



# Illinois NG 9-1-1 Geographic Information Systems Data Standards

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## 1 Introduction

In NG9-1-1, emergency call routing occurs through GIS data aggregated into regional or statewide datasets. There is no better way to ensure the accuracy of the data than through local stewardship: cities and counties maintaining the data for their area. Getting local data aggregated into a single large dataset for call routing requires consistency in attribution and geometry. In an effort to assure the successful creation of the aggregated datasets necessary to support NG9-1-1’s GIS-based call routing, the Illinois State Police (ISP), with help from the Illinois GIS Association (ILGISA), has assembled this document to provide guidance for the remediation and maintenance of local GIS data in Illinois.

The June 2018 draft of the “NENA Standard for NG9-1-1 GIS Data Model” was used as the authoritative basis for this document. While the NENA Standard focuses primarily on feature attributes, basic guidance for feature geometry was developed and included in this document to help ensure consistency across the various entities maintaining the data. These guidelines were developed with the proper functioning of an aggregated call routing dataset in min



## 2 Data Maintenance Personnel

The Local Data Steward is the person responsible for assuring maintenance is performed on the GIS data for the agency. Every 9-1-1 Authority must designate a Local Data Steward. The Local Data Steward must be a staff person for the City, County or Intergovernmental Cooperative responsible for the GIS data for the 9-1-1 Authority, even if a vendor handles the actual data maintenance. The Local Data Steward may also serve as the Data Maintainer, but they must receive both certifications to do so. PSAPs may also choose to designate a secondary Local Data Steward.

The Data Maintainer is the primary person who will be performing the actual maintenance of the GIS data for the agency. The Data Maintainer must acquire and maintain certification for the role. NG911 data shall be maintained to the current standard as presented in the latest version of the Illinois NG911 GIS Data Model.

The Data Aggregator indicates the person or persons responsible for incorporating local NG911 datasets into the aggregated state-wide dataset.

## 3 Authoritative Data

The Provisioning Boundary layer produced by each data steward represents the area for which all of the data submitted by that data steward is authoritative, often a city or county boundary. The features of remaining data layers shall only be accepted from the data steward within that Provisioning Boundary. All features intended for submission must be inside that boundary.

## 4 Data Layer Attributes and Conventions

### 4.1 Inclusion of Attributes

Many of the attributes listed in NENA Standard will be maintained by the local data steward/maintainer rather than the data aggregator. Those attributes have not been included in this guidance.

Additionally, some fields may be added to the list required by the NENA Standard. These fields will be categorized in the attribute descriptions as "Fields Added for Illinois" and are intended to both aid in the data aggregation process and enhance the effectiveness of the aggregated data.

All attributes listed in the attribute tables of this standard shall be included in the local dataset, even if they are unpopulated. The attributes should be kept in the same order presented in this document, unless the data steward has a business reason for changing the order. Data stewards may add any other attributes they find necessary for their own business process. The attributes in this standard represent the minimum required set.

### 4.2 Field Names

A field name has been assigned to each attribute in the standard. The use of these field names is required.



### 4.3 Letter Case

All attribute values shall be stored in upper case characters, unless the attribute description in this document specifies otherwise. The primary exceptions to this recommendation are the [LABEL], [ADDURI], and [UPDATEBY] fields which may be in any case that fits the data steward's needs.

### 4.4 Unique Identifiers

Each data layer will have a unique global id for identification purposes. The data maintainer will generate unique ID's, utilizing the standards format, in the field for each feature, in each layer, as required. The data stewards are required to ensure that the unique id is applied and intact for all future deliveries.

### 4.5 Effective and Expiration Dates

The Effective and Expiration dates on data layers are meant to allow data stewards who know a change is coming to have both the current and the future geometry and attribution submitted to the aggregated dataset. For example, an annexation of land to a municipality may require edits to nearly every layer the data steward is responsible for. If that annexation is scheduled to take effect on July 1, the data steward can set records showing the current geometry and attributes to expire on July 1 and records showing the new geometry and attributes to be effective July 1.

There are two major benefits to this. First, the NG9-1-1 system will be immediately accurate to the legal boundary both before and after the change goes into effect. Second, the data steward can begin the data editing process as soon as they are aware of the coming change and does not have to rush a new data set to the aggregator on a specific day.

If a data steward does choose to take advantage of this method of maintenance, the Expiration Date must be populated on the retiring feature, and it must be equal to the Effective Date of the new feature.

### 4.6 Domains

Many attributes have a specific list of valid values (a domain) assigned in the NENA Standard or the Illinois NG9-1-1 Data Model. Those fields shall only be populated with values from the given domain in order to facilitate data exchange in the NG9-1-1 system. If no value exists for the attribute, it may be left blank or *NULL*. The full listing of domains is available as a spreadsheet that can be downloaded along with the file geodatabase template from the Illinois State Police Website

### 4.7 Mandatory/Conditional/Optional

In the NENA Standard, attributes are tagged as **Mandatory (M)**, **Conditional (C)**, or **Optional (O)**. That convention has been kept throughout this document.

- a. **Mandatory** implies the data field must be populated
- b. **Conditional** implies 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.
- c. **Optional** implies the data field may or may not be populated.



## 4.8 Attribute Types

Attribute types are listed as per the NENA standard. The types are defined as:

- a. **A** – Alphanumeric (any combination of upper and lower case letters from A to Z and/or any number from 0 to 9). Example: Text fields in ESRI feature classes and shapefiles.
- b. **D** – Date and time. The field type shall be specifically chosen for storing date and time data Example: Date fields in ESRI geodatabase feature classes and shapefiles. – *Note: NENA requires the ISO 8601 date/time format with time zone information. Many GIS applications cannot easily produce this particular format. Local data stewards shall store date attributes in the more common format, and the attributes will be converted in the state-wide dataset.*
- c. **I** - Integer (consisting of whole numbers only) Example: In ESRI geodatabase feature classes and shapefiles, these shall be Short Integer or Long Integer fields. Note that address number fields must be Long Integer fields.
- d. **F** – Floating (decimal) Example: In ESRI geodatabase feature classes and shapefiles, these shall be Double fields.

## 4.9 Data Layer Names

Data layers intended for submission shall be named according to the following guidelines. Data layers with different names will not be included in quality assurance tests or aggregated into statewide datasets.

### Required Layers

- Road Centerline layer: RoadCenterline - *REQUIRED*
- Address Point layer: AddressPoints - *REQUIRED*
- PSAP layer: PSAP - *REQUIRED*
- Emergency Service Boundary: ESB - *REQUIRED*
- Provisioning Boundary: ProvisioningBoundary – *REQUIRED*

### Strongly Recommended Layers

- Street Name Alias Table: StreetNameAlias
- Landmark Name Part Table: LandmarkNamePart
- Complete Landmark Name Alias Table: LandmarkNameAlias
- States Layer: States
- Counties Layer: Counties
- Incorporated Municipal Boundary Layer: IncorporatedMunicipal
- Unincorporated Municipal Boundary Layer: UnincorporatedMunicipal
- Neighborhood Community Boundary Layer: NeighborhoodCommunity
- Additional ESB Layers: ESB\_<Layer\_Name> (ex. ESB\_AnimalControl)
- Parcel Layer: Parcels - **State Standard**
- Emergency Service Zone Layer: ESZ - **Legacy Standard**





## Recommended Layers

- Railroad Centerline Layer: RailroadCenterline
- Hydrology Line Layer: HydrologyLine
- Hydrology Polygon Layer: HydrologyPolygon
- Cell Site Location Layer: CellSite
- Mile Marker Location Layer: MileMarker
- Park Boundaries Layer: ParkBoundary - ***State Standard***
- Wind Farms Layer: WindFarms - ***State Standard***
- Wind Tower Layer: WindTower - ***State Standard***
- Cell Tower Layer: CellTower - ***State Standard***
- Hydrants Layer: Hydrants - ***State Standard***
- Water Main Layer: WaterMains - ***State Standard***
- Bridges Layer: Bridges - ***State Standard***
- Airport Runway Layer: AirportRunways - ***State Standard***
- Building Footprint Layer: Buildings - ***State Standard***
- Flood Zones Layer: FloodZone - ***State Standard***
- Zip Code Layer: ZipCodes - ***State Standard***

## 4.10 Attributes Tables and Descriptions

Each data layer is described in this document with a table listing the attributes followed by a more detailed attribute description. The tables are formatted with the following information:

- a. **Attribute:** the required attribute field name.
- b. **Description:** basic description of the data field.
- c. **Type:** the required attribute type.
- d. **Width:** the maximum field width.
- e. **M/C/O:** whether populating the attribute is mandatory, conditional or optional.

