NCRouteCharacteristics Field Descriptions

General Notes:

The layer contains route data maintained by the state and counties. Fields dropped from the previous output product will be listed in the 'Removed Fields' section.

X indicates that the definition is stated once but applies to each co-route 2-6. The LRS supports a dominant route (1) and up to 5 additional co-routes (2 – 6) for each segment. For example, the definition for RouteIDX applies to all of the following fields: RouteID2, RouteID3, RouteID4, RouteID5 and RouteID6.

The Data Owner is the group that is responsible for maintaining that data item. There may be one or more additional business owners associated with that information, but the Data Owner should be the first group to contact when there is a question about the data in this Layer.

Domains are represented as coded values and descriptions. The geodatabase version of the file contains the descriptions. The shapefile version contains the values, which tend to be abbreviated or numeric versions of the description. If the geodatabase table is exported, the resulting table will contain the values.

NCRouteCharacteristics is a dual-carriageway system meaning that divided roads (roads with medians) are represented as two separate lines and undivided roads are represented as a single line. This allows for different characteristics to be coded on each side of the route. On divided roads, most characteristics apply to just that side of the road.

The 11-Digit RouteID is a unique number assigned to each route. The first digit represents the route class, the second digit represents a route qualifier (for example a business route), the third digit represents the inventory or non-inventory direction, the fourth digit through eighth digit represents the route number and lastly, the last three digits represent the Sap County code. Please see 'Guide to the NCDOT Eleven-Digit Route Number' for further illustration ([Guide to NCDOT Eleven Digit Route Number (pdf)](#))

Currently the BeginFeatureID and EndFeatureID fields have six (6) types of representation and are explained below.

1. Dominant intersecting Route which is determined by
    a. lowest numeric RouteClass then
    b. lowest numeric RouteQualifier then
    c. lowest numeric RouteNumber and lastly the
    d. lowest numeric RouteInventory

2. County Boundary (BC000001 - BC000100) where the last three (3) digits represent the sap county number,
3. State Boundary - BS000901 (Georgia), BS0000902 (South Carolina), BS000903 (Tennessee) and
                            BS000904 (Virginia),
4. Pseudo (Route event attributes change within a single segment such as StreetName and Pavement Type),
5. Dead-End (the Route terminates) or
6. X-Cross (where a Route intersects itself).

Table of Contents

Field Definitions:

1. OBJECTID

Common Name	Object Identifier
Definition	A unique number that is automatically generated for each segment
Data Owner	GIS Unit
Extent	Every Segment
Values	Positive numbers
Notes	The Object Identifier changes with each publication.

2. Shape

Common Name	Shape
Definition	Stores the geometry information for each segment and is used by GIS software to display the line
Data Owner	GIS Unit
Extent	Every Segment
Values	Polyline

3. Division

Common Name	Division
Definition	The NCDOT Division number for each route segment
Data Owner	NC DOT
Extent	Every Segment
Values	Data Type = numeric; Data Range from 1-14
Notes	

4. MaintCntyCode

Common Name	Maintenance County; (Sap County Code)
Definition	For state-maintained roads, it is the county responsible for maintaining the section of road. For non-state maintained roads, it is the county that the segment is located in.
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text ; Coded domain – see the metadata or contact the GIS Unit for a full list of codes
Notes	This is the primary county field that should be used. In general both county fields will have the same value. The exceptions are around the county boundaries. For example, a portion of SR-1828 has a Maintenance County of Iredell County and a Location County of Yadkin County where it crosses the county boundary into Yadkin County. This route should be considered SR-1828 Iredell County even though it is physically located in Yadkin County. The domain for the county codes is not listed here because it is so long. The coded values begin with 001 for Alamance County and end with 100 for Yancey County. These are the codes (for roads that are maintained by NCDOT but cross the state boundary): Georgia – 901, South Carolina – 902, Tennessee – 903, Virginia – 904.

5. LocCntyCode

Common Name	Location County; (Sap County Code)
Definition	The county that the segment is physically located in
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text; Coded domain – see the metadata or contact the GIS Unit for a full list of codes

6. RouteClass

Common	Route Class

Name	
Definition	The NCDOT route class code for Dominant Route
Data Owner	GIS Unit
Extent	Every segment except for gap segments
Values	Data Type = text; Coded domain
Notes	Route Class drives the 1st digit of the Route ID.

Domain:

Value	Description	Notes
1	Interstate (I)	State-maintained
2	US Route (US)	State-maintained
3	NC Route (NC)	State-maintained
4	Secondary Route (SR)	State-maintained
5	Non-System (NS)	Not state maintained
6	Other State Agency Route (SA)	Federal-aid roads maintained by other state agencies
7	Federal Route (FED)	Federal-aid roads maintained by federal agencies
80	Ramp (RMP)	Typically state-maintained but not counted towards state-maintained mileage
81	Rest Areas (RST)	Typically state-maintained but not counted towards state-maintained mileage
82	Non-System Ramp	Not state maintained
89	Non-Mainline (NML)	Typically state-maintained but not counted towards state-maintained mileage
9	Projected (PRJ)	Generalized locations of major facilities that have not yet been built

7. RouteNumber

Common Name	Route Number
Definition	The NCDOT route number for the Dominant Route
Data Owner	GIS Unit
Extent	Every segment
Values	Positive numbers
Notes	The Route Number is in the 4th – 8th positions of the RouteID

8. RouteQualifier

Common Name	Route Qualifier
Definition	An additional code that further defines the Dominant Route
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text; Coded domain
Notes	On state-maintained routes, values of Normal indicate the regular route and other values indicate a related route (e.g., I-95 and I-95 Business). The Route Qualifier is represented in the 2nd position of the Route ID. An exception is that Ramps, Rest Areas and Non-Mainline begin with 80, 81 and 89 respectively so that they can be distinguished by the Route ID.

Domain:

Value	Description	Notes
0	Normal Route	On most routes this indicates it is the normal route. If the route class is FED, then Normal/0 means Blue Ridge Parkway.
1	Alternate Route	If the route class is FED, then Alternate/1 means the road is owned by the military.
2	Bypass Route	
5	East Route	This is only used for US-19 East which is a different route than US-19
6	West Route	This is only used for US-19 West which is a different route than US-19

7	Spur/Connector Route	If the Route Class is Interstate, then the route is a spur; if the Route Class is US or NC Route then the route is a connector
8	Truck Route	
80	Ramp	
81	Rest Area	
82	Non-System Ramp	
89	Non-Mainline	
9	Business Route	

9. RouteInventory

Common Name	Route Inventory
Definition	The NCDOT route direction for Dominant Route
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text; Coded domain
Notes	Inventory directions are Inventory (0) and Clockwise (8). All other values indicate the non-inventory direction of the route. To determine if the route is one-way or both directions of travel, use the One-way Direction Flag (i.e., Inventory Route Direction and Both Directions for the One-way Direction Flag imply that the route is bidirectional). The Route Direction is represented in the 3rd position of the RouteID.

