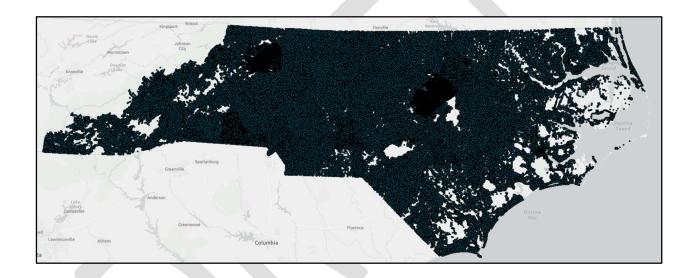# Geographic Data Content Standard for AddressNC

Adopted: August 11, 2021

Geographic Information Coordinating Council

Statewide Mapping Advisory Committee

AddressNC Steering Committee

Contents

AddressNC Data Content Standard

Preface

The AddressNC Data Content Standard found in this document was compiled by the AddressNC Steering Committee from October 2020 through January 2021. The AddressNC Steering Committee was formed in June 2020 and began meeting monthly from July 2020 through January 2021. The steering committee consisted of representatives from both state and local government as well as the CURISA Addressing Group, the NC League of Municipalities, and the NC Association of County Commissioners. A full list of the members can be found in the linked member listing[1] within the References section of this document.

Introduction

This AddressNC Data Content Standard was compiled and proposed to the North Carolina (NC) Statewide Mapping Advisory Committee (SMAC) by the AddressNC Steering Committee that was formed in 2020. The AddressNC Steering Committee derived this standard from the *NENA Standard for NG9-1-1 GIS Data Model[2]*, the *National Address Database (NAD) Schema v2[3]*, the *FGDC Content Standard for Unites States Thoroughfare, Landmark, and Postal Address Data Standard[4]*, as well as the previous two AddressNC data products that were published in 2009 and 2014. Considerations to support the various review of address data for census needs also took place.

Definition

The AddressNC Data Content Standard is designed as a digital representation of the addresses throughout North Carolina. Each digital address point contains attributes that describe specific characteristics of the actual address to identify features of that locations.

General Data Requirements

Coordinate System

The AddressNC data product will be published in the NC State Plane NAD83 (ESPG: 2264) coordinate reference system.

Geometry – Point Feature Type

The address data published for AddressNC will be a point feature geometry type.

Fields and Domains

A complete listing of the fields and their associated domains can be found in Appendix A. Where the domains have been defined by the State of North Carolina these values and definitions can be found within Appendix B.

Metadata Standards

The metadata format that will be used for the AddressNC data is the North Carolina State and Local Government Metadata Profile for Geospatial Data and Services. A link to the metadata profile document[5] can be found within the References section of this document.

Appendix A - Fields

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use*
Add_Number	Address Number	Integer	6	None	Number assigned to the address.	always
AddNum_Suf	Address Number Suffix	String	15	None	Suffix assigned to the address number.	occasionally
St_PreMod	Street Name Pre Modifier	String	15	None	A word of phrase that precedes and modifies the *Street Name* element, but is separated from it by the *Street Name Pre Type* or a *Street Name Pre Directional* or both.[2]	occasionally
St_PreDir	Street Name Pre Directional	String	9	NENA	A word preceding the *Street Name* element that indicates the direction taken by the street from an arbitrary starting point or line, or the sector where it is located.[2]	commonly
St_PreTyp	Street Name Pre Type	String	50	NENA	A word or phrase that precedes the *Street Name* element and identifies a type of thoroughfare in a complete street name.[2]	occasionally
St_PreSep	Street Name Pre Separator	String	20	NENA	A preposition or prepositional phrase between the *Street Name Pre Type* and the *Street Name*.[2]	rarely
St_Name	Street Name	String	60	None	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, directional, or modifiers.[2]	always
St_PosTyp	Street Name Post Type	String	50	NENA	A word of phrase that follows the *Street Name* element and identifies a type of thoroughfare in a complete street name.[2]	commonly
St_PosDir	Street Name Post Directional	String	9	NENA	A word following the *Street Name* element that indicates the direction taken by the street from an arbitrary starting point or line, or the sector where it is located.[2]	commonly

