



NORTH CAROLINA
Department of Transportation

Project: Maintenance Website

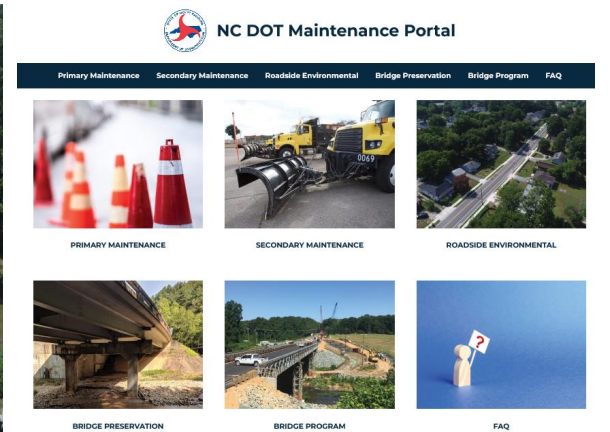
Britt McCurry, PE – Summit Design and Engineering Program Manager

March 28-29

April 6-7

Outline

- Background
- Phase I – Identify Maintenance Items
 - Maintenance
 - Bridge
 - Roadside
- Phase II – Internal Website
 - Consolidating Resources
 - Layout/Buildout
- Phase III External Facing
- Phase IV – Implementation



Project: Maintenance Website

Background: Maintenance resources and training materials are scattered across multiple Inside and Connect Sites and historical word of mouth processes.

Goal: Provide centralized location to support Maintenance staff by creating an Internal and External facing website for Maintenance related resources, training, support and references.

Problem Solving Strategy

Phased problem solving

1. Identified existing Inside Sites
2. Identify Maintenance, Bridge and Roadside specific daily functions and needs
3. Where does this information currently live?
4. What information needs an update?

Cross discipline work groups

- Partners: Field Staff, DIT, Central Units (OPM), Chief's Office
- Focus Areas: Force Account, Daily Operations, New Initiatives

Strong leadership involvement

Phase I: Identify Maintenance Items

Maintenance Processes and Daily Functions

Based on experience and a small statewide workgroup we identified specific items to focus on: (**This is not the full list**)

- **Budget**
 - Allocations
 - Expenditures
- **Work Functions**
 - Definitions
 - How to accomplish
 - FR1101
 - Rental Equipment
- **Tasks**
 - Creation
 - Route level
 - Pipe (MP# asset number)
 - Restrictions
 - Definitions
 - Why do we Task?
 - Which functions do we task?
 - Function Code List – Tasking to system
- **SAP training**
 - Time Entry
 - Expenditures tracking by function and WBS elements
 - Travel approval (meal money)
 - PO/Requisitions
 - Internal Orders
- **Mileage in each county**
 - Route responsibilities
- **CARS**
 - Time limits
 - Expectations
 - How to use the interface
- **HMIP**
 - Expectations
 - Deadlines
 - Goals

