

North Carolina Speed Limits, North Carolina Department of Transportation, Prioritization 7.0, February 2023

Geodatabase Feature Class



Tags Speed Limits, Speed, North Carolina, NC Speed Limits, Miles per Hour, MPH, Prioritization 7.0 (P7), Strategic Prioritization Office of Transportation (SPOT), North Carolina Department of Transportation (NCDOT)

Summary

Speed limits of North Carolina roads were extracted from the Traffic Engineering Accident Analysis System (TEAAS) Dataset. Speed Limits used for Prioritization 7.0. have been manipulated and updated per the Strategic Prioritization Office of Transportation (SPOT) and Divisions. These speed limits are utilized for display purposes and used as part of Strategic Planning Office of Transportation Prioritization 7.0 (P7).

Description

Speed limits for state maintained roads in North Carolina as designated by ordinances and the TEAAS (Traffic Engineering Accident Analysis System) database. Speed limits are controlled by general statutes and local and state ordinances. Within incorporated municipalities, the statutory speed limit is 35 miles per hour unless otherwise ordained and posted. The statutory speed limit on roads outside the incorporated municipalities is 55 miles per hour unless otherwise ordained and posted. Some highways have speed limits of up to 70 miles per hour on certain sections. However, the speed limit along these routes may drop to 55 miles per hour in certain areas.

Speed limits for P7 were pulled from Prioritization 6.0 (P6) and from Road Characteristics (TEAAS). The primary routes were then overlaid with what was in NC Routes for Q1 2023. These changes were made manually by the GIS Department.

For the purpose of the Strategic Planning Office of Transportation Prioritization 7.0 project (P7), speed limit data is not updated after February 2023. Speed limit data aids in project planning by assisting in selecting a project speed limit, calculating travel time savings, and calculating congestion criteria.

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 Geographic Information Systems Unit, Strategic Prioritization Office of Transportation (SPOT)

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.

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.

Extent

West -84.421464
East -75.418363
North 36.615122
South 33.751362

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:150,000,000

Topics and Keywords

Themes or categories of the resource Transportation

Content type Downloadable Data

Theme keywords Speed Limits, Speed, North Carolina, NC Speed Limits, Miles per Hour, MPH, Prioritization 7.0 (P7), Strategic Prioritization Office of Transportation (SPOT), North Carolina Department of Transportation (NCDOT)

Thesaurus

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

Place keywords North Carolina

Thesaurus

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

Citation

Title North Carolina Speed Limits, North Carolina Department of Transportation, Prioritization 7.0, February 2023
Alternate titles Speed_Limit
Publication date 2023-07-17 00:00:00

Presentation formats digital map

Citation Contacts

Responsible party - resource provider

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Responsible party - originator

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

Country US

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)

Dataset character set utf8 - 8 bit UCS Transfer Format

Spatial representation type vector

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

Credits

North Carolina Department of Transportation Geographic Information Systems Unit, Strategic Prioritization Office of Transportation (SPOT)

ArcGIS item properties

Name Speed_Limit

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

Access protocol Local Area Network

Extents

Extent

Geographic extent

Bounding rectangle

West longitude -84.421461

East longitude -75.418363

South latitude 33.751265

North latitude 36.615122

Extent contains the resource Yes

Temporal extent

Date and time 2023-07-17 00:00:00

Extent

Geographic extent

Bounding rectangle

Extent type

Extent used for searching

West longitude -84.421464

East longitude -75.418363

North latitude 36.615122

South latitude 33.751362

Extent contains the resource Yes

Extent in the item's coordinate system

westBL 406980.080163

eastBL 3051823.000440

southBL 42564.600105

northBL 1042848.119875

exTypeCode Yes

Resource Points of Contact

Point of contact - point of contact

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Resource Maintenance

Resource maintenance

Update frequency annually

Scope of the updates dataset

Maintenance contact - point of contact

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Resource Constraints

Constraints

Limitations of use

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

Limitations of use

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 3048.0060960121928
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 Speed_Limit

Object type composite

Object count 86971

ArcGIS Feature Class Properties

Feature class name Speed_Limit

Feature type Simple

Geometry type Polyline

Has topology FALSE

Feature count 86971

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

Data is based off of TEAAS dataset and modified to create a feature class.

