

2020 Census Block Groups, North Carolina Department of Transportation, Prioritization 7.0, July 2023

Geodatabase Feature Class



Tags Boundaries, State, Census, Block Group, Prioritization 7.0 (P7), Strategic Prioritization Office of Transportation (SPOT), North Carolina Department of Transportation (NCDOT)

Summary

In order for others to use the information in the Census MAF/TIGER database in a geographic information system (GIS) or for other geographic applications, the Census Bureau releases to the public extracts of the database in the form of TIGER/Line Shapefiles. The purpose of this layer is to give a total population estimate per census block group.

Description

The TIGER/Line Files are shapefiles and related database files (.dbf) that are an extract of selected geographic and cartographic information from the U.S. Census Bureau's Master Address File / Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) Database (MTDB). The MTDB represents a seamless national file with no overlaps or gaps between parts; however, each TIGER/Line File is designed to stand alone as an independent data set, or they can be combined to cover the entire nation. Census Blocks are statistical areas bounded on all sides by visible features, such as streets, roads, streams, and railroad tracks, and/or by nonvisible boundaries such as city, town, township, and county limits, and short line-of-sight extensions of streets and roads. Census blocks are relatively small in area; for example, a block in a city bounded by streets; however, census blocks in remote areas are often large and irregular and may even be many square miles in area. A common misunderstanding is that data users think census blocks are used geographically to build all other census geographic areas, rather all other census geographic areas are updated and then used as the primary constraints, along with roads and water features, to delineate the tabulation blocks. As a result, all 2020 Census blocks nest within every other 2020 Census geographic area, so that Census Bureau statistical data can be tabulated at the block level and aggregated up to the appropriate geographic areas. Census blocks cover all territory in the United States, Puerto Rico, and the Island Areas (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands). Blocks are the smallest geographic areas for which the Census Bureau publishes data from the decennial census. A block may consist of one or more faces. Population and Employment data were joined per block group. Population estimates were collected by the Census Bureau's American Community Survey (ACS) from 2013-2017 and employment estimates were collected by NC Commerce from 2015. In order to account for seasonal population in the total population, seasonal population was calculated by the GIS Unit. The seasonal, recreational, or occasional housing use estimates for each block group were collected from ACS and this value was multiplied by the estimated number per household (2.53 for 2017). This was then added to the population estimates to give a total population estimate per census block group. For the purposes of the Strategic Planning Office of Transportation Prioritization 7.0 project, data is not updated after July 2023.

For further information about domains and fields used in SPOT see the SPOT P7 Domains document here:

<https://xfer.services.ncdot.gov/gisdot/metadata/spot/NCDOT%20SPOT%20Prioritization%207%20Online%20Domain%20Reference.pdf>

Credits

North Carolina Department of Transportation GIS Unit, US Census Bureau, Strategic Prioritization Office of Transportation (SPOT)

Use limitations

The TIGER/Line Shapefile products are not copyrighted however TIGER/Line and Census TIGER are registered trademarks of the U.S. Census Bureau. These products are free to use in a product or publication, however acknowledgement must be given to the U.S. Census Bureau as the source. The boundary information in the TIGER/Line Shapefiles are for statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement and they are not legal land descriptions. Coordinates in the TIGER/Line shapefiles have six implied decimal places, but the positional accuracy of these coordinates is not as great as the six decimal places suggest .

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.

SPOT On!ine is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT On!ine application or provided by the user, are only intended for use in the Department's Strategic Prioritization Process. All SPOT On!ine project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

Extent

West -84.422108

East -75.355689

North 36.617254

South 33.641967

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

Topics and Keywords

Themes or categories of the resource Boundaries

Content type Downloadable Data

Theme keywords Boundaries, State, Census, Block Group, Prioritization 7.0 (P7), Strategic Prioritization Office of Transportation (SPOT)

Thesaurus

Title user

Publication date 2023-07-17 00:00:00

Place keywords North Carolina

Thesaurus

Title User

Publication date 2019-09-01 00:00:00

Citation

Title 2020 Census Block Groups, North Carolina Department of Transportation, Prioritization 7.0, July 2023

Publication date 2023-07-17 00:00:00

Presentation formats digital map

Citation Contacts

Responsible party - originator

Organization's name United States Census Bureau

Contact's position Call Center

Contact information

Phone

Voice 301.763.4636

Address

Type postal

Delivery point 4600 Silver Hill Road

City Washington

Administrative area DC

Postal code 20233

Country US

e-mail address ask.census.gov

Contact instructions

Phone or email

Responsible party - resource provider

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

e-mail address spot@ncdot.gov

Hours of service

8am-5pm, M-F

Contact instructions

Phone or email

Resource Details

Dataset languages English (UNITED STATES)

Spatial representation type vector

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

Credits

North Carolina Department of Transportation GIS Unit, US Census Bureau, Strategic Prioritization Office of Transportation (SPOT)

ArcGIS item properties

Name BlockGroup

Location file://\DOT\DFSROOT01\GROUPS-GISCC\GIS-SpatialDataMgmt\Metadata\Spot\BackupSchemaProd20231218\P7_Data.gdb

