

MPO Meeting at DOTD Thursday May 10, 2018

MAP-21 Status Including PM2 2 Year & 4 Year Targets

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Asset Management in US

- (ISTEA) 1991 - Intermodal Surface Transportation Efficiency Act
 - *National Highway System (NHS) Established*
- (TEA-21) 1998 - Transportation Equity Act for the 21st Century
 - www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_connectivity/fhwahep18032.pdf
 - *FHWA Office of Asset Management Created*
- (SAFETEA-LU) 2005 - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
- (MAP-21) 2012 - Moving Ahead for Progress in the 21st Century Act
- (FAST Act) 2015- Fixing America's Surface Transportation





FHWA TPM Rulemaking: Status

TPM Related Rules	Final Rule Published	Rule Effective Date
Safety Performance Measures	March 15, 2016	April 14, 2016
Highway Safety Improvement Program	March 15, 2016	April 14, 2016
Statewide and Non-Metropolitan Planning; Metropolitan Planning	May 27, 2016	June 27, 2016
Highway Asset Management Plans for NHS	October 24, 2016	October 2, 2017
Pavement and Bridge Condition Measures	January 18, 2017	May 20, 2017
Performance of the NHS, Freight, and CMAQ Measures	January 18, 2017	May 20, 2017*

* Except for portions of the rule related to the percent change in CO2 emissions from 2017 (GHG measure). Those portions are delayed and FHWA will be publishing an NPRM in the Federal Register pertaining to this measure.



U.S. Department of Transportation
Federal Highway Administration

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Federal TAMP Rules

- **TAMP** (23 CFR Part 515) Asset Management Plan
 - **Initial TAMP – Delivered to FHWA on April 30, 2018 avoiding suspension of all NHPP funds. FHWA is currently in the 90 day comment & review period.**
 - **Fully Compliant & Implemented TAMP – Due: June 30, 2019 with revised TAMP due every 4 years.**
- **PM2** (23 CFR Part 490) National Performance Management Measures (**required May 20, 2018**)
- **PM3** (23 CFR Part 490) National Performance Management Measures (**required May 20, 2018**)



Initial 2018 Federal NHS TAMP delivered to FHWA on April 30, 2018



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Initial 2016 Federal NHS TAMP & 2015 Federal NHS Pilot TAMP posted on DOTD Asset Management webpage

- http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Data_Collection/Pages/Asset-Management.aspx

Asset Management

One of the earliest and still one of the most relevant definitions of Asset Management was provided by the American Public Works Association Asset Management Task Force in 2000 as:

"...a methodology needed by those who are responsible for efficiently allocating generally insufficient funds amongst vital and competing needs." [1]

The 2008 Intermodal Surface Transport Efficiency Act (ISTEA) and the American Road & Builders Builders Act (ARBA) have both proven that world class transportation systems foster economic growth, international and domestic commerce, and tourism.

Asset management means a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and financial analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will enhance and sustain a desired state of good repair over the life cycle of the assets at minimum practicable cost. **23 CFR Part 315.5**

Transportation Asset Management Plan (TAMP)

As part of a national pilot project, Louisiana DOTD was one of three (3) DOTs selected to work closely with the Federal Highway Administration to create a pilot TAMP to serve as a guide for other states to develop their plans. The pilot TAMP was completed in 2015 and has led to numerous operational and functional updates and improvements with regards to advancing asset management practices at LA DOTD.

The TAMP formalizes the concepts of risk management and life cycle planning while expanding these concepts throughout the entire analysis and project selection process.

On April 30, 2018, LA DOTD produced the 2018 Federal NHS Transportation Asset Management Plan (TAMP) for review. This document is expected to be compiled into the next update process, with ongoing modification requirements, and will serve as the primary guide to federal asset management at LA DOTD going forward.

[1] FHWA Office of Asset Management, Asset Management Primer, December 2009

Type	Name	Modified	File Size
	LADOTD TAMP 2018 Version	6/30/2018 8:23 AM	333 KB
	LADOTD TAMP Pilot Version	5/10/2015 11:28 AM	298 KB

Contacts

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STATEMENT OF ADOPTION

Louisiana Revised Statutes 36:501 through 36:509 grants broad authority to the Secretary of the Department of Transportation and Development in establishing transportation policy for the State of Louisiana. Under this authority, I hereby adopt the 2018 Federal NHS Transportation Asset Management Plan as the official state plan for the State of Louisiana on the 27 day of April 2018.



