

National Performance Management Measures for Assessing Pavement Condition

Data Quality Management Program

***Road Profiler Users' Group (RPUG)
29th Annual Meeting
November 15, 2017***



23 CFR 490.319(c) Data Quality Management Program

- States must submit for FHWA approval within one year of the effective date of the TPM regulations (May 20, 2018).
- Addresses quality of all data collected to report pavement metrics.
- Applies to manual and automated data acquisition methods.
- Submit any proposed significant change for approval.

23 CFR 490.319(c) Data Quality Management Program

(c) Each State DOT shall develop and utilize a Data Quality Management Program, approved by FHWA that addresses the quality of all data collected, regardless of the method of acquisition, to report the pavement condition metrics, discussed in 23 CFR 490.311, and data elements discussed in 23 CFR 490.309(c).

Data Quality Management Plan

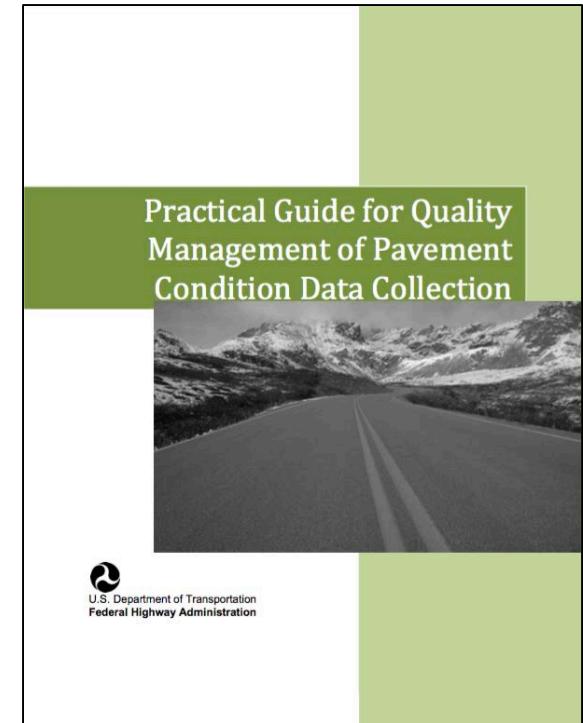
Minimum Requirements

- Data collection equipment calibration and certification
- Certification process for performing manual collection
- Data quality control measures before and during collection
- Data sampling, review and checking processes
- Error resolution procedures and data acceptance criteria



Data Management Resources

- FHWA Practical Guide
 - Detailed guidance on pavement data quality
- NCHRP Synthesis 401
 - Data quality approaches
 - Review of the state of practice
- HPMS materials
 - Guidance on topics including data quality
 - HPMS continuous process improvement model

