U.S. Department of Transportation

Funding Opportunity for the Department of Transportation's Competitive Highway Bridge Program for Fiscal Year 2018

Project Name	Franklin County Bridges Project
State Priority Ranking	2 of 2
Previously Incurred Project Eligible Costs	$300,000
Future Eligible Project Costs	$10,500,000
Total Project Cost	$10,800,000
Program Grant Request Amount	$8,400,000
Federal (DOT) Funding including Program Funds Requested	$8,640,000

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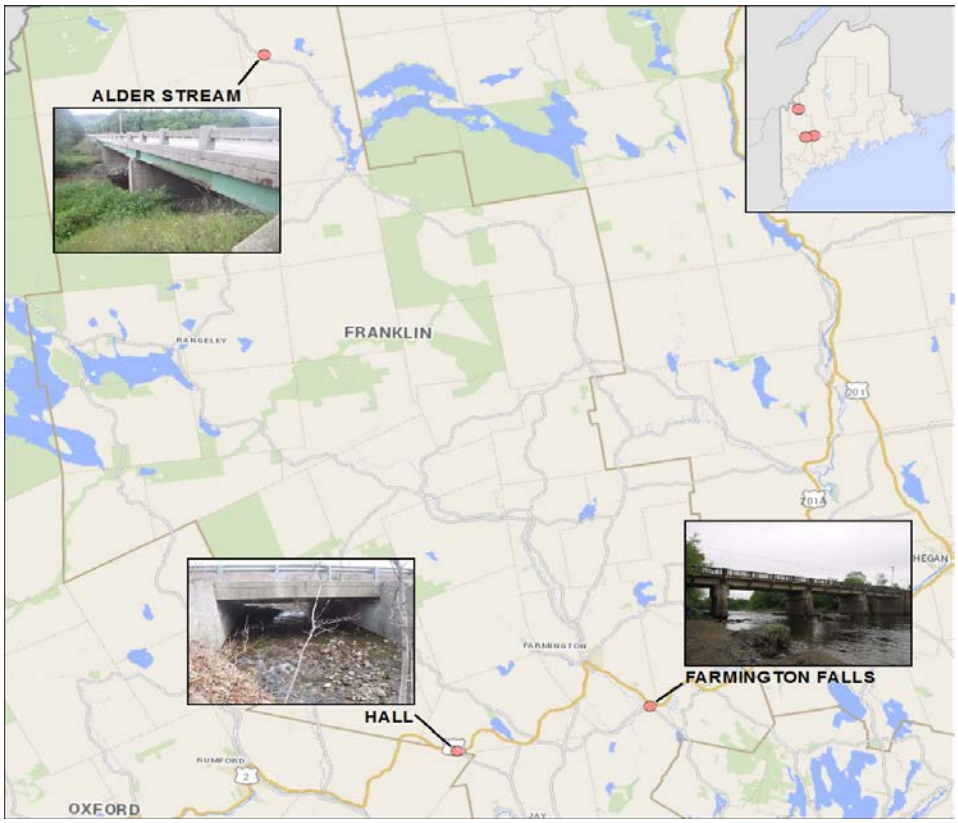
Franklin County Bridges Project



Project Summary

The Maine Department of Transportation (MaineDOT) is seeking $8.4 million from the U.S. Department of Transportation (USDOT) Competitive Highway Bridge Program (CHBP) for fiscal year 2018. The total cost of the project is $10.8 million. Preliminary Engineering and Right-of-Way acquisition has previously been incurred for Chesterville/Farmington, Farmington Falls Bridge in the amount of $0.3 million. The balance (future eligible project cost) for all three bridges is $10.5 million. This application assumes that $8.4 million (80 percent) CHBP Grant will be awarded to match existing $2.1 million (20 percent) non-federal to complete the required funding for this project.

The *Franklin County Bridges Project* will:
a) Repair a network of three key highway bridges in rural Maine that require near-term replacement, as they are all structurally deficient, and will be made safer for the long term.
b) Maintain access to basic life services at existing travel distances and times where alternatives are limited and costly, and put lives at risk.
c) Allow for uninterrupted supply chains for business in the region, principally the Maine forest economy, which while long suffering in terms of plant closures, still plays a critical role for employment, GDP and exports.
d) Continue and improve access to Maine's outdoor recreational resources of mountains and lakes that drive the tourism economy of the region.

