street or railroad centerline. *(This format generalizes the address along the length of the linear feature. It is generally more forgiving but not as precise due to numerous theoretical addresses that may not exist)*

Section 2.06 Essential Address Elements- USPS Publication 28

An address is comprised of several different attribute components, all of which are required to accurately define a specific address. When an address is matched against a Master Address File (MAF) it must be parsed (divided) into the individual components separated by a single space between the components. The minimum components required to accurately define the geospatial portion of an address with relation to this address standard are:

| USPS Publication 28 Data Element | OK Address Standard Field Name | E911 Example Value |
|----------------------------------|--------------------------------|--------------------|
| Street Number | Address | 101 |
| Predirectional | PreDir | N |
| Street Name | Street | Main |
| Street Suffix | StreetType | ST |
| Postdirectional | SufDir | NE |
| Secondary Unit Indicator | BldgUnit | APT |
| Secondary Number | BldgName | 3 |
| City | City | Guthrie |
| State | State | OK |
| Zipcode | Zipcode | 73044 |

Mailing Standards of the United States Postal Service Publication 28 - Postal Addressing Standards

While not all of the elements are required to be filled out for an address to be valid all of the placeholders need to be present in the attribute table to accurately represent the accepted United States Postal Service Standards. The Postal Service uses the following parsing logic to enter address information into their appropriate fields. When parsing an address into the individual components, start from the right-most element of the address and work toward the left. Then it places each element in the appropriate field until all address components are isolated. This process facilitates matching files and produces the correct format for standardized output as well as isolating the mismatches to the closest possible fit before failing. In accordance with USPS Publication 28 all punctuation, with exception of Zipcode4, should be omitted unless absolutely essential throughout all elements of an address. (i.e. 101 1/2 MAIN ST, 101.5 MAIN ST)

Section 2.07 Enhanced 911 (E911) vs Next Generation 911 (NG911) NENA Mapping Requirements

(a) **Enhanced 911 (E911)** - E911 utilizes landlines, wireless lines, and Voice VoIP through a combination of the MSAG and the ANI/ALI to pass locational data into the PSAP. The tabular data is then displayed on the mapping platform in the PSAP via positional information from coordinates or by point or street centerline geocoding functions on premises. Address elements used in geocoding functions within E911 generally adhere to USPS Publication 28 Postal Address Standards. The following layers are required for E911 to functionally map an emergency service request.

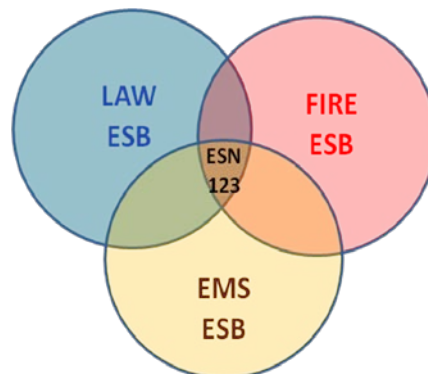
- ADDRESS_POINT
- ROAD_CENTERLINE
- ESZ_BOUNDARY

(b) **Next Generation 911(NG911)** - NG911 is an Internet Protocol (IP)-based system that allows digital information (e.g., voice, photos, videos, text messages) to flow seamlessly from the public, through the 911 network to emergency responders. This process does not rely on the ANI/ALI - MSAG to pass tabular data to the PSAP. NG911 utilizes various functions within a server environment to determine the caller location based on GIS attributes and polygons. The following layers are necessary for NG911 to provide call routing to the proper PSAP.

- PSAP_BOUNDARY
- ESB_FIRE_BOUNDARY
- ESB_LAW_BOUNDARY
- ESB_EMS_BOUNDARY
- DISCREPANCYAGENCY_BOUNDARY

(c) **ESN -ESZ/ESB Relationship**

- **ESN** – (Emergency Service Number) The three to 5 digit **Number** assigned to the unique combination of ESB that represent a ESZ polygon. *Required at a minimum as a legacy lookup table for the MSAG.*
- **ESZ** – (Emergency Service Zone) The **Polygon** that defines the unique geographic area of the combination of ESB (Fire, Law, & EMS Combined) *(Each polygon generally corresponds to a composite ESN)*
- **ESB** – (Emergency Service Boundary) The **Polygon** that defines the geographic area of a **SINGLE** emergency response service. (Fire or Law or EMS separately) *Required to be separate service layers for NG911.*



Section 2.08 Definition of the Standard

The following address standard defines the intended applications and usages associated with NG911 and the address standard along with the detailed components required for accurately representing caller location technology and addresses in a GIS. NG911 data as defined by this standard must meet or exceed the minimum standards outlined within this standard to be considered compliant with regards to Oklahoma NG911.

Section 2.09 Applicability and Intended Uses of the Standard

The intended use of this document is to provide emergency services with a mandatory standard for the implementation and maintenance of a NG911 system, specifically pertaining to the development and maintenance of the NG911 required GIS datasets. The standard also provides a simple basic address schema for anyone working with addresses in the State of Oklahoma. The associated documentation standardizes the basic structure of the tabular and attribute data required for geocoding using points, lines, and polygons. It is intended to be used by both the public and private sector.

Section 2.10 Spatial Components

For the purpose of this standard the spatial feature types referenced are points, lines, and polygons.

- (a) **Points** may be used to represent the center of building footprints, access locations such as driveway, building entrances, or parcel centroids. The address point identifies a single address or at the very least the primary address of a location. (ie. an apartment complexes main address) The individual point may not completely reflect the address of a parcel or structure considering some buildings or parcels have more than one address. In such a case it is generally advisable to place a single point per valid address to ensure a one to one match in geocoding.
- (b) **Lines** are generally used for street centerlines in this standard but can represent any linear feature where addressing is based on a distance along the line. This address format requires address ranges along the linear feature providing an even / odd address parity instead of individual numbers. It is critical that topology and line directionality are strictly adhered to regarding lines to ensure a functional geocoding.
- (c) **Polygons** represent areas and will be used to delineate areas of a Emergency Service Zone (ESZ), PSAP, Emergency Service Boundary (ESB), and Discrepancy Agency Boundary. NG911 will rely on these layers to determine the caller location and services for a particular area as well as maintain an accurate data stewardship to report discrepancy errors and corrections back to the local Agency.

Section 2.11 Attributes

Attributes are the tabular datasets represented by rows and columns of information associated with a geographic spatial feature. The following list represents the types of information that can be stored in attribute tables.

- (a) Required attributes are the essential fields of data that are, at a minimum, required for correct geocoding and accurate address placement.
- (b) Associated attributes pertain to the tabular and related data tied to an address. Examples of this could include a business name, incident number, structure type, etc. Many times associated data is stored in alias tables.
- (c) Alias tables may also be associated with any type of attribute data to provide extra information or increase the accuracy of geocoding operations.

Section 2.12 Data Field Requirements and Types

It is completely acceptable for local datasets to contain extra data fields beyond the required attributes as defined by this standard. The data may be locally stored in whatever format the local Agency requires. Regardless of how the data is being maintained locally, data SHALL be provided in accordance with this standard when exported. Data Domains have been provided and must be utilized to ensure information is not lost when merging local data to a statewide dataset.

(a) Data Field Requirement attributes are tagged as **Mandatory (M)**, **Conditional (C)**, **Optional (O)** or **Transportation (T)**. Transportation fields have been included for use in other public safety applications.

- **Mandatory** means the data field must be populated
(i.e. The field "County" will ALWAYS have a value such as "GARVIN COUNTY")
- **Conditional** means that **IF** an attribute value exists for a given feature, it **MUST** be populated. If no value exists for a given feature, the data field is left blank unless other guidance is given.
(i.e. The Street Prefix Direction "PreDir" MAY have a value such as "NORTH" in 100 NORTH MAIN)
- **Optional** means the data field must be present but may or may not be populated
- **Transportation** denotes fields that are only essential to Transportation and Routing functionality, the data fields must be present but may or may not be populated.
(i.e. The Street Speed Limit "SpeedLimit" MAY have a value such as "25" if so then 25 will be included in the data field. Default speed limit SHOULD be set at "21" unless the limit is known).

(b) Data Field Types

- ALPHANUMERIC - Any combination of letters, numbers, & characters.
- DATETIME- Specifically a Date/Time format
(Since a shapefile only stores dates in a yyyy-mm-dd format a default time of 12am of the attributes stated date will be assigned to all Date/Time attributes not specified when necessary)
- NUMERIC - Consisting of whole numbers only (No Decimals)
- DECIMAL - Consisting of whole numbers including decimals

Section 2.13 Standard Addressing Practices

In order to provide for data consistency and interoperability this is the NG911 standard for the State of Oklahoma.

(a) **Unique Identification Code (Mandatory)** - A unique identifier is required for all databases, whether they are associated attributes or geospatial data sets. This unique identifier shall be used to link address attributes and indexes with other information. The unique identifier is defined in the NENA standard as the NENA Globally unique ID (**NGUID**). Solely this unique ID will enable tracking the address data element back to the original owner. Each **NGUID** shall be configured to the following format:

(LayerName)_(Local911UniqueID)@(Agency_ID)
Example: ROAD_CENTERLINE_24965@psap.5585.ok.gov

(b) **Legacy E911 Data Fields** – Legacy E911 fields (*LgcyPreDir*, *LgcyType*, *LgcySufDir*) are to be used for the current and predominate street names in a Legacy E911 format. They shall **ALWAYS** use abbreviations as defined by the “**LGCYDIRECTION**” and “**LGCYSTREETTYPE**” domains. The actual street (**LgcyStreet**) names should **NEVER** be abbreviated because they are not a “Direction” or a “Street Type” but rather a “Proper” street name even if they contain a word listed in either “**LGCYDIRECTION**” and “**LGCYSTREETTYPE**” domains. Unless there are strong reasons for doing otherwise, it is recommended that the *Mailing Standards of the United States Postal Service Publication 28 - Postal Addressing Standards - Appendix B & C1* be used for legacy data fields. Legacy data fields most likely will be utilized for map labeling & address locators required throughout various applications that require abbreviated street names. **Legacy data fields are NOT to be used as Historic or Alternate Street names.** Historic or Alternate Street names are to be stored in AltStName1, AltStName2, or AltStName3. If further Historic or Alternate Street names are necessary it is recommended to implement add more local fields to the dataset or an Alias table as mentioned in this standard & further defined in the *NENA Standard for NG9-1-1 GIS Data Model*.

(c) **Alias Tables** – The usage of associated alias tables will greatly increase the accuracy of the automated geocoding. It allows the system to handle various spellings or misspellings (aliases). A series of alias tables create alternate spelling options for common discrepancies regarding addresses. Whenever an address is being processed by the system it needs to go through a process of standardization. A crucial part of this standardization is to look up each address component in the alias tables and replace alias values with the standard equivalents. Constructing such alias tables requires considerable judgment to avoid distortions and are typically built up over time as unmatchable addresses are reviewed. While some alias table information is fairly common many customizations are specific to a particular jurisdiction and cannot be universally adopted.

*i.e. A single street with multiple legal names within a single jurisdiction:
14TH AVENUE NORTHEAST / STATE HIGHWAY 199 / SAM NOBLE PARKWAY*

(d) **Abbreviations** – NG911 Address elements do **NOT** recognize any abbreviations **EXCEPT IN THE FOLLOWING INSTANCES**

- **Legacy E911 Data Fields** as previously defined.
- The Country & State name components of an address are **RECOMMENDED** to be abbreviated as defined in the “**COUNTRY**” and “**STATE**” domains.

(e) **Street Naming** - A standard method of assigning numeric and character street names shall be developed and adopted for the whole jurisdiction. The primary objective is to establish a grid within each jurisdiction regardless of the detailed pattern of the individual grid.

(f) **Vanity Street Names** - Vanity street names and addresses that related to a particular business, developer or property owner and should never be used in place of the primary street address. They may, however, be used as a supplemental address in compliance with the *Mailing Standards of the United States Postal Service Publication 28 - Postal Addressing Standards*

(g) **Avoiding Obvious Conflicts** – For the sake of accuracy and clarity avoid obvious conflicting names and numbers.

| | |
|--|--|
| <i>Names with directions:</i> | <i>(i.e. SOUTH RIDGE)</i> |
| <i>Names that include street types:</i> | <i>(i.e. SUNSET PLACE DRIVE)</i> |
| <i>Names that sound alike:</i> | <i>(i.e. ROE and ROW)</i> |
| <i>Easily misleading names:</i> | <i>(i.e. MAIN DRIVE and MAIN STREET)</i> |
| <i>Multiple word names without hyphens :</i> | <i>(i.e. HICKORY WOOD VIEW MANOR)</i> |

(h) **Street Segment Break & Naming Rules** – Individual street segments should break at an intersection whenever possible, and preferably at an intersection with a major cross street along with locations that attributes of a street segment change. (*City Limits, ESB, Jurisdictions, etc...*) Where it is not possible to make the break at an intersection, the break should occur at a point on the curve where the street orientation changes from primarily north-south to east-west, or vice-versa. Street name signs should be used at every street name break to clarify the change.

(i) **Non-Grid Street Names** - Street names that are not in the street name grid should always be unique to the overall jurisdiction.

(j) **Street Types** -Each street name should have a street type that is used consistently, or have a street type that is based on a logical pattern. The exception to this rule is where street type is needed to distinguish between two streets in the same area with the same name (e.g., Sunset Dr and Sunset Ct). The recommended standard for establishing the street type values in NG911 is set forth in the *NENA Civic Location Data Exchange Format (CLDXF)*.

