# StructuresPoint, 4th Quarter 2022 - NC Department of Transportation

#### **File Geodatabase Feature Class**



Tags

Bridge, Pipe, Culvert, Bridge Maintenance Unit, SIP, SDV, Structures

#### **Summary**

Provide all currently-inventoried NC bridge structures in one consistent format for query and display. **Description** 

Point file representing North Carolina bridges and other structures, extracted and attributed by the NCDOT Bridge Maintenance Unit's bridge database.

#### **Credits**

The bridge layer is a compilation of data originally found in the Bridge Inventory maps produced by the Mapping group of the State Road Maintenance Unit which has been supplemented with updates from the bridge database of the NCDOT's Bridge Maintenance Unit.

#### **Use limitations**

The availability and accuracy of the bridge dataset is dependent upon an ongoing process of integration between the NCDOT GIS Unit and the Bridge Maintenance Unit's bridge database. Discrepancies may exist since the frequency with which the sources are updated is not the same among the different groups. Please take this into account prior to utilizing the GIS bridge layer.

#### **Extent**

West -84.402343 East -75.423872

North 36.614200 South 33.769569

#### **Scale Range**

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

#### ArcGIS Metadata >

#### **Topics and Keywords** ▶

THEMES OR CATEGORIES OF THE RESOURCE environment, inlandWaters, location, planningCadastre, structure, transportation

PLACE KEYWORDS North Carolina

TEMPORAL KEYWORDS Bridges - 4th Quarter 2022, Roads - 3rd Quarter 2022

THEME KEYWORDS Bridge, Pipe, Culvert, bridge maintenance, SIP, SDV, Structures Management Unit, structures

Hide Topics and Keywords ▲

#### **Citation** ▶

TITLE StructuresPoint, 4th Quarter 2022 - NC Department of Transportation

PUBLICATION DATE 2022-11-07 00:00:00

PRESENTATION FORMATS \* digital map

Hide Citation ▲

#### **Citation Contacts** ▶

**RESPONSIBLE PARTY** 

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE point of contact

#### CONTACT INFORMATION

PHONE

VOICE 919.707.2165

FAX 919.707.2210

#### ADDRESS

TYPE physical

DELIVERY POINT 4101 Capital Boulevard

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27604

COUNTRY US

E-MAIL ADDRESS gishelp@ncdot.gov

#### Hours of Service

8 am to 5 pm, M-F

#### **CONTACT INSTRUCTIONS**

For further information about bridge attributes, contact Cary Clemmons of the Bridge Maintenance Unit, at (919) 707-6458 or cclemmons@ncdot.gov

Hide Contact information ▲

#### **RESPONSIBLE PARTY**

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE resource provider

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CONTACT'S ROLE originator

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Hide Contact information ▲

#### Hide Citation Contacts

#### Resource Details ▶

DATASET LANGUAGES \* English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE \* vector

#### SUPPLEMENTAL INFORMATION

\*\*\*\*\*This bridge layer contains many kinds of structures currently maintained by the Bridge Maintenance Unit (BMU) of the NCDOT. They reflect an ongoing attempt by the NCDOT GIS Unit to portray the traffic-carrying structures found in the NCDOT BMU's Bridge Database and shown in the GIS Bridge layer in as timely a manner as possible. Until such time as the GIS Unit can approximate the

maintenance schedule of the BMU, the GIS layer may not accurately reflect the structures currently in service or the additions and deletions to the Bridge Inventory system which are performed on a daily basis by the BMU.\*\*\*\*\*

#### Recent attribute changes:

All TIER-related fields were removed for the 1st Quarter 2016 release. TIER values are no longer being utilized or maintained by the NCDOT.

Sign structures have been included in the data release for 1st Quarter 2016. These structures include Overhead, Cantilever and T-Pole signs. Points for Cantilever and T-Pole signs are snapped to the route closest to the main pole of the sign. Points for Overhead signs are snapped to the inventory direction of the route passing under the sign.