Full attribute descriptions are listed after the table. The descriptions include an explanation of the field along with any required domain of valid values.

## 4.11 Projection

While local GIS data may be kept in any projection desired, prior to loading the data into the Illinois State Police Portal the data must be in the following spatial reference:

Coordinate Reference System and Datum – Use of the World Geodetic System of 1984 (WGS84) [6] is required for GIS information as referenced in NENA-STA-010 [1].

Geodetic parameters for WGS84 are specified by the European Petroleum Survey Group (EPSG) for both 2-dimensional and 3-dimensional geometries.

- For 2-dimensional geometries the geodetic parameters are required to follow EPSG::4326.
- For 3-dimensional geometries the geodetic parameters are required to follow EPSG::4979.



Note: WGS84 (GPS) elevation is measured as height above the ellipsoid, which varies significantly from height above the geoid (approximately Mean Sea Level).

Recognizing that conversion always introduces some error, it is recommended that NG9-1-1 systems use WGS84 natively. As an example, if one is using GIS software and the North American Datum (NAD) of 1983, the NAD 1983 to WGS84 transformation SHALL be used. Regardless of the projection used by the native data, any re-projection to WGS84 will require transformation steps. These transformation steps will minimize error and reduce or eliminate the chance of creating unnecessary overlaps and gaps. The transformation steps will vary depending on your native projection and the GIS software used for data development and maintenance. Advice from a geodesist, registered surveyor, or your Spatial Interface (SI) provider is recommended for minimization of transformation errors. Projection and transformation process information for each GIS data layer MUST be included in the metadata.

## 5 Software and Storage Format Considerations

The Illinois NG9-1-1 GIS Data Model includes some technical aspects which may impact the choices of software and the data file storage formats used by data stewards. One of these is the requirement that all data meet certain topological standards, such as no overlapping features in a given data layer. Some software vendors limit the ability to test topology to specific license levels. It is strongly recommended by the committee that data is stored and edited in the geodatabase format.

## 6 Submission of Data Updates

The process of data submission and validation will be addressed in a detailed manner upon the decision of system requirements and implementation. Submission types will be geodatabases and validation will occur on each dataset that is submitted.

## 7 Changes to the Data Model

A log of significant changes will be kept in the Appendices to allow data stewards familiar with one version of the Illinois model to quickly locate changes that have happened in the current version.

Changes to the data model are initiated with Change Order Requests (CORs). Any user of the portal is eligible to submit a COR about any aspect of the NG9-1-1 project, including the GIS Data Model. See the Illinois NG9-1-1 GIS Change Management Policy document for more information on the COR process.

## 8 Acknowledgments

The Illinois State Police would like to thank the following organizations for their assistance with the creation of this document:

- a. The Kansas NG911 Coordinating Council, for making their process, documents, and templates freely available online. We sincerely appreciate their generosity, and



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- b. The Illinois GIS Association’s NG9-1-1 Committee for assisting in the development of this document.
  - c. NENA for their data standards that served as a guide in the development of these data standards.
  - d. The ILGISA NG911 Committee Members:
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## 9 Required Data Layers

### 9.1 Road Centerlines

Road centerlines represent the estimated centerline of a real world roadway and are used for querying and geocoding of civic addresses, map displays and storage of spatially related attributes for other applications.

#### 9.1.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
RCL_NGUID	Road Centerline NENA Globally Unique ID	A	254	M
AdNumPre_L	Left Address Number Prefix	A	15	C
AdNumPre_R	Right Address Number Prefix	A	15	C
FromAddr_L	Left FROM Address	I	6	M
ToAddr_L	Left TO Address	I	6	M
FromAddr_R	Right FROM Address	I	6	M
ToAddr_R	Right TO Address	I	6	M
Parity_L	Parity Left	A	1	M
Parity_R	Parity Right	A	1	M
St_PreMod	Street Name Pre Modifier	A	15	C
St_PreDir	Street Name Pre Directional	A	9	C
St_PreTyp	Street Name Pre Type	A	50	C
St_PreSep	Street Name Pre Type Separator	A	20	C
St_Name	Street Name	A	60	M
St_PosTyp	Street Name Post Type	A	50	C
St_PosDir	Street Name Post Directional	A	9	C
St_PosMod	Street Name Post Modifier	A	25	C
LSt_PreDir	Legacy Street Name Pre Directional	A	2	C



LSt_Name	Legacy Street Name	A	75	C
LSt_Type	Legacy Street Name Type	A	4	C
LSt_PosDir	Legacy Street Name Post Directional	A	2	C
ESN_L	ESN Left	A	5	C
ESN_R	ESN Right	A	5	C
MSAGComm_L	MSAG Community Name Left	A	30	C
MSAGComm_R	MSAG Community Name Right	A	30	C
Country_L	Country Left	A	2	M
Country_R	Country Right	A	2	M
State_L	State Left	A	2	M
State_R	State Right	A	2	M
County_L	County Left	A	40	M
County_R	County Right	A	40	M
AddCode_L	Additional Code Left	A	6	C
AddCode_R	Additional Code Right	A	6	C
IncMuni_L	Incorporated Municipality Left	A	100	M
IncMuni_R	Incorporated Municipality Right	A	100	M
UnincCom_L	Unincorporated Community Left	A	100	O
UnincCom_R	Unincorporated Community Right	A	100	O
NbrhdCom_L	Neighborhood Community Left	A	100	O
NbrhdCom_R	Neighborhood Community Right	A	100	O
PostCode_L	Postal Code Left	A	7	O
PostCode_R	Postal Code Right	A	7	O
PostComm_L	Postal Community Name Left	A	40	O
PostComm_R	Postal Community Name Right	A	40	O
RoadClass	Road Class	A	15	O
OneWay	One-Way	A	2	O
SpeedLimit	Speed Limit	I	3	O
Valid_L	Validation Left	A	1	O
Valid_R	Validation Right	A	1	O

### 9.1.2 Attribute Descriptions

- **[DiscrpAgID]** - Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.



- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[RCL\_NGUID]** – – The NENA Globally Unique ID for each Road Centerline. Each record in the Road Centerline layer MUST have a globally unique ID. When coalescing data from other local 9-1-1 Authorities into the ECRF and LVF, this unique ID MUST continue to have only one occurrence. To accomplish this is, append the 9-1-1 Authority’s domain to the end of the “locally unique ID”. The Unique ID components are comprised of *RCL+ OBJECTID + AGENCYID* (ex. *RCL1@yourorganizationname.org*)
- **[AdNumPre\_L]** - An extension of the Address Number that precedes it and further identifies a location along a thoroughfare or within a defined area, on the Left side of the road segment relative to the FROM Node. It contains any alphanumeric characters, punctuation, and spaces preceding the Left FROM Address and Left TO Address.
- **[AdNumPre\_R]** – An extension of the Address Number that precedes it and further identifies a location along a thoroughfare or within a defined area, on the Right side of the road segment relative to the FROM Node. It contains any alphanumeric characters, punctuation, and spaces preceding the Right FROM Address and Right TO Address.
- **[FromAddr\_L]** – The “low” left address value along the centerline segment.
- **[ToAddr\_L]** – The “high” left address value along the centerline segment.
- **[FromAddr\_R]** - The “low” right address value along the centerline segment.
- **[ToAddr\_R]** - The “high” left address value along the centerline segment.
- **[Parity\_L]** - The even or odd property of the address number range on the Left side of the road segment relative to the FROM Node.
- **[Parity\_R]** - The even or odd property of the address number range on the Right side of the road segment relative to the FROM Node.
- **[St\_PreMod]** - A word or phrase that precedes and modifies the Street Name element but is separated from it by a Street Name Pre Type or a Street Name Pre Directional or both.
- **[St\_PreDir]** – A word preceding the Street Name element that indicates the direction taken by the road from an arbitrary starting point or line, or the sector where it is located.
- **[St\_PreTyp]** - A word or phrase that precedes the Street Name element and identifies a type of thoroughfare in a complete street name.
- **[StPreSep]** - A preposition or prepositional phrase between the Street Name Pre Type and the Street Name. This element is defined in CLDXF (NENA-STA-004) [2] as a US specific extension of PIDF-LO per RFC 6848 [5].
- **[St\_Name]** - The official name of the road, usually defined by the lowest jurisdictional authority (e.g. city). The street name does not include any street types, directionals, or modifiers.
- **[St\_PosTyp]** - A word or phrase that follows the Street Name element and identifies a type of thoroughfare in a complete street name.
- **[St\_PosDir]** - A word following the Street Name element that indicates the direction taken by the road from an arbitrary starting point or line, or the sector where it is located.
- **[St\_PosMod]** - A word or phrase that follows and modifies the Street Name element, but is separated from it by a Street Name Post Type or a Street Name Post Directional or both.
- **[LSt\_PreDir]** - The leading street direction prefix as it previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.



- **[LSt\_Name]** - The street name field as it would appear in the MSAG, as assigned by the local addressing authority.
- **[LSt\_Type]** - The valid street abbreviation as it previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.
- **[LSt\_PosDir]** - The trailing street direction suffix as it previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.
- **[ESN\_L]** - The Emergency Service Number (ESN) on the Left side of the road segment relative to the FROM Node.
- **[ESN\_R]** - The Emergency Service Number (ESN) on the Right side of the road segment relative to the FROM Node.
- **[MSAGComm\_L]** - The existing MSAG Community Name on the Left side of the road segment relative to the FROM Node.
- **[MSAGComm\_R]** - The existing MSAG Community Name on the Right side of the road segment relative to the FROM Node.
- **[Country\_L]** - The name of the Country on the Left side of the road segment relative to the FROM Node, represented by its two-letter ISO 3166-1 English country alpha-2 code elements in capital ASCII letters.
- **[Country\_R]** - The name of the Country on the Right side of the road segment relative to the FROM Node, represented by its two-letter ISO 3166-1 English country alpha-2 code elements in capital ASCII letters.
- **[State\_L]** - The name of a state or state equivalent on the Left side of the road segment relative to the FROM Node, represented by the two-letter abbreviation given in USPS Publication 28 [14], Appendix B.
- **[State\_R]** - The name of a state or state equivalent on the Right side of the road segment relative to the FROM Node, represented by the two-letter abbreviation given in USPS Publication 28 [14], Appendix B.
- **[County\_L]** - The name of a County or County-equivalent on the Left side of the road segment relative to the FROM Node. A county (or its equivalent) is the primary legal division of a state or territory.
- **[County\_R]** - The name of a County or County-equivalent on the Right side of the road segment relative to the FROM Node. A county (or its equivalent) is the primary legal division of a state or territory.
- **[AddCode\_L]** - The Additional Code on the Left side of the road segment relative to the FROM Node.
- **[AddCode\_R]** - The Additional Code on the Right side of the road segment relative to the FROM Node.
- **[IncMuni\_L]** - The name of the Incorporated Municipality or other general-purpose local governmental unit (if any), on the Left side of the road segment relative to the FROM Node.
- **[IncMuni\_R]** - The name of the Incorporated Municipality or other general-purpose local governmental unit (if any), on the Right side of the road segment relative to the FROM Node.
- **[UnincCom\_L]** - The Unincorporated Community, either within an incorporated municipality or in an unincorporated portion of a county, or both, on the Left side of the road segment relative to the FROM Node.
- **[UnincCom\_R]** - The Unincorporated Community, either within an incorporated municipality



or in an unincorporated portion of a county, or both, on the Right side of the road segment relative to the FROM Node.

- **[NbrhdCom\_L]** - The name of an unincorporated neighborhood, subdivision or area, either within an incorporated municipality or in an unincorporated portion of a county or both, on the Left side of the road segment relative to the FROM Node.
- **[NbrhdCom\_R]** - The name of an unincorporated neighborhood, subdivision or area, either within an incorporated municipality or in an unincorporated portion of a county or both, on the Right side of the road segment relative to the FROM Node.
- **[PostCode\_L]** - The Postal Code on the Left side of the road segment relative to the FROM Node.
- **[PostCode\_R]** - The Postal Code on the Right side of the road segment relative to the FROM Node.
- **[PostComm\_L]** - A city name for the ZIP Code of an address, as given in the USPS City State file on the Left side of the road segment relative to the FROM Node.
- **[PostComm\_R]** - A city name for the ZIP Code of an address, as given in the USPS City State file on the Right side of the road segment relative to the FROM Node.
- **[RoadClass]** - The general description of the type of road. The Road Classifications used in this document are derived from the US Census MAF/TIGER Feature Classification Codes (MTFCC), which is an update to the now deprecated Census Feature Class Codes (CFCC).
- **[OneWay]** - The direction of traffic movement along a road in relation to the FROM node and TO node of the line segment representing the road in the GIS data. The one-way field has three possible designations: B (Both), FT (From-To) and TF (To-From). B – Travel in both directions allowed; FT – One way traveling from node to TO node; TF – One way traveling from TO node to FROM node
- **[SpeedLimit]** - Posted Speed Limit in MPH
- **[Valid\_L]** - Indicates if the address range on the left side of the road segment should be used for civic location validation. A value of "Y" MAY be entered if any Address Number within the address range on the left side of the road segment should be considered by the LVF to be valid. A value of "N" MAY be entered if the Address Number should only be validated using the Site/Structure Address Points layer. If not present, a value of "Y" is assumed.
- **[Valid\_R]** - Indicates if the address range on the right side of the road segment should be used for civic location validation. A value of "Y" MAY be entered if any Address Number within the address range on the right side of the road segment should be considered by the LVF to be valid. A value of "N" MAY be entered if the Address Number should only be validated using the Site/Structure Address Points layer. If not present, a value of "Y" is assumed.

### 9.1.3 Road Centerline Creation

Road centerlines represent all public and addressed private streets. Road names must conform to the legal names as assigned by the local addressing authority. All centerline attributes should be accurate, complete, and standardized to the format in this document. All abbreviations of Street Prefixes and Suffixes should be unabbreviated according to NENA Standards (ex. Rd should be Road, Dr should be Drive). Road centerlines must match the corrected MSAG data to a 98% or higher rate, and all related NENA standards shall be met or exceeded.



## 9.2 Address Points

Site/Structure Address Points ideally represent the location of a site or structure or the location of access to a site or structure. Site/Structure Address Points can also represent landmarks. Address points have the ability to locate sites that otherwise may not geocode correctly using the road centerline data, areas of unusual addressing (i.e. odd addresses on even side of the road centerlines and vice versa), and other areas where the data is available. Some addressable locations may be problematic near boundaries.