(k) **Logical Address Consistency** – Addresses located across the street from each other shall be assigned so that they are nearly equal. Where there are more addresses on one side of the street, addresses assigned to the other side will be more widely spaced so that addressing consistency is maintained for addresses across from one another.

(l) **Consistency with Distance-Based Address Grid** – Depending on the preference of the jurisdiction there must be a defined standard interval based grid system. Whether it is hundred blocks as in a city, a potential 1000 addresses per mile, (a possible address every 5.28 feet), or another variation the jurisdictions accepted standards should be adhered to as close as possible. In rural areas addresses can be assigned based on the distance from the nearest section line. This standard is particularly useful in areas that are largely undeveloped (and thus don't have many cross streets) or in areas that have existing streets that are not in the standard street name grid. This standard should generally be considered to be less important, however, than staying consistent with the address designations of cross streets.

(m) **Address Number Assignment** - Each jurisdiction shall adopt a standard method of assigning address numbers. A jurisdiction may elect to have address numbers increase from north to south and from east to west. The jurisdiction may also choose to assign odd address numbers on the south and east sides of the street and even numbers on the north and west sides of the street. Regardless of the method selected, it must remain consistent throughout the jurisdiction and should be coordinated with as many contiguous jurisdictions as possible.

(n) **Address Sequential Direction** - Address ranges shall increase as you travel in the direction adopted by the jurisdiction. The direction of each line segment shall follow the sequence direction of the address ranges. Typically this is accomplished by controlling from-node and to-node topology. One-way streets are NOT an exception to this rule. Curvilinear streets may violate this standard for short stretches provided that they are in compliance with respect to the general direction of the full street segment. Where compliance with this standard is difficult or impossible, it may warrant considering a change in the street name at the point where it changes direction.

(o) **Odd/Even Numbering (Address Parity)** – Parity shall remain consistent within the system adopted by the local jurisdiction. Address ranges are sets of numbers, usually comprised of four (4) distinct values, representing a range of addresses along the sides of the centerline of the road by addresses at either end of a street centerline segment. Two values of the range represent the lowest addresses, and the other two represent the highest. The values are further distinguished as being on either the left or the right side of the segment. In topological terms, the low values are associated with the FROM node of the segment, while the high values are associated with the TO node. Likewise, left and right are determined by

the direction of the segment, as defined by the FROM and TO nodes. Topology is critical when a set of addressed centerlines is being developed. Implementation of the address parity (i.e., odd vs. even) is usually determined by the addressing software

Section 2.14 Geocoding

Geocoding is the process of finding associated geographic coordinates (often expressed as latitude and longitude) from other geographic data, such as street addresses, or ZIP codes (postal codes). This process can be accomplished through various methods. For the purpose of this standard the following three methods are preferred.

(a) **Point based geocoding** provides for the most accurate one to one geocoding option. It utilizes a preset number of essential fields to parse an address and accurately correlate the parsed address to the tabular data associated with a specific geographic point representing an address. While this method is highly accurate it is generally not very tolerant of address discrepancies or errors unless alias tables are utilized. It is generally the preferred first method of geocoding and provides real addresses with absolute accuracy.

(b) **Linear based geocoding** provides the most widely accepted and error tolerant geocoding option. It allows for any number of addresses within a preset range based on either a single high and low number or an even and odd high and low number parity along a linear feature. A geographic position is calculated along a line based on the measured distance and address interval. This method can be extremely accurate depending on the data ranges. While this method is very tolerant of address discrepancies and errors it can produce theoretical addresses where real addresses do not exist. It is generally preferred for complete coverage of a jurisdiction and provides relative accuracy of an address.

*i.e. Linear Theoretical & Actual Address Ranges:
Theoretical Address Range: 701-799; 700-798
Actual address range: 701-725; 700-724*

(c) **Composite Geocoding** is a dual stage geocoding option where generally a more accurate (generally point based) geocoding option is initially utilized to find a location. If a suitable match is not found the address is passed to the second (generally linear based) geocoding option for an attempted match based on more forgiving parameters. This dual pass geocoding provides very good absolute accuracy while retaining complete coverage of relative accuracy throughout a jurisdiction.

Section 2.15 Data Quality

Data quality is a cumulative relationship of data accuracy, consistency, currency, and completeness accurately representing reality within NG911. Every effort must be continually pursued to maintain every aspect of data quality as set forth in this standard. Failure to maintain any portion of the cumulative relationship of data quality for NG911 data compromises the entire integrity of the data and poses a serious risk of loss of life considering the sole intent of the data.

Section 2.16 Positional Accuracy Standards

The geospatial accuracy of an address location and the critical datasets required for NG911 should be pursued to achieve the highest feasible and attainable positional accuracy possible. While the positional accuracy of this data may vary greatly between agencies there must be a minimum statewide accuracy standard that ensures accurately and reliably locating individuals for emergency response. In 2016 NAIP Orthophotography accuracy specifications changed the true ground accuracy to 4 meters (13.1234 feet) at 95% confidence level. Considering many rural address point locations within Oklahoma have been and will be derived from this 1 meter or subsequently higher resolution NAIP Orthophotography or by GPS collection devices capable of differential correction to attain comparable accuracy the following minimum standards should be feasibly attainable in most addressing applications within Oklahoma. The equipment and methodology used to acquire and derive this data must be that of a grade capable of collecting data to within a horizontal accuracy of +/- 13.1234 feet at 95% confidence. Data collection at higher accuracy is obviously preferred as resources permit such acquisition.

Section 2.17 Spatial Reference

Local GIS data may be stored in any projection desired as long as the data projection is a clearly defined and is a regionally recognized projection. For NG911 purposes the NG911 data must be in the following projection prior to loading into the Emergency Call Routing Function (ECRF) or Location Validation Function (LVF).

| |
|---|
| EPSG: 4326 WGS 84 / Latlong |
| Projection: Geographic, Plate Carrée, Equidistant Cylindrical, Equirectangular |
| Latitude of the origin: 0° |
| Longitude of the origin: 0° |
| Scaling factor: 1 |
| False eastings: 0° |
| False northings: 0° |
| Ellipsoid: WGS84 |
| Horizontal Datum: WGS84 |
| Vertical Datum: WGS84 Geoid, which is equivalent to Local Mean Sea Level (MSL) |
| Units: decimal degrees |
| Global extent: -180, -90, 180, 90 |

Section 2.18 Content Accuracy

Content accuracy is measured based on the overall functional correctness of the data to accurately represent reality. This accuracy can be measured by the following aspects.

- (a) The individual components of the data must be complete (filled in where appropriate) and contain the correct information.
- (b) The data must be correct for the location in question. Routing to someplace is important but locating that someplace is critical.
- (c) The data must be correct sequentially in terms of its relationship with the overall addressing schema.
- (d) The data must be both current and valid with regard to content in order to function correctly.

Section 2.19 Approved Agencies

(a) **Agency** - An Agency as defined within this standard is an organization approved by the State of Oklahoma 911 Coordinator to edit and/or submit NG911 data to the State of Oklahoma NG911/GIS Repository for provisioning to the ESInet. A current table of these approved Agencies along with their assigned Agency IDs and corresponding Discrepancy Agency will be maintained by the State of Oklahoma 9-1-1 Coordinator. Below are the types of Agencies that can be approved as an Agency.

- Public Safety Answering Point
- Council of Government
- Vendor

(b) **Agency ID** - Every approved Agency will be assigned an Agency ID by the State of Oklahoma 9-1-1 Coordinator. This unique Agency ID will be utilized within all related tools & documentation to reference an agency in following format:

- | | | |
|----------|------------------------|-----------------------------------|
| • PSAP | psap.XXXX.ok.gov | (XXXX is the Registered FCC ID #) |
| • COG | cog.cogname.ok.gov | (Abbreviated name of the COG) |
| • VENDOR | ven.companyname.ok.gov | (Company Name) |

(c) **Discrepancy Agency** – Historically, the Discrepancy Agency has been referred to by many previous names for a variety of reasons. (Authoritative, Provisioning, Steward, Jurisdiction, and in some cases Source or Source Agency) As functionally defined within this standard the Discrepancy Agency is to serve as both the Agency that officially submits data to and receives a discrepancy report back from the State of Oklahoma NG911/GIS Repository as the data is checked before provisioning up to the ESInet. A Discrepancy Agency may submit data on behalf of another Agency as approved by the State of Oklahoma 9-1-1 Coordinator. The Discrepancy Agency “MAY” be responsible for actually correcting the data if it is the same Agency that locally maintains the data within their respective jurisdiction and also submits data to the State of Oklahoma NG911/GIS Repository. (*i.e. Single PSAP*) In the instance of a Discrepancy Agency submitting another Agencies’ data to the State of Oklahoma NG911/GIS Repository it “IS ALWAYS” the Discrepancy Agency’s responsibility to ensure any discrepancies found get resolved back at the local level. (*i.e. multiple PSAPs, COG, or Vendor*) *Not every Agency is a Discrepancy Agency, but every Agency must have a Discrepancy Agency.*

Section 2.20 Data Stewardship

The local Agency is ultimately responsible for ensuring the NG911 data is maintained and submitted to the State of Oklahoma NG911/GIS Repository. This can be accomplished by directly working with the State of Oklahoma NG911/GIS Repository or by entering into agreements with other Agencies to allow data to be maintained and / or submitted to the State of Oklahoma NG911/GIS Repository on behalf of the local Agency.

When a single feature has more than one responsible agency, (*i.e. a road between two Agencies*) each Agency shall work in conjunction with its neighbor to resolve any conflicts locally for their respective portion of data associated with the feature. While there may be several acceptable methods used to handle this situation locally, these methods must work toward providing seamless statewide interoperability and avoid any obvious confusion. A clear reference must be maintained in the metadata and tabular data to the Agency regarding the development and maintenance of any dataset.

i.e. A specific method currently being utilized is two roads of identical geometry (vertices to vertices) that overlap the data of the two owners. The road name within one ownership with a boundary layer separating the road by PARITY (Odd, Even) could have a duplicate road with opposing parity which could be of a different name (Stacking). The direction or purpose of the Discrepancy Agency of the data, whether a multi-jurisdictional collection, COG or State GIS repository, will be to ensure the EDGE Matching of these single owners or stewards to allow for routing topology (intersection breaks, boundary breaks, etc.) between the individual owners.

Section 2.21 Metadata

Metadata shall be created and maintained for all address data sets before the data is submitted to the State of Oklahoma NG911/GIS Repository. The metadata shall meet the standards as set forth in the *FGDC Content Standards for Geospatial Metadata (FGDC-STD-001-1998)* and shall be made available through accepted publishing methods.

Article III. Required Point, Line, & Polygon Schema

Section 3.01 Address Point – Point

Addresses can be accessed as or through geospatial points. Address points can be used for a variety of purposes, ranging from precise geocoding to assigning addresses in a reliable manner. This schema has the potential to serve as both an address repository while referencing a master street name list, providing an invaluable resource to a broad community of users. This dataset is to be maintained at the local Agency level and submitted to the State of Oklahoma NG911/GIS Repository.

Reference [OK ADDRESS SCHEMAS 22.XLS](#) – ADDRESS_POINT

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_ADD | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| FullAddr | Full Address (ie.101 West Main Street) | ALPHANUMERIC | 100 | C | |
| FullName | Full Name of the Primary Street | ALPHANUMERIC | 50 | C | |
| Label | Map Label of the Address | ALPHANUMERIC | 50 | C | |
| AddPre | Extension that Precedes an Address Number (ie "A" 100 North Main Street) | ALPHANUMERIC | 15 | C | |
| Address | Address Number (ie "100" North Main Street) | NUMERIC | 6 | C | |
| AddSuf | House Number Suffix (ie 100 A) | ALPHANUMERIC | 15 | C | |
| PreMod | Primary Street Modifier (ie "Old" Church Street) | ALPHANUMERIC | 15 | C | |
| PreDir | Primary Street))Directional Prefix (ie "North" Main Street) (Unabbreviated DIRECTION Domain) | ALPHANUMERIC | 9 | C | DIRECTION |
| PreType | Primary Street Prefix Type (ie "Highway" 70 East) | ALPHANUMERIC | 50 | C | STREETTYPE |
| PreTypeSep | Primary Street Name Pre Type Separator (ie Circle "in the" Woods) | ALPHANUMERIC | 20 | C | SEPARATOR |
| Street | Primary Street Name (ie North "Main" Street) | ALPHANUMERIC | 60 | C | |
| StreetType | Primary Street Type (ie North Main "Street") (Unabbreviated STREETTYPE Domain) | ALPHANUMERIC | 50 | C | STREETTYPE |
| SufDir | Primary Street Directional Suffix (ie Highway 70 "East") (Unabbreviated DIRECTION Domain) | ALPHANUMERIC | 9 | C | DIRECTION |
| SufMod | Primary Street Name Suffix Modifier (ie North Main Street "Extension") | ALPHANUMERIC | 25 | C | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| County | Name of the County the Address Resides In (Kay County) | ALPHANUMERIC | 40 | M | COUNTY |
| City | Name of the Municipality the Address Resides In | ALPHANUMERIC | 100 | M | |
| UnincComm | Name of the Unincorporated Community the Address Resides In | ALPHANUMERIC | 100 | O | |
| NbrhdComm | Name of Neighborhood, Subdivision, Community | ALPHANUMERIC | 100 | O | |
| ESN | Emergency Service Number | ALPHANUMERIC | 5 | C | |
| PSAP | Responding Public Service Access Point | ALPHANUMERIC | 25 | M | |
| MSAGComm | Master Street Address Guide Community | ALPHANUMERIC | 30 | C | |
| PostComm | Postal Community | ALPHANUMERIC | 40 | C | |
| Zipcode | Zipcode | ALPHANUMERIC | 7 | C | |