The *Franklin County Bridges Project* ("Project") will fully replace three challenged highway bridges in a rural area of western Maine. Each of these bridges is structurally deficient and needs to be replaced or incur significant maintenance, and risk potential closure. The impact of their failure or closure on the residents in the region as well as those traveling through the region for business, or to enjoy Maine's many outdoor recreation opportunities, is great. These bridges are clustered in a region with little reasonable alternative routing. Because there are few alternative routes, the *one-way* detours in the event of a bridge closure range from 11 to 179 miles. This would add significant expense to individuals and businesses, could put lives at risk for emergency services and inflict substantial inconvenience at best. Replacing the bridges now, prior to load posting, failure or forced closure, will allow for their orderly and cost-efficient replacement. The Project maintains existing access to schools and basic emergency services for residents in this rural region, allows businesses in Maine to use these state roads to connect to Interstate 95 and allows recreational enthusiasts continued access to Maine's many outdoor activities that drive the tourism industry in the state.

Maine and MaineDOT have been investing consistently on bridge improvements and replacements but additional funding sources are needed to continue to keep the 2,458 state bridges, 80% of which are in rural areas, in a state of good repair.[1] MaineDOT is an accomplished and responsible recipient of past TIGER and FASTLANE grants and can be relied upon to fully fund and commence the project in advance of the 2021 obligation date, and to complete the project by the 2026 requirement. Replacing these three bridges will ensure this region maintains continuous access without inflicting undue burdens that this rural area simply cannot afford.

[1] USDOT FHWA National Bridge Inventory, https://www.fhwa.dot.gov/bridge/nbi/no10/condition17.cfm

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Standard Form 424, Application for Federal Assistance

Project Narrative

I. Project Description

A) PROJECT DETAILS AND BACKGROUND

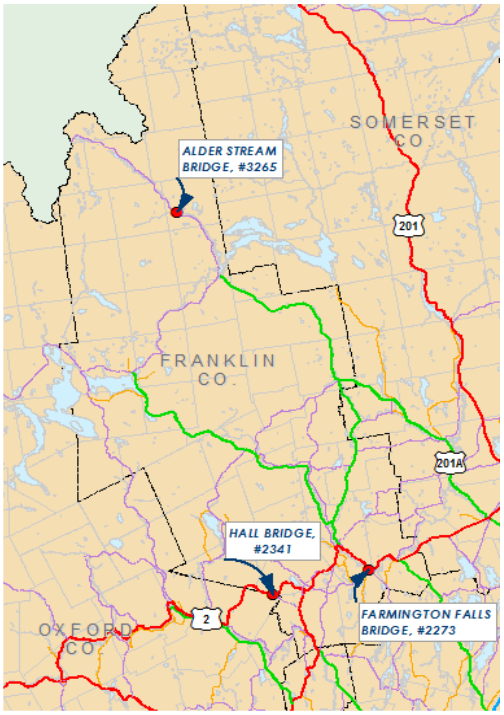
Of all the states in the U.S., Maine has the highest proportion of its residents living in rural areas, some 61.3% according to Census Bureau definition.[2] In fact, 89% of the total land in Maine is forestland.[3] The three bridges that together make up the Project are all within rural Franklin County. "Rural residents tend to be more heavily reliant on their limited transportation network - primarily rural roads and highways - than their counterparts in more urban areas. Residents of rural areas often must travel longer distances to access education, employment, retail locations, social opportunities and health services."[4] The bridges in the Project provide the residents of Chesterville/Farmington, Jim Pond Twp., Wilton and many other small rural towns access to schools and shopping, health and emergency services and basic life necessities. They provide access for the Maine forest industry to get logging trucks from the many private roads that

[2] https://www.quora.com/Which-U-S-state-has-the-most-rural-land-out-of-all-the-other-states
[3] http://maineforest.org/wp-content/uploads/2016/09/Maines-Forest-Economy-10-12-2016.pdf, page 2 of pdf
[4] http://www.tripnet.org/docs/Rural_Roads_TRIP_Report_2017.pdf, page 2

connect the forests to Maine state roads and ultimately to Interstate 95. They provide access for residents and visitors to Maine to enjoy state parks, lakes and snowmobile trails that drive the tourism industry which had over 36.7 million visitors in 2017 who generated nearly $8.9 billion in spending.[5] Because of the size of the region and the scarcity of bridges, each one is of great importance. There are only 128 bridges in all of Franklin County which cover a land area of 1,743 square miles. On an average daily basis, 9,340 vehicles traverse these bridges presently, of which 1,357 are heavy trucks principally serving the forest industry. When access to a bridge is closed in these rural areas, there simply is no nearby alternative within a reasonable distance. For the bridges in the Project, the calculated comparable road detours in the event of an outage are 11 one-way miles for Farmington Falls Bridge, 179 one-way miles for Alder Stream Bridge and 30 one-way miles for Hall Bridge.

