

North Carolina County Boundary Arcs, 2026 (Revised) - NC Department of Transportation / NC Geodetic Survey

Geodatabase Feature Class



Tags NC, North Carolina, NC OneMap, Department of Public Safety, DPS, North Carolina Emergency Management, NCEM, North Carolina Geodetic Survey, NC Geodetic Survey, NCGS, boundaries, location, County Boundary, State Boundary, State, County, Boundary

Summary

Vector lines dataset defining the official boundaries of the counties within North Carolina as well as the boundaries between North Carolina and the states which border North Carolina.

Description

The North Carolina State and County Boundary vector lines data provides location information for North Carolina State and County Boundary lines derived from the best available survey and/or Geographic Information System (GIS) data. Sources for information are the North Carolina Geodetic Survey (NCGS), NC Department of Transportation (NCDOT), United States Geological Survey (USGS), and field surveys conducted by licensed surveyors in North Carolina and neighboring states that have been approved and recorded in their respective counties. North Carolina Geodetic Survey assists counties on a cooperative basis (NC General Statute 153A-18) in defining and monumenting the location of uncertain or disputed boundaries as established by law. Some counties have completed boundary surveys for at least a portion of their county boundary. However, the majority of county boundaries have not been surveyed and are represented by the best currently available data from GIS sources, including NCDOT county maps (which originally came from the USGS) and updated county parcel maps.

North Carolina County Boundary Arcs, 2026 is revised to include updated boundary geometry between Forsyth and Davidson counties.

Credits

North Carolina Geodetic Survey (NCGS), North Carolina Department of Transportation
Support and maintenance of the spatial database where this data resides is handled by the North Carolina Department of Information Technology-Transportation, GIS Unit.

Use limitations

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.

Extent

West -84.422109

East -75.416032

North 36.617254

South 33.730554

Scale Range

Maximum (zoomed in) 1:500,000

Minimum (zoomed out) 1:20,000,000

Topics and Keywords

Themes or categories of the resource Boundaries, Location

Content type Downloadable Data

Theme keywords Line, Boundaries, location, County Boundary, State Boundary, State, County, Boundary

Thesaurus

Title User

Publication date 2025-02-17 00:00:00

Revision date 2025-06-09 00:00:00

Place keywords North Carolina

Thesaurus

Title User

Publication date 2025-02-17 00:00:00

Revision date 2025-06-09 00:00:00

Citation

Title North Carolina County Boundary Arcs, 2026 (Revised) - NC Department of Transportation / NC Geodetic Survey

Alternate titles BoundaryCountyArc

Publication date 2026-02-23 00:00:00

Revision date 2026-05-04 00:00:00

Presentation formats digital map

FGDC geospatial presentation format vector digital data

Citation Contacts

Responsible party - originator

Organization's name North Carolina Geodetic Survey

Contact's position GIS Manager

Contact information

Phone

Voice 919-733-3836

Address

Type physical

Delivery point 4105 Reedy Creek Rd

City Raleigh

Administrative area NC
Postal code 27607
Country US
e-mail address watson.ross@ncdps.gov
Hours of service
Hours: 9:00am - 5:00pm Monday – Friday

Contact instructions

Please send an email with any issues, questions, or comments regarding the data. If it is an immediate need, please call the contact number or indicate as such in the subject line in an email.

Responsible party - resource provider

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit
Contact's position GIS Help Desk

Contact information

Address

Type physical
Delivery point 4101 Capital Blvd.
City Raleigh
Administrative area North Carolina
Postal code 27604
Country US
e-mail address gishelp@ncdot.gov
Hours of service
9:00am - 5:00pm Monday - Friday

Contact instructions

Please send an email with any issues, questions, or comments regarding the data. If it is an immediate need, indicate as such in the subject line in an email.

Responsible party - point of contact

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit
Contact's position GIS Help Desk

Contact information

Address

Type physical
Delivery point 4101 Capital Blvd.
City Raleigh
Administrative area North Carolina
Postal code 27604
Country US
e-mail address gishelp@ncdot.gov
Hours of service

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Contact instructions

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Resource Details

Dataset languages English (UNITED STATES)

Dataset character set utf8 - 8 bit UCS Transfer Format

Status on-going

Spatial representation type vector

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

Credits

North Carolina Geodetic Survey (NCGS), North Carolina Department of Transportation
Support and maintenance of the spatial database where this data resides is handled by the North Carolina Department of Information Technology-Transportation, GIS Unit.

Extents

Extent

Description

publication date

Temporal extent

Date and time 2020-08-19 00:00:00

Extent

Description

geographic extent

Geographic extent

Bounding rectangle

West longitude -84.422111

East longitude -75.416034

South latitude 33.730557

North latitude 36.617257

Extent

Geographic extent

Bounding rectangle

Extent type Extent used for searching

West longitude -84.422109

East longitude -75.416032
North latitude 36.617254
South latitude 33.730554
Extent contains the resource Yes

Extent in the item's coordinate system

westBL 406832.617203
eastBL 3052480.011593
southBL 34987.933500
northBL 1043624.399491
exTypeCode Yes

Resource Points of Contact

Point of contact - point of contact

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit
Contact's position GIS Help Desk

Contact information

Address

Type physical
Delivery point 4101 Capital Blvd.
City Raleigh
Administrative area North Carolina
Postal code 27604
Country US
e-mail address gishelp@ncdot.gov

Hours of service

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Resource Maintenance

Resource maintenance

Update frequency annually
Scope of the updates dataset
Other maintenance requirements

Updated August 2020 to correct minor error in Orange-Chatham boundary, and to update portion of Burke-McDowell boundary.