#### 2 new fields were added for the 1st Qtr 2015 release:

- GOOGLE\_LINK this field contains a hyperlink that will spawn a Google map location centered on the selected structure. Users should select the lightning-bolt shaped "Hyperlink" tool in ArcMap in order to utilize this field. SDV users can do an "Identify" on the structure, followed by a click on this hyperlink field to create a Google map.
- MAINT\_RESP this is a new field indicating the agency with maintenance responsibility for the structure and can be used to indicate the difference between city or state maintenance for a structure. The main code indicating state maintenance is "01," while the main code for city maintenance is "04," although there are other codes for both. Please see the metadata entry for this field for a list of current enumerated codes and associated agencies.

Following the introduction of the new MAINT\_RESP field, structures have been renamed to remove the "CITY" designation in the BRDG\_TYP\_NM field. Users can now distinguish city types by using MAINT\_RESP code described above. BRDG\_TYP\_NM will now only contain the name of the structure type and no information concerning maintenance responsibility.

Please refer to the Attribute section of this metadata for more information on the new attributes, as well as descriptions of some of the values.

#### Older attribute changes:

Item names for 4 of the fields in the shapefile and derived tables have changed to match the item names found in the map services. The names changed are:

BRIDGE\_NUM changed to BRDG\_NBR;

TYPE changed to BRDG\_TYP\_NM, which will be truncated in the shapefile to BRDG\_TYP\_N; BSIP\_BNUM changed to BSIP\_BRDG\_NUM, which will be truncated in the shapefile to BSIP\_BRDG\_; ServiceOn has been capitalized to SERVICEON.

Many fields were previously added to the bridge layer for customer use. These include: Coordinate information fields - X,Y coordinates in NAD 83 Stateplane Feet have been added, along with latitude/longitude coordinates in Geographic Decimal Degrees. Route-milepost information has also been included. Please note the milepost value is derived from the RTE\_ID field - this 10-digit field is a concatenation of the 8-digit ROUTE number and the 2-digit county number and there are a small number of instances across the state where the county number may differ from the COUNTY name carried by the BMU Bridge Database. These are usually cases of structures on or very near a county line and the structure's location along a route may differ from the county assigned by the bridge database.

Many fields from the bridge database have been added to make the shapefile (downloadable from the GIS Unit's Data Distribution page) the equivalent of the bridge map service found in the Spatial Data Viewer (SDV). These include functional class designations, sufficiency ratings, and posted weight values.

Added TYPEs include PAVEMENT ON PILES. FEDERAL BRIDGE replaces "Gov't Bridge;" FERRY RAMP replaces "Ferry;" and all TYPE values are now capitalized.

The Verification field was dropped. All structure points have been compared to the latest imagery available at the time of review and visually verified except for the newest structures under construction

which don't appear yet in any imagery. These structures can't be verified until the imagery and linework have been updated. The GIS Unit does NOT guarantee accurate placement of the structure points, but does try to use all available information at the time of review to accomplish it.

RD\_ANGLE and STR\_ANGLE were added to the layer. RD\_ANGLE is the tangent angle of the road closest to the structure point. The STR\_ANGLE is the angle of the structure relative to the road at that same point. Many structure types will parallel the road ( these structures can be found by selecting for "RD\_ANGLE = STR\_ANGLE"). Other structure types may cross the road perpendicularly (culverts, pipes, railroads, and walkways). Most of these are calculated to be 90-degrees off the RD\_ANGLE value, although some may have values assigned manually during spatial reviews. The STR\_ANGLE can be used to assign angled symbols for structure display on maps - be aware, however, that many symbols may need to have their default angles adjusted in their layer's Properties before the value stored in STR\_ANGLE can display the symbol accurately.

