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

TABLE OF CONTENTS

PROJECT NARRATIVE

I. BASIC PROJECT INFORMATION – DESCRIPTION, LOCATION, AND PARTIES

Project Description

The I-395 Bridge Bundle Project ("Project") calls for replacement or rehabilitation of six bridges along the I-395 corridor in Bangor and Brewer, Maine (Attachment 1). Three of the bridges convey I-395 over area roads, and three of the bridges convey local roads over I-395. The project will greatly improve the condition, safety, reliability, and resiliency of the bridges involved in this bundled bridge improvement project. These bridges are experiencing damage from alkali-silica reaction (ASR). ASR occurs when the alkali and silica that are present in cement react in a moist environment, creating a gel-like substance that expands and swells as it absorbs water, leading to cracking and degradation within concrete. ASR affects regions throughout the U.S., including Maine.

The bridges are integral parts of the roadway network that connects Bangor and Brewer to other parts of the state. Bangor is accessible directly from seven different exits off I-95, and Brewer is accessible from I-395. I-395 connects I-95 to U.S. Route 1A, which is the primary access point for the geographic region of Downeast Maine that houses Acadia National Park and other tourist destinations. Bangor serves as a transportation hub for essentially all northern Maine and eastern Canada. Concord Trailways, the primary long-distance bus provider in Maine, has a bus stop in Bangor that connects to other transit services in Portland and Boston, as well as smaller regions around the state such as college towns and common tourist destinations. Bangor is also a common point of departure to go further south in Maine and New England for travelers from eastern Canada.

The project aims to improve safety and reliability of roadways through rehabilitation or replacement of the six bridges to mitigate ASR damage, therefore improving the safe movement of people and freight.

The proposed bridge improvements are as follows:

Bridge #5799 – I-395 over Main Street in Bangor

Isolated concrete repairs will be made on the corners of the bridge abutments. Jacketing will be used to increase strength around the affected structural members. A protective coating will be applied to the substructure to forestall future ASR concerns.

ASR Damage on Bridge #5799

Bridge #1558 – I-395 over the Penobscot River crossing from Bangor to Brewer.

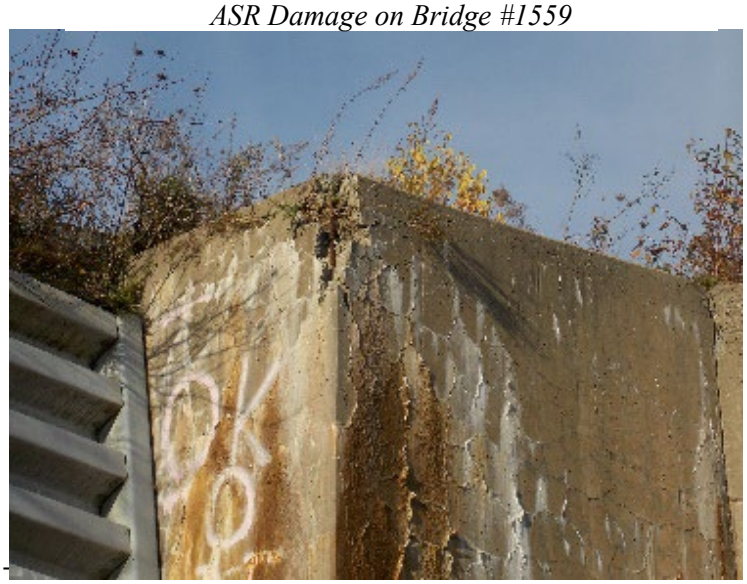
ASR Damage on Bridge #1558

All bridge deck overhangs will be removed and rebuilt. The existing finger joints will be replaced with modular joints. New bridge rail, curb, and median barrier will be installed. All bridge drains in the superstructure will be replaced. The existing bridge deck will be repaired where needed, a new membrane will be placed, the bridge will be paved with a new asphalt wearing surface, and new lighting will be installed. For the bridge substructure, all 86 bearings will be replaced. Concrete on abutments #1 and #2 will be repaired, as well as on Pier #2 where jacketing or facing might also be utilized. The catwalk at abutment #1 will receive a new access ladder, and the catwalk near pier #2 will be repaired. Safety cages and/or handrails will be installed at all ladders on the catwalk. Slope protection in front of abutment #2 will be replaced. A protective coating will be applied to the substructure to prevent future ASR concerns.

Bridge #1559 – I-395 over Maine Central Railroad in Brewer

All four corners of the concrete wingwalls will be repaired and the tops of the wingwalls will be capped with new concrete. The bridge fascia will be repaired. A protective coating will be applied to the wingwalls and fascia to prevent future ASR concerns. The metal wingwalls at the four corners of the bridge will also be replaced or repaired.

ASR Damage on Bridge #1559



Bridge #1560 –

This will be a complete bridge replacement project.

Extensive ASR Damage on Bridge #1560

Bridge #1562 – Parkway South over I-395 in Brewer

This will be a complete bridge replacement project.

ASR Damage on a Bridge #1562 Wingwall

Bridge #1563 – Green Point Road over I-395 in Brewer

ASR Damage on Bridge #1563 Abutment

This will be a complete bridge replacement project. The existing concrete at the abutments and piers will not be reused.

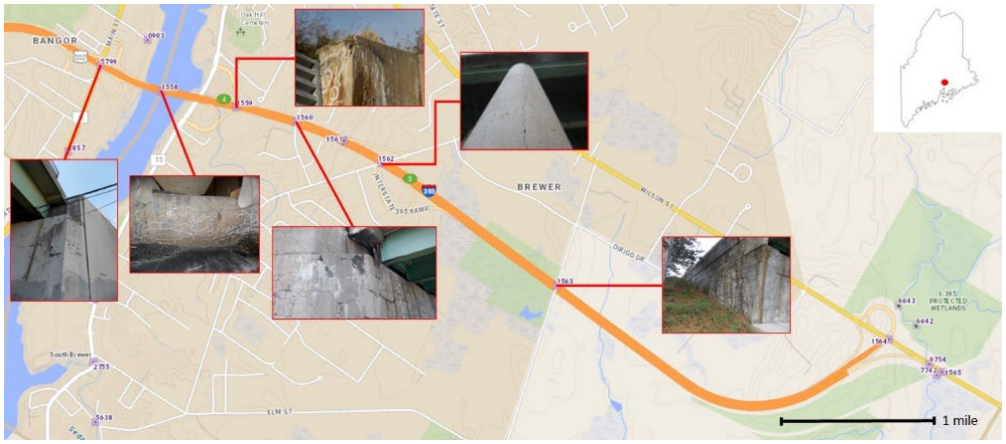
The improvements proposed in this project will provide safety and mobility benefits, such as safer driving conditions, improved infrastructure, and more dependable roadways, resulting in an overall cost savings for MaineDOT. Bridges #5799, 1558, and 1559 do not have pedestrian accommodations as they are part of an interstate transportation corridor that does not allow bicycle and pedestrian access. Bridge #1562 has an existing sidewalk on the northern side of the bridge that allows bicycle and pedestrian movements, and this bridge will be reconstructed with 5-foot shoulders to enhance bicycle and pedestrian safety in this location.