Domain:

Value	Description	Notes
0	Inventory	Includes bidirectional, Northbound, Eastbound, and one-way inventory
4	Non-Inventory (Southbound)	On secondary routes, rest areas and non-state maintained route classes, "Southbound" means non-inventory
6	Non-Inventory (Westbound)	
8	Inventory (Clockwise)	
9	Non-Inventory (Counter-Clockwise)	

10. Direction

Common Name	Direction
Definition	Indicates the actual direction of the route
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text; Coded domain
Notes	

Domain:

Value	Description	Notes
BD	Bidirectional	
NB	Northbound	
SB	Southbound	
EB	Eastbound	
WB	Westbound	
OI	Oneway Inventory	
OO	Oneway Opposite	
CW	Clockwise	
CC	Counterclockwise	

11. TravelDirection

Common Name	Travel Direction

Definition	Indicates whether traffic is restricted to one direction or both
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text; Coded domain
Notes	Since the Route Direction code of 0 can be either one-way or both directions, this field is used to determine if the route is bidirectional or one-way.

Domain:

Value	Description	Notes
Both	Both directions	
One-way	One direction	

12. RouteMaintCode

Common Name	Route Maintenance Code
Definition	The system status of the route
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text; Derived
Notes	This field has a value of "System" on every record except for where Non-System routes. System Routes = Route Class IN (1,2,3,4,80,81,89,9) ; Non-System = Route Class IN (5,6,7,82)

13. RouteName

Common Name	Route Name
Definition	The NCDOT name of the dominant route
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text;
Notes	It is a concatenation of an abbreviation of Route Class, Route Number and Route Qualifier.

14. StreetName

Common Name	Street Name
Definition	The name of the street such as 'Main Street'
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text;
Notes	

15. SrcDocType

Common Name	Source Document Type
Definition	The type of source documentation that created the segment or caused the most recent official change.
Data Owner	GIS Unit
Extent	All system routes
Values	Data Type = text; Coded domain
Notes	This field should be used with the Source Document field.

Domain:

Value	Description	Notes
N	Not-Verified	Indicates either legacy segments or that the source document is unknown
P	Petition	The petition number is stored in the Source Document field

T	TIP		TIP or Project; the project number is stored in the Source Document field
R	Project Alignment		
M	Municipal Agreement		The municipal agreement number is stored in the Source Document field
O	Other		

16. SrcDocID

Common Name	Source Document
Definition	The document reference that created the segment or caused the most recent official change
Data Owner	GIS Unit
Extent	All system routes
Values	Data Type = text;
Notes	Typical values are the TIP number or the Petition number. This field should be used with the Source Document Type field.

17. GeoDocType

Common Name	Revision Source Type
Definition	The most recent data source type used to draw or modify the segment's alignment/geometry.
Data Owner	GIS Unit
Extent	All system routes
Values	Data Type = text; Coded domain
Notes	This field should be used with the GeoDocID field. For example, if the value is Aerial Photo and the GeoDocID is 2010, this means that the segment was aligned to an Aerial Photo that was flown in 2010.

Domain:

Value	Description	Notes
N	Not-Verified	Indicates the segment alignment has not been verified by the GIS Unit; the segment has not been photo-revised yet
A	Aerial Photo	Indicates that the segment has been photo revised
C	Local Centerline	
P	Parcels	
L	Plat	
G	GPS	
F	Field Research	
O	Other	

18. GeoDocID

Common Name	Revision Source
Definition	The most recent data source reference that was used to draw or modify the segment's alignment/geometry
Data Owner	GIS Unit
Extent	Every segment that has been verified
Values	Data Type = text;
Notes	When Aerial Photo is used as the Revision Source Type, the Revision Source Identifier is either the year the photo was flown or else the source of the photo if the year is unknown.

19. RouteID

Common Name	Route Identifier for Dominant Route
Definition	The 11-digit composite route number

Data Owner	GIS Unit
Extent	Every segment
Values	Positive 11-digit numbers (text field)
Notes	It uniquely identifies routes statewide and should be used as the route identifier when performing LRS analysis using route/milepost referencing.

20. MPLength

Common Name	Milepost Length
Definition	The length of the segment in miles, calculated by the ending milepost minus the beginning milepost. The milepost values are based on 3D measures generated from LIDAR data.
Data Owner	GIS Unit
Extent	Every segment
Values	Positive numbers; six decimal places
Notes	Calculated field;

21. LaneMiles

Common Name	Lane Miles
Definition	The Milepost Length multiplied by the number of lanes. In cases where the number of lanes is 0 or blank, the number of lanes is assumed to be 1.
Data Owner	OPM (Operations Program Management)
Extent	Every segment
Values	Positive numbers; six decimal places
Notes	Lane Miles has been populated on all roads, even unpaved roads. In most cases, reporting on lane miles should exclude unpaved roads.

22. BeginMp1

Common Name	Beginning Milepost for Dominant Route
Definition	The ending milepost for route at that point on the segment
Data Owner	GIS Unit
Extent	Every segment
Values	Numbers; six decimal places

23. EndMp1

Common Name	Ending Milepost for Dominant Route
Definition	The ending milepost for route at that point on the segment
Data Owner	GIS Unit
Extent	Every segment
Values	Numbers; six decimal places

24. BeginFeatureID

Common Name	Beginning Intersection Feature for Dominant Route
Definition	This field identifies the intersecting route (or county or route change or dead-end) for the beginning of the associated LRS segment.
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text;
Notes	Use with the Beginning Milepost field.

25. EndFeatureID

Common	Ending Intersection Feature For Dominant Route

Name	
Definition	This field identifies the intersecting route (or county or route change or dead-end) for the ending of the associated LRS segment.
Data Owner	GIS Unit
Extent	Every segment
Values	Data Type = text;
Notes	Use with the Ending Milepost field.

26. RouteIDX

Common Name	11-Digit Route Number
Definition	The 11-digit composite Co-Route numbers 2-6
Data Owner	GIS Unit
Extent	Every segment
Values	Positive 11-digit numbers (text field)

27. BeginMpX

Common Name	Beginning Milepost
Definition	The beginning milepost value at that point on the segment for co-route 2-6
Data Owner	GIS Unit
Extent	Every segment
Values	Numbers; six decimal places

28. EndMpX

Common Name	Ending Milepost
Definition	The ending milepost at that point on the segment for co-route 2-6
Data Owner	GIS Unit
Extent	Every segment
Values	Numbers; six decimal places

29. AADT

Common Name	AADT
Definition	Annual Average Daily Traffic
Data Owner	Traffic Survey Group
Extent	Where applicable
Values	Positive numbers (Integer)

30. AadtDate

Common Name	AADT Date
Definition	Estimated Annual Average Daily Traffic for specified year
Data Owner	Traffic Survey Group
Extent	Where applicable
Values	Positive 4-digit numbers (Short Integer)

31. AADTTruck

Common Name	AADT Truck
Definition	Annual Average Daily Truck Traffic

Data Owner	Traffic Survey Group
Extent	Where applicable
Values	Positive numbers (Integer)

32. AadttMulti

Common Name	AADTT Multi-Unit Trucks
Definition	Annual Average Daily Truck Traffic of Multi-Unit Trucks
Data Owner	Traffic Survey Group
Extent	Where applicable
Values	Positive numbers (Integer)

33. AadttSingle

Common Name	AADTT Single Unit Trucks
Definition	Annual Average Daily Truck Traffic of Single Unit Trucks
Data Owner	Traffic Survey Group
Extent	Where applicable
Values	Positive numbers (Integer)

34. AccessCont

Common Name	Access Control
Definition	Indicates some degree of control of through movements to a road
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Coded domain
Notes	Null indicates that the road does not have any degree of access control.

