

March 15, 2024

Avery Frank Community Planner & PMA FHWA NM Division Office 4001 Office Court Drive, Suite 801 Santa Fe, New Mexico 87507 Submitted via email to: avery.frank@dot.gov

Mr. Tony Ogboli Community Planner FTA Region 6 819 Taylor Street, Room 8A36 Fort Worth, Texas 76102 Submitted via email to: tony.ogboli@dot.gov

Subject: NMDOT FFY2023/2024 Planning Work Program Amendment 6

Dear Ms. Avery and Mr. Ogboli:

The New Mexico Department of Transportation (NMDOT) is requesting approval of Amendment 6 to the FFY2023/2024 Planning Work Program (PWP). The amendments are listed on the attached log and spreadsheet and are entered into the eSTIP.

Your approval of this amendment is requested.

Sincerely,

Jessica Griffin, AICP Planning Division Director

Cc via email: Sean Sandoval John Tennyson Jolene Herrera Jerry Valdez Rosa Kozub Michelle Lujan Grisham Governor

Ricky Serna Cabinet Secretary

Commissioners

Jennifer Sandoval Commissioner, Vice-Chairman District 1

Bruce Ellis Commissioner District 2

Hilma E. Chynoweth Commissioner District 3

Walter G. Adams Commissioner, Chairman District 4

Thomas C. Taylor Commissioner District 5

Charles Lundstrom Commissioner, Secretary District 6

FFY2023_2024 Planning Work Program Amendment Log Amendment 6 / FFY2024 Quarter 2 (Submitted to FHWA 3/15/2024)

Amend No.	Part, Chapter Task (I.1.1)CN 			FFY	Description of Change	Type (Administrative, Formal or Transfer)				
6	2.13	TPF- 5(440)	\$25,000 / \$0	2024	Support for Urban Mobility Analysis Delete TPF-5(440) from FFY24 program. NMDOT is electing to stop participation in this pooled fund study as it is not relevant or beneficial to the work of the Planning Division. Project Manager: Joseph Moriarty	Formal				
6	5	P924100	\$600,000 / \$351,709	2024	IT Migration to ArcPRO (on-premise servers) Project Description/Purpose: Decreasing project by \$248,291 and moving the balance to P924101. Both projects are related to the transition of the NMDOT's GIS system from the current system (which expires March 2024) to ArcPRO. P924100 entails contracting with Esri to implement the ArcPro architecture plan which includes the purchase of and establishment of on-premise servers to host ArcPro. This project is essential to meeting federal requirements, including the operation of the STIP and other NMDOT databases. Included in this project is establishment of a separate server to host the Roadway Inventory System (RIS) which is the system of record for HPMS and other federally mandated work products. Project Goals: set up on-premise servers to host ArcPro, including one server to host the RIS, by end of 2024. Project Amount FFY24: \$351,709 Project Number: P924100 Project Manager: Jeff Woodman, NMDOT IT	Formal				

6	3	P924101	\$0 / \$385,000	2024	Roadway Inventory System Migration to ArcPro and MIRE	Formal
					Add a new project: This is the second project associated with migration of the NMDOT Roads and Highways data to Esri ArcPro database and also includes Model Inventory of Roadway Elements (MIRE) data to Roads and Highways.	
					Project Description/Purpose: This project will migrate existing Roads and Highways data from a legacy system to Esri's ArcPro system. It will change existing data schemas to match HPMS v.9 requirements. Project will also include new federally-mandated MIRE data. On August 7, 2012, FHWA issued a requirement for States to provide an extensive coverage of a Geospatial Network of all highways in their State. This became known as the <u>All Roads</u> <u>Network of Linear Reference Data</u> (<u>ARNOLD</u>). The spirit behind Arnold came from the National States Geographic Information Council (NSGIC) through the Transportation for the Nation (TFTN) initiative. It has long been recognized that a complete highway network was lacking in the US. The Strategic Plan that was created from TFTN identified the Highway Performance Monitoring System (HPMS) as the current best hope to accomplish a successful development of the initiative.	
					 What are the specific requirements this network supports? 1. OMB Circular A-16 identifies the USDOT as the stoward of the s	
					 USDOT as the steward of the FGDC Transportation Data Theme. 2. USDOT passed this stewardship to the FHWA. 3. FHWA requires a complete inventory of all bridges in the US <u>NBI.</u> 	