Reliable mobility and sustainable regional connectivity are key targets of the Project, and MaineDOT has other ongoing projects that aim to address these concerns as well. MaineDOT's I-395/Route 9 Connector Project, a significant project in the region, will enhance regional transportation system connection, safety, and mobility by building a road connecting I-395 at Exit 6 to Route 9 to the northeast.

Project Location

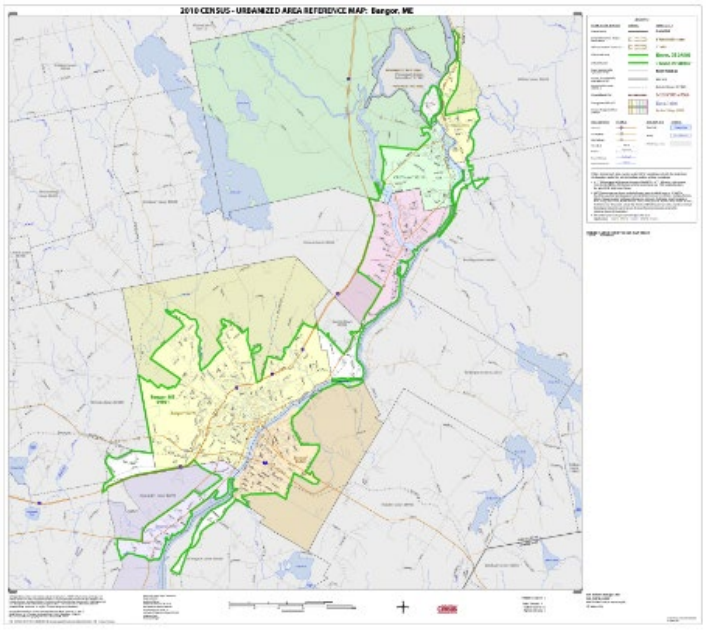
The Project is in Bangor and Brewer, Maine, in Penobscot County. All bridges are located in Maine's 2nd Congressional District, held by Jared Golden (D-ME). The state is represented by U.S. Senators Susan Collins and Angus King. The GPS coordinates are as follows:

- Bridge #5799: 44° 47' 7.52"N, 68° 46' 46.61"W
- Bridge #1558: 44° 47' 2.95"N, 68° 46' 28.73"W
- Bridge #1559: 44° 46' 59.38"N, 68° 46' 10.60"W
- Bridge #1560: 44° 46' 56.87"N, 68° 45' 54.59"W
- Bridge #1562: 44° 46' 49.56"N, 68° 45' 31.98"W
- Bridge #1563: 44° 46' 26.22"N, 68° 44' 45.73"W

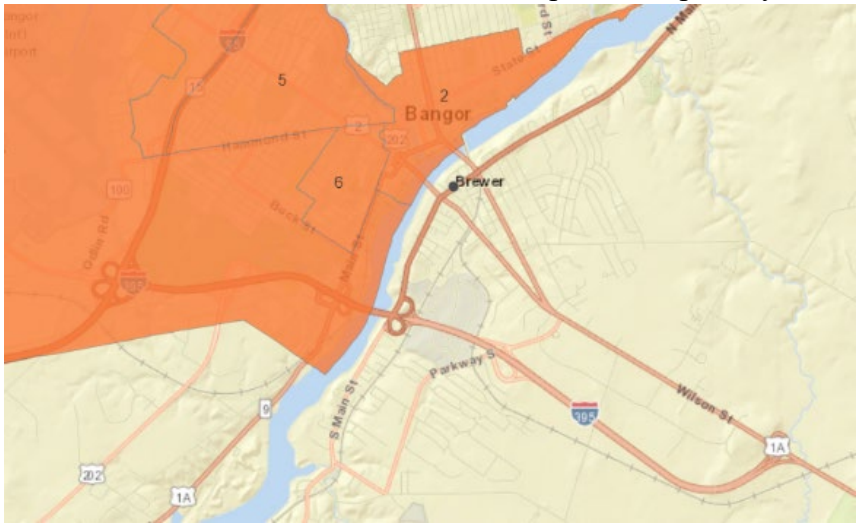


Additional geographic information includes:

1) Census-Designated Urbanized Area[1]: Yes

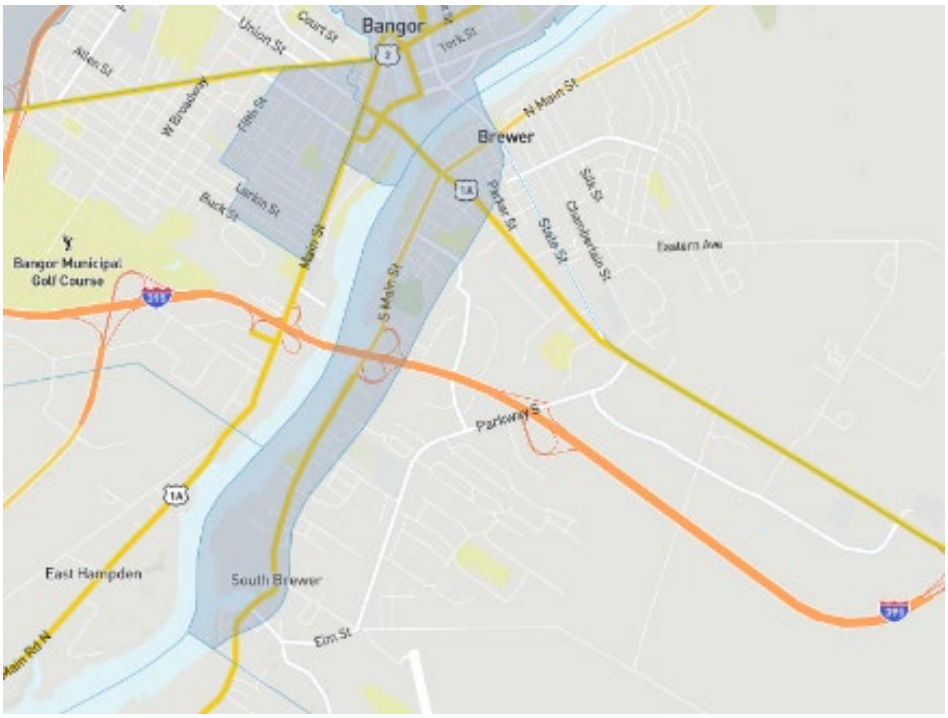


2) Area of Persistent Poverty[2]: Yes, Bridge #5799 and half of Bridge #1558 are located in census tract 2, which is an area of persistent poverty. Bridge #1558 spans between census tract 2 and census tract 41, which is not an area of persistent poverty.



[1] https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua04951_bangor_me/
[2] https://datahub.transportation.gov/stories/s/tsyd-k6ij

3) Historically Disadvantaged Community[3]: Half of Bridge #1558 and Bridge #1559, both located within census tract 41.