Updated March 2022 to correct county district numbers.

Other maintenance requirements

North Carolina Geodetic Survey (NCGS), North Carolina Department of Transportation
Support and maintenance of the spatial database where this data resides is handled by the North Carolina

Department of Information Technology-Transportation, GIS Unit.

Maintenance contact - point of contact

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit

Contact's position GIS Help Desk

Contact information

Address

Type physical

Delivery point 4101 Capital Blvd.

City Raleigh

Administrative area North Carolina

Postal code 27604

Country US

e-mail address gishelp@ncdot.gov

Hours of service

9:00am - 5:00pm Monday - Friday

Contact instructions

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Resource Constraints

Legal constraints

Limitations of use

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Security constraints

Classification unclassified

Classification system None

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Constraints

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Feature count 302
Spatial index TRUE
Linear referencing FALSE

Data Quality

Scope of quality information

Resource level dataset

Data quality report - Completeness commission

Data quality measure reference

Measure description

Features have been checked for completeness. There are no measurement, precision, spatial, or data schema standards assigned to this data set.

Conformance test results

Test passed Yes

Result explanation

pass.

Product specification

Title NCDOT Geospatial Data Specifications
Creation date 2022-03-22 00:00:00
Publication date 2022-03-22 00:00:00

Data quality report - Conceptual consistency

Data quality measure reference

Measure description

Tests for integrity have not been performed.

Conformance test results

Test passed Yes

Result explanation

Pass.

Product specification

Title NCDOT Geospatial Data Specifications
Creation date 2022-03-22 00:00:00
Publication date 2022-03-22 00:00:00

Data quality report - Quantitative attribute accuracy

Data quality measure reference

Measure description

Data were collected using various methods of varying accuracy. Majority of data was obtained from NC Department of Transportation that included scaled data from USGS quadrangles as well as some ground survey information. North Carolina Geodetic Survey verified and updated any of the lines that have been surveyed and approved by the respective counties.

Conformance test results

Test passed Yes

Result explanation

Pass.

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2022-03-22 00:00:00

Publication date 2022-03-22 00:00:00

Data quality report - Quantitative attribute accuracy

Data quality measure reference

Measure description

There are no measurement, precision, spatial, or data schema standards assigned to this data set.

Lineage

Lineage statement

Some counties have completed boundary surveys for at least a portion of their county boundary. However, the majority of county boundaries have not been surveyed and are represented by the best currently available data from GIS sources, including NCDOT county maps (which originally came from the USGS) and updated county parcel maps.

Process step

Description

Review and process for publication

Process contact - processor

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit

Contact's position GIS Help Desk

Contact information

Address

Type physical

Delivery point 4101 Capital Blvd.

City Raleigh

Administrative area North Carolina

Postal code 27604

Country US

e-mail address gishelp@ncdot.gov

Hours of service

9:00am - 5:00pm Monday - Friday

Contact instructions

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Process step

Description

Data was converted from NCGS to a Feature Class using Python code.

Process contact - point of contact

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit

Contact's position GIS Help Desk

Contact information

Address

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Country US

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Hours of service

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Contact instructions

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Distribution

Distributor

Contact information - distributor

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit

Contact's position GIS Help Desk

Contact information

Address

Type physical

Delivery point 4101 Capital Blvd.

City Raleigh

Administrative area North Carolina

Postal code 27604

Country US
e-mail address gishelp@ncdot.gov
Hours of service
9:00am - 5:00pm Monday - Friday

Contact instructions

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Distribution format

Version 10.8.1
Name File Geodatabase Feature Class

Fields

Details for object BoundaryCountyArc

Type Feature Class
Row count 302
Definition source
NC Geodetic Survey

Definition

Vector line data describing the boundaries of all 100 counties in North Carolina

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.

Field CountyLef

Alias CountyLef
Data type String
Width 255
Precision 0
Scale 0

Field description

County to the left of the arc segment

Description source

NCDOT

Field CountyRig

Alias CountyRig

Data type String

Width 255

Precision 0

Scale 0

Field description

County to the right of the arc segment

Description source

NCDOT

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.

Field Shape_Length

Alias Shape_Length

Data type Double

Width 8

Precision 0

Scale 0

Field description

Length of feature in internal units.

Description source

Esri

Description of values

Positive real numbers that are automatically generated.

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 2026-04-22

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 2026-04-09 13:05:18

Last modified in ArcGIS for the item 2026-04-22 15:01:02

Automatic updates

Have been performed Yes

Last update 2026-04-22 15:01:02

Metadata Contacts

Metadata contact - point of contact

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit

Contact's position GIS Help Desk

Contact information

Address

Type physical

Delivery point 4101 Capital Blvd.

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Contact instructions

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Metadata Maintenance

Maintenance

Update frequency annually

Scope of the updates dataset

Maintenance contact - point of contact

Organization's name North Carolina Department of Information Technology -Transportation, GIS Unit

Contact's position GIS Help Desk

Contact information

Address

Type physical

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City Raleigh

Administrative area North Carolina

Postal code 27604

Country US

e-mail address gishelp@ncdot.gov

Hours of service

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Contact instructions

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Metadata Constraints

Constraints

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Security constraints

Classification unclassified

Classification system none

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Thumbnail and Enclosures

Thumbnail

Thumbnail type

Image file