

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

BUREAU OF ENGINEERING

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BUTCH ELEY
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE GOVERNOR

June 28, 2024

Mr. Dan Hinton
Division Administrator
Federal Highway Administration
404 BNA Drive
Building 200, Suite 508
Nashville, TN 37217

Re: Submission of 2024 Transportation Asset Management Plan (TAMP) Consistency

Determination Report

Dear Mr. Hinton:

In accordance with 23 CFR Part 515.13 (b) (3), the Tennessee Department of Transportation (TDOT) is pleased to present the enclosed submittal of our Transportation Asset Management Plan (TAMP) Consistency Determination for the fiscal year 2024.

If you have any questions regarding this consistency determination, please contact me at 615-741-0791 or by email at Will.Reid@tn.gov.

Sincerely,

Will Reid. P.E.

Deputy Commissioner & Chief Engineer

WR/CH/jc

Enclosure

CC:

Commissioner Eley Mr. Ted Kniazewycz Mr. Gilberto DeLeon (FHWA)
Mr. Steve Townsend Ms. Jamie Waller Mr. Sean Santalla (FHWA)
Mr. Joe Galbato Mr. Chris Harris Mr. Jason Oldham (FHWA)
Mr. Preston Elliott Ms. Jennifer Herstek Mr. Greg Simmons (FHWA)
Mr. Matt Barnes Mr. Ronnie Porter Mr. Nathan Marshall (FHWA)

Mr. Joe Deering Mr. Brian Hurst Ms. Lori Lange Mr. James Kelley



CONSISTENCY DETERMINATION

Allotment Amounts:

June 1, 2023 – May 31, 2024

Comparing to Budgets from:

TAMP Version 2022.3.0



What is Consistency Determination?

TDOT strongly believes in operating as an open and transparent governmental body. TDOT's Transportation Asset Management Plan (TAMP) exemplifies TDOT's commitment to plan, design, build, maintain, and manage one of the best transportation systems in the nation. This effort is rooted in our Mission, Vision, and Values. The annual consistency determination is TDOT's proof that it is managing the state's NHS pavement and bridge assets in accordance with a strategic plan to be as efficient and effective as possible with federal and state dollars and achieve Tennessee's performance goals and objectives.

What are the MAP-21 and Final Rule requirements?

Consistency requirements are identified in 23 CFR Part 515.13 (b) (2) as follows: Annual determination of consistency under 23 U.S.C. 119(e)(5). Not later than August 31, 2019, and not later than July 31 in each year thereafter, FHWA will notify the State DOT whether the State DOT has developed and implemented an asset management plan consistent with 23 U.S.C. 119. The notice will be in writing and, in the case of a negative determination, will specify the deficiencies the State DOT needs to address. In making the annual consistency determination, the FHWA will consider the most recent

Mission:

Provide a safe and reliable transportation system that supports economic growth and quality of life.

Vision:

A commitment to excellence in managing and improving the state's transportation system, promoting the success of our employees, and strengthening the trust of our customers.

Values:

- Stewardship
- Integrity
- Safety
- Consistency
- Development
- Innovation
- Collaboration
- Family

asset management plan submitted by the State DOT, as well as any documentation submitted by the State DOT to demonstrate implementation of the plan. The FHWA determination is only as to the consistency of the State DOT asset management plan and State DOT implementation of that plan with applicable requirements and is not an approval or disapproval of strategies or other decisions contained in the plan. With respect to any assets the State DOT may elect to include in its plan in addition to NHS pavement and bridge assets, the FHWA consistency determination will consider only whether the State DOT has complied with § 515.9(I) with respect to such discretionary assets.