Please view project location file for a KMZ version of project location

Lead Applicant

MaineDOT, the sole applicant, is the state agency responsible for managing and funding all transportation modes statewide. Employing approximately 1,900 personnel, the Department expends and disburses more than $600 million annually, including Federal-aid highway program funds as well as state and local funds. MaineDOT performs extensive analysis of infrastructure conditions to select projects for funding that have the most immediate impact and align with USDOT and state transportation goals. The Department is an experienced, thorough, and responsible recipient of previous TIGER, FASTLANE, BUILD, RAISE, INFRA, and CRISI grant funding. USDOT can rely on the Department to meet obligation and construction deadlines without risk.

Other Public and Private Parties

There are no other public or private parties or funders involved in delivering the Project.

Additional Eligibility Requirements

While the interstate bridges are not located on a highway on which pedestrians or bicyclists are allowed to operate at each end of the bridge, Bridge 1562 currently has six foot sidewalk that will be incorporated into new bridge work for pedestrian and bicycle access.

II. NATIONAL BRIDGE INVENTORY DATA

[3] https://usdot.maps.arcgis.com/sharing

All six bridges are listed on the National Bridge Inventory. Detailed bridge data are located in the Bridge Project Application Template.

III. PROJECT COSTS – GRANT FUNDS, SOURCES, AND USES OF ALL PROJECT FUNDING

The Project is considered a BIP Bridge Project. The cost breakdown is as follows:

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 associated with the development of the design-build package prior to grant obligation.

Maintenance Commitment
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.[4] 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.[5] 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 replacement and repairs over five years.[6] While a needed increase in Federal funding, this

[4] https://artbabridgereport.org/state/ranking
[5] https://www.maine.gov/dafs/economist/sites/maine.gov.dafs.economist/files/inline-files/Maine%20Population%20Outlook%20to%202026.pdf, page 2
[6] https://www.whitehouse.gov/wp-content/uploads/2023/10/Maine-Fact-Sheet.pdf

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 a cost savings of approximately $10 million.

IV. MERIT CRITERIA

State of Good Repair

MaineDOT is committed to maintaining the new bridges, utilizing the same team of maintenance crews that cover other area bridges. Maintenance funding will be sourced from state funds. MaineDOT will ensure the new bridges are maintained to all Federal and state standards. The Department will perform all required bridge inspections and immediately correct any issues discovered. ARTBA ranks Maine the fifth worst state in the nation for structurally deficient bridges. According to the FHWA's report, *Bridge Condition by Highway System 2023*, of the state's 531 bridges on the National Highway System (NHS), 371 are rated *Fair* and 47 have a *Poor* rating. For the surface area of NHS bridges, measured in square meters, the state has 567,935 total with 389,345 square meters in *Fair* condition and 38,017 rated *Poor*.[7]

The Department struggles to keep pace with the continually deteriorating infrastructure as the bridges approach their end of life simultaneously. The Department aims, but struggles, to proactively rebuild bridges and bring the state's bridge system to a state of good repair. Aside from interstate bridges, there are 382 other bridges in Maine that will require reconstruction in the next 10 years. The total reconstruction cost for these bridges is $1.15 billion, not including engineering or right-of-way expenses.

Of the six bridges in this bundled project, one is listed in Poor condition (#1562). The five bridges that are listed in Fair condition are all experiencing ongoing, dynamic

[7] https://www.fhwa.dot.gov/bridge/nbi/no10/condition23.cfm

deterioration from ASR. As ASR continues, more damage will occur to the structural integrity of the bridges. Outside forces also act on the bridges and, as they are already fragile due to the ASR, they are more susceptible to weather-based damage. These conditions could will cause to fall from Fair condition to Poor condition within the next three years.

MaineDOT is taking a targeted approach to prevent bridges currently rated *Fair* from degrading to *Poor,* and BIP funding is critical to prevent further conditional decline. The Department carefully selected Project bridges following a detailed review of the state's *Fair* and *Poor* bridges and ADT associated with each bridge.

Safety and Mobility

Safety is the Department's primary consideration as it plans how to best remedy infrastructure challenges posed by outdated and inefficient bridges. The bridges within this bundle have an identified history of ASR. This is an important safety issue the Project will remedy.

Crash Data

There is no crash data associated directly with the bridges included in the Project. Crash data presented below is from the routes required for detours in the event of bridge closure.

	Vehicle Crashes					
Bridge #	**5799**	**1558**	**1559**	**1560**	**1562**	**1563**
Crash Severity Code	0	0	0	0	0	0
Fatal (K)	0	0	0	0	0	0
Serious Injury (A)	0	0	0	0	0	0
Minor Injury (B)	0	0	1	4	4	1
Possible Injury (C)	0	0	3	4	4	3
Property Damage Only (PD)	0	8	9	24	24	9
Total	**0**	**8**	**13**	**32**	**32**	**13**

Protecting motorized and non-motorized travelers from safety risks

MaineDOT has designed all the Project bridge replacements, for a 100-year serviceable life and consistent with FHWA publication *The Standard Specifications for the Construction of Roads and Bridges on Federal Highway Projects*. The new bridges will include MASH-compliant 42-inch guardrails and a minimum four-foot-wide outside shoulder. If new bridge piers are too close to travel lanes, crash barriers or guardrails will be installed to protect motorists and the integrity of the structure.

Prior to construction commencement, MaineDOT will install construction safety signage and barriers and reduce speed limits in construction zones to protect workers, consistent with the Manual on Uniform Traffic Control Devices (MUTCD).[8]

[8] https://mutcd.fhwa.dot.gov/

Economic Competitiveness and Opportunity

Bangor is the third largest metropolitan area in the State of Maine. With its geographic location in essentially the middle of the state, the region is an integral part of Maine's economy, serving as a conduit to central, eastern, and northern Maine. Many of the region's largest businesses are in or near Bangor, with people commuting from surrounding towns. Bangor is also home to several smaller 2- and 4-year higher education institutions, and the University of Maine flagship campus is approximately 10 minutes away in the town of Orono. The University of Maine is well known and respected for the caliber of its educational programs, drawing students from all over the country. I-395 also connects to U.S. Route 1A through the Downeast region, where Bar Harbor and Acadia National Park are attractions for both in-state and out-of-state tourism, with Acadia bringing in nearly four million visitors annually.[9] Jackson Laboratories and the Mount Desert Island Biological Laboratory are also located in Bar Harbor, providing both employment and scientific innovation and research advancement. Bangor and Brewer are the last populous points for those traveling north on I-95, making it a common stayover location for in-state, out-of-state, and international travelers and truck drivers heading to more remote locations. So in addition to pass-through traffic, I-395 serves as a hub for the hospitality industries.

Maintaining reliable, efficient transportation corridors is critical to sustaining economic viability in this region. Bangor and Brewer are economic hubs in Central Maine, connecting to both historic and current economic engines via I-395. This roadway is an interstate and as such doesn't lend itself to village or mixed-use types of development. However, diversion of through traffic to this highway has enabled development consistent with local land use plans along formerly heavily traveled local roadways. While this project is not expected to change the nature of travel through the project area, it will ensure safe, reliable bridge infrastructure into the foreseeable future.

