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# MPO, MDT & FHWA Performance Measure Target Setting Coordination

March 26, 2018



# Agenda

- Welcome and Introductions
- MPO Agreements/Performance Overview
- MDT Target Setting - Data Analysis and Recommendations
  - Pavement and Bridge
  - System Performance and Freight
  - CMAQ
- Announcements/Next Meeting

# Metropolitan Planning Agreements

- Performance-Based Planning and Programming
  - Metropolitan Planning Agreements (450.314(h))- written provisions for cooperatively developing and sharing performance information must be documented, including:
    - transportation performance data,
    - selection of performance targets,
    - reporting of performance targets,
    - reporting of performance, and
    - data collection for the state asset management system for the NHS
  - Documented as part of the PL Agreement or another means
    - Agreement in place by May 27, 2018

# MPO Target Setting

- MPO must set targets, consistent with the performance measures in 23 USC 150 and the target setting framework in 23 USC 490
  - within 180 days of the date the State/Transit Agency sets their targets
  - MPOs have the option to either
    - set their own targets for each measure, or
    - adopt the state targets and agree to plan and program projects so that they contribute to the accomplishment of the relevant state target

# MPO Planning/Performance

Measure Area	Effective Date	Performance Measures	MPO Requirement and Timeline
<b>Highway Safety Improvement Program and Safety Performance (490.207-measures/ 490.209-targets)</b>  <b>State and MPOs Have Been Set</b>	April 14, 2016	<ul style="list-style-type: none"> <li>Number of Fatalities</li> <li>Number of Serious Injuries</li> <li>Rate of Fatalities per 100 million VMT</li> <li>Rate of Serious Injuries per 100 million VMT</li> <li>Number of non-motorized fatalities and non- motorized serious injuries</li> </ul>	<ul style="list-style-type: none"> <li>Targets: Due Feb.27, 2018 (180 days after state established target due date August 31, 2017 (450.306(d)(3))</li> <li>Planning documents: updates after May 27, 2018 (2 years after planning rule effective date (450.226))must integrate performance discussion (goals/measures/targets) in plans/TIP</li> </ul>
<b>Statewide &amp; Metropolitan Planning Draft Out for Comment</b>	June 27, 2016	<ul style="list-style-type: none"> <li>Agreements – Performance based Planning</li> <li>LRTP and TIP FAST Act Compliant</li> </ul>	<ul style="list-style-type: none"> <li>May 27, 2018</li> </ul>
<b>NHS Pavement Condition (490.307)</b>	May 20, 2017	<ul style="list-style-type: none"> <li>Percentage of pavements of the Interstate System in Good condition</li> <li>Percentage of pavements of the non-Interstate NHS in Good condition</li> <li>Percentage of pavements of the Interstate System in Poor condition</li> <li>Percentage of pavements of the non-Interstate NHS in Poor condition</li> </ul>	<ul style="list-style-type: none"> <li>May 20, 2019</li> </ul>

# MPO Planning/Performance

Measure Area	Effective Date	Performance Measures	MPO Requirement and Timeline
<b>NHS Bridge Condition (490.407)</b>	May 20, 2017	<ul style="list-style-type: none"> <li>Percentage of NHS Bridges Classified as in “Good” Condition</li> <li>Percentage of NHS Bridges Classified as in “Poor” Condition</li> </ul>	<ul style="list-style-type: none"> <li>May 20, 2019</li> </ul>
<b>Performance of the National Highway System (490.507)</b>	May 20, 2017	<ul style="list-style-type: none"> <li>Percent of the Interstate System providing for Reliable Travel Times</li> <li>Percent of the non-Interstate NHS providing for Reliable Travel Times</li> <li>Percent of the Interstate System where Peak Hour Travel Times meet expectations (Not applicable to MT)</li> <li>Percent of the non-Interstate NHS where Peak Hour Travel Times meet expectations (Not applicable to MT)</li> <li>Percent Change in tailpipe CO2 emissions on the NHS compared to the calendar year 2017 level (GHG measure)</li> </ul>	<ul style="list-style-type: none"> <li>May 20, 2019</li> </ul>
<b>Freight Movement on the Interstate System (490.607)</b>	May 20, 2017	<ul style="list-style-type: none"> <li>Percent of the Interstate System Mileage providing for Reliable Truck Travel Times</li> <li>Percent of the Interstate System Mileage Uncongested</li> </ul>	<ul style="list-style-type: none"> <li>May 20, 2019</li> </ul>

# MPO Planning/Performance

Measure Area	Effective Date	Performance Measures	MPO Requirement and Timeline
<b>CMAQ Program – Traffic Congestion (490.707)</b>	May 20, 2017	<ul style="list-style-type: none"> <li>Annual Hours of Excessive Delay Per Capita (Not applicable to MT)</li> </ul>	<ul style="list-style-type: none"> <li>May 20, 2019</li> </ul>
<b>CMAQ Program – On-Road Mobile Source Emissions (490.807)</b>	May 20, 2017	<ul style="list-style-type: none"> <li>Total Emission Reductions</li> </ul>	<ul style="list-style-type: none"> <li>May 20, 2019</li> </ul>
<b>Transit</b>	October 1, 2016	<ul style="list-style-type: none"> <li>Percentage of revenue vehicles within a particular asset class that have met or exceeded their useful life bench mark (ULB)</li> <li>Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) scale (1=poor to 5=excellent)</li> <li>Percentage of guideway directional route miles with performance restrictions by class (Not applicable to MT)</li> <li>Percentage of vehicles that have met or exceeded their ULB</li> </ul>	<ul style="list-style-type: none"> <li>October 1, 2018 inclusion in the TAM</li> <li>MPOs 180 days from Transit Agency targets</li> <li>May 20, 2019</li> </ul>

# National Performance Measures

- **MAP -21 Title 23 Section 150**
  - Established National Performance Goals & Management
- **FHWA – Rulemaking**
  - PM2 – Assessing Pavement and Bridge Condition for the National Highway Performance Program
  - PM3 – Assessing Performance of the National Highway System, Congestion Mitigation and Air Quality Improvement Program, and Freight Movement on the Interstate System



# Pavement Condition

- **Interstate Pavement Condition Performance Measures**
  - 4 year target for:
    - % of Interstate pavements in good condition
    - % of Interstate pavements in poor condition
- **Non- Interstate National Highway System (NHS) Pavement Condition Measures**
  - 2 & 4 year targets for:
    - % of non- Interstate NHS pavement in good condition
    - % of non- Interstate NHS pavement in poor condition
- **States must establish targets by May 20, 2018**
  - MPO's must commit to support state targets, or establish separate quantifiable targets by 180-days after the state DOT target.
    - May adjust targets at the mid-performance period progress report – October 2020.