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use*
St_PosMod	Street Name Post Modifier	String	25	None	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.[2]	commonly
LSt_PreDir	Legacy Street Name Pre Directional	String	2	USPS	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.[2]	commonly
LSt_Name	Legacy Street Name	String	75	None	The street name field as it would appear in the master street addressing guide, as assigned by the local addressing authority.[2]	always
LSt_Type	Legacy Street Name Post Type	String	4	USPS	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.[2]	commonly
LSt_PosDir	Legacy Street Name Post Directional	String	2	USPS	The trailing street direction suffix as it is previously existed prior to the adoption of the NG9-1-1 Data Model as assigned by the local addressing authority.[2]	commonly
Unit	Unit	String	75	None	A group or suite of rooms within a building that are under common ownership or tenancy, typically having a common primary entrance.[2]	commonly
St_Address	Full Street Address	String	200	None	The full street address for the site/structure point. This includes the number, number suffix (if applicable), all the legacy street name components, and the unit (if applicable).	always
County	County	String	40	NC Counties	The name of the county where the address is located.	always
State	State	String	2	USPS	The name of the state where the address is located.	always
MSAGComm	Community Name	String	30	None	The community name associated with an address as given in the Master Street Addressing Guide (MSAG) and may or may not be the same as the Community Name assigned by the United States Postal Service (USPS).[2]	always
Post_Comm	Postal Community Name	String	40	None	A city name for the ZIP Code of an address, as given in the *USPS City State Product*.[2]	commonly

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use*
Post_Code	Postal Code	String	7	None	A system of 5-digit character codes that identify the individual USPS delivery station associated with an address.[2]	commonly
Inc_Muni	Incorporated Municipality	String	100	None; however, "Unincorporated" is used if the address is not within an incorporated local government.[1]	The name of the Incorporated Municipality or other general-purpose local government unit (if any) where the address is located.[2]	always
Uninc_Comm	Unincorporated Municipality	String	100	None	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.[2]	rarely
Nbrhd_Comm	Neighborhood Community	String	100	None	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.[2]	rarely
Building	Building	String	75	None	One among a group of buildings that have the same address number and complete street name.[2]	rarely
Floor	Floor	String	75	None	A floor, story, or level within a building.[2]	rarely
Addtl_Loc	Additional Location Information	String	225	None	A part of a sub-address that is not a Building, Floor, Unit, Room, or Seat.[2]	rarely
LandmkName	Complete Landmark Name	String	150	None	The name by which a prominent site/structure is publicly known.[2]	rarely
StateFIPS	State FIPS Code	Integer	2	Census	The state Federal Information Processing Series (FIPS) code. The FIPS codes are two-digit unique values for every state.[6]	always

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use*
CountyFIPS	County FIPS Code	Integer	3	Census	The county Federal Information Processing Series (FIPS) code. The FIPS codes are unique values for every county when the state FIPS code is added to the beginning of the three-digit county code.[6]	always
Tract	Census Tract Number	Integer	6	Census	Census tracts are small, relatively permanent statistical subdivisions of a county or statistically equivalent entity. The numbers are unique within each county and consist of a six-digit code with a decimal between the fourth and fifth digit.[7]	always
Block	Census Block Number	Integer	4	0000 - 9999	Census blocks are numbered within census tracts and are unique to the census tract in which they belong. A 4-digit number, the first digit of the census block number identifies the block group.[7]	always
GEOID	Geographic Identifier	Integer	15	Census	A 15-digit combination of state and county FIPS codes as well as the tract and block numbers.[7]	always
Place_Type	Place Type	String	50	AddressNC Place Type Domain	The type of feature identified by the address.[2] For the State of North Carolina the associated Place Type domain should be used when possible.	commonly
Placement	Placement Method	String	25	AddressNC Placement Domain	The methodology used for placement of the address point.[2] This may or may not be where the address number assignment was calculated from. For the State of North Carolina the associated Placement domain should be used when possible.	commonly
Long	Longitude	Float		None	Longitude of point calculated in NC State Plane NAD83 (ESPG: 2264). Units are feet.	always
Lat	Latitude	Float		None	Latitude of point calculated in NC State Plane NAD83 (ESPG: 2264). Units are feet.	always
Elev	Elevation	Integer	6	None	The elevation given in meters above a reference surface defined by the coordinate system associated with the site/structure address.[2]	rarely
USNG	US National Grid Coordinate	String	50	None	United States National Grid (USNG) coordinate for the point location.	always

