



# AASHTOWare Bridge Integration through Web Services

RADBUG Meeting, 2019



# What? Why? How?

- ▶ Funded by the AASHTOWare Research, Innovation, and Product Improvement (RIPI) Program
- ▶ **Redesigned data linkages** through industry standard Representational State Transfer (REST) web service APIs
- ▶ **Phase 1** complete with BrM 6.0 release
  - ▶ BrM REST web service endpoints ready for consumption!
- ▶ **Phase 2** planned for completion with BrDR 7.1 release in 2020



# Redesigned data linkages

- ▶ Existing Bridge Integration is a highly coupled solution requiring agency to merge BrM database with BrDR database
  - ▶ Both BrM and BrDR access the integrated database in production environment
- ▶ The redesigned data linkages provide a set of RESTful services that can be connected to from anywhere via HTTPS
  - ▶ No longer needs to merge databases, information exchange is on-demand



# Phase 1

- ▶ Implemented BrM REST web service API utilizing the latest Microsoft Web API technologies
- ▶ Provided endpoints to BrM database tables for performing create, read, update and delete (CRUD) operations
- ▶ Additional endpoints for dynamically updating database tables
- ▶ Each endpoint contains additional functionality for specific business operations



# Phase 2

- ▶ Will implement a REST web service client within BrDR to consume the REST web services provided by BrM
- ▶ All existing Bridge Integration features will be provided
- ▶ Existing “Update BrM Rating Results” feature will be enhanced to support BrM Load Rating Module
- ▶ BrM NBI rating will be available in BrDR for timely and accurate decisions on performing load rating



# Questions?