Access protocol Local Area Network

Extents

Extent

Temporal extent

Date and time 2019-09-01 00:00:00

Extent

Geographic extent

Bounding rectangle

Extent type

Extent used for searching

West longitude -84.422108

East longitude -75.355689

North latitude 36.617254

South latitude 33.641967

Extent contains the resource Yes

Extent in the item's coordinate system

westBL 406832.842268

eastBL 3070216.296331

southBL 2698.608971

northBL 1043624.480199

exTypeCode Yes

Resource Points of Contact

Point of contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact's position Senior Transportation Engineer

Contact information

Phone

Voice 919.707.4742

Address

Type postal

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

e-mail address spot@ncdot.gov

Hours of service

8am-5pm, M-F

Contact instructions

Phone or email

Resource Maintenance

Resource maintenance

Update frequency annually

Scope of the updates dataset

Maintenance contact - originator

Organization's name United States Census Bureau

Contact's position Call Center

Contact information

Phone

Voice 301.763.4636

Address

Type postal

Delivery point 4600 Silver Hill Road

City Washington

Administrative area DC

Postal code 20233

Country US

e-mail address ask.census.gov

Contact instructions

Phone or email

Resource Constraints

Constraints

Limitations of use

The TIGER/Line Shapefile products are not copyrighted however TIGER/Line and Census TIGER are registered trademarks of the U.S. Census Bureau. These products are free to use in a product or publication, however acknowledgement must be given to the U.S. Census Bureau as the source. The boundary information in the TIGER/Line Shapefiles are for statistical data collection and tabulation purposes only; their depiction and

designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement and they are not legal land descriptions. Coordinates in the TIGER/Line shapefiles have six implied decimal places, but the positional accuracy of these coordinates is not as great as the six decimal places suggest .

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.

SPOT Online is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT Online application or provided by the user, are only intended for use in the Department's Strategic Prioritization Process. All SPOT Online project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

Legal constraints

Limitations of use

The North Carolina Department of Transportation shall not be held liable for any errors in this metadata. 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.

SPOT Online is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT Online application or provided by the user, are only intended for use in the Department's Strategic Prioritization Process. All SPOT Online project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

Security constraints

Classification unclassified

Classification system none

Limitations of use

The TIGER/Line Shapefile products are not copyrighted however TIGER/Line and Census TIGER are registered trademarks of the U.S. Census Bureau. These products are free to use in a product or publication, however acknowledgement must be given to the U.S. Census Bureau as the source. The boundary information in the TIGER/Line Shapefiles are for statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement and they are not legal land descriptions. Coordinates in the TIGER/Line shapefiles have six implied decimal places, but the positional accuracy of these coordinates is not as great as the six decimal places suggest.

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.

SPOT Online is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT Online application or provided by the user, are only intended for use in the Department's

Strategic Prioritization Process. All SPOT Online project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

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 BlockGroup

Object type composite

Object count 7111

ArcGIS Feature Class Properties

Feature class name BlockGroup
Feature type Simple
Geometry type Polygon
Has topology FALSE
Feature count 7111
Spatial index TRUE
Linear referencing FALSE

Data Quality

Scope of quality information

Resource level dataset

Data quality report - Conceptual consistency

Conformance test results

Test passed Yes

Result explanation

The dataset is converted to file geodatabase (FGDB) format using tools in ArcGIS. Quality checks were performed by the Strategic Prioritization Office of Transportation (SPOT) and the North Carolina Department of Transportation Geographic Information Systems Unit and errors were accepted as within business range or identified as exceptions.

Product specification

Title NCDOT Geospatial Data Specifications

Publication date 2023-07-17 00:00:00

Lineage

Lineage statement

The TIGER/Line Files are shapefiles and related database files (.dbf) that are an extract of selected geographic and cartographic information from the U.S. Census Bureau's Master Address File / Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) Database (MTDB). Population and Employment data were joined per block group. Population estimates were collected by the Census Bureau's American Community Survey (ACS) from 2013-2017 and employment estimates were collected by NC Commerce from 2015. In order to account for seasonal population in the total population, seasonal population was calculated by the GIS Unit.

Process step

Description

Metadata is updated for publication.

Process contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal
Delivery point Century Center Building B, 1020 Birch Ridge Drive
City Raleigh
Administrative area NC
Postal code 27610
e-mail address spot@ncdot.gov
Hours of service
8am-5pm, M-F

Contact instructions
Phone or email

Process step

Description

The data were further manipulated by the North Carolina Department of Transportation Geographic Information Systems Unit and/or the North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT) to produce the required data for Prioritization 7.0.

Process contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal
Delivery point Century Center Building B, 1020 Birch Ridge Drive
City Raleigh
Administrative area NC
Postal code 27610
e-mail address spot@ncdot.gov

Hours of service

8am-5pm, M-F

Contact instructions
Phone or email

Process step

Description

The TIGER/Line Files are shapefiles and related database files (.dbf) that are an extract of selected geographic and cartographic information from the U.S. Census Bureau's Master Address File / Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) Database (MTDB).