Domain:

Value	Description	Notes
Partial	Partial	
Full	Full	

35. AddDate

Common Name	Addition Date
Definition	The date that the section of road the road was constructed, or the date that the road was added to the state maintenance system, if it was already built
Data Owner	OPM (Operations Program Management)
Extent	State-maintained roads, where available
Values	Dates
Notes	The date 12/31/1901 indicates that the date is unknown. Typically December 31st is used when the year was known but the day and month were not.

36. AddDocID

Common Name	Addition Document
Definition	The document reference that created the segment
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Text
Notes	Typical values are the TIP or petition number.

Domain:

Value	Description	Notes
Petition	Petition	
TIP	TIP	
MA	Municipal Agreement	
Correction	Correction	
Other	Other	

37. AddDocType

Common Name	Addition Document Type
Definition	The type of documentation that created the segment or that added the road to the state system
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Coded domain
Notes	This field should be used with the Addition Document field.

Domain:

Value	Description	Notes
Petition	Petition	
TIP	TIP	
MA	Municipal Agreement	
Correction	Correction	
Other	Other	

38. BarePvmtRoute

Common Name	Bare Pavement System
Definition	A system of designated routes that are the first to be cleared and/or chemically treated in the event of winter weather conditions; generally consisting of all Interstates, four-lane divided primary routes and some secondary routes.
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Coded domain

Domain:

Value	Description	Notes
Y	Yes	Segment is part of the Bare Pavement System

39. BaseDetail

Common Name	Detailed Base Type
Definition	Detailed base layer types
Data Owner	OPM (Operations Program Management)
Extent	New Secondary Routes
Values	Coded domain
Notes	This data is only entered on Secondary Routes that are added to the system by Petition or Municipal Agreement and is used by the Pavement Management Unit.

Domain:

Value	Description	Notes
ABC	Aggregate Base Course, Stone	
B25.0B	B25.0B	
B25.0C	B25.0C	
I-19.0B	I19.0B	

I-19.0C	I19.0C
I-19.0D	I19.0D
Soil	Soil
STBC	Soil Type Base Course
CABC	Course Aggregate Base Course
SS	Stabilized Subgrade
CTABC	CTBC Cement Treated Aggregate Base Course

40. BaseThickness

Common Name	Base Thickness
Definition	Thickness of the base layer in inches
Data Owner	OPM (Operations Program Management)
Extent	New Secondary Routes
Values	Positive numbers; Range domain 1-14
Notes	This data is only entered on Secondary Routes that are added to the system by Petition or Municipal Agreement and is used by the Pavement Management Unit.

41. DesignSpd

Common Name	Design Speed
Definition	A selected speed used to determine the various geometric features of the roadway, in miles per hour
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Positive numbers; Range domain 15 - 80

42. FcltyType

Common Name	Facility Type
Definition	The operational characteristics of the roadway
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Coded domain

Domain:

Value	**Description**	**Notes**
One Way	One-Way Roadway	
Couplet	Couplet	
GS Ramp	Grade-Separated Ramp	
Non-Main	Non-Mainline	
Public Facility	Public Facility	
Miscellaneous	Miscellaneous	
Non-GS Ramp	Non-Grade-Separated Ramp	

43. FuncClass

Common Name	Functional Classification
Definition	A classification system of roads based on the character of traffic service that they are intended to provide. Approval of changes is done by the Federal Highway Administration and is managed by the Program Development Branch at NCDOT.
Data Owner	GIS Unit
Extent	Every segment

Values	Coded domain
Notes	Functional Classification along with National Highway System and Urban Identification determine federal-aid eligibility. All roads on the National Highway System are eligible for federal-aid. In addition, all routes functionally classified Interstate through Major Collector, plus urban Minor Collectors are federal-aid eligible. Ramps are given the highest Functional Classification value of the routes that they serve, but ramps are not eligible for federal-aid.

Domain:

Value	Description	Notes
1	Interstate	
2	PA-FrwyExp	Principal Arterial – Other Freeways and Expressways
3	PA-Other	Principal Arterial – Other
4	Minor Arterial	
5	Major Collector	
6	Minor Collector	
7	Local	

44. FuncClassDate

Common Name	Functional Classification Date
Definition	The date which the road became part of the Federal Highway Administration and is managed by the Program Development Branch at NCDOT.
Data Owner	
Extent	Where applicable
Values	Dates

45. HOVLnCount

Common Name	HOV Lanes
Definition	The number of HOV lanes
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Positive numbers; domain range 1 - 12

46. HOVType

Common Name	HOV Type
Definition	The type of HOV lanes
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Coded domain

Domain:

Value	Description	Notes
Full-Time	Full-Time HOV	Section has exclusive HOV lanes (no other use permitted)
Part-Time	Part-Time HOV	Normal through lane(s) used for exclusive HOV in specified time periods
Shldr/Prkg	Shoulder/Parking HOV	Shoulder/parking lane(s) used for exclusive HOV in specific time periods

47. ImprvtDate

Common Name	Improvement Date

Definition	The date of the most recent improvement that was made to the segment
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Dates
Notes	The date 12/31/1901 indicates that the date is unknown. Typically December 31st is used when the year was known but the day and month were not.

48. ImprvDocID

Common Name	Improvement Document Identifier
Definition	Unique identification number or code of the corresponding improvement document
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Text

49. ImprvDocType

Common Name	Improvement Document Type
Definition	The document reference that represents the most recent improvement to the segment
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Text
Notes	Typical values are the TIP number.

Domain:

Value	Description	Notes
TIP	TIP	
Resrfc	Resurfacing Package	
PR	Paving Report	
Other	Other	

50. ImprvType

Common Name	Improvement Type
Definition	The most recent improvement that was made to the segment
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Text; Coded domain

Domain:

Value	Description	Notes
BR	Bridge Replacement	The total replacement of a structurally inadequate or functionally obsolete bridge with a new structure constructed in the same general traffic corridor to current geometric construction standards. A bridge removed and replaced with a lesser facility is considered a bridge replacement. Incidental roadway approach work is included.
MI	Minor Widening	The addition of more width per through lane, shoulder improvements, and/or turn lanes (regardless of length or width) to an existing facility without adding through lanes. The existing pavement is salvaged. Also included, where necessary, is the resurfacing of the existing pavement and other incidental improvements such as shoulder and drainage improvements.
MA	Major Widening	The addition of through lanes or dualization of an existing facility where the existing pavement is salvaged. Also included, where necessary, is

		the resurfacing of the existing pavement and other incidental improvements such as shoulder and drainage improvements.
NR	New Construction	Construction of a new route on an original location that does not replace an existing route, but which was designed and built as an independent facility.
RS	Resurfacing	Placement of additional material (concrete, asphalt, etc.) over the existing roadway to improve serviceability or to provide additional strength. There may be upgrading of unsafe features and other incidental work. If resurfacing Is done as a final stage of construction, the preceding stage (relocation, reconstruction, minor widening, etc.) is used as the improvement type.
NL	Relocation	Construction of a facility on new location that replaces an existing route. The new facility carries all the through traffic with the previous facility closed or retained as a land-service road only.
IP	Initial Paving	This is used the first time an unpaved road is paved.
RE	Reconstruction	Reconstruction on substantially the same alignment. It may include the addition of through lanes, dualization, addition of interchanges or grade separations, or widening of through lanes. Reconstruction may also include the correction of alignment and/or shoulder and drainage deficiencies.
SI	Surface Improvement	Surface improvements such as crack sealing, diamond grinding, subsealing, joint repair, slurry seal, asphalt surface treatment, etc.
OT	Other	Other types of improvements.