Bridge Maintenance Processes and Daily Functions

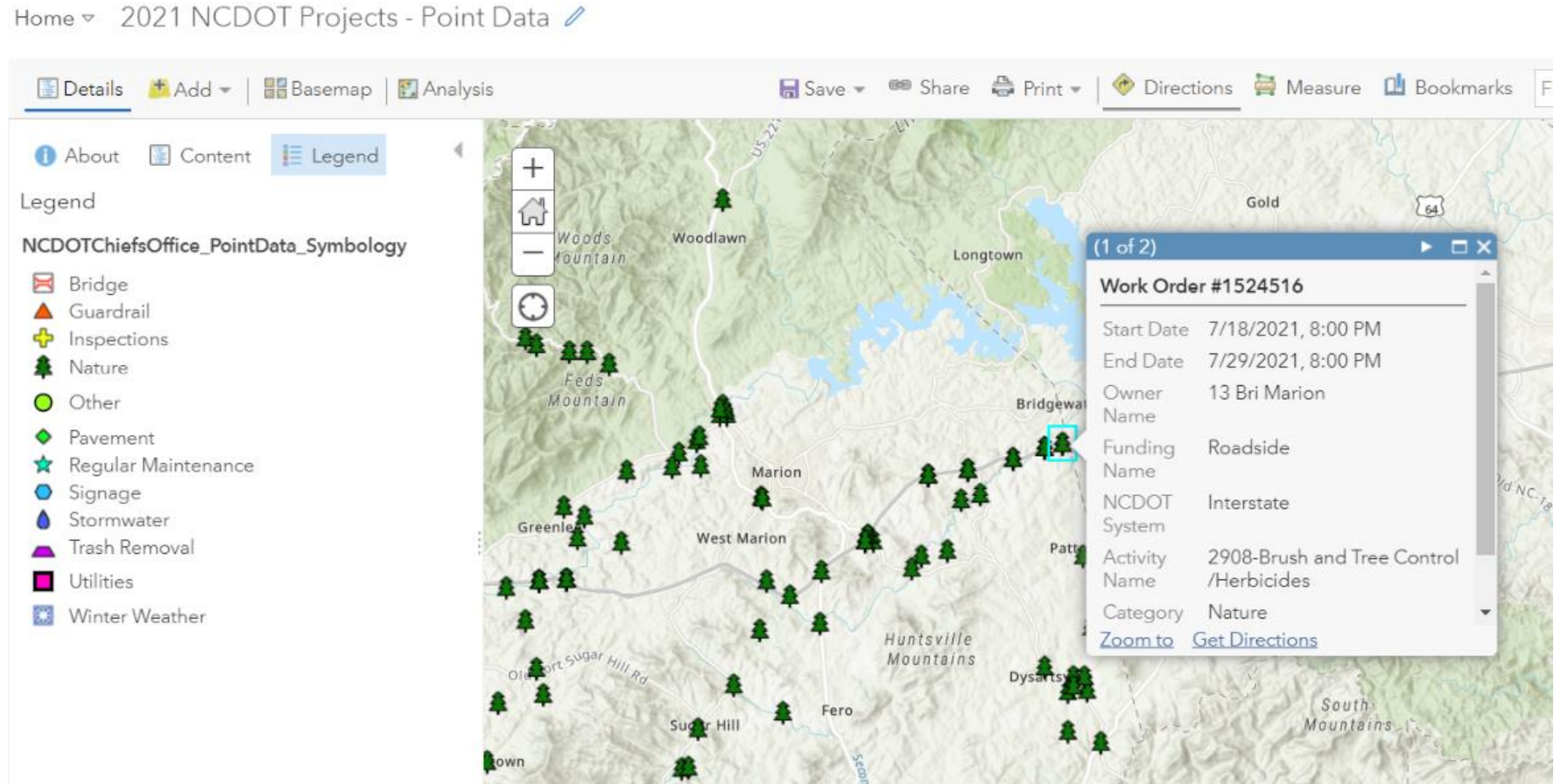
Based on experience and a small statewide workgroup we identified specific items to focus on: (**This is not the full list**) In addition to previous slide:

- **Budget**
 - **Bridge**
 - BPR
 - GMR
- **Tasks**
 - **Bridge**
 - Bridge Inventory
 - Bridge Inspection PEF traffic control coordination restrictions
- **Number of Bridges in County**
- **WIGINS**
 - Time Limits
 - Expectations
 - How to use the interface
- **Bridge Preservation**
- **Worksite Audits**
- **Timber Bridge Inventory**

Roadside Environmental Processes and Daily Functions

Based on experience and a small statewide workgroup we identified specific items to focus on: **(This is not the full list)** In addition to previous slide:

- **Budget**
 - Mowing
 - Litter
- **Tasks**
 - **Brush and Tree**



Phase II: Internal Website

Internal Facing

Familiar Layout:

- SharePoint
- Will either house new material or link to existing

Internal Only:

- Specific business processes
- Usability, simple
- Share across units
- Mapping resources

Internal Facing – Existing NCDOT Home Page...

Broad Information:

- Random Search results...

The screenshot shows the NCDOT website header with the North Carolina Department of Transportation logo and navigation links. Below the header is a search bar containing the text 'pothole guidelines'. To the left of the search bar are filters for 'Last Updated', 'Type', and 'File size'. The search results are displayed in a light blue box, with the top result being 'Report pothole' and the second result being 'U.S. 70 Improvements James City Stormwater Runoff/Drainag...'. The 'Report pothole' result includes a link to 'WWW.NCDOT.GOV/CONTACT/PAGES/CONTACT/'. The 'U.S. 70 Improvements' result includes a link to 'WWW.NCDOT.GOV/PROJECTS/.../DOCUMENTS/2020-11-18-STORMWATER.PDF'.

