

LRS Editing System: Surface Events, Continuous Capture – NC Department of Transportation

SDE Geodatabase Feature Class



Tags

Linear Referencing System, Event, Measure, Line, North Carolina, NCDOT, Transportation, Highway, Roads, Routes, Centerline, State Highway Network, Inventory, Transportation Planning, Location, Pavement, Road Surface, Asphalt, Concrete.

Summary

This feature class contains measured occurrences (events) of road surface properties represented as lines aligned to NCDOT's Linear Reference System (LRS) Network of routes. Attributes containing Event ID and the NCDOT 11-digit Route ID are included. This event also contains the following attributes: Surface Type, Surface Width, Surface Thickness, and Surface Detail. For each [linear/point] event occurrence, From Measure and To Measure fields provide beginning and end locations 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

Measured linear events indicating the different road surface types on North Carolina's route network. These events also contain attributes indicating road surface width, surface thickness, and finer detail in the surface materials. Data provided is collected annually through NCDOT's manual secondary pavement condition survey and automated primary pavement condition survey. The NCDOT Pavement Management Unit under Division of Highways, Operations Program Management maintains the authoritative pavement data in the NCDOT Pavement Management System. The Pavement Management Systems manages pavement condition data, maintains a history of road construction and maintenance treatments, and conducts pavement analyses which assist the department in optimizing limited funding resources. Also responsible for reporting to the federal Highway Performance Monitoring System (HPMS).

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 route 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 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.

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 -84.421464 **East** -75.418363
North 36.615122 **South** 33.733304

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:500,000

[ArcGIS Metadata](#) ►

[Topics and Keywords](#) ►

THEMES OR CATEGORIES OF THE RESOURCE location, society, transportation

CONTENT TYPE Geographic Services

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS North Carolina

THESAURUS ▶

TITLE User

CREATION DATE 2016-10-13 00:00:00

PUBLICATION DATE 2016-10-13 00:00:00

[Hide Thesaurus ▲](#)

THEME KEYWORDS Line, Linear Referencing System, Event, Measure, Line, NCDOT, Transportation, Highway, Roads, Routes, Centerline, State Highway Network, Inventory, Pavement, Road Surface, Asphalt, Concrete

THESAURUS ▶

TITLE User

CREATION DATE 2016-10-13 00:00:00

PUBLICATION DATE 2016-10-13 00:00:00

[Hide Thesaurus ▲](#)

[Hide Topics and Keywords ▲](#)

Citation ▶

TITLE LRS Editing System: Surface Events, Continuous Capture – NC Department of Transportation

ALTERNATE TITLES LRSE_Surface

CREATION DATE 2022-10-13 00:00:00

PUBLICATION DATE 2022-10-13 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 Transportation, Operations Program Management

CONTACT'S POSITION Road Inventory Engineer

CONTACT'S ROLE originator

CONTACT INFORMATION ▶

PHONE

VOICE 919-733-3725

ADDRESS

TYPE physical

DELIVERY POINT 4809 Beryl Road

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27606

COUNTRY US

E-MAIL ADDRESS jtdavis@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.

[Hide Contact information ▲](#)

RESPONSIBLE PARTY

ORGANIZATION'S NAME North Carolina Department of Information Technology -Transportation, GIS Unit
CONTACT'S POSITION GIS Data and Services Consultant
CONTACT'S ROLE resource provider

CONTACT INFORMATION ►

ADDRESS

TYPE physical
DELIVERY POINT 4101 Capital Blvd.
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ADMINISTRATIVE AREA North Carolina
POSTAL CODE 27604
COUNTRY US
E-MAIL ADDRESS gishelp@ncdot.gov

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CONTACT'S ROLE point of contact

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[Hide Contact information ▲](#)

[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 Esri ArcGIS 12.9.3.32739

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

VERTICAL EXTENT

* MINIMUM VALUE -4.800000
* MAXIMUM VALUE 6577.400000

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -84.421464
* EAST LONGITUDE -75.418363
* NORTH LATITUDE 36.615122
* SOUTH LATITUDE 33.733304
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 406980.080272
* EAST LONGITUDE 3051823.000288
* SOUTH LATITUDE 35982.805072
* NORTH LATITUDE 1042848.119824
* 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 Data and Services Consultant
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

ADDRESS

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DELIVERY POINT 4101 Capital Blvd.
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[Hide Contact information ▲](#)

[Hide Resource Points of Contact ▲](#)

Resource Maintenance ►

RESOURCE MAINTENANCE

UPDATE FREQUENCY continual

SCOPE OF THE UPDATES dataset

MAINTENANCE 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 ►

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POSTAL CODE 27604

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[Hide Resource Maintenance ▲](#)

Resource Constraints ►

CONSTRAINTS

LIMITATIONS OF USE

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LEGAL CONSTRAINTS

LIMITATIONS OF USE

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SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

LIMITATIONS OF USE

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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-007
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.