- (1) Plan development. The FHWA will review the State DOT's asset management plan to ensure that it was developed with certified processes, includes the required content, and is consistent with other applicable requirements in this part.
- (2) Plan implementation. The State DOT must demonstrate implementation of an asset management plan that meets the requirements of 23 U.S.C. 119 and this part. Each State DOT may determine the most suitable approach for demonstrating implementation of its asset management plan, so long as the information is current, documented, and verifiable. The submission must show the State DOT is using the investment strategies in its plan to make progress toward achievement of its targets for asset condition and performance of the NHS and to support progress toward the national goals identified in 23 U.S.C. 150(b). The State DOT must submit its implementation documentation not less than 30 days prior to the deadline for the FHWA consistency determination.
- (i) FHWA considers the best evidence of plan implementation to be that, for the 12 months preceding the consistency determination, the State DOT funding allocations are reasonably consistent with the investment strategies in the State DOT's asset management plan. This demonstration takes into account the alignment between the actual and planned levels of investment for various work types (i.e., initial construction, maintenance, preservation, rehabilitation and reconstruction).
- (ii) FHWA may find a State DOT has implemented its asset management plan even if the State has deviated from the investment strategies included in the asset management plan, if the State DOT shows the deviation was necessary due to extenuating circumstances beyond the State DOT's reasonable control.

Is the TDOT TAMP Compliant with Current Federal Requirements?

In November 2022, the Federal government passed the Bipartisan Infrastructure Law (BIL), which modified 23 USC 119 to require the life cycle cost and risk management analyses used to develop the TAMP to consider extreme weather and resilience (23 USC 119(e)(4)(D)). TDOT's current TAMP (version 2022.3.0) has been certified by FHWA as compliant with all TAMP requirements including this new requirement.



What is TDOT's Process for Documenting Consistency?

TDOT will submit to FHWA a summary of how the agency's annual investment strategy of planned allocations, as documented in TDOT's TAMP Version 2022.3.0, is in alignment and reasonably consistent with actual investment amounts during the 12-month period from June 1, 2023 to May 31, 2024, as agreed to by TDOT and the FHWA Tennessee Division during the meeting on February 26, 2020. This 12-month period allows TDOT sufficient time to extract the actual investment amounts and prepare the consistency determination report before the deadline. Should the amounts significantly deviate, TDOT will provide documentation to justify the deviation. The 12-month TAMP Budget amounts and the Actual Investment amounts for four of the five work types, as defined by FHWA (Maintenance, Preservation, Rehabilitation, Construction, and Reconstruction), are compared in Table D-1. Budget amounts for the FHWA work type, Construction, are not presented in the table. This is because new construction of bridge and pavement assets are beyond the scope of asset management investment strategies that focus on the state of good repair for bridge and pavement networks. Similarly, budget amounts for the Reconstruction work type are also not included for pavement in the table since pavement reconstruction locations are typically initiated through system enhancement and expansion projects rather than through the management of the pavement network state of good repair.

Table D-1 also provides explanations for any significant differences between the TAMP budgets, actual budgets, and actual investments. Crosswalks between TDOT's treatment types and the FHWA work types are presented in Table D-2. The planned TAMP investments for pavements and bridges are presented in Tables D-3 and D-4, respectively.

TDOT has continued to use the enhanced data query from PPRM so that details on bridge expenditures included in pavement projects can be identified more easily. This allowed the pavement and bridge obligation adjustments to be calculated within the tabulation spreadsheet, reducing manual adjustments previously required. As the Project Delivery Network (PDN) software, known as TDOT 360, continues to be rolled out, PPRM will soon be phased out. So, TDOT will develop a new process for analysis of actual investment amounts for the 2025 TAMP Consistency Determination.

How is TDOT's Process Changing?

TDOT is making significant changes to its project delivery process and its organizational structure through the Integrated Program Delivery (IPD) and Empowering People, Influencing Culture (EPIC)



initiatives. Together they will create a team-based approach to project delivery by putting a matrix organization into place, allowing teams to work more easily across disciplines. Additionally, the Project Delivery Network (PDN) software is currently being implemented as a replacement for the PPRM software in order to provide consistency, reliability, efficiency, and transparency throughout the project delivery process.

