Agenda

- HPMS Pavement Data Report Card (PRC)
  - User Manual
  - Updates to the PRC
  - How are we doing
Key Acronyms

- CRCP: Continuously Reinforced Concrete Pavement
- HPMS: Highway Performance Monitoring System
- IRI: International Roughness Index
- JCP: Jointed Concrete Pavement
- LRS: Linear Referencing System
- NHS: National Highway System
- PRC: HPMS Pavement Data Report Card
- PSR: Present Serviceability Rating
- TPM: Transportation Performance Management
# User Manual

## DATA CHECK AND PAVEMENT DATA QUANTITY (INTERSTATE)

### DATA CHECK

<table>
<thead>
<tr>
<th>FIPS CODE</th>
<th>STATE NAME</th>
<th>UTOPIA</th>
<th>STATE ABBREVIATION</th>
<th>UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR 2015 HM-41 INTERSTATE CENTERLINE MILES</td>
<td>99 - UTOPIA</td>
<td>621.833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBMITTED DATA INTERSTATE CENTERLINE MILES</td>
<td>99 - UTOPIA</td>
<td>621.833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DELTA</td>
<td>99 - UTOPIA</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YEAR 2015 HM-43 INTERSTATE LANE MILES</td>
<td>99 - UTOPIA</td>
<td>4,140.576</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBMITTED DATA INTERSTATE LANE MILES</td>
<td>99 - UTOPIA</td>
<td>4,140.576</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DELTA</td>
<td>99 - UTOPIA</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT EXCLUDING SECTIONS CODED AS A BRIDGE</td>
<td>99 - UTOPIA</td>
<td>3,990.314</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DATA QUANTITY - PAVEMENT

- TOTAL INTERSTATE LANE MILES FULL EXTENT MISSING CRACKING PERCENT DATA FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA
- TOTAL INTERSTATE LANE MILES FULL EXTENT MISSING FAULTING DATA FROM PCC PAVEMENTS AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA
- TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI DATA IS NULL OR ZERO FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA
- TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI COLLECTION DATE NOT VALID FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA
- TOTAL INTERSTATE LANE MILES FULL EXTENT MISSING RUTTING DATA FROM AC PAVEMENTS AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA

**NOTE:** Items shaded orange are HPMS Pavement Performance Data Improvement Zones where data should be verified or corrected.
Updates to PRC

• Updates reflect Performance Management Final Rule
  – Full extent (required; 23 CFR 490.307 & 490.309)
  – Missing or invalid data (no more than 5%; 23 CFR 490.313)

• Planned updates
  – Link to standard operating procedures calculations
    • Spatial alignment
    • Present Serviceability Rating (PSR)
2016 Interstate

- 39 States were on time
- 35 States had less than 5.0% missing data
- 20 States had less than 5.0% missing or invalid data
- Unresolved data – comments in HPMS software forwarded to states
## Full Extent Lane Miles Rating (Interstate)

<table>
<thead>
<tr>
<th>Description</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Miles Full Extent Good</td>
<td>367.700</td>
</tr>
<tr>
<td>Lane Miles Full Extent Fair</td>
<td>1,012.884</td>
</tr>
<tr>
<td>Lane Miles Full Extent Poor</td>
<td>8.680</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,389.264</strong></td>
</tr>
</tbody>
</table>

**Estimated Total Interstate Lane Miles Missing or Invalid Data**

- Total lane miles: 3,942.812
- % Estimated total: 73.95%

**Sample Size**

- Sample size: 26.13%

**% Surface Type Between 2 and 10 Rated as G-F-P**

- Lane miles full extent good: (26.47%)
- Lane miles full extent fair: (72.91%)
- Lane miles full extent poor: (0.62%)

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The HPMS Pavement Report Card's purpose is to provide feedback to divisions and states on their HPMS pavement submittal data in response to requirements of 23 CFR 490. The report card is for information only and should not be considered the official calculation of measures or missing or invalid data for a state.