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# Pavement Condition Metrics

- Good – Suggests no major investment is needed
- Poor – Suggests major reconstruction investment is needed
- Also - statutory minimum thresholds for Interstate pavement – no more than 5% poor
  - Penalty – if a state fails to achieve, they must obligate a minimum portion of National Highway Performance Program (NHPP) and Surface Transportation Program (STP) funds to address the IM pavement conditions.

Metrics	Good	Fair	Poor
IRI (inches/mile)	< 95	95-170	>170
Rutting (inches)	<0.20	0.20-0.40	>0.40
Faulting (inches)	<0.10	0.10-0.15	>0.15
Cracking (%)	>5	5-20 (asphalt) 5-15 (JCP) 5-10 (CRCP)	>20 (asphalt) >15 (JCP) >10 (CRCP)

# Reporting

## Performance Reports

- Due Oct 1<sup>st</sup>
  - Baseline report in 2018, mid-performance period in 2020, full period in 2022
    - Non-Interstate NHS (NI-NHS) 2 year targets will be evaluated for the 2020 report,
    - Interstate not evaluated until the full 2022 report
- States should achieve or show “significant progress” toward meeting their targets
  - Can adjust targets in the 2020 mid-performance period
- If a state doesn’t achieve their targets, significant progress determination will be made based on Highway Performance Monitoring System (HPMS) data
  - HPMS - long standing annual state data reporting
    - If a state doesn’t achieve significant progress – state must document the actions they will take to achieve significant progress in their performance report.
    - FHWA has updated HPMS to support the new performance requirements – kind of an issue...see next page

# Current Condition

- FY 2017 – based on HPMS Data in the new format:
  - Interstate:
    - Good 56.7%
    - Fair 41.6%
    - Poor 0.0% (not really zero 1.7 miles)
    - Missing 1.7% (likely segments under construction)
  - Non-Interstate NHS:
    - Good 50.7%
    - Fair 48.8%
    - Poor 0.4%
    - Missing 0.5%
  - Issue - we only have 1 year of data in this format!
    - HPMS reporting has changed to reflect the new requirements and past year data can't be converted
      - We don't have a trend line in this format
      - We don't know how much annual variation to expect since this is a compilation
- Plan – use past indicators for the trend, set conservatively, and review at mid performance report period.

