



National Address Database Schema

The purpose of this document is to lay out the National Address Database (NAD) Schema, including all attribute fields and domains. This schema is in line with the minimum content approach that was devised in the [NAD Summit](#). This schema was developed as part of the [NAD Pilot](#) project, and it is anticipated that this schema will evolve over time as participation in the NAD grows.

Please note that this is not a minimum schema for submission - it is anticipated that many of the fields may be null for many records, or perhaps nonexistent depending on the source data. The “Expected Use” column indicates whether a field is generally “always used”, “commonly used”, “occasionally used”, or “rarely used” within a dataset to give submitters a sense of expectations. (Note: a “commonly used” attribute may be null for the majority of records, but is still likely to be utilized within an address database). The proposed schema is a single flat table (non-relational) based largely on the NENA CLDXF standard (http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Standards/NENA-INF-014.1-2015_SSAP_INF.pdf).

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use
State	State	Text	2	see below	Name of the state or state equivalent	always used
County	County	Text	40	see below	Name of county or county-equivalent where the address is located. Proper-case format with no suffix (i.e. Do not include “... County”)	always used
Inc_Muni	Incorporated Municipality	Text	100	None	Name of the incorporated municipality or other general - purpose local governmental unit where the address is located	commonly used
Uninc_Comm	Unincorporated Community	Text	100	None	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.	commonly used
Nbrhd_Comm	Neighborhood Community	Text	100	None	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.	commonly used

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use
Post_Comm	Postal Community Name	Text	40	None	A city name for the ZIP code of an address, as given in the USPS City State file	commonly used
Zip_Code	ZIP Code	Text	7	None	For standard street mail delivery (with a corresponding geographic delivery area), the system of 5-digit codes that identifies the individual USPS Post Office associated with an address.	commonly used
Plus_4	Zip Plus 4 Addition	Text	7	None	The ZIP plus 4 code (without the dash) Example: 1234	occasionally used
Bulk_Zip	Bulk Delivery ZIP Code	Text	7	None	For Bulk Delivery (e.g., government mailroom) zip codes with no corresponding geographical area, the system of 5-digit codes that identifies the individual delivery location associated with an address.	rarely used
Bulk_Plus4	Bulk Delivery ZIP Plus 4 Addition	Text	7	None	For Bulk Delivery (e.g., government mailroom) zip codes with no corresponding geographical area, The ZIP plus 4 code (without the dash) Example: 1234	rarely used
StN_PreMod	Street Name Pre-Modifier (PRM)	Text	15	None	Word or phrase that precedes and modifies the Street Name element or is placed outside the Street Name element so that the Street Name element can be used in creating a sorted list of complete street names	commonly used
StN_PreDir	Street Name Pre-Directional (PRD)	Text	50	see below	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	commonly used
StN_PreTyp	Street Name Pre-Type (STP)	Text	25	see below	Word or phrase that precedes the Street Name element and identifies a type of thoroughfare in a complete street name	commonly used
StN_PreSep	Street Name Pre-Type Separator (STPS)	Text	20	see below	Preposition or prepositional phrase between the Street Name Pre-Type and the Street Name	commonly used
StreetName	Street Name (RD)	Text	60	None	The element of the complete street name that identifies the particular street (as opposed to any street types, directionals, and modifiers). At this time, if the point represents a milepost or landmark, this field will not be required	always used *
StN_PosTyp	Street Name Post-Type (STS)	Text	15	see below	Word or phrase that follows the Street Name element and identifies a type of thoroughfare in a complete street name	commonly used

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use
StN_PosDir	Street Name Post-Directional (POD)	Text	50	see below	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.	commonly used
StN_PosMod	Street Name Post-Modifier (POM)	Text	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, a Street Name Post Directional, or both	commonly used
AddNum_Pre	Address number prefix (HNP)	Text	15	None	An extension of the Address Number that precedes it and further identifies a location along a thoroughfare or within a defined area	commonly used
Add_Number	Address number (HNO)	Long	6	None	The whole number identifier of a location along a thoroughfare or within a defined community. At this time, if the point represents a milepost or landmark, this field will not be required	always used *
AddNum_Suf	Address number suffix (HNS)	Text	15	None	An extension of the Address Number that follows it and further identifies a location along a thoroughfare or within a defined area.	commonly used
LandmkPart	Landmark Name Part (LMKP)	Text	150	None	The name or collection of names by which a prominent feature is publicly known.	occasionally used
LandmkName	Landmark (LMK)	Text	150	None	The name by which a prominent feature is publicly known.	occasionally used
Building	Building (BLD)	Text	75	None	One among a group of buildings that have the same address number and complete street name.	commonly used
Floor	Floor (FLR)	Text	75	None	A floor, story, or level within a building.	commonly used
Unit	Unit (UNIT)	Text	75	None	A group or suite of rooms within a building that are under common ownership or tenancy, typically having a common primary entrance.	commonly used
Room	Room (ROOM)	Text	75	None	A single room within a building.	rarely used
Addtl_Loc	Additional Location Information (LOC)	Text	225	None	A part of a sub-address that is not a building, floor, unit, or room.	rarely used