### 9.2.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
Site_NGUID	Site NENA Globally Unique ID	A	254	M
Country	Country	A	2	M
State	State	A	2	M
County	County	A	40	M
AddCode	Additional Code	A	6	C
AddDataURI	Additional Data URI	A	254	C
Inc_Muni	Incorporated Municipality	A	100	M
Uninc_Comm	Unincorporated Community	A	100	O
Nbrhd_Comm	Neighborhood Community	A	100	O
AddNum_Pre	Address Number Prefix	A	15	C
Add_Number	Address Number	I	6	C
AddNum_Suf	Address Number Suffix	A	15	C
St_PreMod	Street Name Pre Modifier	A	15	C
St_PreDir	Street Name Pre Directional	A	9	C
St_PreTyp	Street Name Pre Type	A	50	C
St_PreSep	Street Name Pre Type Separator	A	20	C
St_Name	Street Name	A	60	C
St_PosTyp	Street Name Post Type	A	50	C
St_PosDir	Street Name Post Directional	A	9	C
St_PosMod	Street Name Post Modifier	A	25	C
LSt_PreDir	Legacy Street Name Pre Directional	A	2	C
LSt_Name	Legacy Street Name*	A	75	C
LSt_Type	Legacy Street Name Type*	A	4	C
LSt_PosDir	Legacy Street Name Post Directional	A	2	C
ESN	ESN	A	5	C
MSAGComm	MSAG Community Name	A	30	C
Post_Comm	Postal Community Name	A	40	O
Post_Code	Postal Code	A	7	O
Post_Code4	ZIP Plus 4	A	4	O





Building	Building	A	75	O
Floor	Floor	A	75	O
Unit	Unit	A	75	O
Room	Room	A	75	O
Seat	Seat	A	75	O
Addtl_Loc	Additional Location Information	A	225	O
LandmkName	Complete Landmark Name	A	150	C
Mile_Post	Mile Post	A	150	C
Place_Type	Place Type	A	50	O
Placement	Placement Method	A	25	O
Long	Longitude	F	-	O
Lat	Latitude	F	-	O
Elev	Elevation	I	6	O

### 9.2.2 Attribute Descriptions

- **[DiscrpAgID]** - Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESNet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[Site\_NGUID]** - The NENA Globally Unique ID for each Site/Structure Address Point. Each record in the Site/Structure Address Points layer MUST have a globally unique ID. When coalescing data from other local 9-1-1 Authorities into the ECRF and LVF, this unique ID MUST continue to have only one occurrence. To accomplish this is, append the 9-1-1 Authority's domain to the end of the "locally unique ID". The Unique ID components are comprised of *SITE+ OBJECTID + AGENCYID (ex. SITE1@yourorganizationname.org)*
- **[Country]** - The name of a country represented by its two-letter ISO 3166-1 English country code in capital ASCII letters.
- **[State]** - The name of a state or state equivalent, represented by the two-letter abbreviation given in USPS Publication 28 [14], Appendix B. A state is a primary governmental division of the United States.
- **[County]** - The name of a County or County-equivalent where the address is located. A county (or its equivalent) is the primary legal division of a state or territory.
- **[AddCode]** - A code that specifies a geographic area. Used in Canada to hold a Standard Geographical Classification code; it differentiates two municipalities with the same name in a province that does not have counties.



- **[AddDataURI]** - URI(s) for additional data associated with the site/structure address point. This attribute is contained in the Site/Structure Address Points layer and will define the Service URI of additional information about a location, including building information (blueprints, contact info, floor plans, etc.).
- **[Inc\_Muni]** - The name of the Incorporated Municipality or other general-purpose local governmental unit (if any) where the address is located.
- **[Uninc\_Comm]** - The name of an Unincorporated Community, either within an incorporated municipality or in an unincorporated portion of a county, or both, where the address is located.
- **[Nbrhd\_Comm]** - The name of an unincorporated neighborhood, subdivision, or area, either within an incorporated municipality or in an unincorporated portion of a county or both, where the address is located.
- **[AddNum\_Pre]** - An extension of the Address Number that precedes it and further identifies a location along a thoroughfare or within a defined area.
- **[Add\_Number]** - The numeric identifier of a location along a thoroughfare or within a defined community.
- **[AddNum\_Suf]** - An extension of the Address number that follows it and further identifies a location along a thoroughfare or within a defined area.
- **[St\_PreMod]** - A word or phrase that precedes and modifies the Street Name element but is separated from it by a Street Name Pre Type or a Street Name Pre Directional or both.
- **[St\_PreDir]** - A word preceding the Street Name element that indicates the direction taken by the road from an arbitrary starting point or line, or the sector where it is located.
- **[St\_PreTyp]** - A word or phrase that precedes the Street Name element and identifies a type of thoroughfare in a complete street name.
- **[StPreSep]** - A preposition or prepositional phrase between the Street Name Pre Type and the Street Name. This element is defined in CLDXF (NENA-STA-004) [2] as a US specific extension of PIDF-LO per RFC 6848 [5].
- **[St\_Name]** - The official name of the road, usually defined by the lowest jurisdictional authority (e.g. city). The street name does not include any street types, directionals, or modifiers.
- **[St\_PosTyp]** - A word or phrase that follows the Street Name element and identifies a type of thoroughfare in a complete street name.
- **[St\_PosDir]** - A word following the Street Name element that indicates the direction taken by the road from an arbitrary starting point or line, or the sector where it is located.
- **[St\_PosMod]** - A word or phrase that follows and modifies the Street Name element, but is separated from it by a Street Name Post Type or a Street Name Post Directional or both.
- **[LSt\_PreDir]** - The leading street direction prefix as it previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.
- **[LSt\_Name]** - The street name field as it would appear in the MSAG, as assigned by the local addressing authority.
- **[LSt\_Type]** - The valid street abbreviation as it previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.
- **[LSt\_PosDir]** - The trailing street direction suffix as it previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.



- **[ESN]** - A 3-5 character alphanumeric string that represents an Emergency Service Zone (ESZ).
- **[MSAGComm]** - The Community name associated with an address as given in the MSAG and may or may not be the same as the Community Name assigned by the United States Postal Service (USPS).
- **[Post\_Comm]** - A city name for the ZIP Code of an address, as given in the USPS City State file.
- **[Post\_Code]** - A system of 5-digit (US) that identify the individual USPS or metropolitan area delivery station associated with an address.
- **[Post\_Code4]** - The addition of the ZIP Plus-4 refines the mail delivery point down to a specific block or building, and may prove useful to validate locations. ZIP Plus-4 codes change more often than US Postal codes, and this additional data field should make maintaining these optional codes easier.
- **[Building]** - One among a group of buildings that have the same address number and complete street name.
- **[Floor]** - A floor, story, or level within a building.
- **[Unit]** - A group or suite of rooms within a building that are under common ownership or tenancy, typically having a common primary entrance.
- **[Room]** - A single room within a building.
- **[Seat]** - A place where a person might sit within a building.
- **[Addtl\_Loc]** - A part of a sub-address that is not a Building, Floor, Unit, Room, or Seat.
- **[LandmkName]** - The name by which a prominent site/structure is publicly known.
- **[Mile\_Post]** - A distance travelled along a route such as a road or highway, typically indicated by a milepost sign. There is typically a post or other marker indicating the distance in miles/kilometers from or to a given point.
- **[Place\_Type]** - The type of feature identified by the address.
- **[Placement]** - The methodology used for placement of the address point
- **[Long]** - The angular distance of a location east or west of the prime meridian of the coordinate system, expressed in decimal degrees.
- **[Lat]** - The angular distance of a location north or south of the equator as defined by the coordinate system, expressed in decimal degrees.
- **[Elev]** - The elevation, given in meters above a reference surface defined by the coordinate system, associated with the site/structure address.

### 9.3 PSAP Boundaries

The primary use for the PSAP Boundary is to route call/emergency requests for NG9-1-1. This layer depicts the polygon(s) and related attribute information that defines the geographic area of all PSAP boundaries within a given 9-1-1 Authority's geographic coverage area. The PSAP Boundary layer may have one or many PSAP Boundaries contained in the layer. Each PSAP Boundary defines the geographic area of a PSAP that has primary responsibilities for an emergency request. This layer is used by the ECRF to perform a geographic query to determine the PSAP to which an emergency request is routed. An emergency request is routed using the NG9-1-1 Core Services based upon the geographic location of the request, provided by either a civic address, geographic coordinate or geodetic shapes as defined in NENA-STA-010 [1].



