

NC Milepost Hatching at 0.50 Mile Intervals, 1st Quarter 2026 - NC Department of Transportation

Geodatabase Feature Class



Tags Roads, North Carolina, NCDOT, State Highway Network, Measure, Hatch Interval, Milepost, Transportation, Highway, Routes, Location, Streets, Interstate, US Route, NC Route Secondary Route

Summary

This layer provides short hatch lines representing half-mile intervals along NCDOT System routes. Each hatch line contains the half-mile Milepost value from the beginning point of a route. Route ID and Route Class attribute values are also included.

Description

This data provides the display for milepost values along public roads, excluding non-system/local roads, in North Carolina. Based on the data the hatch lines are 50 feet in length and positioned perpendicular to the road centerline. The hatch intervals are created off the NC Public Road Arcs publication product. NC Public Road Arcs is a route publication product derived using an internal procedure designed to generate reporting products from the Linear Referencing System (LRS).

NCDOT adopted the road centerline based LRS Network as its official Enterprise LRS, to which multiple road inventory attributes are referenced along measured routes throughout North Carolina. These routes are classified as either System or Non-System routes. System routes are routes within the state-maintained road network, and are comprised of Interstates, US Routes, NC Routes, Secondary Routes, Ramps, and Non-System Routes. Non-System routes are routes that are typically not maintained by NCDOT, but instead by a local agency (county, city or MPO/RPO). The local agency is the source for updating these Non-System routes in NCDOT's LRS. The route classification is recorded in the RteClass field in this data set; see field values and descriptions in the metadata Fields Section.

Credits

NC Department of Information Technology-Transportation (NCDIT-T), GIS Unit, Spatial Data Management Group and Geospatial Services Group - Product creation; NCDIT-T, GIS Unit, Spatial Data Operations Group – System geometry, mileage.

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.

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear

Referencing System.

Extent

West -84.367986

East -75.423736

North 36.607487

South 33.771425

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:50,000

Topics and Keywords

Themes or categories of the resource Location, Society, Transportation

Content type Downloadable Data

Theme keywords Line, Roads, NCDOT, State Highway Network, Measure, Hatch Interval, Milepost, Transportation, Highway, Routes, Location, Streets, Interstate, US Route, NC Route Secondary Route

Thesaurus

Title User

Publication date 2026-05-04 00:00:00

Place keywords North Carolina

Thesaurus

Title User

Publication date 2026-05-04 00:00:00

Citation

Title NC Milepost Hatching at 0.50 Mile Intervals, 1st Quarter 2026 - NC Department of Transportation

Alternate titles Milepost_Hatch_050

Creation date 2026-04-13 00:00:00

Publication 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 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 NC

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, please 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 Data and Services Consultant

Contact information

Address

Type physical

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

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, please 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 Data and Services Consultant

Contact information

Address

Type physical

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

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, please indicate as such in the subject line in an email.

Resource Details

Dataset languages English (UNITED STATES)
Dataset character set utf8 - 8 bit UCS Transfer Format

Status on-going
Spatial representation type vector

Supplemental information

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear Referencing System.

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

Credits

NC Department of Information Technology-Transportation (NCDIT-T), GIS Unit, Spatial Data Management Group and Geospatial Services Group - Product creation; NCDIT-T, GIS Unit, Spatial Data Operations Group – System geometry, mileage.

Extents

Extent

Geographic extent

Bounding rectangle

Extent type Extent used for searching
West longitude -84.367986
East longitude -75.423736
North latitude 36.607487
South latitude 33.771425
Extent contains the resource Yes

Extent in the item's coordinate system

westBL 422574.211264
eastBL 3050343.847888
southBL 49056.760912
northBL 1040067.945856

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 Data and Services Consultant

Contact information

Address

Type physical

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

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, please indicate as such in the subject line in an email.

Resource Maintenance

Resource maintenance

Update frequency quarterly

Scope of the updates dataset

Other maintenance requirements

NC Department of Information Technology-Transportation (NCDIT-T), GIS Unit, Spatial Data Management Group and Geospatial Services Group - Product creation; NCDIT-T, GIS Unit, Spatial Data Operations Group – System geometry, mileage.

Maintenance contact - point of contact

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 NC

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, please indicate as such in the subject line in an 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.

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear Referencing System.

Legal 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.

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear Referencing System.

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.

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear Referencing System.