There are 2,458 bridges over 20 feet in length in the National Bridge Inventory in Maine. Of these, 326 have been determined to be structurally deficient, and thus have a significant defect. In 2017, Maine ranked 10th nationally in terms of percentage of total bridges that are structurally deficient, some 13%.[6] In Franklin county, 19.5 percent, or one out of five, bridges are structurally deficient.

All three bridges that make up the Project are each structurally deficient. They are the Farmington Falls Bridge on State Route 41 over the Sandy River in Chesterville/Farmington, the Alder Stream Bridge on State Route 27 over Alder Stream in Jim Pond Twp., and the Hall Bridge on State Routes 2 & 17 over Hooper (Butterfield) Brook in Wilton as follows:



The Farmington Falls Bridge is a 1931 four-span, concrete T-beam structure in poor condition with poorly aligned approaches. The new structure will be a two-span steel multi-girder bridge situated on a new alignment to the upstream (westerly) side of the existing bridge. The total bridge length will be increased to approximately 230' with the center pier situated to accommodate two equal spans and sufficiently convey stream flows. New reinforced concrete abutments, wingwalls, and pier substructures with spread footings are assumed to be founded on bedrock. The bridge width will accommodate two 11-foot travel lanes with at least four-foot shoulders and a sidewalk along the upstream fascia. The number of piers in the river will be reduced, increasing the opening and improving the flow characteristics through the bridge. Fewer piers reduces the potential for ice jams, flooding and trapping debris. The total project cost for the replacement of Farmington Falls Bridge is $6,000,000.

[5] https://digitalmaine.com/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1168&context=decd_docs, page 18 and 19

[6] Supra note 1, USDOT FHWA National Bridge Inventory

The Alder Stream Bridge is a 1961 three-span, rolled steel beam structure with a concrete deck. The steel superstructure is in poor condition with moderate to severe section loss at beam end locations over the abutments and piers. The new bridge will be a single span steel girder bridge with integral abutments. The bridge is in a floodplain and will need extensive hydraulic modeling, but based on the performance of the existing bridge, that is not expected to significantly affect the size of the bridge. The superstructure will consist of welded weathering, or metalized steel plate girders, with a concrete deck. The wearing surface on the deck will be either integral concrete or bituminous asphalt and membrane waterproofing. The travel lanes will be 11 feet wide with three-foot shoulders. The resulting curb-to-curb width will be 28 feet. The total project cost for the replacement of Alder Stream Bridge is $3,300,000.

The Hall Bridge is a single span, concrete slab bridge built in 1932, and later widened in 1972. The bridge has an integral concrete wearing surface, and a curb-to-curb width of 44 feet. The underside and center of the concrete slab has a large spall with broken rebar. The deck/ superstructure is in poor condition. The new bridge will be a single span precast concrete box culvert bridge with a clear span of 24 feet. The travel lanes will be 12 feet wide with 10 foot shoulders. The resulting curb-to-curb width will be 44 feet. The total project cost for the replacement of Hall Bridge is $1,500,000.

The total cost for replacement of the three bundled bridges with approach work is estimated at $10.8 million. Less $0.3 million previously incurred on Preliminary Engineering and Right-of-Way costs; the remaining costs are estimated at $10.5 million. This application request is for $8.4 million (80 percent) in CHBP grant funds to supplement the $2.1 million (20 percent) in existing Non-federal funds, in order to fully fund the replacement of these bridges.

Quantitative Facts[7]

Project Name: Franklin County Bridges Project

- This project will replace three rural highway bridges (built in 1931, 1961 and 1932) with modern bridges designed for 100-year lives and modern safety features preventing the safety and economic impact of their outages.
- The Project has a total Net Present Value (NPV) benefit of at least $730 million and a benefit-cost ratio of at least 97.8 to 1.
- The Project is regional in scope and is located in a rural region of the country.
- All three bridges in the Project are located in Franklin County.
- The Project is located in Maine Congressional District 2 (Representative Bruce Poliquin). The state is represented by U.S. Senators Susan Collins and Angus King.[8]
- Total Cost of the Project: $10,800,000

[7] *See* Appendix A, Benefit-Cost Analysis, for an explanation of the statistics cited below.
[8] *See* Appendix E, Support Letters.

- Total amount of CHBP FY 2018 funds requested: $8,400,000 (80 percent of future eligible costs of the project). A match has been committed by the Maine Department of Transportation in the amount of $2,100,000 (20 percent).[9]
- The Project's geospatial data can be found in a table in Project Location.
- The BCA (Benefit to Cost Analysis) conservatively estimates that a no build scenario will lead to some manner of shut down for an average of two weeks per year for the remaining service life of the bridges and assumes that the detour miles occur during that time.