\* Processing environment Version 6.2 (Build 9200); Esri ArcGIS 10.8.1.14362

#### **CREDITS**

The bridge layer is a compilation of data originally found in the Bridge Inventory maps produced by the Mapping group of the State Road Maintenance Unit which has been supplemented with updates from the bridge database of the NCDOT's Bridge Maintenance Unit.

Hide Resource Details ▲

#### **Extents** ▶

#### EXTENT

#### **GEOGRAPHIC EXTENT**

#### **BOUNDING RECTANGLE**

EXTENT TYPE Extent used for searching

\* WEST LONGITUDE -84.402343

\* EAST LONGITUDE -75.423872

\* NORTH LATITUDE 36.614200

\* SOUTH LATITUDE 33.769569

\* EXTENT CONTAINS THE RESOURCE Yes

#### EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE 412591.286460

\* EAST LONGITUDE 3050215.764481

\* SOUTH LATITUDE 48904.610063

\* NORTH LATITUDE 1042512.618249

\* EXTENT CONTAINS THE RESOURCE Yes

Hide Extents ▲

#### **Resource Points of Contact** ▶

POINT OF CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE resource provider

#### CONTACT INFORMATION >

**PHONE** 

VOICE 919.707.2165

FAX 919.707.2210

#### **ADDRESS**

Type physical

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Hide Contact information ▲

Hide Resource Points of Contact ▲

#### **Resource Maintenance** ►

#### RESOURCE MAINTENANCE

UPDATE FREQUENCY quarterly

#### OTHER MAINTENANCE REQUIREMENTS

Time Period of content: 4th Quarter 2022 (source date 9/27/22) - Bridges
3rd Quarter 2022 - NCRoutes for route-MP references

#### MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE point of contact

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Hide Resource Maintenance ▲

#### Resource Constraints >

#### **CONSTRAINTS**

LIMITATIONS OF USE

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Hide Resource Constraints ▲

#### **Spatial Reference** ▶

#### ARCGIS COORDINATE SYSTEM

- \* TYPE Projected
- \* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983
- \* PROJECTION NAD\_1983\_StatePlane\_North\_Carolina\_FIPS\_3200\_Feet
- \* COORDINATE REFERENCE DETAILS

#### PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102719

X ORIGIN -121841900

Y ORIGIN -93659000

XY SCALE 3048.0060960121928

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.00328083333333333333

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

LATEST WELL-KNOWN IDENTIFIER 2264

#### **WELL-KNOWN TEXT**

PROJCS["NAD\_1983\_StatePlane\_North\_Carolina\_FIPS\_3200\_Feet",GEOGCS["GCS\_North\_American\_1983 ",DATUM["D\_North\_American\_1983",SPHEROID["GRS\_1980",6378137.0,298.257222101]],PRIMEM["Gree nwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Lambert\_Conformal\_Conic"],PARAMET ER["False\_Easting",2000000.002616666],PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridi an",-

#### REFERENCE SYSTEM IDENTIFIER

- \* VALUE 2264
- \* CODESPACE EPSG
- \* VERSION 6.12(9.0.0)

Hide Spatial Reference ▲

#### **Spatial Data Properties** ►

**VECTOR** 

\* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME StructuresPoint

- \* OBJECT TYPE point
- \* OBJECT COUNT 22787

Hide Vector ▲

#### ARCGIS FEATURE CLASS PROPERTIES

FEATURE CLASS NAME StructuresPoint

- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Point
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 22787
- \* SPATIAL INDEX TRUE
- \* LINEAR REFERENCING FALSE

Hide ArcGIS Feature Class Properties ▲ Hide Spatial Data Properties ▲ **Data Quality** ▶ SCOPE OF QUALITY INFORMATION RESOURCE LEVEL attribute Hide Scope of quality information ▲ DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY **EVALUATION METHOD** There are no measurement, precision, spatial, or data schema standards assigned to this dataset. Hide Data quality report - Quantitative attribute accuracy ▲ DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY **EVALUATION METHOD** There are no measurement, precision, spatial, or data schema standards assigned to this dataset. Hide Data quality report - Conceptual consistency ▲ DATA QUALITY REPORT - COMPLETENESS OMISSION **EVALUATION METHOD** There are no measurement, precision, spatial, or data schema standards assigned to this dataset.