4. FHWA requires data to support
Highway Safety for all public
roads as part of the Highway
Safety improvement Program
(HSIP). This includes a Basemap
for the purpose of geolocating all
public roads. <u>MAP-21</u>
5. General Accounting Office (GAO)
identified <u>GAO</u>
Report inefficiencies from
maintaining several networks at
the federal and local level.
6. Public road mileage data which is
reported to the Federal Highway
Administration (FHWA) on an
annual basis by State governors
or their designees per <u>23 CFR</u>
<u>460.</u>
7. This network supports Safety
Data Analysis, the Crash
Modification Factor
Clearinghouse, the Roadway
Safety Data Program, the
Highway Safety Manual, the
Model Inventory of Roadway
Elements (MIRE) and MIRE FDEs,
the Systemic approach to safety,
Road Safety Audits, and other
Systems.
Most importantly, this database supports
NMDOT's obligation to meet FHWA's
annual requirement for submitting the
Highway Performance Monitoring System
(HPMS). The requirements outlined in the HPMS Field Manual are authorized under
23 U.S.C. 315, which places the
responsibility on the Secretary of
Transportation for management decisions
which affect transportation. In addition,
23 CFR 1.5 provides the Federal Highway
Administrator with authority to request
such information deemed necessary to
administer the Federal-aid highway
program. A biennial estimate of the
future highway investment needs of the
Nation is mandated by Congress (23 U.S.C
502(g)). HPMS data are used for assessing

					highway system performance under FHWA's strategic planning and performance reporting process in accordance with requirements of the	
					Government Performance and Results Act (GPRA, Sections 3 and 4) and for apportioning Federal-aid highway funds under TEA-21, (23 U.S.C. 104). Finally, 23 CFR 420.105(b) requires States to provide data that support FHWA's responsibilities to the Congress and the public. In short, without this database upgrade, which again is necessary due to the depreciation of the ArcMAP software, the	
					 NMDOT will be unable to fulfill the requirements as stated above and could result in withholding of all federal funds due to the NMDOT by FHWA. Project Goals: Migrate existing Data in Roads and Highways from ArcMap to ArcMap 	
					 ArcPRO. Create Schemas and add MIRE data from 2024 Lidar collection to Roads and Highways database in ArcPro to meet MIRE FDE requirements due September 26, 2026. 	
					 Schema Changes to meet Highway Performance Monitoring System 9 requirements. Schedule is dependent upon FHWA approval of Amendment 6 and obligation of P924100 and completion of the architecture plan outlined in P924100. 	
					Project Amount FFY24: \$385,000 Project Number: P924101 Project Manager: John Baker	
6	4.3	R924040	\$100,000 / \$0	2024	Deleting project as FHWA-NM rejected the obligation request and deemed the project ineligible.	Formal
6	4.3	R924020	\$75,000 / \$60,000	2024	Culvert Resistance Number (CRN) Methods vs. Natural Resource Conservation Services (NRCS) Methods Amend current project to decrease total amount by \$15,000 as the proposal	Formal