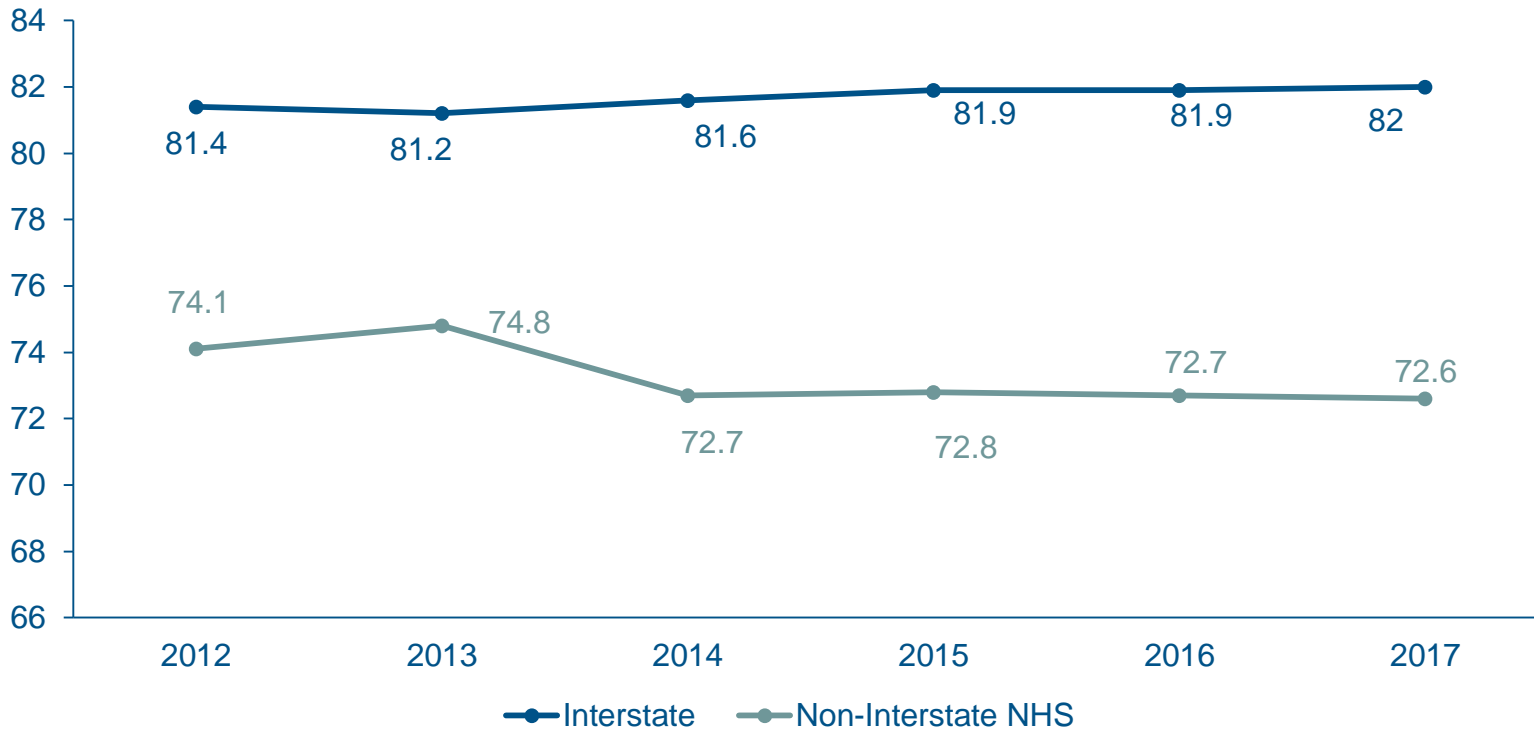


# Past Indicators

- Ride Index
  - MDT uses ride index for our Performance Programming Process (P3)
    - Ride index is more conservative than the ride component (IRI) of the national metric, is generally consistent over time.
    - MDT has ride index based goals for Interstate and Non-Interstate NHS
      - Maintain ride index at current level
      - Provide no significant ride index difference between Districts
    - Ride Index is the basis for our current TCP – thru 2022.
- Rutting
  - MDT doesn't use rutting for funding
    - Past data indicates range of year to year variation
      - IM poor varies by 15 miles and NHS poor varies by 100 miles in 5-year span
- Other
  - Weather events
    - Spring run-off and flooding has had broad impacts to pavement conditions
  - Industry Impacts
    - Market driven increase in traffic (Bakken)

# Ride Index History

Relatively Consistent – but not the current federal measure



# Target Options

## Conservative Targets

### Interstate 4 year targets

Good = 54.0% (2538 miles)

Poor = 3.0% (141 miles)

### NI -NHS 2 & 4 year targets

Good = 44.0% (2879 miles)

Poor = 6.0% (392 miles)

## Moderate Targets

### Interstate 4 year targets

Good = 55.0% (2585 miles)

Poor = 2.0% (94 miles)

### NI -NHS 2 & 4 year targets

Good = 48.0% (3141 miles)

Poor = 4.0% (262 miles)

## Aggressive Targets (basically current condition)

### Interstate 4 year targets

Good = 57.0% (2679 miles)

Poor = 1.0% (47 miles)

### NI -NHS 2 & 4 year targets

Good = 51.0% (3337 miles)

Poor = 2.0% (130 miles)

# Recommendations

- Conservative targets to account for risk (single year of data, unknown variability of this data set, potential outside influence (weather), and past indicators:

## Interstate 4 year targets

**Good = 54.0% (2538 miles)**

**Poor = 3.0% (141 miles)**

## NI -NHS 2 & 4 year targets

**Good = 44.0% (2879 miles)**

**Poor = 6.0% (392 miles)**



# Discussion

# Bridge Condition

- National Bridge Inventory (NBI) Data Establishes Ratings for:
    - Deck – Surface Vehicles Drive On
    - Superstructure – Bridge Elements Supporting the Deck
    - Substructure – Bridge Elements Transferring Load to Foundation
  - Bridge Condition Ratings Used to Classify Bridges as Good / Fair / Poor
    - Ratings Range from 0 to 9 for Deck, Superstructure and Substructure
    - Lowest Rating Determines the Overall Rating for the Bridge
    - Overall Bridge Rating > 6 (Good)
    - Overall Bridge Rating = 5 or 6 (Fair)
    - Overall Bridge Rating < 5 \*(Poor)
- \* Note: A bridge in Poor Condition is Considered Structurally Deficient.

# Bridge Condition Ratings

NBI Rating Scale  
*(from 0 – 9)*

9	8	7	6	5	4	3	2	1	0
Good			Fair		Poor				

Bridge	Deck <i>(Item 58)</i>	$\geq 7$	5 or 6	$\leq 4$
	Superstructure <i>(Item 59)</i>	$\geq 7$	5 or 6	$\leq 4$
	Substructure <i>(Item 60)</i>	$\geq 7$	5 or 6	$\leq 4$
	Culvert <i>(Item 62)</i>	$\geq 7$	5 or 6	$\leq 4$



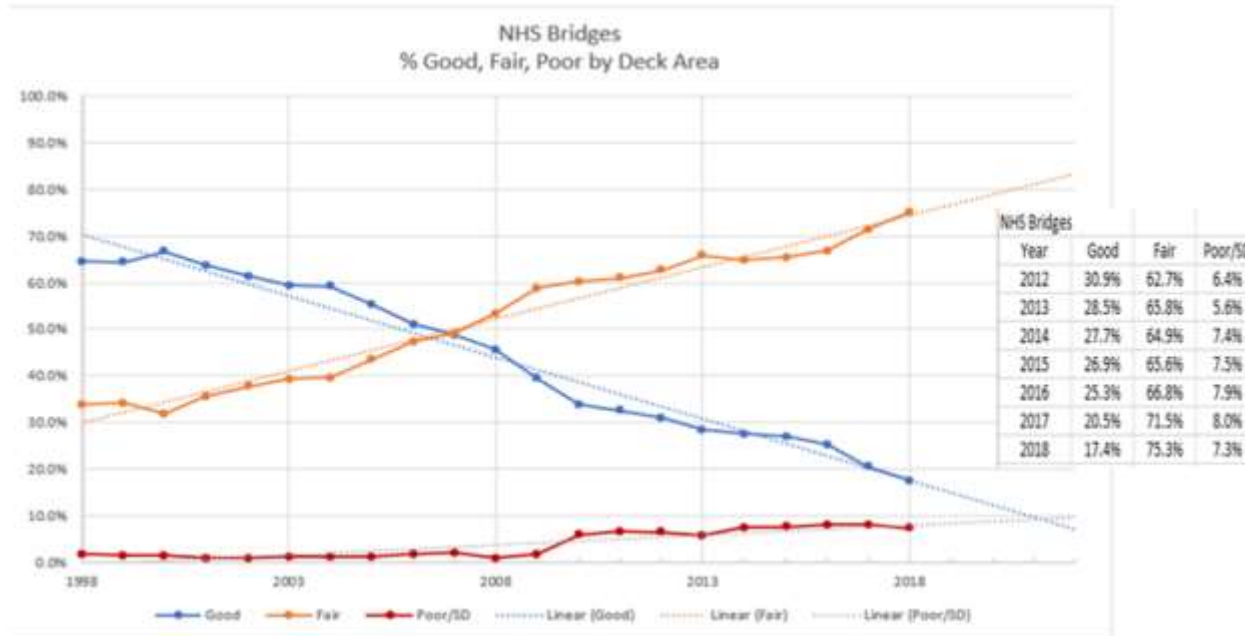
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# Bridge Condition Metrics

