

Rail Crossing Events, Continuous Capture - NC Department of Transportation

SDE Geodatabase Feature Class



Tags

Linear Referencing System, Event, Centerline, Division, SR, Primary, transportation, US, State maintained roads, Highways, NC, Roads, Major Roads, North Carolina, Interstate, Streets, Transportation, County, Rail, Rail Crossings

Summary

This feature class contains measured occurrences (events) of railroad crossings as points on roads that are currently maintained by the North Carolina Department of Transportation (NCDOT) or roads potentially eligible for future addition to the state's Linear Reference System (LRS) based on established business rules for road inclusion. Attributes containing Event ID and the NCDOT 11-digit Route ID are included. For each point event occurrence, the Measure field provides the location of the event along the NCDOT's MilePoint route network. Measures represent a location along a route based on distance from the route's origin. The measure is captured in miles. The precision is to the 6th decimal in the tabular column. Measure precision on the shape is to the 7th decimal. This is one of many events included in NCDOT's LRS, representing route characteristic attributes of the NCDOT state road system. The LRS route network is comprised of Interstate, US, NC, Secondary Roads, Ramps, and non-state maintained and projected roads required for federal reporting purposes.

Description

This feature class contains measured locations (events) of rail crossings represented as points aligned to NCDOT's Linear Reference System (LRS) Network of routes. Coverage includes crossings located on all state-maintained roads throughout the state. Crossing locations were verified by cross-referencing records in the FRA public crossing database with the North Carolina Department of Transportation Rail Division's crossing database, railroad company track charts and aerial imagery. Rail crossing attributes in the dataset include an Event ID (unique NCDOT ID for each rail crossing), Crossing ID (unique ID assigned to crossings in NCDOT's State Authoritative Rail and Highway database: SARAH), as well as the dominant route for each crossing (returned as RouteID).

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.

An LRS is a system for storing geographic locations along linear elements using relative locations. Location is given in terms of a known linear feature and a position, or measure, along it based on a distance from a known point of origin. The road centerline feature class is the geometry source from which NCDOT's routes are created in the LRS. The collection of routes, System and Non-System, is the NCDOT LRS Network referred to as MilePoint. For NCDOT, MilePoint provides the linear measures in miles, from the origin of each route. Events are stored on or along routes. Events are continuous linear or point features and can be anything that occurs on or describes a route. Examples in NCDOT's LRS are speed limit, lane width, functional class, surface type, ownership, or highway exit. Events describe an attribute of a route and have a location along the route (measured by the distance, in miles for NCDOT's LRS, from the start of the route). Multiple sets of road

attributes (events) can be associated with any portion of the underlying routes. This allows the events to be independent of where the route begins and ends, preventing the linework split each time there is an attribute value change.

The GIS Unit of the North Carolina Department of Information Technology-Transportation (NCDIT-T) has been tasked with developing and maintaining NCDOT's Linear Referencing System. The GIS Unit employs the use of GIS spatial layers to reference LRS data to real world locations. The integration of LRS to spatial layers provides a means to analyze data using GIS methods, facilitates the creation of cartographic products, and allows the enforcement of business rules. The unit is authorized to edit the LRS to match official documentation. This also includes the capture of attributes (event data) that are referenced to the linework. The NCDOT road centerline is a spatial representation of official documentation of what roads or sections of roads are physically maintained by the State. Changes to the spatial representation of the road centerline for NCDOT are authorized by the NC Board of Transportation or other business units within NCDOT.

Editing of the LRS at NCDOT is performed by multiple contributing business unit data owners. This designates it as an enterprise GIS data editing system. The GIS Unit at NCDIT-T modifies the LRS Network routes by creating, editing, or retiring based on official change notification from various NCDOT sources. Once the routes have been edited, business units may update their event data as found on the routes based on the same or additional documentation. Business units edit the LRS events using Esri's ArcGIS Event Editor, a map-centric web app that supports linear referenced event data editing via feature services. Some events are also maintained by the GIS Unit at NCDIT-T. More information about Event Editor is available here: <https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/what-is-event-editor.htm>.