Changes in funding allocations could also affect TDOT's project prioritization, selection, and delivery processes. Governor Lee's FY24 budget provided a general fund transfer of approximately \$3.3 billion to the DOT. The additional funding provides a comprehensive approach to addressing the state's increasing critical challenges to infrastructure including: significant investments in major urban and rural congestion, accelerating *Improving Manufacturing*, *Public Roads*, *and Opportunities for a Vibrant Economy* (IMPROVE) Act projects, increasing investments in infrastructure maintenance required to meet the demands of increasing costs, and leveraging local participation on projects that connect state highways to local communities.

TDOT has also made a commitment to include a status update on risk mitigation strategies in future consistency determination reports. TDOT will be holding a workshop to update the risk register and risk mitigation strategies in the fall of 2024 in order to meet that commitment.

TDOT will be updating its TAMP document to reflect the organizational changes and process changes that are being implemented as a result of the EPIC and IPD.



Table D-1

Fiscal Year 2024	Bridges							Pavement										
						Actual Investment (\$M) Grand Difference			Footnotes	Budget (\$M)			Actual Investment (\$M)			Grand Difference (Total		
Work Type	TAMP Budget (\$M)	Adjusted Budget (\$M)	Budget Difference (TAMP - Adjusted) (\$M)	Budget Footnotes	NHS	Non-NHS	Total	(Total Investment - Adjusted Budget) (\$M)	Investment Foo	TAMP Budget (\$M)	Adjusted Budget (\$M)	Budget Difference (TAMP - Adjusted) (\$M)	Budget Footnotes	NHS	Non-NHS	Total	Difference (Total - Adjusted Budget) (\$M)	Investment Foo
Preservation	8.00	8.00	0.00	В1	3.06	0.98	4.04	-3.96	В6	228.00	265.50	37.50	P1	226.38	126.13	352.50	87.00	Р6
Rehabilitation	46.00	71.50	25.50	В2	57.86	21.45	79.31	7.81	В7	28.00	29.50	1.50	P2	93.26	9.46	102.72	73.22	P7
Reconstruction	100.00	96.00	-4.00	В3	289.78	68.03	357.81	261.81	B8	N/A	N/A	N/A	Р3	801.87	31.18	833.05	N/A	P8
Construction Maintenance	N/A 4.00	N/A 4.20	N/A 0.20	B4 B5	3.00	0.00	3.00 3.60	N/A -0.60	B9 B10	N/A 27.00	N/A 46.10	N/A 19.10	P4 P5	232.30 44.	134.01	366.30 44.68	N/A -1.42	P9 P10
				БЭ					B10				rs					F 10
Total	158.00	179.70	21.70		354.30	94.06	447.76	265.06		283.00	341.10	58.10		1,398.48	300.77	1,699.25	158.80	
	Bridge Footnotes:								Pavement Footnotes:									
B1	budget. The	e target is to cifically spen	allocate 10% -	15% of	our total budge	et for preserv	ation of our	ridge rehabilitatio larger assets. If forts inside of larg	f funds	P1	<u>Pavement Preservation Budget</u> : The budget for pavement preservation in FY24 was approved at \$265.5M, which is \$37.5M higher than the TAMP budget amount. This is primarily due to inflation rates which have outpaced our estimates used in the TAMP.							
P2	Bridge Rehabilitation Budget: The budget for bridge rehabilitation in FY24 was approved at \$71.5M, which is \$25.5M higher than the TAMP budget amount. This is primarily due to inflation rates which have outpaced our estimates used in the TAMP and an increase in funding for State of Good Repair for our bridge assets.								aced	P2	Pavement Rehabilitation Budget: The target for pavement rehabilitation budget was to allocate 10% of the total available budget of \$295M for pavement state of good repair. This exceeded the projected budget of \$28M in the TAMP due to inflation rates which outpaced our estimates used in the TAMP.							