Based on 23 CFR 490, the report card is analyzing full extent, not sample based, pavement data. States are encouraged to submit full extent data prior to its requirement so they can better assess their data submission.
INTERSTATE

% POOR AND MISSING SURFACE TYPE

Missing surface type is sample based.
% POOR is sample based prior to 2015.
2015 and 2016 % POOR 23 CFR 490.313
### DATA CHECK

<table>
<thead>
<tr>
<th>FIPS CODE</th>
<th>99</th>
<th>STATE NAME</th>
<th>UTOPIA STATE ABBREVIATION</th>
<th>UP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**YEAR 2015 HM-41 INTERSTATE CENTERLINE MILES**
- Submitted Data: 1,181,590
- Delta: 77,290
- UP: 1,104,300

**YEAR 2015 HM-43 INTERSTATE LANE MILES**
- Submitted Data: 5,508,695
- Delta: 329,280
- UP: 5,179,415

**TOTAL INTERSTATE LANE MILES FULL EXTENT EXCLUDING SECTIONS CODED AS A BRIDGE**
- UP: 5,332,076

### DATA QUANTITY - PAVEMENT

- **TOTAL INTERSTATE LANE MILES FULL EXTENT MISSING CRACKING PERCENT DATA FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 59,608

- **TOTAL INTERSTATE LANE MILES FULL EXTENT MISSING FAULTING DATA FROM PCC PAVEMENTS AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 0,000

- **TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI DATA IS NULL OR ZERO FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 1,200

- **TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI COLLECTION DATE NOT VALID FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 1,200

- **TOTAL INTERSTATE LANE MILES FULL EXTENT MISSING RUTTING DATA FROM AC PAVEMENTS AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 0,000

- **LANE MILES FULL EXTENT SURFACE TYPE IS NULL AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 3,882,044

- **LANE MILES FULL EXTENT SURFACE TYPE = 1 UNSURFACED AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 0,000

- **LANE MILES FULL EXTENT SURFACE TYPE = 11 OTHER AND EXCLUDING SECTIONS CODED AS BRIDGES**
  - Marked as unresolved data: 0,000

- **LANE MILES FULL EXTENT SURFACE TYPE IS AC**
  - Marked as unresolved data: 1,390,464

- **LANE MILES FULL EXTENT SURFACE TYPE IS PCC**
  - Marked as unresolved data: 59,608

- **LANE MILES FULL EXTENT SURFACE TYPE IS CRCP**
  - Marked as unresolved data: 0,000

- **TOTAL INTERSTATE LANE MILES WHERE THROUGH LANES IS CODED AS A 1, 2, OR 3. ALTHOUGH THIS IS POSSIBLE AT INTERSTATE TERMINAL SECTION OR SOME INTERCHANGES THESE SECTIONS SHOULD BE VERIFIED.**
  - Marked as unresolved data: 1,980

- **TOTAL CENTERLINE MILES WHERE THROUGH LANES IS MISSING**
  - Marked as unresolved data: 0,000