					selected by the Project Sponsor, NMDOT	
					Drainage Design Bureau, is a lower cost	
					than the original project budget.	
6	4.3	R924050	\$350,000 / \$400,000	2024	Aggregate Alkali-Silica-Reactivity and Mitigative Measures Administratively amended project to	Administrative
					increase total amount by \$50,000 as the Project Sponsor, NMDOT Materials	
					Bureau, decided to include additional laboratory testing of aggregates, AASHTO T380 - Micro Concrete Prism Test (MCPT),	
					in the Scope of Work and compare the results with those from ASTM C1260 and 1293.	
6	4.3	R924090	\$250,000 / \$330,000	2024	Replace "Resilient Pavement Framework for NM DOT" with "Advancing High RAP Asphalt Mixtures toward Pavement Sustainability and Net Zero Carbon Emissions" as NMDOT decided to evaluate and quantify carbon reduction benefits using innovative construction materials.	Formal
					Project Description: Advance high reclaimed asphalt pavement (RAP) asphalt mixtures toward pavement sustainability and net zero carbon emissions in New Mexico.	
					 Project Goals: Develop mix design strategies to improve the long-term pavement performance and life span of high RAP asphalt mixtures. Determine the multi-cycle recyclability of high RAP asphalt mixtures. Quantify the economic and environmental benefits of high RAP asphalt mixtures through life-cost cycle cost analysis and life-cycle 	
					Project Amount FFY24: \$330,000 Project Number: R924090 Project Manager: Angelo Armijo	
6	4.3	TPF- 5(486)	0 / \$150,000	2024	Participate in Transportation Pooled Fund Study, "Center for the Aging Infrastructure: Steel Bridge Research,	Transfer

					Inspection, Training and Education Engineering Center- SBRITE (Continuation)," which is a continuation of TPF-5 (281). Vincent Dorzweilier, NMDOT Bridge Engineer, is the POC.	
6	Attachment / Mesilla Valley MPO FFY 2023- 2024 UPWP	P123040	No change to PL amount	2024	MVMPO proposes to amend the FFY2024 PL Budget to reflect new funding levels per FFY24 Notice to Proceed (NTP), Total FFY24 Programmed amount \$442,246 (\$369,213 PL, \$62,918 PL Match, \$10,115 PL-SATO).	Formal
6	Attachment /Farmington MPO 2023- 2024 UPWP	P523060	No Change to PL Amount	2024	FMPO proposes to carry-forward \$74,791 from their FFY2023 PL budget to FFY 2024 budget.	Formal
6	Attachment / Santa Fe MPO 2023- 2024 UPWP	P523070	No Change to PL Amount	2024	Santa Fe MPO: Carry Forward \$7,757, 2% of total budget, 10% of task to reflect new funding levels per FFY2024 NTP.	Administrative
6	Attachment C / MRRTPO FFY23-24 RWP	P323030 (SPR)	No change to SPR amount	2024	MRRTPO proposes to carry-forward \$3,214.54 from their FFY23 SPR budget to their FFY24 budget. The budget total was revised from \$112,500 to \$115,714.54 (+2.86% change)	Administrative

