Missouri Division



Administration

August 8, 2024

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> In Reply Refer To: HDA-MO

Mr. Patrick McKenna Director, Missouri Department of Transportation P.O. Box 270 Jefferson City, Missouri 65102

Subject: Transportation Asset Management Plan (TAMP) Annual Consistency Determination

Dear Mr. McKenna:

This letter serves as the Federal Highway Administration (FHWA) Missouri Division Office's 2024 consistency determination, which is an evaluation whether the Missouri Department of Transportation (MoDOT) has developed and implemented a TAMP that is consistent with the requirements established by 23 U.S.C. 119 and 23 CFR part 515.

MoDOT's most recent TAMP and its revised implementation documentation dated June 1, 2024, were received by the Division Office on June 26, 2024. Based on the most recent TAMP, as well as the documentation submitted to demonstrate implementation of the TAMP, the FHWA has determined your TAMP complied with the minimum requirements set forth in 23 CFR 515.13(b)(1). Therefore, MoDOT's TAMP has met the following minimum requirements:

- 1. Was developed with FHWA-certified TAMP processes.
- 2. Includes the required TAMP content; and
- 3. Is consistent with other applicable requirements in 23 U.S.C 119 AND 23 CFR Part 515.

We also determine MoDOT has implemented its TAMP as provided in 23 CFR 515.13(b)(2).

We would like to commend you and your staff for the broad participation in development and implementation of the TAMP, a risk-based asset management plan, in accordance with 23 U.S.C. 119, to achieve and sustain a state of good repair over the life cycle of the assets and to improve or preserve the condition of the National Highway System (NHS).

Should you have any questions, or require further assistance, please contact Jason Marino at (573) 638-2603.

Sincerely yours,

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KEVIN WAYNE Digitally signed by KEVIN WAYNE WAYNE WARD Date: 2024.08.08 14:26:36 -05'00'

Kevin W. Ward, P.E. Division Administrator



2024 TAMP Consistency Review

Developing, monitoring, and improving the Transportation Asset Management Plan (<u>TAMP</u>) is an evolving and iterative process. The Missouri Department of Transportation (MoDOT) monitors the programming and project delivery process to evaluate the successes of the TAMP through the various methods described below.

Implementing MoDOT's TAMP through an asset management approach to project programming.

In accordance with our long-range transportation plan, MoDOT commits our primary goal of keeping our existing transportation systems and services that Missouri has today. Each year, each of our seven districts work to update our 10-year rolling, statewide Asset Management Plan (AMP), which details the anticipated funds needed to manage our assets. This plan informs the conversation with regional partners and stakeholders and guides the decision-making process when identifying regional needs and priorities while updating our Statewide Transportation Improvement Plan (STIP). As part of the programming cycle, MoDOT evaluates the planned asset management expenditures for the first three years in the draft STIP, which helps ensure that asset management projects are programmed, and necessary funds are committed, to support MoDOT's objectives.

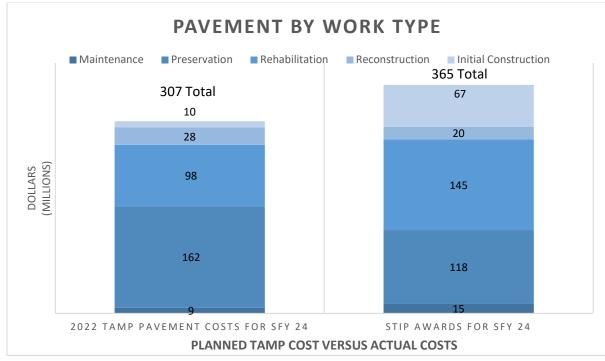
As part of the Executive Team approval process of MoDOT's STIP, a comparison of the AMP goals and the fully programmed years of the STIP are reviewed to gauge compliance with our desired direction. MoDOT's AMPs are the implementation tool for our TAMP.

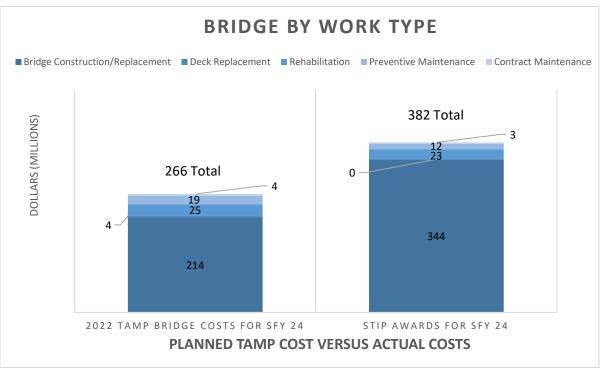
The currently approved TAMP, as supported by the AMP, provides the anticipated investment to meet our performance goals, as MoDOT balances the road and bridge needs of the NHS system and our other assets. To balance the available funds amongst the needs, while also allowing the necessary non-NHS investment, MoDOT works to identify those facilities that have begun to demonstrate lagging performance and to address them with more robust treatments. These system level strategies put MoDOT on target to meet performance goals.

MoDOT is committed to our preservation strategies on a system-wide basis for the optimal use of available funds. MoDOT also recognizes the need for flexibility on a project-to-project basis to ensure the best decisions are made.