Shawn Wilson, Ph.D.
Secretary
Department of Transportation and Development



PAVEMENT PERFORMANCE MEASURES




Key Dates	
May 20, 2017	Final rule effective date.
January 1, 2018	1st 4-year performance period begins.
May 20, 2018	State DOT targets must be established.
January 1, 2018	State DOTs collect data for Interstate pavements that conform to the final rule (IRI, Rutting, Cracking %, Faulting, and Inventory).
Within 180 days of relevant State DOT(s) target establishment	MPOs must commit to support state target or establish separate quantifiable target.
October 1, 2018	Baseline Performance Period Report for 1 st Performance Period due. State DOTs report 4-year targets for Interstate and 2-year and 4-year targets for non-Interstate NHS; etc.
April 15, 2019, and each April 15 thereafter	State DOTs submit first Interstate data that conform to the final rule.
January 1, 2020	State DOTs collect data for non-Interstate NHS pavements that conform to the final rules.
October 1, 2020	Mid Performance Period Progress Report for the 1st Performance Period due. State DOTs report 2-year condition/performance; progress toward achieving 2-year targets; etc.
June 15, 2021, and each June 15 thereafter	State DOTs submit non-Interstate NHS data that conform to the final rule.
December 31, 2021	1st 4-year performance period ends.
October 1, 2022	Full Performance Period Progress Report for 1 st Performance Period due. State DOTs reports 4-year condition/performance; progress toward achieving 4-year targets, etc. Baseline Performance Period Report for 2 nd Performance Period due. State DOTs report 2-year and 4-year targets for Interstate and non-Interstate NHS; baseline condition; etc.



Visit www.ltrwa.dot.gov/tpm/ to learn about training, guidance, and other implementation-related information.


BRIDGE PERFORMANCE MEASURES





Key Dates	
May 20, 2017	Final rule effective date.
January 1, 2018	1st 4-year performance period begins.
May 20, 2018	Initial 2- and 4-year targets established.
October 1, 2018	Baseline Performance Period Report for the 1 st Performance Period due. State DOTs report 2-year and 4-year targets; etc.
Within 180 days of relevant State DOT(s) target establishment	MPOs must commit to support State target or establish separate quantifiable target.
October 1, 2020	Mid Performance Period Progress Report for the 1 st Performance Period due. State DOTs report 2-year condition/performance; progress toward achieving 2-year targets; etc.
December 31, 2021	1st 4-year performance period ends.
October 1, 2022	Full Performance Period Progress Report for 1 st performance period due. State DOTs report 4-year condition/performance; progress toward achieving 4-year targets; etc. Baseline report due for 2 nd performance period due. State DOTs report 2- and 4-year targets; baseline condition, etc.

Other Specifics

- State DOT targets should be determined from asset management analyses and procedures and reflect investment strategies that work toward achieving a state of good repair over the life cycle of assets at minimum practicable cost. State DOTs may establish additional measures and targets that reflect asset management objectives.
- The rule applies to bridges carrying the NHS, including bridges on on- and off-ramps connected to the NHS.
- If for 3 consecutive years more than 10.0% of a State DOT's NHS bridges' total deck area is classified as Structurally Deficient, the State DOT must obligate and set aside National Highway Performance Program (NHPP) funds for eligible projects on bridges on the NHS.
- Deck area of all border bridges counts toward both States DOTs' totals.

 Visit www.fhwa.dot.gov/tpm/ to learn about training, guidance, and other implementation-related information.





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FHWA TAMP Certification

- **TAMP - FHWA Certification/Recertification**
 - Must Comply w/ **23 USC 119**, **23 USC 150**, 23 CFR Part 515 & 23 CRF Part 667
 - **Plus** National Performance Measures (PM2) - 23 CFR Part 490
 - Non-Compliant if Process Not Documented or Not Used
- **Initial Consistency Determination**
 - Based on Plan Development & Content
 - Based on Plan Implementation