B) Current and Future Conditions of the Bridges

Built 1931 - 1961, these bridges are at the end of their useful lives despite undergoing life-extending improvements in the past. They are presently structurally deficient. In each case, access across the bridges during construction will be maintained to avoid the reroute pain that the Project will be preventing. If the Project is not completed, there is the real risk of an eventual outage which would force the reroutes described below.

Details on the current bridges, the replacement bridges and the impact of a detour if the bridges were closed for each bridge in the Project follow:

1. Farmington Falls – Route 41 over the Sandy River

Bridge	Year Built	Remaining Service Life (Yrs)	Bridge Length (Feet)	Bridge Type	Challenge
Farmington Falls	1931	5-10	215	Four Span Concrete Tee Beam	Structurally Deficient

a) Current State

The Farmington Falls Bridge, constructed in 1931, is a four-span, cast-in-place concrete T-beam structure. The two center spans are 54 feet and the two end spans are 52 feet. The curb-to-curb width is 22 feet. The bridge has a single five- foot sidewalk with exposed rebar. Fifteen percent of the concrete wearing surface area is cracked and delaminated. The concrete deck has large areas of heavy staining and spalls with exposed rebar. Areas of spalled concrete range from 2 feet by 2 feet to 6 feet by 10 feet. The concrete beams have deteriorated

[9] *See* Appendix F, Match Letter.

adjacent to bridge drains. There is also scattered areas of heavy scaling on the bridge rail posts along with scattered areas of collision damage. The deck and superstructure are in poor condition.

The substructures consist of cantilevered abutments and wingwalls along with solid wall piers on spread footings bearing on rock. The east abutment and northeast retaining wall have full height vertical cracks that are being monitored. The piers are mass wall type piers on spread footings and have extensive spalling directly under bearing areas. The retaining walls have extensive map cracking, scaling and staining. The substructure overall is in fair condition.

In addition to the poor condition of the bridge, the approaches and adjacent intersections are poorly aligned. This geometry combined with the narrow bridge width present safety concerns for users of the structure including both vehicular and pedestrian traffic.

Rehabilitation of the existing bridge is neither prudent nor feasible given the age of the bridge (87 years) which far exceeds the design life (50 years). Any rehabilitation work would require extensive cofferdams and work trestles. Substructure rehabilitation would be very expensive and only add 10 to 20 years of life to the structure.

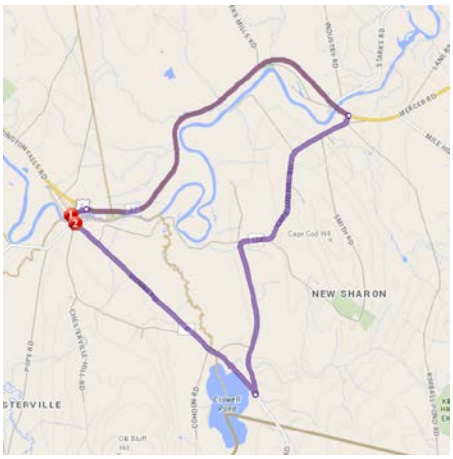
b) Description of Replacement Bridge

The replacement bridge will consist of a two-span steel multi-girder bridge situated on a new alignment to the upstream (westerly) side of the existing bridge. The total bridge length will be increased to approximately 230’ with the center pier situated to accommodate two equal spans and sufficiently convey stream flows. New reinforced concrete abutments, wingwalls, and pier substructures with spread footings are assumed to be founded on rock. The bridge width will accommodate two 11-foot travel lanes with at least four-foot shoulders and a sidewalk along the upstream fascia. To ensure service life of the new bridge and minimize future maintenance costs, corrosion-resistant materials will be utilized for superstructure and substructure elements with increased exposure.

The roadway approaches and adjacent intersections will be reconstructed in accordance with current standards to accommodate modern vehicles. Constructing the bridge to the west of existing will minimize the duration of any necessary lengthy offsite detour and limit impacts to the public.