51. LaneWidth

Common Name	Lane Width
Definition	Width on 1 travel lane on the section.
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Range Domain 6 - 20

52. LftPvdShldrWidth

Common Name	Left Paved Shoulder Width
Definition	The paved width of the left shoulder in feet
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Positive numbers; one decimal place ; Range domain 1-16

53. LftShldrType

Common Name	Left Shoulder
Definition	The surface type of the left shoulder
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Coded domain
Notes	On combination shoulders, the highest code present is used. For example, a shoulder that is bituminous (3) and gravel (2) would be coded as bituminous. On divided roads, this refers to the inside shoulder; on undivided roads it is the shoulder on the left side when facing inventory direction (the line segment direction).

Domain:

Value	Description	Notes
Curb-Con	Curb - Concrete	

Curb-Bit	Curb - Bituminous
Concrete	Concrete
Bitum	Bituminous
Gravel	Gravel Or Stone
Grass	Grass Or Sod

54. LftShldrWidth

Common Name	Left Shoulder Width
Definition	The total width of the left shoulder in feet
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Positive numbers; Range domain 1-30
Notes	If the Left Shoulder Width is greater than the Left Paved Shoulder Width, then it indicates that a combination shoulder is present, such as bituminous and grass.

55. LftTrnLnType

Common Name	Left Turn Lane
Definition	The type of left turning lane
Data Owner	OPM (Operations Program Management)
Extent	Where applicable, but this data item has never been fully populated
Values	Text; Coded domain
Notes	No data indicates that there are no designated left turn lanes.

Domain:

Value	Description	Notes
Single	Single Turn Lane	Single left turn lane
Multiple	Multiple Turn Lanes	Multiple turn lanes; indicates multiple lanes devoted to the same turning movement or that there are single left turn lanes in each direction (if the road is not divided)
Continuous	Continuous Turn Lane	Continuous left turn lane; allows for left turns from either travel direction
No Peak	No Turns During Peak Time	Left turns are prohibited during peak hours

56. LftTrnLnWidth

Common Name	Left Turn Lane Width
Definition	The width of the left turning lane in feet
Data Owner	OPM (Operations Program Management)
Extent	Where applicable, but this data item has never been fully populated
Values	Positive numbers; Range domain 6-120

57. MaintOps

Common Name	Maintenance Operation
Definition	The agency that maintains the segment,if ownership cannot be derived from Route Class
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	This field contains exceptions, i.e., US, NC or Secondary Route that is not maintained by NCDOT would have the correct owner identified in this field.

Domain

Value	Description	Notes
2	County Highway Agency	County highway agency
4	City or Municipal Highway Agency	City or municipal highway agency
11	State Park, Forest, or Reservation Agency	State park, forest or reservation agency
12	Local Park, Forest, or Reservation Agency	Local park, forest or reservation agency
13	Wildlife Resources Commission	Wildlife Resources Commission
21	Other State Agency	Other state agency
25	Other Local Agency	Other local agency
27	Railroad	Railroad
31	State Toll Road	State toll authority
32	Local Toll Authority	Local toll authority
40	Other Public Instrumentality (e.g., Airport)	Other public instrumentality (e.g., airport, school, university)
50	Indian Tribe Nation	Indian Tribe Nation
60	Other Federal Agency	Other federal agency
62	Bureau of Indian Affairs	Bureau of Indian Affairs
63	Bureau of Fish and Wildlife	Bureau of Fish and Wildlife
64	U.S. Forest Service	U.S. Forest Service
66	National Park Service	National Park Service
67	Tennessee Valley Authority	Tennessee Valley Authority
68	Bureau of Land Management	Bureau of Land Management
69	Bureau of Reclamation	Bureau of Reclamation
70	Corps of Engineers	Corps of Engineers
72	Air Force	Air Force
73	Navy/Marines	Navy/Marines
74	Army	Army
80	Other	Other
98	Private-Residential	Private-Residential
99	Private-Other	Private-Other

58. MedianType

Common Name	Median
Definition	The type of median present
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Text; Coded domain
Notes	No data indicates that there is no median present and that the road is not divided. Roads with a median length of at least 200ft are represented as separate lines (dual-carriageway). Medians that are at least two feet wide are coded in this field, regardless of whether the road is represented as a single line or a pair. Where multiple medians are present, the type that prohibits the most movement of vehicles is coded (for example a grass median with a cable guardrail is coded as a flexible positive barrier).

Domain:

Value	Description	Notes
RPB	Rigid Positive Barrier	Includes jersey barriers
SRPB	Semi-Rigid Positive Barrier	A raised median with a sloped edge
FPB	Flexible Positive Barrier	
PM	Paved Mountable	
Curb	Curb	This code is used for legacy data; eventually unspecified positive barriers will be coded as semi-rigid, rigid or flexible positive barriers
Grass	Grass	Includes cable guardrail
Striped	Striped	Striped (painted pavement)

59. MedianWidth

Common Name	Median Width
Definition	The width of the median in feet
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Numbers; range domain 1-999
Notes	On roads represented as two separate lines (divided), one-half of the median width is stored on each segment. If the road is represented as a single line but has a median (typically because the median *length* is less than 200 feet), the entire median width is stored on the segment. Negative numbers should be ignored. Median Widths do not contain turn lanes.

60. NHS

Common Name	National Highway System (NHS)
Definition	A network of nationally significant highways approved by Congress in the National Highway System Designation Act of 1995. New routes can also be added to the NHS.
Data Owner	GIS Unit
Extent	Where applicable
Values	Numbers; Coded domain
Notes	No data indicates that the segment is not part of the NHS. All routes on the National Highway System are eligible for federal-aid.

Domain:

Value	Description	Notes
1	Is on the NHS	Section is on the NHS
2	Major Airport	NHS Connector – Major Airport
3	Major Port Facility	NHS Connector – Major Port Facility
4	Major Amtrak Station	NHS Connector – Major Amtrak Station
5	Major Rail/Truck Terminal	NHS Connector – Major Rail/Truck Terminal
6	Major Inter-city Bus Terminal	NHS Connector – Major Intercity Bus Terminal
7	Major Public Transit Terminal/Multi-modal Passenger Terminal	NHS Connector – Major Public Transit Terminal
8	Major Pipeline Terminal	NHS Connector – Major Pipeline Terminal
9	Major Ferry Terminal	NHS Connector – Major Ferry Terminal
11	Congressional High Priority Corridor	Congressional High Priority Corridors
21	MAP-21	MAP-21

61. NHSDate

Common Name	NHS Date
Definition	The date that the segment was added to the NHS
Data Owner	GIS Unit
Extent	Currently only populated on Map-21 NHS routes
Values	Dates

62. OwnerName

Common Name	Ownership Name
Definition	Owner Name
Data Owner	OPM (Operations Program Management)
Extent	
Values	Text

63. OwnerType

Common Name	Ownership type
Definition	The agency that maintains the segment, if ownership cannot be derived from Route Class
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Number; Coded domain
Notes	This field contains exceptions, i.e., US, NC or Secondary Route that is not maintained by NCDOT would have the correct owner identified in this field.

