

NC Value Management (Lines), November 2025 - NC Department of Transportation

Geodatabase Feature Class



Tags Value Engineering and Management, Value Management, NHS Routes, NHS Category, National Highway System, Interstate, MAP-21, Congressional High Priority Corridors, STRAHNET, Intermodal, STIP, lines, points, Construction cost, buffer, Bike/Ped, EAU, Transportation, NCDOT, Environment, Location, North Carolina, ATLAS

Summary

This dataset was originally created in October 2021 and updated in October 2025 as part of the Project ATLAS initiative at NCDOT to support the Value Management Office embedded under the NCDOT Construction Unit with project delivery in the development phase.

The Value Management lines layer was created to be used by the Value Management Office and other project delivery stakeholders to screen and identify line projects that meet the threshold for required value management assessments. The requirements for such a layer was Draft or Final STIP line projects that intersect with a NHS road and have an estimated construction cost of more than \$20 million.

The STIP layer depicts NCDOT's 2020-2029 Transportation Improvement Program (STIP) Projects. The NHS layer is a network of nationally significant highways approved by Congress in the National Highway System Designation Act of 1995.

Description

The Value Management lines layer is a statewide polyline layer depicting STIP project lines that intersect a NHS roadway throughout the state of North Carolina and have a STIP construction cost estimate of more than \$20 million. This layer is to assist project scoping professionals and project managers in identifying which projects need to be coordinated and scoped with the Value Management Office. Any questions about specific projects that would benefit from value management assessments or if a specific project meets the threshold, contact valuemanagementunit@ncdot.gov

Datasets developed under Project ATLAS do not replace any Value Management Office field work for future projects and may not be used as a replacement for site visits / field surveys by licensed professionals and hence should be used only as a supporting platform for decision making. Use of this dataset for project scoping or screening is merely pre-decisional.

Credits

The Value Management Office within NCDOT was tasked to create this dataset. The STIP Unit of NCDOT is responsible for the development of the NHS layer and the STIP layer.

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

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Extent

West -84.191343

East -75.573653

North 36.559704

South 33.836579

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:625,000

Topics and Keywords

Themes or categories of the resource Oceans, Boundaries, Location, Transportation, Environment

Content type Downloadable Data

Theme keywords Value Engineering and Management, Value Management, NHS Routes, NHS Category, National Highway System, Interstate, MAP-21, Congressional High Priority Corridors, STRAHNET, Intermodal, STIP, lines, points, Construction cost, buffer, Bike/Ped, EAU, Transportation, NCDOT, Environment, Location, North Carolina, ATLAS

Thesaurus

Title User

Creation date 2025-10-28 00:00:00

Publication date 2025-11-14 00:00:00

Place keywords North Carolina

Thesaurus

Title User

Creation date 2025-10-28 00:00:00

Publication date 2025-11-14 00:00:00

Citation

Title NC Value Management (Lines), November 2025 - NC Department of Transportation

Creation date 2025-10-28 00:00:00

Publication date 2025-11-14 00:00:00

Presentation formats digital map

FGDC geospatial presentation format vector digital data

Citation Contacts

Responsible party - point of contact

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

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 ATLAS@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 ATLAS Data Search Tool, ATLAS Screening Tool or ATLAS Workbench. If it is an immediate need, please call the contact number or indicate as such in the subject line in an email.

Responsible party - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

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Voice 919-707-6136

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Responsible party - resource provider

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

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Resource Details

Dataset languages English (UNITED STATES)

Dataset character set utf8 - 8 bit UCS Transfer Format

Status completed

Spatial representation type vector

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

Credits

The Value Management Office within NCDOT was tasked to create this dataset. The STIP Unit of NCDOT is responsible for the development of the NHS layer and the STIP layer.

Extents

Extent

Description

Data collection will continue year round.

Geographic extent

Bounding rectangle

West longitude -84.421752

East longitude -75.418246

South latitude 33.7333

North latitude 36.617735

Extent contains the resource Yes

Temporal extent

Beginning date 2021-10-29 00:00:00

Ending date 2021-10-29 00:00:00

Extent

Geographic extent

Bounding rectangle

Extent type Extent used for searching

West longitude -84.191343

East longitude -75.573653

North latitude 36.559704

South latitude 33.836579

Extent contains the resource Yes

Extent in the item's coordinate system

westBL 473667.740094

eastBL 3006878.620841

southBL 70170.459919

northBL 1022669.059512

exTypeCode Yes

Resource Points of Contact

Point of contact - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

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Resource Maintenance

Resource maintenance

Update frequency as needed

Scope of the updates dataset

Other maintenance requirements

This layer is to be automatically updated when there is an update to the STIP layer.

