I-395 Bridge Bundle Improvement Project

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

The Project is considered a BIP Bridge Project. The overall cost breakdown is below with a detailed Project budget by bridges included on page 4:

Costs		BIP		Other Federal	MaineDOT	Totals		
Previously Incurred Preliminary Engineering (PE)	\$	-	\$	900,000	\$ 605,049	\$	1,505,049	
Previously Incurred Right-of-Way (ROW)	\$	-	\$	-	\$ 1,005	\$	1,005	
Preliminary Engineering	\$	3,756,000	\$	-	\$ 939,000	\$	4,695,000	
Right-of-Way (ROW)	\$	295,200	\$	-	\$ 73,800	\$	369,000	
Construction (CON) & Construction Engineering								
(CE) - Includes 3% inflation	\$	51,274,229	\$	-	\$ 12,818,557	\$	64,092,786	
Contingency - 15%	\$	7,691,134	\$	-	\$ 1,922,784	\$	9,613,918	
Totals	\$	63,016,563	\$	-	\$ 15,754,141	\$	78,770,704	
Percentage of Project Totals (participating)		80%		0%	20%		100%	

- 1) Non-Federal Match funding includes 20 percent state funding committed by MaineDOT. A funding commitment letter accompanies the application. Project match funding will be sourced from State Funds.
- 2) Previously incurred expenses as of February 2024 total \$1,505,049 spent on initial preliminary engineering costs as part of the 2015 I-395 Bridge Bundle study as well as preliminary engineering, Right-of-Way, Construction, and Construction Engineering costs from the 2017 attempt at substructure rehabilitation of Bridge #1558. Additional incurred costs will be associated with the development of the design-build package prior to grant obligation.
- 3) Total project cost of \$78,770,704 has a projected benefit of \$1,526,000,000 over the 34-year analysis period.

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. Future PE/ROW costs will be covered fully by non-Federal funding. A detailed budget that is broken down by bridge and illustrates the 10-percent savings advantage of bridge bundling on construction and construction engineering costs, respectively is included as a Budget Narrative attachment.

Contingency

As with all previous Federal grants MaineDOT has applied for, the Department has included sufficient contingency in the budget to cover unexpected costs or cost increases. MaineDOT closely monitors inflation in the construction sector and stays up to date on labor and material cost increases, leading to a three percent annual inflation rate applied to future construction and construction engineering project costs. Any costs overruns above the contingency amount will be funded with other federal formula funds at an 80/20 ratio with state matching funds.

Inflation Adjustment

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

Previously-incurred Costs

Previously incurred expenses as of March 2024 are \$1,505,049 spent on initial preliminary engineering costs as part of the 2015 I-395 Bridge Bundle study as well as preliminary engineering, Right-of-Way, Construction, and Construction Engineering costs from the 2017 attempt at substructure rehabilitation of Bridge #1558. Additional incurred costs will be **Maintenance Commitment**tent of the design-build package prior to grant obligation.

Maine's Governor's budget includes \$185.2 million in State Fiscal Year 2023, \$204.3 million in State Fiscal Year 2024, and \$207.3 million in State Fiscal Year 2025 for operating and maintaining Maine's transportation system. State funds are included in the State of Maine's current biennial transportation budget for State Fiscal Years 2022 and 2023 and the biennial transportation budget for State Fiscal Years 2022 and 2023. This funding formula is consistent with past and current efforts and is anticipated to continue into the future.

Discretionary Funding Need

The Department is working to mitigate the ASR damage on the six bundled bridges within the next three years, in which time it is likely that the bridges will move from Fair to Poor Condition. There is a great need for discretionary funding, which is described in MaineDOT's long range plan. 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

¹ <u>https://artbabridgereport.org/state/ranking</u>

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

opportunity to grow gas tax receipts will continue to challenge state lawmakers. More fuelefficient 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 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 principals 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 10 percent savings in construction cost and up to 50 percent efficiency in preliminary design efforts. Bundling the bridges in this project provides cost savings of approximately \$10 million.

Website

MaineDOT posts submitted grant applications and supporting information to <u>https://www.maine.gov/mdot/grants/</u> The webpage is organized by grant program.