NMDOT 2023/2024 Planning Work Program

BUDGET TABLE 4 - FFY2024 SPR-A FUNDING SUMMARY

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Control #	Project Name (Budget Code)	Category	Project Manager	TOTAL Original P Amount	roject Amendment 2	Amendment 3	Amendment 4			Current Total Project Amounts As Amended	SPR Federal Portion (80%)	SPR State Match (20%)	SPR RTPO/MPO Match (20%)
23020	Safe and Accessible Options Setaside (100% federal/funding code Y570)	300	Rosa Kozub	\$ 253	260					\$ 253,269	\$ 253,269	1	
	· · · · · · · · · · · · · · · · · · ·												
4000	Planning Division Annual Operations	400	Jessica Griffin	\$ 250						\$ 250,000	\$ 200,000	\$ 50,000	
4010	Planning Division Travel & Training	400	Jessica Griffin	\$ 250	,000					\$ 250,000	\$ 200,000	\$ 50,000	
												1	
24020	Planning On-call Contract (RFP in 2024)	300	Rosa Kozub	\$ 500	,000					\$ 500,000	\$ 400,000	\$ 100,000	
	On-call contract for area (Tribal, local,											1	
23030-	regional or District-level) transportation		1 1	1								1	
24060	plans	300	Rosa Kozub	\$	- \$ 500,000					\$ 500,000	\$ 400,000	\$ 100,000	
	New Mexico State Travel Demand Model											1	
4030	Incremental Update - COVID	400	David Nelson	\$ 240	,000	\$ (240,000)				\$-			
												1	
	Travel Demand Model Software License		1 1	1								1	
24050	Maintenance for calendar year 2024	400	David Nelson	\$	- \$ 8,000)				\$ 8,000	\$ 6,400	\$ 1,600	
	PTV/Visum Travel Demand Model		[]										
4080	Training and Support	300	David Nelson	\$	-	\$ 58,000				\$ 58,000	\$ 46,400	\$ 11,600	
	Traffic Monitoring Program: Data												
2201	Collection	300	Mark Rios	\$ 800	,000	\$ (800,000)				\$-	s -	\$-	
	Video/AI Traffic Monitoring/Counting												
4070	Program	400	Mark Rios	\$	-	\$ 800,000				\$ 800,000	\$ 640,000	\$ 160,000	
	Traffic Monitoring Program: Traffic Data												
3050	Reporting (MS2)	400	Mark Rios	\$ 165	,000			\$ 2,428		\$ 167,428	\$ 133,942	\$ 33,486	
	Traffic Monitoring Program: Continuous						1			. ,.=•			
	Traffic Count Network (Maintenance &												
3100	Expansion)	400	Mark Rios	\$ 600	.000					\$ 600,000	\$ 480,000	\$ 120,000	
	Information Technology Support Services		ł – – ,				1						
3090	(ArcGIS licenses)	400	Jeff Woodman	\$ 538	.878					\$ 538,878	\$ 431,102	\$ 107,776	
2060	Pavement/Asset Data Collection	300	Hashem Faidi	\$ 1,000						\$ 1,000,000	\$ 800,000		
2060	Maintenance & Software for oSTIP	400		\$ 1,000	- \$ 327.564					\$ 327,564	\$ 262,051		
-5(440)	Support for Linkon Makility Analysis	A00 NA	Joseph Moriarty	•		•			e (25.000)	\$ 327,304	\$ 262,051	\$ 65,573	
	Support for Urban Mobility Analysis AASHTO PM 3 Tools	400							\$ (25,000)	\$ 42,700	\$ 25,000	U	
4040	UNM UTC Match	300	Rosa Kozub	\$ 21	,700 \$ 15,000		\$ 600,000			\$ 600,000		ļ	
4090		300	Shannon vigi	Þ	-	-	\$ 600,000			\$ 600,000	\$ 600,000	ļ	
	IT Migration to ArcPRO (on-premise servers)	400	1-ff 1M day an				• • • • • • • • • • • • • • • • • • • •		e (040.004)	A 054 700			
4100	6611616)	400	Jeff Woodman	>	-	-	\$ 600,000		\$ (248,291)	\$ 351,709	\$ 281,367	\$ 70,342	
	Roadway Inventory System Migration to	400										1	
4101	ArcPRO	400	John Baker	\$	-		-		\$ 385,000	\$ 385,000		Ļ/	
	Renew Esri Advantage agreement for Data		1	1								1	
3120	Governance Plan	300	John Baker					\$ 41,436		\$ 41,436	\$ 33,149	\$ 8,287	
			Robert Kuipers									1	
	NWRTPO Trail of the Ancient Spirits		NWRTPO; Neala									1	
4000	Byway Corridor Mgmt Plan	300	Krueger NMDOT	\$ 125	,000					\$ 125,000	\$ 100,000	'	\$ 25,000
			Nathan Masek									1	
	MRCOG Traffic Monitoring & Counts		MRCOG; Neala									1	
3010	Program	300	Krueger NMDOT	\$ 430	,000					\$ 430,000	\$ 344,000		\$ 86,000
			Tara Cok MRCOG;										
	MRMPO Non-Motorized Counts Program		Shannon Glendenning										
3020	Expansion Study	300	NMDOT	\$		\$ 150,000				\$ 150,000	\$ 120,000		\$ 30,000
	SFMPO Multimodal Intersection Efficiency		Erick Aune SFMPO;										
3080	and Safety Analysis	300	Neala Krueger NMDOT	\$		\$ 45,114				\$ 45,114	\$ 36,091		\$ 9,023
	EPMPO International TDM (i-TDM) and												
	2050 TDM (2022 Base Year) Updates;												
	Amendment 5 - adjusting amount to be												
	100% federal with match of \$109,000 from		Eduardo Calvo,										
	Road Fund for a total project amount of		EPMPO; Valerie										
4010	\$545,000.	300	Sherman, NMDOT	\$			\$ 436,000			\$ 436,000	\$ 436,000		\$ -
			Hannah Burnham										
	SFMPO Continuation of Ped Facility		SFMPO; Neala										
4010	Improvement Program	300	Krueger, NMDOT	\$	-		\$ 80,000			\$ 80,000	\$ 64,000		\$ 16,000
3000	Eastern Plains RWP	300	vacant	\$ 112	500		20,000			\$ 112.500	\$ 90,000		\$ 22,500
										φ 112,000			
3030	Mid-Region RTPO RWP	300	Neala Krueger	\$ 112						\$ 112,500	\$ 90,000		\$ 22,500
3000	Northeast RTPO (NCNMEDD) RWP	300	vacant	\$ 112	,500					\$ 112,500	\$ 90,000		\$ 22,500
3040	Northern Pueblos RTPO RWP	300	vacant	\$ 112	,500					\$ 112,500	\$ 90,000		\$ 22,500
3050	Northwest RTPO RWP	300	Neala Krueger	\$ 112						\$ 112.500	\$ 90,000		\$ 22,500
	South Central RTPO RWP	300	ý	\$ 112						\$ 112,500			
	South Gential KIPU KWP	300	vacant			-	-				\$ 90,000		\$ 22,500
3020	Southwest RTPO RWP	300	vacant	\$ 112						\$ 112,500	\$ 90,000		\$ 22,500
23000 23020 23010	Southwest RTPO RWP Southeast RTPO RWP	300 300	vacant vacant		,500 ,500					\$ 112,500 \$ 112,500	\$ 90,000 \$ 90,000		\$ 22,500 \$ 22,500