- Performance Measures
  - % of NHS Bridges (by Deck Area) Classified in Good Condition
  - % of NHS Bridges (by Deck Area) Classified in Poor Condition
  - Federal Requirement for Poor (Structurally Deficient) Bridges
    - No More than 10% of Total Bridge Deck Area on NHS Classified as Poor (SD)
- Performance Targets for NHS Bridges
  - 2 & 4 year targets for:
    - % of NHS Bridges in Good Condition
    - % of NHS Bridges in Poor Condition
- States must establish targets by May 20, 2018
  - MPO's must commit to support state targets, or establish separate quantifiable targets by 180-days after the state DOT target.
  - May adjust targets at the mid-performance period progress report – October 2020.

# Bridge Condition Trends

- NHS Bridge Conditions Continue to Decline
  - % of Good Bridges (by Deck Area) is Decreasing
  - % of Fair Bridges (by Deck Area) is Increasing
  - % of Poor Bridges (by Deck Area) is Steady



# NHS Bridge Target Ranges

- Performance Targets
  - 10% to 13% of NHS Bridges (by Deck Area) in Good Condition
  - 8% to 10% of NHS Bridges (by Deck Area) in Poor Condition
- As noted earlier, performance targets will be evaluated periodically and may be adjusted when the mid-performance progress report is being drafted in October of 2020.

# Discussion

# System Performance & Freight (PM3)

- **Interstate Travel Time Reliability Measure**
  - 2-year & 4-year targets for percent of reliable person-miles traveled on the Interstate
- **Non-Interstate Travel Time Reliability Measure**
  - 4-year target for percent of reliable person-miles traveled on the non-Interstate NHS
- **Freight Reliability Measure on the Interstate**
  - 2-year & 4-year targets for Truck Travel Time Reliability (TTTR) Index
- **On-Road Mobile Source Emissions Measure (CMAQ)**
  - 2-year & 4-year targets for total emissions reductions



# National Performance Management Research Data Set (NPMRDS)

- Derived from vehicle/passenger probe data (sourced from GPS, navigation units, cell phones, etc.)
  - Covers the NHS
  - Includes average travel times representative of all traffic and average travel times for freight trucks
  - Individual records represent 5-minute time periods for a travel time segment, measured continuously throughout the year
- MDT purchased the analytical tools through a PFS.
- NPMRDS, or approved equivalent, required by rule for evaluating the Travel Time and Freight Reliability measures.

# Travel Time Reliability Measure – Interstate & Non-Interstate NHS

## § 490.511 Level of Travel Time Reliability (LOTTR) Metric (Example)

$$\frac{\text{Longer Travel Time (80th)}}{\text{Normal Travel Time (50th)}} = \frac{\# \text{ seconds}}{\# \text{ seconds}} = \text{Level of Travel Time Reliability Ratio}$$

Level of Travel Time Reliability (LOTTR) <i>(Single Segment, Interstate Highway System)</i>		
Monday – Friday	6am – 10am	LOTTR = $\frac{44 \text{ sec}}{35 \text{ sec}} = 1.26$
	10am – 4pm	LOTTR = 1.39
	4pm – 8pm	LOTTR = <b>1.54</b>
Weekends	6am – 8pm	LOTTR = 1.31
Must exhibit LOTTR below 1.50 during <b>all</b> of the time periods		<b>Segment is not reliable</b>

**HPMS Submittal:** Starting in 2018, State DOTs report LOTTR metrics and the corresponding 80<sup>th</sup> and 50<sup>th</sup> percentile times for each time period and directional AADT for each reporting segment by June 15 of each year, for the previous year's measures



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# Travel Time Reliability Measure – Interstate & Non-Interstate NHS

## § 490.513 Calculating Travel Time Reliability Measures (Example)

		
Length	1.000 mi.	0.750 mi.
Annual Traffic Volume	2,000,000	3,500,000
Occupancy Factor	1.3 persons/vehicle	1.7 persons/vehicle
<b>Segment Total</b>	<b>Reliable: 2,600,000 person-miles</b>	<b>Unreliable: 4,462,500 person-miles</b>
	$\frac{\Sigma (\text{Reliable person-miles})}{\Sigma (\text{Total person-miles})}$	

**Measure:** % of person-miles reliable, for full extent of the system



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# NPMRDS – Interstate Travel Time Reliability

## Montana

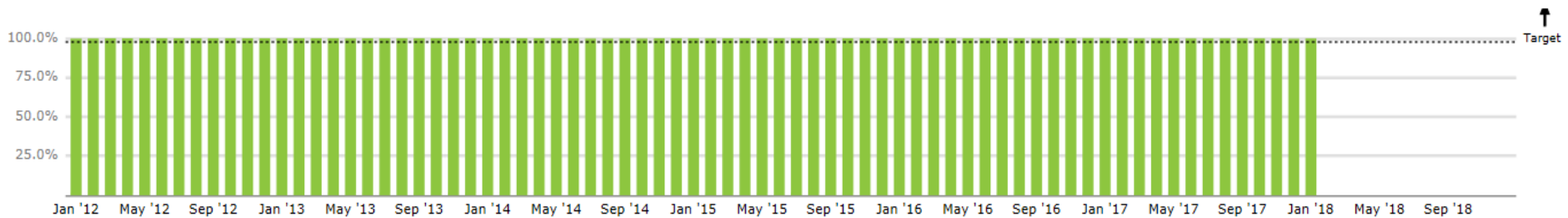
MAP-21 Percent of the Person-Miles Traveled on the Interstate That Are Reliable (the Interstate Travel Time Reliability measure)

**Initial Recommended  
2-Year and 4-Year  
Target:  
  
98% Reliability**

### Year's Performance

2012	👍 99.9%
2013	👍 99.9%
2014	👍 99.9%
2015	👍 99.9%
2016	👍 99.9%
2017	👍 99.8%
2018	👍 99.8%