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

Detailed Project Budget By Bridge:

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	Right-of-Way:		Future Right-of- Way: factored into Grand Total Future Eligible Budget not receiving Federal funds	559 (I-395 over MCRR)	- (Construction & CE)	1560 (Brewer Industr (Constructic		1562 (Brewer Parkway & C		1563 (Greenpoint Road)- ((Construction & CE)	5799 (Maine Street) -	(Construction & CE)	1558 (Veterans' Rem (Construction		15% Contingency on	n Construction/CE	Grand Total Budget : includes Previously Incurred Expenses as well as Project Budget; Unbundled	Characteristics of the second	Grand Total Future Eligible irant Budget: includes Future PE and ROW not Previously Incurred; includes 10% discount for Bridge Bundling
Funding Source					Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Unbundled	Bundled	Funding Amount	Funding Amount	Funding Amount
BIP Funds:	\$-	\$-	\$ 3,756,000.00	\$ 295,200.00	3,116,129	\$ 2,804,516	\$ 6,088,507	5,479,657	\$ 13,192,539	\$ 11,873,285	\$ 6,213,709 \$	5,592,338	\$ 723,387	\$ 651,048 \$	27,637,094 \$	24,873,385	\$ 9,322,111	\$ 7,691,134	\$ 71,244,676	\$ 63,016,563 \$	63,016,563
Other Federal Funds:	\$ 900,000.00	\$ -	\$ -	\$ - \$	-	\$ -	\$. · \$	-	\$ -	\$ -	\$-\$	-	\$-	\$-\$	- \$	-	\$ -	\$-	\$ 900,000	\$ 900,000 \$	÷ -
Non-Federal Funds:	\$ 505,049	\$ 1,005	\$ 939,000	\$ 73,800 \$	779,032	\$ 701,129	\$ 1,522,127 \$	1,369,914	\$ 3,298,135	\$ 2,968,321	\$ 1,553,427 \$	1,398,085	\$ 180,847	\$ 162,762 \$	6,909,273 \$	6,218,346	\$ 2,330,528	\$ 1,922,784	\$ 18,793,352	\$ 16,260,195 \$	5 15,754,141
Total Costs:	\$ 1,405,049	\$ 1,005	\$ 4,695,000	\$ 369,000 \$	3,895,161	\$ 3,505,645	\$ 7,610,634 \$	6,849,571	\$ 16,490,674	\$ 14,841,606	\$ 7,767,136 \$	6,990,423	\$ 904,234	\$ 813,810 \$	34,546,367 \$	31,091,731	\$ 11,652,639	\$ 9,613,918	\$ 90,938,028	\$ 80,176,758	78,770,704

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

	Future Project Engineering and Right of Way	1559 (I-395 over MCRR) - (Construction & CE)		1562 (Brewer Parkway South) - (Construction & CE)		5799 (Maine Street) - (Construction & CE)	1558 (Veterans' Remembrance) - (Construction & CE)	15% Contingency	Grand Total Future Eligible 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:	5%	3.56%	6.96%	15.07%	7.10%	0.83%	31.58%	9.76%	80%
Other Federal Funds:	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Non-Federal Funds	1%	0.89%	1.74%	3.77%	1.77%	0.21%	7.89%	2.44%	20%
								Total Percentage	100%

Percent of Project Budget

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		Future Project Engineering and Right of Way	1559 (I-395 over MCRR) - (Construction & CE)		1562 (Brewer Parkway South) - (Construction & CE)		5799 (Maine Street) - (Construction & CE)	1558 (Veterans' Remembrance) - (Construction & CE)	15% Contingency	Grand Total Future Eligible Budget - Used for Match Funding Request
ſ	Total:	6%	4.45%	8.70%	18.84%	8.87%	1.03%	39.47%	12.20%	100%

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

	1559	1560	1562	1563	5799	1558	total
MaineDOT:	\$ 181,788	\$ 181,788	\$ 181,788	\$ 181,788	\$ 181,788	\$ 497,114	\$ 1,406,054

BIP REQUEST \$ 63,016,563