В3	Bridge Reconstruction Budget; Bridge reconstruction is primarily programmed as a part of TDOT's State of Good Repair project selection. Additionally, TDOT has larger scale capital projects that encompass and include bridge replacements. TDOT has redefined the process for prioritization of projects to be included in the 10-Year Program of Projects with new criteria used to distribute the additional \$3.3B general fund transfer. This new process will be outlined in TDOT's out-of-cycle TAMP update which is scheduled to be completed in late 2024. Additional funds have already been allocated for the time period covered in this TAMP Consistency Determination and are reflected in the adjusted budget. Bridge inspection budget of \$14.25M included in this amount.							P3	Pavement Reconstruction Budget: With few rare exceptions, pavement reconstruction is primarily programmed as a part of larger scale capital projects rather than being part of TDOTs State of Good Repair project selection. Therefore, TDOT has elected to omit budgets for pavement restoration from our 2022 BIL-Compliant TAMP and subsequently in our 2024 Annual TAMP Consistency Determination. TDOT has redefined the process for prioritization of projects to be included in the 10-Year Program of Projects with new criteria used to distribute the additional \$3.38 general fund transfer. This new process will be outlined in TDOT's out-of-cycle TAMP update which is scheduled to be completed in late 2024; however, since the 2024 Consistency Determination is using the 2022 BIL-Compliant TAMP which excludes this information, it will not be included in the 2024 report.									
В4	Bridge Construction Budget; New bridge construction is primarily programmed as a part of larger scale capital projects rather than being part of TDOTs State of Good Repair project selection. Therefore, TDOT has elected to omit budgets for bridge construction from our 2022 BIL-Compliant TAMP and subsequently in our 2024 Annual TAMP Consistency Determination. TDOT has redefined the process for prioritization of projects to be included in the 10-Year Program of Projects with new criteria used to distribute the additional \$3.3B general fund transfer. This new process will be outlined in TDOTs out-of-cycle TAMP update which is scheduled to be completed in late 2024; however, since the 2024 Consistency Determination is using the 2022 BIL-Compliant TAMP which excludes this information, it will not be included in the 2024 report.							P4	Pavement Construction Budget: New pavement construction is primarily programmed as a part of larger scale capital projects rather than being part of TDOTS state of Good Repair project selection. Therefore, TDOT has elected to omit budgets for pavement construction from our 2022 BIL-Compliant TAMP and subsequently in our 2024 Annual TAMP Consistency Determination. TDOT has redefined the process for prioritization of projects to be included in the 10-Year Program of Projects with new criteria used to distribute the additional \$3.3B general fund transfer. This new process will be outlined in TDOTs out-of-cycle TAMP update which is scheduled to be completed in late 2024; however, since the 2024 Consistency Determination is using the 2022 BIL-Compliant TAMP which excludes this information, it will not be included in the 2024 report.									
B5	Bridge Maintenance Budget: No footnote.							P5	Pavement Maintenance Budget: An additional \$15M in supplemental spot paving was approved in FY24 to address areas which were damaged due to severe winter weather in January 2024.									
В6	Bridge Preservation Investment: 26 bridge preservation projects were completed under budget, resulting in a total negative allotment of \$2,577,635 being processed in FY24 when they were closed, thus reducing the actual investment amount for bridge preservation by that amount. 24 bridge preservation projects received a total positive allotment of \$4,942,894. Additionally, \$1.2M in projects were pulled from the letting for various reasons. This resulted in a net allotment of \$4.0M for bridge preservation between June 2023 and May 2024.							P6	Pavement Preservation Investment: Due to shifts in staff as a result of the reorganization, there was misunderstanding which led to overspending on pavement preservation projects in Region 2. Region 4 had a highway program project in Shelby County that was postponed in August 2023. TDOT opted to use those funds in the June and August 2023 lettings to perform an additional \$42M in preservation projects since those projects were ready to be let and the condition of Region 4's pavements are not meeting TDOT's current performance targets.									