FHWA TAMP Certification

- **FHWA Review TAMP Development Process**
 - Written Denial w/ List of Specific Deficiencies
 - 90 Days to Address Deficiencies & Resubmit
 - Written Conditional Certification w/ List of Minor Deficiencies
 - 90 Days to Address Minor Deficiencies & Resubmit
- **TAMP Requires Continual Recertification**
 - Must **Update** TAMP & TAMP Development Process at least **every 4 Years**
 - Due 30 days prior to next FHWA Consistency Determination
 - Minor Technical Corrections/Revisions having No Material Impact on Accuracy/Validity do not require submissions to FHWA



FHWA TAMP Consistency Determination

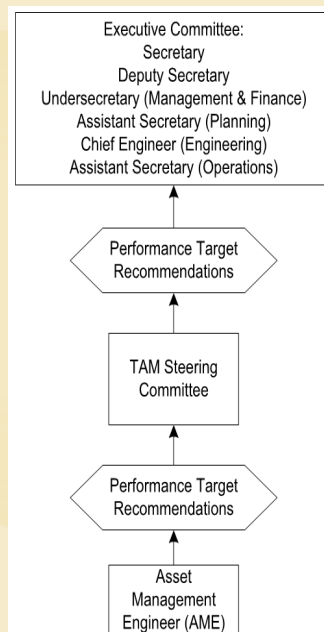
- **Annual Consistency Determination**
 - No Later than **August 31, 2019**
 - No Later than **July 31 Each Year After**
 - Determination of Consistency Based On
 - TAMP Content
 - Implementation of TAMP
 - Not Approval/Disapproval of Strategies or Decisions in Plan



TAMP Implementation Focal Points

- NHS Pavements & Bridges –
 - Management Systems are now Mandated
 - PM2 Requires Data Quality Management Program – Approved by FHWA
- Asset Management Objectives & Measures
- Performance Gap Identification
- Life Cycle Planning
- Risk Management Analysis
- A Financial Plan
- Investment Strategies

NHS Performance Target Recommendations



METHOD FOR SETTING PERFORMANCE TARGETS

- DOTD's strategic plan sets forth agency performance targets for pavements and bridges.
- Strict reliance on historical performance and management system forecasts.
- Asset Management Engineer (AME) identifies potential data driven performance targets.
- AME recommends these performance targets to the Transportation Asset Management (TAM) Steering Committee.
- TAM Steering Committee is led by the Executive Champion.
- TAM Steering Committee evaluates the AME recommendations.
- TAM Steering Committee makes final recommendations to the Executive Committee.
- Performance targets are approved by the Executive Committee.



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2018 TAMP Non-Interstate NHS Pavement Targets

Non-Interstate NHS	2-Year	4-Year
Good	20%	20%
Poor	20%	20%



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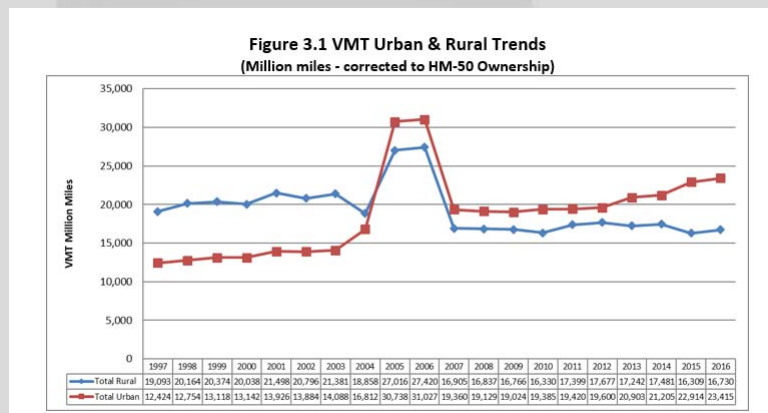
Louisiana Pavement Management System

How It Works

- Per Year Funding Projections Identified (Minimum 10 Years)
- First Year Treatments (FHWA Work Types) Are Determined
- Most Efficient Treatments Are Applied Until Funding is Exhausted
- Pavements Not Receiving Treatments are Further Deteriorated
- Pavements Receiving Treatments Have Index Resets Based on Treatment Life Cycle Improvement
- Repeat the Process for Each Analysis Year



