

NCDOT Coastal Inundation Points (No Lidar), March 2022 - NC

Department of Transportation

Geodatabase Feature Class



Tags interstates, highways, flooding, transportation, Eastern Seaboard, Atlantic Coast, resiliency, coastal, hurricanes, inundation, rivers, streams, East Coast, Hydraulics, Transportation, NCDOT, Environment, Location, North Carolina, ATLAS

Summary

This dataset was originally created in February 2022 as part of the Project ATLAS initiative at NCDOT to support the Hydraulics Unit with project delivery in the development phase.

This dataset comprises points that do not currently have roadway elevation data available along the coast of NC. It was included to demonstrate where gaps in the analysis exist. These gaps can be filled when the data later become available.

Description

The NCDOT Coastal Inundation Points (No Lidar) dataset is a statewide point layer where roadway elevation data is not currently available along the NC coast.

The layer will be helpful to understand road elevations in relation to flood events/inundation to help with planning, mitigation and emergency response. It would allow ATLAS users to understand road elevations in relation to any project.

Datasets developed under Project ATLAS do not replace any Hydraulics Unit 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 Hydraulics Unit within NCDOT was tasked to create this dataset.

Maintenance of this dataset is handled by the Hydraulics Unit. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDOT's Transportation GIS Unit.

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.

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Extent

West -78.678170

East -75.419509

North 36.589566

South 33.800072

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:625,000

Topics and Keywords

Themes or categories of the resource Boundaries, Inland Waters, Location, Transportation, Environment

Content type Downloadable Data

Export to FGDC CSDGM XML format as Resource Description No

Theme keywords interstates, highways, flooding, transportation, Eastern Seaboard, Atlantic Coast, resiliency, coastal, hurricanes, inundation, rivers, streams, East Coast, Hydraulics, Transportation, NCDOT, Environment, Location, North Carolina, ATLAS

Thesaurus

Title User

Creation date 2022-02-08 00:00:00

Publication date 2022-03-31 00:00:00

Place keywords North Carolina

Thesaurus

Title User

Creation date 2022-02-08 00:00:00

Publication date 2022-03-31 00:00:00

Citation

Title NCDOT Coastal Inundation Points (No Lidar), March 2022 - NC Department of Transportation

Creation date 2022-02-08 00:00:00

Publication date 2022-03-31 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

Delivery point 4101 Capital Boulevard

City Raleigh

Administrative area NC

Postal code 27604

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 - resource provider

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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Responsible party - originator

Organization's name North Carolina Department of Transportation - Hydraulics Unit

Contact's position State Hydraulics Engineer

Contact information

Phone

Voice 919-707-6700

Address

Delivery point 1000 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

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 10.5.1.7333

Credits

The Hydraulics Unit within NCDOT was tasked to create this dataset.

Maintenance of this dataset is handled by the Hydraulics Unit. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

Extents

Extent

Description

Data collection is complete.

Geographic extent

Bounding rectangle

West longitude -84.125201

East longitude -75.426058

South latitude 33.829738

North latitude 36.556356

Extent contains the resource Yes

Temporal extent

Beginning date 2022-02-08 00:00:00

Ending date 2022-02-08 00:00:00

Extent

Geographic extent

Bounding rectangle

Extent type Extent used for searching
West longitude -78.678170
East longitude -75.419509
North latitude 36.589566
South latitude 33.800072
Extent contains the resource Yes

Extent in the item's coordinate system

westBL 2097733.823949
eastBL 3051815.843987
southBL 36568.656395
northBL 1033706.471968
exTypeCode Yes

Resource Points of Contact

Point of 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

Type

Delivery point 4101 Capital Boulevard

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Resource Maintenance

Resource maintenance

Update frequency as needed

Scope of the updates dataset

Other maintenance requirements

The Hydraulics Unit within NCDOT was tasked to create this dataset.

Maintenance of this dataset is handled by the Hydraulics Unit. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDOT's Transportation GIS Unit.

