NCRouteCharacteristics Field Descriptions

General Notes:

The layer contains route data maintained by the state and counties. Text in brackets, [], represent the previous field name. 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: 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,
- 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

Gene	ral Notes:	1
Field	Definitions:	6
1.	OBJECTID	6
2.	Shape	6
3.	Division	6
4.	MaintCntyCode [MAINT_CNTY_CD]	6
5.	LocCntyCode [LOC_1_CNTY_CD]	6
6.	RouteClass [RTE_1_CLSS_CD]	6
7.	RouteNumber [RTE_1_NBR]	7
8.	RouteQualifier [RTE_1_PRIM_CD]	7
9.	RouteInventory [RTE_1_DDIR_CD]	8
10.	Direction	8
11.	TravelDirection [ONEWAY_DIR_FLG]	8
12.	RouteMaintCode [RTE_STATUS_CD]	9
13.	RouteName [STREET_NAME]	9
14.	StreetName [STREET_NAME]	9
15.	SrcDocType [SRCDOC_TYP_CD]	9
16.	SrcDocID [SRCDOC_NBR]	10
17.	GeoDocType [REVDOC_TYP_CD]	10
18.	GeoDocID [REVDOC_NUM]	10
19.	RouteID [Rte_ld]	10
20.	MPLength [MP_LENGTH]	11
21.	LaneMiles [LANE_MILES]	11
22.	BeginMp1 [BegMp1]	11
23.	EndMp1 [EndMp1]	11
24.	BeginFeatureID [Beg_Intersect]	11
25.	EndFeatureID [End_Intersect]	11
26.	RouteIDX [RouteX]	12
27.	BeginMpX [BegMpX]	12
28.	EndMpX [EndMpX]	12
29.	AccessCont [ACS_CNTRL_TYP_CD]	12
30.	AddDate [ADTN_DT]	12
31.	AddDocID [ADTN_DCMT_ID]	13
32.	AddDocType [ADTN_DCMT_TYP_CD]	13

33.	AppaDevHwy	13
34.	BarePvmtRoute [BARE_PVMNT_CD]	13
35.	BaseDetail [BASE_DTL_TYP_CD]	14
36.	BaseThickness [BTHCK_HGT]	14
37.	DesignSpd [DS_NBR]	14
38.	FcltyType [FCLTY_TYP_CD]	15
39.	FuncClass [FC_TYP_CD]	15
40.	FuncClassDate	15
41.	HOVLnCount [HOV_LN_CNT]	15
42.	HOVType [HOV_TYP_CD]	16
43.	ImprvtDate [IMPTYP_DT]	16
44.	ImprvDocID	16
45.	ImprvDocType [IMP_DCMT_ID]	16
46.	ImprvType [IMPTYP_CD]	17
47.	LaneWidth	17
48.	LftPvdShldrWidth [SW_PVD_LFT_QTY]	18
49.	LftShldrType [SHLDR_LFT_TYP_CD]	18
50.	LftShldrWidth [SHLDR_WID_LFT_QTY]	18
51.	LftTrnLnType [TRNLN_LFT_TYP_CD]	18
52.	LftTrnLnWidth [TRNLN_LFT_WID]	19
53.	MaintOps	19
54.	MedianType [MDN_TYP_CD]	20
55.	MedianWidth [MDN_WID]	20
56.	NHS [NHS_TYP_CD]	20
57.	NHSDate [NHS_DT]	21
58.	OwnerName	21
59.	OwnerType [OWNR_TYP_CD]	21
60.	CounterPkLanes [CNTR_PEAK_LANE_QTY]	22
61.	PeakLanes [PEAK_LNS_QTY]	22
62.	PostedRoute [PSTD_RTE_CD]	22
63.	ROW [RW_WID]	22
64.	RtPvdShldrWidth [SW_PVD_RGT_QTY]	23
65.	RtShldrType [SHLDR_RGT_TYP_CD]	23
66.	RtShldrWidth [SHLDR_WID_RGT_QTY]	23
67.	RtTrnLnType [TRNLN_RGT_TYP_CD]	23