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 1893.9393939393938

ZOrigin -100000

ZScale 9.999999999999982

MOrigin -100000

MScale 10000000

XYTolerance 0.00528

ZTolerance 0.20000000000000004

MTolerance 9.999999999999995e-07

HighPrecision true

LatestWKID 2264

VCSWKID 105703

LatestVCSWKID 6360

WKT

PROJCS["NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet",GEOGCS["GCS_North_American_1983",DATUM["79.0],PARAMETER["Standard_Parallel_1",34.33333333333334],PARAMETER["Standard_Parallel_2",36.166666666666666

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 Milepost_Hatch_050

Object type composite

Object count 12900

ArcGIS Feature Class Properties

Feature class name Milepost_Hatch_050

Feature type Simple

Geometry type Polyline

Has topology FALSE

Feature count 12900
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 2026-04-13 00:00:00
Publication date 2026-05-04 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 2026-04-13 00:00:00
Publication date 2026-05-04 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 2026-04-13 00:00:00

Publication date 2026-05-04 00:00:00

Lineage

Lineage statement

This data is created using an automated process designed to generate feature classes with short hatch lines at specific milepost intervals along routes. The publication product NC Public Road Arcs is used as the input for the application to generate hatchmarks at specific milepost intervals from the beginning point (milepost zero) of a route. NC Public Road Arcs is a route publication product derived using an internal procedure designed to generate reporting products from the Linear Referencing System maintained by the Spatial Data Operations Group within the North Carolina Department of Information Technology- Transportation, GIS Unit.

Process step

When the process occurred 2024-01-20 00:00:00

Description

Data Conversion Group maintains the NCDOT LRS in a geodatabase.

Process contact - originator

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 NC

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, please indicate as such in the subject line in an email.

Process step

When the process occurred 2024-01-29 00:00:00

Description

Run internal program to create NC Public Road Arcs product.

Process contact - resource provider

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 NC

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, please indicate as such in the subject line in an email.

Process step

When the process occurred 2024-02-08 00:00:00

Description

Run internal, automated process to generate feature classes of hatch lines at specific milepost intervals along routes.

Process contact - point of contact

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 NC

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, please 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 Data and Services Consultant

Contact information

Address

Type physical

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

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, please indicate as such in the subject line in an email.

Distribution format

Version 10.8.1

Name File Geodatabase Feature Class

Fields

Details for object Milepost_Hatch_050

Type Feature Class

Row count 12900

Definition

NC Milepost Hatching at 0.50 Mile Intervals,

Definition source

North Carolina Department of Transportation

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 RteClass

Alias RteClass

Data type String

Width 3

Precision 0

Scale 0

Description source

NCDOT

Field description

The NCDOT route class code for dominant route.

List of values

Value 1

Description Interstate (I)

Enumerated domain value definition source NCDOT

Value 2

Description US Route (US)

Enumerated domain value definition source NCDOT

Value 3

Description NC Route (NC)

Enumerated domain value definition source NCDOT

Value 4

Description Secondary Route (SR)

Enumerated domain value definition source NCDOT

Value 5

Description Non-System (NS)

Enumerated domain value definition source NCDOT

Value 6

Description Other State Agency Route (SA)

Enumerated domain value definition source	NCDOT
Value	7
Description	Federal Route (FED)
Enumerated domain value definition source	NCDOT
Value	80
Description	Ramp (RMP)
Enumerated domain value definition source	NCDOT
Value	81
Description	Rest Areas (RST)
Enumerated domain value definition source	NCDOT
Value	82
Description	Non-System Ramp
Enumerated domain value definition source	NCDOT
Value	9
Description	Projected (PRJ)
Enumerated domain value definition source	NCDOT

Field Rteld

Alias Rteld
Data type String
Width 11
Precision 0
Scale 0

Field description

The NCDOT eleven-digit number for each route in the network. More information explaining this route naming convention used by NCDOT is available here:

<https://xfer.services.ncdot.gov/gisdot/DistDOTData/Guide%20to%20the%20NCDOT%20Eleven-Digit%20Route%20Number%20-%20Rome%20Implementation.pdf>

Description source

NCDOT

Description of values

Values vary.

Field Milepost

Alias Milepost
Data type String
Width 10
Precision 0
Scale 0

Field description

Milepost of the hatch line measured in half mile intervals from the beginning point (milepost 0) of the route.

Description source

NCDOT

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.

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 2026-04-21

ArcGIS metadata properties

Metadata format ArcGIS 1.0

Metadata style ISO 19139 Metadata Implementation Specification

Standard or profile used to edit metadata ISO19139

Created in ArcGIS for the item 2026-04-15 14:57:42

Last modified in ArcGIS for the item 2026-04-21 16:01:28

Automatic updates

Have been performed Yes

Last update 2026-04-21 16:01:28

Metadata Contacts

Metadata contact - point of contact

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 NC

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, please indicate as such in the subject line in an email.

Metadata Maintenance

Maintenance

Update frequency quarterly

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 Data and Services Consultant

Contact information

Address

Type physical

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

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, please indicate as such in the subject line in an email.

Metadata 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.

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear Referencing System.

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.

This data is produced as a derivative of a reporting product out of the NCDOT Linear Referencing System, and is intended for visualization and reference use only. This is representative data only and is not designed for participation in data analysis or modelling. Use of this data is not analogous to integration with or alignment to NCDOT's Linear Referencing System.

Thumbnail and Enclosures

Thumbnail

Thumbnail type

Image file