| | | | | | |
|------------|---|--------------|-----|---|----------------|
| Zipcode4 | Zip Code +4 Extension | ALPHANUMERIC | 4 | O | |
| LandmkName | Business or Agency at the Address | ALPHANUMERIC | 150 | C | |
| AddtnLoc | Additional Location Information (ie Loading Dock, Gate A1, West Wing) | ALPHANUMERIC | 225 | O | |
| BldgName | Building or Unit Name (ie Building A, Building 1) | ALPHANUMERIC | 75 | O | |
| Floor | Floor of the Building | ALPHANUMERIC | 75 | O | |
| BldgUnit | Building Unit Type (ie Suite B, Apartment 206) | ALPHANUMERIC | 75 | O | |
| Room | Room Number in the Building | ALPHANUMERIC | 75 | O | |
| Seat | Seat in the Room | ALPHANUMERIC | 75 | O | |
| GrpQuarter | Group Living Quarters | ALPHANUMERIC | 1 | O | YESNO |
| OccupTime | Times the Building is Occupied (8:00 a.m.- 5:00 p.m.) | ALPHANUMERIC | 50 | O | |
| StrmSheltr | Type of Storm Shelter | ALPHANUMERIC | 25 | O | STORMSHELTER |
| Basement | Existing Basement | ALPHANUMERIC | 1 | O | YESNO |
| PlaceType | Type of Feature Identified by an Address | ALPHANUMERIC | 50 | O | PLACETYPE |
| Placement | Methodology Used For Address Point Placement | ALPHANUMERIC | 25 | O | PLACEMENT |
| MilePost | Mile Post | ALPHANUMERIC | 150 | C | |
| Longitude | Longitude Coordinates of the Address Point in Decimal Degrees | DECIMAL | 15 | O | |
| Latitude | Latitude Coordinates of the Address Point in Decimal Degrees | DECIMAL | 15 | O | |
| Elevation | Elevation of the Address Point (Meter) | NUMERIC | 6 | O | |
| AddDataURI | Uniform Resource Identifier (URI) for Additional Associate Data (Floorplans, Photos, URL) | ALPHANUMERIC | 254 | C | |
| InitiSrc | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| LgcyAdd | Legacy Full Address with Abbreviations (ie.101 W Main St) | ALPHANUMERIC | 100 | O | |
| LgcyPreDir | Legacy Street Name Pre Directional (Abbreviated DIRECTION Domain) | ALPHANUMERIC | 2 | C | LGCYDIRECTION |
| LgcyStreet | Legacy Street Name | ALPHANUMERIC | 75 | C | |
| LgcyType | Legacy Street Name Type (Abbreviated STREETTYPE Domain) | ALPHANUMERIC | 4 | C | LGCYSTREETTYPE |
| LgcySufDir | Legacy Street Name Post Directional (Abbreviated DIRECTION Domain) | ALPHANUMERIC | 2 | C | LGCYDIRECTION |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |
| RCLMatch | NGUID_RDCL of the road segment the address point should match to as Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 254 | M | |
| RCLSide | Checks the Left or Right Side of the Address Point to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | RCLSIDE |

Section 3.02 Road Centerline - Line

The line in this instance is a linear geospatial feature that represents a street centerline. Other linear features that have incremental address ranges along their sides may also utilize this basic structure. Address ranges are typically established for individual centerline segments so address matching may be performed. Street names and address ranges shall conform to the actual addresses assigned to specific points as a practical rule. This dataset is to be maintained at the local Agency level and submitted to the State of Oklahoma NG911/GIS Repository.

Reference **OK ADDRESS SCHEMAS 22.XLS** - ROAD_CENTERLINE

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|--|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_RDCL | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| FullName | Full Name of the Primary Road | ALPHANUMERIC | 50 | M | |
| Label | Map Label of the Road Segment | ALPHANUMERIC | 50 | O | |
| Add_L_Pre | Extension that Precedes an Address Number on the Left Side of the Road (ie "A" 100 North Main Street) | ALPHANUMERIC | 15 | C | |
| Add_R_Pre | Extension that Precedes an Address Number on the Right Side of the Road (ie "A" 100 North Main Street) | ALPHANUMERIC | 15 | C | |
| Add_L_From | Left From (Low) Address | NUMERIC | 6 | M | |
| Add_L_To | Left To (High) Address | NUMERIC | 6 | M | |
| Add_R_From | Right From (Low) Address | NUMERIC | 6 | M | |
| Add_R_To | Right To (High) Address | NUMERIC | 6 | M | |
| Parity_L | The Even or Odd Property of the Address Number Range on the Left Side of the Road Segment | ALPHANUMERIC | 1 | M | PARITY |
| Parity_R | The Even or Odd Property of the Address Number Range on the Right Side of the Road Segment | ALPHANUMERIC | 1 | M | PARITY |
| PreMod | Primary Street Modifier (ie "Old" Church Street) | ALPHANUMERIC | 15 | C | |
| PreDir | Primary Street Directional Prefix (ie "North" Main Street) (Unabbreviated DIRECTION Domain) | ALPHANUMERIC | 9 | C | DIRECTION |
| PreType | Primary Street Prefix Type (ie "Highway" 70 East) (Unabbreviated STREETTYPE Domain) | ALPHANUMERIC | 50 | C | STREETTYPE |
| PreTypeSep | Primary Street Name Pre Type Separator (ie Circle "in the" Woods) | ALPHANUMERIC | 20 | C | SEPARATOR |
| Street | Primary Street Name (ie North "Main" Street) | ALPHANUMERIC | 60 | M | |
| StreetType | Primary Street Type (ie North Main "Street") (Unabbreviated STREETTYPE Domain) | ALPHANUMERIC | 50 | C | STREETTYPE |
| SufDir | Primary Street Directional Suffix (ie Highway 70 "East") (Unabbreviated DIRECTION Domain) | ALPHANUMERIC | 9 | C | DIRECTION |
| SufMod | Primary Street Name Suffix Modifier (ie North Main Street "Extension") | ALPHANUMERIC | 25 | C | |
| Country_L | Name of Country on the Left Side of the Road (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| Country_R | Name of Country on the Right Side of the Road (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State_L | Name of the State on the Left Side of the Road (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| State_R | Name of the State on the Right Side of the Road (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| County_L | Name of the County on the Left Side of the Road (Kay County) | ALPHANUMERIC | 40 | M | COUNTY |
| County_R | Name of the County on the Right Side of the Road (KayCounty) | ALPHANUMERIC | 40 | M | COUNTY |
| City_L | Name of the Municipality on the Left Side of the Road | ALPHANUMERIC | 100 | M | |
| City_R | Name of the Municipality on the Right Side of the Road | ALPHANUMERIC | 100 | M | |
| UnincCommL | Name of the Unincorporated Community on the Left Side of the Road | ALPHANUMERIC | 100 | O | |

| | | | | | |
|------------|---|--------------|-----|---|----------------|
| UnincCommR | Name of the Unincorporated Community on the Right Side of the Road | ALPHANUMERIC | 100 | O | |
| NbrhdCommL | Name of Neighborhood, Subdivision, Community on the Left Side of the Road | ALPHANUMERIC | 100 | O | |
| NbrhdCommR | Name of Neighborhood, Subdivision, Community on the Right Side of the Road | ALPHANUMERIC | 100 | O | |
| Esn_L | Emergency Service Number on the Left Side of the Road | ALPHANUMERIC | 5 | C | |
| Esn_R | Emergency Service Number on the Right Side of the Road | ALPHANUMERIC | 5 | C | |
| PSAP_L | Responding Public Service Access Point on the Left Side of the Road | ALPHANUMERIC | 25 | M | |
| PSAP_R | Responding Public Service Access Point on the Right Side of the Road | ALPHANUMERIC | 25 | M | |
| MSAGComm_L | MSAG Community on the Left Side of the Road | ALPHANUMERIC | 30 | C | |
| MSAGComm_R | MSAG Community on the Right Side of the Road | ALPHANUMERIC | 30 | C | |
| Zipcode_L | Zipcode on the Left Side of the Road | ALPHANUMERIC | 7 | C | |
| Zipcode_R | Zipcode on the Right Side of the Road | ALPHANUMERIC | 7 | C | |
| Zipcode4_L | Zipcode +4 Extension on the Left Side of the Road | ALPHANUMERIC | 4 | O | |
| Zipcode4_R | Zipcode +4 Extension on the Right Side of the Road | ALPHANUMERIC | 4 | O | |
| PostComm_L | Postal Community on the Left Side of the Road | ALPHANUMERIC | 40 | C | |
| PostComm_R | Postal Community on the Right Side of the Road | ALPHANUMERIC | 40 | C | |
| RoadClass | HPMS Functional Classification | ALPHANUMERIC | 15 | O | ROADCLASS |
| Oneway | Travel Direction of the Segment Related to Line Direction | ALPHANUMERIC | 2 | O | ONEWAY |
| SpeedLimit | Speed Limit of Street Centerline Segment | NUMERIC | 3 | O | |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | O | |
| AltStName1 | 1st Alternate Street Name | ALPHANUMERIC | 50 | O | |
| AltStName2 | 2nd Alternate Street Name | ALPHANUMERIC | 50 | O | |
| AltStName3 | 3rd Alternate Street Name | ALPHANUMERIC | 50 | O | |
| LgcyPreDir | Legacy Street Name Pre Directional (Abbreviated DIRECTION Domain) | ALPHANUMERIC | 2 | C | LGCYDIRECTION |
| LgcyStreet | Legacy Street Name | ALPHANUMERIC | 75 | C | |
| LgcyType | Legacy Street Name Type (Abbreviated STREETTYPE Domain) | ALPHANUMERIC | 4 | C | LGCYSTREETTYPE |
| LgcySufDir | Legacy Street Name Post Directional (Abbreviated DIRECTION Domain) | ALPHANUMERIC | 2 | C | LGCYDIRECTION |
| FromLevel | Level from Overpass / Underpass | ALPHANUMERIC | 10 | T | LEVEL |
| ToLevel | Level to Overpass / Underpass | ALPHANUMERIC | 10 | T | LEVEL |
| BoundLane | Direction of the Lane of Traffic if Dedicated Direction | ALPHANUMERIC | 9 | T | DIRECTION |
| RoadLength | Length of Street Segment | DECIMAL | 15 | T | |
| DriveTime | Drivetime of the Street Segment | DECIMAL | 15 | T | |
| DeadEnd | Dead End Street Segment | ALPHANUMERIC | 1 | T | YESNO |
| Surface | Paving Surface of the Street | ALPHANUMERIC | 10 | T | |
| Lanes | Number of Lanes Represented by the Street Segment | ALPHANUMERIC | 5 | T | NUMBER |
| Toll | Requires Toll to Access | ALPHANUMERIC | 1 | T | YESNO |
| LtdAccess | Limited Access to the General Public | ALPHANUMERIC | 1 | T | YESNO |
| Valid_L | Indicates if Address Range on the Left Side of the Segment Should be used for Civic Location | ALPHANUMERIC | 1 | O | YESNO |
| Valid_R | Indicates if Address Range on the Right Side of the Segment Should be used for Civic Location | ALPHANUMERIC | 1 | O | YESNO |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

| | | | | | |
|------------|--|--------------|----|---|------------|
| TopoExcept | Topological Exceptions when Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 20 | M | TOPOEXCEPT |
| GeoMSAG_L | Toggle denoting whether the Left Side of the Road Centerline segment's address range will be included in the submitting agencies MSAG validation check. | ALPHANUMERIC | 1 | M | YESNO |
| GeoMSAG_R | Toggle denoting whether the Right Side of the Road Centerline segment's address range will be included in the submitting agencies MSAG validation check. | ALPHANUMERIC | 1 | M | YESNO |

Section 3.03 Emergency Service Zone(ESZ) Boundary - Polygon

The Emergency Service Zone (ESZ) boundary is the geographical representation of the Emergency Service Number (ESN). The ESN is a 3 to 5 digit number representing a unique combination of emergency service agencies (Law, Fire, and EMS) designated to serve a specific range of addresses within a particular geographical area, or ESZ. The ESN facilitates selective routing and selective transfer, if required, to the appropriate PSAP and the dispatching of the proper service agencies through the MSAG. There can be no overlaps or gaps in this dataset. This dataset is to be maintained at the local Agency level and submitted to the State of Oklahoma NG911/GIS Repository.

Reference **OK ADDRESS SCHEMAS 22.XLS** – ESZ_BOUNDARY

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_ESZ | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency | Name of the Service Provider within the Authoritative Service area | ALPHANUMERIC | 60 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| Avcard_URI | The internet address of an XML data structure which contains contact information in the form of a vCard | ALPHANUMERIC | 254 | M | |
| ESN | The three to 5 digit Number assigned to the unique combination of ESB that represent a ESZ polygon. | ALPHANUMERIC | 5 | M | |
| ESZ | The Polygon that defines the unique geographic area of the combination of ESB | ALPHANUMERIC | 5 | M | |
| ServiceNum | A dialable number or dial string on a 12-digit keypad to reach the emergency service appropriate for the location | ALPHANUMERIC | 15 | O | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

Section 3.04 Public Safety Answer Point (PSAP) Boundary – Polygon

The PSAP boundary layer may contain one or many PSAP Boundaries. Each PSAP boundary defines the geographic area of a PSAP that has primary responsibilities for an emergency request. This boundary layer provides the primary call routing. This layer is used by the ECRF to perform the geographic query to determine which PSAP receives the emergency service request. There can be no overlaps or gaps in this dataset. This dataset is maintained as a statewide dataset housed in the State of Oklahoma NG911/GIS Repository. Any boundary disputes within this dataset will be resolved by the State of Oklahoma 911 Coordinator on an individual basis with input from all involved Agencies.