68.	RtTrnLnWidth [TRNLN_RGT_WID]	24
69.	SampleID [SMPL_ID_NBR]	24
70.	SpeedLimit [SPD_LMT_TYP_CD]	24
71.	MilitaryBase [MLTRY_BASE_CD]	24
72.	SrfcDetail [SRFC_DTL_TYP_CD]	24
73.	SrfcThickness [STHCK_HGT]	25
74.	SrfcType [SRFC_TYP_CD]	25
75.	SrfcWidth [SRFC_WID]	26
76.	STRAHNETDate	26
77.	STRAHNETType [SHN_TYP_CD]	26
78.	StreetName	26
79.	TerrainType [TRRN_TYP_CD]	26
80.	ThruLaneCount [NBR_LANE_QTY]	27
81.	TollCharged [SPTLLN_TYP_CD]	27
82.	TollID [TOLL_ID_NBR]	27
83.	TollType [TOLL_TYP_CD]	27
84.	MunPopGroup [PPLTN_GRP_TYP_CD]	28
85.	TownCode [TWN_CD]	28
86.	TownName	28
87.	TrkRoute [TRCK_RTE_TYP_CD]	28
88.	TrkRouteDate	29
89.	UrbanType	29
90.	UrbanID [URBN_ID_CD]	29
91.	UrbanPop [RU_PPLTN_TYP_CD]	29
92.	Shape_Length	30
Remove	ed Fields:	30
93.	HOVAccess	30
94.	StructurID	30
95.	StructurType [STRCTR_CD]	31
96.	SHS [SHS_TYP_CD]	31
97.	[RouteX Class]	31
98.	[RTE_X_NBR]	32
99.	[RTE_X_PRIM_CD]	32
100.	[RTE_X_DDIR_CD]	33
101.	LUPD_A_DATE	33

102.	LUPD_F_DA TE	33
103.	[RTE_RMP_CD]	33
104.	[ShieldType]	34
105.	G1_FtSeg_Id	34
106.	Frm_Evnt_Pct	34
107.	To_Evnt_Pct	34
108.	RTE_X_START	35
109.	RVRS_ATRBT_IND	35
110.	PVMT_QLTY_TYP_CD	35
111.	[LOC_2_CNTY_CD]	36

Field Definitions:

1. OBJECTID

Object Identifier	
A unique number that is automatically generated for each segment	
GIS Unit	
Every Segment	
Positive numbers	
The Object Identifier changes with each publication.	

2. Shape

Common	Shape
Name	
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	Division	
Name		
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 [MAINT_CNTY_CD]

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		
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 [LOC_1_CNTY_CD]

Common	mmon Location County; (Sap County Code)	
Name		
Definition	The county that the segment is physically located in	
Data Owner	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 [RTE 1 CLSS CD]

o. Itouteoluss	[112_1_0100_05]
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
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 [RTE_1_NBR]

Common	Route Number
Name	
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 4 th – 8 th positions of the RouteID

8. RouteQualifier [RTE_1_PRIM_CD]

Common	Route Qualifier		
Name			
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 2 nd 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.		

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	
89	Non-Mainline	
9	Business Route	

9. RouteInventory [RTE_1_DDIR_CD]

Common	Route Inventory	
Name		
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 3 rd position of the RouteID.	

Domain:

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

10. Direction

Common	Direction
Name	
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		
00	Oneway Opposite		
CW	Clockwise		
CC	Counterclockwise		

11. TravelDirection [ONEWAY_DIR_FLG]

Common	Travel Direction
Name	
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 [RTE_STATUS_CD]

Common	Route Maintenance Code
Name	
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 = RouteClass IN (1,2,3,4,8,9); Non-System = RouteClass IN (5,6,7)

13. RouteName [STREET_NAME]

Common	Route Name
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 [STREET_NAME]

Common	Street Name
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 [SRCDOC_TYP_CD]

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.	

