

Data Dictionary

NYS Streets

NYS GIS Program Office

Document Description

This document contains the attribute field names and descriptions for the NYS GIS Program Office's *NYS Streets* layer. Appendix A includes a list of valid Field Domains and additional descriptive information for Field Names in **bold**.

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StreetSegment

Field Name	Field Type	Field Length	Field Description	Domain Names
OBJECT_ID	OID	-	Unique feature record number.	N/A
Shape	Geometry	-	Shape description, automatically assigned.	
DateModified	Date	-	Last modified date.	N/A
NYStreetID	Integer	-	Unique ID of NYS Streets.	N/A
LeftFromPrefixAddressNumber	String	10	An extension that precedes the LeftFromAddress on the NYS Streets linestring.	N/A
LeftToPrefixAddressNumber	String	10	An extension that precedes the LeftToAddress on the NYS Streets linestring.	N/A
RightFromPrefixAddressNumber	String	10	An extension that precedes the RightFromAddress on the NYS Streets linestring.	N/A
RightToPrefixAddressNumber	String	10	An extension that precedes the LeftToAddress on the NYS Streets linestring.	N/A
LeftFromAddress	String	11	The address on the left side of the NYS Streets linestring corresponding to the FROM node of the linestring.	N/A
LeftToAddress	String	11	The address on the left side of the NYS Streets linestring corresponding to the TO node of the linestring.	N/A
RightFromAddress	String	11	The address on the right side of the NYS Streets linestring corresponding to the FROM node of the linestring.	N/A
RightToAddress	String	11	The address number on the right side of the NYS Streets linestring corresponding to the TO node of the linestring.	N/A
CompleteStreetName	String	100	Concatenation of PreModifier, CLDXF_PreDirectional, PreType, SeparatorElement, StreetName, CLDXF_PostType, CLDXF_PostDirectional, and PostModifier fields.	N/A
PreModifier	String	10	A word or phrase that precedes and modifies the Street Name element, typically separated from it by a PreType, PreDirectional, or both.	N/A
PreDirectional	String	9	A street direction that precedes the street name.	Direction
PreType	String	25	A word or phrase that precedes the Street Name element and identifies a type of thoroughfare.	PreType
SeparatorElement	String	10	A preposition or prepositional phrase that separates the PreType and StreetName elements.	SepElem
StreetName ¹	String	60	The legal, authoritative name of the street.	N/A
PostType	String	15	An abbreviated street type that follows the StreetName element.	StreetType
PostDirectional	String	9	A street direction that follows the street name.	Direction
PostModifier	String	25	A descriptor that follows the street name and is not a suffix or a direction.	N/A
Shield	String	6	Route shield type.	Shield

Field Name	Field Type	Field Length	Field Description	Domain Names
HighwayNumber	String	5	A route number, which is assigned to a stretch of public road.	N/A
NavigationDirection	String	6	General travel direction along a divided highway.	Direction
Jurisdiction ¹	String	6	Code representing owner of the street.	Jurisdiction
FCC ¹	String	3	Feature Class Code.	FCC
ACC ¹	String	1	Arterial Classification Code.	ACC
Speed ¹	Integer	-	Average travel speed in miles per hour.	Speed
OneWay	String	6	One way status/direction.	OneWay
FromZlev ¹	Integer	-	The elevation at the start of the segment where positive numbers go above grade and negative numbers go below grade. Zero is ground level.	N/A
ToZlev ¹	Integer	-	The elevation at the end of the segment where positive numbers go above grade and negative numbers go below grade. Zero is ground level.	N/A
FromToDirection	String	6	The general direction of travel along a divided road based on the digitalizing of the linestring.	Direction
ToFromDirection	String	6	The general direction of travel along a divided road based on the digitalizing of the linestring.	Direction
FromToCost	Double	-	From-To impedance in minutes.	N/A
ToFromCost	Double	-	To-From impedance in minutes.	N/A
LeftStateName ¹	String	2	Abbreviation of the State name on left side of the NYS Streets linestring.	State
RightStateName ¹	String	2	Abbreviation of the State name on right side of the NYS Streets linestring.	State
LeftCountyName ¹	String	12	Name of the County on left side of the NYS Street linestring.	County
RightCountyName ¹	String	12	Name of the County on right side of the NYS Street linestring.	County
LeftPostal ¹	String	5	Postal code on the left side of the NYS streets linestring.	N/A
RightPostal ¹	String	5	Postal code on the right side of the NYS streets linestring.	N/A
LeftZipName ¹	String	30	Name of the Zip code area on left side of the NYS Street linestring.	N/A
RightZipName ¹	String	30	Name of the Zip code area on right side of the NYS Street linestring.	N/A
LeftCityTownName ¹	String	30	Name of the City or Town on left side of the NYS Street linestring.	N/A
RightCityTownName ¹	String	30	Name of the City or Town on right side of the NYS Street linestring.	N/A
LeftPlaceName	String	35	Name of Village, Indian Reservation, CDP or Alternate Zip Name on left side of the NYS Streets linestring.	N/A
RightPlaceName	String	35	Name of Village, Indian Reservation, CDP or Alternate Zip Name on right side of the NYS Streets linestring.	N/A
LeftFIPS	String	15	US Census Bureau's Federal Information Processing Series unique identifier on left side of the NYS Streets linestring.	N/A
RightFIPS	String	15	US Census Bureau's Federal Information Processing Series unique identifier on right side of the NYS Streets linestring.	N/A
GeometryAccuracy ¹	String	1	T/F (True/False) value indicates if the geometry was verified against orthoimagery or other high resolution data source.	GeomAcc
GeometrySource ¹	String	30	The primary geometry data source used to align the linestring.	GeometrySource
NameSource ¹	String	30	The street primary data source used to populate the street attributes on the linestring.	NameSource
AddressSource ¹	String	30	The primary data source used to populate the address attributes on the linestring.	AddressSource
Status ¹	String	7	Status of the record, either Active or Retired.	Status
CLDXF_PreDirectional	String	9	Fully spelled out PreDirectional element.	CLDXF_Direction
CLDXF_PostType	String	15	Fully spelled out Street PostType element.	CLDXF_PostType
CLDXF_PostDirectional	String	9	Fully spelled out PostDirectional element.	CLDXF_Direction
Label	String	90	Same as CompleteStreetName but with abbreviations for smaller labels.	N/A