The bridge layer contains many kinds of structures currently maintained by the Structures Management Unit of the NCDOT. They reflect an ongoing integration between the structures found in the GIS bridge layer and the bridge database maintained by the Structures Management Unit. As such, the GIS layer may not accurately reflect the structures currently in service or the additions and deletions to the Bridge Inventory system which are performed on a daily basis.



**DIMENSION** horizontal

#### **EVALUATION METHOD**

Structures were compared for accuracy against the most current imagery and against field inspection reports where necessary. Structure points are snapped to the relevant state-maintained routes in the center of the structures where possible. In the case of intersecting, non-divided routes, the structure point is snapped to the routes' intersection point. In the case of divided highways, the structure point is snapped to the intersection of the inventory sides of the routes. Otherwise, there are no measurement, precision, spatial, or data schema standards assigned to this dataset.

Hide Data quality report - Absolute external positional accuracy ▲

Hide Data Quality ▲

#### Lineage ▶

#### LINEAGE STATEMENT

x,y-coordinate values were collected from Microstation DGN's used in the layout of the Bridge Inventory Maps. These x,v-coordinates were matched to a copy of the Bridge Database supplied by the NCDOT SMU which contained all structures. Matching structures were placed by these x,y-coordinates utilizing the Add XY Data tool in ArcMap. Non-matching structures were extracted and placed using their latitude/longitude values. The two datasets were then merged into one dataset under the NAD83 Stateplane Feet projection, and a process was started to review the positional accuracy of all bridges placed via latitude/longitude and to confirm other structures as deemed necessary.

Quarterly, the GIS Unit requests a bridge database update from SMU and compares this update against the existing GIS Bridge layer. Non-matching structure records are sorted according to whether they are additions or deletions compared to the existing bridge layer. Deletions are removed to a separate layer and additions are merged into the existing layer, followed by a period of review using the latest imagery for location verification. Coordinate information (X,Y's, lat/long's and route-MP's) are updated following this verification.

Because of timing issues, the current quarter's bridge mileposts are usually based on the previous quarter's linework.

Hide Lineage ▲

#### **Distribution** ▶





**CONTACT INFORMATION** 

INDIVIDUAL'S NAME GIS Help Desk

ORGANIZATION'S NAME NCDOT GIS Unit

# CONTACT INFORMATION > **PHONE** VOICE 919.707.2152 FAX 919.707.2214 **ADDRESS** Type physical DELIVERY POINT 4101 Capital Boulevard CITY Raleigh ADMINISTRATIVE AREA NC POSTAL CODE 27604 COUNTRY US E-MAIL ADDRESS gishelp@ncdot.gov Hours of Service 8 am to 5 pm, M-F **CONTACT INSTRUCTIONS** For further information about bridge attributes, contact Cary Clemmons of the Bridge Maintenance Unit, at (919) 707-6458 or cclemmons@ncdot.gov Hide Contact information ▲ Hide Distributor ▲ **DISTRIBUTION FORMAT** \* NAME File Geodatabase Feature Class Hide Distribution ▲ Fields ▶ DETAILS FOR OBJECT StructuresPoint ▶ \* TYPE Feature Class

**DEFINITION** 

\* Row COUNT 22787

#### Bridges and other structures along NC highways

#### **DEFINITION SOURCE**

NCDOT Structures Management Unit

# \* ALIAS Route \* DATA TYPE String \* WIDTH 10

- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

8-digit route number on which structure is located; may be empty for non-verified bridges

#### **DESCRIPTION SOURCE**

NCDIT-T GIS Unit

Hide Field ROUTE ▲

#### FIELD BRDG\_NBR ▶

- \* ALIAS Bridge Number
- \* DATA TYPE String
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

