

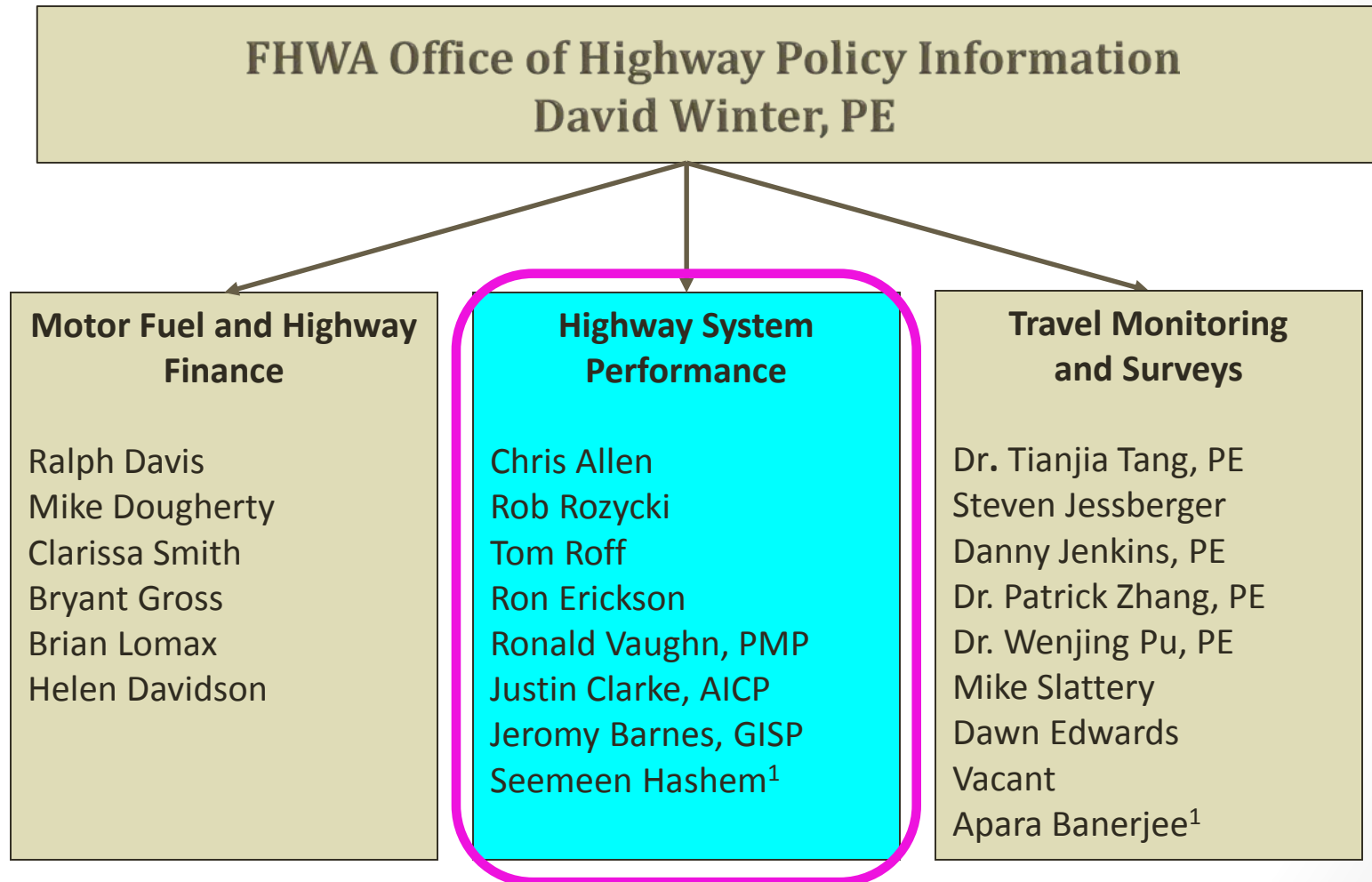
HPMS and TPM – Part 1b: Data Requirements for Pavement Conditions