Field Name	Field Type	Field Length	Field Description	Domain Names
GlobalID	UUID	-	A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a table row is created.	N/A
LeftCountry	String	2	Country on the left side of the NYS streets linestring.	N/A
RightCountry	String	2	Country on the right side of the NYS streets linestring.	N/A
LeftParity	String	1	Odd, Even, or Both addressing on the left side of the NYS streets linestring.	Parity
RightParity	String	1	Odd, Even, or Both addressing on the right side of the NYS streets linestring.	Parity
LeftESN ³	String	5	Emergency Service Zone number on the left side of the NYS streets linestring.	N/A
RightESN ³	String	5	Emergency Service Zone number on the right side of the NYS streets linestring.	N/A
LeftIncorporatedMunicipality ¹	String	30	Name of the City, Town or Village on the left side of the NYS Streets linestring	N/A
RightIncorporatedMunicipality ¹	String	30	Name of the City, Town or Village on the right side of the NYS Streets linestring	N/A
LeftUnincorporatedMunicipality ³	String	35	The name of an unincorporated municipality (e.g. Census Designated Place) where the address is located on the left side of the NYS Streets linestring. Also includes Indian Territories.	N/A
RightUnincorporatedMunicipality ³	String	35	The name of an unincorporated municipality (e.g. Census Designated Place) where the address is located on the right side of the NYS Streets linestring. Also includes Indian Territories.	N/A
LeftNeighborhoodCommunity ³	String	30	The name of an unincorporated neighborhood, subdivision, or area on the left side of the NYS Streets linestring.	N/A
RightNeighborhoodCommunity ³	String	30	The name of an unincorporated neighborhood, subdivision, or area on the right side of the NYS Streets linestring.	N/A
LeftMSAGCommunityName ²	String	30	The existing MSAG Community Name on the Left side of the road segment relative to the FROM Node.	N/A
RightMSAGCommunityName ²	String	30	The existing MSAG Community Name on the Right side of the road segment relative to the FROM Node.	N/A
DiscrepancyAgencyID	String	75	Agency that will take responsibility for ensuring discrepancy resolution. May or may not be the same as the 9-1-1 Authority. Formerly called Source of Data.	N/A
Maintenance ²	String	1	Code representing the entity responsible for physically maintaining the road.	Maintenance
LeftMunicipalityType ¹	String	1	Type of Incorporated Municipality (City, Town, or Village) on left side of NYS Streets linestring	MunicipalityType
RightMunicipalityType ¹	String	1	Type of Incorporated Municipality (City, Town, or Village) on right side of NYS Streets linestring	MunicipalityType
CR_UserName	String	50	NY.gov ID of the user creating the linestring (GeoLynx edit tracking field).	N/A
CR_DateTime	Date	-	Date and Time the linestring was created (GeoLynx edit tracking field).	N/A
AT_UserName	String	50	NY.gov ID of the user modifying an attribute on the linestring (GeoLynx edit tracking field).	N/A
AT_DateTime	Date	-	Date and Time the attributes of a linestring were modified (GeoLynx edit tracking field).	N/A
SP_UserName	String	50	NY.gov ID of the user spatially modifying an attribute on the linestring (GeoLynx edit tracking field).	N/A
SP_DateTime	Date	-	Date and Time a feature was spatially modified.	N/A
USERNAME	String	50	NY.gov ID of the user modifying the linestring (ESRI edit tracking field).	N/A