Domain:

Value	Description	Notes
2	County Highway Agency	County highway agency
4	City or Municipal Highway Agency	City or municipal highway agency
11	State Park, Forest, or Reservation Agency	State park, forest or reservation agency
12	Local Park, Forest, or Reservation Agency	Local park, forest or reservation agency
13	Wildlife Resources Commission	Wildlife Resources Commission
21	Other State Agency	Other state agency
25	Other Local Agency	Other local agency
27	Railroad	Railroad
31	State Toll Road	State toll authority
32	Local Toll Authority	Local toll authority
40	Other Public Instrumentality (e.g., Airport)	Other public instrumentality (e.g., airport, school, university)
50	Indian Tribe Nation	Indian Tribe Nation
60	Other Federal Agency	Other federal agency
62	Bureau of Indian Affairs	Bureau of Indian Affairs
63	Bureau of Fish and Wildlife	Bureau of Fish and Wildlife
64	U.S. Forest Service	U.S. Forest Service
66	National Park Service	National Park Service
67	Tennessee Valley Authority	Tennessee Valley Authority
68	Bureau of Land Management	Bureau of Land Management
69	Bureau of Reclamation	Bureau of Reclamation
70	Corps of Engineers	Corps of Engineers
72	Air Force	Air Force
73	Navy/Marines	Navy/Marines
74	Army	Army
80	Other	Other
98	Private-Residential	Private-Residential
99	Private-Other	Private-Other

64. PeakLanes

Common Name	Peak Lanes
Definition	The number of lanes in the peak direction of flow during the peak hour, in cases where it cannot be derived from the number of lanes
Data Owner	OPM (Operations Program Management)
Extent	HPMS Samples
Values	Positive numbers
Notes	For example, a four-lane road in which one of the lanes is reversed during the peak hour to accommodate traffic movement would have a Peak Lanes value of 3. If there is no data in the field, assume that the Peak Lanes is ½ the Number of Lanes on undivided roads, or just the Number of Lanes in the peak direction if the road is divided.

65. PostedRoute

Common Name	Posted Route

Definition	A system of designated secondary routes where truck traffic with axle weights exceeding 13,000 pounds is prohibited by ordinance.
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Text
Notes	The value is the ordinance number; any value present indicates that the segment is part of the Posted Route system.

66. ROW

Common Name	Right of Way
Definition	The width of the right of way of the road in feet
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Positive numbers; range domain 9-999
Note	Right of Way can vary continuously along the road. The data has been generalized in areas of widely varying Right of Way to represent significant changes.

67. RtPvdShldrWidth

Common Name	Right Paved Shoulder Width
Definition	The paved width of the right shoulder in feet
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Positive numbers; one decimal place; Range domain 1-30

68. RtShldrType

Common Name	Right Shoulder
Definition	The surface type of the right shoulder
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Coded domain
Notes	On combination shoulders, the highest code present is used. For example, a shoulder that is bituminous and gravel would be coded as bituminous. On divided roads, this refers to the outside shoulder; on undivided roads it is the shoulder on the right side when facing inventory direction (the line segment direction).

Domain:

Value	Description	Notes
Curb-Con	Curb - Concrete	
Curb-Bit	Curb - Bituminous	
Concrete	Concrete	
Bitum	Bituminous	
Gravel	Gravel or Stone	
Grass	Grass or Sod	

69. RtShldrWidth

Common Name	Right Shoulder Width
Definition	The total width of the right shoulder in feet
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Positive numbers; one decimal place; Range domain 1-30

Notes	If the Right Shoulder Width is greater than the Right Paved Shoulder Width, then it indicates that a combination shoulder is present, such as bituminous and grass.

70. RtTrnLnType

Common Name	Right Turning Lane
Definition	The type of right turning lane
Data Owner	OPM (Operations Program Management)
Extent	Where applicable, but this data item has never been fully populated
Values	Text; Coded domain
Notes	No data indicates that there are no designated left turn lanes.

Domain:

Value	Description	Notes
Single	Single Turn Lane	Single right turn lane
Multiple	Multiple Turn Lanes	Multiple turn lanes; indicates multiple lanes devoted to the same turning movement or that there are single right turn lanes in each direction (if the road is not divided)
Continuous	Continuous Turn Lane	Continuous right turn lane; a lane devoted to right turns that goes through multiple intersections
No Peak	No Turns During Peak Time	Right turns are prohibited during peak hours

71. RtTrnLnWidth

Common Name	Right Turning Lane Width
Definition	The width of the right turning lane in feet
Data Owner	OPM (Operations Program Management)
Extent	Where applicable, but this data item has never been fully populated
Values	Positive numbers; Range domain 1-120

72. SampleID

Common Name	Sample ID
Definition	The HPMS Sample identification number
Data Owner	OPM (Operations Program Management)
Extent	HPMS Samples
Values	Positive numbers; Range domain 100000-999999
Notes	Samples are reported annually to the Federal Highway Agency as part of the HPMS Report. Detailed data is provided for the samples as part of the report.

73. SpeedLimit

Common Name	Speed Limit
Definition	The posted speed limit in miles per hour
Data Owner	Traffic Safety Unit
Extent	State-maintained roads
Values	Positive numbers
Notes	This data comes from traffic ordinances governing speed limit; where there is no ordinance, the speed limit is 35 within municipalities and 55 outside.

74. MilitaryBase

Common Name	STRAHNET Military Base
Definition	The military base that the STRAHNET route is located within
Data Owner	GIS Unit
Extent	Where applicable, but this data item has never been fully populated
Values	Coded domain

Domain:

Value	Description	Notes
1	Pope Air Force Base	Pope Air Force Base
2	Seymour Johnson Air Force Base	Seymour Johnson Air Force Base
3	Fort Bragg Army Base	Fort Bragg Army Base
4	Camp Lejeune Marine Base	Camp Lejeune Marine Base
5	Cherry Point Marine Air Station	Cherry Point Marine Air Station
6	New River Marine Air Station	New River Marine Air Station
7	Elizabeth City Coast Guard Air Station	Elizabeth City Coast Guard Air Station

75. SrfcDetail

Common Name	Detailed Surface Type
Definition	The detailed surface type
Data Owner	OPM (Operations Program Management)
Extent	New Secondary Routes
Values	Text; Coded domain
Notes	This data is only entered on Secondary Routes that are added to the system by Petition or Municipal Agreement and is used by the Pavement Management Unit.