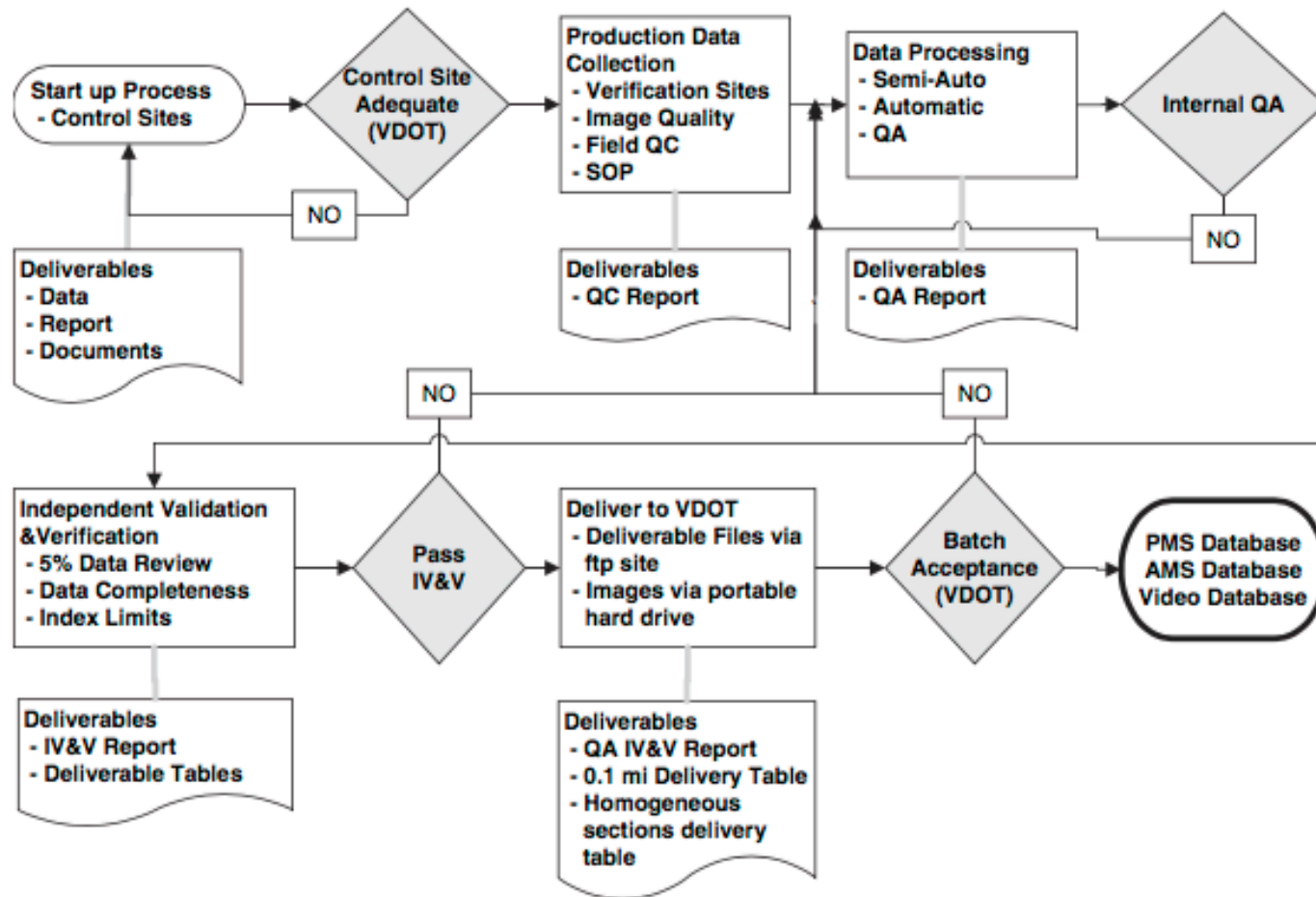


Quality Management Guide: Contents

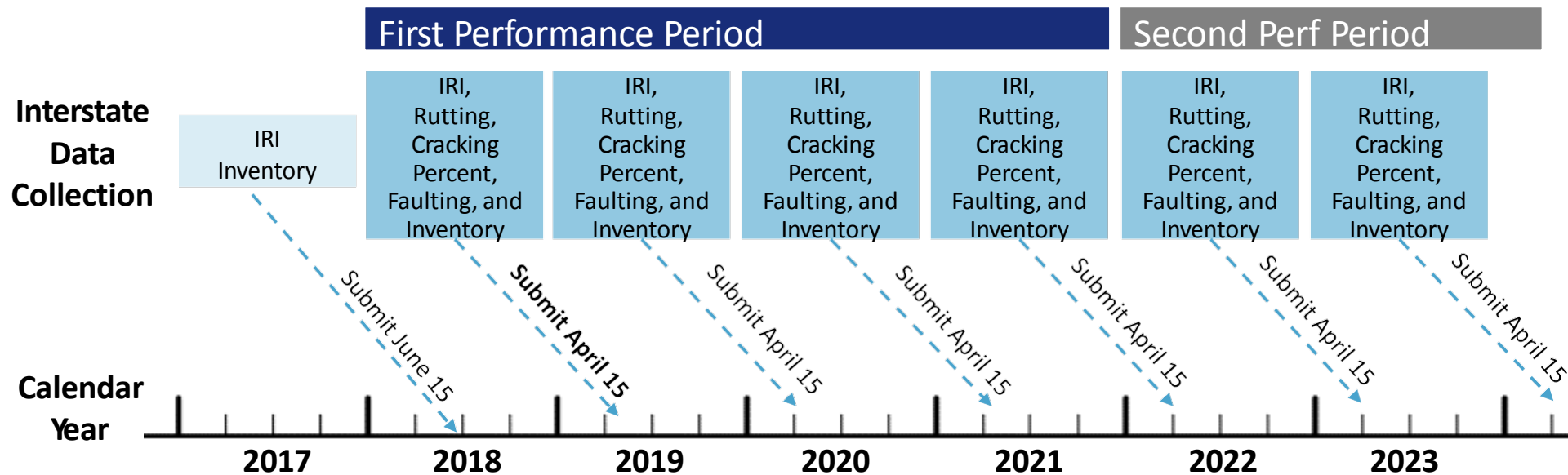
- Principles of Data Quality Management
- Data Quality Standards and Acceptance Criteria
- Quality Control
- Acceptance
- Quality Management Reporting
- Quality Management Tools
- Quick Reference to QMP: Appendix A
- QMP Template: Appendix B
- QC and Acceptance Checklist: Appendix G
- Case Studies
 - Louisiana DOTD
 - Oklahoma DOT
 - Pennsylvania DOT
 - British Columbia MoTI
- Information from Virginia DOT and FHWA Long-Term Pavement Performance (LTPP)



