I-95 Accessibility Improvements Minimizing Heavy-Truck Impacts Project (I-95 AIM HI) Maine Department of Transportation

U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) FY 2024 Bridge Investment Program (BIP) Grant Opportunity March 2024

PROJECT BUDGET GRANT FUNDS, SOURCES, AND USES OF ALL PROJECT FUNDING

detailed Project budget by bridges included ir	the application	n:	
		Other	

The Project is considered a BIP Bridge Project. The overall cost breakdown is below with a

Costs	BIP	Other Federal	MaineDOT	Totals					
Previously Incurred Preliminary Engineering (PE)	\$0	\$800,000	\$388,341	\$1,188,341					
Previously Incurred Right-of-Way (ROW)	\$0	\$0	\$80	\$80					
Preliminary Engineering	\$2,000,000	\$0	\$500,000	\$2,500,000					
Right-of-Way (ROW)	\$60,000	\$0	\$15,000	\$75,000					
Construction (CON) & Construction Engineering (CE) - Includes 3% inflation	\$58,782,151	\$0	\$14,695,538	\$73,477,689					
Contingency - 15%	\$8,817,323	\$0	\$2,204,331	\$11,021,653					
Totals	\$69,659,474	\$0	\$17,414,868	\$87,074,342					
Percentage of Project Totals (participating)	80%	0%	20%	100%					
MaineDOT match is 20% previously incurred costs are an additional 1.3% of total project costs									

MaineDOT has the non-Federal match funding available. A funding commitment letter accompanies the application. Project match funding will be sourced from State Funds. No Project funding is contingent upon satisfying a condition or available for expenditure only during a fixed period. None of the funds are subject to Federal limits. The budget is segmented into *Grand Total Budget* as well as *Project Budget* components. Both versions of the budgets do not exceed the Federal cost share requirements. The *Project Budget* includes all eligible costs for the grant request. It excludes previously incurred costs. It consists of Project Engineering (PE), Right-of-Way (ROW), Construction (CON), Construction Engineering (CE), a 15-percent contingency factor, and a 3-percent inflation factor (over five years). The budget is broken down by bridge and illustrates the 10-percent savings advantage of bridge bundling on construction and construction engineering costs, respectively.

Contingency

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Consistent with all Federal transportation grant funding MaineDOT applies for, the Department has budgeted a 15 percent contingency amount to cover unanticipated cost increases. If any cost overruns develop above the contingency amount, MaineDOT will fund that increase with 80 percent Formula Funds and 20 percent match funds. The Department carefully monitors national

and global inflation factors and is aware of the potential for labor and materials cost increases with infrastructure projects.

Inflation Adjustment

A three percent annual inflation adjustment is factored into the CON and CE portion of the budget.

Previously-incurred Costs

Previously incurred expenses as of March 2024 are \$1,188,421 and cover initial PE and ROW review as well for continued funding for the design-build package prior to grant obligation. They are included in the *Grand Total Budget* but not in the *Project Budget*.

Maintenance Commitment

MaineDOT is committed to maintaining the new bridges, utilizing the same team of maintenance crews that cover all area bridges. Maintenance funding will be sourced from state funds.

Maintenance costs projected for the years preceding project completion were included in the first year of the analysis period to encompass the entirety of expected maintenance costs in the project area. The previous three years of maintenance costs for all bridges totaled \$62,582.37. This cost includes maintenance, annual cleaning, and a bi-annual NBI bridge inspection. This figure does not include emergency repairs resulting from excess-height vehicles striking the bridges. As the bridges continue to age, maintenance tasks will shift from minor work to more frequent and expensive work, including emergency structural deck repair. Funding for such work comes from state sources; Federal dollars are utilized for bridge inspection activity.