The Project does not involve changing the existing geometry or configuration of the bridges in the finished condition. The improvement to travel time comes from reducing the chance of bridge closure. As the primary roadway between Bangor and areas to the east, I-395 sees significant traffic volumes. Avoided detour times in the event of bridge failure will allow existing and future commercial and passenger vehicle traffic to continue to utilize the highway without interruption. Bridge #1558 passes over the MCRR CSX mainline on the Bangor side of the bridge, and Bridge #1559 passes over the MCRR line in Brewer. Ensuring the safety and durability of these bridges allows the rail lines to continue to move freight consistently and reliably.

Considerations to Support Good-Paying Jobs and Strong Labor Standards

The Project will create good-paying jobs and ensures strong labor standards through the promotion of equal opportunity that removes barriers to hire and preventing harassment on the work site through MaineDOT's Equal Employment Opportunity (EEO) Policy and Affirmative Action. As an employer, MaineDOT endeavors to be a model employer—a workplace where people want to come to work and make the mission of the Department a reality. As a recipient of

[9] https://www.nps.gov/acad/learn/facts.htm.

federal funding, it is incumbent on MaineDOT to ensure that contracts let through our agency adhere to the standards prescribed by Federal and state law.

The foundation for MaineDOT's EEO Policy and Affirmative Action is derived from State and Federal laws and regulations, as well as a moral and professional commitment. Legal mandates include: Title VII of the Civil Rights Act of 1964 as amended by the Equal Employment Opportunity Act of 1972; the Rehabilitation Act of 1973; the Age Discrimination in Employment Act of 1967; the Equal Pay Act; the Maine Human Rights Act, 5MRSA, CH.337; the State Personnel Law, 5MRSA, CH 51, Section 553 (Non-Discrimination) and 5MRSA, CH 65 (Code of Fair Practices and Affirmative Action); and the Americans with Disabilities Act (ADA) of 1990.

Additionally, through MaineDOT's On-The-Job Training (OJT) Program meaningful training opportunities for Women, Minorities, & Disadvantaged individuals on federal-aid highway and bridge projects exists to develop full journeymen. MaineDOT's OJT program requires contractors make every effort to enroll minority and women trainees (i.e., by conducting systematic and direct recruitment through public and private sources likely to yield women, minorities, and disadvantaged trainees) to the extent that such persons are available within a reasonable area of recruitment.

Climate Change, Sustainability, Resiliency, and the Environment

Reduction of air pollution or greenhouse gases
Improving and maintaining the roadway to improve durability will contribute to the reduction of greenhouse gas emissions from vehicles. Reductions in emissions will be realized from reduced vehicle miles traveled should the closure of any bridge due to structural concerns force an extensive detour. During bridge closures, a detour would be necessary, and each of the six bridges in this bundle would require at minimum a one-mile detour and at maximum, and eight-mile detour. The bundle contains a total of 18 miles in required detour for all included bridges. The identified detours also involve multiple intersections, which includes accelerating and decelerating that is not involved when the bridges are operational, leading to further vehicle emissions.

Four of the six bridges are within a Class A hurricane evacuation zone, highlighting the importance of maintaining access for egress and evacuation via routes that rely on the bridges. While the bridges are likely not at immediate flood-risk, they serve as key routes to safety during severe weather events.

Lower carbon construction materials such as precast concrete could be used in the bridge design, and streamlining the construction schedule could reduce vehicle emissions associated with construction vehicles. Generally, this project provides needed investment in long-term solutions for resilient transportation infrastructure. The project prioritizes public safety in terms of traveler safety and mobility for citizens vulnerable to the multifaceted effects of climate change.

As detailed in the BCA, reconstructing the bridges will eliminate the threat of additional travel mileage and associated harmful emissions resulting from a potential bridge closure and long-term, reroute. Total Project emission savings, both CO_2 and non-CO_2 combined, are

$494,211,689. These savings, calculated in the BCA, result from eliminating long detours should the bridges eventually fail and close permanently.

Improved Resiliency of At-Risk Infrastructure

The six bridges in this project are experiencing degradation due to ASR-induced cracking and deterioration such that the structural integrity of concrete are compromised. Forces such as increased wind and rain strength applied to affected structures can further degrade the concrete causing it to crumble away from the structure. Rehabilitating and replacing these bridges will address the deteriorated structural integrity, allowing them to better withstand climate-based events as well as general wear and tear. Four of the six bridges are within a Class A hurricane evacuation zone. Class A zones are described by Maine Emergency Management Agency as generally most at risk of flooding and storm surge. These designations contribute to the importance of maintaining access and egress during severe weather events. Generally, this project provides needed investment in long-term solutions to ensure resilient transportation infrastructure.

Improved Wildlife Connectivity, Especially for Aquatic Species

None of the bridges included in this bundle pose limitations on wildlife or aquatic connectivity. However, there is a peregrine falcon nest on Pier 6 of Bridge #1558, which also spans the bird's habitat. The presence of the nest will require coordination with USFWS.

Addressing Disproportionate Negative Environmental Impacts on Disadvantaged Communities

No disproportional negative environmental impacts will occur on disadvantaged communities. However, in Maine, rural residents are often geographically distant from locations offering expanded food options, health care, and other commercial activities. With this project, rural residents will be able to more dependably rely on infrastructure to connect them to commercial or recreational hubs in the region and around the state.

According to ETC Explorer, residents in the Project area do experience transportation, social, and health vulnerabilities and burdens. Transportation vulnerabilities include low Transportation Safety and significant Transportation Cost Burdens.[10] Bangor and Brewer, like much of Maine, are home to an aging population.[11] The ETC Explorer concludes ownership of manufactured and mobile homes are also prevalent in the area. Additional social vulnerabilities include high house tenure and endemic inequality rates as well as low rates of insurance and internet access.[12] Health burdens include a high prevalence of asthma, cancer, high blood pressure, diabetes, and mental health challenges.[13]

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[10] Tract 700: Transportation Safety, 84th percentile; Cost Burden, 41st percentile. Tract 4100: Transportation Safety, 21st percentile; Cost Burden: 87th percentile. Tract 4200: Transportation Safety, 52nd percentile; Cost Burden, 39th percentile.

[11] Tract 700: 65 or older, 71st percentile. Tract 4100: 65 or older, 26th percentile. Tract 4200: 65 or older, 73rd percentile.

[12] Tract 700: 58th percentile and 65th percentile respectively. Tract 4100: 82nd percentile, 16th percentile respectively. Tract 4200: 45th percentile, 53rd percentile respectively.
Tract 4200: 91st percentile, 93rd percentile, 80th percentile, 67th percentile, 64th percentile respectively.

[13] Tracts 700, 4100 and 4200: 36th percentile, 82nd percentile respectively.

V. Equity and Quality of Life

As MaineDOT plans, develops, and implements transportation investments, the Department is careful to ensure a project has the ability to improve the lives of residents and foster better and more meaningful connections to everyday needs.

The Department will use its virtual Public Involvement Management Application (PIMA) for virtual and/or hybrid public engagement during program development and implementation. MaineDOT was an early adopter of virtual public involvement during COVID-19 when in-person meetings were restricted for public health reasons. Beyond the pandemic, MaineDOT has opted to continue using PIMA as its primarily vehicle to distribute information as well as collect public comment. The number of people accessing the project-specific websites and the number of comments received are significantly higher using PIMA, because people are able to access the virtual platform regardless of their geographic location. Additionally, this engagement has a high level of customer satisfaction. To engage with project-area residents, MaineDOT will utilize PIMA together with direct conversations with local populations will provide the opportunity to proactively minimize impacts to potentially affected community-based organizations, businesses, and residents during project planning. PIMA is particularly effective in engagement of rural populations, for which travel to traditional in-person meetings can pose a barrier. PIMA is used not only to collect comments on projects, but also to reflect how such input is taken into consideration in decision-making and keep the public informed during construction.