2005 & 2006 Traffic Volume Spikes Caused by Hurricanes Katrina & Rita



Note: Long Term Traffic Volumes indicate Urban Increasing and Rural Decreasing



PM2 Interstate Pavement Penalties

- PM2 - 490.317 **Penalties for not Maintaining Minimum Interstate System Pavement Condition**
- **Not NHS Pavements (Yet)**
- “and, transfer, from the amounts apportioned to the State DOT under 23 U.S.C. 104(b)(2) (for the Surface Transportation Program) ... to the apportionment of the State under 23 U.S.C. 104(b)(1), an amount equal to **10 percent** of the amount of funds apportioned to the State for fiscal year 2009 under the Interstate Maintenance program for the purposes described in 23 U.S.C. 119 (as in effect on the day before the date of enactment of the MAP-21).”
Initially 9.2 M from STP, Plus 2% Per Year
- “FAST Act, ... penalty under 23 U.S.C. 119(f)(1)(A) if ... **Interstate** pavement condition has fallen below the **minimum condition level for the most recent year...**”

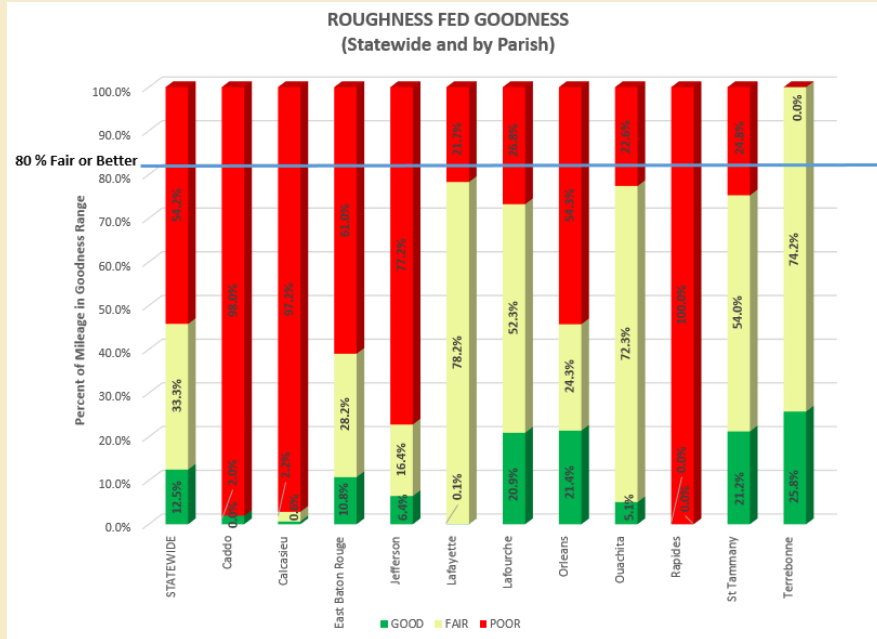


FHWA PM2 Pavement Condition Rating Network Level Analysis

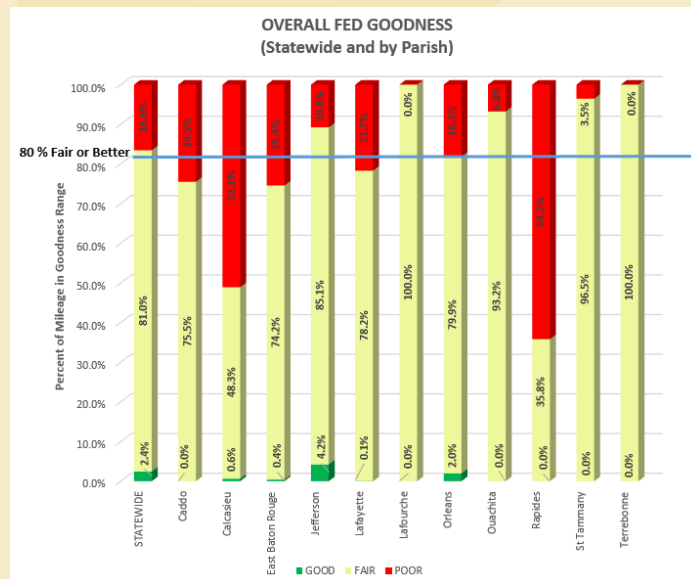
- **Pavement Rating - IRI, Cracking Percent, Rutting (Asphalt), Faulting (JCP)**
 - Good = All 3 Conditions Rated Good
 - Poor = 2 or More Rated Poor
 - Fair = Not Good or Poor
- **Significant Progress** based on comparison between:
 - **Target** & Actual Condition/Performance
 - **Baseline Condition/Performance** & Actual Condition/Performance
- 1st Reporting Dates Interstate 2019 & Non-Interstate NHS 2021/2022
 - **Data Capture by December 31st**