The number of piers in the river will be reduced, increasing the opening and improving the flow characteristics through the bridge. Fewer piers reduces the potential for ice jam and trapping debris.

c) Impact of Closure Detour – 11 one-way miles



Bridge	Functional Classification	AADT	Heavy Truck AADT
Farmington Falls	Rural - Major Collector	4,320	475

AADT - Annual Average Daily Traffic

If the Project is not completed and there is a closure, the detour for crossing the Farmington Falls Bridge is **11** one-way miles for 4,320 vehicles on an average day. This is the shortest route not employing local roads. The route has a daily user cost of $14,751.[10]

2. Alder Stream Bridge – Route 27 over Alder Stream

Bridge	Year Built	Remaining Service Life (Yrs)	Bridge Length (Feet)	Bridge Type	Challenge
Alder Stream	1961	5-10	128	Three Span Steel Multi-Girder	Structurally Deficient

a) Current State

The Alder Stream Bridge, constructed in 1961, is a three-span, rolled steel beam structure with a concrete deck. The curb-to-curb width is 26 feet. The concrete wearing surface has scattered areas of delaminated concrete. The underside of the concrete deck has areas that have been patched. The steel beams have moderate to severe section loss at beam end locations over the abutments and piers. This deterioration reflects the difficulty in maintaining bridge joint seals over piers for simply supported bridges built during this period. The superstructure is in poor condition.

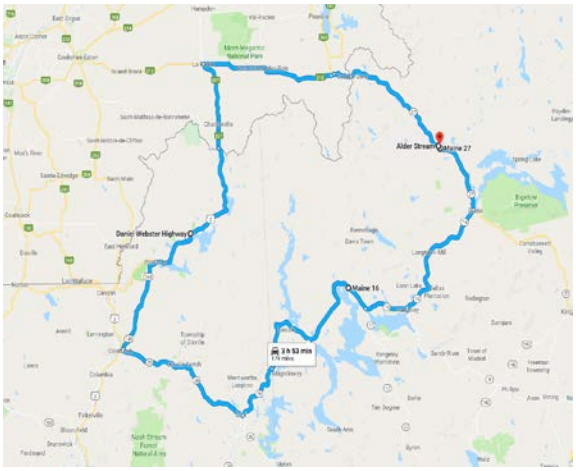
All components of the substructure are generally in good condition.

b) Description of Replacement Bridge

[10] *See* Appendix A, Benefit-Cost Analysis, for user cost details for all bridges.

The new bridge will be a single span steel girder bridge with integral abutments. The bridge is in a floodplain and will need extensive hydraulic modeling, but based on the performance of the existing bridge, that is not expected to significantly affect the size of the bridge. The superstructure will consist of welded weathering, or metalized steel plate girders, with a concrete deck. The wearing surface on the deck will be either integral concrete or bituminous asphalt and membrane waterproofing. The travel lanes will be 11 feet wide with three-foot shoulders. The resulting curb-to-curb width will be 28 feet.

c) Impact of Closure Detour – 179 one-way miles



If the Project is not completed and there is a closure, the detour for crossing the Alder Stream is **179** one-way miles for 800 vehicles on an average day. This route has a daily user cost of $49,244.

Bridge	Functional Classification	AADT	Heavy Truck AADT
Alder Stream	Rural - Major Collector	800	274

AADT - Annual Average Daily Traffic

3. Hall Bridge – Routes 2 & 17 over Hooper (Butterfield) Brook

Bridge	Year Built	Remaining Service Life (Yrs)	Bridge Length (Feet)	Bridge Type	Challenge
Hall	1932	5-10	23	Concrete Slab	Structurally Deficient

a) Current State

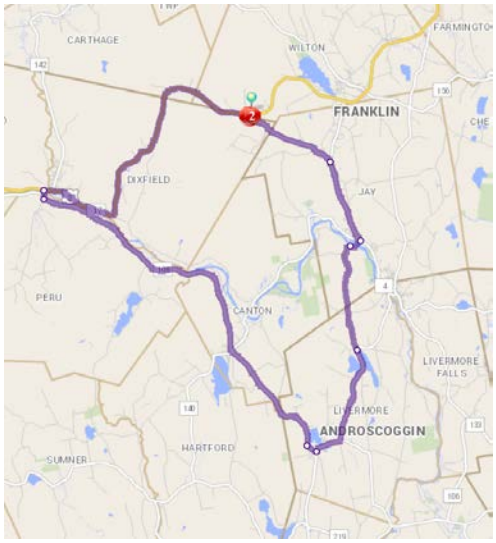
The Hall Bridge is a single span, concrete slab bridge built in 1932, and later widened in 1972. The bridge has an integral concrete wearing surface, and a curb-to-curb width of 44 feet. The underside and center of the concrete slab has a large spall with broken rebar. The deck/ superstructure is in poor condition. The bridge rail is substandard.