Reference **OK_ADDRESS_SCHEMAS_22.XLS** – PSAP_BOUNDARY

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_PSAP | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency | Name of the Service Provider within the Authoritative Service area | ALPHANUMERIC | 60 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| Avcard_URI | The internet address of an XML data structure which contains contact information in the form of a vCard | ALPHANUMERIC | 254 | M | |
| ServiceURN | The ECRF is queried with a location and a service URN that returns the Service URI. | ALPHANUMERIC | 50 | M | SERVICEURN |
| ServiceURI | URI for Call Routing contained in the ESB layer | ALPHANUMERIC | 254 | M | |
| ServiceNum | A dialable number or dial string on a 12-digit keypad to reach the emergency service appropriate for the location | ALPHANUMERIC | 15 | O | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

Section 3.05 Emergency Service Boundary – Polygons (FIRE, LAW, EMS)

The Emergency Service Boundaries (ESB) are the geographical representation of the primary responding FIRE, LAW and EMS agencies within the given area. This layer is used by the ECRF to perform the geographic query to determine which PSAP receives the emergency service request based on specific need or type of emergency. These boundary layers provides the secondary call routing. There can be no overlaps or gaps in the **THREE SEPARATE LAYERS**. (There **MUST** be a separate ESB for each type of emergency responding service) These datasets are to be maintained at the local Agency level and submitted to the State of Oklahoma NG911/GIS Repository.

Reference **OK_ADDRESS_SCHEMAS_22.XLS** – ESB_FIRE_BOUNDARY

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_FIRE | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency | Name of the Service Provider within the Authoritative Service area | ALPHANUMERIC | 60 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| Avcard_URI | The internet address of an XML data structure which contains contact information in the form of a vCard | ALPHANUMERIC | 254 | M | |
| ServiceURN | The ECRF is queried with a location and a service URN that returns the Service URI. | ALPHANUMERIC | 50 | M | SERVICEURN |
| ServiceURI | URI for Call Routing contained in the ESB layer | ALPHANUMERIC | 254 | M | |
| ServiceNum | A dialable number or dial string on a 12-digit keypad to reach the emergency service appropriate for the location | ALPHANUMERIC | 15 | O | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

Reference **OK_ADDRESS_SCHEMAS_22.XLS** – ESB_LAW_BOUNDARY

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_LAW | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency | Name of the Service Provider within the Authoritative Service area | ALPHANUMERIC | 60 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| Avcard_URI | The internet address of an XML data structure which contains contact information in the form of a vCard | ALPHANUMERIC | 254 | M | |
| ServiceURN | The ECRF is queried with a location and a service URN that returns the Service URI. | ALPHANUMERIC | 50 | M | SERVICEURN |

| | | | | | |
|------------|---|--------------|-----|---|---------|
| ServiceURI | URI for Call Routing contained in the ESB layer | ALPHANUMERIC | 254 | M | |
| ServiceNum | A dialable number or dial string on a 12-digit keypad to reach the emergency service appropriate for the location | ALPHANUMERIC | 15 | O | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

Reference **OK ADDRESS SCHEMAS 22.XLS** – ESB_EMS_BOUNDARY

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_EMS | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency | Name of the Service Provider within the Authoritative Service area | ALPHANUMERIC | 60 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| Avcard_URI | The internet address of an XML data structure which contains contact information in the form of a vCard | ALPHANUMERIC | 254 | M | |
| ServiceURN | The ECRF is queried with a location and a service URN that returns the Service URI. | ALPHANUMERIC | 50 | M | SERVICEURN |
| ServiceURI | URI for Call Routing contained in the ESB layer | ALPHANUMERIC | 254 | M | |
| ServiceNum | A dialable number or dial string on a 12-digit keypad to reach the emergency service appropriate for the location | ALPHANUMERIC | 15 | O | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

Section 3.06 Discrepancy Agency Boundary – Polygon

The Discrepancy Agency Boundary (*Formerly referred to as Authoritative and Provisioning Boundary*) is the geographical representation of the Agency that officially submits data to and receives a discrepancy report back from the State of Oklahoma NG911/GIS Repository as the data is checked before provisioning up to the ESInet. There can be no overlaps in this dataset. This dataset is maintained as a statewide dataset housed in the State of Oklahoma NG911/GIS Repository. Any boundary disputes within this dataset will be resolved by the State of Oklahoma 911 Coordinator on an individual basis with input from all involved Agencies.

Reference **OK_ADDRESS_SCHEMAS_22.XLS** – DISCREPANCYAGENCY_BOUNDARY

| Field Name | Field Description | Field Type | Field Width | Priority | Domain Table |
|------------|---|--------------|-------------|----------|--------------|
| DiscrpAgID | Discrepancy Agency ID (Agency that receives the Discrepancy Report) | ALPHANUMERIC | 75 | M | AGENCYID |
| NGUID_DISC | NENA Globally Unique ID : (LayerName)_(Local911UniqueID)@(Agency_ID) | ALPHANUMERIC | 254 | M | |
| Agency | Name of the Service Provider within the Authoritative Service area | ALPHANUMERIC | 60 | M | |
| Agency_ID | ID Assigned to each Agency by the State of Oklahoma 911 Coordinator | ALPHANUMERIC | 100 | M | AGENCYID |
| Avcard_URI | The internet address of an XML data structure which contains contact information in the form of a vCard | ALPHANUMERIC | 254 | M | |
| ServiceURN | The ECRF is queried with a location and a service URN that returns the Service URI. | ALPHANUMERIC | 50 | M | SERVICEURN |
| ServiceURI | URI for Call Routing contained in the ESB layer | ALPHANUMERIC | 254 | M | |
| ServiceNum | A dialable number or dial string on a 12-digit keypad to reach the emergency service appropriate for the location | ALPHANUMERIC | 15 | O | |
| Country | Name of Country the Address Resides In (US) (Abbreviated COUNTRY Domain) | ALPHANUMERIC | 2 | M | COUNTRY |
| State | Name of the State the Address Resides In (OK) (Abbreviated STATE Domain) | ALPHANUMERIC | 2 | M | STATE |
| InitiSrce | Original source of the data | ALPHANUMERIC | 75 | M | |
| InitiDate | Initial Time-Stamp - (Creation Entry Date) | DATETIME | 20 | M | |
| RevEditor | Most recent editor of the data | ALPHANUMERIC | 75 | M | |
| RevDate | Modified Time-Stamp - (Modify Entry Date) | DATETIME | 20 | M | |
| EffectDate | Date & Time that the record is scheduled to take effect | DATETIME | 20 | O | |
| ExpireDate | Date & Time that the record is no longer valid | DATETIME | 20 | O | |
| Comment | Comments / Notes | ALPHANUMERIC | 100 | C | |
| SUBMIT | Submit Feature to be Validated in OK NG911 GIS Toolkit | ALPHANUMERIC | 1 | M | YESNO |

Section 3.07 Other Recommended Layers Polygon

Additional GIS Data layers may be extremely helpful in ultimately meeting your local purposes. The following layers may aid in the functionality of the ECRF and LVF and are strongly recommended for call taking and dispatch operations:

ECRF & LVF Recommended Layers

- Street Name Alias Table
- Landmark Name Part Table
- Complete Landmark as Table
- States
- Counties
- Incorporated Municipal Boundaries
- Unincorporated Community Boundaries
- Neighborhood Community Boundaries

- Other ESB (Poison Control, Forest Service, Animal Control)

Other Recommended Layers

- Railroad Centerline
- Hydrology Line
- Hydrology Polygon
- Cell Site Location
- Mile Marker Location

Section 3.08 Reference Domains

Reference domain values provide a pick list of preset values for various attributes in order to standardize data values both within an organization as well as across multiple jurisdictions. The following domain values are either preset static values or professionally authoritative standard values in order to provide consistency among various datasets.

The domain tables shown below are current at the approval date of this standard; however values may be updated as necessary between approved versions of this standard. For the most current domain values please reference the associated Excel file and File Geodatabase. OK ADDRESS SCHEMAS 22.XLS

Associated Reference Document: OK ADDRESS SCHEMAS 22.XLS

(a) Reference OK ADDRESS SCHEMAS 22.XLS –AGENCYID

| |
|---|
| Data Source - Approved by State of Oklahoma 911 Coordinator |
| PSAPs without current FCC ID #'s are listed with a temporary name until a FCC ID # is secured and accepted by the State of Oklahoma 9-1-1 Coordinator |

| Code | Description |
|-------------------------|-------------------------|
| cog.acog.ok.gov | cog.acog.ok.gov |
| cog.ascog.ok.gov | cog.ascog.ok.gov |
| cog.coedd.ok.gov | cog.coedd.ok.gov |
| cog.eodd.ok.gov | cog.eodd.ok.gov |
| cog.ggeda.ok.gov | cog.ggeda.ok.gov |
| cog.incog.ok.gov | cog.incog.ok.gov |
| cog.keddo.ok.gov | cog.keddo.ok.gov |
| cog.noda.ok.gov | cog.noda.ok.gov |
| cog.oeda.ok.gov | cog.oeda.ok.gov |
| cog.swoda.ok.gov | cog.swoda.ok.gov |
| cog.soda.ok.gov | cog.soda.ok.gov |
| psap.5578.ok.gov | psap.5578.ok.gov |
| psap.5603.ok.gov | psap.5603.ok.gov |
| psap.5585.ok.gov | psap.5585.ok.gov |
| psap.5586.ok.gov | psap.5586.ok.gov |
| psap.5589.ok.gov | psap.5589.ok.gov |
| psap.5592.ok.gov | psap.5592.ok.gov |
| psap.5593.ok.gov | psap.5593.ok.gov |
| psap.5594.ok.gov | psap.5594.ok.gov |
| psap.Blanchard.ok.gov | psap.Blanchard.ok.gov |
| psap.5596.ok.gov | psap.5596.ok.gov |
| psap.5597.ok.gov | psap.5597.ok.gov |
| psap.5631.ok.gov | psap.5631.ok.gov |
| psap.8328.ok.gov | psap.8328.ok.gov |
| psap.8835.ok.gov | psap.8835.ok.gov |
| psap.5604.ok.gov | psap.5604.ok.gov |
| psap.5608.ok.gov | psap.5608.ok.gov |
| psap.ChoctawHugo.ok.gov | psap.ChoctawHugo.ok.gov |

| Code | Description |
|----------------------|----------------------|
| psap.5610.ok.gov | psap.5610.ok.gov |
| psap.5616.ok.gov | psap.5616.ok.gov |
| psap.5615.ok.gov | psap.5615.ok.gov |
| psap.5612.ok.gov | psap.5612.ok.gov |
| psap.5617.ok.gov | psap.5617.ok.gov |
| psap.5618.ok.gov | psap.5618.ok.gov |
| psap.5669.ok.gov | psap.5669.ok.gov |
| psap.5622.ok.gov | psap.5622.ok.gov |
| psap.5623.ok.gov | psap.5623.ok.gov |
| psap.5741.ok.gov | psap.5741.ok.gov |
| psap.5625.ok.gov | psap.5625.ok.gov |
| psap.5626.ok.gov | psap.5626.ok.gov |
| psap.5627.ok.gov | psap.5627.ok.gov |
| psap.5628.ok.gov | psap.5628.ok.gov |
| psap.5629.ok.gov | psap.5629.ok.gov |
| psap.8394.ok.gov | psap.8394.ok.gov |
| psap.5630.ok.gov | psap.5630.ok.gov |
| psap.5633.ok.gov | psap.5633.ok.gov |
| psap.5634.ok.gov | psap.5634.ok.gov |
| psap.8134.ok.gov | psap.8134.ok.gov |
| psap.Ellis.ok.gov | psap.Ellis.ok.gov |
| psap.5636.ok.gov | psap.5636.ok.gov |
| psap.Garfield.ok.gov | psap.Garfield.ok.gov |
| psap.8724.ok.gov | psap.8724.ok.gov |
| psap.5643.ok.gov | psap.5643.ok.gov |
| psap.5644.ok.gov | psap.5644.ok.gov |
| psap.Grant.ok.gov | psap.Grant.ok.gov |
| psap.5646.ok.gov | psap.5646.ok.gov |