Roughness by MPO



Overall FED Goodness (under new rules) (Poor Pavement Rating requires poor rating in 2 of 4 pavement rating categories)



2018 TAMP Bridge Target Summary

Including Local NHS Bridges	2-Year	4-Year
Good	35%	30%
Poor	9.9%	9.9%

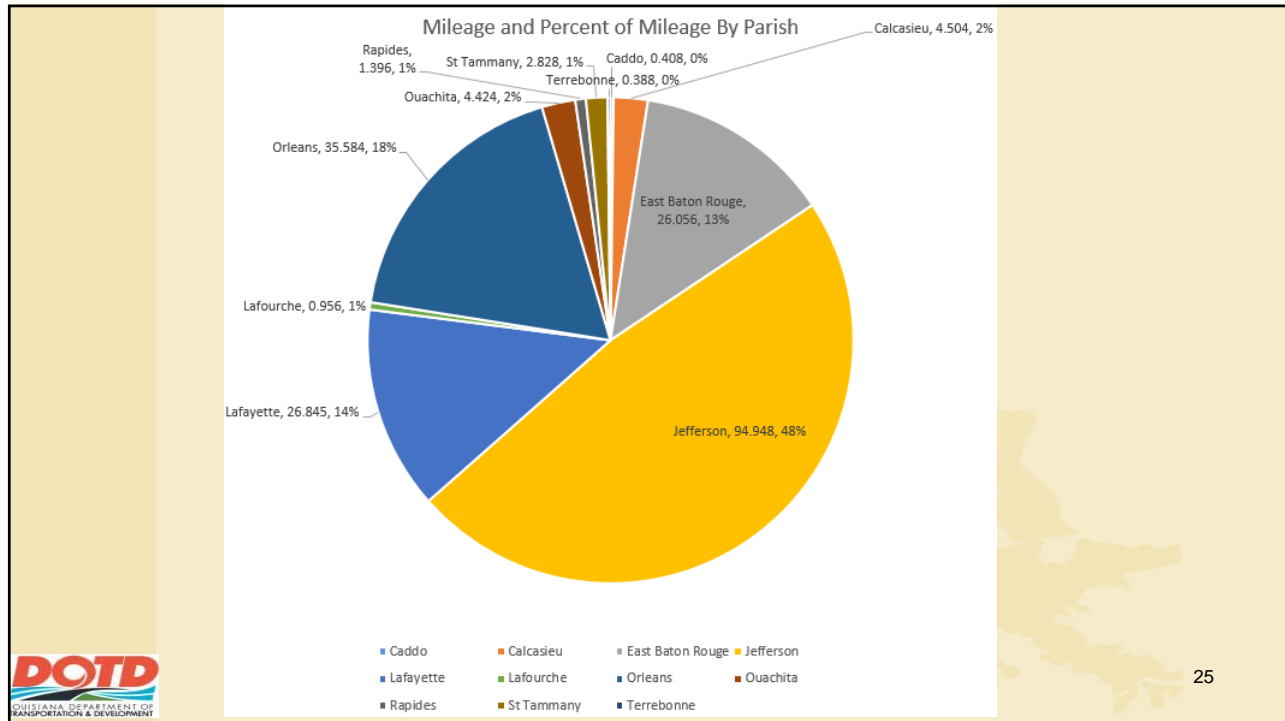


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PM2 NHS Bridge Funding Penalties

- PM2 - **490.413 Penalties** for not maintaining bridge condition
- The State DOT shall obligate and set aside in an amount equal to **50 percent of funds apportioned to such State for fiscal year 2009** to carry out 23 U.S.C. 144 (as in effect the day before enactment of MAP-21) from amounts apportioned to a State for a fiscal year under 23 U.S.C. 104(b)(1) only for eligible projects on bridges on the NHS.
- **\$86M of NHPP** would have to be set aside for eligible bridge projects on the NHS in Louisiana





Questions?

“If you have an opportunity to make things better and you don't, then you are wasting your time on earth.”

Roberto Clemente

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