### 9.3.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ES_NGUID	Emergency Service Boundary NENA Globally Unique ID	A	254	M
State	State	A	2	M
Agency_ID	Agency ID	A	100	M
ServiceURI	Service URI	A	254	M
ServiceURN	Service URN	A	50	M
ServiceNum	Service Number	A	15	O
AVcard_URI	Agency vCard URI	A	254	M
DsplayName	Display Name	A	60	M

### 9.3.2 Attribute Descriptions

- **[DiscrpAgID]** - Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[ES\_NGUID]** - The NENA Globally Unique ID for each Emergency Service Boundary and 941 PSAP Boundary. The Unique ID components are comprised of *PSAP + OBJECTID + AGENCYID* (ex. *PSAP1@yourorganizationname.org*)
- **[State]** - The name of a state or state equivalent, represented by the two-letter abbreviation given in USPS Publication 28 [14], Appendix B. A state is a primary governmental division of the United States.
- **[Agency\_ID]** - A Domain Name System (DNS) domain name which is used to uniquely identify an agency. An agency is represented by a domain name as defined in RFC 1034. Each agency MUST use one domain name consistently in order to correlate actions across a wide range of calls and incidents. Any domain name in the public DNS is acceptable so long as each distinct agency uses a different domain name. This ensures that each agency ID is globally unique. Simply put, this is your organizations web domain or the email domain for your organization (ex. *@yourorganzationname.org*)
- **[ServiceURI]** - URI for call routing. This attribute is contained in the Emergency Service Boundary layer and will define the Service URI of the service. The URI is usually a Session



Initiation Protocol (e.g. SIP or SIPs) URI but MAY be a telephone number URI that defines the route to reach the service. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*

- **[ServiceURN]** - The URN used to select the service for which a route is desired. The ECRF is queried with a location and a service URN that returns the Service URI. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[ServiceNum]** - The numbers that would be dialed on a 12-digit keypad to reach the emergency service appropriate for the location. This is not the same as an Emergency Service Number (ESN) in Legacy E9-1-1 systems. This field is used for all Emergency Boundaries including PSAP; Law; Fire; EMS; and others such as Poison Control. Within the United States the Service Number for most emergency services is 9-1-1, however, there may be Emergency Service boundaries that have a different number that may be associated with them such as Poison Control. Additionally, in areas outside of the United States, different numbers may be used for Law, Fire, and EMS – this field would be used to denote those numbers. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[AVcard\_URI]** - A vCard is a file format standard for electronic business cards. The Agency vCard URI is the internet address of an eXtensible Markup Language (XML) data structure which contains contact information (Name of Agency, Contact phone numbers, etc.) in the form of a vCard (RFC 6350). vCard files may be exported from most email programs or created with a text editor. The vCard URI is used in the service boundary layers to provide contact information for that agency. The Agency Locator (see STA-010) will provide these URIs for Agencies listed in it. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DisplayName]** - A description or "name" of the service provider that offers services within the area of a PSAP or an Emergency Service Boundary. This value MUST be suitable for display.

## 9.4 Emergency Service Boundaries

Emergency Service Boundaries are polygons representing the service area of the PSAP and various emergency service providers. At minimum law enforcement, fire and emergency medical response must be represented. Data stewards are to maintain a separate polygon layer for each ESB layer. Every ESB layer shall completely fill the Authoritative Boundary layer with no gaps and no overlaps.

### 9.4.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ES_NGUID	Emergency Service Boundary NENA Globally Unique ID	A	254	M



State	State	A	2	M
Agency_ID	Agency ID	A	100	M
ServiceURI	Service URI	A	254	M
ServiceURN	Service URN	A	50	M
ServiceNum	Service Number	A	15	O
AVcard_URI	Agency vCard URI	A	254	M
DsplayName	Display Name	A	60	M

## 9.4.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This **MUST** be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value **MUST** be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[ES\_NGUID]** - The NENA Globally Unique ID for each Emergency Service Boundary and 941 PSAP Boundary. The Unique ID components are comprised of *LAYER NAME + OBJECTID + AGENCYID* (ex. *FIRE1@yourorginzationname.org, LAW1@yourorginzationname.org, etc*)
- **[State]** – The name of a state or state equivalent, represented by the two-letter abbreviation given in USPS Publication 28 [14], Appendix B. A state is a primary governmental division of the United States.
- **[Agency\_ID]** - A Domain Name System (DNS) domain name which is used to uniquely identify an agency. An agency is represented by a domain name as defined in RFC 1034. Each agency **MUST** use one domain name consistently in order to correlate actions across a wide range of calls and incidents. Any domain name in the public DNS is acceptable so long as each distinct agency uses a different domain name. This ensures that each agency ID is globally unique. Simply put, this is your organizations web domain or the email domain for your organization (ex. *@yourorganzationname.org*)
- **[ServiceURI]** - URI for call routing. This attribute is contained in the Emergency Service Boundary layer and will define the Service URI of the service. The URI is usually a Session Initiation Protocol (e.g. SIP or SIPs) URI but **MAY** be a telephone number URI that defines the route to reach the service. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[ServiceURN]** - The URN used to select the service for which a route is desired. The ECRF is queried with a location and a service URN that returns the Service URI. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*



- **[ServiceNum]** - The numbers that would be dialed on a 12-digit keypad to reach the emergency service appropriate for the location. This is not the same as an Emergency Service Number (ESN) in Legacy E9-1-1 systems. This field is used for all Emergency Boundaries including PSAP; Law; Fire; EMS; and others such as Poison Control. Within the United States the Service Number for most emergency services is 9-1-1, however, there may be Emergency Service boundaries that have a different number that may be associated with them such as Poison Control. Additionally, in areas outside of the United States, different numbers may be used for Law, Fire, and EMS – this field would be used to denote those numbers. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[AVcard\_URI]** - A vCard is a file format standard for electronic business cards. The Agency vCard URI is the internet address of an eXtensible Markup Language (XML) data structure which contains contact information (Name of Agency, Contact phone numbers, etc.) in the form of a vCard (RFC 6350). vCard files may be exported from most email programs or created with a text editor. The vCard URI is used in the service boundary layers to provide contact information for that agency. The Agency Locator (see STA-010) will provide these URIs for Agencies listed in it. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DisplayName]** - A description or "name" of the service provider that offers services within the area of a PSAP or an Emergency Service Boundary. This value MUST be suitable for display.

### 9.4.3 Layer Names

- a. Emergency Service Boundary layers must be named as follows:
  1. Combined ESB layer: ESB (historical only – will not be used in the system)
  2. Sheriff/Police Department Boundary layer: ESB\_LAW
  3. EMS Department boundary layer: ESB\_EMS
  4. Fire Department boundary layer: ESB\_FIRE
  5. Optional ESB layers may be named as the Data Steward wishes. Only the "ESB\_" prefix is required

## 9.5 Provisioning Boundaries

This polygon layer defines the area of GIS data provisioning responsibility, with no unintentional gaps or overlaps. The Provisioning Boundary must be agreed to by all adjoining data provisioning providers. This Provisioning Boundary polygon layer can be used by an ECRF to facilitate exclusion of erroneous features that lie beyond the boundary, for geoprocessing purposes and can also be used by the Forest Guide to determine coverage for a data provisioning authority. It is a mandatory (M) layer with the following schema structure.

When provisioning data for an ECRF and LVF through the SI, a 9-1-1 Authority (or 9-1-1 Authority designee) MUST only include GIS data for their geographic area of responsibility and MUST ensure the data includes coverage for the entire extent of that area.



Note: The 9-1-1 Authority is ultimately responsible for the GIS data within the area they provide service for.