AltStreetName_Tbl

Field Name	Field Type	Field Length	Field Description	Domain Names
OBJECTID	OID	-	Unique feature record number	N/A
StName_ID	Integer	-	Unique record identifier	N/A
DateModified	Date	-	Last modified date	N/A
NYStreetID	Integer	-	Join identifier to the StreetSegment Layer	N/A
Sequence	Integer	-	Street sequence number	N/A
CompleteStreetName	String	100	Full/concatenated street name	N/A
PreModifier	String	10	Standardized street modifier	N/A
PreDirectional	String	9	Standardized street directional	Direction
PreType	String	25	Standardized street type	StreetType
SeparatorElement	String	10	Standardized separator elements	SepElem
StreetName ¹	String	60	Standardized street	N/A
PostType	String	15	Standardized street type	StreetType
PostDirectional	String	9	Standardized street directional	Direction
PostModifier	String	25	Standardized street modifier	N/A
Shield	String	6	Route shield type	Shield
HighwayNumber	String	5	Number, number with letter, or blank	N/A
NameSource	String	30	Name data source	NameSource
CLDXF_PreDirectional	String	10	Fully spelled out Street PreDirectional	CLDXF_Direction
CLDXF_PostType	String	15	Fully spelled out Street PostType	CLDXF_PostType
CLDXF_PostDirectional	String	10	Fully spelled out Street PostType	CLDXF_Direction
Label	String	90	Same as CompleteStreetName but with abbreviations for smaller labels.	N/A
GlobalID	UUID	-	A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a table row is created.	N/A
DiscrepancyAgencyID	String	75	Agency that will take responsibility for ensuring discrepancy resolution. May or may not be the same as the 9-1-1 Authority. Formerly called Source of Data.	N/A
CR_UserName	String	50	NY.gov ID of the user creating the linestring (GeoLynx edit tracking field).	N/A
CR_DateTime	Date	-	Date and Time the linestring was created (GeoLynx edit tracking field).	N/A
AT_UserName	String	50	NY.gov ID of the user modifying an attribute on the linestring (GeoLynx edit tracking field).	N/A
AT_DateTime	Date	-	Date and Time the attributes of a linestring were modified (GeoLynx edit tracking field).	N/A

¹ Required field

² Populated only upon a county's request, submission of source data to populate the fields, and their QA/QC of the initial population of the field.

³ Not currently populated

Appendix A

Table 1 – Domain Values

ACC (See detailed descriptions in Table 2)

AddressSource

<i>Domain Value</i>	<i>Description</i>
NYSDP Build	NYSDP Build
Tele Atlas	Tele Atlas
NAVTEQ	NAVTEQ
County E911	County E911
County RPTS	County RPTS
NYC LION	NYC LION
NYSDOT HCC	NYSDOT HCC
NYSDP Maintenance	NYSDP Maintenance
NYSOPR	NYSOPR
Segment Validly Unaddressed	Segment Validly Unaddressed

County

Domain Value	Description
Albany	Albany
Allegany	Allegany
Bronx	Bronx
Broome	Broome
Cattaraugus	Cattaraugus
Cayuga	Cayuga
Chautauqua	Chautauqua
Chemung	Chemung
Chenango	Chenango
Clinton	Clinton
Columbia	Columbia
Cortland	Cortland
Delaware	Delaware
Dutchess	Dutchess
Erie	Erie
Essex	Essex
Franklin	Franklin
Fulton	Fulton
Genesee	Genesee
Greene	Greene
Hamilton	Hamilton
Herkimer	Herkimer
Jefferson	Jefferson
Kings	Kings
Lewis	Lewis
Livingston	Livingston
Madison	Madison
Monroe	Monroe
Montgomery	Montgomery
Nassau	Nassau
New York	New York

County

Domain Value	Description
Niagara	Niagara
Oneida	Oneida
Onondaga	Onondaga
Ontario	Ontario
Orange	Orange
Orleans	Orleans
Oswego	Oswego
Otsego	Otsego
Putnam	Putnam
Queens	Queens
Rensselaer	Rensselaer
Richmond	Richmond
Rockland	Rockland
Saratoga	Saratoga
Schenectady	Schenectady
Schoharie	Schoharie
Schuyler	Schuyler
Seneca	Seneca
St Lawrence	St Lawrence
Steuben	Steuben
Suffolk	Suffolk
Sullivan	Sullivan
Tioga	Tioga
Tompkins	Tompkins
Ulster	Ulster
Warren	Warren
Washington	Washington
Wayne	Wayne
Westchester	Westchester
Wyoming	Wyoming
Yates	Yates

Direction

<i>Domain Value</i>	<i>Description</i>
N	North
S	South
E	East
W	West
NE	Northeast
NW	Northwest
SE	Southeast
SW	Southwest

FCC (See detailed descriptions in Table 3)