| Code | Description |
|------------------------|------------------------|
| psap.5647.ok.gov | psap.5647.ok.gov |
| psap.5648.ok.gov | psap.5648.ok.gov |
| psap.5650.ok.gov | psap.5650.ok.gov |
| psap.5406.ok.gov | psap.5406.ok.gov |
| psap.5652.ok.gov | psap.5652.ok.gov |
| psap.5653.ok.gov | psap.5653.ok.gov |
| psap.5655.ok.gov | psap.5655.ok.gov |
| psap.5654.ok.gov | psap.5654.ok.gov |
| psap.5679.ok.gov | psap.5679.ok.gov |
| psap.5659.ok.gov | psap.5659.ok.gov |
| psap.5661.ok.gov | psap.5661.ok.gov |
| psap.5662.ok.gov | psap.5662.ok.gov |
| psap.Kingfisher.ok.gov | psap.Kingfisher.ok.gov |
| psap.5667.ok.gov | psap.5667.ok.gov |
| psap.5670.ok.gov | psap.5670.ok.gov |
| psap.8215.ok.gov | psap.8215.ok.gov |
| psap.8331.ok.gov | psap.8331.ok.gov |
| psap.5673.ok.gov | psap.5673.ok.gov |
| psap.8288.ok.gov | psap.8288.ok.gov |
| psap.5674.ok.gov | psap.5674.ok.gov |
| psap.8180.ok.gov | psap.8180.ok.gov |
| psap.8097.ok.gov | psap.8097.ok.gov |
| psap.5613.ok.gov | psap.5613.ok.gov |
| psap.5334.ok.gov | psap.5334.ok.gov |
| psap.5679.ok.gov | psap.5679.ok.gov |
| psap.5680.ok.gov | psap.5680.ok.gov |
| psap.5682.ok.gov | psap.5682.ok.gov |
| psap.5684.ok.gov | psap.5684.ok.gov |
| psap.5685.ok.gov | psap.5685.ok.gov |
| psap.5686.ok.gov | psap.5686.ok.gov |
| psap.5687.ok.gov | psap.5687.ok.gov |
| psap.5689.ok.gov | psap.5689.ok.gov |
| psap.5688.ok.gov | psap.5688.ok.gov |
| psap.5690.ok.gov | psap.5690.ok.gov |
| psap.5691.ok.gov | psap.5691.ok.gov |
| psap.5692.ok.gov | psap.5692.ok.gov |
| psap.5693.ok.gov | psap.5693.ok.gov |
| psap.5694.ok.gov | psap.5694.ok.gov |
| psap.5698.ok.gov | psap.5698.ok.gov |
| psap.5700.ok.gov | psap.5700.ok.gov |

| Code | Description |
|----------------------|----------------------|
| psap.OSU.ok.gov | psap.OSU.ok.gov |
| psap.5678.ok.gov | psap.5678.ok.gov |
| psap.8397.ok.gov | psap.8397.ok.gov |
| psap.5705.ok.gov | psap.5705.ok.gov |
| psap.5708.ok.gov | psap.5708.ok.gov |
| psap.5710.ok.gov | psap.5710.ok.gov |
| psap.5676.ok.gov | psap.5676.ok.gov |
| psap.5713.ok.gov | psap.5713.ok.gov |
| psap.5714.ok.gov | psap.5714.ok.gov |
| psap.5577.ok.gov | psap.5577.ok.gov |
| psap.8183.ok.gov | psap.8183.ok.gov |
| psap.5719.ok.gov | psap.5719.ok.gov |
| psap.5720.ok.gov | psap.5720.ok.gov |
| psap.5721.ok.gov | psap.5721.ok.gov |
| psap.5722.ok.gov | psap.5722.ok.gov |
| psap.5725.ok.gov | psap.5725.ok.gov |
| psap.5726.ok.gov | psap.5726.ok.gov |
| psap.5727.ok.gov | psap.5727.ok.gov |
| psap.8145.ok.gov | psap.8145.ok.gov |
| psap.Sequoyah.ok.gov | psap.Sequoyah.ok.gov |
| psap.5730.ok.gov | psap.5730.ok.gov |
| psap.5727.ok.gov | psap.5727.ok.gov |
| psap.5733.ok.gov | psap.5733.ok.gov |
| psap.5734.ok.gov | psap.5734.ok.gov |
| psap.8614.ok.gov | psap.8614.ok.gov |
| psap.5736.ok.gov | psap.5736.ok.gov |
| psap.5640.ok.gov | psap.5640.ok.gov |
| psap.5737.ok.gov | psap.5737.ok.gov |
| psap.8550.ok.gov | psap.8550.ok.gov |
| psap.5738.ok.gov | psap.5738.ok.gov |
| psap.5739.ok.gov | psap.5739.ok.gov |
| psap.5740.ok.gov | psap.5740.ok.gov |
| psap.5742.ok.gov | psap.5742.ok.gov |
| psap.8404.ok.gov | psap.8404.ok.gov |
| psap.5743.ok.gov | psap.5743.ok.gov |
| psap.5588.ok.gov | psap.5588.ok.gov |
| psap.5621.ok.gov | psap.5621.ok.gov |
| psap.5595.ok.gov | psap.5595.ok.gov |
| psap.5744.ok.gov | psap.5744.ok.gov |
| psap.5581.ok.gov | psap.5581.ok.gov |

| Code | Description |
|---------------------|---------------------|
| psap.5746.ok.gov | psap.5746.ok.gov |
| psap.8529.ok.gov | psap.8529.ok.gov |
| psap.5749.ok.gov | psap.5749.ok.gov |
| ven.datamark.ok.gov | ven.datamark.ok.gov |
| ven.geocomm.ok.gov | ven.geocomm.ok.gov |

| Code | Description |
|----------------------|----------------------|
| ven.geotg.ok.gov | ven.geotg.ok.gov |
| ven.intrado.ok.gov | ven.intrado.ok.gov |
| ven.rsdigital.ok.gov | ven.rsdigital.ok.gov |
| ven.sdr.ok.gov | ven.sdr.ok.gov |
| | |

(b) Reference **OK ADDRESS SCHEMAS 22.XLS** -YESNO

| Data Source - None |
|--------------------|
| STATIC |

| Code | Description |
|------|-------------|
| Y | Y |
| N | N |

(c) Reference **OK ADDRESS SCHEMAS 22.XLS** -NUMBER

| Data Source - None |
|--------------------|
| STATIC |

| Code | Description |
|------|-------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| 10 | 10 |

(d) Reference **OK ADDRESS SCHEMAS 22.XLS** -LEVEL

| Data Source - None |
|--------------------|
| STATIC |

| Code | Description |
|------|------------------|
| 0 | OVERPASS LEVEL 0 |
| 1 | OVERPASS LEVEL 1 |
| 2 | OVERPASS LEVEL 2 |
| 3 | OVERPASS LEVEL 3 |
| 4 | OVERPASS LEVEL 4 |
| 0 | OVERPASS LEVEL 0 |
| 1 | OVERPASS LEVEL 1 |
| 2 | OVERPASS LEVEL 2 |

(e) Reference **OK ADDRESS SCHEMAS 22.XLS** –STORMSHELTER

| Data Source - None | |
|---------------------------|---------------------------|
| STATIC | |
| Code | Description |
| ABOVE GROUND IN STRUCTURE | ABOVE GROUND IN STRUCTURE |
| ABOVE GROUND OUTSIDE | ABOVE GROUND OUTSIDE |
| BELOW GROUND IN STRUCTURE | BELOW GROUND IN STRUCTURE |
| BELOW GROUND OUTSIDE | BELOW GROUND OUTSIDE |

(f) Reference **OK ADDRESS SCHEMAS 22.XLS** - RDCLSIDE

| Data Source - None | |
|--------------------|-------------|
| STATIC | |
| Code | Description |
| L | L |
| R | R |
| N | N |

(g) Reference **OK ADDRESS SCHEMAS 22.XLS** - TOPOEXCEPT

| Data Source - None | |
|--------------------|---|
| STATIC | |
| Code | Description |
| DANGLE_EXCEPTION | Feature is an exception to the "Must Not Have Dangles" topology rule |
| INSIDE_EXCEPTION | Feature is an exception to the "Must be Inside Discrepancy Agency Boundary" topology rule |
| BOTH_EXCEPTION | Feature is an exception to both topology rules |

(h) Reference **OK ADDRESS SCHEMAS 22.XLS** –PLACEMENT

| Data Source - NENA-STA-006.1.1-2020, February 18, 2020 - 4.91 -Page 67 | |
|---|-----------------|
| https://www.nena.org/page/NG911GISDataModel | |
| Code | Description |
| GEOCODING | GEOCODING |
| PARCEL | PARCEL |
| PROPERTY ACCESS | PROPERTY ACCESS |
| STRUCTURE | STRUCTURE |
| SITE | SITE |
| UNKNOWN | UNKNOWN |

(i) Reference **OK ADDRESS SCHEMAS 22.XLS** –PARITY

| Data Source - NENA-STA-006.1.1-2020, February 18, 2020- 4.88-4.89 -Page 66 | |
|---|-------------|
| https://www.nena.org/page/NG911GISDataModel | |
| Code | Description |
| O | ODD |
| E | EVEN |
| B | BOTH |
| Z | ZERO |
| O | ODD |
| E | EVEN |

(j) Reference **OK ADDRESS SCHEMAS 22.XLS** –COUNTRY

Data Source - represented by 2 letter ISO 3166-1 Code -NENA-STA-004.1.1-2014 CLDXF - 3.2.2 - Page 26

<https://www.iso.org/obp/ui/#search>

| Code | Description |
|------|--------------------------|
| US | UNITED STATES OF AMERICA |

(k) Reference **OK ADDRESS SCHEMAS 22.XLS** –STATE

Data Source - USPS Publication 28 - Appendix B - Two-Letter State and Possession Abbreviations - Page 55

<http://pe.usps.com/text/pub28/28apb.htm>

| Code | Description |
|------|-------------|
| OK | OKLAHOMA |
| TX | TEXAS |
| CO | COLORADO |
| NM | NEW MEXICO |
| AR | ARKANSAS |
| KS | KANSAS |
| MO | MISSOURI |

(l) Reference **OK ADDRESS SCHEMAS 22.XLS** –COUNTY

Data Source - FIPS Codes for Counties and County Equivalent Entities

<https://www.census.gov/geo/reference/codes/cou.html>

| Code | Description | State | Code | Description | State |
|------------------|------------------|-------|-------------------|-------------------|-------|
| ADAIR COUNTY | ADAIR COUNTY | OK | HASKELL COUNTY | HASKELL COUNTY | OK |
| ALFALFA COUNTY | ALFALFA COUNTY | OK | HUGHES COUNTY | HUGHES COUNTY | OK |
| ATOKA COUNTY | ATOKA COUNTY | OK | JACKSON COUNTY | JACKSON COUNTY | OK |
| BEAVER COUNTY | BEAVER COUNTY | OK | JEFFERSON COUNTY | JEFFERSON COUNTY | OK |
| BECKHAM COUNTY | BECKHAM COUNTY | OK | JOHNSTON COUNTY | JOHNSTON COUNTY | OK |
| BLAINE COUNTY | BLAINE COUNTY | OK | KAY COUNTY | KAY COUNTY | OK |
| BRYAN COUNTY | BRYAN COUNTY | OK | KINGFISHER COUNTY | KINGFISHER COUNTY | OK |
| CADDO COUNTY | CADDO COUNTY | OK | KIOWA COUNTY | KIOWA COUNTY | OK |
| CANADIAN COUNTY | CANADIAN COUNTY | OK | LATIMER COUNTY | LATIMER COUNTY | OK |
| CARTER COUNTY | CARTER COUNTY | OK | LE FLORE COUNTY | LE FLORE COUNTY | OK |
| CHEROKEE COUNTY | CHEROKEE COUNTY | OK | LINCOLN COUNTY | LINCOLN COUNTY | OK |
| CHOCTAW COUNTY | CHOCTAW COUNTY | OK | LOGAN COUNTY | LOGAN COUNTY | OK |
| CIMARRON COUNTY | CIMARRON COUNTY | OK | LOVE COUNTY | LOVE COUNTY | OK |
| CLEVELAND COUNTY | CLEVELAND COUNTY | OK | MAJOR COUNTY | MAJOR COUNTY | OK |
| COAL COUNTY | COAL COUNTY | OK | MARSHALL COUNTY | MARSHALL COUNTY | OK |
| COMANCHE COUNTY | COMANCHE COUNTY | OK | MAYES COUNTY | MAYES COUNTY | OK |
| COTTON COUNTY | COTTON COUNTY | OK | MCCLAIN COUNTY | MCCLAIN COUNTY | OK |
| CRAIG COUNTY | CRAIG COUNTY | OK | MCCURTAIN COUNTY | MCCURTAIN COUNTY | OK |
| CREEK COUNTY | CREEK COUNTY | OK | MCINTOSH COUNTY | MCINTOSH COUNTY | OK |
| CUSTER COUNTY | CUSTER COUNTY | OK | MURRAY COUNTY | MURRAY COUNTY | OK |
| DELAWARE COUNTY | DELAWARE COUNTY | OK | MUSKOGEE COUNTY | MUSKOGEE COUNTY | OK |
| DEWEY COUNTY | DEWEY COUNTY | OK | NOBLE COUNTY | NOBLE COUNTY | OK |
| ELLIS COUNTY | ELLIS COUNTY | OK | NOWATA COUNTY | NOWATA COUNTY | OK |
| GARFIELD COUNTY | GARFIELD COUNTY | OK | OKFUSKEE COUNTY | OKFUSKEE COUNTY | OK |
| GARVIN COUNTY | GARVIN COUNTY | OK | OKLAHOMA COUNTY | OKLAHOMA COUNTY | OK |
| GRADY COUNTY | GRADY COUNTY | OK | OKMULGEE COUNTY | OKMULGEE COUNTY | OK |
| GRANT COUNTY | GRANT COUNTY | OK | OSAGE COUNTY | OSAGE COUNTY | OK |
| GREER COUNTY | GREER COUNTY | OK | OTTAWA COUNTY | OTTAWA COUNTY | OK |
| HARMON COUNTY | HARMON COUNTY | OK | PAWNEE COUNTY | PAWNEE COUNTY | OK |
| HARPER COUNTY | HARPER COUNTY | OK | PAYNE COUNTY | PAYNE COUNTY | OK |