### 9.5.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
PB_NGUID	Provisioning Boundary NENA Globally Unique ID	A	254	M
Agency_ID	Agency ID	A	100	M

### 9.5.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[PB\_NGUID]** - The NENA Globally Unique ID for each Provisioning Boundary. Each record in the Provisioning Boundary layer MUST have a globally unique ID. When coalescing data from other local 9-1-1 Authorities into the ECRF and LVF, this unique ID MUST continue to have only one occurrence. To accomplish this is, append the 9-1-1 Authority's domain to the end of the "locally unique ID". The Unique ID components are comprised of *PB + OBJECTID + AGENCYID* (ex. [PB1@yourorganization.org](mailto:PB1@yourorganization.org))
- **[Agency\_ID]** - A Domain Name System (DNS) domain name which is used to uniquely identify an agency. An agency is represented by a domain name as defined in RFC 1034. Each agency MUST use one domain name consistently in order to correlate actions across a wide range of calls and incidents. Any domain name in the public DNS is acceptable so long as each distinct agency uses a different domain name. This ensures that each agency ID is globally unique. Simply put, this is your organizations web domain or the email domain for your organization (ex. [@yourorganization.org](mailto:@yourorganization.org))

## 10 Strongly Recommended Data Layers





## 10.1 Street Name Alias Table

The street name as assigned by the local addressing authority MUST be the name in the Road Centerlines Table. The street name assigned by the local addressing authority is the street name used for location validation, and call routing. However, many roads are known by more than one street name, and these are known as alias street names. There are many ways to represent an alias. This document describes one model. Regardless of the alias naming methodology selected, one MUST ensure it is compatible with the latest version of Appendix B of NENA-STA-010 [1]. Note that the representation shown in this section is compatible with the latest version of Appendix B of NENA-STA-010 [1].

Alias street names are common and must be considered. Examples include when a state route or state highway crosses into a city jurisdiction, when several streets “merge” to traverse the same road segment, or when honorary names are given to previously named and addressed roads. Many 9-1-1 Authorities will need to accommodate for alias street names during call taking and data sharing.

### 10.1.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ASt_NGUID	Alias Street Name NENA Globally Unique ID	A	254	M
RCL_NGUID	Road Centerline NENA Globally Unique ID	A	254	M
ASt_PreMod	Alias Street Name Pre Modifier	A	15	C
ASt_PreDir	Alias Street Name Pre Directional	A	9	C
ASt_PreTyp	Alias Street Name Pre Type	A	50	C
ASt_PreSep	Alias Street Name Pre Type Separator	A	20	C
ASt_Name	Alias Street Name	A	60	M
ASt_PosTyp	Alias Street Name Post Type	A	50	C
ASt_PosDir	Alias Street Name Post Directional	A	9	C
ASt_PosMod	Alias Street Name Post Modifier	A	25	C
ALStPreDir	Alias Legacy Street Name Pre Directional*	A	2	C
ALStName	Alias Legacy Street Name*	A	75	C
ALStTyp	Alias Legacy Street Name Type*	A	4	C
ALStPosDir	Alias Legacy Street Name Post Directional*	A	2	C

\*Legacy Attribute not utilized in current NG 9-1-1 systems

### 10.1.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*



- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[ASt\_NGUID]** – An identifier used for tracking Authoritative Boundaries in the local dataset.
- **[RCL\_NGUID]** – The SEGID from the road centerline file for the segment the record refers to
- **[ASt\_PreMod] – (Alias Pre-Modifier) –** : A word or phrase that precedes and modifies the Alias Street Name element but is separated from it by an Alias Street Name Pre Type or an Alias Street Name Pre Directional or both.
- **[ASt\_PreDir] – (Alias Pre - Directional) –** A cardinal direction abbreviation preceding the street name key. Only N, S, E, W or NE, NW, SE, SW can be used.
- **[ASt\_PreType] – (Alias Preceding Type) –** A Street type which precedes the street name. This must always be spelled out fully. Example: AVENUE 3, not AVE 3
- **ASt\_PreSep] – (Alias Preceding Type) -** A preposition or prepositional phrase between the Alias Street Name Pre Type and the Alias Street Name.
- **[ASt\_Name] – (Alias Street Name) –** The alias name for the segment
- **[ASt\_PosType] – (Alias Street Post Type) –** A abbreviated suffix following the street name key
- **[ASt\_PosDir] – (Alias Post Directional) -** A cardinal direction abbreviation following the street name key. \*Only N, S, E, W or NE, NW, SE, SW can be used
- **[ASt\_PosMod] – (Alias Post Modifier) –** An additional value sometimes found on certain roads. Valid values include but are not limited to: Access, Alternate, Business, Bypass, Connector, Extended, Extension, Loop, Private, Public, Scenic, Spur, Ramp, Underpass, Old, Overpass.
- **[ALSt\_PreDir] – (Alias Pre - Directional) –** A cardinal direction abbreviation preceding the street name key. Only N, S, E, W or NE, NW, SE, SW can be used.
- **[ALSt\_Name] – (Alias Street Name) –** The alias name for the segment
- **[ALSt\_PosType] – (Alias Street Post Type) –** A abbreviated suffix following the street name key
- **[ALSt\_PosDir] – (Alias Post Directional) -** A cardinal direction abbreviation following the street name key. \*Only N, S, E, W or NE, NW, SE, SW can be used

## 10.2 Landmark Part Name

The Complete Landmark Name in the Site/Structure Address Points layer is the complete name by which a prominent feature is publicly known. There are different ways to represent Landmark Name Part elements in a GIS data model. Visit the [NENA NG 9-1-1 Data Standards documentation](#) for more details.

### 10.2.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrepAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
LMNP_NGUID	Landmark Name Part NENA Globally Unique ID	A	254	C
Site_NGUID	Site NENA Globally Unique ID	A	254	C
ACLMNNGUID	Alias Complete Landmark Name NENA Globally Unique ID	A	254	C
LMNamePart	Landmark Name Part	A	150	M
LMNP_Order	Landmark Name Part Order	I	1	M



### 10.2.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[LMNP\_NGUID]** – Landmark Name Part Global Unique Identifier.
- **[Site\_NGUID]** – The NENA Globally Unique ID for each Site/Structure Address Point.
- **[ACLMNNGUID]** – Alias Complete Landmark Name NENA Global Unique Identifier.
- **[LMNamePart]** – The name or collection of names by which a prominent feature is publicly known.
- **[LMNP\_Order]** – The order in which to concatenate Landmark Name Parts where 1 is the first (or leftmost) Landmark Name Part, 2 is the second Landmark Name Part, 3 is the third Landmark Name Part, etc.

## 10.3 Complete Landmark Name Alias

The Complete Landmark Name Alias Table contains the alternate landmark names that are associated with the Complete Landmark Name in the Site/Structure Address Points layer.

### 10.3.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ACLMNNGUID	Alias Complete Landmark Name Globally Unique ID	A	254	M
Site_NGUID	Site NENA Globally Unique ID	A	254	M
ACLandmark	Alias Complete Landmark Name	A	150	C

### 10.3.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST



be populated upon modifications to attributes, geometry, or both.

- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[ACLMNNGUID]** – Alias Complete Landmark Name NENA Global Unique Identifier.
- **[Site\_NGUID]** – The NENA Globally Unique ID for each Site/Structure Address Point.
- **[ACLandmark]** – Alias Complete Landmark Name.

## 10.4 States

A state, or its equivalent, is a primary governmental division of the United States.

### 10.4.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
StateNGUID	State NENA Globally Unique ID	A	254	M
Country	Country	A	2	M
State	State	A	2	M

### 10.4.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[StateNGUID]** –State NENA Globally Unique Identifier.
- **[Country]** – Country name.
- **[State]** – State name.

## 10.5 Counties

A county or its equivalent boundary is the primary legal division of a state, province, or territory.

### 10.5.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M



Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
CntyNGUID	County NENA Globally Unique ID	A	254	M
Country	Country	A	2	M
State	State	A	2	M
County	County	A	75	M

### 10.5.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[CntyNGUID]** – County NENA Globally Unique Identifier.
- **[Country]** – Country name.
- **[State]** – State name.
- **[County]** – County name.