Process contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

e-mail address spot@ncdot.gov

Hours of service

8am-5pm, M-F

Contact instructions

Phone or email

Process step

Description

Population and Employment data were joined per block group. Population estimates were collected by the Census Bureau's American Community Survey (ACS) from 2013-2017 and employment estimates were collected by NC Commerce from 2015.

Process contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

e-mail address spot@ncdot.gov

Hours of service

8am-5pm, M-F

Contact instructions

Phone or email

Distribution

Distributor

Contact information - distributor

Organization's name United States Census Bureau

Contact's position Call Center

Contact information

Phone

Voice 301.763.4636

Address

Type postal

Delivery point 4600 Silver Hill Road

City Washington

Administrative area DC

Postal code 20233

Country US

e-mail address ask.census.gov

Contact instructions

Phone or email

Distribution format

Version ArcGIS 10.3

Name File Geodatabase Feature Class

Fields

Details for object BlockGroup

Type Feature Class

Row count 7111

Definition

Census Block Group

Definition source

Census

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 Block_Area

Alias Block_Area

Data type Double

Width 8

Precision 0

Scale 0

Field description

Area of block in square feet

Description source

Census

Description of values

No domain

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 Total_Pop

Alias Total_Pop
Data type Double
Width 8
Precision 0
Scale 0

Field description

Population per census block + seasonal population from 2015

Description source

Census

Description of values

No domain

Field GEOID10

Alias GEOID10
Data type String
Width 12
Precision 0
Scale 0

Field description

Unique Census Block ID

Description source

Census

Description of values

No domain

Field EMP_17

Alias Employment

Data type Double

Width 8

Precision 0

Scale 0

Field description

Employment numbers per block group from 2017

Description source

NCDOT

Description of values

No Domain

Field Pop_17

Alias Pop_17

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Population numbers per block group from 2017

Description source

NCDOT

Description of values

No domain

Metadata Details

Metadata language English (UNITED STATES)

Scope of the data described by the metadata dataset

Scope name dataset

Last update 2024-02-26

ArcGIS metadata properties

Metadata format ArcGIS 1.0

Standard or profile used to edit metadata ISO19139

Created in ArcGIS for the item 2023-12-06 09:02:13

Last modified in ArcGIS for the item 2024-02-26 16:10:29

Automatic updates

Have been performed Yes

Last update 2024-02-26 16:10:29

Metadata Contacts

Metadata contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

e-mail address spot@ncdot.gov

Hours of service

8am-5pm, M-F

Contact instructions

Phone or email

Metadata Maintenance

Maintenance

Update frequency annually

Scope of the updates dataset

Maintenance contact - point of contact

Organization's name North Carolina Department of Transportation Strategic Prioritization Office of Transportation (SPOT)

Contact information

Phone

Voice 919.707.4742

Address

Type postal

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC
Postal code 27610
e-mail address spot@ncdot.gov
Hours of service
8am-5pm, M-F

Contact instructions
Phone or email

Metadata Constraints

Constraints

Limitations of use

The TIGER/Line Shapefile products are not copyrighted however TIGER/Line and Census TIGER are registered trademarks of the U.S. Census Bureau. These products are free to use in a product or publication, however acknowledgement must be given to the U.S. Census Bureau as the source. The boundary information in the TIGER/Line Shapefiles are for statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement and they are not legal land descriptions. Coordinates in the TIGER/Line shapefiles have six implied decimal places, but the positional accuracy of these coordinates is not as great as the six decimal places suggest.

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.

SPOT Online is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT Online application or provided by the user, are only intended for use in the Department's Strategic Prioritization Process. All SPOT Online project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

Legal constraints

Limitations of use

The North Carolina Department of Transportation shall not be held liable for any errors in this metadata. 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.

SPOT Online is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT Online application or provided by the user, are only intended for use in the Department's Strategic Prioritization Process. All SPOT Online project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

Security constraints

Classification unclassified
Classification system none

Limitations of use

The TIGER/Line Shapefile products are not copyrighted however TIGER/Line and Census TIGER are registered trademarks of the U.S. Census Bureau. These products are free to use in a product or publication, however acknowledgement must be given to the U.S. Census Bureau as the source. The boundary information in the TIGER/Line Shapefiles are for statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement and they are not legal land descriptions. Coordinates in the TIGER/Line shapefiles have six implied decimal places, but the positional accuracy of these coordinates is not as great as the six decimal places suggest.

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.

SPOT Online is the NC Department of Transportation's online project prioritization evaluation system. All data used for scoring and evaluating projects, including scores and preliminary point-in-time cost estimates either generated by the SPOT Online application or provided by the user, are only intended for use in the Department's Strategic Prioritization Process. All SPOT Online project data will be used for preliminary level planning, scoring, and evaluation purposes only, and must undergo further review prior to use in the Department's programming process. By entering SPOT Online, the user hereby acknowledges this statement.

Thumbnail and Enclosures

Thumbnail

Thumbnail type

Image file