16666666666666666666],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
- * CODESPACE 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_Surface
- * OBJECT TYPE composite
- * OBJECT COUNT 333653

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

- FEATURE CLASS NAME LRSE_Surface
- * FEATURE TYPE Simple
- * GEOMETRY TYPE Polyline
- * HAS TOPOLOGY FALSE
- * FEATURE COUNT 333653
- * 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 2016-10-13 00:00:00

PUBLICATION DATE 2016-10-13 00:00:00

[Hide Product specification ▲](#)

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

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

CREATION DATE 2016-10-13 00:00:00

PUBLICATION DATE 2016-10-13 00:00:00

[Hide Product specification ▲](#)

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

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
CREATION DATE 2016-10-13 00:00:00
PUBLICATION DATE 2016-10-13 00:00:00

[Hide Product specification ▲](#)

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

[Hide Data Quality ▲](#)

Lineage ►

LINEAGE STATEMENT

LRS editing is done across many NCDOT business units on an enterprise system using Esri's ArcGIS Event Editor web mapping application. This dataset was originally developed by the North Carolina Department of Transportation, Operations Program Management in conjunction with the GIS Unit at NCDIT-T, to provide a geographic representation of road surface properties in North Carolina. 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 2016-10-13 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 4101 Capital Blvd.
CITY Raleigh
ADMINISTRATIVE AREA North Carolina
POSTAL CODE 27604
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 Process step ▲](#)

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2016-10-13 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 Data and Services Consultant

CONTACT'S ROLE resource provider

CONTACT INFORMATION ▶

ADDRESS

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[Hide Process step ▲](#)

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2016-10-13 00:00:00

DESCRIPTION

Road attributes (event data) are referenced to the LRS network (routes). The event is edited by the NCDOT Operations Program Management in an enterprise environment using Esri's online ArcGIS Event Editor software.

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 point of contact

CONTACT INFORMATION ▶

ADDRESS

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[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 Data and Services Consultant

CONTACT'S ROLE distributor

CONTACT INFORMATION ▶

ADDRESS

TYPE physical

DELIVERY POINT 4101 Capital Blvd.

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[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

DISTRIBUTION FORMAT

NAME SDE Geodatabase Feature Class

VERSION 10.8.1

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT [LRSE_Surface ►](#)

TYPE SDE Geodatabase Feature Class

* ROW COUNT 333653

DEFINITION

Surface

DEFINITION SOURCE

North Carolina Department of Transportation

FIELD [OBJECTID ►](#)

* ALIAS OBJECTID

* DATA TYPE OID

* WIDTH 4

* PRECISION 0

* SCALE 0

* FIELD DESCRIPTION

Internal feature number.

* DESCRIPTION SOURCE

Esri

* DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

[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 [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.

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 RouteID ►

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

FIELD DESCRIPTION

The NCDOT eleven-digit number for each route in the network. More information explaining this route naming convention used by NCDOT is available here:

<https://xfer.services.ncdot.gov/gisdot/DistDOTData/Guide%20to%20the%20NCDOT%20Eleven-Digit%20Route%20Number%20-%20Rome%20Implementation.pdf>

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

Hide Field RouteID ▲

FIELD FromMeasure ►

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

FIELD DESCRIPTION

The measure on the route where the beginning of 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

NCDOT

DESCRIPTION OF VALUES

Values vary.

Hide Field FromMeasure ▲

FIELD SurfaceDetail ►

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

FIELD DESCRIPTION

The detailed road surface type.

DESCRIPTION SOURCE

NCDOT

LIST OF VALUES

VALUE Asphalt, Hot Mix Asphalt, Plant Mix Asphalt

DESCRIPTION Asphalt is a sustainable paving solution made from a mixture of aggregates, binder, and filler. Aggregates are processed mineral materials such as crushed rock, sand, gravel, slags, or various recycled materials. Binder is used to unite the aggregates together to form a cohesive mixture.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE BST

DESCRIPTION Bituminous Surface Treatment

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE AST

DESCRIPTION Asphalt Surface Treatment

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S4.75A

DESCRIPTION Asphalt Concrete Surface Course, Type S4.75A

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S9.5A

DESCRIPTION Asphalt Concrete Surface Course, Type S9.5A

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S9.5B

DESCRIPTION Asphalt Concrete Surface Course, Type S9.5B

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S9.5C

DESCRIPTION Asphalt Concrete Surface Course, Type S9.5C

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S9.5D

DESCRIPTION Asphalt Concrete Surface Course, Type S9.5D

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE SF9.5A

DESCRIPTION Asphalt Concrete Surface Course, Type SF9.5A

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S12.5B

DESCRIPTION Asphalt Concrete Surface Course, Type S12.5B

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S12.5C

DESCRIPTION Asphalt Concrete Surface Course, Type S12.5C

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE S12.5D

DESCRIPTION Asphalt Concrete Surface Course, Type S12.5D

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE I-1

DESCRIPTION Asphalt Concrete Surface Course, Type, I-1

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE I-2

DESCRIPTION Asphalt Concrete Surface Course, Type I-2

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE JCP

DESCRIPTION Jointed Concrete Pavement

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE HDS

DESCRIPTION Heavy Duty Surface

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Gravel
DESCRIPTION Unpaved, gravel surface.
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE CRCP
DESCRIPTION Continuously Reinforced Concrete Pavement
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

Hide Field SurfaceDetail ▲

FIELD SurfaceThickness ►

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

FIELD DESCRIPTION

The thickness of the surface layer of pavement/concrete in inches.