**Target: At least 98% of the system should have a LOTTR less than 1.50**



# Montana Interstate Travel Time Reliability vs. Surrounding States

Year	Montana	Idaho	North Dakota	South Dakota	Wyoming
2012	99.9%	100.0%	98.6%	99.9%	99.7%
2013	99.9%	100.0%	99.1%	99.9%	99.9%
2014	99.9%	96.1%	99.9%	99.7%	99.9%
2015	99.9%	95.6%	99.9%	99.8%	99.8%
2016	99.9%	98.9%	99.9%	99.9%	99.8%
2017	99.8%	97.9%	99.4%	99.8%	100.0%
2018*	99.8%	97.9%	99.8%	99.7%	100.0%

\* Data includes January 2018

# Interstate Travel Time Reliability Significant Progress Determination

- Achieved Significant Progress if:
  - Actual condition/performance is better than baseline; or
  - Actual condition/performance is equal to or better than the established target.
- Penalty for not Achieving Significant Progress:
  - In next Biennial Performance Report, document the actions MDT will take to achieve the NHS travel time targets

# Discussion

# NPMRDS – NINHS Travel Time Reliability

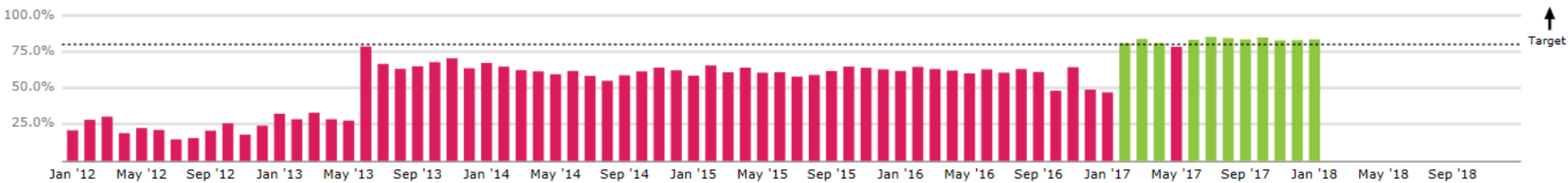
## Montana

MAP-21 Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable (the Non-Interstate NHS Travel Time Reliability measure)

**Initial Recommended  
4-Year Target:  
80% Reliability**

Year's Performance	
2012	19.6%
2013	67.2%
2014	62.3%
2015	62.9%
2016	65.6%
2017	86.0%
2018	83.0%

Target: At least 80% of the system should have a LOTTR less than 1.50





# Montana NINHS Travel Time Reliability vs. Surrounding States

Year	Montana	Idaho	North Dakota	South Dakota	Wyoming
2012	19.6%	62.0%	71.8%	54.1%	44.4%
2013	67.2%	74.9%	84.7%	73.3%	70.7%
2014	62.3%	78.7%	84.7%	74.8%	72.9%
2015	62.9%	70.6%	82.9%	74.1%	70.4%
2016	65.6%	69.8%	79.6%	73.4%	73.5%
2017	86.0%	87.4%	89.9%	93.8%	88.6%
2018*	83.0%	88.3%	88.8%	90.9%	86.8%

\* Data includes January 2018

# NINHS Travel Time Reliability Significant Progress Determination

- Achieved Significant Progress if:
  - Actual condition/performance is better than baseline; or
  - Actual condition/performance is equal to or better than the established target.
- Penalty for not Achieving Significant Progress:
  - In next Biennial Performance Report, document the actions MDT will take to achieve the NHS travel time targets

# Discussion

# Truck Travel Time Reliability Measure – Interstate

## **§ 490.611 Freight Reliability Metric (Example)**

$$\frac{\text{Longer Truck Travel Time (95th)}}{\text{Normal Truck Travel Time (50th)}} = \frac{\# \text{ seconds}}{\# \text{ seconds}} = \text{Truck Travel Time Reliability (TTTR) Ratio}$$

Truck Travel Time Reliability (TTTR) (Single Segment, Interstate Highway System)		
Monday – Friday	6am – 10am	TTTR = $\frac{72 \text{ sec}}{50 \text{ sec}} = 1.44$
	10am – 4pm	TTTR = 1.39
	4pm – 8pm	TTTR = <b>1.49</b>
Weekends	6am – 8pm	TTTR = 1.31
Overnight	8pm – 6am	TTTR = 1.20
Maximum TTTR		<b>1.49</b>

**HPMS Submittal:** Starting in 2018, State DOTs report TTTR metrics and the corresponding 95<sup>h</sup> and 50<sup>th</sup> percentile times for each time period and each reporting segment by June 15 of each year, for the previous year’s measures



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# Truck Travel Time Reliability Measure – Interstate

## § 490.613 Calculating Freight Reliability Measure (Example)

$$\text{TTTR Index} = \frac{\sum \text{All segment length weighted TTTR}}{\sum \text{All segment lengths}}$$

Segment length (mi.)	0.500	0.500	1.000	1.000	5.000
MaxTTTR	X 1.49	X 1.59	X 1.50	X 1.41	X 1.36
Length-weighted TTTR	= 0.75	= 0.80	= 1.50	= 1.41	= 6.80

$$\text{TTTR Index} = \frac{11.25}{8.000 \text{ mi}} = \mathbf{1.41}$$

**Measure: TTTR Index, full extent of the Interstate system**



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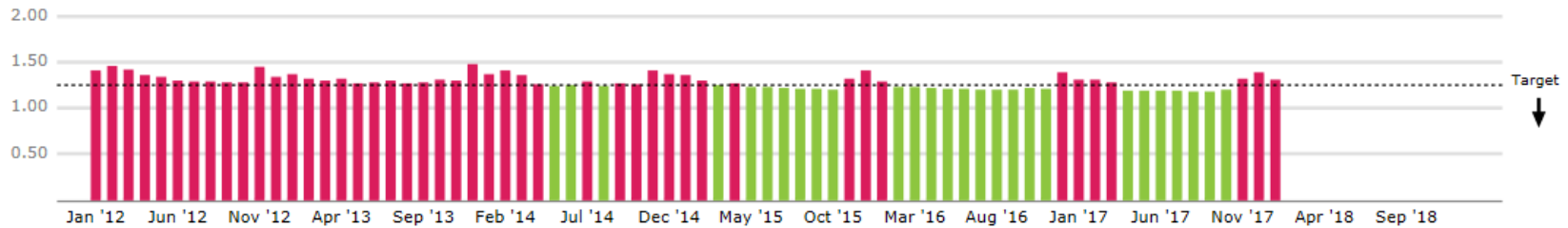
# NPMRDS – Truck Travel Time Reliability Index on Interstate