FHWA Highway Information Seminar

Arlington, VA

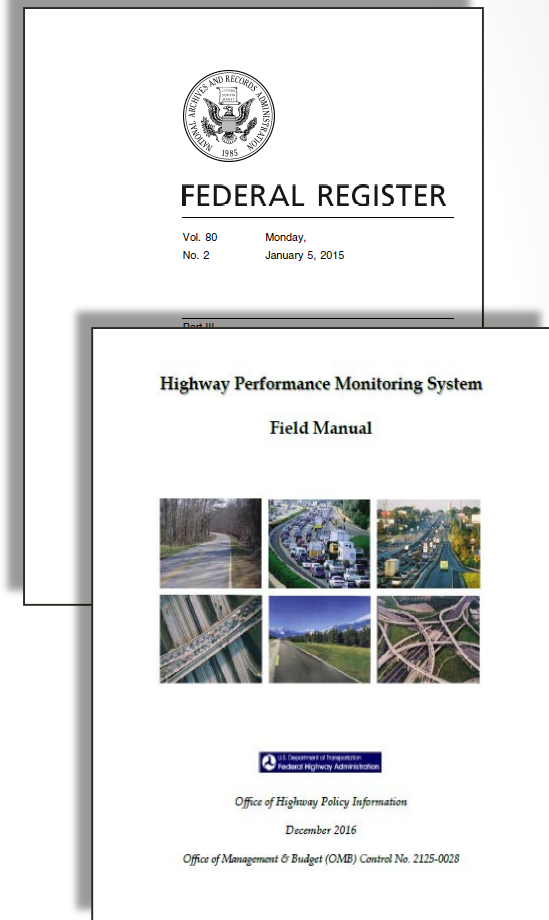
November 16, 2017

Office Organizational Chart

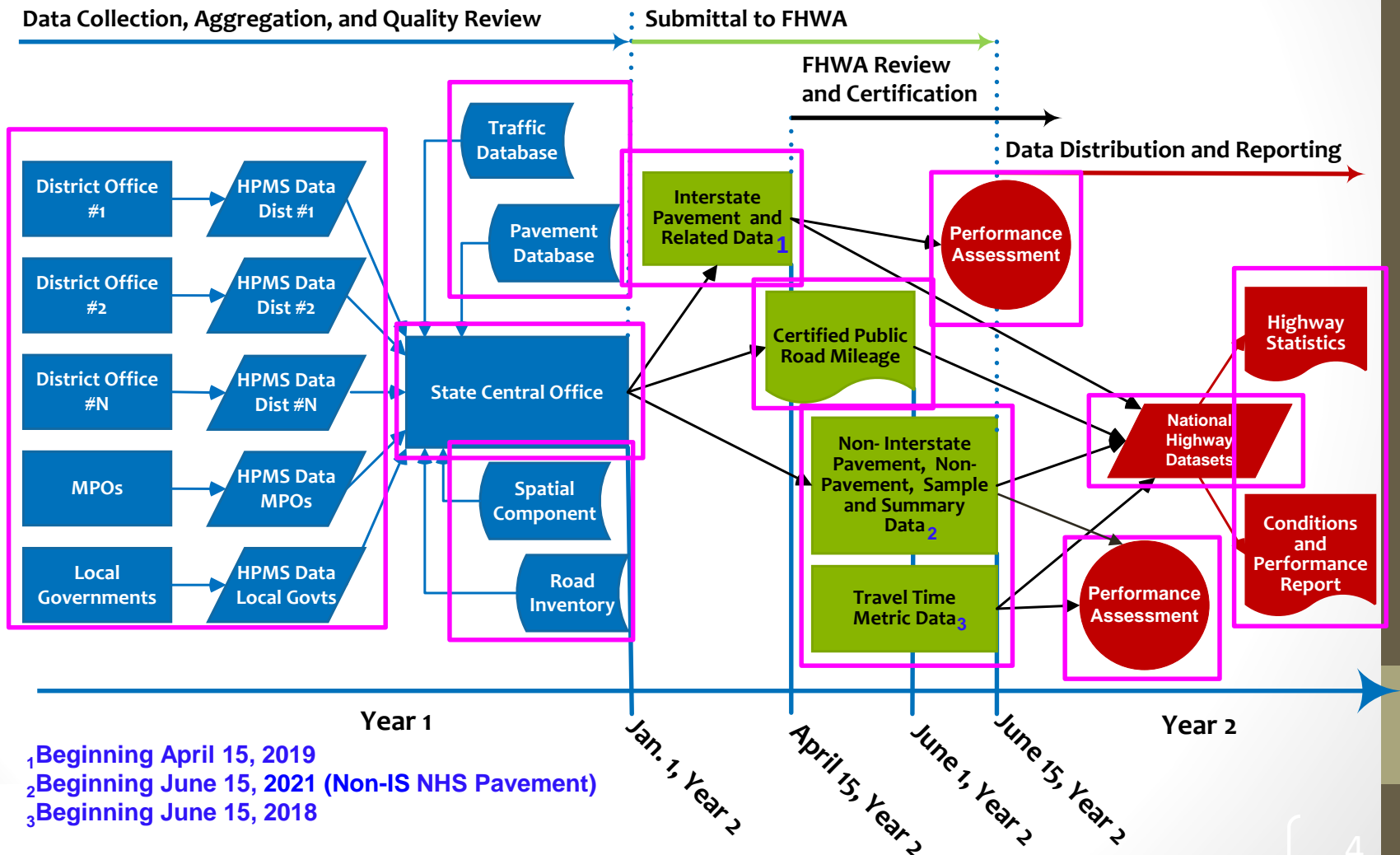


HPMS Field Manual 2016

- Addresses updated data requirements needed to support the Pavement & Bridge Performance Measures (PM2) Final Rule
- Provides additional clarification on existing data collection and reporting guidance



