

Materials Quality Assurance Stewardship Reviews

Mid-Atlantic Quality Assurance
Workshop - February 2017

FHWA Materials and Quality Assurance
Team

QA Review Objectives

- Evaluate State's QA program
- Capture and Promote Best Practices
- Compliance with 23 CFR 637 B
 - Quality Assurance Procedures for Construction
- Assess and Minimize Risks
- Improve Material Quality and Efficiency

QA Stewardship Reviews

- Typically 5 states per year
- 50 states plus 10 follow-ups since 2003
- Structured program review
- Site visits to evaluate implementation



QA Review Teams

- FHWA Office of Infrastructure
- FHWA Resource Center
- FHWA Division Office P&M Engineer
- State Staff: Materials & Construction
 - Statewide / central office
 - District / region

QA Program

- Random numbers / sampling
- Sample security
- Independent Assurance tolerances
- Design-Build QA roles
- Pavement smoothness testing



Asphalt Quality

- Mix design validation
 - Aggregate specific gravity (G_{sb})
 - Mixture maximum gravity (G_{mm})
 - AC correction factor
- Monitor aggregate gravity (G_{se})
- Validation of contractor data for acceptance

Asphalt Best Practices

- Joint density specifications
- Volumetrics used for acceptance
- Sampling behind the paver
- MSCR in lieu of “PG plus” tests
- Percent within limits specifications

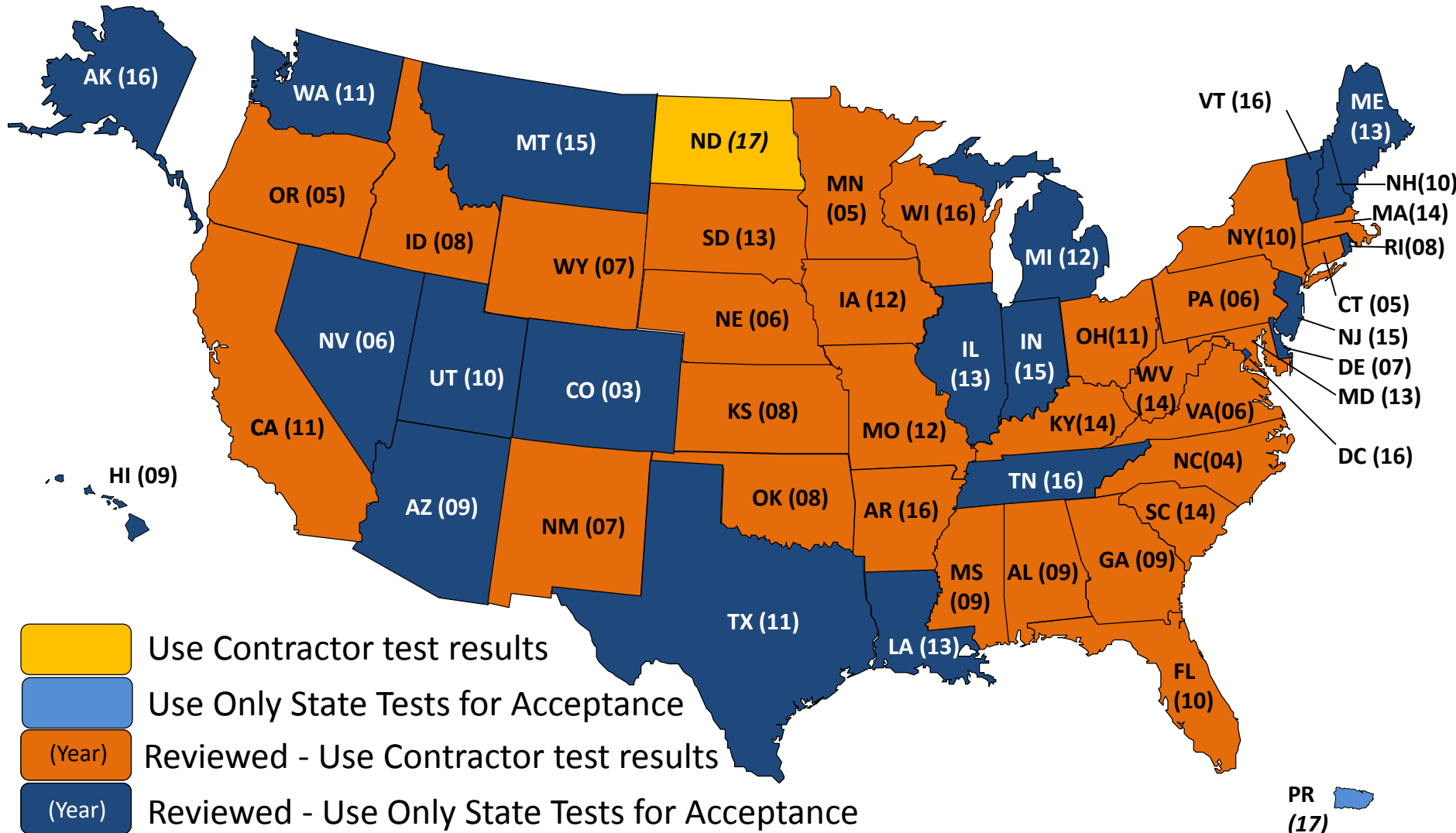


QA Best Practices

- Electronic data records
- IA: System vs. Project approach
- Utilize NTPEP data
- Regional coordination
- Routine QA program review



QA Reviews & Asphalt Acceptance



(Based on 2014 FHWA Quality Assurance Assessment.)

QA Reviews - Outcomes

- Spread best practices
- Monitor regulatory compliance
- Identify national challenges & weaknesses
- Guide for improvement opportunities



QA Reviews - Future

- Planned 2017: PR, ND, 3 more
- Risk based selection
- Coordination
 - FHWA Division Office
 - State DOT



References

- Contact: Jeff Withee

jeff.withee@dot.gov or 202-366-6429

- FHWA Quality Assurance Stewardship Activities

<http://www.fhwa.dot.gov/pavement/stewardship.cfm>

- FHWA Policy and Guidance Center – Materials and Quality Assurance

<http://www.fhwa.dot.gov/pgc/index.cfm?ddisc=52&dsub=1006>