How planning and engagement in design will mitigate/prevent physical and economic displacement

The delivery of the project through the design-build approach, coupled with the virtual PIMA engagement with the public, will allow for a mitigation of the physical and economic displacement for the project.

Incorporation of nonvehicular and/or public transportation into project and quantifiable benefits to quality of life

The bridges are located along I-395, the primary corridor connecting Bangor – the third largest city in the state – to surrounding towns and regions. The roadway provides easy access for users to travel between their homes and workplaces, reach regional and specialized healthcare, use transit centers, and seek nature. Public transportation routes are supported on each of these roadways, connecting vast portions of the state and beyond. Emergency response vehicles rely on these roadways. Every day people utilize these roadways to reach their commitments and enhance their daily lives. Failure of any of the bridges in this project would result in interruptions and delays to traffic in the area, affecting the daily patterns of roadway users, and possibly expanding the disruption in surrounding areas due to detours or adjusted routes. The project addresses the deterioration of the bridges to mitigate their failure and ensure continued roadway connectivity. The mitigation of bridge closures will be even more relevant once MaineDOT's I-395 Connector project is complete in 2025. This project will connect I-395 at Exit 6 (close to Bridge #1565) to Route 9 to the north. Route 9 is another route that connects Downeast Maine with central Maine. The new road is intended to provide mobility and connectivity benefits, and these benefits rely on the functionality of the bundled bridges in this project.

No physical or economic displacement is anticipated as a part of this project. Anticipated project designs do not include any expansion of the existing bridges. Where possible, construction zones and timing will be designed to minimize traffic interruption. Bridges #1558 and #1563 are utilized by local public transportation. Bangor Area Transit Routes 30 and 31 cross the bridges going to and from Bangor and Brewer, connecting shopping areas, downtown districts, education centers, medical facilities, workplaces, and neighborhoods. Maintaining these bridges will prevent disruption of existing public transit lines.

VI. Innovation

Innovative Project Design or Construction Techniques

The Project will utilize bridge bundling under the guidelines of FHWA's *Bridge Bundling Guidebook*.[14] Given the similar design and nature of the bridges, bridge bundling will advance the Project efficiently by saving time, design and construction costs, and creating opportunities for small and disadvantaged businesses.[15] This will allow construction to commence quickly and with very little risk.

MaineDOT will utilize an innovative design-build Project delivery plan, allowing the Department to contract with a single point of responsibility. The designer and contractor will work together as a team, providing unified Project recommendations that fit schedule and budget. Any concerns or changes will be addressed by the entire team with a focus on collaborative problem solving.

MaineDOT estimates bridge bundling, and employing an owner-engineer to assist in generating an RFP and the selection of a design-build team, will save 10 percent of Project costs, consistent with *Every Day Counts: Innovation for a Nation on the Move*, EDC-5 Final Report, April 2021.[16]

Innovative Technology

This project provides the opportunity for innovative technologies to be implemented as part of the design. In bridge construction, steel offers opportunities for innovation. Steel beams can be galvanized or metalized to protect them, leading to a longer project lifespan. Corrosion resistant rebar can also be used to protect against deterioration within the concrete slabs, leading to more durable bridges. The use of prefabricated materials, where applicable, contributes to reduced construction time and enhanced structure resilience. Many technological innovations incorporate elements of environmental and community innovation as well, such as helping reduce carbon emissions from construction or streamlining project operations to minimize disruptions. This project will also rely on interagency cooperation to ensure environmental protection and conservation. MaineDOT has a long history of working effectively with other state and private entities. Additionally, MaineDOT will use its virtual Public Involvement Management Application (PIMA) for public engagement during program development and implementation.

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[14] *Bridge Bundling Guidebook,* https://www.fhwa.dot.gov/ipd/pdfs/alternative_project_delivery/bridge_bundling_guidebook_070219.pdf

[15] *Bridge Bundling Guidebook*, page 9-10

[16] *Every Day Counts: Innovation for a Nation on the Move*, EDC-5 Final Report, April 2021, page 10, https://www.fhwa.dot.gov/innovation/everydaycounts/reports/edc5_finalreport.pdf?utm_source=rotator

PIMA is an innovative tool that helps remove barriers to public engagement and dissemination of information, especially in more rural communities.

Innovative Financing
The Project includes innovative bridge bundling, leading to a 10-precent Project cost reduction. MaineDOT will follow the guidelines of the FHWA Bridge Bundling Guidebook.

Innovative Planning and Environmental Review Process Improvements
MaineDOT is deploying innovation to administer the National Environmental Policy Act (NEPA) process and permitting for the Project through Programmatic Agreements already in place, which will ensure timely and consistent reviews and accelerate Project delivery. MaineDOT, the Federal government, and other state departments have agreements to thoroughly and expeditiously review a Project's environmental impacts.

V. BENEFIT-COST ANALYSIS

7% NPV Summary over 30 Years			
	Costs	Benefits	
BIP - Project Cost	$79,017,058		
Maintenance (Net)		$92,430	
User Time, Operating & Crash Savings		$1,076,463,477	
Emissions Savings		$494,211,689	
Residual Value of the Project		$2,438,733	
TOTAL	$79,017,058	$1,573,206,329	
Benefit-Cost Ratio			32.08

A Benefit-Cost Analysis (BCA) was conducted utilizing the BIP BCA workbook provided by USDOT and in accordance with 2024 USDOT BCA Guidance. Based on the NBI data provided and bridge-specific data inputs, project benefits and costs were calculated. Costs included residual value and maintenance. Benefits primarily came from reduced maintenance costs over the lifespan of the proposed project and from reducing potential traffic interruptions due to bridge closures that would result in detours. The benefits fall under several benefit classes, including value of time savings, CO2 and non-CO2 emissions reductions, operating costs savings, and safety. A Benefit Cost Ratio (BCR) of 1.0 or greater determines that the project is cost-effective. For this project, the individual bridge B/Cs ranged from negative values to over 200, reinforcing that bridge bundling is a more cost-effective approach. The smaller bridges have higher relative costs, but when combined with the larger bridges, the overall project BCR is 32.08, indicating that the benefits of the project will deliver a net positive result for the community and for the environment, while also achieving cost savings.

