

NC Existing Guardrail Lines, Continuous Capture – NC Department of Transportation

Geodatabase Feature Class



Tags Line, North Carolina, NCDOT, Transportation, Right of Way, Highway, Transportation Planning, Location, Acquisition, Guardrail, Property, ROW.

Summary

This feature class contains line representation of guardrails in which NCDOT acquisition, in part, may be necessary for road construction or improvement. Attributes containing NCDOT Project and Parcel ID are included. These data support the NCDOT Right Of Way Management System which allows for the continuous capture of right of way data. The data entered are the latest available to the NCDOT Right Of Way Branch, but data currency may vary across the system.

Description

The Right of Way Branch of NCDOT is responsible for the acquisition of all necessary lands and rights of way used for construction and improvements of all highways which are part of the State Highway System. This includes roads on both the primary (interstate, U.S., and N.C. routes) and secondary (SR routes) systems. Purchasing land for other public modes of transportation is also required for expansion and to accommodate increased demand.

Multiple facets make up the Right of Way business process from early NCDOT project development to appraisals and land purchases. NCDOT's "Understanding the Right of Way Process" document provides more information here:

<https://connect.ncdot.gov/business/ROW/ROWManualsandPublications/Right-of-Way-Brochure-Single%20Page%20layout.pdf>

The Right of Way Management System (ROWMS) is a web-based application that captures Right of Way (ROW) information and documents, provides workflow and reporting capabilities, and interfaces with internal systems. ROWMS supports NC legislative mandates requiring Right of Way to have a role-based, data management system used by all projects.

A major benefit ROWMS provides is a 25% workflow cycle time reduction. It also facilitates process standardization, cross-department integration, collaboration across the organization, a detailed audit trail, and contractor integration. ROWMS integrates systems such as SAP (Vendors, Invoices, POs, Asset Management, etc.), SharePoint (public documents and deeds), DocuSign (electronic signatures, eNotary), and GIS.

The GIS Unit of the North Carolina Department of Information Technology-Transportation (NCDIT-T) has developed a process to convert the Right of Way Unit's original DGN/CAD files into a GIS format, that can then be managed and disseminated to meet the ROWMS project needs. These are adjacent and nearby critical features such as existing roads, buildings, utilities, and property, affected or impacted in some way due to NCDOT's state highway system construction or improvement projects. Proposed features for ROW acquisition, proposed roads and related features are also included. This ROW data can be viewed overlaying maps in the application. The GIS capability of ROWMS enables management and dissemination of Right of Way-based spatial data.

Credits

The North Carolina Department of Transportation, Division of Highways, Right of Way Unit.

Support and maintenance of the enterprise spatial database where this data resides is handled by the North Carolina Department of Information Technology-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.

All Right of Way data is the sole property of NCDOT and any public purpose use is subject to approval and release by NCDOT. No data, whole or in part, shall be released, published, or shared without prior written approval by NCDOT. No information concerning the data shall be divulged to anyone outside the proper officials at NCDOT or the Federal Highway Administration. All Right of Way data is strictly confidential to NCDOT and its approved contractors.

Extent

West -85.782845
East -76.290365
North 36.578200
South 33.582614

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:50,000

Topics and Keywords

Themes or categories of the resource Location, Planning & Cadastral, Society, Transportation

Content type Downloadable Data

Export to FGDC CSDGM XML format as Resource Description No

Theme keywords Line, North Carolina, NCDOT, Transportation, Right of Way, Highway, Transportation Planning, Location, Guardrail, Property, ROW.

Thesaurus

Title User
Creation date 2018-09-13 00:00:00
Publication date 2018-09-13 00:00:00

Place keywords North Carolina

Thesaurus

Title User
Creation date 2018-09-13 00:00:00
Publication date 2018-09-13 00:00:00

Citation

Title NC Existing Guardrail Lines, Continuous Capture – NC Department of Transportation
Alternate titles ExistingGuardrailPolyline
Creation date 2018-09-13 00:00:00

Publication date 2018-09-13 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 Transportation, Right of Way Unit

Contact's position Right of Way Agent II (Real Property Conveyance Specialist)

Contact information

Phone

Voice 919-707-4360

Address

Type physical

Delivery point 1 South Wilmington Street

City Raleigh

Administrative area NC

Postal code 27601

Country US

e-mail address cegrady@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 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 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 Right of Way Geodatabase. If it is an immediate need, please call the contact number or 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

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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

Processing environment Version 6.2 (Build 9200) ; Esri ArcGIS 10.5.1.7333

Credits

The North Carolina Department of Transportation, Division of Highways, Right of Way Unit.

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ArcGIS item properties

Name ExistingGuardrailPolyline

Location file://\DOT\DFSROOT01\GROUPS-GISNH\GIS-TechShare\GISAppDevProjects\MetadataROWMS\ROWMS_Services.gdb

Access protocol Local Area Network

Extents

Extent

Geographic extent

Bounding rectangle

Extent type

Extent used for searching

West longitude -85.782845
East longitude -76.290365
North latitude 36.578200
South latitude 33.582614
Extent contains the resource Yes

Extent in the item's coordinate system

westBL 4915.169071
eastBL 2795960.607967
southBL 4949.272120
northBL 1029403.733050
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
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e-mail address gishelp@ncdot.gov

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Resource Maintenance

Resource maintenance

Update frequency continual

Scope of the updates dataset

Other maintenance requirements

The North Carolina Department of Transportation, Division of Highways, Right of Way Unit maintenance is as needed and not regularly scheduled.

Support and maintenance of the spatial database where this data resides is handled by the North Carolina Department of Information Technology-Transportation, GIS Unit.