Credits

The North Carolina Department of Transportation, Division of Highways.

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 metadata. 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 should be used for planning, maintenance, and decision-making support purposes only. It should be used only by those who fully understand the extents, limitations, and content of the data. This data should not be used for routing. The data should not be used in place of field survey or data collection efforts that are normally performed by licensed professionals and it should not replace any data collection efforts that are typically required as a part of detailed design and construction efforts.

Extent

West -84.124514 **East** -76.091016

North 36.572487 **South** 33.846561

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:625,000

ArcGIS Metadata ►

Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE transportation, location, society

CONTENT TYPE Geographic Services

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS North Carolina, Division, County

THESAURUS ▶

TITLE User

PUBLICATION DATE 2023-11-06 00:00:00

CREATION DATE 2023-10-16 00:00:00

[Hide Thesaurus ▲](#)

THEME KEYWORDS North Carolina, transportation, Linear Referencing System, Rail Event, Rail Crossings, Railroad, Rail, Crossing, Measure, Point, North Carolina, NCDOT, Transportation, Highway, Roads, Routes, Centerline, State Highway Network, Inventory, Transportation Planning, Location

THESAURUS ▶

TITLE User

PUBLICATION DATE 2023-11-06 00:00:00

CREATION DATE 2023-10-16 00:00:00

FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

[Hide Thesaurus ▲](#)

THEME KEYWORDS Centerline, SR, Primary, US, State maintained roads, Highways, NC, Roads, Major Roads, Interstate, Streets, Secondary, Rail crossings

THESAURUS ▶

TITLE User

CREATION DATE 2023-10-16 00:00:00

PUBLICATION DATE 2023-11-06 00:00:00

[Hide Thesaurus ▲](#)

THEME KEYWORDS Transportation

THESAURUS ▶

TITLE User

PUBLICATION DATE 2023-11-06 00:00:00

CREATION DATE 2023-10-16 00:00:00

[Hide Thesaurus ▲](#)

[Hide Topics and Keywords ▲](#)

Citation ▶

TITLE Rail Crossing Events, Continuous Capture - NC Department of Transportation

ALTERNATE TITLES Rail Crossings

PUBLICATION DATE 2023-11-06 00:00:00

CREATION DATE 2023-10-16 00:00:00

PRESENTATION FORMATS digital map

FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

[Hide Citation ▲](#)

Citation Contacts ▶

RESPONSIBLE PARTY

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Help Desk
CONTACT'S ROLE originator

CONTACT INFORMATION ▶

ADDRESS

TYPE physical
DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA North Carolina
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, indicate as such in the subject line in an email.

[Hide Contact information ▲](#)

RESPONSIBLE PARTY

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Help Desk
CONTACT'S ROLE point of contact

CONTACT INFORMATION ▶

ADDRESS

TYPE physical
DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive
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RESPONSIBLE PARTY

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Help Desk
CONTACT'S ROLE resource provider

CONTACT INFORMATION ▶

ADDRESS

TYPE physical
DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive
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[Hide Citation Contacts ▲](#)

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 10.8.1.14362

CREDITS

The North Carolina Department of Transportation, Division of Highways.

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.

[Hide Resource Details ▲](#)

Extents ►

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

WEST LONGITUDE -84.421752
EAST LONGITUDE -75.418246
SOUTH LATITUDE 33.7333
NORTH LATITUDE 36.617735

VERTICAL EXTENT

* MINIMUM VALUE 2.200000
* MAXIMUM VALUE 3319.900000

EXTENT

DESCRIPTION

Unknown

VERTICAL EXTENT

* MINIMUM VALUE 2.200000
* MAXIMUM VALUE 3319.900000

EXTENT

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

VERTICAL EXTENT
* MINIMUM VALUE 2.200000
* MAXIMUM VALUE 3319.900000

EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -84.124514
* EAST LONGITUDE -76.091016
* NORTH LATITUDE 36.572487
* SOUTH LATITUDE 33.846561
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE 493592.031808
* EAST LONGITUDE 2854613.081536
* SOUTH LATITUDE 72804.865600
* NORTH LATITUDE 1027323.547552
* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