Maintenance contact - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

Address

Type physical

Delivery point Century Center Building B, 1020 Birch Ridge Drive

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Resource Constraints

Legal constraints

Limitations of use

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Security constraints

Classification unclassified
Classification system None
Limitations of use

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Spatial Reference

ArcGIS coordinate system

Type Projected
Geographic coordinate reference GCS_North_American_1983
Projection NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet

Coordinate reference details
ProjectedCoordinateSystem

WKID 102719
XOrigin -121841900
YOrigin -93659000
XYScale 3048.0060960121918
ZOrigin 0
ZScale 1
MOrigin 0
MScale 1
XYTolerance 0.0032808333333333331
ZTolerance 0.001
MTolerance 0.001
HighPrecision true
LatestWKID 2264
WKT
PROJCS["NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet",GEOGCS["GCS_North_American_1983",DATUM["79.0"],PARAMETER["Standard_Parallel_1",34.33333333333334],PARAMETER["Standard_Parallel_2",36.166666666666666

Reference system identifier

Value 2264

Spatial Data Properties

Vector

Level of topology for this dataset	geometry only
Geometric objects	
Feature class name	GdbGisuPubC.ATLAS.VMLine
Object type	composite
Object count	6155

ArcGIS Feature Class Properties

Feature class name	GdbGisuPubC.ATLAS.VMLine
Feature type	Simple
Geometry type	Polyline
Has topology	FALSE
Feature count	6155
Spatial index	TRUE
Linear referencing	FALSE

Data Quality

Scope of quality information

Resource level	dataset
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Data quality report - Completeness omission

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.
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Conformance test results

Test passed	Yes
Result explanation	Pass

Product specification

Title	NCDOT Geospatial Data Specifications
Creation date	2025-10-28 00:00:00
Publication date	2025-11-14 00:00:00

Data quality report - Conceptual consistency

Data quality measure reference

Measure description

The dataset is converted to file geodatabase (FGDB) format using tools in ArcGIS. The geometry is checked for invalid geometries.

Conformance test results

Test passed Yes

Result explanation

Pass

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2025-10-28 00:00:00

Publication date 2025-11-14 00:00:00

Data quality report - Quantitative attribute accuracy

Data quality measure reference

Measure description

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 2025-10-28 00:00:00

Publication date 2025-11-14 00:00:00

Lineage

Lineage statement

This dataset was developed by intersecting the NHS Routes layer with STIP lines.

Source for NHS Layer: https://gis11.services.ncdot.gov/arcgis/rest/services/NCDOT_NHSQtr/MapServer/0

Source for STIP layer: https://gis11.services.ncdot.gov/arcgis/rest/services/NCDOT_STIP/MapServer

The NHS layer was buffered by 100 feet. The STIP layer was filtered to only show projects > \$20 million. The buffered NHS layer was intersected with the STIP Layer. Fields were adjusted as needed by the Value Management Office.

Process step

Description

Geodatabase was forwarded on to the GIS Unit for publishing as part of data for project ATLAS.

Process contact - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

Address

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

Country US

e-mail address ATLAS@ncdot.gov

Hours of service

9:00am – 5:00pm Monday - Friday

Contact instructions

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Process step

Description

Polyline data was reviewed in ESRI's Data Reviewer tool to verify geometry.

Process contact - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

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or indicate as such in the subject line in an email.

Process step

Description

To create this layer, the buffered NHS layer was intersected with a reduced STIP layer.

Process contact - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling
Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

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Distribution

Distributor

Contact information - distributor

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling
Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

Address

Delivery point Century Center Building B, 1020 Birch Ridge Drive

City Raleigh

Administrative area NC

Postal code 27610

Country US
e-mail address ATLAS@ncdot.gov
Hours of service
9:00am – 5:00pm Monday - Friday

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Distribution format

Version 10.5
Name SDE Feature Class

Fields

Details for object GdbGisuPubC.ATLAS.VMLine

Type Feature Class

Row count 6155

Definition

Layer that identifies project lines that meet the threshold for required value management assessments.

Definition source

NCDOT

Field OBJECTID

Alias FID

Data type OID

Width 4

Precision 10

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 4

Precision 0

Scale 0

Field description

Feature geometry.

Description source

Esri

Description of values

Coordinates defining the features.