HPMS Submission Timeline (Revised)



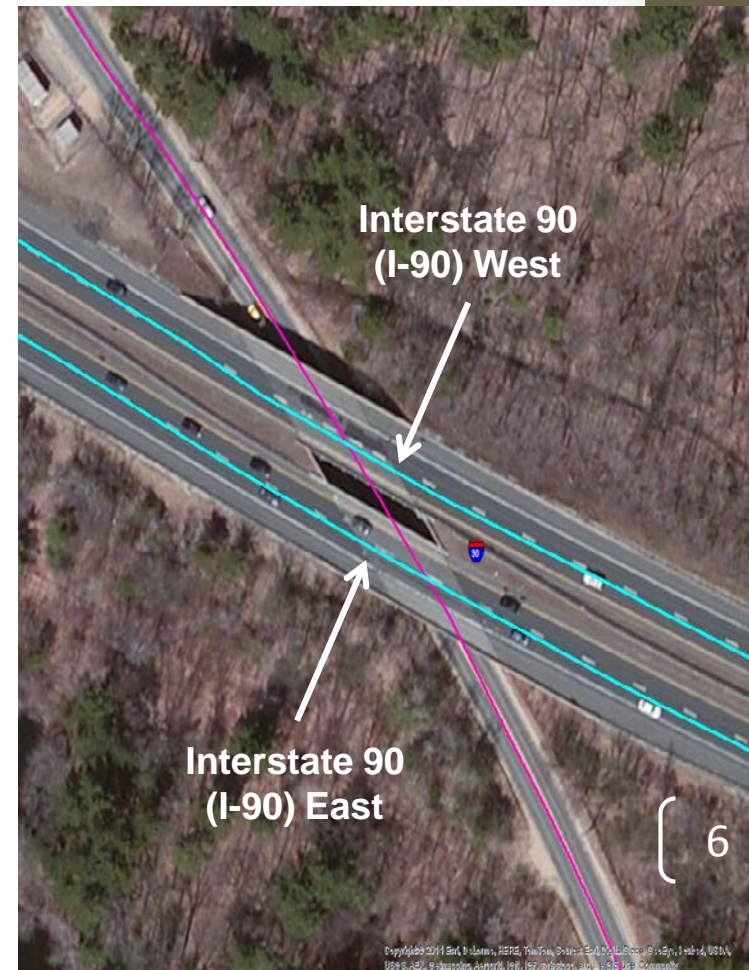
Pavement & Bridge Condition Rule (PM2)-related Modifications

		<u>Pre-PM2</u>			<u>Post-PM2</u>		
<u>Data Item</u>	<u>Roadway System</u>	<u>Extent</u>	<u>Collection Cycle</u>	<u>Direction</u>	<u>Extent</u>	<u>Collection Cycle</u>	<u>Direction</u>
IRI	Interstate (IS)	Full Extent	Annual	Inventory	Full Extent	Annual	Inventory*
	Non-IS NHS	Full Extent	Annual	Inventory	Full Extent	Biennial	Inventory
Surface Type	Interstate (IS)	Sample	Biennial	Inventory	Full Extent	Annual	Inventory*
	Non-IS NHS	Sample	Biennial	Inventory	Full Extent	Biennial	Inventory
Rutting	Interstate (IS)	Sample	Biennial	Inventory	Full Extent	Annual	Inventory*
	Non-IS NHS	Sample	Biennial	Inventory	Full Extent	Biennial	Inventory
Faulting	Interstate (IS)	Sample	Biennial	Inventory	Full Extent	Annual	Inventory*
	Non-IS NHS	Sample	Biennial	Inventory	Full Extent	Biennial	Inventory
Cracking Percent	Interstate (IS)	Sample	Biennial	Inventory	Full Extent	Annual	Inventory*
	Non-IS NHS	Sample	Biennial	Inventory	Full Extent	Biennial	Inventory