NORTH CAROLINA
Department of Transportation

NC.GOV AGENCIES JOBS REAL TIME TRAFFIC

About ▾ News & Events ▾ Divisions ▾ Initiatives & Policies ▾ Travel & Maps ▾ Projects ▾ Contact

Last Updated

One Year Ago Today

All

Type

PDF

File size

Less than 1.3 M
1.3 M - up to 2 M
2 M - up to 9 M
9 M or more

pothole guidelines

Relevance ▾

MOST USEFUL RESULT:

[Report pothole](#)

Report a pothole directly to NCDOT
WWW.NCDOT.GOV/CONTACT/PAGES/CONTACT/

[U.S. 70 Improvements James City Stormwater Runoff/Drainag...](#)

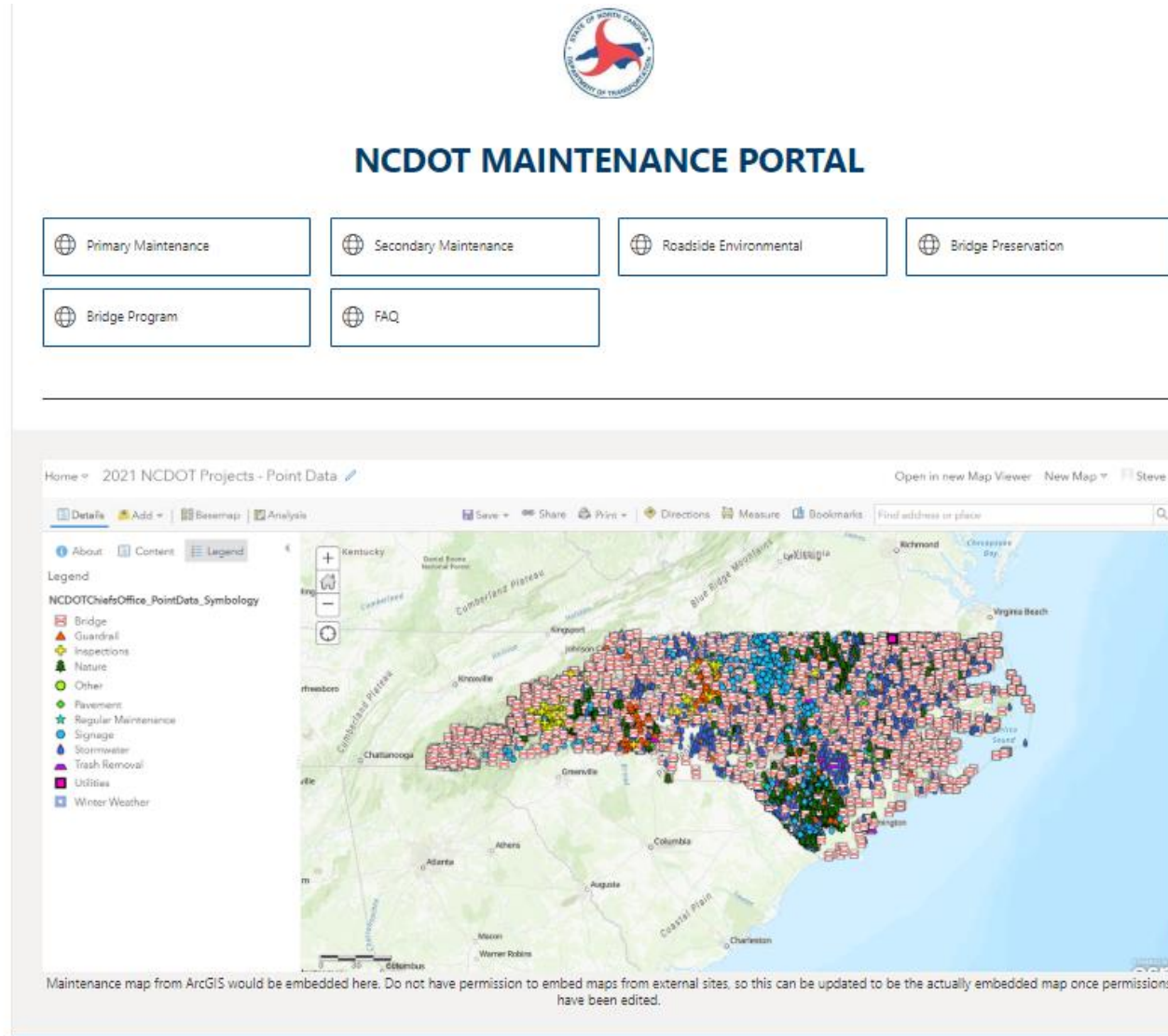
Stormwater runoff is generated when rain and snowmelt flows over land and especially impervious (hard) surfaces, such as paved streets, parking lots and building rooftops ...
WWW.NCDOT.GOV/PROJECTS/.../DOCUMENTS/2020-11-18-STORMWATER.PDF