Resource Points of Contact ►

POINT OF CONTACT
ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Help Desk
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

ADDRESS
TYPE physical
DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA North Carolina
POSTAL CODE 27610
COUNTRY US
E-MAIL ADDRESS gishelp@ncdot.gov

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[Hide Contact information ▲](#)

[Hide Resource Points of Contact ▲](#)

Resource Maintenance ►

RESOURCE MAINTENANCE

UPDATE FREQUENCY continual

SCOPE OF THE UPDATES dataset

OTHER MAINTENANCE REQUIREMENTS

The North Carolina Department of Transportation, Division of Highways 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

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

ADDRESS

TYPE physical

DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA North Carolina

POSTAL CODE 27610

COUNTRY US

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[Hide Contact information ▲](#)

[Hide Resource Maintenance ▲](#)

Resource Constraints ►

SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

LIMITATIONS OF USE

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CONSTRAINTS

LIMITATIONS OF USE

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LEGAL CONSTRAINTS

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[Hide Resource Constraints ▲](#)

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

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102719
X ORIGIN -121841900
Y ORIGIN -93659000
XY SCALE 1893.9393939393938
Z ORIGIN -100000
Z SCALE 9.9999999999999982
M ORIGIN -100000
M SCALE 10000000
XY TOLERANCE 0.00528
Z TOLERANCE 0.20000000000000004
M TOLERANCE 9.9999999999999995e-07
HIGH PRECISION true
LATEST WELL-KNOWN IDENTIFIER 2264
VCSWKID 105703
LATESTVCSWKID 6360
WELL-KNOWN TEXT

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]],VERTCS["NAVD_1988_Foot_US",VDATUM["North_American_Vertical_Datum_1988"],PARAMETER["Vertical_Shift",0.0],PARAMETER["Direction",1.0],UNIT["Foot_US",0.3048006096012192]]

REFERENCE SYSTEM IDENTIFIER

VALUE 2264
* COORDINATE SYSTEM EPSG
* VERSION 6.12(9.0.0)

[Hide Spatial Reference ▲](#)

Spatial Data Properties ►

VECTOR ►

* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME LRSE_RailCrossing
* OBJECT TYPE point
* OBJECT COUNT 4763

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME LRSE_RailCrossing
* FEATURE TYPE Simple
* GEOMETRY TYPE Point
* HAS TOPOLOGY FALSE
* FEATURE COUNT 4763
* SPATIAL INDEX TRUE
* LINEAR REFERENCING TRUE

[Hide ArcGIS Feature Class Properties ▲](#)

[Hide Spatial Data Properties ▲](#)

Data Quality ►

SCOPE OF QUALITY INFORMATION ►

RESOURCE LEVEL dataset

[Hide Scope of quality information ▲](#)

DATA QUALITY REPORT - COMPLETENESS COMMISSION ►

MEASURE DESCRIPTION

Contributing editors are responsible for the quality control and assessment of data at the time of data entry. Additional resources may be utilized by the data owner/editor groups to assess quality of data on a more comprehensive scale. The primary tool in use for quality assessment in the NCDOT LRS Editing System is Esri's Data Reviewer extension. The quality of this data is subject to the oversight of the editing party.

CONFORMANCE TEST RESULTS

TEST PASSED Yes
RESULT EXPLANATION
Pass.

PRODUCT SPECIFICATION ▶

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2023-10-09 00:00:00

PUBLICATION DATE 2023-11-06 00:00:00

[Hide Product specification ▲](#)

[Hide Data quality report - Completeness commission ▲](#)

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ▶

MEASURE DESCRIPTION

Contributing editors are responsible for the quality control and assessment of data at the time of data entry. Additional resources may be utilized by the data owner/editor groups to assess quality of data on a more comprehensive scale. The primary tool in use for quality assessment in the NCDOT LRS Editing System is Esri's Data Reviewer extension. The quality of this data is subject to the oversight of the editing party.