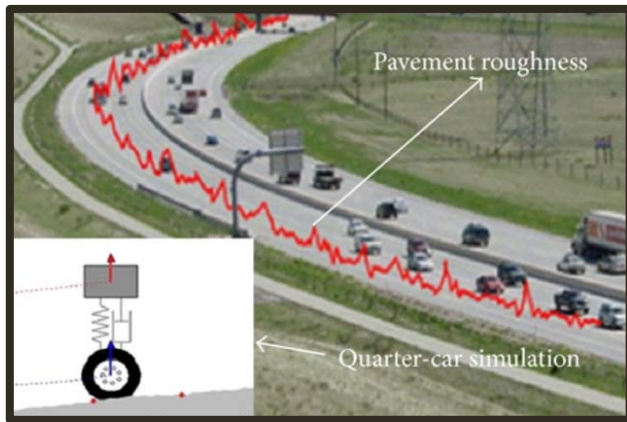
***States can opt to report distress data independently for divided Interstate highway sections**

Directional Pavement Metrics Reporting Options

- If pavement distress data is being reported independently for both directions of travel on divided Interstate roadways, then the following data items shall be reported in the same manner:
 - Urban Code
 - Structure Type
 - Route Number
 - Directional Through Lanes



Pavement Data & Distress Items



IRI (International Roughness Index):

- Road roughness measurement
- Required for **all surface types**
- Reported in inches/mile



PSR (Pavement Serviceability Rating):

- Visual inspection-based pavement condition rating
- Can be reported in lieu of IRI
- Reported/coded on scale of 0 (poor) to 5 (very good, in units of tenths (e.g., 4.2))

Pavement Data & Distress Items (cont'd)



Rutting :

- Longitudinal surface depressions in asphalt pavement
- Required for **asphalt** pavements
- Reported as the average depth of ruts on a section to the nearest 0.01 inch



Faulting :

- Vertical misalignment of joints in Jointed Concrete Pavement
- Req. for **jointed-concrete** pavements
- Reported as average/mean absolute faulting to the nearest 0.01 inch

Pavement Data & Distress Items (cont'd)



Cracking Percent :

- Percentage of pavement surface exhibiting cracking
- Required for **all surface types**
- Reported as percent of section area or slabs to the nearest 1%



Surface Type:

- One of 11 FHWA surface type codes determined from visual inspection or construction records
- Preservation treatments of < 0.5 in. compacted material shall be excluded surface type determination

Pavement Data Collection/Reporting Guidance

- Collect in the rightmost through lane or one consistent lane
- Collect and report in **uniform** section lengths of 0.1 mi. (528 ft.); sections shall not exceed 0.11 mi.
- PSR, Rutting, Faulting, Cracking shall be collected for milepoint limits (i.e., sections) that are consistent with those reported for IRI



Pavement Data Collection/Reporting Guidance (cont'd)

- The following codes must be used to specify why data could not be collected on an NHS section
 - **A:** Construction - Roadway under construction
 - **B:** Closure - Roadway closed to traffic
 - **C:** Disaster - Roadway is in area declared as a disaster zone
 - **D:** Deterioration - Roadway too deteriorated to measure and already rated “poor”
 - **E:** *Other – E.g. section added to NHS post data collection*



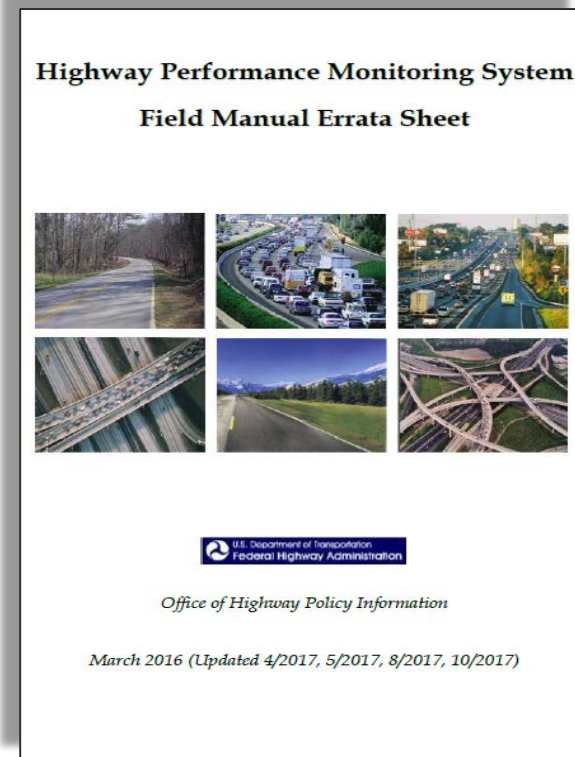
Pavement Data Collection/Reporting Guidance (cont'd)

- Report existing values until they can be replaced by newly measured values
- Use Value Text field (Field 9) to indicate why measured value has not been reported for NHS sections
- An estimated date can be provided when exact collection date is unavailable



HPMS Field Manual Errata

- Contains revisions to various HPMS Field Manual contents
- Awaiting FHWA Office of Chief Counsel approval
 - Release Date: TBD



Questions / Comments?



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