Value	Description	Notes
N	Not-Verified	Indicates either legacy segments or that the source document is
		unknown
Р	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	
М	Municipal Agreement	The municipal agreement number is stored in the Source Document field
0	Other	

16. SrcDocID [SRCDOC_NBR]

Common	Source Document	
Name		
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 [REVDOC_TYP_CD]

Common	Revision Source Type	
Name		
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
Α	Aerial Photo	Indicates that the segment has been photo revised
С	Local Centerline	
Р	Parcels	
L	Plat	
G	GPS	
F	Field Research	
0	Other	

18. GeoDocID [REVDOC_NUM]

Common	Revision Source	
Name		
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 [Rte_ld]

Common	Route Identifier for Dominant Route	
Name		
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 [MP_LENGTH]

Common	Milepost Length	
Name		
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 [LANE_MILES]

Common	Lane Miles	
Name		
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 lar	
	miles should exclude unpaved roads.	

22. BeginMp1 [BegMp1]

Common	Beginning Milepost for Dominant Route	
Name		
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 [EndMp1]

Common	Ending Milepost for Dominant Route	
Name		
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 [Beg_Intersect]

Common	Beginning Intersection Feature for Dominant Route	
Name		
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 [End_Intersect]

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 [RouteX]

Common	11-Digit Route Number	
Name		
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 [BegMpX]

Common	Beginning Milepost
Name	
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 [EndMpX]

Common	Ending Milepost	
Name		
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. AccessCont [ACS_CNTRL_TYP_CD]

Common	Access Control	
Name		
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		

30. AddDate [ADTN_DT]

Common	Addition Date	
Name		
Definition The date that the section of road the road was constructed, or the date that the road was		
	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	

31. AddDocID [ADTN_DCMT_ID]

Common	Addition Document
Name	
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	

32. AddDocType [ADTN_DCMT_TYP_CD]

Common	Addition Document Type	
Name		
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	

33. AppaDevHwy

Common	Appalachian Development Highway	
Name		
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
Υ	Yes	Segment participants in the Appalachian Development Highway
		program

34. BarePvmtRoute [BARE_PVMNT_CD]

Common	Bare Pavement System
Name	
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
Υ	Yes	Segment is part of the Bare Pavement System

35. BaseDetail [BASE_DTL_TYP_CD]

Common	Detailed Base Type	
Name		
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		

36. BaseThickness [BTHCK_HGT]

Common	Base Thickness	
Name		
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.	

37. DesignSpd [DS_NBR]

Common	Design Speed	
Name		
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	

38. FcltyType [FCLTY_TYP_CD]

Common	Facility Type
Name	
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		

39. FuncClass [FC_TYP_CD]

Common Name	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.	
Definition		
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	

40. FuncClassDate

Common	Functional Classification Date	
Name		
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	

41. HOVLnCount [HOV_LN_CNT]

Common	HOV Lanes
Name	
Definition	The number of HOV lanes

Data Owner	OPM (Operations Program Management)	
Extent	Where applicable	
Values	Positive numbers; domain range 1 - 12	

42. HOVType [HOV_TYP_CD]

Common	HOV Type
Name	
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

43. ImprvtDate [IMPTYP_DT]

Common	Improvement Date	
Name		
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.	

44. ImprvDocID

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

45. ImprvDocType [IMP_DCMT_ID]

Common	Improvement Document Type	
Name		
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.	

Value	Description	Notes
TIP	TIP	
Resrfc	Resurfacing Package	

PR	Paving Report
Other	Other

46. ImprvType [IMPTYP_CD]

Common	Improvement Type	
Name		
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.	
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		

47. LaneWidth

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

48. LftPvdShldrWidth [SW_PVD_LFT_QTY]

Common	Left Paved Shoulder Width	
Name		
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	

49. LftShldrType [SHLDR_LFT_TYP_CD]

Common	Left Shoulder	
Name		
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			

50. LftShldrWidth [SHLDR_WID_LFT_QTY]

Common	Left Shoulder Width	
Name		
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.	