Domain:

Value	Description	Notes
Asphalt	Asphalt, Hot Mix Asphalt, Plant Mix Asphalt	
BST	BST	
AST	AST	
S4.75A	S4.75A	
S9.5A	S9.5A	
S9.5B	S9.5B	
S9.5C	S9.5C	
S9.5D	S9.5D	
SF9.5A	SF9.5A	
S12.5B	S12.5B	
S12.5C	S12.5C	
S12.5D	S12.5D	
I-1	I-1	
I-2	I-2	
JCP	Jointed Concrete Pavement	
CRCP	Continuously reinforced concrete pavement	
HDS	Heavy Duty Surface	
Gravel	Gravel	

76. SrfcThickness

Common Name	Surface Thickness
Definition	The thickness of the surface layer of pavement/concrete in inches
Data Owner	OPM (Operations Program Management)
Extent	Where available

Values	Positive numbers; two decimal places; range domain 0.25-18

77. SrfcType

Common Name	Surface Type
Definition	The surface type of the segment
Data Owner	OPM (Operations Program Management)
Extent	State-maintained roads
Values	Text; Coded domain

Domain:

Value	Description	Notes
Unpaved	Unpaved	
Bitum	Bituminous	
JPCP	JPCP	
CRCP	CRCP	Continuously reinforced concrete pavement Jointed plain concrete pavement
AC_AC	AC overlay on AC	Asphalt-concrete (AC) overlay over existing AC pavement
AC_JCP	AC overlay on JCP	AC overlay over existing jointed concrete pavement
AC_CRCP	AC overlay on CRCP	Bituminous overlay over existing CRCP
UJC_PCC	Unbonded JC Overlay on PCC	Unbonded jointed concrete overlay on PCC pavement
BPCC_PCC	Bonded PCC Overlay on PCC	Bonded PCC overlay on PCC pavement
Other	Other (includes bridge decks, whitetopping, brick)	Other (includes bridge decks, whitetopping, brick, etc.)

78. SrfcWidth

Common Name	Surface Width
Definition	The paved surface width in feet, or the road width from ditch to ditch on unpaved roads
Data Owner	OPM (Operations Program Management)
Extent	State-maintained roads
Values	Positive numbers; range domain 9-400
Notes	The Surface Width does not include the median width. On divided roads, it is the paved width on that side of the median. On paved roads, the Surface Width is edge of pavement to edge of pavement (includes paved shoulders).

79. STRAHNETDate

Common Name	Strategic Highway Network Date
Definition	Date
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Dates

80. STRAHNETType

Common Name	STRAHNET
Definition	The military's Strategic Highway Network (a subset of the National Highway System)
Data Owner	GIS Unit
Extent	Where applicable
Values	Number; Coded domain

Domain:

Value	Description	Notes
1	Regular STRAHNET	STRAHNET route

2	Connector	STRAHNET connector route

81. StreetName

Common Name	Street Name
Definition	Local Street Name
Data Owner	Local County GIS / NCDOT GIS
Extent	Where applicable
Values	Text

82. TerrainType

Common Name	Terrain
Definition	Generalized terrain classification
Data Owner	GIS Unit
Extent	Every segment
Values	Number; Coded domain

Domain:

Value	Description	Notes
1	Level	
2	Rolling	
3	Mountainous	

83. ThruLaneCount

Common Name	Through Lanes
Definition	The number of through lanes
Data Owner	OPM (Operations Program Management)
Extent	State-maintained roads, some non-system roads, some ramps
Values	Positive numbers; range 1-12
Notes	This represents the through lanes, does not include ancillary lanes used for turning movements and ramps. On divided roads, the value is the number of through lanes in that direction. To estimate for the entire route, double the values on the inventory side.

84. TollCharged

Common Name	Toll Charged
Definition	The travel direction, if any, that a toll is charged
Data Owner	OPM (Operations Program Management)
Extent	Toll roads
Values	Text; Coded domain

Domain:

Value	Description	Notes
One Dir	One Direction	Toll is charged in one direction only
Both Dir	Both Directions	Toll is charged in both directions
None	No Toll Charged	No toll is charged on the toll road

85. TollID

Common Name	Toll ID
Definition	The toll identifier assigned by FHWA

Data Owner	OPM (Operations Program Management)
Extent	Toll roads
Values	Number; Coded domain

Domain:

Value	Description	Notes
193	Triangle Expressway	
194	Western Wake Expressway	
378	Monroe Expressway	
379	I-77 Express Lanes	

86. TollType

Common Name	Toll Type
Definition	The type of toll relating to function and accessibility
Data Owner	OPM (Operations Program Management)
Extent	Toll roads
Values	Text; Coded domain

Domain:

Value	Description	Notes
Regular	Regular Toll	
HOT	HOT Lanes	High occupancy toll road

87. MunPopGroup

Common Name	Municipal Population Group
Definition	Population categories based on the municipality that the segment is located within
Data Owner	GIS Unit
Extent	Segments that are located within the Municipal Boundaries
Values	Number; Coded domain
Notes	No data indicates that the segment is not with in any city or town limits.

Domain:

Value	Description	Notes
1	Under 1,000 Population	Municipality population is under 1,000
2	1,000 to 2,499	Municipality population is between 1,000 and 2,500
3	2,500 to 4,999	Municipality population is between 2,500 and 5,000
4	5,000 to 9,999	Municipality population is between 5,000 and 10,000
5	1,0000 to 24,999	Municipality population is between 10,000 and 25,000
6	25,000 to 49,999	Municipality population is between 25,000 and 50,000
7	50,000 to 99,999	Municipality population is between 50,000 and 100,000
8	100,000 and over	Municipality population is over 10,000

88. TownCode

Common Name	Town Code
Definition	A code identifying the municipality where the segment is located
Data Owner	GIS Unit
Extent	Segments that are located within the Municipal Boundaries
Values	Coded domain – contact the GIS Unit for a full list of codes
Notes	The first two digits of the Town Code are the NCDOT Division number. Although towns that cross division boundaries are assigned two different town codes, only one town code is used for each municipality. Null indicates that the segment is not with in any city or town limits.

89. TownName

Common Name	Town Name
Definition	A name identifying the municipality where the segment is located
Data Owner	GIS Unit
Extent	Segments that are located within the Municipal Boundaries
Values	Coded domain – contact the GIS Unit for a full list of codes
Notes	

90. TrkRoute

Common Name	Truck Route
Definition	Internal and federally-designated truck routes
Data Owner	
Extent	Where applicable
Values	Integer; Coded domain
Notes	No data indicates trucks are allowed on the route without restrictions.

Domain:

Value	Description	Notes
2	Parkway- Trucks/Commercial Vehicles Prohibited	Parkway – trucks and commercial vehicles prohibited
4	Not a Parkway- Trucks/Commercial Vehicles Prohibited	Not a parkway – trucks and commercial vehicles prohibited
3	Not a Parkway- Trucks/Commercial Vehicles Prohibited during specific periods; not a designated Truck Route	Not a parkway – trucks and commercial vehicles prohibited during specific times
5	Designated Truck Route (Federally approved)	National Network (federally approved)

91. TrkRouteDate

Common Name	Truck Route date
Definition	Date added Internal and federally-designated truck routes
Data Owner	
Extent	Where applicable
Values	Dates
Notes	No data indicate trucks are allowed on the route without restrictions.

92. UrbanType

Common Name	Urban Area Type
Definition	The designated code of the Urban Area that the segment is located within
Data Owner	GIS Unit
Extent	Segments that are located within the Urbanized and Urban Areas (represented as the Smoothed Urban Boundaries)
Values	Coded domain
Notes	No data indicates that the segment is rural; any value other than 0 or null indicates that the segment is urban. This field should be used to determine rural/urban designation. This field is not related to whether or not the segment is within a town or city.

