

NC Milepost Zero Marker for Routes with 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, Milepost Zero, Route Beginning Point, Hatch Interval, Milepost, Transportation, Highway, Routes, Location, Streets, Interstate, US Route, NC Route Secondary Route

Summary

This layer provides points representing the beginning point—milepost zero—for routes where hatch lines are generated that represent half-mile intervals along the NCDOT Road Network. Each hatch line contains the half-mile Milepost value from this beginning point of a route. The Route ID attribute value is also included.

Description

This data provides the display for zero milepost values along public roads, excluding non-system/local roads, in North Carolina. This can accompany the half-mile interval hatch lines data. The zero milepost points and 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

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Referencing System.

Extent

West -84.382849

East -75.423365

North 36.585357

South 33.783450

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 Point, Roads, NCDOT, State Highway Network, Measure, Hatch Interval, Milepost, Milepost Zero, Route Beginning Point 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 Zero Marker for Routes with Hatching at 0.50 Mile Intervals, 1st Quarter 2026 - NC Department of Transportation

Alternate titles Milepost_Zero_Marker_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

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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 Data and Services Consultant

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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

Supplemental information

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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 -84.382849
East longitude -75.423365
North latitude 36.585357
South latitude 33.783450
Extent contains the resource Yes

Extent in the item's coordinate system

westBL 417760.666528
eastBL 3050743.418224

southBL 53692.142080
northBL 1032009.939856
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

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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

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City Raleigh

Administrative area NC

Postal code 27610

Country US

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Hours of service

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Resource Constraints

Constraints

Limitations of use

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Legal constraints

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Security constraints

Classification unclassified

Classification system None

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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 1893.9393939393938

ZOrigin -100000

ZScale 9.9999999999999982

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["NAD83",SPHEROID["GRS80",6378137,298.257222101],AUTHORITY["EPSG",7000]],PRIMARIES["North_American_1983",0,0,0,0,0,0,0,0,0,0,0,0],UNIT["Meter",1],AUTHORITY["EPSG",31466]],PARAMETER["Standard_Parallel_1",34.33333333333334],PARAMETER["Standard_Parallel_2",36.166666666666664],PARAMETER["False_Easting",500000],PARAMETER["False_Northing",500000],PARAMETER["Central_Meridian",-78.5],AUTHORITY["EPSG",31466]]

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_Zero_Marker_050

Object type point

Object count 5028

ArcGIS Feature Class Properties

Feature class name Milepost_Zero_Marker_050

Feature type Simple

Geometry type Point

Has topology FALSE
Feature count 5028
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 points representing the beginning milepost zero on the NCDOT Road Network of routes. The publication product NC Public Road Arcs is used as the input for the application to generate 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

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Country US

e-mail address gishelp@ncdot.gov

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Contact instructions

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Process step

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

Description

Run internal, automated process to generate feature classes of beginning points at milepost zero 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

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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

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Distribution format

Version 10.8.1

Name File Geodatabase Feature Class

Fields

Details for object Milepost_Zero_Marker_050

Type Feature Class

Row count 5028

Definition

NC Milepost Zero Marker for Routes with 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

Field description

The NCDOT route class code for dominant route.

Description source

NCDOT

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 beginning point (milepost 0) of the route.

Description source

NCDOT

Description of values

Zero.

Field RoadAngle

Alias RoadAngle

Data type SmallInteger

Width 2

Precision 0

Scale 0

Field description

Angle of the route at the point of the beginning milepost.

Description source

NCDOT

Range of values

Minimum value -180

Maximum value 180

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.

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 14:57:19

Last modified in ArcGIS for the item 2026-04-21 15:52:31

Automatic updates

Have been performed Yes

Last update 2026-04-21 15:52:08

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

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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

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Administrative area NC

Postal code 27610

Country US

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Metadata Constraints

Constraints

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Security constraints

Classification unclassified

Classification system None

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Thumbnail and Enclosures

Thumbnail

Thumbnail type

Image file