

# North Carolina State Boundary, 2025 - 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, Counties

### Summary

Vector polygon 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 polygon 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.

### Credits

North Carolina Geodetic Survey (NCGS)

### Use limitations

None. Please check sources, scale, accuracy, currentness and other available information. Please confirm that you are using the most recent copy of both data and metadata. Although these data have been processed successfully on a computer system at the NC Geodetic Survey, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data to evaluate data set limitations, restrictions or intended use. The NC Geodetic Survey shall not be held liable for improper or incorrect use of the data described.

### 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

**Export to FGDC CSDGM XML format as Resource Description** No

## Citation

**Title** North Carolina State Boundary, 2025 - NC Department of Transportation / NC Geodetic Survey

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

**Presentation formats** digital map

## Citation Contacts

### Responsible party - originator

**Organization's name** North Carolina Geodetic Survey

### Responsible party - point of contact

**Organization's name** North Carolina Geodetic Survey

**Contact's position** GIS Manager

### Contact information

#### Phone

**Voice** 919-733-3836

#### Address

**Type** physical

**Delivery point** 200 Park Offices Dr

**City** Durham

**Administrative area** NC

**Postal code** 27709

**Country** US

#### Contact instructions

More information at <https://ncgs.state.nc.us/>

## 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)

## ArcGIS item properties

**Name** BoundaryStateNCPolygon

**Size** 8.369

**Location** file://\DOT\DFSROOT01\GROUPS-GISCC\GIS-

SpatialDataMgmt\Maintenance\QuarterlyDataRefresh\Boundary\2025Q4\FinalFGDB\BoundaryPublicationData.gdb

**Access protocol** Local Area Network

## Extents

### Extent

#### Description

publication date

### Temporal extent

**Date and time** 2025-06-23 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 Geodetic Survey  
**Contact's position** GIS Manager

### Contact information

#### Phone

**Voice** 919-733-3836

#### Address

**Type** physical

**Delivery point** 200 Park Offices Dr

**City** Durham

**Administrative area** NC

**Postal code** 27709

**Country** US

#### Contact instructions

More information at <https://ncgs.state.nc.us/>

## Resource Maintenance

### Resource maintenance

**Update frequency** as needed

#### Other maintenance requirements

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

#### Other maintenance requirements

Updated Jan 2025 to reduce extraneous vertices in areas that had been surveyed, to correct vertex positions in many of those areas, and to adjust numerous other boundaries that had been resurveyed.

#### Other maintenance requirements

Updated Jun 2025 to adjust the Catawba-Lincoln, Franklin-Granville, and Forsyth-Guilford boundaries that had been resurveyed or reestablished and to reduce extraneous vertices in those areas.

## Resource Constraints

### Legal constraints

## Limitations of use

Although these data have been processed successfully on a computer system at the NC Geodetic Survey, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data to evaluate data set limitations, restrictions or intended use. The NC Geodetic Survey shall not be held liable for improper or incorrect use of the data described.

## Security constraints

**Classification** unclassified

**Classification system** FIPS Pub 199

## Additional restrictions

Standard Technical Controls

## Constraints

### Limitations of use

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## 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

#### ProjectedCoordinateSystem

**WKID** 102719

**XOrigin** -121841900

**YOrigin** -93659000

**XYScale** 3048.0060960121918

**ZOrigin** -100000

**ZScale** 10000

**MOrigin** -100000

**MScale** 10000

**XYTolerance** 0.0032808333333333331

**ZTolerance** 0.001

**MTolerance** 0.001

**HighPrecision** true

**LatestWKID** 2264

## WKT

```
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** 3404

**Codespace** EPSG

**Version** 6.12(9.0.0)

## Spatial Data Properties

### Vector

**Level of topology for this dataset** geometry only

### Geometric objects

**Feature class name** BoundaryStateNCPolygon

**Object type** composite

**Object count** 1

### ArcGIS Feature Class Properties

**Feature class name** BoundaryStateNCPolygon

**Feature type** Simple

**Geometry type** Polygon

**Has topology** FALSE

**Feature count** 1

**Spatial index** TRUE

**Linear referencing** FALSE

## Data Quality

### Scope of quality information

**Resource level** dataset

## 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.

## Distribution

## Distribution format

**Name** File Geodatabase Feature Class

## Transfer options

**Transfer size** 8.369

## Fields

### Details for object BoundaryStateNCPolygon

**Type** Feature Class

**Row count** 1

#### Definition source

NCGS

#### Definition

Vector polygon 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 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.

### Field Shape\_Area

**Alias** Shape\_Area

**Data type** Double

**Width** 8

**Precision** 0

**Scale** 0

### Field description

Area of feature in internal units squared.

### Description source

ESRI

### Description of values

Positive real numbers that are automatically generated.

## Overview Description

### Entity and Attribute Overview

County boundary polygons

### Entity and Attribute Detail Citation

North Carolina Geodetic Survey

## 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** 2026-02-02

### 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** 2026-01-21 14:48:53  
**Last modified in ArcGIS for the item** 2026-02-02 16:36:38

### Automatic updates

**Have been performed** Yes  
**Last update** 2026-02-02 16:36:26

## Metadata Contacts

### Metadata contact - point of contact

**Organization's name** North Carolina Geodetic Survey  
**Contact's position** GIS Manager

#### Contact information

##### Phone

**Voice** 919-733-3836

##### Address

**Type** physical  
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**City** Durham  
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**Postal code** 27709  
**Country** US

##### Contact instructions

More information at <https://ncgs.state.nc.us/>

## Metadata Maintenance

### Maintenance

**Update frequency** as needed

## Thumbnail and Enclosures

### Thumbnail

**Thumbnail type**

Image file