GeomAcc

<i>Domain Value</i>	<i>Description</i>
T	T
F	F

GeometrySource

Domain Value	Description
NYS DP Build	NYS DP Build
NYC Orthoimagery	NYC Orthoimagery
USGS Orthoimagery	USGS Orthoimagery
Tele Atlas	Tele Atlas
NAVTEQ	NAVTEQ
County E911	County E911
County RPTS	County RPTS
NYS DOT HCC	NYS DOT HCC
NYS DP Maintenance	NYS DP Maintenance
Image Low Confidence	Image Low Confidence
NYS DOP Orthoimagery	NYS DOP Orthoimagery

Jurisdiction

Domain Value	Description
1	State Route
2	County Road
3	Town Road
6	Thruway & Berkshire Spur
9	Unknown Roadway Type
10	Parking Lot
12	City Street
13	Village Street
14	Private Road
15	Off Road

NameSource

Domain Value	Description
NYS DP Build	NYS DP Build
Tele Atlas	Tele Atlas
NAVTEQ	NAVTEQ
County E911	County E911
County RPTS	County RPTS
NYC LION	NYC LION
NYS DOT	NYS DOT
NYS DOT HCC	NYS DOT HCC
NYS DP Maintenance	NYS DP Maintenance
NYS OPR	NYS OPR

OneWay

Domain Value	Description
FT	FromTo
TF	ToFrom

SepElem

Domain Value	Description
And	And
At	At
By The	By The
Con	Con
De Las	De Las
For	For
For The	For The
In The	In The

SepElem (con't)

Of	Of
Of The	Of The
On The	On The
The	The
To	To
Y	Y

Shield

<i>Domain Value</i>	<i>Description</i>
C	County Road
CT	County Touring
I	Interstate
IC	Interstate Connector
P	Parkway
S	State Touring Route
SC	State Highway Connector
SH	State 900 Route
U	US Highway
UB	US Highway Business Route
UC	US Highway Connector

Speed

<i>Domain Value</i>	<i>Description</i>
5	5
15	15
25	25
35	35
45	45
55	55
65	65
85	85

State

<i>Domain Value</i>	<i>Description</i>
NY	New York
CT	Connecticut
MA	Massachusetts
NJ	New Jersey
PA	Pennsylvania
VT	Vermont

MunicipalityType

<i>Domain Value</i>	<i>Description</i>
1	City
2	Town
3	Village

Parity

<i>Domain Value</i>	<i>Description</i>
O	Odd
E	Even
B	Both

StreetType

Domain Value	Description
Acrs	Acres
Aly	Alley
Anx	Annex
Arc	Arcade
Ave	Avenue
Bay	Bay
Byu	Bayou
Bch	Beach
Bnd	Bend
Blf	Bluff
Blfs	Bluffs
Blvd	Boulevard
Br	Branch
Brg	Bridge
Brk	Brook
Byp	Bypass
Cp	Camp
Cswy	Causeway
Ctr	Center
Chas	Chase
Cir	Circle
Clf	Cliff
Clfs	Cliffs
Clos	Close
Clb	Club
Cmn	Common
Cmns	Commons
Concrs	Concourse
Cor	Corner
Cors	Corners
Crse	Course
Ct	Court
Cts	Courts
Cv	Cove
Crk	Creek
Cres	Crescent
Crst	Crest
Xing	Crossing
Xrd	Crossroad
Curv	Curve
DI	Dale
Dv	Divide
Dr	Drive
End	End
Esp	Esplanade
Est	Estate
Ests	Estates
Expy	Expressway
Ext	Extension
Fls	Falls
Farm	Farm
Fry	Ferry
Fld	Field
Flds	Fields
Flt	Flat
Flts	Flats

StreetType

Frst	Forest
Frks	Forks
Fwy	Freeway
Gdn	Garden
Gdns	Gardens
Gate	Gate
Gtwy	Gateway
Gln	Glen
Grn	Green
Grns	Greens
Grv	Grove
Grvs	Groves
Hbr	Harbor
Hvn	Haven
Hts	Heights
Hwy	Highway
HI	Hill
Hls	Hills
Holw	Hollow
Inlt	Inlet
I	Interstate
Is	Island
Iss	Islands
Isle	Isle
KnI	Knoll
Knls	Knolls
Lk	Lake
Land	Land
Lndg	Landing
Ln	Lane
Lck	Lock
Ldg	Lodge
Loop	Loop
Mall	Mall
Mnr	Manor
Mdw	Meadow
Mdws	Meadows
Mews	Mews
MI	Mill
Mls	Mills
Mt	Mount
Mtn	Mountain
Orch	Orchard
Oval	Oval
OvIk	Overlook
Park	Park
Pkwy	Parkway
Pass	Pass
Psge	Passage
Path	Path
Pike	Pike
Pne	Pine
Pnes	Pines
PI	Place
Plns	Plains
Plz	Plaza
Pt	Point

StreetType

Pts	Points
Pr	Prairie
Prom	Promenade
Rnch	Ranch
Rst	Rest
Rdg	Ridge
Riv	River
Rd	Road
Rte	Route
Row	Row
Rue	Rue
Run	Run
Shr	Shore
Shrs	Shores
Skwy	Skyway
Slip	Slip
Spg	Spring
Spgs	Springs
Spur	Spur
Spurs	Spurs
Sq	Square