2-digit county number + 4-digit bridge number

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field BRDG\_NBR ▲

# FIELD Shape ▶ \* ALIAS Shape \* DATA TYPE Geometry \* WIDTH 0 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Feature geometry. **DESCRIPTION SOURCE ESRI DESCRIPTION OF VALUES** Coordinates defining the features. Hide Field Shape ▲ FIELD COUNTY > \* ALIAS County \* DATA TYPE String \* WIDTH 15 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION County name **DESCRIPTION SOURCE** NCDOT Structures Management Unit Hide Field COUNTY ▲

FIELD F\_CARRIED ▶

\* ALIAS F\_CARRIED

\* DATA TYPE String

- \* WIDTH 50

  \* PRECISION 0

  \* SCALE 0

  FIELD DESCRIPTION

  Facility carrie
  - Facility carried by the structure highways, railroads, etc

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field F\_CARRIED ▲

#### FIELD BRDG\_TYP\_NM ▶

- \* ALIAS Bridge Type
- \* DATA TYPE String
- \* WIDTH 25
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Structure type

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field BRDG\_TYP\_NM ▲

#### FIELD FTR\_INTRSC ▶

- \* ALIAS FTR\_INTRSC
- \* DATA TYPE String
- \* WIDTH 50
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Feature intersected by the structure - streams, river, highways, etc

**DESCRIPTION SOURCE** 

#### NCDOT Structures Management Unit

Hide Field FTR\_INTRSC ▲

#### FIELD DIVISION >

- \* ALIAS DIVISION
- \* DATA TYPE String
- \* WIDTH 2
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Division number

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field DIVISION ▲

#### FIELD STRUCT\_DEF ▶

- \* ALIAS STRUCT\_DEF
- \* DATA TYPE String
- \* WIDTH 5
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Structural deficiency

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field STRUCT\_DEF ▲

#### FIELD FUNC\_OBSOL ▶

\* ALIAS FUNC\_OBSOL

\* DATA TYPE String \* WIDTH 5 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Functional obsolescence **DESCRIPTION SOURCE** NCDOT Structures Management Unit Hide Field FUNC\_OBSOL ▲ FIELD SUFFRATING ▶ \* ALIAS SUFFRATING \* DATA TYPE Double \* WIDTH 8 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Sufficiency rating **DESCRIPTION SOURCE** NCDOT Structures Management Unit Hide Field SUFFRATING ▲

#### FIELD NHS >

- \* ALIAS NHS
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

National Highway System

#### **DESCRIPTION SOURCE**

#### NCDOT Structures Management Unit

#### LIST OF VALUES

VALUE 0

DESCRIPTION Inventory Route is not on the NHS

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 1

DESCRIPTION Inventory Route is on the NHS

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

#### Hide Field NHS ▲

#### FIELD DEF\_NETWRK ▶

- \* ALIAS DEF\_NETWRK
- \* DATA TYPE String
- \* WIDTH 3
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Defense network

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

#### LIST OF VALUES

VALUE 0

DESCRIPTION The inventory route is not a STRAHNET route

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

#### VALUE 1

DESCRIPTION The inventory route is on an Interstate STRAHNET route

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

DESCRIPTION The inventory route is on a Non-Interstate STRAHNET route

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 3

DESCRIPTION The inventory route is on a STRAHNET connector route

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

Hide Field DEF\_NETWRK ▲

#### FIELD DETOUR\_LEN ▶

- \* ALIAS DETOUR\_LEN
- \* DATA TYPE String
- \* WIDTH 5
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Detour length

**DESCRIPTION SOURCE** 

NCDOT Structures Management Unit

Hide Field DETOUR\_LEN ▲

#### FIELD FUNC\_CLASS ▶

- \* ALIAS FUNC\_CLASS
- \* DATA TYPE String
- \* WIDTH 60
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Functional class