Rehabilitation of the existing bridge, which has previously undergone a bridge deck rehabilitation when it was widened, is neither prudent nor feasible, given the age of the bridge (86 years) which far exceeds the design life (50 years).

b) Description of Replacement Bridge

The new bridge will be a single span precast concrete box bridge with a clear span of 24 feet. The wearing surface on the deck will be either integral concrete or bituminous asphalt and membrane waterproofing. The travel lanes will be 12 feet wide with 10 foot shoulders. The resulting curb-to-curb width will be 44 feet.

c) Impact of Closure Detour – 30 one-way miles

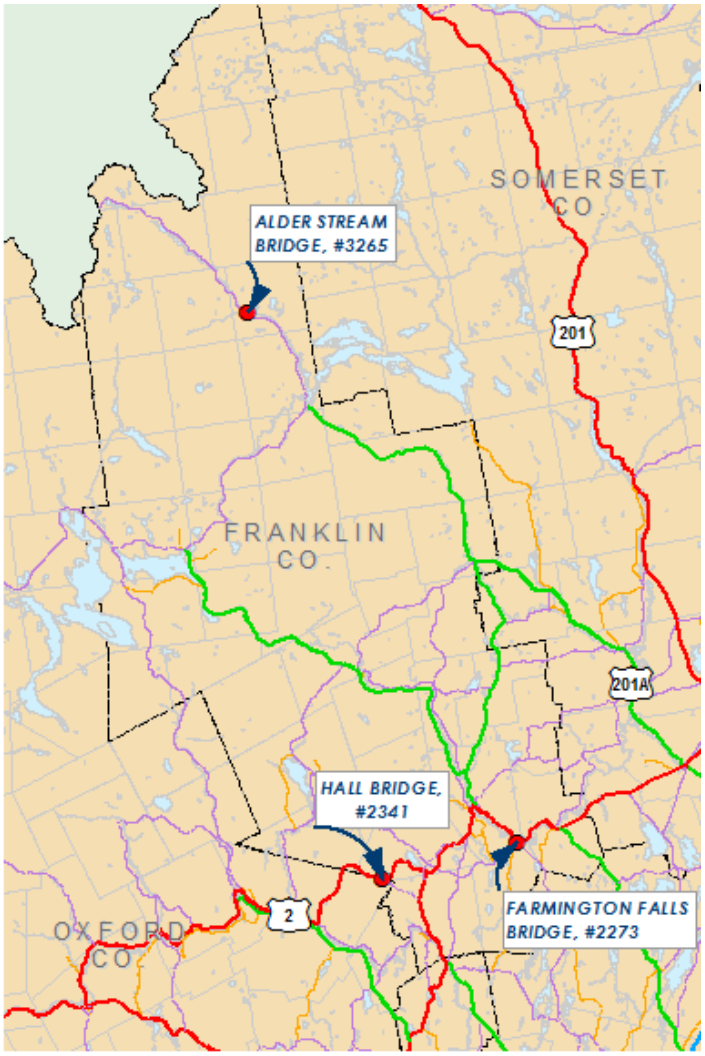


If the Project is not completed and there is a closure, the detour for crossing the Hooper (Butterfield) Brook is **30** miles for 4220 vehicles on an average day. This detour has a daily user cost of $39,894.

Bridge	Functional Classification	AADT	Heavy Truck AADT
Hall	Rural – Principal Arterial - other	4220	602

AADT - Annual Average Daily Traffic

II. Project Location



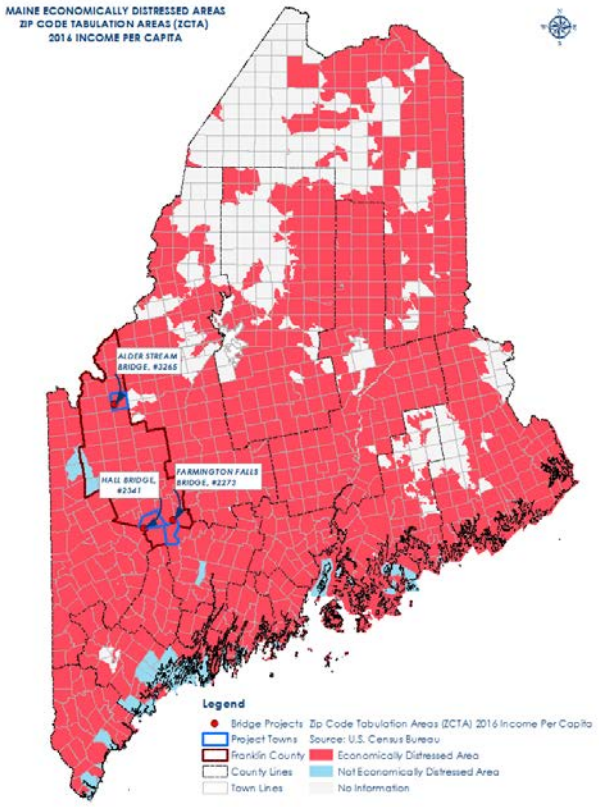
Location - Maps, geo-spatial information[11]

The bridges in the Project are in Franklin County in Maine's 2nd Congressional District. They are located in the towns of Chesterville/Farmington, Jim Pond Twp and Wilton.