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use*
DDLat	Longitude Decimal Degrees	Float		None	Longitude of point calculated in WGS84 (ESPG: 4326). Units are decimal degrees.	always
DDLong	Latitude Decimal Degrees	Float		None	Latitude of point calculated in WGS84 (ESPG: 4326). Unites are decimal degrees.	always
PlusCode	plus code	String	11	None	Plus codes are used creating the Open Location Code system developed by Google. Plus codes are 10 to 11 characters long. Plus codes represent areas, and the size of the area depends on the code length. The longer the code, the smaller and more accurate the area. The codes are based on a simple encoding of latitude and longitude.[8]	always
Source	Address Source	String	75	None	The source of the address point. If the address point was acquired through the NG9-1-1 project the attribute will be the jurisdiction's discrepancy agency identifier. If the address point was created by the Center for Geographic Information and Analysis (CGIA) due to gaps in the NG9-1-1 data, this will be assigned as "CGIA".	always
DateUpdate	Date Last Updated	Date		None	Date the address was last updated, maintained by the source.	always
Effective	Effective Date	Date		None	Date the address becomes effective, maintained by the source.	commonly
Expire	Expiration Date	Date		None	Date the address expires, maintained by the source.	rarely
UniqueID	Unique ID	String	254	None	Unique Identifier for the point. This is usually a combination of the layer name abbreviated, the objectID, as well as the NG9-1-1 discrepancy agency identifier.	always

*The *Expected Use* column indicates whether a field is "always", "commonly", "occasionally", or "rarely" used within the dataset.

The References section at the end of this document details the references used throughout the table.

Appendix B - Domains

NC Counties

Alamance	Catawba	Franklin	Jones	Pamlico	Surry
Alexander	Chatham	Gaston	Lee	Pasquotank	Swain
Alleghany	Cherokee	Gates	Lenoir	Pender	Transylvania
Anson	Chowan	Graham	Lincoln	Perquimans	Tyrell
Ashe	Clay	Granville	McDowell	Person	Union
Avery	Cleveland	Greene	Macon	Pitt	Vance
Beaufort	Columbus	Guilford	Madison	Polk	Wake
Bertie	Craven	Halifax	Martin	Randolph	Warren
Bladen	Cumberland	Harnett	Mecklenburg	Richmond	Washington
Brunswick	Currituck	Haywood	Mitchell	Robeson	Watauga
Buncombe	Dare	Henderson	Montgomery	Rockingham	Wayne
Burke	Davidson	Hertford	Moore	Rowan	Wilkes
Cabarrus	Davie	Hoke	Nash	Rutherford	Wilson
Caldwell	Duplin	Hyde	New Hanover	Sampson	Yadkin
Camden	Durham	Iredell	Northampton	Scotland	Yancey
Carteret	Edgecombe	Jackson	Onslow	Stanly	
Caswell	Forsyth	Johnston	Orange	Stokes	

Place Type

Domain Attribute	Description	Example
Agricultural	Classification to use for a point that represents an address used for agriculture. This does not include a residential dwelling on an agricultural parcel.	Barn, outbuilding, chicken house, etc.
Cemetery	Classification to use for a single point representative of an entire cemetery, not each individual lot within a cemetery.	
Civic – Recreation	Classification to use for a point that represents civic recreational location.	
Civic – Other	Classification to use for a point that represents any other civic location not associated with recreation.	

Domain Attribute	Description	Example
Commercial – Banking	Classification to use for a point that represents a banking commercial enterprise.	Bank, atm, etc.
Commercial – Day-Care	Classification to use for a point that represents a day-care commercial enterprise.	
Commercial – Gas Station	Classification to use for a point that represents a gas station commercial enterprise.	
Commercial – Grocery	Classification to use for a point that represents a grocery commercial enterprise.	
Commercial – Hospitality	Classification to use for a point that represents a hospitality commercial enterprise.	Hotel, motel, resort, etc.
Commercial – Office	Classification to use for a point that represents an office of a commercial enterprise.	
Commercial – Restaurant	Classification to use for a point that represents a restaurant commercial enterprise.	
Commercial – Retail	Classification to use for a point that represents a retail commercial enterprise.	
Commercial – Other	Classification to use for a point that represents any other commercial enterprise not represented by the other commercial classification options.	
Educational – College/University	Classification to use for a point that represents a college or university.	
Educational – Grade School	Classification to use for a point that represents a grade school.	
Government – Emergency Response	Classification to use for a point that represents an address used for emergency response.	Fire station, Police station, EMS, 911 call center, etc.
Government – Office (not public)	Classification to use for a point that represents a non-public government office address.	
Government – Office (public)	Classification to use for a point that represents a public government office address.	
Government – Other	Classification to use for a point that represents any other government use address not represented by the other government classification options.	