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

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Contact instructions

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Resource Constraints

Constraints

Limitations of use

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Legal constraints

Limitations of use

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Access constraints restricted

Use constraints restricted

Security constraints

Classification confidential

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 3048.0060960121928

ZOrigin -100000

ZScale 10000

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 ExistingGuardrailPolyline

Object type composite

Object count 14128

ArcGIS Feature Class Properties

Feature class name ExistingGuardrailPolyline

Feature type Simple

Geometry type Polyline

Has topology FALSE

Feature count 14128

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 and based on the availability of the submitter, 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 2018-09-13 00:00:00

Publication date 2018-09-13 00:00:00

Data quality report - Conceptual consistency

Data quality measure reference

Measure description

This dataset is converted to file geodatabase (FGDB) format. Data quality is not automated as part of the conversion process and assessed on an irregular basis.

Conformance test results

Test passed Yes

Result explanation

Pass.

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2018-09-13 00:00:00

Publication date 2018-09-13 00:00:00

Data quality report - Quantitative attribute accuracy

Data quality measure reference

Measure description

The source data may be checked using standard review procedures. Attributes and null values were checked by using visual inspection as well as automated verification routines. Geometry checks were done post processing by the users.

Conformance test results

Test passed Yes

Result explanation

Pass.

Product specification

Title NCDOT Geospatial Data Specifications

Creation date 2018-09-13 00:00:00

Publication date 2018-09-13 00:00:00

Lineage

Lineage statement

This dataset was originally created by the North Carolina Department of Transportation, Right of Way Unit, to provide a geographic representation of quardrails affected by proposed Right of Way acquisition in North Carolina. The data contained within this dataset is automatically loaded to the enterprise database environment through the data conversion process. Web mapping services are created with this data from the database. These services support the Right of Way Management System (ROWMS) online GIS data viewer which is utilized by the NCDOT's Right of Way Unit.

Process step

When the process occurred 2018-09-01 00:00:00

Description

The Right of Way data is originally created using MicroStation (CAD software). This data, known as Levels, exist as DGN format data files

Process contact - originator

Organization's name North Carolina Department of Transportation, Right of Way Unit

Contact's position Right of Way Agent II (Real Property Conveyance Specialist)

Contact information

Phone

Voice 919-707-4360

Address

Type physical

Delivery point 1 South Wilmington Street

City Raleigh

Administrative area NC

Postal code 27601

Country US

e-mail address cegrady@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 call the contact number or indicate as such in the subject line in an email.

Process step

When the process occurred 2018-09-10 00:00:00

Description

The ROW DGN format data is converted into a geospatial enterprise database utilizing a GIS data conversion process.

Process contact - resource provider

Organization's name North Carolina Department of Transportation, Right of Way Unit

Contact's position Right of Way Agent II (Real Property Conveyance Specialist)

Contact information

Phone

Voice 919-707-4360

Address

Type physical

Delivery point 1 South Wilmington Street

City Raleigh

Administrative area NC

Postal code 27601

Country US

e-mail address cegrady@ncdot.gov

Hours of service

9:00am - 5:00pm Monday – Friday

Contact instructions

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Process step

When the process occurred 2018-09-13 00:00:00

Description

The Right of Way enterprise geodatabase data is published as a series of map services for display in the online ROWMS application, maintained by the NCDIT-Transportation GIS Unit.

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

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Distribution

Distributor

Contact information - 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

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Contact instructions

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Distribution format

Version 10.5.1

Name File Geodatabase Feature Class

Fields

Details for object ExistingGuardrailPolyline

Type Feature Class

Row count 14128

Definition

ExistingGuardrailPolyline

Definition source

North Carolina Department of Transportation, Right of Way Unit

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 IgdsClass

Alias IgdsClass

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Field from original DGN format file. The element's class value. 0 = Primary.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field IgdsStyle

Alias IgdsStyle

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Field from original DGN format file. The element's line style.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field IgdsWeight

Alias IgdsWeight

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Field from original DGN format file. The element's line weight.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field IgdsColor

Alias IgdsColor

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Field from original DGN format file. The element's color setting. This is the element's color index into the color table stored in the design file.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field IgdsGraphicGroup

Alias IgdsGraphicGroup

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Field from original DGN format file. The element's graphic group number.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field IgdsLevel

Alias IgdsLevel

Data type Integer

Width 4

Precision 0

Scale 0

Field description

Field from original DGN format file, a level-based format. The IGDS (Interactive Graphics Design System – CAD format) level value of the feature.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field LevelName

Alias LevelName

Data type String

Width 75

Precision 0

Scale 0

Field description

Field from original DGN format file, a level-based format. The name of the level from which the element originated. This closely matches the name of the feature class.

Description source

NCDOT Right of Way Unit

Description of values

Numerical value.

Field ProjectID

Alias ProjectID

Data type String

Width 75

Precision 0

Scale 0

Description source

NCDOT Right of Way Unit

Field description

Concatenation of the NCDOT TIP Project number and “_ROWGIS”.

Description of values

Alphanumeric values will vary.

Field GlobalID

Alias GlobalID

Data type GlobalID

Width 38

Precision 0

Scale 0

Description source

NCDOT Right of Way Unit

Field description

Uniquely identifies a feature or table row within a geodatabase and across geodatabases.

Description of values

Alphanumeric values will vary.

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 2022-02-02

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 2021-11-30 09:04:41

Last modified in ArcGIS for the item 2022-02-02 09:16:30

Automatic updates

Have been performed Yes

Last update 2022-02-02 09:16:29

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

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Metadata Maintenance

Maintenance

Update frequency as needed

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

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Country US

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Metadata Constraints

Constraints

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Security constraints

Classification confidential

Classification system None

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Thumbnail and Enclosures

Thumbnail

Thumbnail type

Image file