Field Name	Field Alias	Type	Length	Domain	Description	Expected Use
Milepost	Milepost	Text	50	None	A posted numeric measurement from a given beginning point, they may or may not be actual mileposts. Milepost numbers are useful for specifying locations along interstate highways, recreational trails, and other unaddressed routes, as well as stretches of county, state, federal, and other routes where distance measurements are posted. Milepost numbers may be given in place of or in addition to Address Numbers. Example: Mile Marker 231.5	rarely used
Long	Address Longitude	Float	12	None	Address Longitude, derived based on point placement	always used
Lat	Address Latitude	Float	11	None	Address Latitude, derived based on point placement	always used
NatGrid_Coord	National Grid Coordinates	Text	50	None	National Grid Coordinate, derived based on point placement	always used
GUID	GUID	GUID		None	Globally Unique Identifier (also known as Universally Unique Identifier - <i>UUID</i>), automatically generated	always used
Addr_Type	Address Type	Text	50	see below	Indicates the general use of the address (residential, commercial, etc.) The type of feature identified by the address	commonly used
Placement	Address Placement	Text	25	see below	Method used to place the address point	commonly used
Source	Address Source	Text	75	None	Entity that provided the data to the NAD (this could be different than the authority. For example, the state may aggregate from the counties and then submit to the NAD. In this case, the state would be the source and the authority would be the county.)	always used
AddAuth	Address Authority	Text	75	None	Entity responsible for the address assignment and maintenance	commonly used
UniqWithin	Unique Within	Text	75	None	The name of the area within which the address should be assumed to be unique.	occasionally used
LastUpdate	Date Last Updated	Date	26	None	Date that the address was last updated in the database	always used
Effective	Effective Date	Date	26	None	Date that the address becomes effective (may be past or future)	commonly used
Expired	Expiration Date	Date	26	None	Date that the address expires	commonly used

Domains *

Address Placement

Structure - Rooftop
Structure - Entrance
Structure - Interior Unit Location
Parcel - Centroid
Parcel - Other/Manual Placement
Linear Geocode
Property Access Point
Site Placement
Other
Unknown

[See example images of each address placement type](#)

Address Type

Residential (Housing)
Commercial (Office, Retail, Restaurant, Banking)
Multi-Use (mixed commercial/residential)
Open Space (Forest, vacant, cemeteries)
Industrial
Government/Public Services (Fire/Police, Library, Government offices)
Religious
Recreation (Ball fields, parks, golf courses, ski area)
Educational (Schools, Universities)
Institutional (Hospitals, group homes, Prisons, etc)
Other
Unknown

State

<http://pe.usps.gov/cpim/ftp/pubs/Pub28/Pub28.pdf>

County

www.census.gov/geo/reference/codes/cou.html

Street Name Pre-Directional AND Street Name Post-Directional

North	Northeast
East	Southeast
South	Southwest
West	Northwest

Street Name Pre-Type

As referenced in the CLDXF standard, these values are found in the USPS Publication 28 Appendix C1

http://pe.usps.gov/text/pub28/28apc_002.htm

Street Name Pre-Type Separator (CLDXF Section 4.1)

at	of	to	
in the	of the	to the	on the
des	de las		

Street Name Post Type

As referenced in the CLDXF standard, these values are found in the USPS Publication 28 Appendix C1

http://pe.usps.gov/text/pub28/28apc_002.htm

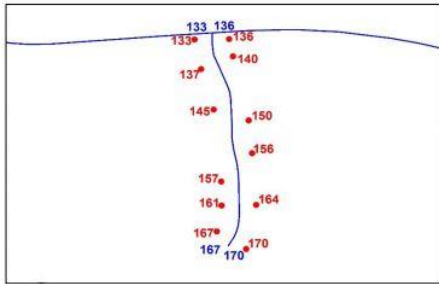
* Anyone finding additional domain values may suggest the new value be taken into consideration for future updates to the NAD. For the latest schema and domains, visit: <https://www.transportation.gov/nad>

Details of Address Placement

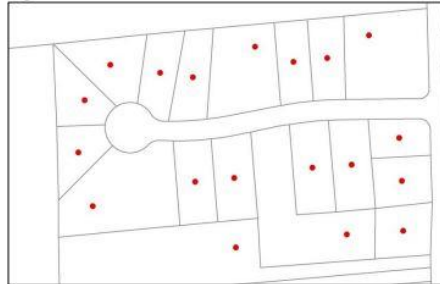
The following section provides examples of each address placement domain value. The images are pulled from the “NENA Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1” which can be found here:

http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Standards/NENA-INF-014.1-2015_SSAP_INF.pdf

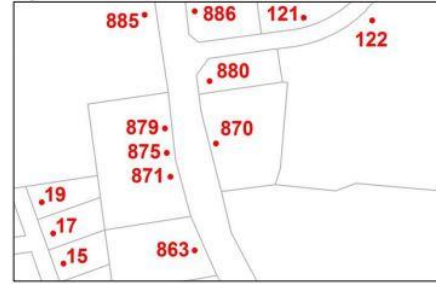
Linear Geocode



Parcel - Centroid



Parcel - Other/Manual Placement



Property Access



Site Placement



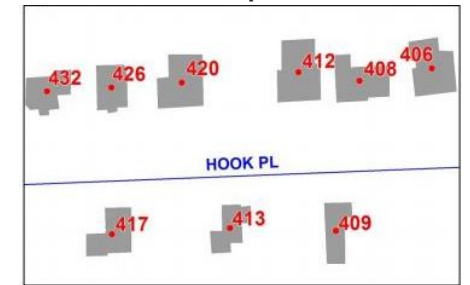
Structure - Entrance



Structure - Interior Unit Location



Structure - Rooftop



Other - some other method not listed

Unknown - unknown address placement method