

# North Carolina Smoothed Urban Boundaries - 2026 - NC Department of Transportation

## Geodatabase Feature Class



**Tags** Urbanized Area, Urban Cluster, Boundaries, Roads, Major Roads, State Maintained Roads, Interstate, Highways, Streets, Centerline, Smooth Boundary, Functional Class, Urban, Rural, County, North Carolina, Division

### Summary

Polygon layer representing urban areas and clusters in North Carolina. The boundaries were originally generated by the US Census Bureau and have been adjusted (smoothed) by the North Carolina Department of Transportation, in cooperation with North Carolina's Metropolitan Planning Organizations.

### Description

The boundaries were originally generated by the US Census Bureau and have been adjusted (smoothed) by the North Carolina Department of Transportation, in cooperation with North Carolina's Metropolitan Planning Organizations. The population estimates for all of the boundaries have been updated using the 2024 Standard Population Estimates from the Office of State Budget Management, the 2023-2024 NCDOT Municipal Boundaries, and the 2020 Census block data.

### Credits

Transportation Planning Division, NCDOT. Support and maintenance of the enterprise 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** -83.528676  
**East** -75.528491  
**North** 36.693720  
**South** 33.438236

### Scale Range

**Maximum (zoomed in)** 1:5,000  
**Minimum (zoomed out)** 1:625,000

## Topics and Keywords

**Themes or categories of the resource** Boundaries, Transportation, Location, Society

**Content type** Downloadable Data

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

**Theme keywords** Polygon, Urbanized Area, Urban Cluster, Boundaries, Smooth Boundary, Urban, Rural

### Thesaurus

**Title** User

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

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

**Place keywords** North Carolina

### Thesaurus

**Title** User

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

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

## Citation

**Title** North Carolina Smoothed Urban Boundaries - 2026 - NC Department of Transportation

**Alternate titles** Urban Boundaries

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

**Presentation formats** digital map

**FGDC geospatial presentation format** vector digital data

## Citation Contacts

### Responsible party - originator

**Organization's name** North Carolina Department of Transportation, Transportation Planning Division

**Contact's position** TPD Data Manager

### Contact information

#### Phone

**Voice** 919-707-0900

#### Address

**Type** physical

**Delivery point** 1 South Wilmington Street

**City** Raleigh

**Administrative area** NC

**Postal code** 27601

**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 NC Planning Geodatabase. 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** Century Center Building B, 1020 Birch Ridge Drive

**City** Raleigh

**Administrative area** North Carolina

**Postal code** 27610

**Country** US

**e-mail address** gishelp@ncdot.gov

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## 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

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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 10.5.1.7333

## Credits

Transportation Planning Division, NCDOT. Support and maintenance of the enterprise spatial database where this data resides is handled by the North Carolina Department of Information Technology-Transportation, GIS Unit.

## ArcGIS item properties

**Name** BoundarySmoothUrban

**Size** 3.362

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

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

**Access protocol** Local Area Network

## Extents

### Extent

#### Geographic extent

##### Bounding rectangle

**West longitude** -83.524014

**East longitude** -75.533645

**South latitude** 33.448299

**North latitude** 36.574755

**Extent contains the resource** Yes

### Extent

#### Geographic extent

##### Bounding rectangle

##### Extent type

Extent used for searching

**West longitude** -83.528676

**East longitude** -75.528491

**North latitude** 36.693720

**South latitude** 33.438236

**Extent contains the resource** Yes

## Extent in the item's coordinate system

**westBL** 671019.978591  
**eastBL** 3018453.431025  
**southBL** -84319.280969  
**northBL** 1071468.852332  
**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** Century Center Building B, 1020 Birch Ridge Drive  
**City** Raleigh  
**Administrative area** North Carolina  
**Postal code** 27610  
**Country** US  
**e-mail address** gishelp@ncdot.gov

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## Resource Maintenance

### Resource maintenance

**Update frequency** as needed

**Scope of the updates** dataset

### Other maintenance requirements

Transportation Planning Division, NCDOT. Support and maintenance of the enterprise 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** Century Center Building B, 1020 Birch Ridge Drive  
**City** Raleigh  
**Administrative area** North Carolina  
**Postal code** 27610  
**Country** US  
**e-mail address** gishelp@ncdot.gov

### Hours of service

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### 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

#### 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** 0  
**ZScale** 1  
**MOrigin** 0  
**MScale** 1  
**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** 2264  
**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** BoundarySmoothUrban  
**Object type** composite  
**Object count** 78

### ArcGIS Feature Class Properties

**Feature class name** BoundarySmoothUrban  
**Feature type** Simple  
**Geometry type** Polygon  
**Has topology** FALSE  
**Feature count** 78  
**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

After processing, the dataset is checked for drawing display and number of records and file sizes compared with source materials.

### Conformance test results

Test passed Yes

#### Result explanation

Pass

### Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2023-12-11 00:00:00

Publication date 2024-02-12 00:00:00

### Data quality report - Conceptual consistency

#### Data quality measure reference

##### Measure description

This dataset is converted to file geodatabase (FGDB) format using tools in ArcGIS. The geometry is checked, and if needed repaired.

### Conformance test results

Test passed Yes

#### Result explanation

Pass.

### Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2023-12-11 00:00:00

Publication date 2024-02-12 00:00:00

### Data quality report - Quantitative attribute accuracy

#### Data quality measure reference

##### Measure description

The source data was checked using standard review procedures. Attributes were checked by using visual inspection as well as automated verification routines. Geometry checks were conducted using Esri's Data Reviewer tool.

## Conformance test results

**Test passed** Yes

### Result explanation

Pass.

## Product specification

**Title** NCDOT Geospatial Data Specifications

**Creation date** 2023-12-11 00:00:00

**Publication date** 2024-02-12 00:00:00

## Lineage

### Lineage statement

This dataset was originally created by the North Carolina Department of Transportation to provide a geographic representation of the urban areas and clusters in North Carolina. The data were then used by the NC Department of Transportation GIS Unit for further data processing

## Process step

### Description

Polygon layer representing the smoothed boundaries for the Census urban areas in North Carolina. The boundaries were originally generated by the US Census Bureau and have been adjusted (smoothed) by the North Carolina Department of Transportation, in cooperation with North Carolina's Metropolitan Planning Organizations.

## Process contact - processor

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

**Contact's position** GIS Data and Services Consultant

## Contact information

### Address

**Type** physical

**Delivery point** Century Center Building B, 1020 Birch Ridge Drive

**City** Raleigh

**Administrative area** North Carolina

**Postal code** 27610

**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.

## 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** Century Center Building B, 1020 Birch Ridge Drive

**City** Raleigh

**Administrative area** North Carolina

**Postal code** 27610

**Country** US

**e-mail address** gishelp@ncdot.gov

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## Distribution format

**Name** Feature Class

**Version** 10.8.1

## Transfer options

**Transfer size** 3.362

## Online source

**Online location (URL)** <https://connect.ncdot.gov/resources/gis/Pages/GIS-Data-Layers.aspx>

## Fields

### Details for object BoundarySmoothUrban

**Type** Feature Class

**Row count** 70

#### Definition

Urbanized Area or Urban Cluster

#### Definition source

U.S. Census Bureau

### 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 POP\_EST\_YR

**Alias** POP\_EST\_YR  
**Data type** Integer  
**Width** 4  
**Precision** 0  
**Scale** 0

### Field description

Year of US Census population estimate for the area.

### Description source

U.S. Census Bureau

### Description of values

Values vary.

## Field POP\_EST

**Alias** POP\_EST  
**Data type** Integer  
**Width** 4  
**Precision** 0  
**Scale** 0

### Field description

US Census population estimate for the area.

### Description source

U.S. Census Bureau

### Description of values

Values vary.

## Field SHAPE\_Leng

**Alias** SHAPE\_Leng  
**Data type** Double  
**Width** 8  
**Precision** 0  
**Scale** 0

### Field description

Length of polygon outline in feet.

### Description source

Esri.

### Description of values

Text.

## Field TYPE

**Alias** TYPE  
**Data type** String  
**Width** 15  
**Precision** 0  
**Scale** 0

### Field description

Urban boundary type.

### Description source

U.S. Census Bureau

### List of values

**Value** Urbanized Area

**Description** The polygon represents an urban area, the region surrounding the city.

**Enumerated domain value definition source** U.S. Census Bureau

**Value** Urban Cluster

**Description** The polygon represents an urban cluster. Areas defined based on the same criteria as urbanized areas, but represent areas containing at least 2,500 and less than 50,000 people.

**Enumerated domain value definition source** U.S. Census Bureau

## Field FHWA\_5\_Dig

**Alias** FHWA\_5\_Dig  
**Data type** Integer  
**Width** 4  
**Precision** 0

**Scale** 0

**Field description**

Federal Highway Administration five-digit ID.

**Description source**

FHWA

**Description of values**

Values vary.

**Field NAME**

**Alias** NAME

**Data type** String

**Width** 50

**Precision** 0

**Scale** 0

**Field description**

Urban area or cluster name.

**Description source**

U.S. Census Bureau

**Description of values**

Values vary.

**Field FHWA\_5\_Txt**

**Alias** FHWA\_5\_Txt

**Data type** String

**Width** 50

**Precision** 0

**Scale** 0

**Field description**

Federal Highway Administration five-digit ID (text field).

**Description source**

FHWA

**Description of values**

Values vary.

**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.

## Field FHWA\_UA

**Alias** FHWA\_UA

**Data type** String

**Width** 11

**Precision** 0

**Scale** 0

## Field description

FHWA defined Urban Area.

## Metadata Details

**Metadata language** English (UNITED STATES)

**Metadata character set** utf8 - 8 bit UCS Transfer Format

**Metadata identifier** AD7A344E-767B-4173-A591-576EEDB25E3D

**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 14:32:39

**Last modified in ArcGIS for the item** 2026-02-02 16:35:59

## Automatic updates

**Have been performed** Yes

**Last update** 2026-02-02 16:35:59

## 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** Century Center Building B, 1020 Birch Ridge Drive

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**Administrative area** North Carolina  
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**Country** US  
**e-mail address** gishelp@ncdot.gov

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## **Metadata Maintenance**

### **Maintenance**

**Update frequency** as needed

**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

**Delivery point** Century Center Building B, 1020 Birch Ridge Drive

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**Administrative area** North Carolina

**Postal code** 27610

**Country** US

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## **Metadata Constraints**

### **Security constraints**

**Classification** unclassified

**Classification system** None

### **Limitations of use**

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## **Thumbnail and Enclosures**

### **Thumbnail**

#### **Thumbnail type**

Image file