	Bridge Rehabilitation Investment: Additional funds from bridge rehabilitation projects completed under budget and excess preservation funds were directed towards bridge rehabilitation projects during the period between June 2023 and May 2024.						P7	Pavement Rehabilitation Investment: Due to shifts in staff as a result of the reorganization, there was misunderstanding which led to overspending on pavement rehabilitation projects in Region 2. Region 4 had a highway program project in Shelby County that was postponed in August 2023. TDOT opted to use those funds in the June and August 2023 lettings to perform an additional \$25.5M in rehabilitation projects since those projects were ready to be let and the condition of Region 4's pavements are not meeting TDOTs current performance targets.										
В8	<u>Bridge Reconstruction Investment:</u> Additional funds from state general funds (TMA and GFT) during the period between June 2023 and May 2024 were available to fund projects that included major bridge replacements. The excess funds are state dollars resulting from bids under estimate that will be reprogrammed in the next performance cycle. Bridge inspection investment of \$14.25M included in this amount.						P8	Pavement Reconstruction Investment: Pavement Reconstruction Investment: TDOTs state of good repair program but is instead addressed through large-scale capital projects. Therefore, TDOT has elected to omit budgets and investments for these types of projects in our 2022 BIL-Compliant TAMP and subsequently in the 2024 annual consistency report. TDOT has developed a new prioritization matrix used to rank projects for inclusion in the fiscally-constrained 10-Year Program, and this new process will be outlined in an out-of-cycle update of TDOT's TAMP document in late 2024.										
В9	Bridge Construction Investment: New bridge construction is primarily programmed as a part of larger scale capital projects rather than being part of TDOTs State of Good Repair project selection. Therefore, TDOT has elected to omit budgets for bridge construction from our 2022 BIL-Compliant TAMP and subsequently in our 2024 Annual TAMP Consistency Determination. TDOT has redefined the process for prioritization of projects to be included in the 10-Year Program of Projects with new criteria used to distribute the additional \$3.3B general fund transfer. This new process will be outlined in TDOTs out-of-cycle TAMP update which is scheduled to be completed in late 2024; however, since the 2024 Consistency Determination is using the 2022 BIL-Compliant TAMP which excludes this information, it will not be included in the 2024 report.						P9	Pavement Construction Investment: New pavement construction is generally not included in TDOTs state of good repair program but is instead addressed through large-scale capital projects. Therefore, TDOT has elected to omit budgets and investments for these types of projects in our 2022 BIL-Compliant TAMP and subsequently in the 2024 annual consistency report. TDOT has developed a new prioritization matrix used to rank projects for inclusion in the fiscally-constrained 10-Year Program, and this new process will be outlined in an out-of-cycle update of TDOTs TAMP document in late 2024.										
B10	Bridge Ma	intenance II	nvestment: No	footnot	e.					P10							spot paving was weather in Janu	