Process step

Description

Extracted and aggregated the TEAAS source dataset

Process contact - processor

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Process step

Description

Dissolved TEAAS and blanket speed limit datasets. The dataset from TEAAS overwrites/replaces its counterpart in

the speed blanket.

Process contact - processor

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Process step

Description

Created the speed limit blanket. Assigned a speed limit value of 35 for routes within the municipal boundary layer. For routes outside the municipal boundary layer, a speed limit value of 55 was assigned. The dataset does not contain routes designated as projects, ramps, rest areas, local streets, and federal or state parks.

Process contact - processor

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Process step

Description

Transformed TEAAS dataset from milepost values to G1Ftseg values.

Process contact - processor

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Process step

Description

Metadata is updated for publication

Process contact - processor

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Distribution

Distributor

Contact information - distributor

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Distribution format

Version ArcGIS 10.3

Name File Geodatabase Feature Class

Fields

Details for object Speed_Limit

Type Feature Class

Row count 86971

Definition source

NCDOT

Definition

Speed limits 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 Rte_ID

Alias Rte_Id
Data type String
Width 11
Precision 0
Scale 0

Field description

The 11-digit route number is a route naming convention used by NCDOT

Description source

NCDOT

Description of values

Positive real numbers that are manually generated

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 Speed

Alias Speed

Data type Double

Width 8

Precision 0

Scale 0

Field description

Speed Limit for segment

Description source

P7 Valid Code Source

List of values

Value 35

Description Speed limit of 35 miles per hour

Enumerated domain value definition source NCDOT

Value 30

Description Speed limit of 30 miles per hour

Enumerated domain value definition source NCDOT

Value 15

Description Speed limit of 15 miles per hour

Enumerated domain value definition source NCDOT

Value 20

Description Speed limit of 20 miles per hour

Enumerated domain value definition source NCDOT

Value 55

Description Speed limit of 55 miles per hour

Enumerated domain value definition source NCDOT

Value 70

Description Speed limit of 70 miles per hour

Enumerated domain value definition source NCDOT

Value 25

Description Speed limit of 25 miles per hour

Enumerated domain value definition source NCDOT

Value 50

Description Speed limit of 50 miles per hour

Enumerated domain value definition source NCDOT

Value 40

Description Speed limit of 40 miles per hour

Enumerated domain value definition source NCDOT

Value 60

Description Speed limit of 60 miles per hour

Enumerated domain value definition source NCDOT

Value 65

Description Speed limit of 65 miles per hour

Enumerated domain value definition source NCDOT

Value 45

Description Speed limit of 45 miles per hour

Enumerated domain value definition source NCDOT

Description of values

Speed limit

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 BegMp1

Alias BegMp1

Data type Double

Width 8

Precision 0

Scale 0

Field description

Route milepost at the beginning of the reference

Description source

NCDOT

Description of values

No domain

Field EndMp1

Alias EndMp1

Data type Double

Width 8

Precision 0

Scale 0

Field description

Route milepost at the end of the reference

Description source

NCDOT

Description of values

No domain

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 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 09:06:09

Last modified in ArcGIS for the item 2024-02-26 17:08:53

Automatic updates

Have been performed Yes

Last update 2024-02-26 17:08:53

Metadata Contacts

Metadata contact - resource provider

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Metadata Maintenance

Maintenance

Update frequency annually

Scope of the updates dataset

Maintenance contact - resource provider

Organization's name NC 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 North Carolina

Postal code 27610

Country US

e-mail address spot@ncdot.gov

Hours of service

8am to 5pm, Monday - Friday

Contact instructions

Phone or Email.

Metadata Constraints

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 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.

Constraints

Limitations of use

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