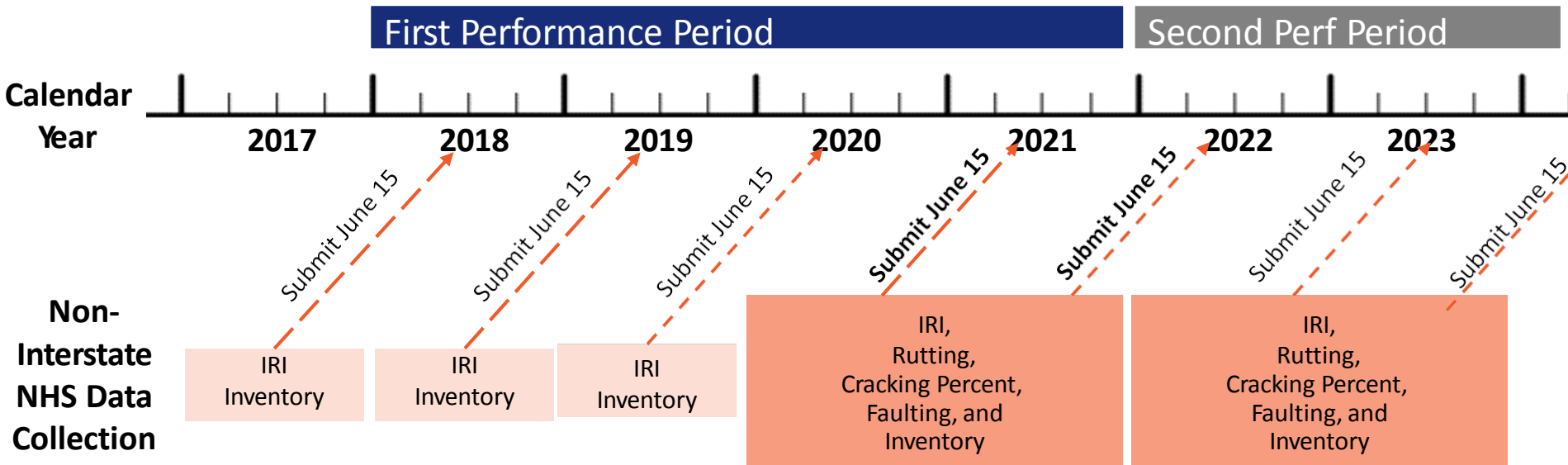
Example Data Quality Process: Virginia DOT