Field NHSCat

Alias NHSCat

Data type String

Width 37

Precision 0

Scale 0

Field description

NHS Category

Description source

NCDOT

List of values

Value Interstate

Description Interstate

Enumerated domain value definition source NHS

Value STRAHNET Route

Description STRAHNET Route

Enumerated domain value definition source NHS

Value STRAHNET Connector

Description STRAHNET Connector

Enumerated domain value definition source NHS

Value Other NHS

Description Other NHS

Enumerated domain value definition source NHS

Value Intermodal Connector

Description Intermodal Connector

Enumerated domain value definition source NHS

Value MAP-21 NHS

Description MAP-21 NHS

Enumerated domain value definition source NHS

Value Congressional High Priority Corridors

Description Congressional High Priority Corridors

Enumerated domain value definition source NHS

Value Unbuilt NHS Routes

Description Unbuilt NHS Routes

Enumerated domain value definition source NHS

Field TIP

Alias TIP

Data type String

Width 10

Precision 0

Scale 0

Field description

STIP Project Identifier

Description source

NCDOT

Field SPOTID

Alias SPOTID

Data type String

Width 500

Precision 0

Scale 0

Field description

Prioritization project identifier

Description source

NCDOT

Field Route

Alias Route

Data type String

Width 255

Precision 0

Scale 0

Field description

Name of Route facility project is located on

Description source

NCDOT

Field Descr

Alias Descr

Data type String

Width 500

Precision 0

Scale 0

Field description

Brief description of project

Description source

NCDOT

Field Category

Alias Category

Data type String

Width 255

Precision 0

Scale 0

Field description

STI Category project was funded under

Description source

NCDOT

List of values

Value DIV

Description DIV

Enumerated domain value definition source NCDOT

Value REG

Description REG

Enumerated domain value definition source NCDOT

Value SW

Description SW

Enumerated domain value definition source NCDOT

Value EX

Description EX

Enumerated domain value definition source NCDOT

Value TRN

Description TRN

Enumerated domain value definition source NCDOT

Field Mode

Alias Mode

Data type String

Width 255

Precision 0

Scale 0

Field description

Mode of transportation for project

Description source

NCDOT

List of values

Value	BICYCLE AND PEDESTRIAN	
Description	BICYCLE AND PEDESTRIAN	
Enumerated domain value definition source	NCDOT	
Value	HIGHWAY	
Description	HIGHWAY	
Enumerated domain value definition source	NCDOT	
Value	HIGHWAY SAFETY	
Description	HIGHWAY SAFETY	
Enumerated domain value definition source	NCDOT	
Value	PUBLIC TRANSIT	
Description	PUBLIC TRANSIT	
Enumerated domain value definition source	NCDOT	

Field ROWYear

Alias	ROWYear
Data type	String
Width	255
Precision	0
Scale	0
Field description	First year funding is authorized for Right of Way acquisition

Description source

NCDOT

Field ConstrYr

Alias	ConstrYr
Data type	String
Width	255
Precision	0
Scale	0
Field description	First year funding is authorized for construction.

Description source

NCDOT

Field Comment

Alias	Comment
Data type	String
Width	255
Precision	0
Scale	0
Field description	Additional Notes and Comments from the STIP Unit

Description source
NCDOT

Field PrCost

Alias PrCost
Data type Double
Width 8
Precision 38
Scale 8

Field description
Cost of project remaining. For projects with Prior Years funds already spent, this sum in not included.

Description source
NCDOT

Field Symbology

Alias Symbology
Data type String
Width 100
Precision 0
Scale 0

Field description
Road symbology to be used for mapping

Description source
NCDOT

List of values

- Value** Division Highway

Description Division Highway

Enumerated domain value definition source NCDOT
- Value** Ex Bicycle And Pedestrian

Description Ex Bicycle And Pedestrian

Enumerated domain value definition source NCDOT
- Value** Ex Highway

Description Ex Highway

Enumerated domain value definition source NCDOT
- Value** Highway

Description Highway

Enumerated domain value definition source NCDOT
- Value** IM

Description IM

Enumerated domain value definition source NCDOT
- Value** Regional Highway

Description Regional Highway

Enumerated domain value definition source	NCDOT
Value	Regional Highway Safety
Description	Regional Highway Safety
Enumerated domain value definition source	NCDOT
Value	Regional Public Transit
Description	Regional Public Transit
Enumerated domain value definition source	NCDOT
Value	Statewide Highway
Description	Statewide Highway
Enumerated domain value definition source	NCDOT
Value	Transition Highway
Description	Transition Highway
Enumerated domain value definition source	NCDOT

Field Counties

Alias Counties
Data type String
Width 255
Precision 0
Scale 0
Field description
Counties that are stakeholders to the project

Description source
NCDOT

Field Divisions

Alias Divisions
Data type String
Width 255
Precision 0
Scale 0
Field description
NCDOT Divisions that are stakeholders to the project

Description source
NCDOT

Field MPOsRPOs

Alias MPOsRPOs
Data type String
Width 255
Precision 0
Scale 0
Field description
Planning organizations that are stakeholders to the project

Description source

NCDOT

Field GlobalID

Alias GlobalID

Data type GlobalID

Width 38

Precision 0

Scale 0

Field Shape.STLength()

Alias Shape.STLength()

Data type Double

Width 0

Precision 0

Scale 0

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 2026-03-06

ArcGIS metadata properties

Metadata format ArcGIS 1.0

Standard or profile used to edit metadata ItemDescription

Metadata style ISO 19139 Metadata Implementation Specification

Created in ArcGIS for the item 2026-08-26 13:51:52

Last modified in ArcGIS for the item 2026-03-06 11:07:37

Automatic updates

Have been performed Yes

Last update 2026-03-06 11:07:28

Metadata Contacts

Metadata contact - point of contact

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

Address

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Metadata Maintenance

Maintenance

Update frequency as needed

Maintenance contact - originator

Organization's name North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

Contact's position Environmental Program Consultant

Contact information

Phone

Voice 919-707-6136

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Metadata Constraints

Security constraints

Classification unclassified
Classification system None
Limitations of use

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Thumbnail and Enclosures

Thumbnail

Thumbnail type
Image file