This Consistency Determination document will be updated and posted on TDOT's website annually. It will also be referenced in the appendix of each version of TDOT's TAMP using the appropriate URL web address. Accompanying the 2024 Consistency Determination document is a link to the spreadsheet that was used to compile the actual investment data from PPRM (shown below). Below are links to the documents on TDOT's website.

TAMP Consistency Determination Document:

https://www.tn.gov/content/dam/tn/tdot/maintenance/asset-management-office-/tamp/2024 TAMP-Consistency Determination v.1.2.docx

TAMP Consistency Determination Spreadsheet:

https://www.tn.gov/content/dam/tn/tdot/maintenance/asset-management-office-/tamp/TAMPData_2024_Consistency_Determination_v1.2.xlsx



Table D-2: Crosswalk Between TDOT Treatment Types and FHWA Work Types

FHWA Work	TDOT Pavement Treatments	TDOT Bridge Treatments				
Types Preservation	Preservation Activities, including:	Preservation Activities, including:				
riesei vatioii	Thin asphalt overlay (1.5 in. or less)	Repainting structural steel				
	Microsurfacing	Sweeping				
	Chip seals	Deck repairs				
	Cape seals	Deck waterproofing				
	Crack sealing	Deck epoxy overlay				
	Concrete joint sealing	Polymer modified concrete deck				
	Mill and fill asphalt overlays (1.5 in. or less)	overlay				
		 Cleaning and resealing expansion joints 				
		Scour Prevention (1)				
Rehabilitation	Rehabilitation Activities, including: • Full-depth patching	Rehabilitation Activities, including: Replacement of expansion joints				
	Repair/replacing concrete slabs	Concrete spall repairs				
	Hot-in-place recycling with 1.25 in. overlay	Structural steel repairs				
		• Scour repairs ⁽¹⁾				
		Bearing replacement				
Reconstruction	Reconstruction Activities, including:	Reconstruction Activities, including:				
	 Rubblization and overlay of concrete pavement 	Bridge replacement				
	 Full-depth replacement of asphalt pavement 	Bridge widening				
Construction	Construction Activities, including: • Highway widening	Construction Activities, including:New bridge construction				
	Highway realignments					
	New highway construction					
Maintenance	Maintenance Activities, including:	Maintenance Activities, including:				
	Shallow patching skin patching	Filling potholes in deck				
	Partial-depth patching	Minor structure repair				
	Repair concrete corner breaks	Major structure repair				
	Concrete joint repair	Cleaning structure				
	Other thin patching					



Table D-3: TDOT 10-Year Estimated Budget for Pavements by Work Type (Dollars in Millions) (Source: 2022 TAMP Table 7-3)

Year	Construction	Reconstruction	Rehabilitation	Preservation	Maintenance	Total
2023	N/A	N/A	\$27	\$221	\$26	\$274
2024	N/A	N/A	\$28	\$228	\$27	\$283
2025	N/A	N/A	\$29	\$234	\$28	\$291
2026	N/A	N/A	\$30	\$242	\$28	\$300
2027	N/A	N/A	\$31	\$249	\$29	\$309
2028	N/A	N/A	\$32	\$256	\$30	\$318
2029	N/A	N/A	\$33	\$263	\$31	\$327
2030	N/A	N/A	\$34	\$271	\$32	\$337
2031	N/A	N/A	\$35	\$279	\$33	\$347
2032	N/A	N/A	\$36	\$288	\$34	\$358
Total	N/A	N/A	\$315	\$2,531	\$298	\$3,144

Table D-4: TDOT 10-Year Estimated Bridge Management Budget by Work Type (Dollars in Millions) (Source: 2022 TAMP Table 7-3)

Year	Construction	Reconstruction	Rehabilitation	Preservation	Maintenance	Total
2023	N/A	\$100	\$45	\$8	\$4	\$157
2024	N/A	\$100	\$46	\$8	\$4	\$158
2025	N/A	\$102	\$46	\$8	\$4	\$160
2026	N/A	\$103	\$47	\$8	\$4	\$162
2027	N/A	\$104	\$47	\$8	\$5	\$164
2028	N/A	\$105	\$48	\$8	\$5	\$166
2029	N/A	\$106	\$48	\$8	\$5	\$167
2030	N/A	\$106	\$49	\$9	\$5	\$169
2031	N/A	\$108	\$49	\$9	\$5	\$171
2032	N/A	\$110	\$50	\$9	\$5	\$174
Total	\$N/A	\$1,044	\$475	\$83	\$48	\$1,648



Table D-2 Footnotes:

1) Table D-2: Crosswalk Between TDOT Treatment Types and FHWA Work Types is based on table 7-2 of the same name in the 2022 TAMP document. However, table D-2 was updated to include Scour Prevention and Scour Repairs which were inadvertently omitted from table 7-2 in the TAMP.