DESCRIPTION SOURCE
NCDOT

RANGE OF VALUES

MINIMUM VALUE 0.25
MAXIMUM VALUE 18

Hide Field SurfaceThickness ▲

FIELD SurfaceType ►

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

FIELD DESCRIPTION

The generalized type of pavement surface on the road.

DESCRIPTION SOURCE
NCDOT

LIST OF VALUES

VALUE Unpaved
DESCRIPTION Road is not paved.
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Bituminous
DESCRIPTION Road surface is made of Bituminous materials.
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE JPCP
DESCRIPTION Road surface is made of Jointed Plain Concrete Pavement. This usually consists of: Doweled concrete slabs (Top Layer), Asphalt base course (Middle Layer), Asphalt surface course (Bottom Layer).
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE CRCP
DESCRIPTION Road surface is made of Continuously Reinforced Concrete Pavement.
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE AC overlay on AC

DESCRIPTION Road surface is made of Asphalt-Concrete (AC) overlay over existing AC pavement.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE AC overlay on JCP

DESCRIPTION Road surface is made of Asphalt-Concrete overlay over existing Jointed Concrete Pavement.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE AC overlay on CRCP

DESCRIPTION Road surface is made of Asphalt-Concrete material overlay over existing Continuously Reinforced Concrete Pavement.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Unbonded JC Overlay on PCC

DESCRIPTION Road surface is made of Unbonded Jointed Concrete overlay on PCC (Portland Cement Concrete - a generic term that encompasses all concrete).

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Bonded PCC Overlay on PCC

DESCRIPTION Road surface is made of Bonded Portland Cement Concrete (PCC) overlay on PCC pavement.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Other (includes bridge decks, whitetopping, brick)

DESCRIPTION Road surface is some other type such as bridge decks, brick, whitetopping (the covering of an existing asphalt pavement with a layer of Portland cement concrete), etc.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

[Hide Field SurfaceType ▲](#)

FIELD [SurfaceWidth ▶](#)

* ALIAS SrfcWidth

DATA TYPE Small Integer

* WIDTH 2

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

The paved surface (including paved shoulders) width in feet, or the surface from edge of surface to edge of surface on unpaved roads.

For paved roads, striped medians are included in the Surface Width because they are typically constructed using the same material as the through lanes. Parking is not included in the surface width if parking is directly adjacent to the travel lane.

DESCRIPTION SOURCE

NCDOT

RANGE OF VALUES

MINIMUM VALUE 9

MAXIMUM VALUE 400

[Hide Field SurfaceWidth ▲](#)

FIELD [ToMeasure ▶](#)

* ALIAS ToMeasure

* DATA TYPE Double

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

FIELD DESCRIPTION

The measure on the route where the end of 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

NCDOT

DESCRIPTION OF VALUES

Values vary.

[Hide Field ToMeasure ▲](#)

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.
NO ERROR: The event measures match or are within the route measures.

MEASURE EXTENT OUT OF ROTE MEASURE RANGE: The event measures for the FromMeasure and To Measure fields (Measure fields for point events) are outside the route measures for that time slice.

PARTIAL MATCH FOR THE FROM-MEASURE: 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.

PARTIAL MATCH FOR THE TO-MEASURE: 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.

ROUTE LOCATION NOT FOUND: 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.

ROUTE NOT FOUND: 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.

ZERO LENGTH EXTENT: 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.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

[Hide Field LocError ▲](#)

FIELD CreatedUser ►

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

FIELD DESCRIPTION

User 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

User name who last edited the event record.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

Hide Field LastEditedUser ▲

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 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

Dates vary.

Hide Field LastEditedDate ▲

FIELD UnpavedID ►

- * ALIAS UnpavedID
- * DATA TYPE Integer
- * WIDTH 4
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Unique ID number for unpaved road segments.

DESCRIPTION SOURCE

NCDOT

DESCRIPTION OF VALUES

Values vary.

[Hide Field UnpavedID ▲](#)

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.

[Hide Field Shape_Length ▲](#)

[Hide Details for object LRSE_Surface ▲](#)

[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 2022-12-06

ARCGIS METADATA PROPERTIES
METADATA FORMAT ArcGIS 1.0
STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

CREATED IN ARCGIS FOR THE ITEM 2022-09-03 17:01:23
LAST MODIFIED IN ARCGIS FOR THE ITEM 2022-12-06 11:29:23

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2022-12-06 11:29:23

[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 ►

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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

Hide Metadata Maintenance ▲

Metadata Constraints ►

CONSTRAINTS

LIMITATIONS OF USE

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.

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.

SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

LIMITATIONS OF USE

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[Hide Metadata Constraints ▲](#)

Thumbnail and Enclosures ►

THUMBNAIL

THUMBNAIL TYPE JPG

[Hide Thumbnail and Enclosures ▲](#)