**ITEMS SHADED ORANGE ARE HPMS PAVEMENT PERFORMANCE DATA IMPROVEMENT ZONES WHERE DATA SHOULD BE VERIFIED OR CORRECTED**
<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI COLLECTION DATE NOT VALID FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA. IRI DATA IS REQUIRED TO BE COLLECTED AND REPORTED ANNUALLY ON THE INTERSTATE ALONG WITH THE DATE OF COLLECTION. IRI COLLECTION YEAR SHOULD EQUAL YEAR_RECORD.</td>
<td>1.200</td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT IRI COLLECTION YEAR DOES NOT EQUAL YEAR_RECORD. CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%</td>
<td>0.08 %</td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI DATA IS NULL OR ZERO FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES - MARKED AS UNRESOLVED DATA</td>
<td>1.200</td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT WHERE IRI DATA IS NULL OR ZERO. CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%</td>
<td>0.08 %</td>
</tr>
<tr>
<td>FULL EXTENT LANE MILES WITH MISSING OR INVALID IRI, FROM SURFACE_TYPE BETWEEN 2 AND 10 AND EXCLUDING SECTIONS CODED AS BRIDGES</td>
<td>1.200</td>
</tr>
<tr>
<td>% FULL EXTENT LANE MILES MISSING OR INVALID IRI EXCLUDING SECTIONS CODED AS BRIDGES - SIP SP5</td>
<td>0.08 %</td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI IS LESS THAN 30.0 INCHES/MILE. ALTHOUGH VALUES LESS THAN 30.0 INCHES PER MILE ARE POSSIBLE THEY ARE NOT LIKELY AND SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED IRI CUMULATIVE DISTRIBUTION.</td>
<td>85.744</td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT IRI LESS THAN 30.0 INCHES PER MILE. AVERAGE VALUE IS 1.23%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%</td>
<td>5.91 %</td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE IRI IS GREATER THAN 400.0 INCHES/MILE. ALTHOUGH VALUES GREATER THAN 400.0 INCHES PER MILE ARE POSSIBLE THEY ARE NOT LIKELY AND SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED IRI CUMULATIVE DISTRIBUTION.</td>
<td>0.120</td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT IRI GREATER THAN 400.0 INCHES PER MILE. AVERAGE VALUE IS 0.0%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%</td>
<td>0.01 %</td>
</tr>
<tr>
<td>LANE MILES FULL EXTENT GOOD BASED ON PSR WHERE IRI IS NULL</td>
<td>0.000</td>
</tr>
<tr>
<td>LANE MILES FULL EXTENT POOR BASED ON PSR WHERE IRI IS NULL</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Items shaded orange are HPMS Pavement Performance Data Improvement Zones where data should be verified or corrected.
### PAVEMENT DATA QUALITY – CRACKING PERCENT (INTERSTATE)

**TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE CRACKING PERCENT IS REPORTED AS 0.00%.** MULTIPLE STATES REPORTED VERY HIGH VALUES FOR THEIR PAVEMENTS AND THESE SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED CRACKING PERCENT CUMULATIVE DISTRIBUTION.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00%</td>
<td>766.642</td>
</tr>
</tbody>
</table>

**% INTERSTATE LANE MILES FULL EXTENT WHERE CRACKING PERCENT IS REPORTED AS 0.00%. AVERAGE IS 61.79% WITH A SD OF 26.02%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 87.82%**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.79%</td>
<td>52.87%</td>
</tr>
</tbody>
</table>

**TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE CRACKING PERCENT IS REPORTED > 0.00% AND < 1.00%. THIS MAY BE AN INDICATION THAT A STATE MAY HAVE A PROBLEM CONVERTING DECIMAL TO PERCENTAGES. CRACKING PERCENT IS TO BE REPORTED WITH A PRECISION OF 1.00% OR LESS. MULTIPLE STATES REPORTED VERY HIGH VALUES FOR THEIR PAVEMENTS AND THESE SHOULD BE VERIFIED.**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 0.00% and &lt; 1.00%</td>
<td>153.831</td>
</tr>
</tbody>
</table>

**% INTERSTATE LANE MILES FULL EXTENT WHERE CRACKING PERCENT IS REPORTED > 0.00% AND < 1.00%. AVERAGE IS 9.53% WITH A SD OF 17.26%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 26.79%**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.53%</td>
<td>10.61%</td>
</tr>
</tbody>
</table>

**TOTAL INTERSTATE LANE MILES FULL EXTENT FOR PAVEMENTS CODED AS HMA WHERE CRACKING PERCENT IS REPORTED GREATER THAN 54.00%. CRACKING PERCENT FOR HMA IS LIMITED TO WHEELPATH AND THEREFORE SHOULD NOT EXCEED 54.00% FOR A 12-FOOT LANE WIDTH. MULTIPLE STATES REPORTED VERY HIGH VALUES FOR THEIR PAVEMENTS AND THESE SHOULD BE VERIFIED.**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 54.00%</td>
<td>7.084</td>
</tr>
</tbody>
</table>

**% INTERSTATE LANE MILES FULL EXTENT FOR HMA PAVEMENTS WHERE CRACKING PERCENT IS REPORTED GREATER THAN 54.00%. AVERAGE IS 0.29% WITH A SD OF 0.46%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.29%</td>
<td>0.51%</td>
</tr>
</tbody>
</table>

**TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE CRACKING PERCENT IS REPORTED AS 100.00%. MULTIPLE STATES REPORTED VERY HIGH VALUES FOR THEIR PAVEMENTS AND THESE SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED CRACKING PERCENT CUMULATIVE DISTRIBUTION.**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.00%</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**% INTERSTATE LANE MILES FULL EXTENT WHERE CRACKING PERCENT IS REPORTED AS 100.00%. AVERAGE IS 0.16% WITH A SD OF 0.65%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.81%**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Miles Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.16%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

*Items shaded orange are HPMS PAVEMENT PERFORMANCE DATA IMPROVEMENT ZONES WHERE DATA SHOULD BE VERIFIED OR CORRECTED*
### PAVEMENT DATA QUALITY - FAULTING AND RUTTING (INTERSTATE)

**Stage:** Review 2016  
**Year:** 99 - UTOPIA  
**State:** 05/09/2017

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS JOINTED PCC AND FAULTING IS EQUAL TO 0.00. MULTIPLE STATES REPORTED VERY HIGH VALUES AND THIS DATA SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED FAULTING CUMULATIVE DISTRIBUTION.</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS JOINTED PCC AND FAULTING IS EQUAL TO 0.00. AVERAGE IS 56.41% WITH A SD OF 36.57%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 92.98%</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS JOINTED PCC AND FAULTING IS GREATER THAN 1.00 INCH. MULTIPLE STATES REPORTED VERY HIGH VALUES AND THIS DATA SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED FAULTING CUMULATIVE DISTRIBUTION.</td>
<td>3.594</td>
<td></td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS JOINTED PCC AND FAULTING IS GREATER THAN 1.00 INCH. AVERAGE IS 0.06% WITH A SD OF 1.12%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%</td>
<td>6.03%</td>
<td></td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS HMA AND RUTTING IS EQUAL TO 0.00. MULTIPLE STATES REPORTED VERY HIGH VALUES AND THIS DATA SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED RUTTING CUMULATIVE DISTRIBUTION.</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS HMA AND RUTTING IS EQUAL TO 0.00. AVERAGE IS 15.07% WITH A SD OF 23.93%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 39.00%</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS HMA AND RUTTING IS GREATER THAN 1.00 INCH. MULTIPLE STATES REPORTED VERY HIGH VALUES AND THIS DATA SHOULD BE VERIFIED. YOU MAY WISH TO REFER TO THE ATTACHED RUTTING CUMULATIVE DISTRIBUTION.</td>
<td>1.700</td>
<td></td>
</tr>
<tr>
<td>% INTERSTATE LANE MILES FULL EXTENT WHERE SURFACE TYPE IS HMA AND RUTTING IS GREATER THAN 1.00 INCH. AVERAGE IS 0.00% WITH A SD OF 0.02%, CUTOFF VALUE TO FLAG FOR VERIFICATION IS 0.00%</td>
<td>0.12%</td>
<td></td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE RUTTING IS REPORTED ON SURFACE TYPE = PCC OR CRCP</td>
<td>59.608</td>
<td></td>
</tr>
<tr>
<td>MANY STATES REPORT ALL DISTRESSES REGARDLESS OF SURFACE TYPE. VALUES OTHER THAN 0% SHOULD BE VERIFIED AS THIS MAY BE AN ERROR OR THE RESULT OF DIFFERENT SOURCES OF REPORTING DATA</td>
<td>100.00%</td>
<td></td>
</tr>
<tr>
<td>TOTAL INTERSTATE LANE MILES FULL EXTENT WHERE FAULTING IS REPORTED ON SURFACE TYPE = HMA OR CRCP</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>MANY STATES REPORT ALL DISTRESSES REGARDLESS OF SURFACE TYPE. VALUES OTHER THAN 0% SHOULD BE VERIFIED AS THIS MAY BE AN ERROR OR THE RESULT OF DIFFERENT SOURCES OF REPORTING DATA</td>
<td>0.00%</td>
<td></td>
</tr>
</tbody>
</table>

**Items shaded orange are HPMS Pavement Performance Data Improvement Zones where data should be verified or corrected.**
BRIDGE LOCATION

PER MAP-21 BRIDGES ARE EXCLUDED FROM THE PERFORMANCE MEASURE CALCULATION. THE ABILITY TO ACCURATELY LOCATE BRIDGES IN HPMS IS VERY IMPORTANT IN THE CORRECT CALCULATION OF PAVEMENT CONDITION.