Montana  
MAP-21 Truck Travel Time Reliability Index

**Initial Recommended  
2-Year and 4-Year  
Target:  
  
1.25**

Year	Year's Performance
2012	1.29
2013	1.28
2014	1.27
2015	1.23
2016	1.21
2017	1.22
2018	1.30

Target: The system should have a TTTR less than 1.25



# Montana Truck Travel Time Reliability – Percent Reliable vs. Index

Year	% Reliable Using TTTR of 1.25	TTTR Index	Unreliable Directional Miles
2014	61.8%	1.27	889
2015	72.2%	1.23	648
2016	77.8%	1.21	516
2017	73.9%	1.22	623

TTTR Target  
of 1.25

≈

600-700  
“Unreliable”  
Interstate  
Directional  
Miles

# Montana Truck Travel Time Reliability vs. Surrounding States

Year	Montana	Idaho	North Dakota	South Dakota	Wyoming
2012	1.29	1.19	1.52	1.19	1.28
2013	1.28	1.19	1.28	1.22	1.28
2014	1.27	1.21	1.25	1.23	1.22
2015	1.23	1.19	1.23	1.17	1.20
2016	1.21	1.17	1.22	1.16	1.21
2017	1.22	1.18	1.15	1.14	1.17
2018*	1.30	1.18	1.18	1.21	1.33

\* Data includes January 2018



# Truck Travel Time Reliability Significant Progress Determination

- Penalty for not Achieving Significant Progress:
  - In next Biennial Performance Report include:
    - Identification of significant freight system trends, needs, and issues within the state;
    - Description of the freight policies and strategies that guide freight related investments;
    - Inventory of truck freight bottlenecks and how MDT is allocating funding to address them.
    - A description of the actions MDT will undertake to achieve the Freight Reliability Target.

# Discussion

# Summary of Proposed Travel Time Targets

<b>Target</b>	<b>Proposed 2-Year Target</b>	<b>Proposed 4-Year Target</b>
Interstate Travel Time Reliability	98%	98%
NINHS Travel Time Reliability	N/A	80%
Truck Travel Time Reliability Index	1.25	1.25

# CMAQ On-Road Mobile Source Emissions

- Applies to areas designated as nonattainment or maintenance for ozone, carbon monoxide or particulate matter. Applicable State DOTs and MPOs will establish separate targets for each of these criteria pollutants and applicable precursors. [23 CFR 490.803]
- For Montana, statewide targets must be developed for: Carbon Monoxide (CO), Particulate Matter 10 (PM10), and Particulate Matter 2.5 (PM2.5).

# CMAQ Funding

## Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ)

23  
USC  
Sect  
149

CMAQ Flexible \$13.3M



Montana Air & Congestion Initiative  
(MACI)  
\$13.3M

CMAQ  
Mandatory  
\$1.2M  
(Missoula)



Mandatory  
Missoula  
(\$1.2M)  
CMMS



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# CMAQ Public Access System

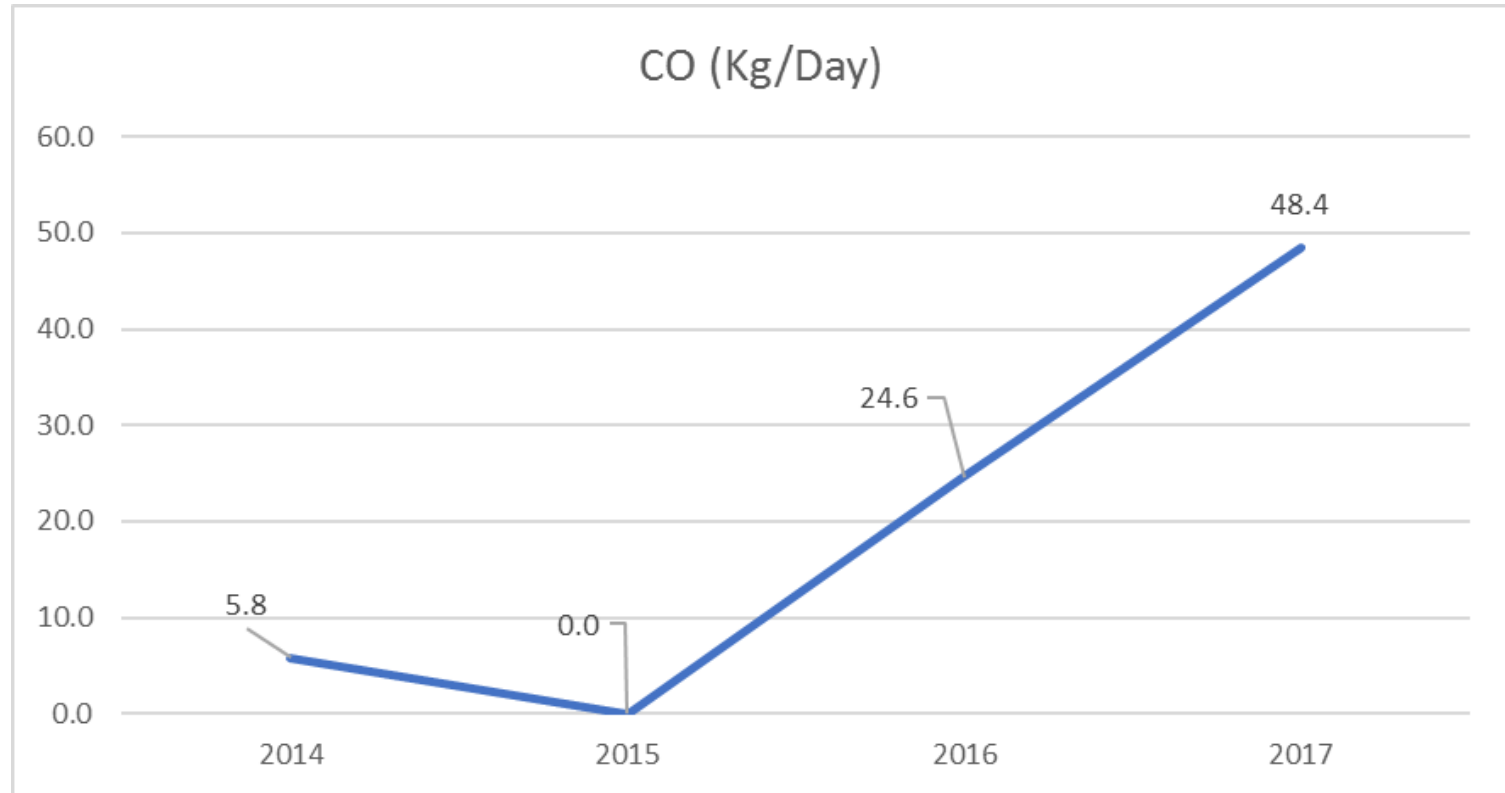
- As identified in the final rule, this will be the tool for reporting annual emissions reductions in kg/day. It's currently and has been used to fulfill the CMAQ annual reporting requirement, and therefore was used for development of the baseline.
- Quantitative benefits are reported for projects funded with CMAQ-mandatory funding, in accordance with FHWA's CMAQ Guidance document.
- Tools to calculate benefits for reporting were developed as part of MDT's 2014 research project. New tools are being developed by FHWA.