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass.

PRODUCT SPECIFICATION ▶

TITLE NCDOT Geospatial Data Specifications

PUBLICATION DATE 2023-11-06 00:00:00

CREATION DATE 2023-10-09 00:00:00

[Hide Product specification ▲](#)

[Hide Data quality report - Quantitative attribute accuracy ▲](#)

DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY ▶

MEASURE DESCRIPTION

Contributing editors are responsible for the quality control and assessment of data at the time of data entry. Additional resources may be utilized by the data owner/editor groups to assess quality of data on a more comprehensive scale. The primary tool in use for quality assessment in the NCDOT LRS Editing System is Esri's Data Reviewer extension. The quality of this data is subject to the oversight of the editing party.

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass.

PRODUCT SPECIFICATION ▶

TITLE NCDOT Geospatial Data Specifications

PUBLICATION DATE 2023-11-06 00:00:00

CREATION DATE 2023-10-16 00:00:00

[Hide Product specification ▲](#)

[Hide Data quality report - Conceptual consistency ▲](#)

[Hide Data Quality ▲](#)

Lineage ▶

LINEAGE STATEMENT

This dataset was developed by the North Carolina Department of Transportation Rail Division, in conjunction with the GIS Unit at NCDIT-T, to provide a geographic representation of rail crossings in North Carolina.

Moffatt & Nichol Engineers initially performed analysis to verify the location of every open public crossing in the state of North Carolina and subsequent updates added all pedestrian and inactive crossings to the dataset. Crossing data sources include NCDOT Rail Division's Statewide Authoritative Rail and Highway (SARAH) database, Federal Railroad Administration's crossing database, and NCDOT State Route LRS dataset.

LRS editing is done across many NCDOT business units on an enterprise system using Esri's ArcGIS Event Editor web mapping application. The GIS Unit modifies the LRS Network routes by creating, editing, or retiring based on official change notification from various NCDOT sources. Once the routes have been edited, business units may update their data as found on the routes based on the same or additional documentation. Web mapping services are created from some of the events. The LRS supports systems, web applications, and geospatial data needs across NCDOT business units, as well as submittal to the Federal Highway Administration's Highway Performance Monitoring System (HPMS).

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2023-10-02 00:00:00

DESCRIPTION

Development and maintenance of NCDOT's Linear Referencing System. This includes the road centerline, route network, some events, and other related spatial data.

PROCESS CONTACT

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit

CONTACT'S POSITION GIS Data and Services Consultant

CONTACT'S ROLE originator

CONTACT INFORMATION ▶

ADDRESS

TYPE physical

DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA North Carolina

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, indicate as such in the subject line in an email.
Phone or e-mail.

[Hide Contact information ▲](#)

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2023-10-05 00:00:00

DESCRIPTION

Routes are created, edited, and/or retired based on official change notification from various NCDOT sources. Road attribute-only information is also provided to the GIS Unit. Once the routes have been edited, business units may update their data as found on the routes based on the same or additional documentation.

PROCESS CONTACT

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit

CONTACT'S POSITION GIS Help Desk

CONTACT'S ROLE resource provider

CONTACT INFORMATION ►

ADDRESS

TYPE physical

DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA North Carolina

POSTAL CODE 27610

COUNTRY US

E-MAIL ADDRESS gishelp@ncdot.gov

HOURS OF SERVICE

9:00am - 5:00pm Monday - Friday

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[Hide Contact information ▲](#)

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2023-10-13 00:00:00

DESCRIPTION

Rail crossings (event data) are referenced to the LRS network (routes). The event is edited by the NCDOT Rail Division.