StreetType

StPkwy	State Parkway
Sta	Station
Strm	Stream
St	Street
Ter	Terrace
Trwy	Thruway
Trce	Trace
Trl	Trail
Turn	Turn
Tpke	Turnpike
Un	Union
Vly	Valley
Via	Viaduct
Vw	View
Vlg	Village
Vis	Vista
Walk	Walk
Way	Way
WI	Well

PreType

Domain	Description
Alley	Alley
Avenue	Avenue
Boulevard	Boulevard
Camp	Camp
Circle	Circle
County Highway	County Highway
County Road	County Road
County Route	County Route
Court	Court
Cove	Cove
Drive	Drive
Expressway	Expressway
Extension	Extension
Farm	Farm
Highway	Highway
Hill	Hill
Interstate	Interstate
Island	Island
Lake	Lake
Lane	Lane
Loop	Loop
Mount	Mount
New York State Route	New York State Route

PreType

NYS Route	NYS Route
Oval	Oval
Park	Park
Parkway	Parkway
Path	Path
Pike	Pike
Place	Place
Plaza	Plaza
Points	Points
Road	Road
Route	Route
Row	Row
Rue	Rue
State Highway	State Highway
State Route	State Route
Trail	Trail
United State Route	United States Route
Viaduct	Viaduct
Vista	Vista

CLDXF_Direction

Domain	Description
North	North
South	South
East	East
West	West
Northeast	Northeast
Northwest	Northwest
Southeast	Southeast
Southwest	Southwest

CLDXF_PostType

End	End
Esplanade	Esplanade
Estate	Estate
Estates	Estates
Expressway	Expressway
Extension	Extension
Falls	Falls
Farm	Farm
Ferry	Ferry
Field	Field
Fields	Fields
Flat	Flat
Flats	Flats
Forest	Forest
Forks	Forks
Freeway	Freeway
Garden	Garden
Gardens	Gardens
Gate	Gate
Gateway	Gateway
Glen	Glen
Green	Green
Greens	Greens
Grove	Grove
Groves	Groves
Harbor	Harbor
Haven	Haven
Heights	Heights
Highway	Highway
Hill	Hill
Hills	Hills
Hollow	Hollow
Inlet	Inlet
Interstate	Interstate
Island	Island
Islands	Islands
Isle	Isle
Knoll	Knoll
Knolls	Knolls
Lake	Lake
Land	Land
Landing	Landing
Lane	Lane
Lock	Lock
Lodge	Lodge
Loop	Loop
Mall	Mall
Manor	Manor
Meadow	Meadow
Meadows	Meadows
Mews	Mews
Mill	Mill
Mills	Mills
Mount	Mount
Mountain	Mountain

CLDXF_PostType

Domain	Description
Code	Desc_
Acres	Acres
Alley	Alley
Annex	Annex
Arcade	Arcade
Avenue	Avenue
Bay	Bay
Bayou	Bayou
Beach	Beach
Bend	Bend
Bluff	Bluff
Bluffs	Bluffs
Boulevard	Boulevard
Branch	Branch
Bridge	Bridge
Brook	Brook
Bypass	Bypass
Camp	Camp
Causeway	Causeway
Center	Center
Chase	Chase
Circle	Circle
Cliff	Cliff
Cliffs	Cliffs
Close	Close
Club	Club
Common	Common
Commons	Commons
Concourse	Concourse
Corner	Corner
Corners	Corners
Course	Course
Court	Court
Courts	Courts
Cove	Cove
Creek	Creek
Crescent	Crescent
Crest	Crest
Crossing	Crossing
Crossroad	Crossroad
Curve	Curve
Dale	Dale
Divide	Divide
Drive	Drive

CLDXF_PostType

Orchard	Orchard
Oval	Oval
Overlook	Overlook
Park	Park
Parkway	Parkway
Pass	Pass
Passage	Passage
Path	Path
Pike	Pike
Pine	Pine
Pines	Pines
Place	Place
Plains	Plains
Plaza	Plaza
Point	Point
Points	Points
Prairie	Prairie
Promenade	Promenade
Ranch	Ranch
Rest	Rest
Ridge	Ridge
River	River
Road	Road
Route	Route
Row	Row
Rue	Rue
Run	Run

Shore	Shore
Shores	Shores
Skyway	Skyway
Slip	Slip
Spring	Spring
Springs	Springs
Spur	Spur
Spurs	Spurs
Square	Square
State Parkway	State Parkway
Station	Station
Stream	Stream
Street	Street
Terrace	Terrace
Thruway	Thruway
Trace	Trace
Trail	Trail
Turn	Turn
Turnpike	Turnpike
Union	Union
Valley	Valley
Viaduct	Viaduct
View	View
Village	Village
Vista	Vista
Walk	Walk
Way	Way
Well	Well