Town	Bridge	Bridge #	Longitude	Latitude	County
Chesterville/Farmington	Farmington Falls	2273	-70.07484	44.62008	Franklin
Jim Pond Twp	Alder Stream	3265	-70.54699	45.25419	Franklin
Wilton	Hall	2341	-70.30100	44.57280	Franklin

[11] *See* Appendix B, Maps with Project Locations

The percentage of structurally deficient bridges in the U.S. fell from 2001 to 2013 while Maine's percentage of bridges in that category remained the same.[12] Maine had 326 structurally deficient bridges in 2017 and ranked 10th in the nation in this category. Of the total number of bridges statewide, 13 percent of them were classified as structurally deficient.[13] In Franklin County, home to all three of these bridges, 19.5 percent, or 'one out of every five' bridges, are classified as structurally deficient. These bridges were selected as one Project for this grant application due to their close proximity to one another, their access to the region and their poor ranking in a region struggling to overcome economic hardship. The bridges are a vital connection to the region's employment, emergency services, access to healthcare, tourism and recreation. With public transportation in this rural area virtually non-existent, residents rely on personal vehicles and local roadways and bridges to get to and from work.



The vast majority of Franklin County, in which all three bridges are located, is an economically distressed area, including the towns of Jim Pond Twp., Chesterville/Farmington and Wilton. The latest data (2017) from the U.S. Bureau of Economic Analysis indicates that the per capita income for the United States was $51,640, and for Maine it was $46,455. In Franklin County, per capita income for that same period was $37,315.[14] It is also instructive that very recent data from the U.S. Bureau of Labor Statistics Local Area Unemployment Statistics Program indicates that for October 2018 the unemployment rate for the United States was 3.7%, and for Maine 3.2%. The unemployment rate for Franklin County for that same period was 3.8%.[15]

III. Project Parties

MaineDOT – Funding $2,100,000

The Maine Department of Transportation (MaineDOT) is a cabinet-level state agency with primary responsibility for statewide transportation by all modes of travel. MaineDOT employs approximately 1,900 people and expends or disburses more than $600 million per year, including federal, state and local funds. The primary source of transportation funding in Maine is gas tax revenue, which by statute, can be used for highways and bridges only. The funding source for

[12] http://maine.gov/mdot/pdf/kobs2014.pdf, page 11
[13] American Road & Transportation Builders Association 2016 Annual Bridge Report, Source: U.S. Department of Transportation Federal Highway Administration National Highway Bridge Inventory, 2015 data
[14] https://apps.bea.gov/regional/bearfacts/

[15] https://www.maine.gov/labor/cwri/laus.html

the Project will be State General Obligation Bonds. In Maine that comes from state bonds approved by the legislature and taxpayers. Due to its significant economic and transportation impact on the entire state and region, the Project has been prioritized by MaineDOT.

MaineDOT will continue to consult with stakeholders during the development of this project.

Federal Highway Administration – Maine Division
Maine Department of Environmental Protection
Maine Department of Inland Fisheries & Wildlife
Maine Historic Preservation Office
U.S. Fish and Wildlife Service
Army Corps of Engineers
Franklin County Commissioners
Town of Chesterville
Town of Wilton
Town of Farmington

IV. Grant Fund Sources/Uses

Preliminary Engineering and Right-of-Way acquisition has previously been incurred for Chesterville/Farmington, Farmington Falls Bridge in the amount of $0.3 million. The balance (future eligible project cost) for all three bridges is $10.5 million. This application assumes that $8.4 million (80 percent) CHBP Grant will be awarded to match existing $2.1 million (20 percent) non-federal to complete the required funding for this project, as follows:

	Previously Incurred	MaineDOT	Grant	Total
Preliminary Engineering	$285,000	$169,000	$676,000	$1,130,000
Right of Way	$15,000	$21,000	$84,000	$120,000
Construction		$1,684,000	$6,736,000	$8,420,000
Construction Engineering (CE)		$226,000	$904,000	$1,130,000
Total	$300,000	$2,100,000	$8,400,000	$10,800,000
% of Future Eligible Project Costs		20%	80%	

The Cost Estimates for the individual bridges are provided in Appendix C.