Internal Facing – Maintenance Specific

More Useful Information:

- Maintenance Specific
- Focused information and links
- Less random search results...
- <https://ncconnect.sharpoint.com/sites/ChiefEngBullpen>

Primary Maintenance
Secondary Maintenance
Roadside Environmental
Bridge Preservation
Bridge Program
FAQ
Recycle bin
Edit



The screenshot displays the NCDOT Maintenance Portal. At the top center is the NCDOT logo, followed by the title "NCDOT MAINTENANCE PORTAL". Below the title are six navigation buttons: "Primary Maintenance", "Secondary Maintenance", "Roadside Environmental", "Bridge Preservation", "Bridge Program", and "FAQ".

Below the navigation buttons is a map titled "2021 NCDOT Projects - Point Data". The map shows the state of North Carolina with numerous colored markers representing maintenance points. A legend on the left side of the map lists various maintenance categories: Bridge, Guardrail, Inspections, Nature, Other, Pavement, Regular Maintenance, Signage, Stormwater, Trash Removal, Utilities, and Winter Weather. The map interface includes standard GIS controls like zoom in/out, pan, and search.

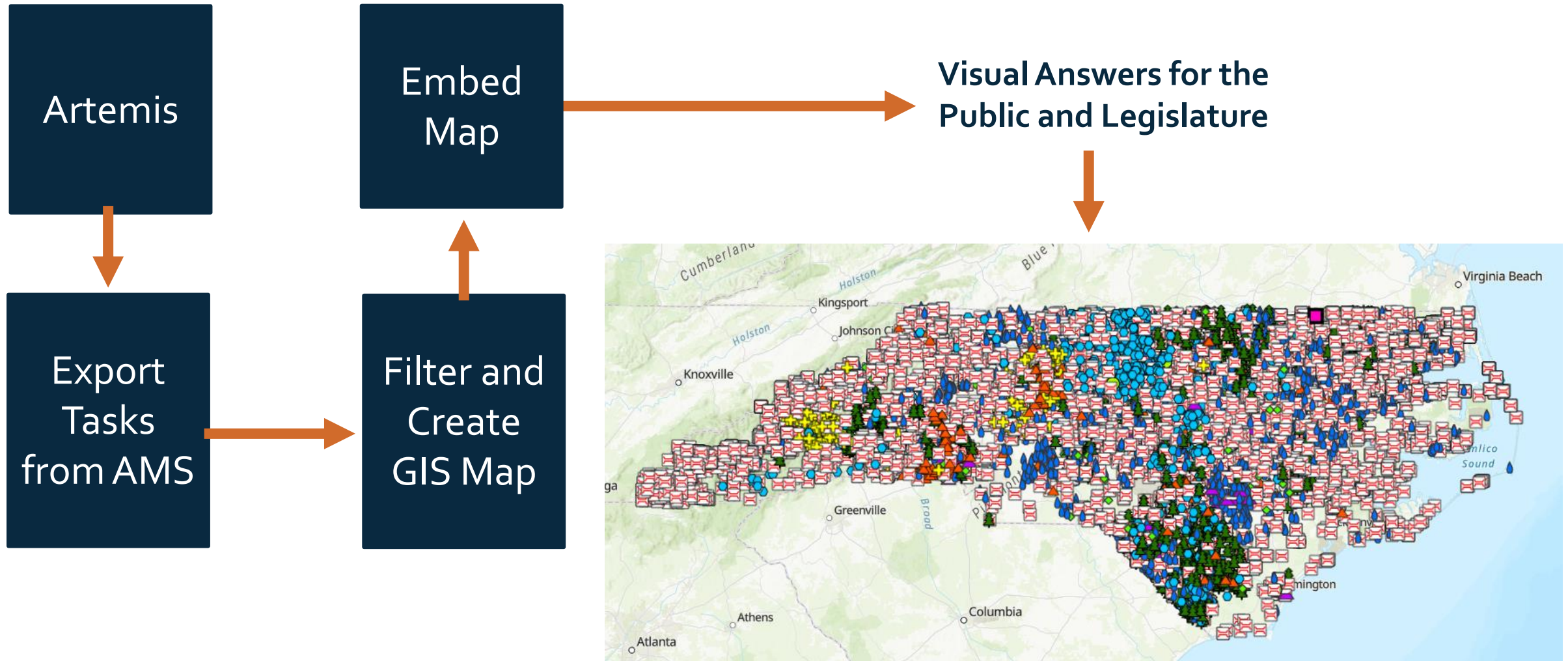
At the bottom of the map area, there is a note: "Maintenance map from ArcGIS would be embedded here. Do not have permission to embed maps from external sites, so this can be updated to be the actually embedded map once permissions have been edited."