CLDXF_Direction

Domain	Description
North	North
South	South
East	East
West	West
Northeast	Northeast
Northwest	Northwest
Southeast	Southeast
Southwest	Southwest

Maintenance

Domain	Description
1	State
2	County
3	City
4	Town
5	Village
6	Tribal
7	Private

Supplementary Attribute Description

ACC: Arterial Classification Codes (ACCs) that categorize roads according to the level of travel mobility that they provide in the road network. Mobility refers to the volume of traffic that a stretch of road carries and the length of trip that it serves. Roads at the highest level of mobility serve the greatest number of trips and the longest trips. Conversely, high-mobility roads provide the lowest level of access to property. Low-level, local roads serve that function.

This system uses a six-level system, with 6 as the lowest level, 1 as the highest. A list of the Arterial Classification Codes is in Table 2 below. Ascending through the levels, each step represents an increase in relative importance to routing – an increase in the number and length of routes using the road. In general, a step up also represents an increase in traffic-volume capacity of the road, an increase in vehicle operating speed, and a decrease in travel time. (This system is similar to, but not tied to, the Federal Highway Administration's Highway Functional Classification System.)

The primary use of ACCs is in automated routing. Using ACCs, a routing program calculates the maximum use of the highest-level roads that are appropriate to the scale of the desired trip. This is analogous to the route planning of a typical driver, who uses the highest-speed road available, within the geographic range established by the origin and destination points. The hierarchical nature of the ACC levels allows for more efficient access to relevant routing networks for a given route, and in turn reduces system requirements.

The implementation of ACC also supports its usage for map rendering. Using ACC as a cartographic tool allows for a variety of enhancements including:

1. The display of "important" roads.
2. Reduction of line density and visual clutter based on scale of map
3. "Visual Routing" on paper maps (the end user chooses a route based on ACC display)
4. Effective zoom layering in digital applications

FCC: Feature classification code used to identify the most noticeable characteristics of a road including whether the road has limited access or is divided, gated, seasonal, a ramp, a traffic circle, a service road, a cul-de-sac, a trail/off road, a walkway, an alley, a parking area, or a planned road.

This series of Feature Class Codes (FCC) provides more detailed information on the classification of a line segment. A list of the Feature Class Codes is in Table 3 below.

AddressSource: Indicates the address resource used to populate that segment.

FromToDirection and ToFromDirection: These fields convey information about the described direction of travel along roads. This directional is distinct from the existing directional suffix field in that it is not part of the recognized street name. While the navigation direction can correspond to the actual geographic direction of the street, it can and does deviate. For example, I-90 Westbound runs south along Lake Erie. To accommodate single carriageway streets, two fields are used. Values are: N, S, E, W, NE, SE, NW, SW.

FromToCost and ToFromCost: Represents From-To impedance in minutes where cost is calculated by dividing the distance by the speed. Distance is stored in the Shape_Leng field in meters and average travel speed is stored in the Speed field in miles per hour. Therefore travel time (Cost) is calculated as:

$$\text{Cost} = [\text{Shape_leng}] / [\text{Speed}]$$

The following formula is used to calculate the time cost in meters per minute which is how the data is stored in these fields:

$$\text{FromToCost or ToFromCost} = [\text{Shape_leng}] * 60 / [\text{Speed}] * 1609$$

FromZlev and ToZlev: All segments will contain node elevation (segment-end elevation) values to indicate planar connectivity. The default value is 0, but can range from -8 to 99 as needed. Negative Zlev values (except -9, which is reserved for alternate names), represent features which are underground. A feature at Zlev=0 is on the surface of the Earth, whether or not it is under a manmade structure. For example, a bridge

spanning a river or street would have a Zlev >=1. Multi-level bridges, such as the George Washington Bridge, will be represented by multiple chains. Chains will be duplicated as necessary to maintain traffic flow for each level. Node elevation values will be used to distinguish each layer from the next. These segments will each have unique NYSSStreetID, not equal to layers above or below them. This will be represented by parallel segments with a separation of .00003 (30 micro degrees, approximately 10 feet.).

GeometryAccuracy: In most cases, when GeometryAccuracy = T, the street segment has a positional accuracy error of less than or equal to 12 meters. If GeometryAccuracy = F, then the street segment was not found on the orthoimagery or other high resolution data source used for realignment but has been confirmed to exist. This only indicates that its accuracy is unknown.

GeometrySource: Indicates the geometry resource used to align the segment.

NameSource: Indicates the street name resource used to populate the segment.

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 where "TF" is one-way in the To-From direction, "FT" is one-way in the From-To direction, and <null> indicates that travel is permitted in both directions.

Sequence: This number represents the number of alternate names a segment has. It will start at 1 and increase to the number of the last alternate name. For example, if the segment has five alternate names then the sequence number will be 1- 5 for that segment id.