VI. PROJECT READINESS AND ENVIRONMENTAL RISK

Design Criteria
A comprehensive review of available asset inventory information was conducted for each bridge included in the project. This review encompassed a range of data, including bridge condition ratings, bridge element level data, traffic data, historical maintenance activities, crash data, existing plans, geotechnical information, environmental constraints, historical constraints,

vertical clearance constraints, utility conflicts, and hydraulic data, where applicable. Certain unique aspects necessitated additional study, such as coordination with CSX for railroad considerations, navigable waterway requirements for the Penobscot River, and work window limitations due to Peregrine Falcon nesting on Pier 6. Following the establishment of baseline data, site visits were conducted at each location to further refine the bridges' needs. Constructability studies were undertaken for each bridge to assess the feasibility of the proposed scope of work, identify access constraints, and determine the approach to traffic maintenance. For the Veterans Remembrance Bridge (#1558), the most complex structure in the project, the project was developed through to final design and advertised for contractor bids. However, due to bids exceeding the available funds, the project was not awarded. In response to this setback, several meetings were held with local contractors to gather feedback on potential risk mitigation strategies and cost-saving tactics.

This feedback informed the current proposed scope of work and estimate level. Additionally, in 2009, five of the six bridges proposed as part of this project were part of an FHWA study investigating Alkali-Silica Reaction (ASR)-related distress. The study's results were published in both the Methods for Evaluating and Treating ASR-Affected Structures: Results of Field Application and Demonstration Projects (2013) and the Alkali-Aggregate Reactivity (AAR) Facts Book (2013). The studies confirmed the presence of ASR and revealed varying degrees of damage across different parts of the structures. The bridges were treated in 2010 using different methods like silane treatment, elastomeric coating, and carbon-fiber wrapping. The effectiveness of these treatments was evaluated through measurements conducted prior to repair in May 2010 and during the summers of 2011, 2012, and 2013. The study concluded that silane sealers can be very effective for mitigation of ASR on median barriers, but the benefits on bridge abutments, wing walls, and retaining walls was inconclusive during the study period. Overall, the result of this study and the existence of ASR related distress is the underpinning for why these bridges are proposed for rehabilitation and replacement. The bridges continue to deteriorate and need to be addressed.

MaineDOT is speeding up design and construction by employing an owner-engineer to assist in generating a Request for Proposal (RFP). MaineDOT and its owner-engineer will seek designer/contractor teams interested in working alongside MaineDOT based on a base-level scope for the project. Interested designer/contractor teams will be prequalified by MaineDOT, who will then introduce a RFP to the accepted teams. This process aids in rapidly moving through design stage and allows the contractor to begin work quickly.

The RFP will include site surveys, baseline geotechnical investigations, environmental assessments, and minimum bridge geometric requirements, clearances, and safety standards that will allow teams to bid on Project work rapidly and with confidence. When a design-build firm is selected, final design can immediately begin, and with direct input from the contractor throughout design, can quickly progress to construction.

This innovative process minimizes delay and risk because the contractor is actively participating in Project design. Any unforeseen construction challenges can be quickly and efficiently managed so the Project can remain on schedule and within budget. MaineDOT will have an owner-engineer employed to assist in generating an RFP in the spring of 2024. No land acquisition is required as part of the Project, accelerating the scope of project readiness.

Technical Feasibility
MaineDOT has the technical experience to complete the Project, which is similar to other bridge projects the Department has designed, built, and maintained statewide. MaineDOT is a very experienced, thorough, and responsible recipient of previous TIGER, FASTLANE, INFRA, CHBP, BUILD and RAISE grant funding. USDOT can rely on MaineDOT to fully fund and begin construction well prior to the obligation of funds date and complete the Project without risk. MaineDOT expends or disburses more than $675 million per year, including federal, state, and local funds. MaineDOT will comply with all Federal regulations with regards to all aspects of the Project. This includes EEO Policy and Affirmative Action, all NEPA requirements, all Civil Rights policies, the ADA, and all other regulations.

Project Schedule
MaineDOT is an experienced partner able to deliver the project with very little risk as the Department is an experienced and responsible recipient of previous grant funding. The project's non-federal funding sources are fully committed with funding also available to cover contingency and cost increases. It is likely that the NEPA process will be complete prior to the project start. The project will begin environmental screening, right of way proceedings, geotechnical explorations, then proceed with the design-build process once funding is secured.

Design and Project Status	Planned Start Date	Planned End Date
Preliminary Design	02/01/2025	03/01/2026
MaineDOT Request for Statement of Interest	2/13/2025	2/13/2025
Design-Build Team Selected	11/16/2025	11/16/2025
Final Design	03/01/2026	03/01/2027
NEPA Complete	10/30/2026	10/30/2026
Construction	05/01/2026	03/01/2031

Required Approvals
Bridges included in the project have been determined to be eligible as CE-level projects under an agreement with FHWA. Specific documentation will be completed between grant application submission and advertising. Relevant permits required for the Project and their status are available on MaineDOT's grant materials website: (https://www.maine.gov/mdot/grants/i395).

Five environmental permits or reviews are necessary for the Project: National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act, the Federal Endangered Species Act, Section 404 Clean Water Act Permit (Army Corps of Engineers), and Maine National Resources Protection Act. Public roads and bridges under the control of MaineDOT are not subject to local zoning controls pursuant to 30-A M.R.S.A. Section 4352.

Cost Estimate and Contingency Levels

Cost estimates provided in this grant application are based on pricing of project services and components included in recent bid estimates and cost proposals developed and received by MaineDOT. These estimates encompass costs associated with preliminary engineering, right-of-way, construction engineering, and construction, all of which are adjusted for inflation to align with the anticipated year of construction. A contingency of 15 percent was included in the project cost total.

Statement of Work
Bridge replacement activities will consist of the following specific activities, as outlined below:

Pre-Construction Activities:
Preliminary Engineering – Preliminary and final design of the bridge and roadway, including public notice, and structural & geotechnical evaluations for the structure, completed by MaineDOT and a designer/contractor team through the design-build process.

Utility Coordination – Coordinating with the private utility companies within the project limits about potential relocations and protection during construction.

NEPA Coordination – Review project to avoid/minimize impacts to the project area.

Construction and Demolition Activities:
Construction Engineering – MaineDOT oversight of construction activities to include traffic control, site safety, conformance to plans & design standards, inspection & quality control, and regulatory compliance.

Mobilization – Contractor procurement and distribution of project specific materials, equipment, and labor force:

Bridge Demolition for Bridge Replacement Bridges– Remove the existing bridge in its entirety.
Bridge Construction – Build replacement bridges.
Bridge Rehabilitation – Rehabilitate existing bridge structures.
Roadway Reconstruction – Drainage, grading, paving, striping, and signage installation.

Environmental Permits and Reviews
MaineDOT and FHWA Maine Division have a Programmatic Agreement for processing actions classified as Categorical Exclusions (CEs). The agreement authorizes MaineDOT to determine on behalf of FHWA whether a project qualifies for a CE specifically listed in 23 CFR 771.117. In addition, it authorizes MaineDOT to approve a CE on behalf of FHWA as "Programmatic CE" pursuant to the Agreement. No separate review or approval of the CE by FHWA is required. Project documentation is available to FHWA upon request. The agreement is posted on the MaineDOT website at: https://www.maine.gov/mdot/env/NEPA/_assets/docs/2022/Maine%20Programmatic%20NEPA%20CE%20Agreement.Executed.020821.pdf. Based on baseline data collection and preliminary plans, the Project is expected to have minimal to no impacts on natural or cultural resources or the environment.