51. LftTrnLnType [TRNLN_LFT_TYP_CD]

Common	Left Turn Lane	
Name		
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.	

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

52. LftTrnLnWidth [TRNLN_LFT_WID]

Common	Left Turn Lane Width
Name	
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

53. MaintOps

Common	Maintenance Operation	
Name		
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	Numeric; 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.	

Value	Description	Notes
2	County Highway Agency	County highway agency
3	Town or Township Highway Agency	Town or township 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
21	Other State Agency	Other state agency
25	Other Local Agency	Other local agency
26	Private (other than Railroad)	Private (other than Railroad)
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

54. MedianType [MDN_TYP_CD]

Common	Median	
Name		
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)

55. MedianWidth [MDN_WID]

Common	Median Width
Name	
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 <i>length</i> 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.

56. NHS [NHS_TYP_CD]

Common	National Highway System (NHS)	
Name		
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.	

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	NHS Connector – Major Public Transit Terminal

	Passenger 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

57. NHSDate [NHS_DT]

Common	NHS Date
Name	
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

58. OwnerName

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

59. OwnerType [OWNR_TYP_CD]

Common	Ownership type		
Name			
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.		

Value	Description	Notes	
2	County Highway Agency	County highway agency	
3	Town or Township Highway Agency	Town or township 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	
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	

60. CounterPkLanes [CNTR_PEAK_LANE_QTY]

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.	

61. PeakLanes [PEAK_LNS_QTY]

Common	Peak Lanes	
Name		
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.	

62. PostedRoute [PSTD_RTE_CD]

Common	Posted Route		
Name			
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.		

63. ROW [RW_WID]

Common	Right of Way
Name	
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.

64. RtPvdShldrWidth [SW_PVD_RGT_QTY]

Common	Right Paved Shoulder Width
Name	
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

65. RtShldrType [SHLDR_RGT_TYP_CD]

Common	Right Shoulder
Name	
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		

66. RtShldrWidth [SHLDR_WID_RGT_QTY]

Common	Right Shoulder Width
Name	
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.

67. RtTrnLnType [TRNLN_RGT_TYP_CD]

Common	Right Turning Lane
Name	
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.

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

68. RtTrnLnWidth [TRNLN_RGT_WID]

Common	Right Turning Lane Width	
Name		
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	

69. SampleID [SMPL_ID_NBR]

Common	Sample ID	
Name		
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.	

70. SpeedLimit [SPD_LMT_TYP_CD]

Common	Speed Limit	
Name		
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.	

71. MilitaryBase [MLTRY_BASE_CD]

	· =	
Common	STRAHNET Military Base	
Name		
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	

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

Common	Detailed Surface Type	
Name		
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	

73. SrfcThickness [STHCK_HGT]

Common	Surface Thickness	
Name		
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	

74. SrfcType [SRFC_TYP_CD]

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

Value	Description	Notes
Unpaved	Unpaved	
Bitum	Bituminous	
JPCP	JPCP	
		Continuously reinforced concrete pavement Jointed plain concrete
CRCP	CRCP	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

OHEL WHEDDONG DIGN	Other	Other (includes bridge decks, whitetopping, brick)	Other (includes bridge decks, whitetopping, brick, etc.)
--------------------	-------	--	--

75. SrfcWidth [SRFC_WID]

Common	Surface Width		
Name			
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 that side of the median. On paved roads, the Surface Width is edge of pavement to edge of pavement (includes paved shoulders).			

76. STRAHNETDate

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

77. STRAHNETType [SHN_TYP_CD]

Common	STRAHNET	
Name		
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	

78. StreetName

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

79. TerrainType [TRRN_TYP_CD]

Common	Terrain	
Name		
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		

80. ThruLaneCount [NBR_LANE_QTY]

Common	Through Lanes	
Name		
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.	