23 CFR 490.309 State DOT Pavement Data Submittal: INTERSTATE Data



23 CFR 490.309 State DOT Pavement Data Submittal: NON-Interstate

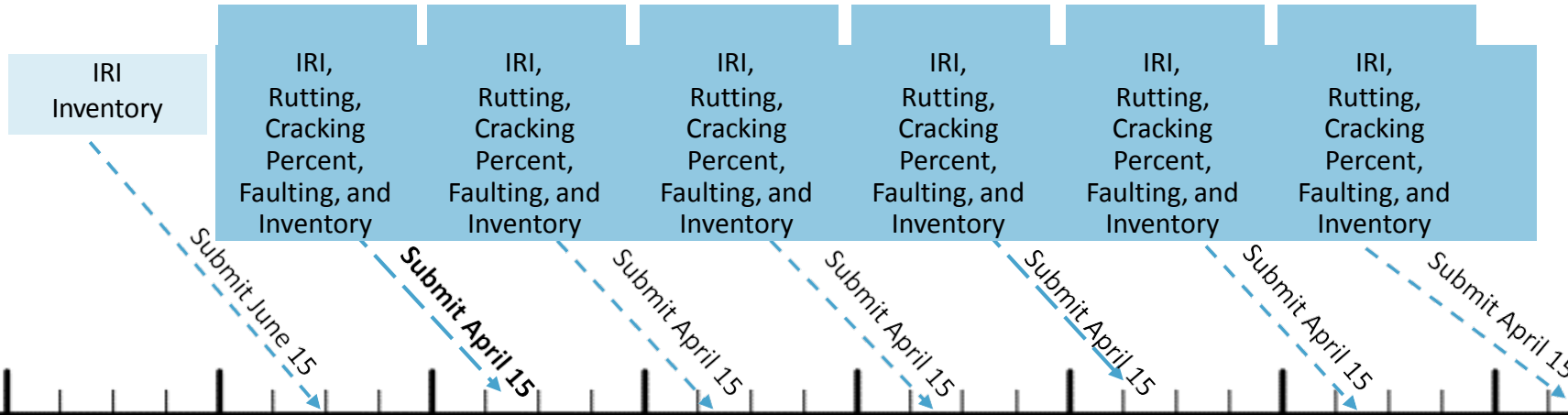


23 CFR 490.309 State DOT Pavement Data Submittal

1st Performance Period

2nd Performance Period

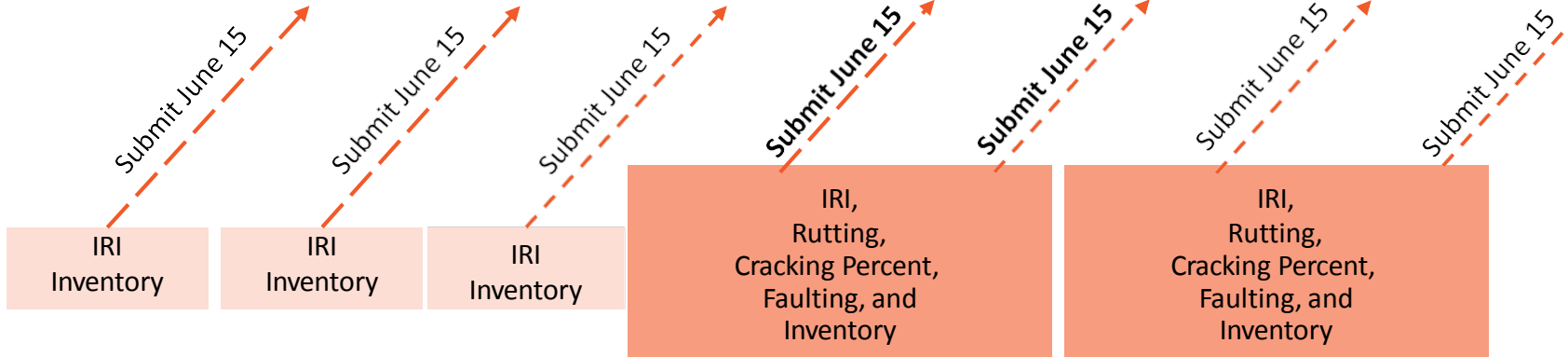
Interstate
Data
Collection



Calendar
Year

2017 2018 2019 2020 2021 2022 2023

Non-
Interstate
NHS Data
Collection



Final Rule in the Federal Register

Pavement and Bridge Condition Performance Measures Final Rule

<https://www.federalregister.gov/documents/2017/01/18/2017-00550/national-performance-management-measures-assessing-pavement-condition-for-the-national-highway>



Final Rule Webinar Recordings

<http://www.fhwa.dot.gov/tpm/resources/presentations.cfm>



Contacts

For questions or more information, please contact:

Tom Van, Pavements Thomas.Van@dot.gov

Max Grogg, Pavements Max.Grogg@dot.gov

Robert Orthmeyer, P&M TST Robert.Orthmeyer@dot.gov