## 10.6 Incorporated Municipality Boundary

This is defined as the boundary of a city, town, village, borough, or similar entity that has local governmental powers and may be useful in determining jurisdictional authority for addressing and emergency response.

### 10.6.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
IncM_NGUID	Incorporated Municipality NENA Globally Unique ID	A	254	M
Country	Country	A	2	M
State	State	A	2	M
County	County	A	75	M
AddCode	Additional Code	A	6	C
Inc_Muni	Incorporated Municipality	A	100	M



### 10.6.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[IncM\_NGUID]** – Incorporated Municipality NENA Globally Unique Identifier.
- **[Country]** – Country name.
- **[State]** – State name.
- **[County]** – County name.
- **[AddCode]** – A code that specifies a geographic area. Differentiates two municipalities with the same name.
- **[Inc\_Muni]** – Incorporated Municipality name.

## 10.7 Unincorporated Community Boundary

This is defined as the boundary of an unincorporated community, either within an incorporated municipality or in an unincorporated portion of a county, or both, and may be useful in determining jurisdictional authority for addressing and emergency response.

### 10.7.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
UnincNGUID	Unincorporated NENA Globally Unique ID	A	254	M
Country	Country	A	2	M
State	State	A	2	M
County	County	A	75	M
AddCode	Additional Code	A	6	C
Uninc_Comm	Unincorporated Community	A	100	M

### 10.7.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State’s 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*



- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[IncM\_NGUID]** – Incorporated Municipality NENA Globally Unique Identifier.
- **[Country]** – Country name.
- **[State]** – State name.
- **[County]** – County name.
- **[AddCode]** – A code that specifies a geographic area. Differentiates two municipalities with the same name.
- **[Uninc\_Comm]** – Unincorporated Community name.

## 10.8 Neighborhood Community Boundary

This is defined as the boundary of a neighborhood, subdivision, or commercial area. The most intuitive way to refer to a place is often by the neighborhood name. Locations of similar sounding street names may be resolved when the neighborhood name is known.

### 10.8.1 Attribute Table

Attribute	Description	Type	Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
NbrhdNGUID	Neighborhood NENA Globally Unique ID	A	254	M
Country	Country	A	2	M
State	State	A	2	M
County	County	A	75	M
AddCode	Additional Code	A	6	C
Inc_Muni	Incorporated Municipality	A	100	M
Uninc_Comm	Unincorporated Community	A	100	C
Nbrhd_Comm	Neighborhood Community	A	100	M

### 10.8.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[IncM\_NGUID]** – Incorporated Municipality NENA Globally Unique Identifier.



- **[Country]** – Country name.
- **[State]** – State name.
- **[County]** – County name.
- **[AddCode]** – A code that specifies a geographic area. Differentiates two municipalities with the same name.
- **[Inc\_Muni]** – Incorporated Municipality name.
- **[Uninc\_Comm]** – Unincorporated Community name.
- **[Nbrhd\_Comm]** – Neighborhood Community name.

## 10.9 Additional ESB's

### 10.9.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ES_NGUID	Emergency Service Boundary NENA Globally Unique ID	A	254	M
State	State	A	2	M
Agency_ID	Agency ID	A	100	M
ServiceURI	Service URI	A	254	M
ServiceURN	Service URN	A	50	M
ServiceNum	Service Number	A	15	O
AVcard_URI	Agency vCard URI	A	254	M
DsplayName	Display Name	A	60	M

### 10.9.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This **MUST** be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value **MUST** be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[ES\_NGUID]** - The NENA Globally Unique ID for each Emergency Service Boundary and 941 PSAP Boundary. The Unique ID components are comprised of PSAP + OBJECTID + AGENCYID (ex. PSAP1@yourorginzationname.org)





- **[State]** – The name of a state or state equivalent, represented by the two-letter abbreviation given in USPS Publication 28 [14], Appendix B. A state is a primary governmental division of the United States.
- **[Agency\_ID]** - A Domain Name System (DNS) domain name which is used to uniquely identify an agency. An agency is represented by a domain name as defined in RFC 1034. Each agency MUST use one domain name consistently in order to correlate actions across a wide range of calls and incidents. Any domain name in the public DNS is acceptable so long as each distinct agency uses a different domain name. This ensures that each agency ID is globally unique. Simply put, this is your organizations web domain or the email domain for your organization (ex. @yourorganizationname.org)
- **[ServiceURI]** - URI for call routing. This attribute is contained in the Emergency Service Boundary layer and will define the Service URI of the service. The URI is usually a Session Initiation Protocol (e.g. SIP or SIPs) URI but MAY be a telephone number URI that defines the route to reach the service. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[ServiceURN]** - The URN used to select the service for which a route is desired. The ECRF is queried with a location and a service URN that returns the Service URI. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[ServiceNum]** - The numbers that would be dialed on a 12-digit keypad to reach the emergency service appropriate for the location. This is not the same as an Emergency Service Number (ESN) in Legacy E9-1-1 systems. This field is used for all Emergency Boundaries including PSAP; Law; Fire; EMS; and others such as Poison Control. Within the United States the Service Number for most emergency services is 9-1-1, however, there may be Emergency Service boundaries that have a different number that may be associated with them such as Poison Control. Additionally, in areas outside of the United States, different numbers may be used for Law, Fire, and EMS – this field would be used to denote those numbers. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[Vcard\_URI]** - A vCard is a file format standard for electronic business cards. The Agency vCard URI is the internet address of an eXtensible Markup Language (XML) data structure which contains contact information (Name of Agency, Contact phone numbers, etc.) in the form of a vCard (RFC 6350). vCard files may be exported from most email programs or created with a text editor. The vCard URI is used in the service boundary layers to provide contact information for that agency. The Agency Locator (see STA-010) will provide these URIs for Agencies listed in it. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DisplayName]** - A description or "name" of the service provider that offers services within the area of a PSAP or an Emergency Service Boundary. This value MUST be suitable for display.

## 10.10 Parcel Boundaries



### 10.10.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
PIN	Parcel ID	A	15	M

### 10.10.2 Attribute Descriptions

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[PIN]** – Parcel Identification Number.

## 10.11 Emergency Service Zones

Emergency Service Zone (ESZ) Boundaries are polygons representing a unique combination of emergency service agencies (Law Enforcement, Fire and Emergency Medical Services) designated to serve a specific range of addresses. Each ESZ has a three to five digit identifier called an Emergency Service Number or ESN.

### 10.11.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ESN_NGUID	Emergency Service Zone NENA Globally Unique ID	A	254	M
ESN	Emergency Service Number	I	6	C
STATE	State	A	2	M
ENTITY	Official Entity Name	A	100	M
DISPLAY	Display Name	A	60	M
ESB_TYPE	Description of the type of boundary in the layer. COMBINED or specific boundary type.	A	20	M
	<i>If ESB_TYPE = COMBINED, the following four fields shall be populated</i>			



PSAP	Display Name of the PSAP	A	60	C
LAW	Display Name of Law Enforcement Entity	A	60	C
FIRE	Display Name of Fire Entity	A	60	C
EMS	Display Name of EMS Entity	A	60	C
NOTES	Notes	A	255	O

### 10.11.2 Attribute Details

- **[DiscrpAgID]** – Agency that receives a Discrepancy Report (DR), should a discrepancy be discovered, and will take responsibility for ensuring discrepancy resolution. This may or may not be the same as the 9-1-1 Authority. This MUST be represented by a domain name that is an Agency Identifier as defined in the NENA Master Glossary. *The value for this field will be coordinated with the State's 911 office upon the implementation of the NG911 ESInet and will not be mandatory until that time.*
- **[DateUpdate]** - The date and time that the record was created or last modified. This value MUST be populated upon modifications to attributes, geometry, or both.
- **[Effective]** - The date and time that the record is scheduled to take effect.
- **[Expire]** - The date and time when the information in the record is no longer considered valid.
- **[ESN\_NGUID]** – ESN NENA Globally Unique Identifier.
- **[ESN]** – Emergency Service Number.
- **[STATE]** – State Name.
- **[ENTITY]** – Official Entity Name.
- **[DISPLAY]** – ESZ Display Name.
- **[ESB\_TYPE]** – Description of boundary type, combined or individual type.
- **[PSAP]** – Display name of the PSAP.
- **[LAW]** – Display name of the Law Enforcement Entity.
- **[FIRE]** – Display name of the Fire Entity.
- **[EMS]** – Display name of the EMS Entity.
- **[NOTES]** – Additional Notes