Shield: Indicates the type of route shield where "I" = Interstate, "IC" = Interstate Connector, "U" = US Highway, "UB" = US Highway Business Route, "UC" = US Highway Connector, "S" = State Touring Route, "SH" = State 900 Route, "SC" = State Highway Connector, "P" = Parkway, "C" = County Road, "CT" = County Touring Route.

Jurisdiction: Code representing the ownership of a street segment. Missing codes (04, 05, 07, 08, 11) are codes that have been retired.

Table 2 – Generalized ACC Level Descriptions

ACC Class	Approach				
	Feature Guidelines <small>(95% Rule)</small>	Geographic Significance	Routing Importance	Cities Connected <small>(Ranked by Population)</small>	Intersection Controls
1	<ul style="list-style-type: none"> - Limited Access - Divided - 1 & 2 Digit Interstates - 4+ Lanes - 65+ MPH Maximum Speed Limit - 45+ MPH Minimum Speed Limit - Dedicated HOV Lanes - Allows Truck / Commercial Traffic - May Have Tolls - Non-Commercial POI's 	- North America / Continental	<ul style="list-style-type: none"> - Largest / Longest Highways - Connect Major / Largest Cities - "Coast-to-Coast" Origin to Destination - Interstate Commerce / Travel - Intrastate Commerce / Travel 	150	- Limited Access
2	<ul style="list-style-type: none"> - Limited Access - Divided - 3 Digit Interstates, Freeways, Expressways & Beltways - 4+ Lanes - 55+ MPH Maximum Speed Limit - 45+ MPH Minimum Speed Limit - Dedicated HOV Lanes - Allows Truck / Commercial Traffic - May Have Tolls - Non-Commercial POI's - Regulated Access / Ramp Controls 	<ul style="list-style-type: none"> - State / Region - Inter-Metropolitan Area 	<ul style="list-style-type: none"> - Long / Large Highways - Beltways / Secondary Freeways - Connect Major Cities - Connect Major Suburbs with Metro Core - Intrastate Commerce - Recreational Travel 	600	- Limited Access
3	<ul style="list-style-type: none"> - Dedicated Turn Lanes - 2-6 Lanes - 45-55 MPH Maximum Speed Limit - Numerous Intersections / Maintains Right-of-Way - Scenic Highways - Commercial / Non-Commercial POI's - Allows Truck / Commercial Traffic - Dedicated Turn Lanes - Overwhelmingly Commercial 	<ul style="list-style-type: none"> - Intra-State - Intra-Metropolitan Area 	<ul style="list-style-type: none"> - Medium Highways - US/State Highway Network - Connect Minor Cities - Intrastate Commerce - Recreational Travel 	20,000	- Traffic Lights
4	<ul style="list-style-type: none"> - 2-4 Lanes - 35-45 MPH Maximum Speed Limit - Dedicated Turn Lanes - Numerous Intersections / Numerous Stops - Defined "Grid" - Commercial / Non-Commercial POI's - Connects the Non-Limited & Limited Access Network - Restricted Truck / Commercial Traffic - Rarely Dirt - Predominately Mixed Use (Commercial / Residential) 	- City / County	<ul style="list-style-type: none"> - Local Arteries - Retail Commerce - Recreational Activities - Initial Route Origin / Final Destination 	- Every town / village	<ul style="list-style-type: none"> - Traffic Lights - Stop Signs
5	<ul style="list-style-type: none"> - Rarely Divided - 2 Lanes - 25-35 MPH Maximum Speed Limit - Few Dedicated Turn Lanes - Restricted Truck / Commercial Traffic - Commercial / Non-Commercial POI's - "Every Fourth Street" - Predominately Residential 	- Neighborhood	<ul style="list-style-type: none"> - Neighborhood / Community Access - Initial Route Origin / Final Destination 	N/A	- Stop Signs
6	<ul style="list-style-type: none"> - Very Rarely Divided - 1-2 Lanes - 15-25 MPH or Unposted Maximum Speed Limit - Highly Restricted Truck / Commercial Traffic - Lacks Dedicated Turn Lanes - Rarely has POI's - Includes Apartment Developments / Private Drives - Overwhelming Residential - Includes "Business Parks" / Commercial Developments 	- Residential	<ul style="list-style-type: none"> - Intra-neighborhood Travel - Initial Route Origin / Final Destination 	N/A	<ul style="list-style-type: none"> - Stop Signs - Uncontrolled