**DESCRIPTION SOURCE** 

NCDOT Structures Management Unit

VALUE 1

### FIELD POSTED\_SV ▶ \* ALIAS POSTED\_SV \* DATA TYPE Integer \* WIDTH 4 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Posted weight limit, single vehicle **DESCRIPTION SOURCE** NCDOT Structures Management Unit Hide Field POSTED SV ▲ FIELD NATTRUCNET ▶ \* ALIAS NATTRUCNET \* DATA TYPE String \* WIDTH 3 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION National truck network **DESCRIPTION SOURCE** NCDOT Structures Management Unit LIST OF VALUES VALUE 0 DESCRIPTION The inventory route is not part of the national network for trucks ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

DESCRIPTION The inventory route is part of national network for trucks

#### Hide Field NATTRUCNET ▲

#### FIELD STRTYPMAIN ▶

- \* ALIAS STRTYPMAIN
- \* DATA TYPE String
- \* WIDTH 5
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Structure type main

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field STRTYPMAIN ▲

#### FIELD SUPERSTRUC ▶

- \* ALIAS SUPERSTRUC
- \* DATA TYPE String
- \* WIDTH 100
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Superstructure

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field SUPERSTRUC ▲

```
* ALIAS BSIP Bridge Number
 * DATA TYPE String
 * WIDTH 8
 * PRECISION 0
 * SCALE 0
 FIELD DESCRIPTION
    3-digit county number + 4-digit bridge number
 DESCRIPTION SOURCE
    NCDIT-T GIS Unit
Hide Field BSIP_BRDG_NBR ▲
FIELD X_COORD ▶
 * ALIAS X_COORD
 * DATA TYPE Double
 * WIDTH 8
 * PRECISION 0
 * SCALE 0
 FIELD DESCRIPTION
    Calculated X coordinate in NAD83 Stateplane Feet
 DESCRIPTION SOURCE
    NCDIT-T GIS Unit
Hide Field X_COORD ▲
FIELD Y_COORD ▶
 * ALIAS Y_COORD
 * DATA TYPE Double
 * WIDTH 8
 * PRECISION 0
 * SCALE 0
 FIELD DESCRIPTION
```

Calculated Y coordinate in NAD83 Stateplane Feet

#### **DESCRIPTION SOURCE**

#### NCDIT-T GIS Unit

Hide Field Y\_COORD ▲

#### FIELD LONG\_DD ▶

- \* ALIAS LONG\_DD
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Calculated Longitude value in Geographic decimal degrees

#### **DESCRIPTION SOURCE**

NCDIT-T GIS Unit

Hide Field LONG\_DD ▲

#### FIELD SUBSTRUCTU ▶

- \* ALIAS SUBSTRUCTU
- \* DATA TYPE String
- \* WIDTH 100
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Substructure

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

Hide Field SUBSTRUCTU ▲

```
FIELD LAT_DD ▶
 * ALIAS LAT_DD
 * DATA TYPE Double
 * WIDTH 8
 * PRECISION 0
 * SCALE 0
 FIELD DESCRIPTION
    Calculated Latitude value in Geographic decimal degrees
 DESCRIPTION SOURCE
    NCDIT-T GIS Unit
Hide Field LAT_DD ▲
FIELD OBJECTID ▶
 * ALIAS OBJECTID
 * DATA TYPE OID
 * WIDTH 4
 * PRECISION 0
 * SCALE 0
 FIELD DESCRIPTION
    Internal feature number.
 DESCRIPTION SOURCE
    ESRI
 DESCRIPTION OF VALUES
    Sequential unique whole numbers that are automatically generated.
Hide Field OBJECTID ▲
FIELD ServiceOn ▶
 * ALIAS ServiceOn
```

\* DATA TYPE String

- \* WIDTH 3
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

The type of service offered by the bridge, used in determining traffic-carrying structures (codes 1, 4, 5, 6, 7, 8 carry traffic)