## 11 Recommended Data Layers

### 11.1 Railroad Centerline

#### 11.1.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
RS_NGUID	Rail Segment NENA Globally Unique ID	A	254	M
RLOWN	Rail Line Owner	A	100	C
RLOP	Rail Line Operator	A	100	C
RLNAME	Rail Line Name	A	100	O



RMPL	Rail Mile Post Low	F	-	O
RMPH	Rail Mile Post High	F		O

## 11.2 Hydrology Line

### 11.2.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
HS_NGUID	Hydrology Segment NENA Globally Unique ID	A	254	M
HS_Type	Hydrology Segment Type	A	100	O
HS_Name	Hydrology Segment Name	A	100	O

## 11.3 Hydrology Polygon

### 11.3.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
HP_NGUID	Hydrology Polygon NENA Globally Unique ID	A	254	M
HP_Type	Hydrology Polygon Type	A	100	O
HP_Name	Hydrology Polygon Name	A	100	O

## 11.4 Cell Site Location

### 11.4.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Country	Country	A	2	M
State	State	A	2	M
County	County	A	75	M
Cell_NGUID	Cell NENA Globally Unique ID	A	254	M
Site_ID	Site ID	A	10	C
Sector_ID	Sector ID	A	4	M
Switch_ID	Switch ID	A	10	C
CMarket_ID	Market ID	A	10	C
CSite_Name	Cell Site ID	A	10	C



ESRD_ESRK	ESRD or First ESRK	I	10	C
ESRK_Last	Last ESRK	I	10	C
CSctr_Ornt	Sector Orientation	A	4	M
Technology	Technology	A	10	M
Site_NGUID	Site NENA Globally Unique ID	A	254	O
Long	Longitude	F	-	C
Lat	Latitude	F	-	C

## 11.5 Mile Marker Location

### 11.5.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
MileMNGUID	Mile Post NENA Globally Unique ID	A	254	M
MileM_Unit	Mile Post Unit of Measurement	A	15	C
MileMValue	Mile Post Measurement Value	F	-	M
MileM_Rte	Mile Post Route Name	A	100	M
MileM_Type	Mile Post Type	A	15	C
MileM_Ind	Mile Post Indicator	A	1	M

## 11.6 Park Boundaries

### 11.6.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
EFF_DATE	Effective Date	D	26	O
EXP_DATE	Expiration Date	D	26	O
PARKID	Unique identifier in the local dataset	A	38	M
NAME	Feature Name	A	75	O
STATE	State	A	2	M
COUNTY	County	A	75	M
NOTES	Notes	A	255	O
PARKTYPE	Park Type Designation	A	26	M

## 11.7 Wind Farms



### 11.7.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
EFF_DATE	Effective Date	D	26	O
EXP_DATE	Expiration Date	D	26	O
WINDID	Unique identifier in the local dataset	A	38	M
NAME	Feature Name	A	75	O
OWNER	Owner Contact Information	A	255	M
STATE	State	A	2	M
COUNTY	County	A	75	M
NOTES	Notes	A	255	O

## 11.8 Wind Tower

### 11.8.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
EFF_DATE	Effective Date	D	26	O
EXP_DATE	Expiration Date	D	26	O
TOWERID	Unique identifier in the local dataset	A	38	M
SITEID	Identifier assigned by Wind Farm company	A	10	C
FULLADDRESS	Concatenated Full Address	A	255	M
STATE	State	A	2	M
COUNTY	County	A	75	M
HEIGHT	Full height of tower	I	10	O
NOTES	Notes	A	255	O

## 11.9 Cell Tower

### 11.9.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
EFF_DATE	Effective Date	D	26	O
EXP_DATE	Expiration Date	D	26	O



CELLID	Unique identifier in the local dataset	A	38	M
SITEID	Identifier assigned by cell company	A	10	C
C_SITEID	Name of cell site	A	10	C
FULLADDRESS	Concatenated Full Address	A	255	M
SECTORID	Cell sector face or Omni	A	4	C
STATE	State	A	2	M
COUNTY	County	A	75	M
HEIGHT	Full height of tower and antennas	A	10	O
TWR_TYP	Antenna or tower type	A	50	O
SWITCHID	Mobile Switch Center ID	A	10	O
MARKETID	Market ID of Mobile Switch Center	A	10	O
ESRD	ESRD of sector or the first number in the ESRK range	I	10	C
LASTESRK	Last number in the ESRK range for the PSAP	I	10	C
SECORN	Antenna orientation	A	4	C
NOTES	Notes	A	255	O

## 11.10 Hydrants

### 11.10.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
EFF_DATE	Effective Date	D	26	O
EXP_DATE	Expiration Date	D	26	O
NGHYDID	Unique identifier in the local dataset	A	38	M
HYDTYPE	Hydrant Type	A	50	M
PROVIDER	Water Provider Name	A	100	O
HYDSTATUS	In or Out of Service	A	10	M
PRIVATE	Yes / No / Unknown	A	10	M
FLOW	Flow Rate	F	10	O
NOTES	Notes	A	255	O

## 11.11 Water Mains

### 11.11.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O



Expire	Expiration Date	D	-	O
Diameter	Diameter	A	4	M

## 11.12 Bridges

### 11.12.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
NGBRIDGE	Unique Identifier in the local dataset	A	38	M
LPA_NAME	Local identifier for the bridge	A	75	O
STRUCT_NO	FHWA Structure number	A	15	O
WEIGHT_L	Weight limit	I		O
OVERUNDER	Over or Under bridge	A	5	O
STATUS	Open or Closed to traffic	A	10	O
SUBMIT	For Submission to Master Repository	A	1	M
NOTES	Notes	A	255	O

## 11.13 Airport Runways

### 11.13.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
Name	Name	A	100	C

## 11.14 Building Footprints

### 11.14.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O





Name	Name	A	100	C
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## 11.15 Flood Zones

### 11.15.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
Code	Code	A	10	M
FldPlain	Floodplain	A	25	M
Description	Description	A	254	O

## 11.16 Zip Codes

### 11.16.1 Attribute Table

Attribute	Description	Type	Field Width	M/C/O
DiscrpAgID	Discrepancy Agency ID	A	75	M
DateUpdate	Date Updated	D	-	M
Effective	Effective Date	D	-	O
Expire	Expiration Date	D	-	O
ZipCode	ZipCode	A	5	M
ZipCode4	Zip Code + 4	A	10	M

## 12 Metadata

Every data layer in the Illinois NG911 GIS Data Model shall have the FGDC mandatory fields as defined in the Content Standard for Digital Geospatial Metadata (CSDGM) Essential Metadata Elements document. When using the Illinois NG911 Template Geodatabase in Esri ArcGIS Desktop software, many of these metadata elements are automatically populated. The following elements, described as they appear in ArcGIS Desktop software, must be populated by the Local Data Steward directly:

### 12.1 Metadata Requirements

#### 12.1.1 Item Description

- Abstract
- Purpose
- Tag/Keyword



### **12.1.2 Citations**

- Publication Data

### **12.1.3 Citation Contact**

- Originator

### **12.1.4 Contacts**

- Metadata Contact

### **12.1.5 Details**

- Status Code

### **12.1.6 Extents**

- Temporal Extent

### **12.1.7 Maintenance**

- Maintenance Frequency

### **12.1.8 Lineage**

### **12.1.9 Statement**

