

StructuresPoint, 1st Quarter 2022 - NC Department of Transportation

SDE 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

* CONTENT TYPE Downloadable Data
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS North Carolina

TEMPORAL KEYWORDS Bridges - 1st Quarter 2022, Roads - 4th Quarter 2021

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

[Hide Topics and Keywords ▲](#)

Citation ►

TITLE StructuresPoint, 1st Quarter 2022 - NC Department of Transportation

PUBLICATION DATE 2022-02-14 00:00:00

PRESENTATION FORMATS * digital map

[Hide Citation ▲](#)

Citation Contacts ►

RESPONSIBLE PARTY

INDIVIDUAL'S NAME GIS Help Desk

ORGANIZATION'S NAME NCDOT GIS Unit

CONTACT'S ROLE originator

CONTACT INFORMATION ►

PHONE

VOICE 919.707.2165

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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 clemmons@ncdot.gov

[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 10.5.1.7333

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.

ARCGIS ITEM PROPERTIES

* NAME StructuresPoint

[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

INDIVIDUAL'S NAME GIS Help Desk

ORGANIZATION'S NAME NCDOT GIS Unit

CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

PHONE

VOICE 919.707.2165

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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
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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: 1st Quarter 2022 (source date 01/03/22) - Bridges;
4th Quarter 2021 - NCRoutes for route-MP references

[Hide Resource Maintenance ▲](#)

Resource Constraints ►

CONSTRAINTS
LIMITATIONS OF USE

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.

LEGAL CONSTRAINTS
LIMITATIONS OF USE

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.

SECURITY CONSTRAINTS
CLASSIFICATION unclassified
CLASSIFICATION SYSTEM None

LIMITATIONS OF USE
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.

[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 0.0032808333333333331
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["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Lambert_Conformal_Conic"],PARAMETER["False_Easting",2000000.002616666],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",-79.0],PARAMETER["Standard_Parallel_1",34.33333333333334],PARAMETER["Standard_Parallel_2",36.16666666666666],PARAMETER["Latitude_Of_Origin",33.75],UNIT["Foot_US",0.3048006096012192],AUTHORITY["EPSG",2264]]

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 22585

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME StructuresPoint
* FEATURE TYPE Simple
* GEOMETRY TYPE Point
* HAS TOPOLOGY FALSE
* FEATURE COUNT 22585
* 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.

[Hide Data quality report - Completeness omission ▲](#)

DATA QUALITY REPORT - ABSOLUTE EXTERNAL POSITIONAL ACCURACY ▶
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,y-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.

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2022-02-14

DESCRIPTION

Review metadata and publish to web

PROCESS CONTACT

INDIVIDUAL'S NAME GIS Help Desk

ORGANIZATION'S NAME NCDOT GIS Unit

CONTACT'S ROLE author

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

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[Hide Contact information ▲](#)

[Hide Process step ▲](#)

[Hide Lineage ▲](#)

Distribution ►

DISTRIBUTOR ►

CONTACT INFORMATION

INDIVIDUAL'S NAME GIS Help Desk
ORGANIZATION'S NAME NCDOT GIS Unit
CONTACT'S ROLE distributor

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

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[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

DISTRIBUTION FORMAT

NAME Shape File
VERSION 10.5.1

TRANSFER OPTIONS

ONLINE SOURCE

LOCATION <https://connect.ncdot.gov/resources/gis/Pages/GIS-Data-Layers.aspx>

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT STRUCTURES_POINT ►

* TYPE Feature Class
* ROW COUNT 22585

DEFINITION

Bridges and other structures along NC highways

DEFINITION SOURCE

NCDOT Structures Management Unit

FIELD ROUTE ►

* 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 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_NETWORK ►

* ALIAS DEF_NETWORK

* 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

VALUE 2

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_NETWORK ▲

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

[Hide Field FUNC_CLASS ▲](#)

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

VALUE 1

DESCRIPTION The inventory route is part of national network for trucks
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

[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 ▲

FIELD **BSIP_BRDG_NBR** ▶

- * 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 ►

* ALIAS POSTED_TTST

* DATA TYPE Integer

* WIDTH 4

* 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 ▲](#)

FIELD MP ►

- * ALIAS MP
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

DESCRIPTION SOURCE

NCDIT-T GIS Unit

FIELD DESCRIPTION

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

VALUE 27

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

METADATA IDENTIFIER 8A3AECDE-0670-44F8-84EF-6924070A08F0

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset

SCOPE NAME * dataset

* LAST UPDATE 2022-01-18

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

METADATA STYLE ISO 19139 Metadata Implementation Specification

CREATED IN ARCGIS FOR THE ITEM 2022-01-18 14:10:04

LAST MODIFIED IN ARCGIS FOR THE ITEM 2022-01-18 14:19:41

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2022-01-18 13:35:00

[Hide Metadata Details ▲](#)

Metadata Contacts ►

METADATA CONTACT

INDIVIDUAL'S NAME GIS Help Desk

ORGANIZATION'S NAME NCDOT GIS Unit

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 clemmons@ncdot.gov

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

Metadata Maintenance ►

MAINTENANCE

UPDATE FREQUENCY quarterly

[Hide Metadata Maintenance ▲](#)

Metadata Constraints ►

CONSTRAINTS

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SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

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[Hide Metadata Constraints ▲](#)

Thumbnail and Enclosures ►

THUMBNAIL

THUMBNAIL TYPE JPG

[Hide Thumbnail and Enclosures ▲](#)