NCDOT GIS Unit Announcement – February 11, 2024

The GIS Unit is pleased to announce the release of our 1st Quarter 2024 Publication data updates.

If you have any questions, please contact gishelp@ncdot.gov.

Contents

Updated Data Sets

The following datasets were updated:

BoundaryCountyArc
BoundaryCountyPolygon
BoundaryCountyShoreline
BoundaryDOTDistrict
BoundaryDOTDivision
BoundaryMpoRpo
BoundaryMunicipal
BoundarySmoothUrban
BoundaryStateNCPolygon
NCRouteArcs
NCRouteCharacteristics
NCRoutes
NHSRoutes
RoadAccessControl
RoadBarePvmnt
RoadFederalAid
RoadFunctionalClass
RoadPostedRoute
RoadSpeedLimit
RoadUnpaved
RoadFederalAid
RailroadCrossings
RailroadTrack
RailroadFacility
StructuresPoint

Schema Updates

NCDOT MilePost Hatching- New service replaced NCDOT MileMarker Hatching Nov 2023:

The service named NCDOT MilePost hatching is replacing the existing NCDOT MileMarker Hatching service. This new service has been slightly modified:
-Added Milepost Endpoint markers
-Truncated layer order: Visualization will largely remain unchanged, except for the inability to turn individual route types off.
-Removed redundant Milepost Zero Markers: The same Zero markers are used at all zoom scales.

The legacy layer NCDOT MileMarker Hatching service is now deemed "retired", and is slated for deprecation during 4th quarter 2024 publication. Please modify your GO!NC Maps or apps as soon as possible to replace this layer with the new MilePost Hatching service

New NCDOT MilePost Hatching Service:
https://gis11.services.ncdot.gov/arcgis/rest/services/NCDOT_MileMarkerHatching_Updated/MapServer

GO!NC Metadata page:
https://ncdot.maps.arcgis.com/home/item.html?id=861af7f703f74bafb6ba9ec58da54123

For any questions or concerns, please contact Raquel Bensadoun at rbbensadoun@ncdot.gov

NC Rail- Schema and Symbology Changes
RailroadCrossings feature classes has added the fields "LRS RouteID" and "LRS Milepost" to the schema and the symbology for services containing RailroadCrossings (i.e. NCDOT_RailSystem) has changed upon request from the Rail Division. This update should be available on all GIS unit products with this quarterly release.

GIS Unit Products Affected by the Update

The following GIS Unit products will reflect the data updates:

Geospatial Web Services

NCDOT District Boundaries
NCDOT Division Boundaries
NCDOT County Boundaries
NCDOT County Boundaries Shoreline
NCDOT Structures
NCDOT Bridges
NCDOT MPO & RPO Boundaries
NCDOT North Carolina Rail System
NCDOT North Carolina Railroads
NCDOT Road Characteristics
NCDOT State Maintained Roads
NCDOT Access Control

NCDOT Bare Pavement
NCDOT Federal Aid Routes
NCDOT Functional Class
NCDOT MileMarker Hatching
NCDOT NHS
NCDOT Posted Roads - Light Traffic
NCDOT Speed Limits
NCDOT Unpaved Roads
NCDOT Shields

GO!NC/AGOL Web Maps
(available at http://ncdot.maps.arcgis.com)

NCDOT 2021-2029 STIP Map
NCDOT Structures Map
NCDOT Distance Hatches & Bridges Map
NCDOT Bridges Map
NCDOT Bridges, State Maintained Roads, and MPO/RPO Boundary Map
NCDOT Access Control Map
NCDOT Federal Aid Routes Map
NCDOT Road Events Map
NCDOT State Boundary Roadway Maintenance Status Change Map
NCDOT State Maintained Network Map
NCDOT State Maintained Roads, State Orthoimagery, and Parcels
NCDOT RoadNC Viewer Map
NCDOT Connecting North Carolina's Military and Families

Downloadable Data
(available at https://connect.ncdot.gov/resources/gis/Pages/GIS-Data-Layers.aspx)

Structure Locations Statewide (aka Bridges)
NCDOT Rail Track Shapefile
NCDOT Rail Crossing Shapefile
NCDOT Rail Facility Shapefile
NCDOT Rail Layers Geodatabase
Road Characteristics Arcs Shapefile
Road Characteristics Arcs File Geodatabase
NCRoutes Shapefile
NCRoutes File Geodatabase
NCRouteArcs Shapefile
NCRouteArcs File Geodatabase

Status of the Route Data

The following is the status of the route/road data provided at this quarterly data update:

Improvements

Route Data Currency:

For visual representation of public roads in North Carolina. System roads (state maintained) are current through December 2023 for changes by NCDOT Petitions and Municipal Agreements process. Non-system roads (maintained by local governments) are up to date for Alamance (up to date as of 3/1/2023), Alexander (up to date as of 1/28/2021), Alleghany (up to date as of 11/25/2021), Anson(up to date as of 8/3/2012), Ashe (up to date as of4/16/2019), Avery (up to date as of 1/25/2021), Beaufort (up to date as of 5/25/2021), Bertie (up to date as of 5/19/2021), Bladen (up to date as of 8/11/2020), Brunswick (up to date as of 5/12/2023), Buncombe (up to date as of 6/1/2023), Burke (up to date as of 10/27/2021), Cabarrus (up to date as of 7/11/2023), Caldwell (up to date as of 8/6/2018), Camden (up to date as of 11/3/2020), Carteret (up to date as of 11/15/2021), Caswell (up to date as of 5/26/2020), Catawba (up to date as of 10/14/2020), Chatham (up to date as of 7/10/2023), Cherokee (up to date as of 8/18/2021), Chowan (up to date as of 6/6/2022), Clay (up to date as of 5/25/2021), Cleveland (up to date as of 9/28/2022), Columbus (up to date as of 11/1/2021), Craven (up to date as of 10/4/2021), Cumberland (up to date as of 3/16/2023), Currituck (up to date as of 1/10/2023), Dare (up to date as of 2/1/2021), Davidson (up to date as of 6/1/2023), Davie (up to date as of 12/1/2021), Duplin (up to date as of 1/26/2021), Durham (up to date as of 9/13/2023), Cherokee (up to date as of 9/17/2018), EBCN Graham (up to date as of 9/21/2018), EBCN Haywood (up to date as of 9/17/2018), EBCN Jackson (up to date as of 9/17/2018), Edgecombe (up to date as of 4/22/2020), Forsyth (up to date as of 5/17/2023), Guilford (up to date as of 5/15/2023), Gaston (up to date as of 10/4/2022), Gates (up to date as of 1/13/2023), Graham (up to date as of 5/16/2022), Granville (up to date as of 1/11/2023), Greene (up to date as of 4/21/2020), Guilford (up to date as of 1/11/2021), Halifax (up to date as of 5/31/2022), Harnett (up to date as of 8/22/2021), Haywood (up to date as of 1/11/2023), Henderson (up to date as of 10/24/2022), Hertford (up to date as of 6/1/2021), Hoke (up to date as of 8/24/2020), Hyde (up to date as of 2/2/2021), Iredell (up to date as of 5/15/2023), Jackson (up to date as of 4/1/2021), Johnston (up to date as of 5/1/2023), Jones (up to date as of 2/15/2023), Lee (up to date as of 6/16/2021), Lenoir (up to date as of 2/5/2020), Lincoln (up to date as of 8/18/2021), Macon (up to date as of 11/3/2020), Madison (up to date as of 8/18/2020), Martin (up to date as of 6/9/2023), McDowell (up to date as of 12/31/2019), Mecklenburg (up to date as of 8/19/2022), Mitchell (up to date as of 3/11/2022), Montgomery (up to date as of 1/25/2021), Moore (up to date as of 6/4/2020), Nash (up to date as of 3/22/2022), New Hanover (up to date as of 5/1/2023), Northampton (up to date as of 3/15/2022), Onslow (up to date as of 8/18/2021), Orange (up to date as of 11/20/2023), Pamlico (up to date as of 11/10/2020), Pasquotank (up to date as of 8/25/2020), Pender (up to date as of 10/31/2019), Perquimans (up to date as of 1/25/2021), Person (up to date as of 1/29/2020), Pitt (up to date as of 11/1/2022), Polk (up to date as of 3/20/2023), Randolph (up to date as of 5/11/2021), Richmond (up to date as of 12/7/2021), Robeson (up to date as of 12/13/2019), Rockingham (up to date as of 5/4/2021), Rowan (up to date as of 6/6/2023), Rutherford (up to date as of 3/20/2023), Sampson (up to date as of 11/16/2020), Scotland (up to date as of 11/4/2020), Stanly (up to date as of 5/1/2023), Stokes (up to date as of 2/20/2023), Surry (up to date as of 11/10/2020), Swain (up to date as of 10/22/2020), Transylvania (up to date as of 1/10/2020), Tyrrell (up to date as of 2/2/2021), Union (up to date as of 5/24/2022), Vance (up to date as of 10/26/2020), Wake (up to date as of 2/9/2023), Warren (up to date

as of 2/5/2021), Washington (up to date as of 5/1/2023), Watauga (up to date as of 4/14/2021), Wayne (up to date as of 5/26/2022), Wilkes (up to date as of 5/9/2022), Wilson (up to date as of 1/11/2021), Yadkin (up to date as of 4/6/2022), Yancey (up to date as of 1/26/2021).

Non-System Route Data Updated This Quarter:

Durham (up to date as of 9/13/2023), New Hanover (up to date as of 5/1/2023), Orange (up to date as of 11/20/2023).

https://connect.ncdot.gov/resources/gis/Pages/GIS-Data-Layers.aspx

Route Data Updated this Quarter:

This layer is a visual representation of public roads in North Carolina. State maintained roads are current through December 2023 for changes by NCDOT Petitions and Municipal Agreements processes.

All represented non-system roads are maintained by local governments and are reflective of the last uploaded datasets. Non-system roads specifically updated this quarter: Durham, New Hanover, Orange counties. For more detailed information about available NCDOT data, please see document NCDOT GIS Unit Announcements. If you have any questions, please contact gishelp@ncdot.gov.

Known Issues:

- These routes' alignments are being researched:
    - RouteId 40002084043
    - RouteId 40001525043
- These routes have incorrect inventory codes (These should all be X04 and not X06 codes):
    - 40603685011
    - 40601667056
    - 40601395054
    - 50696562090
    - 80607205054
- There are overlapping / duplicate segments in Road Characteristics, NCRouteArcs, and NCRoutes:
    - RouteId 80007152018 begin 0.490121 end 1.160062/80007160018 begin 0.421 end 1.497971
    - RouteId 80007154018 begin 0.867076 end 1.526513/80007161018 begin 0.421371 end 0.748295
    - RouteId 80004251041 begin 0.971671 end 1.009/80004254041 begin 0.3 end 0.338
    - RouteId 80006531026 begin 0.077149 end 0.539079/80006532026 begin 0.072623 end 0.536
- From April-December 2023, the number of through lanes were updated statewide for route classes 1-4 using recent aerial imagery.

Improvements:

No improvements this quarter