

# 2023 TAMP Consistency Review

Developing, monitoring and improving the Transportation Asset Management Plan (TAMP) 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

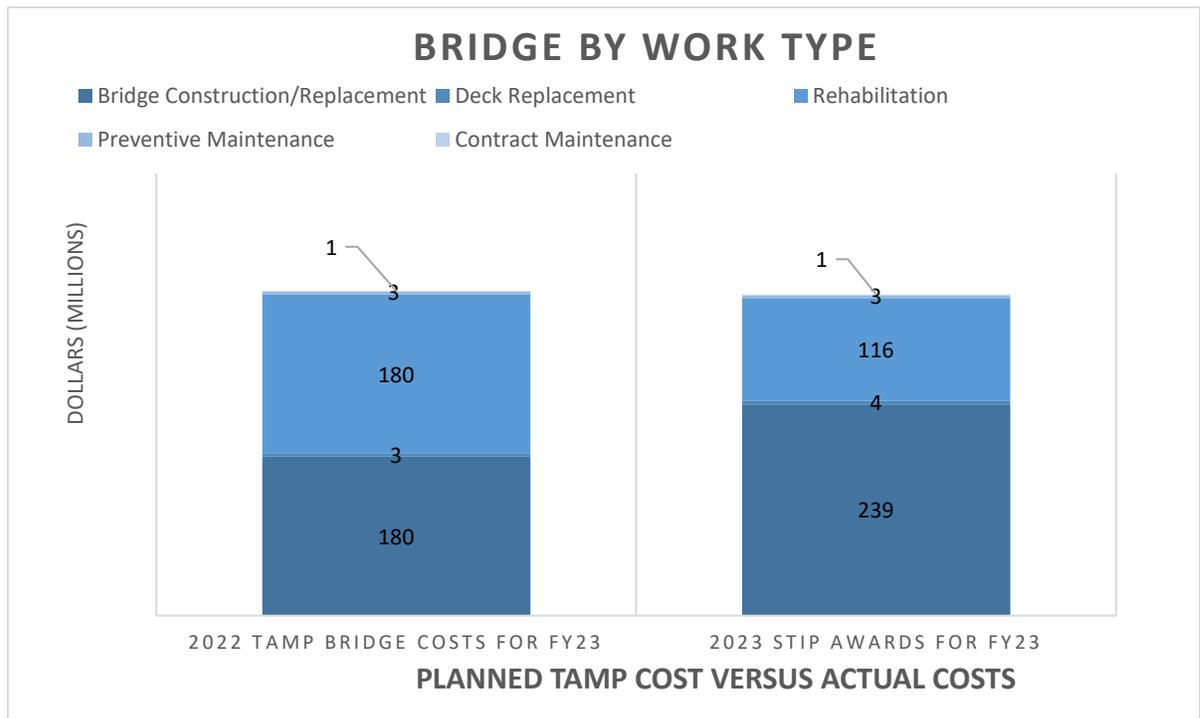
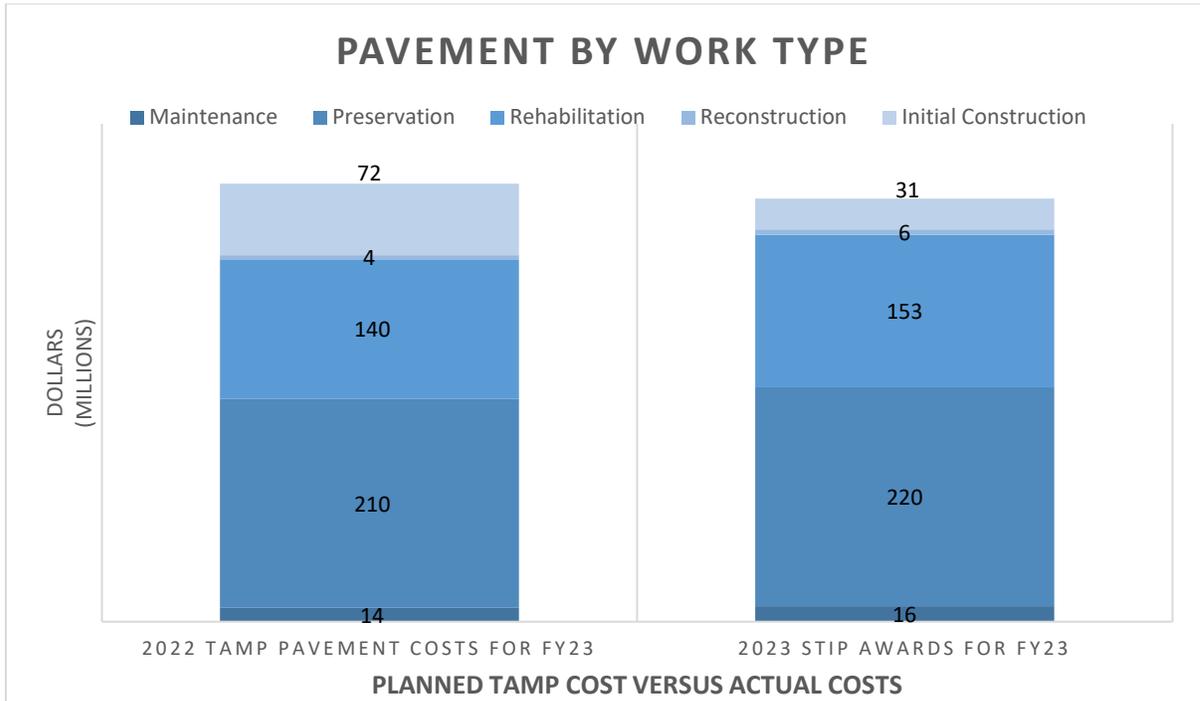
In accordance with our long-range transportation plan, MoDOT commits our primary goal of keeping our existing transportation systems and services that Missouri has today. Each year, each of our seven districts work to update our 10-year rolling, statewide Asset Management Plan (AMP), which details the 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 the 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.