PROCESS CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation Rail Division
CONTACT'S POSITION Inventory & Data Analysis Manager
CONTACT'S ROLE point of contact

CONTACT INFORMATION ▶

ADDRESS

TYPE physical
DELIVERY POINT 862 Capital Blvd
CITY Raleigh
ADMINISTRATIVE AREA North Carolina
POSTAL CODE 27603
COUNTRY US
E-MAIL ADDRESS tmeyer@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, indicate as such in the subject line in an email.

[Hide Contact information ▲](#)

[Hide Process step ▲](#)

[Hide Lineage ▲](#)

Distribution ▶

DISTRIBUTOR ▶

CONTACT INFORMATION

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Help Desk
CONTACT'S ROLE distributor

CONTACT INFORMATION ▶

ADDRESS

TYPE physical
DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA North Carolina
POSTAL CODE 27610
COUNTRY US
E-MAIL ADDRESS gishelp@ncdot.gov

HOURS OF SERVICE

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[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

DISTRIBUTION FORMAT

VERSION 10.8.1

NAME SDE Geodatabase Feature Class

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT LRSE_RailCrossing ►

TYPE SDE Geodatabase Feature Class

* ROW COUNT 4763

DEFINITION

Rail crossing

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.

[Hide Field OBJECTID ▲](#)

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.

Hide Field Shape ▲

FIELD Measure ►

- * ALIAS Measure
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The measure on the route where the event is located. The measure is captured in miles. The precision is to the 6th decimal in the tabular column. Measure precision on the shape is to the 7th decimal.

DESCRIPTION SOURCE

North Carolina Department of Rail

DESCRIPTION OF VALUES

Values vary.

Hide Field Measure ▲

FIELD CrossingID ►

- * ALIAS CrossingID
- * DATA TYPE String
- * WIDTH 20
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The US DOT Crossing Inventory Number contains six digits followed by an alpha check character.

DESCRIPTION SOURCE

U.S. DOT - FRA

DESCRIPTION OF VALUES

Values vary.

Hide Field CrossingID ▲

FIELD FromDate ►

- * ALIAS FromDate
- * DATA TYPE Date
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The date the event becomes active on the route.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Dates vary.

[Hide Field FromDate ▲](#)

FIELD ToDate ▶

- * ALIAS ToDate
- * DATA TYPE Date
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The date the event is retired on the route. Null values indicate the crossing has not been retired, i.e. it is open.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Dates vary.

[Hide Field ToDate ▲](#)

FIELD EventID ▶

- * ALIAS EventID
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The unique ID for each event record.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

[Hide Field EventID ▲](#)

FIELD LocError ▶

- * ALIAS LocError
- * DATA TYPE String
- * WIDTH 100
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The location error for the event. Values are generated as part of an internal Esri software QC process for the event time slice on the matching route time slice. Possible values listed below.

DESCRIPTION SOURCE

NCDOT

LIST OF VALUES

VALUE NO ERROR

DESCRIPTION The event measures match or are within the route measures.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE MEASURE EXTENT OUT OF ROUTE MEASURE RANGE

DESCRIPTION The event measures for the FromMeasure and To Measure fields (Measure fields for point events) are outside the route measures for that time slice.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE PARTIAL MATCH FOR THE FROM-MEASURE

DESCRIPTION The event FromMeasure values are greater than the route FromMeasure values, i.e., if the route FromMeasure is 0 then the event FromMeasure is a negative value, or the event has "slid" off the front of the route.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE PARTIAL MATCH FOR THE TO-MEASURE:

DESCRIPTION The event ToMeasure values are greater the route ToMeasure values, i.e., if the route ToMeasure is 1.0 then the event ToMeasure is 1.01 or the event has "slid" off the end of the route.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE ROUTE LOCATION NOT FOUND

DESCRIPTION The event xy coordinates do not match the route xy coordinates. Typically, this is caused by Esri's ArcGIS Roads & Highways software not cleaning up a route edit correctly.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE ROUTE NOT FOUND

DESCRIPTION The event time slice does not match the route timeslice, i.e., the event is active, and the route is not active. Typically this is caused by Esri's ArcGIS Roads & Highways software not cleaning up a route edit correctly.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE ZERO LENGTH EXTENT