BUDGET TABLE 5 - FFY2024 PL FUNDING SUMMARY

										PL-SATO Current Tota							
									L Current Total		Project						
Control #	Project Name	Project Manager	PL Total	ы	-SATO Total		nend 4 _ only)	Pro	ject Amounts As Amended	Amounts As Amended						PL-SATO (100%	
Control #	Project Name	Project Mallager	PLIOLAI	FL	-SATU TOLAT				Amenueu	4	Amended		(85.44%)	(14.56%)		Federal)	
P123030	El Paso MPO UPWP	Valerie Sherman	\$ 76,568	\$	1,963	\$	12,261	\$	88,829	\$	1,963	\$	75,895	\$	12,934	\$	1,963
P523060	Farmington MPO UPWP	Shannon Glendenning	\$ 253,206	\$	6,492	\$	20,382	\$	273,588	\$	6,492	\$	233,754	\$	39,834	\$	6,492
P123040	Mesilla Valley MPO UPWP	Valerie Sherman	\$ 394,491	\$	10,115	\$	37,640	\$	432,131	\$	10,115	\$	369,213	\$	62,918	\$	10,115
P323000	Mid-Region MPO UPWP	Sullivan Moore	\$ 1,164,725	\$	29,865	\$ 1	98,337	\$	1,363,062	\$	29,865	\$	1,164,600	\$	198,462	\$	29,865
P523070	Santa Fe MPO UPWP	Shannon Glendenning	\$ 335,390	\$	8,600	\$	27,964	\$	363,354	\$	8,600	\$	310,450	\$	52,904	\$	8,600
	TOTALS		\$ 2,224,380	\$	57,035			\$	2,520,964	\$	57,035	\$	2,153,912	\$	367,052	\$	57,035