**2023 Performance**



SFY 2023 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 | 2022 Results<br>(Current Year) | 2023 Target |
|--------------------------------|---------------|--------------------------------|-------------|
| Good Cond. IS Pavement         | 79.9%         | 70.1%                          | 77.5%       |
| Poor Cond. IS Pavement         | 0.0%          | 0.0%                           | 0.1%        |
| Good Cond. Non-IS NHS Pavement | 61.3%         | 55.4%                          | 61.1%       |
| Poor Cond. Non-IS NHS Pavement | 0.9%          | 1.9%                           | 1.0%        |
| Good Deck on NHS               | 27.2%         | 27.9%                          | 22.8%       |
| Poor Deck on NHS               | 7.1%          | 6.5%                           | 7.7%        |

## Gap Analysis

### Fiscal Responsibility and Coordination of Work Efforts

With the 2022 TAMP, MoDOT began to integrate the pavement and bridge NHS system expansion work associated with our system improvement funding category into our TAMP work types, as this work usually impacted pavement and bridges as a product of the improvements. Much of this work is delivered through MoDOT’s design build approach. In the design build approach final work type may be less rigidly defined and the process itself demands greater flexibility in timing and development to ensure success. In SFY 2023, it became necessary for MoDOT to adjust the schedule of two large Design Build Projects addressing IS 55 and the US 63/IS 70 Interchange, to ensure the projects would align appropriately with other projects in the regions and reduce the likelihood of cost escalation from multiple adjacent work zones.

With the January 2023 MoDOT construction awards, MoDOT awards were \$161 million over program, so to stem this rising inflation while maintaining fiscal constraint of SFY 2023 projects, MoDOT adjusted the schedule of several projects, including projects with scopes that are applicable to the TAMP, to later fiscal years. Most of these projects were delayed to early SFY 2024, whereby accommodating a slight delay in delivery of these projects, MoDOT can maintain financial responsibility for the fiscal year while still delivering on Missouri Highways and Transportation Commission commitments.

### Pavement:

MoDOT contracted 96.6% of the SFY 2023 TAMP planned expenditure for NHS pavements.

- The greatest discrepancy in expenditure occurred in the initial construction category due to the schedule adjustment of the two large design build projects. This work along with the other delayed work will be delivered in SFY 2024.
- MoDOT continued to experience a high rate of inflation in SFY 2023, with STIP projects being delivered 18.3% over program.

Bridge:

MoDOT contracted 98.6% of the SFY 2023 TAMP planned expenditure for NHS bridges.

- The greatest discrepancy in expenditure occurred in the rehabilitation category due to the schedule adjustment of the two large design build projects. This work along with the other delayed work will be delivered in SFY 2024.
- MoDOT continued to experience a high rate of inflation in SFY 2023, with STIP projects being delivered 18.3% over program.

Performance Gaps:

MoDOT's performance for Good Condition IS Pavement, Good Condition Non-IS NHS Pavement, and Poor Condition Non-IS NHS Pavement are lower the SFY 2023 target.

Although not a target year, the 2022 results indicate a decline for these categories greater than the current trend. 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. Additionally, MoDOT Asset Management plans balance work on NHS routes (primarily MoDOT's major routes) and our minor pavement system, in addition to bridges, over a ten-year window. This sometimes results in years with significantly more or significantly less, NHS pavement being included in a given year. MoDOT will continue to monitor this performance to identify opportunities to impact the performance within each category.

## **Review of SFY 2023 Implemented Improvement Strategies**

- As discussed in the last consistency determination, bridge and pavement costs were updated to reflect recent inflationary impacts. While working through both asset management plan development and STIP programming decisions, MoDOT adjust anticipated costs to reflect recent cost trends, instead of broader historical trends. These adjustments resulted in an increase to existing programmed project estimates of nearly \$900 million.
- 10-year pavement and bridge plans. MoDOT has worked 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. With this improved outlook, our asset management planning is not only better informed, but it is more accurate. Additionally, these changes improve contractor interest and create greater economy of scale to our projects, which helps to offset the inflationary impacts experienced in contract letting.

## **SFY 2024 Improvement Strategies**

- Beginning in SFY 2024, MoDOT is automatically increasing the Asset Management allocation of funds by 7%, instead of the previous used 3%. 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.
- MoDOT's draft STIP includes a robust investment in terms of a transformative improvement across rural I-70 in Missouri. This design build project (more appropriately, series of projects) will be a major investment for an entire NHS corridor which will upgrade any non-good locations into a state of good repair. Upon full funding commitment, MoDOT anticipates adding this investment in to the TAMP.

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

Missouri Division



U.S. Department  
of Transportation

**Federal Highway  
Administration**

July 25, 2023

3220 W. Edgewood, Suite H  
Jefferson City, Missouri 65109  
(573) 636-7104  
Fax (573) 636-9283  
Missouri.FHWA@fhwa.dot.gov

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 2023 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 implementation documentation dated June 1, 2023, were received by the Division Office on July 17, 2023. 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.

Missouri Division believes 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). We look forward to seeing the improvements outlined in your consistency letter.

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

Sincerely yours,

Kevin W. Ward, P.E.  
Missouri Division Administrator