DESCRIPTION The event FromMeasure and ToMeasure values are the same, i.e., a point. Typically, this is caused by Esri's ArcGIS Roads & Highways software not cleaning up a route edit correctly.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

Hide Field LocError ▲

FIELD CreatedUser ►

- * ALIAS CreatedUser
- * DATA TYPE String
- * WIDTH 255
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The user's name who created the event record.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

Hide Field CreatedUser ▲

FIELD CreatedDate ►

- * ALIAS CreatedDate
- * DATA TYPE Date

- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Date event record was created.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Dates vary.

Hide Field CreatedDate ▲

FIELD LastEditedUser ►

- * ALIAS LastEditedUser
- * DATA TYPE String
- * WIDTH 255
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The user's name who last edited the event record.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

Hide Field LastEditedUser ▲

FIELD LastEditedDate ►

- * ALIAS LastEditedDate
- * DATA TYPE Date
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Most recent date the event record was edited.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

Hide Field LastEditedDate ▲

FIELD GlobalID ►

- * ALIAS GlobalID
- * DATA TYPE GlobalID

- * WIDTH 38
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. The GlobalID field is necessary for maintaining object uniqueness across replicas. All feature classes and tables participating in one-way or two-way replication must contain the GlobalID field. This field is not editable and is automatically populated when it is added for existing data.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary

[Hide Field GlobalID ▲](#)

FIELD RailCrossingEventType ►

- * ALIAS RailCrossingEventType
- * DATA TYPE String
- * WIDTH 10
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The type of rail crossing event located on the LRS. When the route is represented by more than 1 line segment (e.g., divided highways) and there is only 1 crossing number assigned, the Main crossing event is located on the inventory route and an Auxiliary crossing event is located on the remaining non-inventory route(s).

DESCRIPTION SOURCE

NCDOT

LIST OF VALUES

VALUE Main

DESCRIPTION The Main crossing event is located on the route that is used as the source of highway information in the SARAH database.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Auxiliary

DESCRIPTION Auxiliary crossing events will be used to show there is a crossing on the route but is not the main source of highway information in the SARAH database.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

[Hide Field RailCrossingEventType ▲](#)

FIELD RouteID ►

- * ALIAS RouteID
- * 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 GIS

DESCRIPTION OF VALUES

Values vary.

[Hide Field RouteID ▲](#)

[Hide Details for object LRSE_RailCrossing ▲](#)

[Hide Fields ▲](#)

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 2023-11-20

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 2023-11-20 10:53:21

LAST MODIFIED IN ARCGIS FOR THE ITEM 2023-11-20 10:56:50

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2023-11-20 10:56:50

[Hide Metadata Details ▲](#)

Metadata Contacts ►

METADATA CONTACT

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit

CONTACT'S POSITION GIS Data and Services Consultant

CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

ADDRESS

TYPE physical

DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA North Carolina

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

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

Metadata Maintenance ►

MAINTENANCE

UPDATE FREQUENCY as needed

SCOPE OF THE UPDATES dataset

OTHER MAINTENANCE REQUIREMENTS

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

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.

MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Help Desk
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

ADDRESS

TYPE physical

DELIVERY POINT Century Center – Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA North Carolina

POSTAL CODE 27610

COUNTRY US

E-MAIL ADDRESS gishelp@ncdot.gov

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CONTACT INSTRUCTIONS

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[Hide Contact information ▲](#)

[Hide Metadata Maintenance ▲](#)

Metadata Constraints ►

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 metadata. 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 should be used for planning, maintenance, and decision-making support purposes only. It should be used only by those who fully understand the extents, limitations, and content of the data. This data should not be used for routing. The data should not be used in place of field survey or data collection efforts that are normally performed by licensed professionals and it should not replace any data collection efforts that are typically required as a part of detailed design and construction efforts.

CONSTRAINTS

LIMITATIONS OF USE

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[Hide Metadata Constraints ▲](#)