NMDOT 2023/2024 Planning Work Program

BUDGET TABLE 6 - FFY2024 SPR-B (Research) FUNDING SUMMARY

Control #	Project Name	Category	Project Manager	L Original t Amount	Amendmen	3	Amendment 4	Amendment !		Amendment	6 Amendment 7	Project	nt Total t Amounts ended		SPR Federal Portion (80%)		te Match
R924000	Research Salaries (200)	200	Research Bureau Chief	\$ 600,000								s	600,000	s	480.000	s	120.000
			Research Bureau Chief													-	
R924010	Research Operational	400	Chief	\$ 600,000	\$ (40)	,000)						\$	200,000	\$	160,000	\$	40,000
R924020	Comparing Resistivity and Conductivity in Metal Culverts	300	Management Analyst	\$ -	\$ 75	,000				\$ (15,00)	\$	60,000	\$	48,000	\$	12,000
R924030	Methodology to Estimate Pedestrian Demand	300	Management Analyst	\$ -	\$ 100	,000,	\$ (100,000)					\$		\$	-	\$	-
R924040	Patrol Yard Renovation Upgrades	300	Richard Chavez		\$ 100	,000				\$ (100,00	0)	\$		\$	-	\$	-
R924050	Aggregate Alkali-Silica-Reactivity and Mitigative Measures	300	Management Analyst		\$ 350	,000,				\$ 50,00	0	s	400,000	\$	320,000	\$	80,000
R924060	Zuni Bowl and One Rock Check Dam Hydraulic Testing	300	Shannon Vigil		\$ 150	,000,	\$ (115,000)					\$	35,000	\$	28,000	\$	7,000
R924070	Unmanned Aerial Vehicles	300	Management Analyst		\$ 390	,000,						\$	390,000	\$	312,000	\$	78,000
R924080	Synthesis of 10-Year NMDOT UHPC Research (NMSU)	300	Management Analyst				\$ 50,000					s	50,000	\$	40.000	s	10.000
	Resilient Pavement Framework for NMDOT Advancing High RAP Asphalt Mixtures toward																
R924090	Pavement Sustainability and Net Zero Carbon Emissions	300	Management Analyst Research Bureau	 			\$ 250,000			\$ 80,00	0	\$	330,000	\$	264,000	\$	66,000
R924100	NMDOT Research Peer Exchange	300	Chief				\$ 230,000					\$	230,000		184,000	\$	46,000
TPF5(451)	Road Usage Charging Consortium (RUC West) - 2023-2025	TXFR	Joseph de la Rosa	\$ 25,000								\$	25,000	\$	25,000		
TPF5(445)	Design Guidelines and Mitigation Strategies for Reducing Sedimentation of Multi-Barrel Culverts	TXFR	Steve Morgenstern	\$ 1.1	\$ 2!	,000,						\$	25,000	\$	25,000		
TPF5(464)	Hydrologic and Hydraulic Sfotware Enhancements (SMS, WMS, Hydraulic Toolbox and HY-8)	TXFR	Steve Morgenstern		\$ 10	,000,						\$	10,000	\$	10,000		
TPF5(465)	Consortium for Asphalt Pavement Research and Implementation (CAPRI)	TXFR	Research Bureau Chief		\$ 10	,000,						\$	10,000	\$	10,000		
TPF5(501)	Roadside Safety for MASH Implementation	TXFR	Brad Julian		\$ 65	,000						\$	65,000		65,000		
TPF5(520)	Improving Traffic Detection Through New Innovative i-LST Technology Demonstration Pilot	TXFR	Mark Rios				\$ 30,000					\$	30,000				
TPF5(518)	Pavement Structural Evaluation with Traffic Speed Deflection Devices (TSDDs)	TXFR	Hashem Faidi				\$ 30,000					\$	30,000				
TPF5(526)	Western Transportation Research Consortium	TXFR	Randy Trujillo				\$ 45,000					\$	45,000				
R924110	AASHTO Census Transportation Solutions (ACTS) Technical Service Program (100% federal)		Rosa Kozub					\$ 5	56,430			\$	56,430				
TPF-5(486)	Center for Aging Infrastructure: Steel Bridge Research, Inspection, Training and Education Engineering Center - SBRITE (Continuation of TPF-5(281) funded in 2021)		Vincent Dorzweilier							\$ 150,00	0	\$	150,000				
N/A	TRB Annual Dues - 100% Federally Participating	TXFR	Research Bureau Chief	\$ 120,000	\$ 10	,000,						\$	130,000	\$	130,000	\$	-
	Setaside for Transportation Pooled Fund Studies	TXFR	Research Bureau Chief	\$ 100,000								\$	100,000	\$	100,000		
	TOTALS			\$ 1.345.000				\$ 5	56.430	\$ 165.00) s -	\$	2.971.430	\$	2.201.000	\$	459.000