Discretionary Funding Need

MaineDOT is unable to fund the Project without Federal grant funding assistance. The Department works diligently to improve roads and bridges, but discretionary funding is a critical component of its comprehensive plan. According to the American Road and Transportation Builder's Association (ARTBA), which analyzed and ranked 2023 Federal Highway Administration (FHWA) National Bridge Inventory (NBI) data, Maine ranks fifth nationally for the number of structurally deficient bridges as a percentage of the state's bridge inventory.¹ The ARTBA data concluded that of the state's 2,521 bridges, 372, or 14.8 percent, are currently classified as structurally deficient. This is up from 314 bridges in 2019. The state has identified required repair or replacement of 392 bridges compared to 335 bridges needing work in 2019.

The population of Mainers age 65 and older is expected to increase 36 percent between 2020 and 2030 as baby boomers age and older individuals move to the state following retirement.² As older individuals begin to drive less or reach an age where driving is no longer practical, the opportunity to grow gas tax receipts will continue to challenge state lawmakers. More fuel-efficient vehicles and EVs supported by the state's impressive expansion of electric vehicle infrastructure also reduces tax receipts available to fund road and bridge improvements. Under Infrastructure Investment and Jobs Act (IIJA) formula funding, Maine can expect to receive \$1.3 billion for federal-aid highway apportioned programs as well as \$225 million for bridge

¹ https://artbabridgereport.org/state/ranking

² https://www.maine.gov/dafs/economist/sites/maine.gov.dafs.economist/files/inline-files/Maine%20Population%20Outlook%20to%202026.pdf, page 2

replacement and repairs over five years.³ While a needed increase in Federal funding, this funding is unable to cover the state's growing bridge needs.

However, MaineDOT Commissioner Bruce Van Note sees cautious optimism ahead, stating: "...we soon may be able to transition from 'MacGyver' mode—which is MaineDOT's general approach, born of fiscal necessity, of doing the best we can with what we have—toward a more proactive approach." The IIJA provides formula funding "...that MaineDOT can rely on to build the basic elements of its Work Plan. The increase in formula funding—although significant (28 percent)—will be largely offset by construction cost inflation fueled by tight labor and material markets."

Discretionary funding will help MaineDOT insulate the state from this effect and improve bridge conditions throughout the state.

Bridge Bundling

MaineDOT will be delivering these projects using an inclusive Design-Build approach. Delivery will be based on the principles of the 2019 Bridge Bundling Guidebook, emphasizing construction efficiencies, economies of scale and time savings. Phasing will enable effective use of local construction contractors and minimize multiple traffic disruptions. According to EDC-5, bundling can be expected to result in approximately ten percent savings in construction cost and up to 50 percent efficiency in preliminary design efforts. Bundling the bridges in this Project provides a cost savings of approximately \$9,388,816.

Website

MaineDOT maintains a website used to post submitted grant applications and supporting information. The web page is organized by grant program. This application will be posted at the following wed address. https://www.maine.gov/mdot/grants/bip/

³ <u>https://www.whitehouse.gov/wp-content/uploads/2023/10/Maine-Fact-Sheet.pdf</u>

Funding Source by Component in Dollars - Project Budget & Grand Total Budget elements