| Code | Description | State |
|----------------------|----------------------|-------|
| PITTSBURG COUNTY | PITTSBURG COUNTY | OK |
| PONTOTOC COUNTY | PONTOTOC COUNTY | OK |
| POTTAWATOMIE COUNTY | POTTAWATOMIE COUNTY | OK |
| PUSHMATAHA COUNTY | PUSHMATAHA COUNTY | OK |
| ROGER MILLS COUNTY | ROGER MILLS COUNTY | OK |
| ROGERS COUNTY | ROGERS COUNTY | OK |
| SEMINOLE COUNTY | SEMINOLE COUNTY | OK |
| SEQUOYAH COUNTY | SEQUOYAH COUNTY | OK |
| STEPHENS COUNTY | STEPHENS COUNTY | OK |
| TEXAS COUNTY | TEXAS COUNTY | OK |
| TILLMAN COUNTY | TILLMAN COUNTY | OK |
| TULSA COUNTY | TULSA COUNTY | OK |
| WAGONER COUNTY | WAGONER COUNTY | OK |
| WASHINGTON COUNTY | WASHINGTON COUNTY | OK |
| WASHITA COUNTY | WASHITA COUNTY | OK |
| WOODS COUNTY | WOODS COUNTY | OK |
| WOODWARD COUNTY | WOODWARD COUNTY | OK |
| DALLAM COUNTY | DALLAM COUNTY | TX |
| SHERMAN COUNTY | SHERMAN COUNTY | TX |
| HANSFORD COUNTY | HANSFORD COUNTY | TX |
| OCHILTREE COUNTY | OCHILTREE COUNTY | TX |
| LIPSCOMB COUNTY | LIPSCOMB COUNTY | TX |
| HEMPHILL COUNTY | HEMPHILL COUNTY | TX |
| WHEELER COUNTY | WHEELER COUNTY | TX |
| COLLINGSWORTH COUNTY | COLLINGSWORTH COUNTY | TX |
| CHILDRESS COUNTY | CHILDRESS COUNTY | TX |
| HARDEMAN COUNTY | HARDEMAN COUNTY | TX |
| WILBARGER COUNTY | WILBARGER COUNTY | TX |
| WICHITA COUNTY | WICHITA COUNTY | TX |
| CLAY COUNTY | CLAY COUNTY | TX |
| MONTAGUE COUNTY | MONTAGUE COUNTY | TX |

| Code | Description | State |
|---------------------|---------------------|-------|
| COOKE COUNTY | COOKE COUNTY | TX |
| GRAYSON COUNTY | GRAYSON COUNTY | TX |
| FANNIN COUNTY | FANNIN COUNTY | TX |
| LAMAR COUNTY | LAMAR COUNTY | TX |
| RED RIVER COUNTY | RED RIVER COUNTY | TX |
| BOWIE COUNTY | BOWIE COUNTY | TX |
| MORTON COUNTY | MORTON COUNTY | KS |
| STEVENS COUNTY | STEVENS COUNTY | KS |
| SEWARD COUNTY | SEWARD COUNTY | KS |
| MEADE COUNTY | MEADE COUNTY | KS |
| CLARK COUNTY | CLARK COUNTY | KS |
| BARBER COUNTY | BARBER COUNTY | KS |
| SUMNER COUNTY | SUMNER COUNTY | KS |
| COWLEY COUNTY | COWLEY COUNTY | KS |
| CHAUTAUQUA COUNTY | CHAUTAUQUA COUNTY | KS |
| MONTGOMERY COUNTY | MONTGOMERY COUNTY | KS |
| LABETTE COUNTY | LABETTE COUNTY | KS |
| BACA COUNTY | BACA COUNTY | CO |
| LAS ANIMAS COUNTY | LAS ANIMAS COUNTY | CO |
| UNION COUNTY | UNION COUNTY | NM |
| BENTON COUNTY | BENTON COUNTY | AR |
| CRAWFORD COUNTY | CRAWFORD COUNTY | AR |
| SEBASTAIN COUNTY | SEBASTAIN COUNTY | AR |
| SCOTT COUNTY | SCOTT COUNTY | AR |
| POLK COUNTY | POLK COUNTY | AR |
| SEVIER COUNTY | SEVIER COUNTY | AR |
| LITTLE RIVER COUNTY | LITTLE RIVER COUNTY | AR |
| MCDONALD COUNTY | MCDONALD COUNTY | MO |
| NEWTON COUNTY | NEWTON COUNTY | MO |

(m) Reference **OK ADDRESS SCHEMAS 22.XLS** -PLACETYPE

| Data Source - NENA-STA-004.1.1-2014_CLDXF.pdf - Page 104 | |
|---|-------------------|
| https://tools.ietf.org/html/rfc4589 | |
| Code | Description |
| AIRCRAFT | AIRCRAFT |
| AIRPORT | AIRPORT |
| ARENA | ARENA |
| AUTOMOBILE | AUTOMOBILE |
| BANK | BANK |
| BAR | BAR |
| BICYCLE | BICYCLE |
| BUS | BUS |
| BUS-STATION | BUS-STATION |
| CAFE | CAFE |
| CLASSROOM | CLASSROOM |
| CLUB | CLUB |
| CONSTRUCTION | CONSTRUCTION |
| CONVENTION-CENTER | CONVENTION-CENTER |
| GOVERNMENT | GOVERNMENT |
| Code | Description |
| HOSPITAL | HOSPITAL |
| HOTEL | HOTEL |
| INDUSTRIAL | INDUSTRIAL |
| LIBRARY | LIBRARY |
| MOTORCYCLE | MOTORCYCLE |
| OFFICE | OFFICE |
| OTHER | OTHER |
| OUTDOORS | OUTDOORS |
| PARKING | PARKING |
| PLACE-OF-WORSHIP | PLACE-OF-WORSHIP |
| PRISON | PRISON |
| PUBLIC | PUBLIC |
| PUBLIC-TRANSPORT | PUBLIC-TRANSPORT |
| RESIDENCE | RESIDENCE |
| RESTAURANT | RESTAURANT |

| Code | Description |
|---------------|---------------|
| SCHOOL | SCHOOL |
| SHOPPING-AREA | SHOPPING-AREA |
| STADIUM | STADIUM |
| STORE | STORE |
| STREET | STREET |
| THEATER | THEATER |
| TRAIN | TRAIN |
| TRAIN-STATION | TRAIN-STATION |

| Code | Description |
|------------|-------------|
| TRUCK | TRUCK |
| UNDERWAY | UNDERWAY |
| UNKNOWN | UNKNOWN |
| WAREHOUSE | WAREHOUSE |
| WATER | WATER |
| WATERCRAFT | WATERCRAFT |
| | |
| | |

(n) Reference **OK ADDRESS SCHEMAS 22.XLS** -DIRECTION

| |
|--|
| Data Source - USPS Publication 28 - Appendix B - Two-Letter State and Possession Abbreviations - Page 56 |
| http://pe.usps.com/text/pub28/28apb.htm |
| Abbreviation Usage Clarification: Abbreviations are ALWAYS used in Legacy E911 required data fields & NEVER used in NG911 required data fields. |

| Code | Description |
|-----------|-------------|
| NORTH | NORTH |
| SOUTH | SOUTH |
| EAST | EAST |
| WEST | WEST |
| NORTHEAST | NORTHEAST |
| NORTHWEST | NORTHWEST |
| SOUTHEAST | SOUTHEAST |
| SOUTHWEST | SOUTHWEST |

(o) Reference **OK ADDRESS SCHEMAS 22.XLS** -LCGYDIRECTION

| |
|--|
| Data Source - USPS Publication 28 - Appendix B - Two-Letter State and Possession Abbreviations - Page 56 |
| http://pe.usps.com/text/pub28/28apb.htm |
| Abbreviation Usage Clarification: Abbreviations are ALWAYS used in Legacy E911 required data fields & NEVER used in NG911 required data fields. |

| Code | Description |
|------|-------------|
| N | NORTH |
| S | SOUTH |
| E | EAST |
| W | WEST |
| NE | NORTHEAST |
| NW | NORTHWEST |
| SE | SOUTHEAST |
| SW | SOUTHWEST |

(p) Reference **OK ADDRESS SCHEMAS 22.XLS** -STREETTYPE

| Data Source - USPS Publication 28 - Appendix C1 - Street Suffix Abbreviations- Pages 59-71 | | | | | | | |
|---|-------------|------------|-------------|-----------|-------------|------------|-------------|
| http://pe.usps.com/text/pub28/28apc_002.htm | | | | | | | |
| NENA REFERENCE - NENA 71-501-v1 Synchronizing GIS Databases with MSAG and ALLI.pdf - Page 9 | | | | | | | |
| http://www.nena.org/resource/collection/F2E0D66A-4824-418C-8670-3238D262B84A/NENA_71-501-v1_Synchronizing_GIS_Databases_with_MSAG_and_ALLI.pdf | | | | | | | |
| https://www.nena.org/page/NG911GISDataModel | | | | | | | |
| Abbreviation Usage Clarification: Abbreviations are ALWAYS used in Legacy E911 required data fields & NEVER used in NG911 required data fields. | | | | | | | |
| Code | Description | Code | Description | Code | Description | Code | Description |
| ALLEY | ALLEY | DIVIDE | DIVIDE | KEY | KEY | PORT | PORT |
| ANNEX | ANNEX | DRIVE | DRIVE | KEYS | KEYS | PORTS | PORTS |
| ARCADE | ARCADE | DRIVES | DRIVES | KNOLL | KNOLL | PRAIRIE | PRAIRIE |
| AVENUE | AVENUE | ESTATE | ESTATE | KNOLLS | KNOLLS | RADIAL | RADIAL |
| BAYOU | BAYOU | ESTATES | ESTATES | LAKE | LAKE | RAMP | RAMP |
| BEACH | BEACH | EXPRESSWAY | EXPRESSWAY | LAKES | LAKES | RANCH | RANCH |
| BEND | BEND | EXTENSION | EXTENSION | LAND | LAND | RAPID | RAPID |
| BLUFF | BLUFF | EXTENSIONS | EXTENSIONS | LANDING | LANDING | RAPIDS | RAPIDS |
| BLUFFS | BLUFFS | FALL | FALL | LANE | LANE | REST | REST |
| BOTTOM | BOTTOM | FALLS | FALLS | LIGHT | LIGHT | RIDGE | RIDGE |
| BOULEVARD | BOULEVARD | FERRY | FERRY | LIGHTS | LIGHTS | RIDGES | RIDGES |
| BRANCH | BRANCH | FIELD | FIELD | LOAF | LOAF | RIVER | RIVER |
| BRIDGE | BRIDGE | FIELDS | FIELDS | LOCK | LOCK | ROAD | ROAD |
| BROOK | BROOK | FLAT | FLAT | LOCKS | LOCKS | ROADS | ROADS |
| BROOKS | BROOKS | FLATS | FLATS | LODGE | LODGE | ROUTE | ROUTE |
| BURG | BURG | FORD | FORD | LOOP | LOOP | ROW | ROW |
| BURGS | BURGS | FORDS | FORDS | MALL | MALL | RUE | RUE |
| BYPASS | BYPASS | FOREST | FOREST | MANOR | MANOR | RUN | RUN |
| CAMP | CAMP | FORGE | FORGE | MANORS | MANORS | SHOAL | SHOAL |
| CANYON | CANYON | FORGES | FORGES | MEADOW | MEADOW | SHOALS | SHOALS |
| CAPE | CAPE | FORK | FORK | MEADOWS | MEADOWS | SHORE | SHORE |
| CAUSEWAY | CAUSEWAY | FORKS | FORKS | MEWS | MEWS | SHORES | SHORES |
| CENTER | CENTER | FORT | FORT | MILL | MILL | SKYWAY | SKYWAY |
| CENTERS | CENTERS | FREEWAY | FREEWAY | MILLS | MILLS | SPRING | SPRING |
| CIRCLE | CIRCLE | GARDEN | GARDEN | MISSION | MISSION | SPRINGS | SPRINGS |
| CIRCLES | CIRCLES | GARDENS | GARDENS | MOTORWAY | MOTORWAY | SPUR | SPUR(S) |
| CLIFF | CLIFF | GATEWAY | GATEWAY | MOUNT | MOUNT | SQUARE | SQUARE |
| CLIFFS | CLIFFS | GLEN | GLEN | MOUNTAIN | MOUNTAIN | SQUARES | SQUARES |
| CLUB | CLUB | GLENS | GLENS | MOUNTAINS | MOUNTAINS | STATION | STATION |
| COMMON | COMMON | GREEN | GREEN | NECK | NECK | STRAVENUE | STRAVENUE |
| COMMONS | COMMONS | GREENS | GREENS | ORCHARD | ORCHARD | STREAM | STREAM |
| CORNER | CORNER | GROVE | GROVE | OVAL | OVAL | STREET | STREET |
| CORNERS | CORNERS | GROVES | GROVES | OVERPASS | OVERPASS | STREETS | STREETS |
| COURSE | COURSE | HARBOR | HARBOR | PARK | PARK(S) | SUMMIT | SUMMIT |
| COURT | COURT | HARBORS | HARBORS | PARKWAY | PARKWAY(S) | TERRACE | TERRACE |
| COURTS | COURTS | HAVEN | HAVEN | PASS | PASS | THROUGHWAY | THROUGHWAY |
| COVE | COVE | HEIGHTS | HEIGHTS | PASSAGE | PASSAGE | TRACE | TRACE |
| COVES | COVES | HIGHWAY | HIGHWAY | PATH | PATH | TRACK | TRACK |
| CREEK | CREEK | HILL | HILL | PIKE | PIKE | TRAFFICWAY | TRAFFICWAY |
| CRESCENT | CRESCENT | HILLS | HILLS | PINE | PINE | TRAIL | TRAIL |
| CREST | CREST | HOLLOW | HOLLOW | PINES | PINES | TRAILER | TRAILER |
| CROSSING | CROSSING | INLET | INLET | PLACE | PLACE | TUNNEL | TUNNEL |
| CROSSROAD | CROSSROAD | ISLAND | ISLAND | PLAIN | PLAIN | TURNPIKE | TURNPIKE |
| CROSSROADS | CROSSROADS | ISLANDS | ISLANDS | PLAINS | PLAINS | UNDERPASS | UNDERPASS |
| CURVE | CURVE | ISLE | ISLE | PLAZA | PLAZA | UNION | UNION |
| DALE | DALE | JUNCTION | JUNCTION | POINT | POINT | UNIONS | UNIONS |
| DAM | DAM | JUNCTIONS | JUNCTIONS | POINTS | POINTS | VALLEY | VALLEY |

| Code | Description | Code | Description | Code | Description | Code | Description |
|---------|-------------|----------|-------------|------|-------------|-------|-------------|
| VALLEYS | VALLEYS | VILLAGE | VILLAGE | WALK | WALK(S) | WELL | WELL |
| VIADUCT | VIADUCT | VILLAGES | VILLAGES | WALL | WALL | WELLS | WELLS |
| VIEW | VIEW | VILLE | VILLE | WAY | WAY | | |
| VIEWS | VIEWS | VISTA | VISTA | WAYS | WAYS | | |