Domain:

Value	Description	Notes
Urban Cluster	Urban Cluster	
Urbanized Area	Urbanized Area	

93. UrbanID

Common Name	Urban ID
Definition	The 5-digit Census code of the Urban Area that the segment is located within
Data Owner	GIS Unit
Extent	Segments that are located within the Urbanized and Urban Areas (represented as the Smoothed Urban Boundaries)
Values	Integer; Coded domain – see the metadata or contact the GIS Unit for a full list of codes
Notes	No data indicates that the segment is rural; any value other than 0 or null indicates that the segment is urban. This field should be used to determine rural/urban designation. This field is not related to whether or not the segment is within a town or city.

94. UrbanPop

Common Name	Urban Population
Definition	Population based on the Urban Area that the segment is located within
Data Owner	
Extent	Every segment
Values	Integer; Coded domain
Notes	The populations are estimates of the urban areas that are updated annually. The populations are officially updated by the Census Bureau every ten years. This field is not related to whether or not the segment is within a town or city. Codes 3 -7 are considered Urban.

Domain:

Value	Description	Notes
1	< 2,500	Rural
2	2,500 to 4,999	Reserved for future use; the minimum population of a small urban boundary is 5,000
3	5,000 to 24,999	Urban population between 5,000 and 25,000
4	25,000 to 49,999	Urban population between 25,000 and 50,000
5	50,000 to 99,999	Urbanized population between 50,000 and 99,000
6	100,000 to 199,999	Urbanized population between 100,000 and 200,000
7	> 200,000	Urbanized population greater than 200,000

95. Shape_Length

Common Name	Shape Length
Definition	The two-dimensional length of the segment in feet
Data Owner	GIS Unit
Extent	Every segment
Values	Positive numbers; six decimal places
Notes	This field should not be used to determine the length of segments or routes. Instead the user should create a field and calculate the values to be Ending Milepost minus Beginning Milepost. The official length is based on mileposts because they reflect three-dimensional measurements.

Removed Fields:

(Removed starting 1st Quarter 2022)

96. AppaDevHwy

Common Name	Appalachian Development Highway
Definition	Indicates segments part of the Appalachian Development Highway
Data Owner	OPM (Operations Program Management)

Extent	Where applicable
Values	Coded domain
Notes	

Domain:

Value	Description	Notes
Y	Yes	Segment participants in the Appalachian Development Highway program

97. CounterPkLanes

Common Name	Counter Peak Lanes
Definition	The number of lanes in the counter-peak direction of flow during the peak hour, in cases where it cannot be derived from the number of lanes
Data Owner	OPM (Operations Program Management)
Extent	HPMS Samples
Values	Positive numbers
Notes	For example, a four-lane road in which one of the lanes is reversed during the peak hour to accommodate traffic movement would have a Counter Peak Lanes value of 1 and a Peak Lanes value of 3. If there is no data in the field, assume that the Counter Peak Lanes is ½ the Number of Lanes on undivided roads, or the Number of Lanes in the counter peak direction if the road is divided.

(Removed starting 3rd Quarter 2020)

98. HOVAccess

Common Name	HOV Access
Definition	The type of access of HOV lanes
Data Owner	OPM (Operations Program Management)
Extent	Where applicable
Values	Coded domain

Domain:

Value	Description	Notes
2 or More	2 or More People	Vehicles with 2 or more persons allowed
Buses	Buses Only	Buses only

(Removed starting 2nd Quarter 2019)

99. StructurID

Common Name	Structure ID
Definition	Structure Identifier
Data Owner	OPM (Operations Program Management)
Extent	Where available
Values	Text

100.   StructurType   [STRCTR_CD]

Common Name	Structure Type
Definition	A structure (bridge, tunnel or causeway) is present
Data Owner	OPM (Operations Program Management)
Extent	Populated on primaries; sparsely populated on other route classes

Values	Text; Coded domain

Domain:

Value	Description	Notes
Bridge	Bridge	Bridges and pipes greater than 20 feet
Tunnel	Tunnel	
Causeway	Causeway	

(removed starting 4th Quarter 2016)

101.   SHS [SHS_TYP_CD]

Common Name	State Highway System
Definition	An internal classification system based on route class and Municipal Boundaries
Data Owner	GIS Unit
Extent	Every segment
Values	Coded domain (integer)
Notes	"Rural" refers to a segment that is outside of municipality limits and is not related to the Urban Area boundaries.

Domain:

Value	Description	Notes
1	Rural Primary	Interstate, US or NC route not within a municipal boundary
2	Mun Primary (Over 5000)	Interstate, US or NC route within a municipality with a population over 5,000
3	Mun Primary (Under 5000)	Interstate, US or NC route within a municipality with a population under 5,000
4	Rural Secondary	Secondary Route not within a municipal boundary
5	Mun Secondary (Over 5000)	Secondary Route within a municipality with a population over 5,000
6	Mun Secondary (Under5000)	Secondary Route within a municipality with a population under 5,000
7	Non-System	Municipality-maintained road
8	Other State Agency	Other state agency-maintained road
9	Federal	Federal agency-maintained road
10	Rural Ramp	Ramp not within a municipal boundary
11	Mun Ramp (Over 5000)	Ramp within a municipality with a population over 5,000
12	Mun Ramp (Under 5000)	Ramp within a municipality with a population under 5,000
14	Projected	Projected road

102.   [RouteX Class]

Common Name	Route Class
Definition	The NCDOT route class code for Co-Routes 2-6
Data Owner	GIS Unit
Extent	Every segment except for gap segments
Values	Coded domain
Notes	Route Class drives the 1st digit of the Route ID or 11-Digit Route Number. Derived from Route

Domain:

Value	Description	Notes
I	Interstate	State-maintained (exceptions noted in the Ownership field)
US	US Route	State-maintained (exceptions noted in the Ownership field)

NC	NC Route	State-maintained (exceptions noted in the Ownership field)
SR	Secondary Route	State-maintained (exceptions noted in the Ownership field)
RMP	Ramp, Rest Areas, Non-Mainline	Typically state-maintained but not counted towards state-maintained mileage
PRJ	Projected	Generalized locations of major facilities that have not yet been built
LOC	Municipal	Federal-aid roads maintained by municipalities
SP	Other State Agency Route	Federal-aid roads maintained by other state agencies
FED	Federal Route	Federal-aid roads maintained by federal agencies
NA	NA	Indicates no co-route present (used for route classes 2 -6 only)

103.   [RTE_X_NBR]

Common Name	Route Number
Definition	The NCDOT route number for Co-Routes 2-6
Data Owner	GIS Unit
Extent	Every segment
Values	Positive numbers
Notes	A value of 0 in the dominant route indicates that the segment is a gap; a value of 0 in RTE_2_NBR – RTE_6_NBR means that there is no co-route present. The Route Number is in the 4th – 8th positions of the Route ID and 8-Digit Route Number.

104.   [RTE_X_PRIM_CD]

Common Name	Route Qualifier
Definition	An additional code that further defines the Co-Route 2-6
Data Owner	GIS Unit
Extent	Every segment
Values	Coded domain
Notes	On state-maintained routes, values of Normal indicate the regular route and other values indicate a related route (e.g., I-95 and I-95 Business). The Route Qualifier is represented in the 2nd position of the Route ID and the 8-Digit Route Number. An exception is that rest areas begin with 81 even though they have a 0 value for the RTE_X_PRIM_CD, so that they can be distinguished from ramps by the Route ID.