Domain Attribute	Description	Example
Industrial – Manufacturing	Classification to use for a point that represents an address used for industrial manufacturing.	
Industrial – Warehouse	Classification to use for a point that represents an address used for an industrial warehouse.	
Industrial – Other	Classification to use for a point that represents any other industrial enterprise not represented by the other industrial classification options.	
Infrastructure – Non-Public Service	Classification to use for a point that represents infrastructure of a non-public service.	
Infrastructure – Public Service	Classification to use for a point that represents infrastructure of a public service.	
Infrastructure – Other	Classification to use for a point that represents any other industrial enterprise not represented by the other industrial classification options.	
Institutional – Correctional	Classification to use for a point that represents an institutional correctional facility.	
Institutional – Nursing Facility	Classification to use for a point that represents an institutional nursing facility.	
Institutional – Other	Classification to use for a point that represents any other institutional facility not represented by the other institutional classification options.	
Medical – Clinic/Office	Classification to use for a point that represents a medical clinic or office.	
Medical – Hospital	Classification to use for a point that represents a medical hospital.	
Mixed Use	Classification to use for a point that represents mixed use. One example could be a point for a building that has both retail and apartment dwelling spaces.	
Preserved Open Space	Classification to use for a point that represents preserved open space. This classification differs from vacant as this point represents an area set aside for open space such as a park or forest land.	

Domain Attribute	Description	Example
Religious	Classification to use for a point that represents place of worship.	
Residential – Apartment	Classification to use for a point that represents a residential multi-family attached dwellings of 1 unit.	
Residential – Assisted Living	Classification to use for a point that represents a residential assisted living dwelling.	
Residential - Duplex	Classification to use for a point that represents residential multi-family attached dwellings of 2 units.	
Residential – Manufactured Home	Classification to use for a point that represents a manufacture home residential dwelling.	
Residential – Military Quarters	Classification to use for a point that represents residential military quarters.	
Residential – Mobile Home	Classification to use for a point that represents a mobile home residential dwelling.	
Residential – Multi-Family Attached	Classification to use for a point that represents residential multi-family attached dwellings where the exact unit specification is unknown. This could be the main address without a number suffix or unit associated with the point.	
Residential – Multi-Family Attached (5-9 units)	Classification to use for a point that represents residential multi-family attached dwellings for 5-9 units.	
Residential – Multi-Family Attached (10-19 units)	Classification to use for a point that represents residential multi-family attached dwellings for 10-19 units.	
Residential – Multi-Family Attached (20-49 units)	Classification to use for a point that represents residential multi-family attached dwellings for 20-49 units.	
Residential – Multi-Family Attached (50+ units)	Classification to use for a point that represents residential multi-family attached dwellings for 50+ units.	
Residential - Quadplex	Classification to use for a point that represents residential multi-family attached dwellings of 4 units.	
Residential – Single-Family Detached	Classification to use for a point that represents a single-family detached residential dwelling.	
Residential – Student Housing	Classification to use for a point that represents residential student housing.	

Domain Attribute	Description	Example
Residential - Triplex	Classification to use for a point that represents a residential multi-family attached dwellings of 3 units.	
Residential – Other	Classification to use for a residential dwelling that does not fit into the other classification definitions. One example could be a dwelling unit above a garage.	
Transportation	Classification to use for a point where the type is associated with any mode of transportation.	
Veterinary	Classification to use for a point associated with veterinary services. This can include veterinary offices or kennels.	
Other	Classification to use for a point for any other type that is not previously defined within the classifications in this place type domain.	
Unknown	Classification to use for a point where the type is unknown.	
Vacant	Classification to use for a point where the area this point represents is vacant.	

Placement

Structure – Rooftop
Structure – Entrance
Structure – Interior Unit Location
Parcel – Centroid
Parcel – Other/Manual Placement
Geocode
Driveway
Site Placement
Other
Unknown

References

1. [AddressNC Steering Committee Member Listing](#)
2. [NENA Standard for NG9-1-1 GIS Data Model](#)
3. [National Address Database (NAD) Schema v2](#)
4. [The FGDC Content Standard for Unites States Thoroughfare, Landmark, and Postal Address Data Standard](#)
5. [North Carolina State and Local Government Metadata Profile for Geospatial Data and Services](#)
6. [Understanding Geographic Identifiers (GEOIDs)](#)
7. [2020 Census Local Update of Census Addresses Operation (LUCA) Respondent Guide](#)
8. [Evaluation of Location Encoding Systems](#)