(g) Reference **OK ADDRESS SCHEMAS 22.XLS** -LGCYSTREETTYPE

| Data Source - USPS Publication 28 - Appendix C1 - Street Suffix Abbreviations- Pages 59-71 | |
|---|--|
| http://pe.usps.com/text/pub28/28apc_002.htm | |
| NENA REFERENCE - NENA 71-501-v1 Synchronizing GIS Databases with MSAG and ALI.pdf - Page 9 | |
| http://www.nena.org/resource/collection/F2E0D66A-4824-418C-8670-3238D262B84A/NENA_71-501-v1_Synchronizing_GIS_Databases_with_MSAG_and_ALI.pdf | |
| https://www.nena.org/page/NG911GISDataModel | |
| Abbreviation Usage Clarification: Abbreviations are ALWAYS used in Legacy E911 required data fields & NEVER used in NG911 required data fields. | |

| Code | Description | Code | Description | Code | Description | Code | Description | Code | Description |
|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|
| ALY | ALLEY | XING | CROSSING | HVN | HAVEN | NCK | NECK | SPG | SPRING |
| ANNX | ANNEX | XRD | CROSSROAD | HTS | HEIGHTS | ORCH | ORCHARD | SPGS | SPRINGS |
| ARC | ARCADE | XRDS | CROSSROADS | HWY | HIGHWAY | OVAL | OVAL | SPUR | SPUR(S) |
| AVE | AVENUE | CURV | CURVE | HL | HILL | OPAS | OVERPASS | SQ | SQUARE |
| BYU | BAYOU | DL | DALE | HLS | HILLS | PARK | PARK(S) | SQS | SQUARES |
| BCH | BEACH | DM | DAM | HOLW | HOLLOW | PKWY | PARKWAY(S) | STA | STATION |
| BND | BEND | DV | DIVIDE | INLT | INLET | PASS | PASS | STRA | STRAVENUE |
| BLF | BLUFF | DR | DRIVE | IS | ISLAND | PSGE | PASSAGE | STRM | STREAM |
| BLFS | BLUFFS | DRS | DRIVES | ISS | ISLANDS | PATH | PATH | ST | STREET |
| BTM | BOTTOM | EST | ESTATE | ISLE | ISLE | PIKE | PIKE | STS | STREETS |
| BLVD | BOULEVARD | ESTS | ESTATES | JCT | JUNCTION | PNE | PINE | SMT | SUMMIT |
| BR | BRANCH | EXPY | EXPRESSWAY | JCTS | JUNCTIONS | PNES | PINES | TER | TERRACE |
| BRG | BRIDGE | EXT | EXTENSION | KY | KEY | PL | PLACE | TRWY | THROUGHWAY |
| BRK | BROOK | EXTS | EXTENSIONS | KYS | KEYS | PLN | PLAIN | TRCE | TRACE |
| BRKS | BROOKS | FALL | FALL | KNL | KNOLL | PLNS | PLAINS | TRAK | TRACK |
| BG | BURG | FLS | FALLS | KNLS | KNOLLS | PLZ | PLAZA | TRFY | TRAFFICWAY |
| BGS | BURGS | FRY | FERRY | LK | LAKE | PT | POINT | TRL | TRAIL |
| BYP | BYPASS | FLD | FIELD | LKS | LAKES | PTS | POINTS | TRLR | TRAILER |
| CP | CAMP | FLDS | FIELDS | LAND | LAND | PRT | PORT | TUNL | TUNNEL |
| CYN | CANYON | FLT | FLAT | LNDG | LANDING | PRTS | PORTS | TPKE | TURNPIKE |
| CPE | CAPE | FLTS | FLATS | LN | LANE | PR | PRAIRIE | UPAS | UNDERPASS |
| CSWY | CAUSEWAY | FRD | FORD | LGT | LIGHT | RADL | RADIAL | UN | UNION |
| CTR | CENTER | FRDS | FORDS | LGTS | LIGHTS | RAMP | RAMP | UNS | UNIONS |
| CTRS | CENTERS | FRST | FOREST | LF | LOAF | RNCH | RANCH | VLY | VALLEY |
| CIR | CIRCLE | FRG | FORGE | LCK | LOCK | RPD | RAPID | VLYS | VALLEYS |
| CIRS | CIRCLES | FRGS | FORGES | LCKS | LOCKS | RPDS | RAPIDS | VIA | VIADUCT |
| CLF | CLIFF | FRK | FORK | LDG | LODGE | RST | REST | VW | VIEW |
| CLFS | CLIFFS | FRKS | FORKS | LOOP | LOOP | RDG | RIDGE | VWS | VIEWS |
| CLB | CLUB | FT | FORT | MALL | MALL | RDGS | RIDGES | VLG | VILLAGE |
| CMN | COMMON | FWY | FREEWAY | MNR | MANOR | RIV | RIVER | VLGS | VILLAGES |
| CMNS | COMMONS | GDN | GARDEN | MNRS | MANORS | RD | ROAD | VL | VILLE |
| COR | CORNER | GDNS | GARDENS | MDW | MEADOW | RDS | ROADS | VIS | VISTA |
| CORS | CORNERS | GTWY | GATEWAY | MDWS | MEADOWS | RTE | ROUTE | WALK | WALK(S) |
| CRSE | COURSE | GLN | GLEN | MEWS | MEWS | ROW | ROW | WALL | WALL |
| CT | COURT | GLNS | GLENS | ML | MILL | RUE | RUE | WAY | WAY |
| CTS | COURTS | GRN | GREEN | MLS | MILLS | RUN | RUN | WAYS | WAYS |
| CV | COVE | GRNS | GREENS | MSN | MISSION | SHL | SHOAL | WL | WELL |
| CVS | COVES | GRV | GROVE | MTWY | MOTORWAY | SHLS | SHOALS | WLS | WELLS |
| CRK | CREEK | GRVS | GROVES | MT | MOUNT | SHR | SHORE | | |
| CRES | CRESCENT | HBR | HARBOR | MTN | MOUNTAIN | SHRS | SHORES | | |
| CRST | CREST | HBRs | HARBORS | MTNS | MOUNTAINS | SKWY | SKYWAY | | |

(r) Reference **OK ADDRESS SCHEMAS 22.XLS** –SEPARATOR

Data Source - NENA-STA-004.1.1-2014_CLDXF.pdf - Page 83
<http://technet.nena.org/nrs/registry/StreetNamePreTypeSeparators.xml>

| Code | Description |
|--------|-------------|
| OF THE | OF THE |
| AT | AT |
| DE LAS | DE LAS |
| DES | DES |
| IN THE | IN THE |
| TO THE | TO THE |
| OF | OF |
| ON THE | ON THE |
| TO | TO |

(s) Reference **OK ADDRESS SCHEMAS 22.XLS** –ONEWAY

Data Source - NENA 71-501-v1_Synchronizing GIS Databases with MSAG and ALLI.pdf - Page 14
http://www.nena.org/resource/collection/F2E0D66A-4824-418C-8670-3238D262B84A/NENA_71-501-v1_Synchronizing_GIS_Databases_with_MSAG_and_ALLI.pdf

| Code | Description |
|------|-------------|
| B | BOTH |
| FT | FROM TO |
| TF | TO FROM |
| N | NONE |

(t) Reference **OK ADDRESS SCHEMAS 22.XLS** - ROADCLASS

Data Source -<https://www.census.gov/>
https://www.census.gov/rdo/pdf/AttD_MAF_TIGER_Feature_Classification_Codes.pdf

| Code | Description |
|-----------------|-----------------|
| PRIMARY | PRIMARY |
| SECONDARY | SECONDARY |
| LOCAL | LOCAL |
| RAMP | RAMP |
| SERVICE DRIVE | SERVICE DRIVE |
| VEHICULAR TRAIL | VEHICULAR TRAIL |
| WALKWAY | WALKWAY |
| STAIRWAY | STAIRWAY |
| ALLEY | ALLEY |
| PRIVATE | PRIVATE |
| PARKING LOT | PARKING LOT |
| TRAIL | TRAIL |
| BRIDLE PATH | BRIDLE PATH |
| OTHER | OTHER |

(u) Reference **OK ADDRESS SCHEMAS 22.XLS** –SERVICEURN

| Data Source -NENA-STA-006.1.1-2020, February 18, 2020 - 4.116 -Page 75 | |
|---|---|
| https://www.nena.org/page/NG911GISDataModel | |
| The URN used to select the service for which a route is desired. | |
| Code | Description |
| urn:nenaservice:additionalData | urn:nenaservice:additionalData |
| urn:nenaservice:responder.coast_guard | urn:nenaservice:responder.coast_guard |
| urn:nenaservice:responder.ems | urn:nenaservice:responder.ems |
| urn:nenaservice:responder.federal_police.atf | urn:nenaservice:responder.federal_police.atf |
| urn:nenaservice:responder.federal_police.cbp | urn:nenaservice:responder.federal_police.cbp |
| urn:nenaservice:responder.federal_police.dea | urn:nenaservice:responder.federal_police.dea |
| urn:nenaservice:responder.federal_police.dss | urn:nenaservice:responder.federal_police.dss |
| urn:nenaservice:responder.federal_police.fbi | urn:nenaservice:responder.federal_police.fbi |
| urn:nenaservice:responder.federal_police.fps | urn:nenaservice:responder.federal_police.fps |
| urn:nenaservice:responder.federal_police.ice | urn:nenaservice:responder.federal_police.ice |
| urn:nenaservice:responder.federal_police.marshall | urn:nenaservice:responder.federal_police.marshall |
| urn:nenaservice:responder.federal_police.pp | urn:nenaservice:responder.federal_police.pp |
| urn:nenaservice:responder.federal_police.rcmp | urn:nenaservice:responder.federal_police.rcmp |
| urn:nenaservice:responder.federal_police.usss | urn:nenaservice:responder.federal_police.usss |
| urn:nenaservice:responder.fire | urn:nenaservice:responder.fire |
| urn:nenaservice:responder.mountain_rescue | urn:nenaservice:responder.mountain_rescue |
| urn:nenaservice:responder.poison_control | urn:nenaservice:responder.poison_control |
| urn:nenaservice:responder.police | urn:nenaservice:responder.police |
| urn:nenaservice:responder.psap | urn:nenaservice:responder.psap |
| urn:nenaservice:responder.sheriff | urn:nenaservice:responder.sheriff |
| urn:nenaservice:responder.stateProvincial_police | urn:nenaservice:responder.stateProvincial_police |
| urn:nenaservice:sos.call_taker | urn:nenaservice:sos.call_taker |
| urn:nenaservice:sos.level_2_esrp | urn:nenaservice:sos.level_2_esrp |
| urn:nenaservice:sos.level_3_esrp | urn:nenaservice:sos.level_3_esrp |
| urn:nenaservice:sos.psap | urn:nenaservice:sos.psap |
| urn:service:sos | urn:service:sos |
| urn:service:sos.ambulance | urn:service:sos.ambulance |
| urn:service:sos.animal-control | urn:service:sos.animal-control |
| urn:service:sos.fire | urn:service:sos.fire |
| urn:service:sos.gas | urn:service:sos.gas |
| urn:service:sos.marine | urn:service:sos.marine |
| urn:service:sos.mountain | urn:service:sos.mountain |
| urn:service:sos.physician | urn:service:sos.physician |
| urn:service:sos.poison | urn:service:sos.poison |
| urn:service:sos.police | urn:service:sos.police |

Article IV. Citations of Existing Standards, Sources, and Reference Material

Section 4.01 Existing Neighbor State Standards

The Oklahoma Address Standard utilized, in part the research and knowledge acquired from the following states published standards and documentation.