2024 Performance





SFY 2024 project details were reviewed, including the work type categories. Projects were then sorted based upon work types and then sub-categorized based upon TAMP criteria.



Resultant System Conditions and Targets

Measure	2021 Baseline	2023 Results	2023 Target
		(Current Year)	
Good Cond. IS Pavement	79.9%	78.2%	77.5%
Poor Cond. IS Pavement	0.0%	0.1%	0.1%
Good Cond. Non-IS NHS	61.3%	52.6%	61.1%
Pavement			
Poor Cond. Non-IS NHS	0.9%	1.6%	1.0%
Pavement			
Good Deck on NHS	27.2%	26.8%	19.2%
Poor Deck on NHS	7.1%	6.0%	7.8%

Gap Analysis

Fiscal Responsibility and Coordination of Work Efforts

MoDOT's SFY 2024 had a significant impact with legislatively designated and funded projects being added through the General Assembly and the Governor's office. The most impactful of these projects was the \$2.8 billion Improve I-70 project, intended to address an aging and overcapacity corridor across the state. The Improve I-70 delivery team worked with District and Division staff to align schedules and incorporate existing I-70 projects into the multi-year, broad project suite created to address the corridor. For the TAMP, MoDOT considers the General Revenue funded project delivery to align with the TAMP commitment of seeking out and using potential additional funds to accelerate asset management and improvement through all available means. The additional funds serve to address an existing asset management need while also allowing improving flexibility to address other needs throughout the impacted Districts. In SFY 2024, it became necessary for MoDOT to adjust the schedule of a planned large-scale Design Build project addressing I-70, project J4I1486D. The scope of the project was increased and moved to SFY 2025, and associated work was therefore not delivered. Additionally, project J5S3411 was expanded beyond the original scope to deliver a larger scale project. As this was a planned asset management project, only the original estimated proposed work is considered as part of our assessment of consistency with our TAMP. The unplanned work, while beneficial to our asset management program, is considered outside of the TAMP.

In SFY 2023, MoDOT adjusted the schedule of several projects, including projects with scopes that are applicable to the TAMP, to later fiscal years. Several of those projects were delayed to SFY 2024 which is partially responsible for exceeding the TAMP anticipated NHS expenditures for bridges and pavement in the fiscal year.

Pavement:

MoDOT contracted 118.9% of the SFY 2024 TAMP planned expenditure for NHS pavements.

• The greatest discrepancy in expenditure occurred in the breakdown of preservation and rehabilitation. MoDOT's preservation category includes resurfacing up to 2". A Construction and Materials initiative changed MoDOT policy on minimum lift thickness which increased the minimum lift thickness for several mix types from 1 3/4" to 2". This adjustment shifted the amount of work that corresponded to each category, however the intent and purpose of the work was the same, to keep good condition pavement in good condition by using preventative treatments to maintain condition, before it falls out of the thresholds.



Moving into SFY 2024, inflation increased the cost associated with these projects, raising the
expenditures higher than originally anticipated at the time that the initial estimates for TAMP
development were completed.

Bridge:

MoDOT contracted 143.6% of the SFY 2023 TAMP planned expenditure for NHS bridges.

- The greatest discrepancy in expenditure occurred in the replacement category, where we exceeded the planned expenditure considerably. This increase is partially attributable to the movement of several projects from the last quarter of SFY 2023 being postponed due to inflationary pressure to SFY 2024, at time when inflation was increasing.
- Moving into SFY 2024, inflation increased the cost associated with these projects, raising the
 expenditures higher than originally anticipated at the time that the initial estimates for TAMP
 development were completed.

Performance Gaps:

MoDOT's performance for Good Condition Non-IS NHS Pavement is lower than the 2023 target and Poor Condition Non-IS NHS Pavement is higher than the 2023 target.

Over recent years, MoDOT has evolved to allow longer construction windows to allow contractors greater flexibility in the delivery of work. This strategy has generally increased the lag between contracting work and actual construction, increasing the delay between contracting and resulting performance.

For the 2023 data collection, MoDOT upgraded our ARAN van Laser Crack Measurement System to LCMS-2. Due to new equipment that detects and rates the percent of cracking on the roads, the system identified more cracking which significantly impacted the resultant performance. With more cracking being picked up, an abnormal amount of pavement went from good to fair or fair to poor per FHWA's rating scale.

Review of SFY 2023 Implemented Improvement Strategies

• 10-year pavement and bridge plans. MoDOT continues to work with district staff to have a longer outlook on anticipated construction projects, to aid in project grouping, project size, consistency in pavement type and construction. As our pavement and bridge plans evolve and improve, our asset management planning is not only better informed, but it is more accurate.

SFY 2024 Improvement Strategies

 Beginning in SFY 2025, MoDOT is automatically increasing the Asset Management allocation of funds by an equivalent inflation percentage as used for the STIP. For SFY 2025, 4% will be used. This move, which essentially commits an increased portion of the overall construction budget towards asset management projects, will offset some of the impacts which resulted from the abnormal inflation of construction costs.

Once approved, this Consistency Determination document will be posted on MoDOT's website.