COUNT OF MAINLINE INTERSTATE BRIDGES OF DATA YEAR 2016 FROM NBI INVENTORY

| Count | 1,282 |

TOTAL INTERSTATE LANE MILES OF BRIDGES OF DATA YEAR 2016 FROM NBI INVENTORY

| Total | 194,009 |

TOTAL LANE MILES ON FULL EXTENT BASIS CODED AS A BRIDGE IN HPMS

| Total | 176,619 |

PERCENT HPMS BRIDGE LANE MILES OF NBI BRIDGE LANE MILES. CUTOFF FOR VERIFICATION IS LESS THAN 90.00% OR GREATER THAN 100.00%.

| Percent | 91.04% |

SECTION LENGTH

DISTRESS DATA SHOULD BE REPORTED IN SECTIONS 0.1 MILE IN LENGTH OR SHORTER

TOTAL INTERSTATE LANE MILES WHERE SECTION LENGTH IS GREATER THAN 0.11 MILE (0.1 MILE NOMINAL) EXCLUDING BRIDGES - MARKED AS UNRESOLVED DATA

| Total | 0.00 |

CUTOFF VALUE FOR VERIFICATION IS 0.00%

| Cutoff | 0.00% |

ITEMS SHADED ORANGE ARE HPMS PAVEMENT PERFORMANCE DATA IMPROVEMENT ZONES WHERE DATA SHOULD BE VERIFIED OR CORRECTED
Bridges

- MAP-21 excluded bridges from pavement performance calculation and required establishment of separate measures to assess bridge performance. [23 USC 150(c)(3)]
- NBI definition of bridges – length ≥ 20 ft. [23 CFR 650.305]
- Comparing lane-miles of bridges from NBI
  - Will never match – 90 to 100% target
    - Definition of lanes
    - Dual carriageway
    - Border bridges
- Issues
  - HPMS error
  - NBI error
  - LRS error
% 2015 NBI BRIDGE LANE MILES REPORTED IN HPMS
% SECTION LENGTH EXCEEDS 0.11 MILE
CUMULATIVE AND FREQUENCY DISTRIBUTION – IRI
(INTERSTATE)

( Frequency of Missing IRI = 0.083%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - IRI -
CLOSEUP 0 TO 400
(INTERSTATE)

(Frequency of Missing IRI = 0.113%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - IRI
(NON-INTERSTATE NHS)

(Frequency of Missing IRI = 0.066%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - IRI
(INTERSTATE)

(Frequency of Missing IRI = 0.000%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - CRACKING PERCENT (INTERSTATE)

(Frequency of Missing CRACKING_PERCENT = 4.111%, missing data is included in the cumulative distribution graph.)
HPMS 8.0.1  CUMULATIVE AND FREQUENCY DISTRIBUTION - FAULTING (INTERSTATE)

( Frequency of Missing FAULTING = 0.000%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - FAULTING (INTERSTATE)

(Frequency of Missing FAULTING = 0.000%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - RUTTING (INTERSTATE)

(Frequency of Missing RUTTING = 0.000%, missing data is included in the cumulative distribution graph.)
( Frequency of Missing RUTTING = 0.000%, missing data is included in the cumulative distribution graph.)
CUMULATIVE AND FREQUENCY DISTRIBUTION - SECTION LENGTHS - CLOSEUP 0.0 TO 0.2 MILE IN LENGTH (INTERSTATE)
• Improve HPMS Pavement Performance Data quality so the agency has confidence as we use it in performance management.

• The debate should be on the quality of the pavement, not the quality of the data.
QUESTIONS

Max Grogg
Pavement Performance and Implementation Engineer
max.grogg@dot.gov
515-233-7306