- (a) **Kansas** - Kansas Geospatial Data Addressing Standard Final Edition – October 29, 1999
- (b) **Arkansas** – Proposed Arkansas Centerline File Standard – June 18, 2002
- (c) **Missouri** – Missouri Addressing Standard – January 26, 2005
- (d) **Texas** – ESRI Address Geodatabase Schema – September 15, 2005
- (e) **Nebraska** – Nebraska Street Centerline Address Database Schema – Draft-September 23, 2013

NG911 Standard Update- Existing State Standards Reviewed

- (f) **Kansas** – Kansas NG9-1-1 GIS Data Model (Version 1.1) - April 14, 2015
- (g) **Iowa** – Iowa Next Generation 9-1-1 GIS Standards
- (h) **Texas** – Commission on State Emergency Communications (CSEC NG9-1-1 GIS DATA Standard)

Section 4.02 Existing Professional Standards Documentation & Legislation

The Oklahoma Address Standard directly referenced various pertaining portions of the following documents to ensure industry standards are adhered to.

- (a) **Federal Geographic Data Committee (FGDC)**
 - FDGC Standards Page
 - FGDC Content Standard for Geospatial Metadata –(FGDC-STD-001-1998)
 - FGDC Standards Reference Model – (March 1996)
 - Postal Addressing Profile of the Federal Geographic Data Committee United States Thoroughfare, Landmark, and Postal Address Standard (December 16, 2010 FGDC Standards WG meeting)
 - FGDC Endorsed Address Standard – (FGDC-STD-016-2011)
 - Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy (FGDC-STD-007.3-1998)
- (b) **National Emergency Number Association (NENA)**
 - NENA Standards Page
 - NENA Standard Data Formats For 9-1-1 Data Exchange & GIS Mapping – (NENA-02-010)
 - NENA Information Documentation for Synchronizing GIS Databases with MSAG & ALI – (NENA-71-501)
 - GIS Data Collection and Maintenance – (NENA-02-014)
 - NENA Next Generation 9-1-1 (NG9-1-1) United States Civic Location Data Exchange Format (CLDXF) Standard (NENA-STA-004.1.1-2014)
 - Recommended Standard For Street Thoroughfare Abbreviations - Arkansas reference – (NENA-02-002)
 - Service URI for call routing. Contained in the Emergency Service Boundary layer and will define the Service URI of the service.
 - NENA Standard for NG9-1-1 GIS Data Model – (NENA-STA-006.1-2018) /

- (NENA-STA-006.1.1-2020)
- NENA Standards for the Provisioning and Maintenance of GIS data to ECRF and LVFs (NENA-STA-005.1-2017)
- Detailed Functional and Interface Standards for the NENA i3 Solution (NENA-STA-010.2-2016 (originally 08-03))
- Development of Site/Structure Address Point GIS Data for 9-1-1(NENA-INF-014.1-2015)
- NENA Information Document for GIS Data Stewardship for Next Generation 9-1-1 (NENA-INF-028.1-201Y) Public Review / (NENA-INF-028.1-2020)

(c) International Standards Organization (ISO)

- International Standards Organization - Country 2 letter codes

(d) United States Postal Service (USPS)

- Mailing Standards of the United States Postal Service Publication 28 - Postal Addressing Standards

(e) American Society for Photogrammetry and Remote Sensing (ASPRS)

- ASPRS Accuracy Standards for Digital Geospatial Data – (Draft March 2014) / (Edition 1, Version 1- November 2014)
- ASPRS Accuracy Standards for Large-Scale Maps(1990_jul_1068-1070)

(f) United States Census Bureau (Census)

- FIPS Codes for Counties and County Equivalent Entities

(g) United States Department of Agriculture (NAIP)

- NAIP Information Sheet – April 2016

(h) State of Oklahoma Legislative Actions

- Oklahoma Senate. 1994 Regular Session, SB722
- Oklahoma House of Representatives. 1995 Regular Session, HB1964
- Oklahoma House of Representatives. Interim Study H2003-105
- Oklahoma House of Representatives. 2004 Regular Session, HB2457
- Oklahoma House of Representatives. 2016 Regular Session, HB3126

Section 4.03 Workgroup Acknowledgements

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- | | |
|----------------------|-----------------------------|
| • Mike Sharp | OGI |
| • Shellie Willoughby | OGI |
| • Troy Frazier | Oklahoma Tax Commission |
| • Kathy Hines | Center for Spatial Analysis |
| • Sohail Hasanjee | OneOK |
| • Craig Moody | ODOT |
| • John Sharp | ACOG |
| • Wade Patterson | Garfield County Assessor |
| • Brenda Fennel | Choctaw Nation |
| • Joel Foster | ACOG |
| • Charles Brady III | City of Ardmore |

NG911 Standard Update 2.0 – GIS Technical Workgroup

- Lance Terry Oklahoma 9-1-1 Coordinator Management Authority
- Kristal Kuhn Oklahoma 9-1-1 Coordinator Management Authority
- Stacy Root Oklahoma 9-1-1 Coordinator Management Authority
- Mike Sharp OGI
- Shellie Willoughby OGI
- Jeremy Planteen ODOT
- Jana Harris SWODA
- Terry O’Malley City of Tulsa
- Mike Davis ACOG
- Kurt Bickle INCOG
- Andrew Sears INCOG
- Shelly Stahlbusch Carter County E911
- James Allen Carter County E911
- Russell Anderson City of Norman
- Charles Brady III City of Ardmore

NG911 Standard Update 2.1 – GIS Technical Workgroup

- Lance Terry Oklahoma 9-1-1 Coordinator Management Authority
- Stacy Root Oklahoma 9-1-1 Coordinator Management Authority
- Mike Sharp OGI
- Shellie Willoughby OGI
- Jeremy Planteen ODOT
- Mary Harris SWODA
- Mike Davis ACOG
- Russell Anderson City of Norman
- Charles Brady III City of Ardmore

NG911 Standard Update 2.2 – GIS Technical Workgroup

- Lance Terry Oklahoma 9-1-1 Coordinator Management Authority
- Stacy Root Oklahoma 9-1-1 Coordinator Management Authority
- Karen Douglas Oklahoma 9-1-1 Coordinator Management Authority
- Mike Sharp OGI
- Shellie Willoughby OGI
- Mary Harris SWODA
- Jeremy Planteen ODOT
- Emma Baker ODOT
- Riley Baird ODOT
- Gwen Johnson ODOT
- Mike Davis ACOG
- Tanner Jones ACOG
- Barbara Gibson INCOG
- Wendy Kramer INCOG
- Russell Anderson City of Norman
- Charles Brady III City of Ardmore

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Section 4.04 Maintenance of the Standard

This standard will be maintained through a partnership between the 911 Authority and the GI Council. This partnership ensures that this address standard is relevant and applicable to the professions it represents and moreover the citizens it protects.

Oklahoma Geographic Information Council

- **Version 1.0**
 - Draft Submitted for Public Review : May 2, 2014 – September 4, 2014
 - Adopted : September 5, 2014

- **Version 2.0**
 - Draft Submitted for Public Review : November 3, 2017 – January 5, 2018
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- **Version 2.1**
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- **Version 2.2**
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Oklahoma 9-1-1 Management Authority

- **Version 2.0**
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 - Adopted : May 3, 2018

- **Version 2.1**
 - Adopted : February 7, 2019

- **Version 2.2**
 - Adopted : October 1, 2020

Section 4.05 Technical Glossary

(a) **Accuracy**

Absolute - A measure of the location of features on a map compared to their true position on the face of the earth.

Relative - A measure of the accuracy of individual features on a map when compared to other features on the same map.

(b) **Address**

Actual or Real - The simple, everyday element that designates a specific, situs location, such as a house number or an office suite.

Range - Numbers associated with segments of a digital street centerline file that represent the actual high and low addresses at either end of each segment.

Theoretical - A location that can be interpolated along a street centerline file through geocoding software.

Vanity - A special address that is inconsistent with or an exception to the standard addressing schema.

- (c) **Address matching** – See **Geocoding**.
- (d) **ALI** – (Automatic Location Identification) The automatic display at the PSAP of the caller's telephone number, the address/location of the telephone, and supplementary emergency services information of the location from which a call originates.
- (e) **ANI** – (Automatic Number Identification) The 10-digit Telephone Number associated with a device originating a 9-1-1 call.
- (f) **Attribute** - the properties and characteristics of entities.
- (g) **CAD** – (Computer Aided Dispatch) Information about features or elements contained in GIS data is usually stored in a related table.
- (h) **CLDFX** - (Civic Location Data Exchange Format) A set of data elements that describe detailed street address information.
- (i) **E911** – (Enhanced 911) A telephone system which includes network switching, database, and Public Safety Answering Point premise elements capable of providing Automatic Location Identification (ALI) data, selective routing, selective transfer, fixed transfer, and a call back number. The term also includes any enhanced 9-1-1 service so designated by the Federal Communications Commission in its Report and Order in WC Docket Nos. 04-36 and 05-196, or any successor proceeding.
- (j) **ECRF** - (Emergency Call Routing Function) A functional element in an ESInet which is a Location-to-Service Translation (LoST) protocol server where location information (either civic address or geo-coordinates) and a Service Uniform Resource Name (URN) serve as input to a mapping function that returns a Uniform Resource Identifier (URI) used to route an emergency call toward the appropriate PSAP for the caller's location or towards a responder agency.
- (k) **EMS** -(Emergency Medical Service) Fire, hospital, poison control, etc., response centers.
- (l) **Entity** - A data entity is any object about which an organization chooses to collect data.
- (m) **ESB** – (Emergency Service Boundary) The Polygon that defines the geographic area of a single emergency response service. (Fire or Law or EMS separately) *Required to be separate service layers for NG911.*
- (n) **ESInet** - (Emergency Services Internet protocol network) An ESInet is a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core functional processes can be deployed, including, but not restricted to, those necessary for providing NG9-1-1 services. ESInets may be constructed from a mix of dedicated and shared facilities. ESInets may be interconnected at local, regional, state, federal, national, and international levels to form an IPbased inter-network (network of networks).
- (o) **ESN** – (Emergency Service Number) The three to 5 digit Number assigned to the unique combination of ESB that represent a ESZ polygon. *Required at a minimum as a legacy lookup table for the MSAG.*
- (p) **ESZ** – (Emergency Service Zone) The **Polygon** that defines the unique geographic area of the combination of ESB (Fire, Law, & EMS Combined)
- (q) **Geocoding** -A mechanism for building a database relationship between addresses

and geospatial features. When an address is matched to the geospatial features, geographic coordinates are assigned to the address resulting in a single geographic point for a specific address.

- (r) **Geospatial feature** - A point, line or polygon stored within geospatial software.
- (s) **Geospatial software** - Mapping software with analytical capabilities.
- (t) **Line** -A linear feature built of straight line segments made up of two or more coordinates.
- (u) **LVF** – (Location Validation Function) A functional element in a Next Generation 9-1-1 Core Services (NGCS) that is a Location-to-Service Translation (LoST) protocol server where civic location information is validated against the authoritative GIS database information. A civic address is considered valid if it can be located within the database uniquely, is suitable to provide an accurate route for an emergency call, and adequate and specific enough to direct responders to the right location.
- (v) **MCS** – (MSAG Conversion Service) A web service providing conversion between PIDF-LO and MSAG data.
- (w) **MSAG** – (Master Street Address Guide) A database of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZs) and their associated Emergency Service Numbers (ESNs) to enable proper routing of 9-1-1 calls.
- (x) **NENA** - The National Emergency Number Association is a not-for profit corporation established in 1982 to further the goal of “One Nation-One Number.” NENA is a networking source and promotes research, planning, and training. NENA strives to educate, set standards, and provide certification programs, legislative representation, and technical assistance for implementing and managing 9-1-1 systems.
- (y) **NG911** - (Next Generation 9-1-1) NG9-1-1 is an Internet Protocol (IP) based system comprised of managed Emergency Services IP networks (ESInets), functional elements (applications), and databases that replicate traditional E9-1-1 features and functions and provides additional capabilities. NG9-1-1 is designed to provide access to emergency services from all connected communications sources, and provide multimedia data capabilities for Public Safety Answering Points (PSAPs) and other emergency service organizations.

www.nena.org/resource/resmgr/ng9-1-1_project/whatisng911.pdf
- (z) **NGUID** -(NENA Globally Unique ID) NENA Globally Unique IDs must exist for each feature within the GIS data layer such that the ID is unique within a set of aggregated data for each layer.
- (aa) **Parity** -A characteristic of a set of addresses or address ranges in which the numbers are either odd or even.
- (bb) **PIDF-LO** - Provides a flexible and versatile means to represent location information in a Session Initiation Protocol (SIP) header using an XML schema.
- (cc) **Point** - A geospatial feature that is stored as a single XY coordinate.
- (dd) **PSAP** - (Public Safety Answering Point) An entity responsible for receiving 9-1-1 calls and processing those calls according to a specific operational policy.
- (ee) **Road Centerline** – A linear representation of a road that contains the associated

attributes required for geocoding. A road centerline can represent a single lane or multiple lanes depending on the required functionality.

- (ff) **SI** – (Spatial Interface) A standardized interface between the GIS and the functional elements that consume GIS data, such as the ECRF and the LVF.
- (gg) **URI** - (Uniform Resource Identifier) A predictable formatting of text used to identify a resource on a network (usually the Internet) OR A string of characters that must follow prescribed syntaxes such as URL, URN. Note: Version 1.1 of the XML namespaces recommendation uses IRIs (Internationalized Resource Identifiers) instead of URIs. However, because version 1.1 is not yet a full recommendation [February 2003] and because the IRI RFC is not yet complete, this document continues to refer to URIs instead of IRIs.
- (hh) **URN** – (Uniform Resource Name) Uniform Resource Identifiers (URIs) that use the URN scheme, and are intended to serve as persistent, location independent resource names.
- (ii) **VoIP** – (Voice Over Internet Protocol) A technology that allows you to make voice calls using a broadband Internet connection instead of a regular (or analog) phone line.