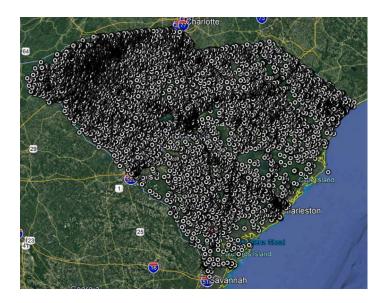
# SCDOT Enhancements to BrM

Emily Berry, P.E., Assoc. DBIA Assistant State Bridge Maintenance Engineer South Carolina Department of Transportation



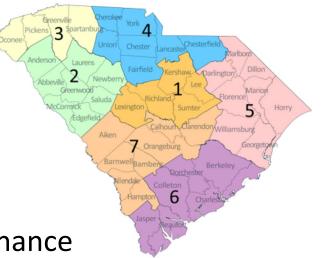
## Overview

- Introduction
- SCDOT Bridge Maintenance
- "The Past"
- BrM Workplan
- BrM Enhancements
- Questions?



# SCDOT Bridge Maintenance

- ≈ 9,500 Bridges
- Seven Districts
- HQ Bridge Maintenance Office
  - Load ratings
  - Inspection oversight
  - Oversize overweight
  - Rehab/repair/preventative maintenance
  - Consultant contracts





## How did we end up here?

- 2015 Peer Review
  - Bridge inspection software
  - Defined QA/QC roles
- 2017 4 PCAs
  - Load ratings
  - QC/QA
  - Critical findings
- Progress starts but...





#### It gets worse ...

- Needs Identified in 2018
  - Bridge Management Parametric Study
  - Load Rating Guidance Document
  - Bridge Inspection Guidance Document
- December 2018
  - 9 more PCAs
  - 2 improvement plans
  - Load rating consultants selected





#### PCA Action Items

- On-time inspections
- Inspection quality
- Load ratings
- Bridge files
- Inspection procedures
  Software updates

- Scour assessments
- QC/QA
- Critical findings
- NBI data

#### PCA Action Items

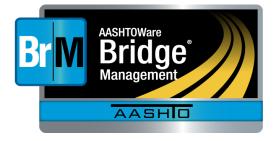
- On-time inspections
- Inspection quality
- Load ratings
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  Software updates

- Scour assessments
- QC/QA
- Critical findings
- NBI data

#### **BrM Investment**

# BrM Workplan

- Focus on FHWA Requirements
- Core Implementation
- One Stop Shop
- Enhancement Development Process
  - 1. Design / group collaboration
  - 2. FDS review and approval
  - 3. BrM development
  - 4. Testing/acceptance











# BrM Workplan Cont.

- Under Development
  - User certifications
  - Critical findings
- FDS in Draft Form
  - Inspection assignments
  - Inspection procedures
- More FDS to Come
  - Started March 2020
  - 36 month process







FC



# User Certifications

- Enhancement
- Experience & certifications
- Tied to assignments & inspection type
- Admin approval option
- Signature/stamp in user profile
- Linked to multimedia enhancements



U.S. Department of Transportation Federal Highway

National Highway Institute Certificate of Training



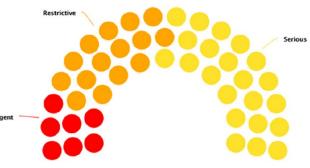
FHWA-NHI-130053 Bridge Inspection Refresher Training boated by WSP USA Hours of Instruction: 18 March 03-05 2020

# **Critical Findings**

- New module
- Reporting/reviewing process
- Assign tasks
- Status updates
- Critical finding dashboard
- Linked to notifications & multimedia enhancements



Critical Findings

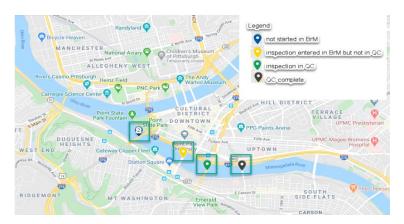


🕒 Urgent 7 🛛 😑 Restrictive 15 👘 🥚 Serious 22

## Inspection Assignments

- Enhancement
- Inspection & equipment types
- Request re-assignment
- My assignment page (inspector-level)
- Linked to inspection procedures





# Inspection Procedures

- New module
- Template procedures
- Bridge specific procedures
- Admin controls procedure updates
- Viewable once assigned
- Linked to inspection assignments







# Upcoming – New Modules

- QC/QA
- Notifications
  - Email alerts
  - Certification expiration
  - Overdue inspections
  - QC/QA due
  - Critical findings







# Upcoming - Enhancements

- Inspection Pages
  - Inspection type sensitive fields
  - Site logistics
  - Tools for member deterioration
- Multimedia
  - ProjectWise
  - Agency-defined file naming
- Reporting
  - Dashboard of inspection status







# Questions?

#### "Continuous improvement is better than delayed perfection."

- Mark Twain