81. TollCharged [SPTLLN_TYP_CD]

Common	Toll Charged	
Name		
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	

82. TollID [TOLL_ID_NBR]

Common	Toll ID	
Name		
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 Parkway	
194	Western Wake Expressway	

83. TollType [TOLL_TYP_CD]

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

Value	Description	Notes	
Regular	Regular Toll		

84. MunPopGroup [PPLTN_GRP_TYP_CD]

Common	Municipal Population Group
Name	
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

85. TownCode [TWN_CD]

Common	Town Code
Name	
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.

86. TownName

Common	Town Name
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	

87. TrkRoute [TRCK_RTE_TYP_CD]

Common	Truck Route
Name	
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
	Not a Parkway- Trucks/Commercial Vehicles	Not a parkway – trucks and commercial
4	Prohibited	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)

88. TrkRouteDate

Common	Truck Route date
Name	
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.

89. UrbanType

Common	Urban Area Type
Name	
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			

90. UrbanID [URBN_ID_CD]

Common	Urban ID	
Name		
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.	

91. UrbanPop [RU_PPLTN_TYP_CD]

Common	Urban Population	
Name		
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
		Reserved for future use; the minimum population of a small urban
2	2,500 to 4,999	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

92. Shape_Length

Common	Shape Length	
Name		
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 3rd Quarter 2020)

93. HOVAccess

Common	HOV Access	
Name		
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)

94. StructurID

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

95. StructurType [STRCTR_CD]

Common	Structure Type	
Name		
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)

96. SHS [SHS_TYP_CD]

• –	- ·	
Common	State Highway System	
Name		
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		Interstate, US or NC route within a municipality with a population over
	Mun Primary (Over 5000)	5,000
3		Interstate, US or NC route within a municipality with a population under
	Mun Primary (Under 5000)	5,000
4	Rural Secondary	Secondary Route not within a municipal boundary
5	Mun Secondary (Over	Secondary Route within a municipality with a population over 5,000
	5000)	Cooling reduce within a maniopality with a population ever 6,000
6	Mun Secondary	Secondary Route within a municipality with a population under 5,000
	(Under5000)	Occordary Route within a manicipality 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

97. [RouteX Class]

Common	Route Class	
Name		
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-	Typically state-maintained but not counted towards state-maintained
	Mainline	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)

98. [RTE_X_NBR]

Common	Route Number
Name	redio rembol
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 4 th – 8 th
	positions of the Route ID and 8-Digit Route Number.

99. [RTE_X_PRIM_CD]

Common	Route Qualifier	
Name		
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 2 nd 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.	

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)

100. [RTE_X_DDIR_CD]

Common	Route Direction
Name	
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 3 rd 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)	

101. LUPD_A_DATE

Common	Last Attribute Update	
Name		
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.	

102. LUPD_F_DA TE

Common	Last Feature Update	
Name		
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.	

103. [RTE_RMP_CD]

Common	Ramp Routes	
Name		
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).	

Value	Description	Notes
1	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

104. [ShieldType]

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

105. G1_FtSeg_ld

Common	G1_FtSeg_ld	
Name		
Definition	Numbers assigned to LRS segments that can be used in Linear Referencing operations	
Data Owner	er 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.	

106. Frm_Evnt_Pct

Common Name	From Percent	
Definition The length of every G1 FTSEG is normalized from 0 − 1 (to indicate the percentage of segment length). The From Measure is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the expectation is the location along the Route ID where the location is the location along the Route ID where ID		
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.	

107. To_Evnt_Pct

	1
Common	To Percent
••••	10100110

Name	
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.

108. RTE_X_START

Common	Route Start
Name	
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)

109. 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 milepost values are opposite of the line orientation on flipped segments because the follows the G1 linear referencing method which does not change when a segment				

Domain:

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

110. PVMT_QLTY_TYP_CD

Common	Petition Pavement Condition			
Name				
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.			

Value	Description	Notes		
EXCELLENT	EXCELLENT			
GOOD	GOOD			

FAIR	FAIR			
POOR	POOR			

111. [LOC_2_CNTY_CD]

Common	Location Two County		
Name	•		
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.		