1) **National Environmental Policy Act (NEPA)**: While the Project components have cumulative benefits if completed together, the bridges have independent utility and will be classified separately as Categorical Exclusions in accordance with 23 CFR 771.117(c) and (d). FHWA Maine Division is the lead agency for NEPA. Categorical Exclusions will be processed in accordance with the *Programmatic Agreement between the Federal Highway Administration, Maine Division and the Maine Department of Transportation Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Projects*. Public involvement will be completed in accordance with the MaineDOT Public Involvement Plans. The anticipated date for NEPA completion is October 2026 and is listed in the Project Schedule.
2) **Section 106 of the National Historic Preservation Act**: MaineDOT and FHWA have initiated the Section 106 process. The bridges are not National-Register Eligible and they are not located within National-Register-Eligible Historic Districts. The MaineDOT Historic Coordinator has reviewed the components of the Project and made a preliminary determination that it meets the criteria for abbreviated review pursuant to the *Programmatic Agreement among Federal Highway Administration, Federal Transit Administration, the Advisory Council on Historic Preservation, the Maine State Historic Preservation Officer, and Maine Department of Transportation Regarding Implementation of the Federal Aid Highway and Federal Transit Programs in Maine*. This agreement acknowledges that work on the interstate or other controlled-access highways within existing interchanges, medians and routes within previously constructed slope limits has little or no potential to affect historic properties.
3) **Section 4(f) of the U.S. Department of Transportation Act**: The MaineDOT Cultural Coordinator has reviewed the projects to identify potential Section 4(f) resources. As noted previously, the bridges are not historic and are not located within historic districts; they are located entirely within existing MaineDOT right-of-way. Because preliminary Project information indicates that the Project limits do not extend beyond the existing state right-of-way, no Section 4(f) uses are anticipated.
4) **Endangered Species Act**: All bridges are located within the range of the Federally-threatened Northern Long-Eared Bat. MaineDOT will complete consultation with U.S. Fish and Wildlife Service and will incorporate avoidance and minimization measures into Project design. All bridges are located within the range of the Federally-listed Gulf of Maine Distinct Population Segment (DPS) of Atlantic Salmon (ATS) and within designated ATS Critical Habitat. The Project does not include work in or adjacent to waterbodies and is expected to have no effect to Atlantic Salmon or Critical Habitat.
5) **Essential Fish Habitat (EFH)**: The Project is located within a watershed designated as Essential Fish Habitat for Atlantic Salmon. The Project does not include work in or adjacent to waterbodies and is expected to have no effect on Essential Fish Habitat.
6) **Section 404 Clean Water Act Permit (U.S. Army Corps of Engineers)**: MaineDOT will avoid and minimize temporary and permanent wetland impacts to the extent practical. MaineDOT anticipates minimal wetland impacts or in-water work. If required, the activities will be eligible for Category 2 Permits under the Maine Programmatic General Permit.
7) **Natural Resources Protection Act (Maine Department of Environmental Protection)**: Wetland and stream impacts are regulated by the Maine Natural Resources Protection Act. MaineDOT anticipates minimal wetland and stream impacts associated

with the Project. If required, the activities will be exempt or eligible for Permit-By-Rule Chapter 305, Section 11, which is a streamlined permit process for state transportation facilities.

8) **Stormwater**: The Project will incorporate Best Management Practices for temporary and permanent management of soil erosion and sedimentation. The Project is not located in and will not encroach into designated flood zones.

Programmatic Agreements

MaineDOT recognizes that assuring sustainability of habitats, ecosystems and transportation infrastructure can be achieved in a mutually beneficial manner. MaineDOT endeavors to exercise reasonable stewardship over natural resources and transportation infrastructure through its commitment to addressing aquatic organisms, wildlife habitat and fish passage in cooperation with natural resource agencies, while considering all aspects of a proposed project. MaineDOT and various other state and Federal departments have executed agreements to expeditiously and thoroughly review environmental impacts. The Department will utilize the following agreements, where applicable, to streamline the environmental review and approval process:

a) Programmatic Agreement between the Federal Highway Administration, Maine Division and the Maine Department of Transportation Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Projects;
b) Programmatic Agreement among Federal Highway Administration, Federal Railroad Administration, the Advisory Council on Historic Preservation, the Maine State Historic Preservation Officer, and Maine Department of Transportation Regarding Implementation of the Federal Aid Highway and Federal Transit Programs in Maine;
c) Cooperative Agreement between U.S. Department of the Interior Fish and Wildlife Service (USFWS), FHWA and the MaineDOT State Transportation Reviews by the USFWS in Maine;
d) Maine Atlantic Salmon Programmatic Consultation finalized January 23, 2017;
e) Programmatic Agreement for the State of Maine concerning identification of listed and proposed species and designation of non-Federal representative under the Federal Endangered Species Act between FHWA, Maine Division USACE, MaineDOT, USFWS, NOAA's National Marine Fisheries Service;
g) Programmatic Agreement for the State of Maine between MaineDOT, FHWA Maine Division, USFWS Regarding Endangered Species Act Section 7 Consultation for Canada Lynx;
h) Memorandum of Agreement for Stormwater Management between the MaineDOT, MTA and Maine Department of Environmental Protection; and
i) Memorandum of Agreement between United States Army Corps of Engineers (USACE), New England District and MaineDOT for Expediting Permit Application Evaluations under Section 214 of the Water Resources Development Act of 2000, as amended, and Section 139(j) of Title 23, United States Code, Assistance to Affected State and Federal Agencies, July 2022.

Communication

MaineDOT will use its virtual Public Involvement Management Application (PIMA) for virtual and/or hybrid public engagement during program development and implementation.

Environmental Justice
As previously described, the project area includes areas identified as Disadvantaged using the Climate and Economic Justice Screening Tool (CJEST) (https://screeningtool.geoplatform.gov/en/).

A portion of the project area along the riverfront in Brewer containing half of Bridge #1558 and Bridge #1559 is considered disadvantaged because it meets more than one burden threshold identified by the EJ screening tool, as well as the associated socioeconomic burden. This area is in the 95th percentile for projected flood risk due to tides, rain, and storm surges within the next 30 years. While the bridges are elevated to the point that flooding is not an immediate concern, they are part of the evacuation route for the region in the case of severe weather events. This same area exceeds the Health Burden Threshold for asthma, a concern should extensive detours be required, increasing vehicle miles traveled and resulting in worsening air quality. The socioeconomic component of these burdens is that the same portion of Brewer is considered low income, in the 80th percentile, with households meeting less than or equal to twice the federal poverty level.

Assessment of Project Risks and Mitigation Strategies

Project Risks	Mitigations
• Potential presence of Atlantic salmon in Souadabscook Stream and the Penobscot River, Section 7 ESA Consultation and Section 404 permitting may limit the time of year that certain activities may be completed in the water at bridge #1558 • State-listed Endangered Species, Peregrine falcons, are known to nest on one of the piers of bridge #1558	• Minimize permanent and temporary in-water structures. • Plan construction sequence to avoid sensitive times for salmon life stages and falcon activity. • Incorporate measures to avoid and minimize effects early in design and scheduling. • Implement avoidance and minimization measures during construction to reduce potential effects from in-water work. • Early coordination with U.S. Fish and Wildlife and Maine Department of Marine Resources to obtain best available information on species located within project location.