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

LIST OF VALUES

VALUE 1

DESCRIPTION Highway

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 2

DESCRIPTION Railroad

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 3

DESCRIPTION Pedestrian-bicycle

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 4

DESCRIPTION Highway-railroad

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 5

**DESCRIPTION** Highway-pedestrian

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 6

DESCRIPTION Overpass structure at an interchange or second level of a multilevel interchange

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 7

DESCRIPTION Third level (Interchange)

```
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit
  VALUE 8
  DESCRIPTION Fourth level (Interchange)
   ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit
  VALUE 9
  DESCRIPTION Building or plaza
  ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit
  VALUE 0
  DESCRIPTION Other
   ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit
Hide Field ServiceOn ▲
FIELD RTE_ID ▶
 * ALIAS Route ID
 * DATA TYPE String
 * WIDTH 12
 * PRECISION 0
 * SCALE 0
 FIELD DESCRIPTION
    11-digit route & county number, used for routing purposes
 DESCRIPTION SOURCE
    NCDIT-T GIS Unit
Hide Field RTE_ID ▲
```

FIELD POSTED\_TTST ▶

\* DATA TYPE Integer

\* WIDTH 4

\* ALIAS POSTED\_TTST

- \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Posted weight limit, tractor trailer, semi-truck **DESCRIPTION SOURCE** NCDOT Structures Management Unit Hide Field POSTED TTST ▲ FIELD RD\_ANGLE ▶
- \* ALIAS RD ANGLE

  - \* DATA TYPE Double
  - \* WIDTH 8
  - \* PRECISION 0
  - \* SCALE 0

#### FIELD DESCRIPTION

Calculated angle of the road at the point closest to the structure (the tangent angle).

#### **DESCRIPTION SOURCE**

NCDIT-T GIS Unit

Hide Field RD ANGLE ▲

#### FIELD STR\_ANGLE ▶

- \* ALIAS STR ANGLE
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Calculated angle of the structure relative to the road; many types will parallel the road (RD\_ANGLE = STR\_ANGLE), others may cross the road perpendicularly (culverts, pipes, railroads, and walkways). Most of the perpendicular structures are calculated to be 90-degrees off the RD\_ANGLE value.

**DESCRIPTION SOURCE** 

#### NCDIT-T GIS Unit

#### Hide Field STR\_ANGLE ▲

# \* ALIAS MP \* ALIAS MP \* DATA TYPE Double \* WIDTH 8 \* PRECISION 0 \* SCALE 0 DESCRIPTION SOURCE NCDIT-T GIS Unit FIELD DESCRIPTION Milepost of the str

Milepost of the structure along the indicated ROUTE

Hide Field MP ▲

#### FIELD GOOGLE\_LINK ▶

- \* ALIAS GOOGLE\_LINK
- \* DATA TYPE String
- \* WIDTH 150
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Hyperlink to Google Maps showing structure selected; calculated from the LAT\_DD and LONG\_DD fields

**DESCRIPTION SOURCE** 

NCDIT-T GIS Unit

Hide Field GOOGLE\_LINK ▲

#### FIELD MAINT\_RESP ▶

\* ALIAS Maintenance Responsibility

- \* DATA TYPE String
- \* WIDTH 2
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

The actual name(s) of the agency(s) responsible for the maintenance of the structure. Values enumerated below are for the currently-existing codes in the database, as of 1st Qtr 2015

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

LIST OF VALUES

VALUE 01

**DESCRIPTION** State Highway Agency

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 04

DESCRIPTION City or Municipal Highway Agency

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 11

DESCRIPTION State Park, Forest, or Reservation Agency

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 21

**DESCRIPTION** Other State Agencies

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 25

**DESCRIPTION** Other Local Agencies

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 26

DESCRIPTION Private (other than railroad)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

DESCRIPTION Railroad

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 31

DESCRIPTION State Toll Authority

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 60

DESCRIPTION Other Federal Agencies (not listed below)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 66

