StructuresPoint, 2024 End of Year - 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 NCDIT 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 -98.233952 **East** -0.042129
North 83.767023 **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 - Quarter ending January 2025, Roads - 4th Quarter 2024

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

Hide Topics and Keywords ▲

Citation ►

TITLE StructuresPoint, 2024 End of Year - NC Department of Transportation
PUBLICATION DATE 2025-02-17 00:00:00

PRESENTATION FORMATS * digital map

Hide Citation ▲

Citation Contacts ►

RESPONSIBLE PARTY
INDIVIDUAL'S NAME GIS Help Desk
ORGANIZATION'S NAME NCDIT GIS Unit
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►
PHONE
FAX 919.707.2210
VOICE 919.707.2165

ADDRESS
TYPE physical
DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA NC
POSTAL CODE 27610
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 Citation Contacts ▲

Resource Details ►

DATASET LANGUAGES * English (UNITED STATES)
DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

STATUS on-going
SPATIAL REPRESENTATION TYPE * vector

SUPPLEMENTAL INFORMATION
*****This bridge layer contains many kinds of structures currently maintained by the Structures Maintenance Unit (SMU) of the NCDOT. They reflect an ongoing attempt by the NCDIT GIS Unit to portray the traffic-carrying structures found in the NCDOT SMU'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 SMU, 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 SMU.*****

Due to changes to the WIGINS database maintained by NCDOT Structures Management Unit, the Sufficiency Rating and Structural Deficiency items are no longer calculated and are dropped from this GIS Structures layer as of the 3rd Quarter of 2023. The NHS, National Truck Network and Defense Network fields have also been dropped as of this same quarter. Equivalent values for the last 3 attributes can be found within the NCDIT GIS Unit's NCRouteCharacteristics linework. For further information, please contact the NCDOT Structures Management Unit.

Older attribute changes:
The GIS Unit adopted a new, 11-digit route-county number for their linework, replacing the 10-digit route-county number. This number is created by adding "1" to the previous county code numbers and adding leading zero(es) where needed to make up 3 digits. This new route number is now found in the RTE_ID field (with alias "Route ID" for GDB users). The 8-digit route-only attribute (Route) has been maintained.

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 since 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 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 were renamed to remove the "CITY" designation in the BRDG_TYP_NM field. Users can now distinguish city types by using the 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 these and other attributes, as well as descriptions of the values.

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.

AADT (Average Annual Daily Traffic) and AADT_YR added 2nd Quarter 2024 - derived from the most recently published layer from the Traffic Surveys Unit; used along the inventory direction for non-sign points. Be aware that linework can change frequently throughout the year and may not match the original AADT Traffic Count Segments that were used as the source for this value. It is recommended to download and use the AADT Segments layer in conjunction with this layer if AADT counts are important. It is up to the user to recognize when the linework sources (roads and traffic segments) differ and confirm the values placed on structures from the traffic segments layer.

* 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 -98.233952
EAST LONGITUDE -0.042129
NORTH LATITUDE 83.767023
* SOUTH LATITUDE 33.769569
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE 412590.971172
* 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 NCDIT GIS Unit
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►
PHONE
VOICE 919.707.2165
FAX 919.707.2210

ADDRESS
TYPE physical
DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA NC
POSTAL CODE 27610
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 Resource Points of Contact ▲

Resource Maintenance ►

RESOURCE MAINTENANCE
UPDATE FREQUENCY quarterly

OTHER MAINTENANCE REQUIREMENTS
Time Period of content: Quarter ending January 2025 (source table date 01/07/2025) - Bridges
4th Quarter 2024 - 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 NCDIT 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",0.017453292519943]],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 23019

Hide Vector ▲

ARCGIS FEATURE CLASS PROPERTIES ►
FEATURE CLASS NAME StructuresPoint
* FEATURE TYPE Simple
* GEOMETRY TYPE Point
* HAS TOPOLOGY FALSE
* FEATURE COUNT 23019

* 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.

Hide Lineage ▲

Distribution ►

DISTRIBUTOR ►

CONTACT INFORMATION

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 Century Center Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27610

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
VERSION ArcGIS 10.1

Hide Distribution ▲

Fields ►

DETAILS FOR OBJECT StructuresPoint ►
* TYPE Feature Class
* ROW COUNT 23019
DEFINITION
Bridges and other structures along NC highways

DEFINITION SOURCE
NCDOT Structures Management Unit

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 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 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 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 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 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 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 ServiceUnder ►

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

DESCRIPTION SOURCE

NCDOT Structures Management Unit

FIELD DESCRIPTION

The type of service offered by the route passing under the bridge

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 ▲

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 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 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

VALUE 02
DESCRIPTION County Agency
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT Structures Management Unit

Hide Field MAINT_RESP ▲

FIELD AADT ►
* ALIAS AADT
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Average Annual Daily Traffic derived from the most recently published layer from the Traffic Surveys Unit; used along the inventory direction for non-sign points. Be aware that linework can change frequently throughout the year and may not match the original AADT Traffic Count Segments that were used as the source for this value. It is recommended to download and use the AADT Segments layer in conjunction with this layer if AADT counts are important. It is up to the user to recognize when the linework sources (roads and traffic segments) differ and confirm the values placed on structures from the traffic segments layer.

DESCRIPTION SOURCE
NCDOT Traffic Surveys Unit

Hide Field AADT ▲

FIELD AADT_YR ►
* ALIAS AADT_YR
* DATA TYPE SmallInteger
* WIDTH 2
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Year of the most recent AADT count.

DESCRIPTION SOURCE

NCDOT Traffic Surveys Unit

Hide Field AADT_YR ▲

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 2025-01-30

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 2023-08-03 06:34:10
LAST MODIFIED IN ARCGIS FOR THE ITEM 2025-01-30 15:28:49

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2025-01-30 15:28:49

Hide Metadata Details ▲

Metadata Contacts ►

METADATA CONTACT
INDIVIDUAL'S NAME GIS Help Desk
ORGANIZATION'S NAME NCDIT GIS Unit
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►
PHONE
VOICE 919.707.2165
FAX 919.707.2210

ADDRESS
TYPE physical
DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA NC
POSTAL CODE 27610
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 Metadata Contacts ▲

Metadata Maintenance ►

MAINTENANCE
UPDATE FREQUENCY quarterly

Hide Metadata Maintenance ▲

Metadata Constraints ►

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LIMITATIONS OF USE

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LEGAL CONSTRAINTS
OTHER CONSTRAINTS

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Hide Metadata Constraints ▲