VII. ADMINISTRATION PRIORITIES & DEPARTMENT STRATEGIC PLAN GOALS

The five bridges listed in Fair condition are all experiencing ongoing, dynamic deterioration from ASR. Without the BIP grant funding, the project will likely not move forward before 2026. It is likely that it would not be possible to complete the mitigation work needed on all six bridges without BIP funding, or work would be undertaken based on severity of individual bridge status.

As noted previously, approaching the bridge construction as a bundle is more efficient environmentally, economically, and strategically. MaineDOT is the sole applicant and will begin environmental screening, right of way proceedings, geotechnical explorations, design, and subsequently will be put out to bid as soon as construction funding is secured and approval from relevant parties has been granted.

Safety

As ASR continues, more damage will occur to the structural integrity of the bridges. Outside forces also act on the bridges and, as they are already fragile due to the ASR, they are more susceptible to weather-based damage. These conditions could cause them to fall from Fair condition to Poor condition within the next three years. The anticipated safety benefits of this project include reduced chance of bridge closure, preventing detours on area roads. Additionally, Bridge #1562 will have widened shoulders for pedestrians and cyclists. During construction, MaineDOT will ensure workers are protected and work zones remain safe, a critically important aspect of any MaineDOT project.[17]

Climate Change and Sustainability

Maine Won't Wait, the state's comprehensive climate action plan provides state agencies, including MaineDOT, with proven guidelines to consider when incorporating climate change and environmental justice measures into any project. MaineDOT is very experienced considering a project's potential impacts on the natural, economic, and social environments, as outlined in the *Bridge Bundling Guidebook*, including:

- Threatened and/or endangered species (and their habitats)
- Migratory birds
- USACE Section 408 authorizations
- Cultural resources (archeological or historic)
- Public parklands
- Floodplains and wetlands
- Noise levels, water quality, and air quality
- Human health and safety
- Social and economic impacts on communities

Reconstructing the bridges will eliminate the threat of additional vehicle miles traveled, and associated harmful emissions that result, should a long-term bridge outage occur. Total Project emission savings, both CO_2 and non-CO_2 combined, are $494,211,689. These savings, calculated in the BCA, result from eliminating long detours should the bridges eventually fail and close permanently. Bridges will be constructed in the same right-of-way as current bridges. The Project will not affect endangered species or waterways.

Equity

The Department has long-standing policies in place to support all individuals equally and avoid discrimination. The Department's policy states:

[17] https://www.maine.gov/mdot/safety/workzone/

> "In accordance with Title VI of the Civil Rights Act of 1964 and other authorities, MaineDOT is committed to ensuring that the fundamental principles of equal opportunity are upheld in all decisions involving our employees and contractors/consultants, and to ensuring that the public-at-large is afforded access to our programs and services. To that end, no person shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any MaineDOT program or activity on the grounds of race, color, or national origin. MaineDOT will work with staff, sub-recipients, contractors and service beneficiaries to promote awareness for the provisions of Title VI and the responsibilities associated with that Act."[18]

Workforce Development, Job Quality, and Wealth Creation
As detailed in the *Economic Competition and Opportunity* section of the Merit Criteria, the Project will create good-paying jobs that include strong labor standards guided by MaineDOT's EEO Policy and Affirmative Action. MaineDOT will ensure Project contracts let through the Agency adhere to Federal and state law. MaineDOT maintains a strong focus on workforce development with an OJT Program providing meaningful training opportunities for Women, Minorities, and Disadvantaged individuals on Federal-aid highway and bridge projects, to develop full journeymen. The Project contractor is responsible for demonstrating to the Department steps taken to ensure training and recruitment includes disadvantaged populations.

VIII. DOT PRIORITY SELECTION CONSIDERATIONS

The Project recognizes and complies with the following DOT priorities:

Plans to improve the condition of a bridge or bundle of bridges in poor condition or in fair condition and at risk of falling into poor condition within the next 3 years.
The Project consists of replacing a bundle of five bridges currently in *Fair* condition and likely to rapidly deteriorate to *Poor* condition in the next three years, as well as one bridge currently in *Poor* condition and likely to deteriorate further in the next three years.

Demonstrates but for a BIP grant the project sponsor(s) will be unable to complete the Bridge Project
The Department is unable to complete the Project without BIP funding due to a number of challenging internal and external factors. The bridges selected along I-395 were constructed in the 1980s, following the construction of the interstate system in Maine between the 1950s and 1970s. Many of the bridges are now reaching the end of their useful life simultaneously. The cost to rebuild all these bridges would be around $1.2 billion, nearly all of the Department's annual transportation project budget. Externally, the Department has experienced inflationary pressures that increase the cost of each infrastructure project.

The applicants are an FLMA that owns the bridge and a State, and Bridge Project application provides evidence that upon completion of the project, the bridge will be divested
The Project bridges are all owned by the State of Maine; no involvement with an FLMA applies.

The project is or will be ready to proceed to the next stage of project delivery within 12 months of a CE Determination, FONSI, or ROD

[18] https://www.maine.gov/mdot/civilrights/title-vi/

The Project is expected to receive a Categorical Exclusion Determination and will proceed to the next stage of project delivery within 12 months of that determination. The Project Schedule is available in the *Project Readiness and Environmental Risk* section of the application.

The project includes accommodation for transit and/or multi-modal transportation such as the inclusion of bus rapid lanes on the bridge and pedestrian/bicycle facilities
Due to the location of the bridges along the interstate, accommodations for multi-modal transportation are not included.

The project considers Workforce Development, Job Quality and Wealth Creation such as the creation of good-paying jobs directly related to the project, that may result in equitable access to those jobs, with a free and fair choice to join a union, expand training programs, and incorporates strong labor standards and includes strategies such as targeted hiring preferences for bringing in and retention of historically underrepresented workers into the workforce
As detailed in the *Economic Competition and Opportunity* section of the Merit Criteria, the Project will create good-paying jobs that include strong labor standards guided by MaineDOT's EEO Policy and Affirmative Action. MaineDOT will ensure Project contracts let through the Agency adhere to Federal and state law. MaineDOT maintains a strong focus on workforce development. MaineDOT's OJT Program provides meaningful training opportunities for Women, Minorities, and Disadvantaged individuals on Federal-aid highway and bridge projects. MaineDOT's OJT program requires contractors make every effort to enroll minority and women trainees (i.e., by conducting systematic and direct recruitment through public and private sources likely to yield women, minorities, and disadvantaged trainees) to the extent that such persons are available within a reasonable area of recruitment.

Without a BIP grant, construction of the project is unlikely to commence before September 30 of the fiscal year plus 3 years (September 30, 2026, for FY 2023 funds.)
Without BIP grant funding, Project construction is unlikely to commence prior to September 30, 2026, because sole state funding is not available and would be unsustainable, given the need. There are 56 outdated bridges passing over the interstate; the cost to replace all would be around $1.2 billion, nearly all of MaineDOT's annual transportation project budget. Given high bridge replacement costs, the number of bridges requiring replacement, and inflationary pressures, the Department is unable to replace them without BIP funding.

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/