Maintenance 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

Type

Delivery point 4101 Capital Boulevard

City Raleigh

Administrative area NC

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Country US

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Resource Constraints

Legal constraints

Limitations of use

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Security constraints

Classification unclassified

Limitations of use

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Constraints

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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 18939.39393939394

ZOrigin -100000

ZScale 10000

MOrigin -100000

MScale 10000

XYTolerance 0.00052800000000000004

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",36.16666666666666
```

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 CoastallInundationPointsNoLIDAR

Object type point

Object count 414667

ArcGIS Feature Class Properties

Feature class name CoastallInundationPointsNoLIDAR

Feature type Simple

Geometry type Point

Has topology FALSE

Feature count 414667

Spatial index TRUE

Linear referencing FALSE

Data Quality

Scope of quality information

Resource level dataset

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.

Conformance test results

Test passed Yes

Result explanation

Pass

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2021-12-15 00:00:00

Publication date 2022-01-28 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, and if needed repaired.

Conformance test results

Test passed Yes

Result explanation

Pass

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2021-12-15 00:00:00

Publication date 2022-01-28 00:00:00

Data quality report - Quantitative attribute accuracy

Data quality measure reference

Measure description

A contractor created the layer using numerous manual and automated checks as well as QA/QC of the layers used in creation and the final product by NCDOT personnel. The original layers had gone through the normal process from NC Emergency Management to assure quality.

Conformance test results

Test passed Yes

Result explanation

Pass

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2021-12-15 00:00:00

Publication date 2022-01-28 00:00:00

Lineage

Lineage statement

Points were generated every 50 feet along primary and secondary roads. It comprises points where roadway elevation data is not currently available. It was included to demonstrate where gaps in the analysis exist

Process step

Description

Data was reviewed in ESRI's Data Reviewer tool to verify geometry. No legitimate errors were found.

Process 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

Delivery point 4101 Capital Boulevard

City Raleigh

Administrative area NC

Postal code 27604

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.

Process step

Description

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

Process contact - point of contact

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

Contact's position Environmental Program Consultant

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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

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Distribution format

Name File Geodatabase Feature Class

Version 10.5

Fields

Details for object CoastallnundationPointsNoLIDAR

Type Feature Class

Row count 414667

Definition

Points where roadway elevation data is not currently available along the NC coast.

Definition source

NCDOT

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 Division

Alias Division

Data type SmallInteger

Width 2

Precision 0

Scale 0

Field description

The NCDOT highway division number.

Description source

NCDOT

Field County

Alias County

Data type String

Width 20

Precision 0

Scale 0

Field description

The name of the North Carolina county the point is located in.

Description source
NCDOT

Field RouteID

Alias RouteID
Data type String
Width 20
Precision 0
Scale 0

Field description
An 11-digit route identifier, derived from NCDOT’s NCRoutes feature class.

Description source
NCDOT

Field RouteClass

Alias RouteClass
Data type String
Width 5
Precision 0
Scale 0

Field description
The route classification, derived from NCDOT’s NCRoutes feature class. A value of 1 is an interstate. A value of 2 is a U.S. route. A value of 3 is an NC route. Larger values are secondary routes.

Description source
NCDOT

List of values

- Value** 1
Description Interstate
Enumerated domain value definition source NCDOT
- Value** 2
Description US Route
Enumerated domain value definition source NCDOT
- Value** 3
Description NC Route
Enumerated domain value definition source NCDOT
- Value** 4
Description Secondary Route
Enumerated domain value definition source NCDOT
- Value** 5
Description Non-System
Enumerated domain value definition source NCDOT
- Value** 6

Description Other State Agency Route
Enumerated domain value definition source NCDOT
Value 7
Description Federal Route
Enumerated domain value definition source NCDOT
Value 80
Description Ramp
Enumerated domain value definition source NCDOT

Field RouteNumber

Alias RouteNumber
Data type String
Width 5
Precision 0
Scale 0
Description source
NCDOT

Field description

Route Number derived from NCDOT's NCRoutes feature class.

Field RouteName

Alias RouteName
Data type String
Width 20
Precision 0
Scale 0

Field description

The route name, derived from NCDOT's NCRoutes feature class.

Description source

NCDOT

Field EvacRt

Alias EvacuationRoute
Data type String
Width 5
Precision 0
Scale 0

Field description

Whether the route is an established evacuation route. Evacuation routes can accommodate heavy traffic volumes and higher speeds.

Description source

NCDOT

List of values

Value Y

Description Yes, evacuation route

Enumerated domain value definition source NCDOT

Value N

Description Not an evacuation route

Enumerated domain value definition source NCDOT

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 2022-06-08

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 2026-08-26 14:37:22

Last modified in ArcGIS for the item 2022-06-08 14:55:44

Automatic updates

Have been performed Yes

Last update 2022-06-08 14:55:44

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

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Metadata Maintenance

Maintenance

Update frequency as needed

Other maintenance requirements

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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