Phase III: External Facing

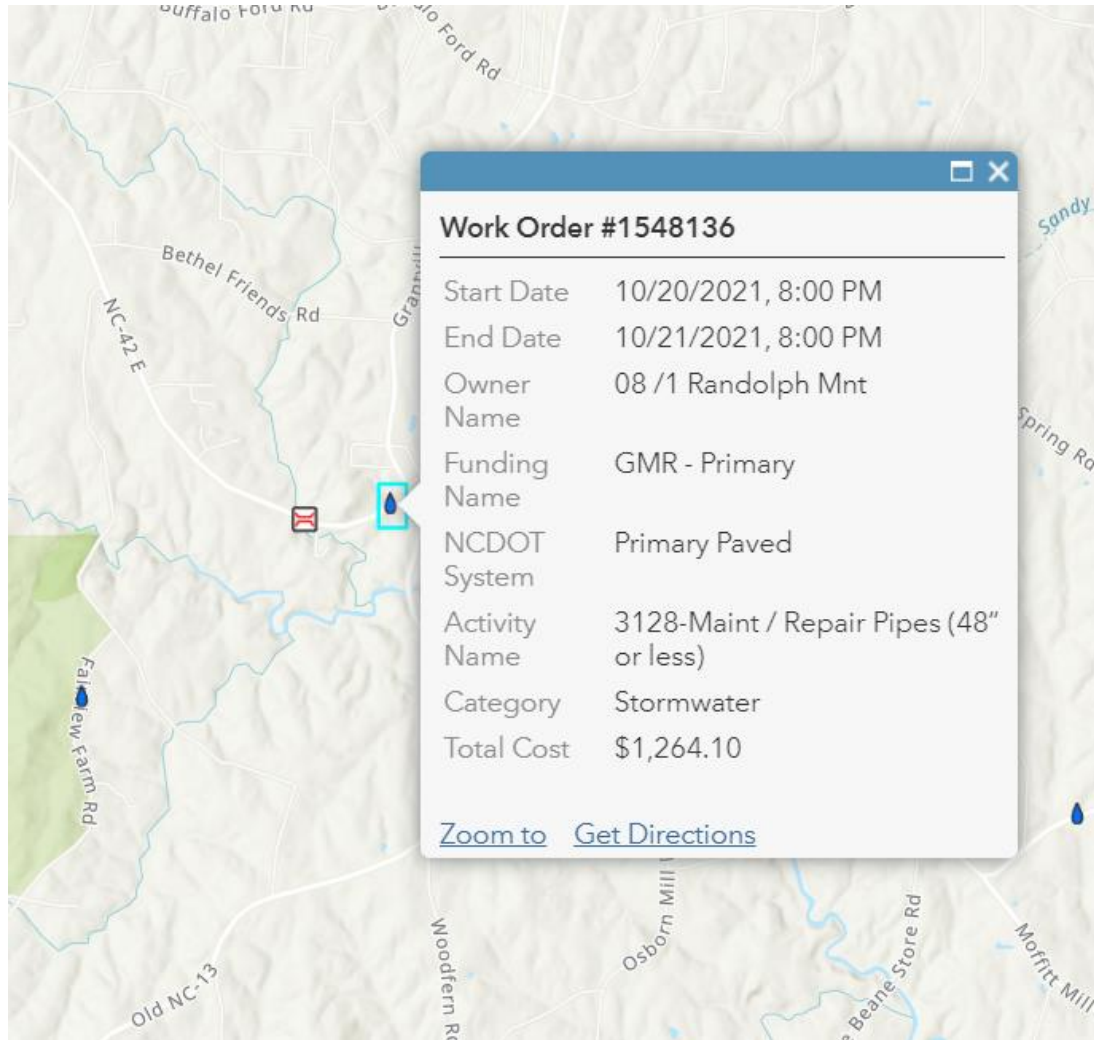
How Does External Facing Benefit Us?