	Previously Incurred Project Engineering: factored into Grand Total Budget but not into Project Budget	Previously Incurred Right-of-Way: factored into Grand : Total Budget but not into Project Budget	Project Engineering	Right-of-Way	Trafton Road Bridge (#5 3% Inflation (812) - Construction, CE, Dver 5 years)	Town Farm Road Bridge CE, 3% Inflation	(#5785) - Construction, (Over 5 years)	Drummond Road Bridge (#5 CE, 3% Inflation (O	i784) - Construction, ver 5 years)	yons Road Bridges NB (Construction, CE, 3% In Total reflects equal cos	#5783) & SB (#1463) - flation (Over 5 years) ts for both structures	Dinsmore Road Bridge (CE, 3% Inflation	#5782) - Construction, (Over 5 years)	15% Contir	ngency	Grand Total Budget : includes Previously Incurred Expenses as well as Eligible Project Costs Unbundled	Grand Total Budget : includes Previously Incurred Expenses as well as Eligible Project Costs; includes 10% discount for Bridge Bundling	Project Budget: includes all Eligible Costs for Grant Request Unbundled	Project Budget: includes all Eligible Costs for Grant Request <i>includes</i> 10% discount for Bridge Bundling
Funding Source			Funding Amount	Funding Amount	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Funding Amount	Funding Amount	Funding Amount	Funding Amount
BIP Funds:	: \$ -	\$-	\$ 2,000,000	\$ 60,000	\$ 17,143,345	\$ 15,429,011	\$ 10,651,410	\$ 9,586,269	\$ 8,796,572 \$	7,916,915	18,070,764	\$ 16,263,688	\$ 10,651,410	\$ 9,586,269	\$ 9,797,025	8,817,323	\$ 77,170,527	\$ 69,659,474	\$ 77,170,527	\$ 69,659,474
Other Federal Funds:	: \$ 800,000	\$-	\$-	\$ -	\$-	\$-	\$-	\$ -	\$ - \$	- 5	-	\$ -	\$-	\$-	\$-\$	-	\$ 800,000	\$ 800,000	\$-	\$ -
Non-Federal Funds:	: \$ 388,341	\$ 80	\$ 500,000	\$ 15,000	\$ 4,285,836	\$ 3,857,253	\$ 2,662,853	\$ 2,396,567	\$ 2,199,143 \$	1,979,229 \$	4,517,691	\$ 4,065,922	\$ 2,662,853	\$ 2,396,567	\$ 2,449,256	2,204,331	\$ 19,681,053	\$ 17,803,289	\$ 19,292,632	\$ 17,414,868
Total Costs:	: \$ 1,188,421	\$ 80	\$ 2,500,000	\$ 75,000	\$ 21,429,181	\$ 19,286,263	\$ 13,314,263	\$ 11,982,836	\$ 10,995,715 \$	9,896,143 \$	22,588,455	\$ 20,329,610	\$ 13,314,263	\$ 11,982,836	\$ 12,246,282	11,021,653	\$ 97,651,579	\$ 88,262,763	\$ 96,463,158	\$ 87,074,342

Funding Source by Component in Percentages - used for Match Funding Request

	Project Engineering	Right-of-Way	Trafton Road Bridge	Town Farm Road Bridge	Drummond Road Bridge	Lyons Road Bridge NB and SB	Dinsmore Road Bridge	15% Contingency	Percent of Project Budget - Used for Match Funding Request
Funding Source	Percentage Amount	Percentage Amount	Percentage Amount	Percentage Amount	Percentage Amount	Percentage Amount	Percentage Amount	Percentage Amount	Percentage Amount
BIP Funds:	2.3%	0.1%	17.7%	11.0%	9.1%	18.7%	11.0%	10.1%	80%
Other Federal Funds:	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%
Non-Federal Funds	0.6%	0.0%	4.4%	2.8%	2.3%	4.7%	2.8%	2.5%	20%
								Total Percentage	100%

Percent of Project Budget

	Project Engineering	Right-of-Way	Trafton Road Bridge	Town Farm Road Bridge	Drummond Road Bridge	Lyons Road Bridge NB and SB	Dinsmore Road Bridge	15% Contingency	Percent of Project Budget - Used for Match Funding Reques
Total:	2.9%	0.1%	22.1%	13.8%	11.4%	23.3%	13.8%	12.7%	100%

Previously Incurred Costs (PE & ROW) - Factored into Grand Total Budget, but not Project Budget

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	Trafton Road Bridge	Town Farm Road Bridge	Drummond Road Bridge	Lyons Road Bridges	Dinsmore Road Bridge
MaineDOT:	\$ 323,388	\$ 209,539	\$ 212,335	\$ 219,434	\$ 223,725

BIP REQUEST \$ 69,659,474