**DESCRIPTION** National Park Service

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 70

DESCRIPTION Corps of Engineers (Civil)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

Hide Field MAINT\_RESP ▲

#### FIELD SERVICEUNDER >

- \* ALIAS ServiceUnder
- \* DATA TYPE String
- \* WIDTH 3
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

The type of service offered by the route passing under the bridge (codes 5, 6, 7, 8, and 9 indicate a waterway under the bridge)

#### **DESCRIPTION SOURCE**

NCDOT Structures Management Unit

LIST OF VALUES

VALUE 1

DESCRIPTION Highway, with or without pedestrian

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 2

**DESCRIPTION Railroad** 

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 3

DESCRIPTION Pedestrian-bicycle

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 4

DESCRIPTION Highway-railroad

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 5

**DESCRIPTION Waterway** 

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 6

**DESCRIPTION Highway-waterway** 

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 7

DESCRIPTION Railroad-waterway

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 8

DESCRIPTION Highway-waterway-railroad

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 9

DESCRIPTION Relief for waterway

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

VALUE 0

**DESCRIPTION Other** 

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

Hide Field SERVICEUNDER ▲

Hide Details for object StructuresPoint ▲

Hide Fields ▲

#### **Metadata Details** ▶

METADATA LANGUAGE English (UNITED STATES)

METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2022-10-25

**ARCGIS METADATA PROPERTIES** 

METADATA FORMAT ArcGIS 1.0

STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

METADATA STYLE FGDC CSDGM Metadata

CREATED IN ARCGIS FOR THE ITEM 2019-10-15 06:47:03 LAST MODIFIED IN ARCGIS FOR THE ITEM 2022-10-25 12:27:25

**AUTOMATIC UPDATES** 

HAVE BEEN PERFORMED Yes

LAST UPDATE 2022-10-25 12:27:25

Hide Metadata Details A

#### Metadata Contacts ▶

METADATA CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE point of contact

```
PHONE
```

VOICE 919.707.2165 FAX 919.707.2210

#### **ADDRESS**

TYPE physical

DELIVERY POINT 4101 Capital Boulevard

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27604

COUNTRY US

E-MAIL ADDRESS gishelp@ncdot.gov

#### Hours of Service

8 am to 5 pm, M-F

#### **CONTACT INSTRUCTIONS**

For further information about bridge attributes, contact Cary Clemmons of the Bridge Maintenance Unit, at (919) 707-6458 or cclemmons@ncdot.gov

Hide Contact information ▲

#### METADATA CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE resource provider

#### CONTACT INFORMATION >

**PHONE** 

VOICE 919.707.2165

FAX 919.707.2210

#### **ADDRESS**

Type physical

DELIVERY POINT 4101 Capital Boulevard

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#### METADATA CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE originator

CONTACT INFORMATION

**PHONE** 

VOICE 919.707.2165

FAX 919.707.2210

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ADMINISTRATIVE AREA NC

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#### Metadata Maintenance ▶

#### MAINTENANCE

UPDATE FREQUENCY quarterly

#### MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Geographic Information Systems Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE point of contact

#### CONTACT INFORMATION

#### **PHONE**

VOICE 919.707.2165

FAX 919.707.2210

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Hide Contact information ▲

#### **Metadata Constraints** ▶

#### **CONSTRAINTS**

#### LIMITATIONS OF USE

The North Carolina Department of Transportation shall not be held liable for any errors in this data. This includes errors of omission, commission, errors concerning the content of the data, and relative and positional accuracy of the data. This data cannot be construed to be a legal document. Primary sources from which this data was compiled must be consulted for verification of information contained in this data.

#### **LEGAL CONSTRAINTS**

#### **OTHER CONSTRAINTS**

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Hide Metadata Constraints A

#### Thumbnail and Enclosures ▶

**THUMBNAIL** 

THUMBNAIL TYPE JPG

Hide Thumbnail and Enclosures ▲