- Creates better public awareness of the day-to-day tasks and success of the maintenance side of NC
 - Gives the Public the ability to see (mapped) work that has been accomplished
- Gives insightful data and resources for members of the public and elected officials to see where things are happening
 - Transparency in work functions and tasks
- Will include Dashboards showing certain scores and metrics

How Does External Facing Benefit Us?



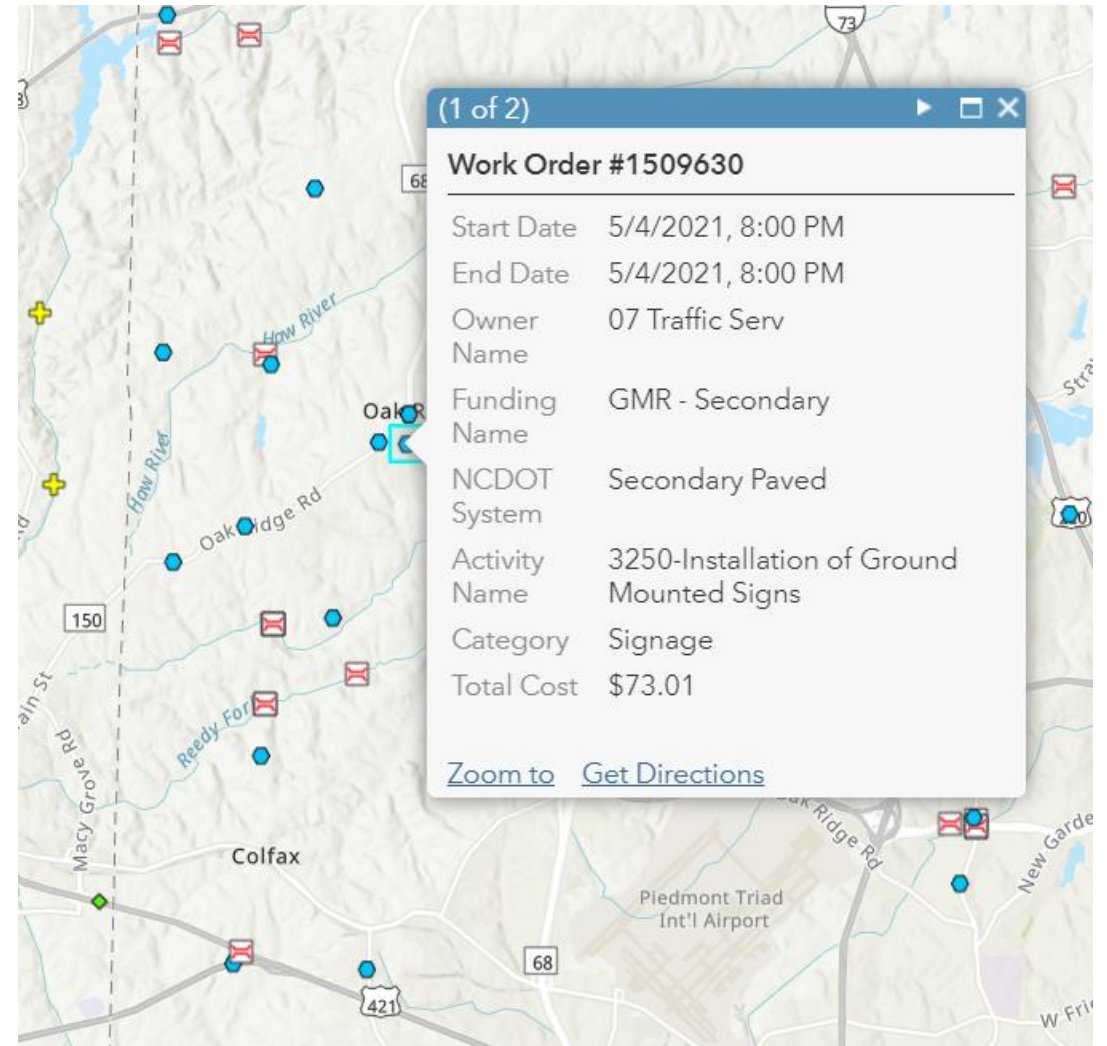
External Facing



A map view showing a work order location. A popup window displays the following details for Work Order #1548136:

Work Order #1548136	
Start Date	10/20/2021, 8:00 PM
End Date	10/21/2021, 8:00 PM
Owner Name	08 /1 Randolph Mnt
Funding Name	GMR - Primary
NCDOT System	Primary Paved
Activity Name	3128-Maint / Repair Pipes (48" or less)
Category	Stormwater
Total Cost	\$1,264.10

[Zoom to](#) [Get Directions](#)



A map view showing a work order location. A popup window displays the following details for Work Order #1509630:

Work Order #1509630	
Start Date	5/4/2021, 8:00 PM
End Date	5/4/2021, 8:00 PM
Owner Name	07 Traffic Serv
Funding Name	GMR - Secondary
NCDOT System	Secondary Paved
Activity Name	3250-Installation of Ground Mounted Signs
Category	Signage
Total Cost	\$73.01

[Zoom to](#) [Get Directions](#)

External Facing



NC DOT Maintenance Portal

Primary Maintenance

Secondary Maintenance

Roadside Environmental

Bridge Preservation

Bridge Program

FAQ



PRIMARY MAINTENANCE



SECONDARY MAINTENANCE



ROADSIDE ENVIRONMENTAL



BRIDGE PRESERVATION



BRIDGE PROGRAM



FAQ

External Facing



NC DOT Maintenance Portal

[Primary Maintenance](#)

[Secondary Maintenance](#)

[Roadside Environmental](#)

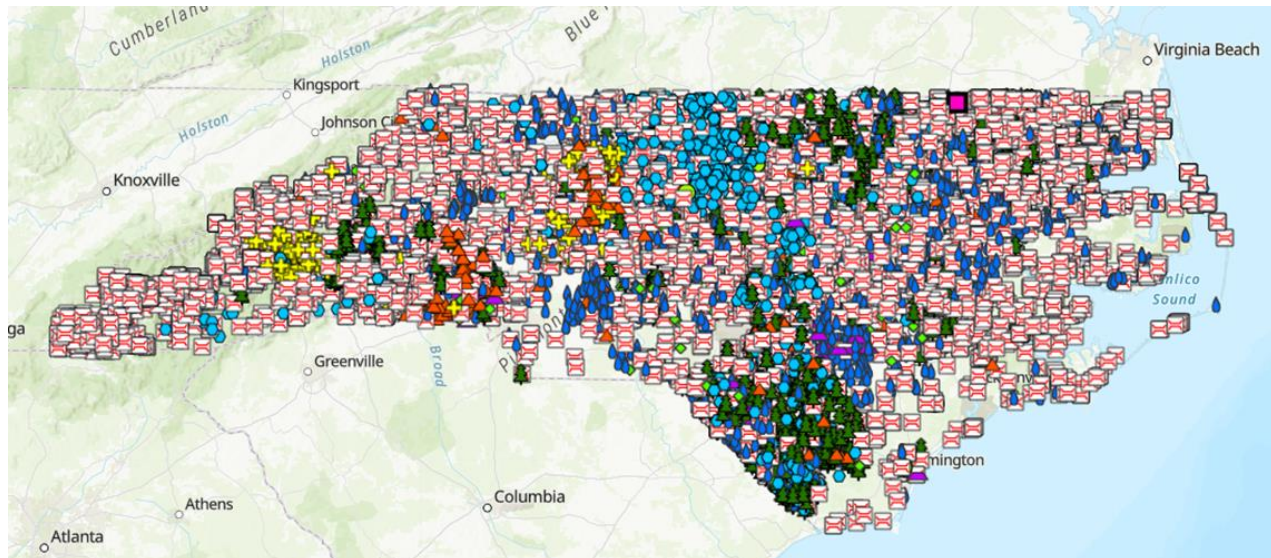
[Bridge Preservation](#)

[Bridge Program](#)

[FAQ](#)

Primary Maintenance

Text about the primary maintenance page.



Phase IV: Implementation

Implementation

Internal Site:

- Identification of existing Sites - **March 2022**
- Coordination with IT for build out – **March/April 2022**
- Go Live – **April/May 2022**

External Site:

- Template – **February 2022**
- Mapping Template – **Feb/March 2022**
 - Tasking/Artemis data
- Coordination with IT for build out – **TBD**
- Go Live – **TBD**

Questions?

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