Climate Resilience DataPalooza

Nastasha Earle-Young, Statewide Initiatives Engineer
Transportation Planning Division
Drive NC Database

Incident ID: 594737

Interstate
Medium Impact

NC Route
Franklin Moore Rd (SR-1679)
East of Danbury / Mile Marker 2 to 2.1 Both Directions
Stokes County

Road Closed
Weather Event: None

9/3/2020, 11:38 AM - 1/31/2022, 4:00 PM

Flash flooding washed away roadway shoulder and 1 lane of the road.
Statewide Maintenance Pipe Inventory

<table>
<thead>
<tr>
<th>Route Inventory</th>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route Name</td>
<td>SR-1146</td>
</tr>
<tr>
<td>Route ID</td>
<td>40001146031</td>
</tr>
<tr>
<td>Milepost</td>
<td>4.07</td>
</tr>
<tr>
<td>Inlet Latitude</td>
<td>34.82</td>
</tr>
<tr>
<td>Inlet Longitude</td>
<td>-78.03</td>
</tr>
<tr>
<td>Outlet Latitude</td>
<td>34.82</td>
</tr>
<tr>
<td>Outlet Longitude</td>
<td>-78.03</td>
</tr>
<tr>
<td>Pipe Type</td>
<td>CMP</td>
</tr>
<tr>
<td>Pipe Size Inches</td>
<td>30</td>
</tr>
<tr>
<td>Barrel Count</td>
<td>1</td>
</tr>
<tr>
<td>Inlet Headwalls</td>
<td>None</td>
</tr>
<tr>
<td>Outlet Headwalls</td>
<td>None</td>
</tr>
</tbody>
</table>

https://ncdot.maps.arcgis.com/home/item.html?id=00cc017f649247d8816fd817e842606f
Statewide Non-NBIS Pipe Inventory

https://ncdot.maps.arcgis.com/home/item.html?id=5441b2e4ecc74f5ab0ca8927d77faa38
Statewide Storm Drainage Pipe Inventory

https://ncdot.maps.arcgis.com/home/webmap/viewer.html?layers=1bc2689221d34cb284b8ce30a3fc493f
Statewide Inlets Inventory

[Image of a map with a pop-up window displaying inlets information]

https://ncdot.maps.arcgis.com/home/webmap/viewer.html?layers=e376c6f20afc4154a28fb26dc08158df
Statewide Retaining Walls

https://ncdot.maps.arcgis.com/home/webmap/viewer.html?layers=e376c6f20afc4154a28fb26dc08158df
Geotech Asset Management Database

https://ncdot.maps.arcgis.com/apps/mapviewer/index.html?layers=6908e4d9497d462c90c0101b503a0bd1
Coastal Roadway Inundation Simulator (CRIS)

- Comprises 23 coastal counties
- Inundation from 1-17 ft
- 4 inundation categories:
  - 0.1 – 0.5 ft
  - 0.5 – 2 ft
  - 2 – 5 ft
  - > 5 ft
- Analyzed primary and secondary roads (over 6,500 miles)
Road Inundation Tool (RIT)

- Based on multi-frequency flood studies
  - 10-, 25-, 50-, 100- and 500-year recurrence intervals
- Statewide coverage
- Analyzed primary and secondary roads
- Originally was an ArcGIS Online dashboard

<table>
<thead>
<tr>
<th>Recurrence Interval</th>
<th>% Chance in a Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10.0%</td>
</tr>
<tr>
<td>25</td>
<td>4.0%</td>
</tr>
<tr>
<td>50</td>
<td>2.0%</td>
</tr>
<tr>
<td>100</td>
<td>1.0%</td>
</tr>
<tr>
<td>500</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
Additional Resources

- Resilience website
  https://www.ncdot.gov/initiatives-policies/Transportation/transportation-resilience

- ArcGIS Platform
  https://ncdot.maps.arcgis.com/home/index.html

- Research
  https://connect.ncdot.gov/projects/research/Pages/ProjectSearch.aspx

- NCDOT Division of Highways staff
  - County Maintenance Engineer, District Engineer, Division Planning Engineer