Table 3 – Feature Class Codes (FCC) Descriptions

A	ROADS
A00	Road, major and minor categories unknown
A01	Road, unseparated
A02	Road, unseparated, in tunnel
A03	Road, unseparated, underpassing
A04	Road, unseparated, with rail line in center
A05	Road, separated
A06	Road, separated, in tunnel
A07	Road, separated, underpassing
A08	Road, separated, with rail line in center
A09	<i>not used</i>
A1	PRIMARY HIGHWAY WITH LIMITED ACCESS
A10	Primary road with limited access, major category
A11	Primary road with limited access or interstate hwy, unseparated
A12	Primary road with limited access or interstate hwy, unseparated in tunnel
A13	Primary road with limited access or interstate hwy, unseparated underpassing
A14	Primary road with limited access or interstate hwy, unseparated rail line in center
A15	Primary road with limited access or interstate hwy, separated
A16	Primary road with limited access or interstate hwy, separated in tunnel
A17	Primary road with limited access or interstate hwy, separated underpassing
A18	Primary road with limited access or interstate hwy, separated rail line in center
A19	<i>not used</i>
A2	PRIMARY ROAD WITHOUT LIMITED ACCESS
A20	Primary Highways without limited access, major category
A21	Primary Highways without limited access, unseparated
A22	Primary Highways without limited access, unseparated in tunnel
A23	Primary Highways without limited access, unseparated underpassing
A24	Primary Highways without limited access, unseparated rail line in center
A25	Primary Highways without limited access, separated
A26	Primary Highways without limited access, separated in tunnel
A27	Primary Highways without limited access, separated underpassing
A28	Primary Highways without limited access, separated rail line in center
A29	<i>not used</i>
A3	SECONDARY and CONNECTING ROAD
A30	Secondary state and county highways, major category
A31	Secondary state and county highways, unseparated
A32	Secondary state and county highways, unseparated in tunnel
A33	Secondary state and county highways, unseparated underpassing
A34	Secondary state and county highways, unseparated rail line in center
A35	Secondary state and county highways, separated
A36	Secondary state and county highways, separated in tunnel
A37	Secondary state and county highways, separated underpassing
A38	Secondary state and county highways, separated rail line in center
A39	Secondary state and county highways, seasonal *

A4	LOCAL, NEIGHBORHOOD, and RURAL ROAD
A40	Local, neighborhood, rural road, city street, major category
A41	Local, neighborhood, rural road, city street, unseparated
A42	Local, neighborhood, rural road, city street, unseparated in tunnel
A43	Local, neighborhood, rural road, city street, unseparated underpassing
A44	Local, neighborhood, rural road, city street, unseparated rail line in center
A45	Local, neighborhood, rural road, city street, separated
A46	Local, neighborhood, rural road, city street, separated in tunnel
A47	Local, neighborhood, rural road, city street, separated underpassing
A48	Local, neighborhood, rural road, city street, separated rail line in center
A49	Local, neighborhood, rural road, city street, seasonal *
A5	VEHICULAR TRAIL
A50	Vehicular (4WD) Trail, major category
A51	Vehicular (4WD) Trail, unseparated
A52	Vehicular (4WD) Trail, unseparated in tunnel
A53	Vehicular (4WD) Trail, unseparated underpassing
A54	Gated, all vehicles *
A55	Gated, 4WD Only *
A56	Gated, seasonal, all vehicles *
A57	Gated, seasonal, 4WD Only *
A58	<i>not used</i>
A59	Vehicular (4WD) Trail, seasonal *
A6	ROADS with SPECIAL CHARACTERISTICS
A60	At-grade ramp or connecting road not associated with a limited access highway
A61	Cul-de-Sac, the closed end of a road that forms a loop or turn around
A62	Traffic Circle, the portion of a road or intersection of roads forming a roundabout
A63	Access Ramp, the portion of a road that forms a cloverleaf or limited access interchange
A64	Service Road, provides access to businesses and rest areas
A65	Ferry Crossing, Passenger, Seasonal
A66	Ferry Crossing, Passenger, Year-Round
A67	<i>not used</i>
A68	Ferry Crossing, Vehicular, Seasonal
A69	Ferry Crossing, Vehicular, Year-Round
A7	ROAD as OTHER THOROUGHFARE
A70	Other Thoroughfare major category
A71	Walkway, for pedestrians, usually unnamed
A72	Stairway, stepped road for pedestrians, usually unnamed
A73	Alley, road for service vehicles, located at the rear of buildings
A74	Driveway, usually privately owned and unnamed
A75	Road, parking area
A76	Non-motorized Trail *
A77	Snowmobile Trail *
A78	Planned Road – unknown construction start date *
A79	<i>not used</i>

* Codes added in January 2013 and are not complete statewide. They are being updated as counties provide the changes.

FCC Code Definitions

Gated: Any transportation corridor where motorized vehicular traffic is intentionally restricted by the presence of a physical barrier.

Seasonal: A transportation corridor that is not open year-round for motorized vehicular use (e.g. closed in winter; restricted by easement), with posted signs indicating seasonal status.

Snowmobile Trail: A transportation corridor that is seasonally accessible by snowmobiles, but otherwise not accessible to motorized transportation.

Non-motorized Trail: Any transportation corridor that is open only to non-motorized uses (e.g. foot, bicycle or horse trail).

4WD: 4WD Roads are dirt roads that do not have a name or addressing. They will carry a Jurisdiction of 15 (Off-Road) unless it is a Private road; then it would be a Jurisdiction of 14.