Domain:

Value	Description	Notes
0	Normal	On most routes this indicates it is the normal route. If the route class is FED, then Normal/0 means Blue Ridge Parkway
1	Alternate, Rest Area	If the route class is FED, then Alternate/1 means the road is owned by the military. If the route class is RMP, then Alternate/1 means it is a rest area.
2	Bypass Route	
5	East Route	This is only used for US-19 East which is a different route than US-19
6	West Route	This is only used for US-19 West which is a different route than US-19
7	Connector Route	If the Route Class is Interstate, then the route is a spur; if the Route Class is US or NC Route then the route is a connector
8	Truck Route	
9	Business Route, Non-Mainline	
99	NA	Indicates no co-route present (used for routes 2 -6)

105.   [RTE_X_DDIR_CD]

Common Name	Route Direction
Definition	The NCDOT route direction for Co-Routes 2-6
Data Owner	GIS Unit

Extent	Every segment
Values	Coded domain
Notes	Inventory directions are Inventory (0) and Clockwise (8). All other values indicate the non-inventory direction of the route. To determine if the route is one-way or both directions of travel, use the One-way Direction Flag (i.e., Inventory Route Direction and Both Directions for the One-way Direction Flag imply that the route is bidirectional). The Route Direction is represented in the 3rd position of the Route ID and the 8-Digit Route Number.

Domain:

Value	Description	Notes
0	Inventory	Includes bidirectional, Northbound, Eastbound, and one-way inventory
4	Non-Inventory (Southbound)	On secondary routes, rest areas and non-state maintained route classes, "Southbound" means non-inventory
6	Non-Inventory (Westbound)	
8	Inventory (Clockwise)	
9	Non-Inventory (Counterclockwise)	

106.   LUPD_A_DATE

Common Name	Last Attribute Update
Definition	The date of the last LRS-attribute change (all of the fields listed before Route Name in this document) to the segment
Data Owner	GIS Unit
Extent	Every segment
Values	Dates
Notes	The date 6/1/2006 indicates that the segment has not had an LRS-attribute edit since the LRS went live in 2006.

107.   LUPD_F_DA TE

Common Name	Last Feature Update
Definition	The date of the last geometric change to the segment
Data Owner	GIS Unit
Extent	Every segment
Values	Dates
Notes	The date reflects either the date that the feature was created or the last time it was modified. The date 6/1/2006 indicates that the segment has not had a geometric edit since the LRS went live in 2006.

108.   [RTE_RMP_CD]

Common Name	Ramp Routes
Definition	A list of route classifications that the ramp connects to
Data Owner	GIS Unit
Extent	Sparsely populated
Values	Coded domain
Notes	Applies to the entire ramp, not just that particular segment (ramps connect facilities and may be comprised of multiple segments).

Domain:

Value	Description	Notes
I	Interstate	Ramp connects to Interstates
US	US	Ramp connects to US Routes
NC	NC	Ramp connects to NC Routes
SR	SR	Ramp connects to Secondary Routes

I&US	I&US	Ramp connects an Interstate and US Route
I&NC	I&NC	Ramp connects an Interstate and NC Route
I&SR	I&SR	Ramp connects an Interstate and Secondary Route
US&NC	US&NC	Ramp connects a US Route and NC Route
US&SR	US&SR	Ramp connects a US Route and Secondary Route
NC&SR	NC&SR	Ramp connects an NC Route and Secondary Route
I&NC&US&SR	I&NC&US&SR	Ramp connects an Interstate, NC Route, US Route and Secondary Route
I&NC&US	I&NC&US	Ramp connects an Interstate, NC Route and US Route
I&NC&SR	I&NC&SR	Ramp connects an Interstate, NC Route and Secondary Route
I&US&SR	I&US&SR	Ramp connects an Interstate, US Route and Secondary Route
NONE	Null	Data not populated

109. [ShieldType]

Common Name	Shield Type
Definition	The type of highway shield used to label the route
Data Owner	GIS Unit
Extent	Every segment
Values	Text

110. G1_FtSeg_Id

Common Name	G1_FtSeg_Id
Definition	Numbers assigned to LRS segments that can be used in Linear Referencing operations
Data Owner	GIS Unit
Extent	Every Segment
Values	Positive and negative numbers
Notes	A single G1 FTSEG may be made up of several individual segments. G1 FTSEGs are measured from 0 (From Percent) to 1 (To Percent). G1 FTSEGs can be split at LRS segment breaks (intersections, county boundaries, direction changes, historic changes and pseudo nodes) and can also be split at event breaks (changes in one of the characteristics of the road). Segments that have the same G1 FTSEG would have unique, non-overlapping From and To Percent measures. G1 FTSEG is stable and does not change between publications. Should be used as the route identifier when performing LRS analysis using G1 referencing.

111. Frm_Evnt_Pct

Common Name	From Percent
Definition	The length of every G1 FTSEG is normalized from 0 – 1 (to indicate the percentage of the total segment length). The From Measure is the location along the Route ID where the event segment begins.
Data Owner	GIS Unit
Extent	Every Segment
Values	Positive numbers; six decimal places
Notes	From Percent should be used when performing LRS analysis using G1 referencing as the To-Measure field.

112. To_Evnt_Pct

Common Name	To Percent
Definition	The location along the G1 FTSEG where the segment ends
Data Owner	GIS Unit
Extent	Every Segment
Values	Positive numbers; six decimal places

Notes	A segment with a From Percent value of 0 and a To Percent value of 1 represents the entire G1 FTSEG; the segment has never been split by LRS or event changes. To Percent should be used when performing LRS analysis using G1 referencing as the To-Measure field.

113.   RTE_X_START

Common Name	Route Start
Definition	The beginning segment of the route
Data Owner	GIS Unit
Extent	Every segment
Values	Coded domain
Notes	Divided routes have a start in each direction. This field is used to create milepost values.

Domain:

Value	Description	Notes
0	Not start	
1	Start	
9	NA	Indicates no co-route present (used for routes 2-6)

114.   RVRS_ATRBT_IND

Common Name	Reverse Segment Indicator
Definition	A flag that indicates whether the segment is facing in its original direction or if it has been physically flipped
Data Owner	GIS Unit
Extent	Every segment
Values	Coded domain
Notes	Segments that have been flipped since they were originally created are marked as "Yes." The milepost values are opposite of the line orientation on flipped segments because the line direction follows the G1 linear referencing method which does not change when a segment is flipped.

Domain:

Value	Description	Notes
0	No	Segment is not flipped
1	Yes	Segment has been flipped
9	NA	Segment is not flipped

115.   PVMT_QLTY_TYP_CD

Common Name	Petition Pavement Condition
Definition	A general assessment of the pavement condition at the time that the road is added to the system
Data Owner	OPM (Operations Program Management)
Extent	New Secondary Routes
Values	Coded domain
Notes	This data is only entered on Secondary Routes that are added to the system by Petition or Municipal Agreement and is used by the Pavement Management Unit.

Domain:

Value	Description	Notes
EXCELLENT	EXCELLENT	
GOOD	GOOD	
FAIR	FAIR	
POOR	POOR	

116. [LOC_2_CNTY_CD]

Common Name	Location Two County
Definition	For roads that are on the county line, it is the adjacent county
Data Owner	GIS Unit
Extent	Every segment
Values	Coded domain – see the metadata or contact the GIS Unit for a full list of codes
Notes	Every value other than NA indicates that the road is on the county boundary.