# Methodology

- Targets for each criteria pollutants will be based on quantitative emissions benefits reported in the CMAQ Public Access System – that is, Missoula’s mandatorily-funded projects.
- Missoula’s projects used to set targets include: Bike/Ped, Missoula in Motion, and Missoula-Ravalli Transportation Management Association.
- Excluded are Missoula’s air quality equipment purchase, which is currently delayed indefinitely due to Buy America, & FTA transfer to Mountain Line, due to timing variability.

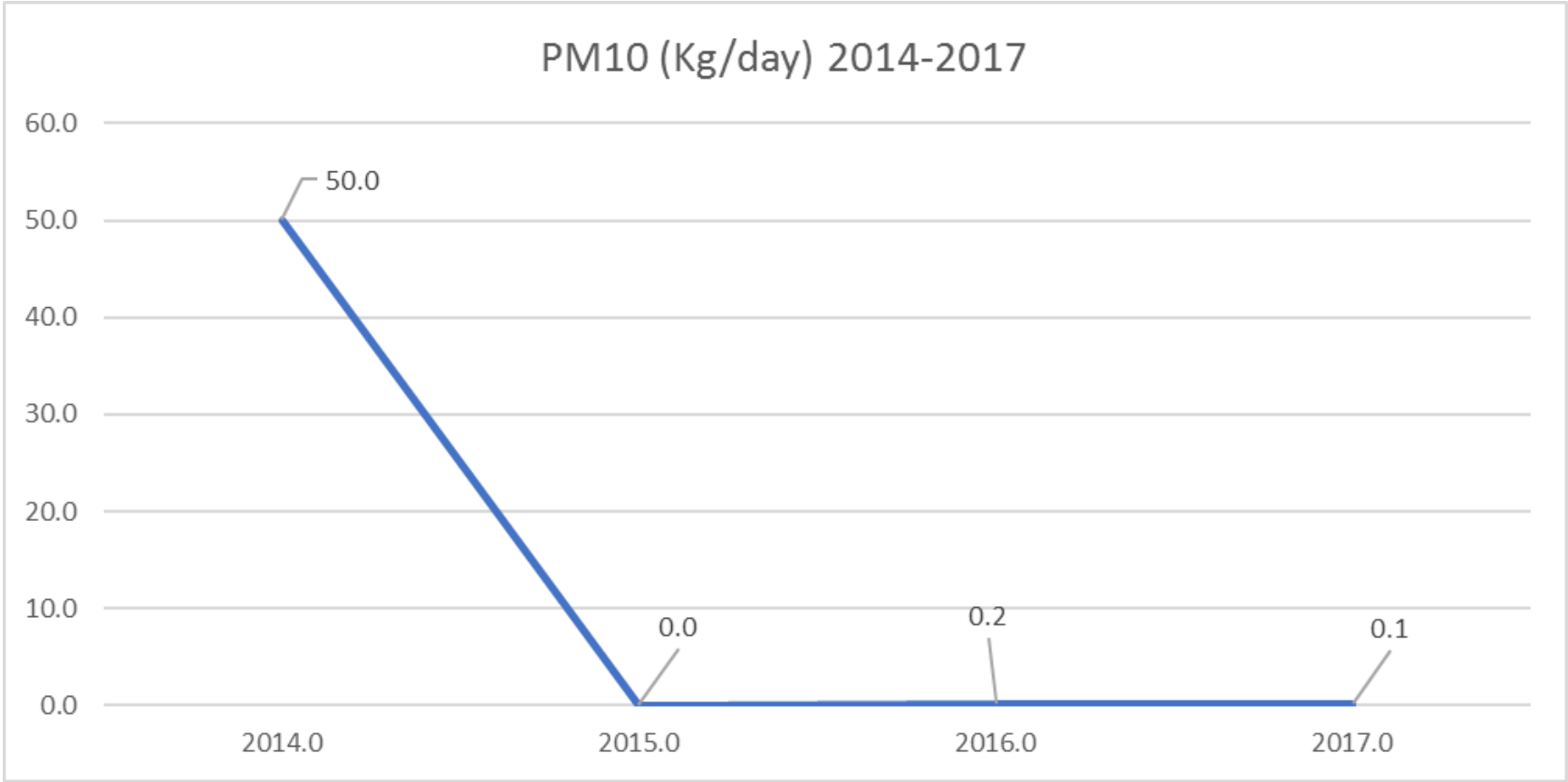
# Baseline: CO, kg/day, 2014-2017



**VISION ZERO**  
zero deaths · zero serious injuries  
MONTANA DEPARTMENT  
OF TRANSPORTATION

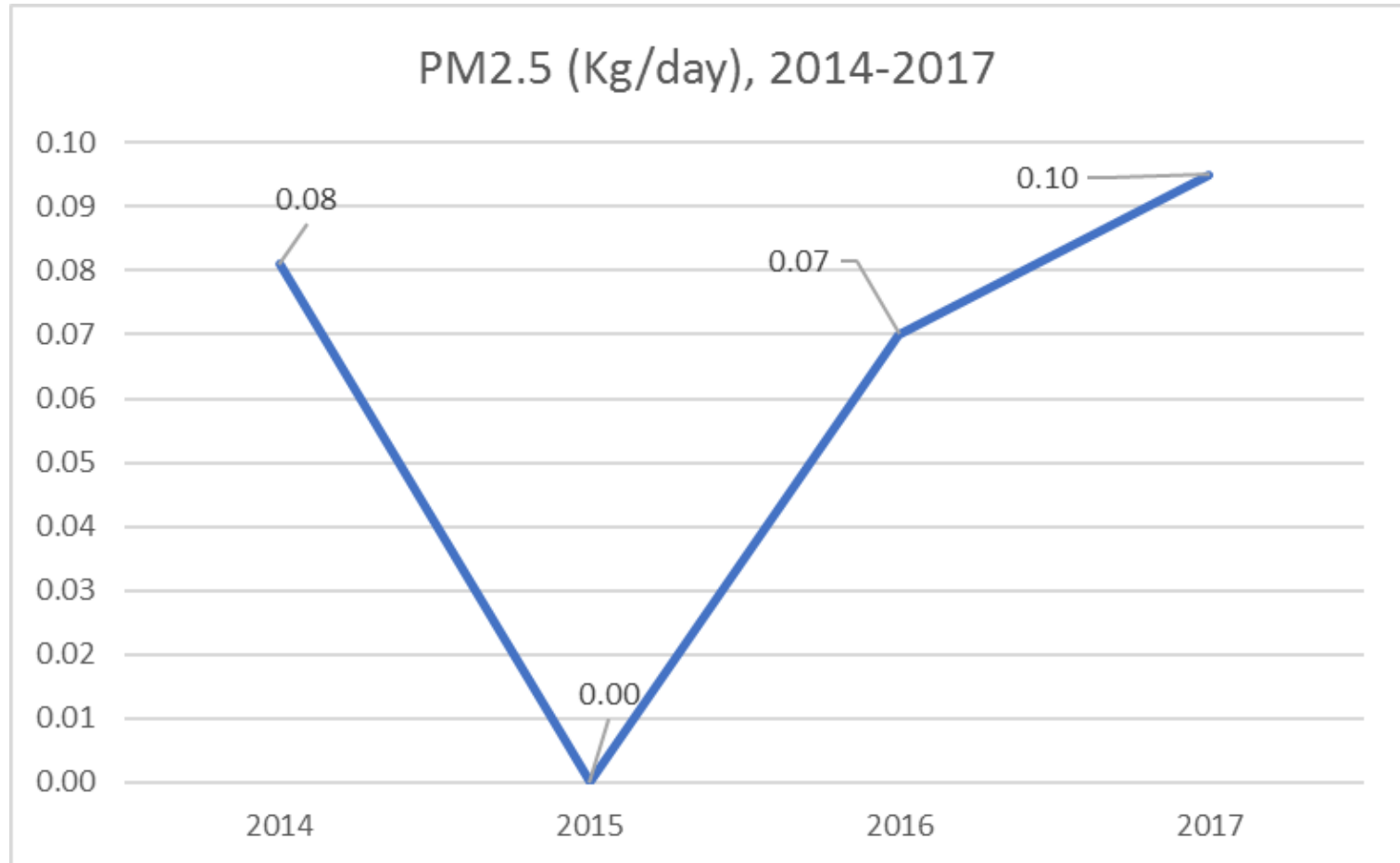


# Baseline: PM10, kg/day, 2014-2017



**VISION ZERO**  
zero deaths · zero serious injuries  
MONTANA DEPARTMENT  
OF TRANSPORTATION

# Baseline: PM2.5, kg/day, 2014-2017



# Proposed Targets (2-Year & 4-Year)

	<b>2-Year Target (2020)</b>	<b>4-Year Target (2022)</b>
<b>CO</b>	36.33 kg/day	36.33 kg/day
<b>PM 10</b>	0.10 kg/day	0.10 kg/day
<b>PM 2.5</b>	0.07 kg/day	0.07 kg/day

No significant progress determination is required for the CMAQ On-Road Mobile Source Emissions measure. MDT will monitor and may adjust CMAQ targets during the mid-performance period reporting cycle.

# Discussion

# FAST Act Compliance/Target Setting

- **February 28, 2018**
  - Deadline for MPO's to set Safety Targets (February 27, 2018) - **COMPLETE**
- **May 27, 2018**
  - Performance Agreements need to be in place
  - All Planning products adopted/approved after this date MUST reflect safety performance and targets (new or amended LRTP & TIP)
    - Billings (conformity grace period begins 11/10/18)
    - Great Falls (conformity grace period begins 4/17/18)
    - Missoula – Amendment to LRTP and TIP
- **September 30, 2018**
  - MPO targets due for Pavement, Bridge, System Performance, Freight and CMAQ (11 total targets)
- **May 20, 2019**
  - All, State and MPO, Planning products adopted/approved after this date MUST comply with FAST Act (new or amended LRTP & STIP/TIP)
- **Transit Targets**
  - MPO Transit Agencies must have TAM in place by October 1, 2018, TAMs must include transit targets
  - January 2019 Transit agencies report in NTD, including transit targets
  - MPO's have 180 days from transit agency targets to set their targets

# Next Meeting

- Next meeting: Early May?
- Potential topics:
  - PL Fund accumulating balance, lapse potential
  - LRTP performance content
  - Agreement status