State Matching Funds

Funding for MaineDOT's portion of the project will come from the State's General Obligation Bond proceeds. MaineDOT is well equipped to manage and administer this grant, having received and managed numerous USDOT grants for highway, railroad and transit programs including previous TIGER and FASTLANE awards. Those awards include the Kennebec Bridge Replacement (Richmond-Dresden), Sarah Mildred Long Bridge Replacement (Kittery-Portsmouth), and the Penquis Region Bridges project. A match commitment letter from the MaineDOT Commissioner is attached as Appendix F.

V. Selection Criteria

The Project is important because it meets all of the merit criteria. The bridges are each structurally deficient, which combined with the potential for increased emergency response time and additional road transit time in the event of an outage, is an important *safety* issue. The bridges range in age from 57 to 87 years since they were originally built, and all show visible signs of that age. The Project would put all into a *state of good repair*. With few alternative routes, and none which are reasonable and practical, an outage of each of the bridges would impact the *economy* of the region, the ability to *compete* on a level playing field and the economic fortunes of the residents. Outdoor recreation and the environment play a vital role to Maine and the tourist industry. As such, the project will be constructed in an *environmentally sustainable* way reflective of the unique and recent agreement MaineDOT has with FHWA for NEPA. Any outage would greatly lessen *quality of life* in the region causing wasteful time and resources versus current routes. Construction of the Project will use *innovative* processes and materials for completion. The Project *bundles* three bridges together to streamline processes and minimize design and construction costs. The Project has a broad base of support from numerous stakeholders, enabling MaineDOT to once again be a great *partner* with USDOT for a significant federal grant.

1) Innovations

The Project bridges will be designed for 100-year lives. To achieve that, MaineDOT will utilize a variety of innovative techniques in construction:

i. Use of corrosion resistant reinforcing steel for bridge components – Stainless steel concrete reinforcing will be used for all superstructure elements, including abutment backwalls, and will be considered for substructure elements, especially piers.

ii. Use of high performance concrete – Low permeability concrete will be used in the bridge through performance-based specifications. MaineDOT has used performance-based specifications for concrete since the late 1990s.

iii. Use of good detailing practices including:
   1. Use of integral abutments or semi-integral abutments to eliminate the use of bridge joints and bearings.
   2. Using the minimum number of deck drains possible.
   3. Using fiberglass reinforced polymer drains
   4. Increased reinforcing bar cover, particularly on the bottom face of the deck

2) Safety

All three bundled bridges are structurally deficient, as indicated by their most recent evaluation scoring. The safety and well-being of area residents could be jeopardized in the event of bridge failure. Emergency response time would increase to some parts of the region as time and distance of travel for emergency responders would rise. Replacing the three bridges in this grant application will address safety issues on the rural highway system. Any increase in mileage will increase the likelihood of negative safety events. These bridges are critical to the area because of the rural nature of the region. If a bridge fails or needs to be closed due to sudden major repairs, the detour mileage will range from 11 miles to 179 miles. Using these detour miles and conservatively estimating that a no-build scenario will lead to some manner of shutdown for an

average of two weeks per year and with these mileages and time frames, the Project will result in an overall safety savings of $45,984,146 over the course of 30 years on a 7 percent NPV basis.

In Maine, the number of fatal crashes per 100 million vehicle miles traveled is 1.07. Using this data, the dollar value of lives saved by this project over 30 years is expected to be more than $42 million. Looking at each bridge independently, this project will result in a cost savings of $6,877,917 for Farmington Falls; $17,507,349 for Alder Stream; and $17,997,694 for Hall. A 2018 FMCSA study stated that the number of large trucks involved in crashes that resulted in injuries per 100 million truck miles traveled was 50.3. To be conservative, this application assumes that all the injuries would be minor (i.e. Maximum Abbreviated Injury Scale Level 1). The value of preventing injuries is $762,481 over the course of 30 years. Looking at each bridge independently, this project will result in a cost savings of $56,937 for Farmington Falls; $510,530 for Alder Stream; and $195,013 Hall. The economic impact of these crashes is $4,327 per accident, which accounts for property damage only. The benefit of eliminating these crash impacts over the course of 30 years has a value of $2,838,705. Looking at each bridge independently, this project will result in a cost savings of $460,666 for Farmington Falls; $1,172,599 for Alder Stream; and $1,205,441 for Hall.

VI. Support for Economic Vitality

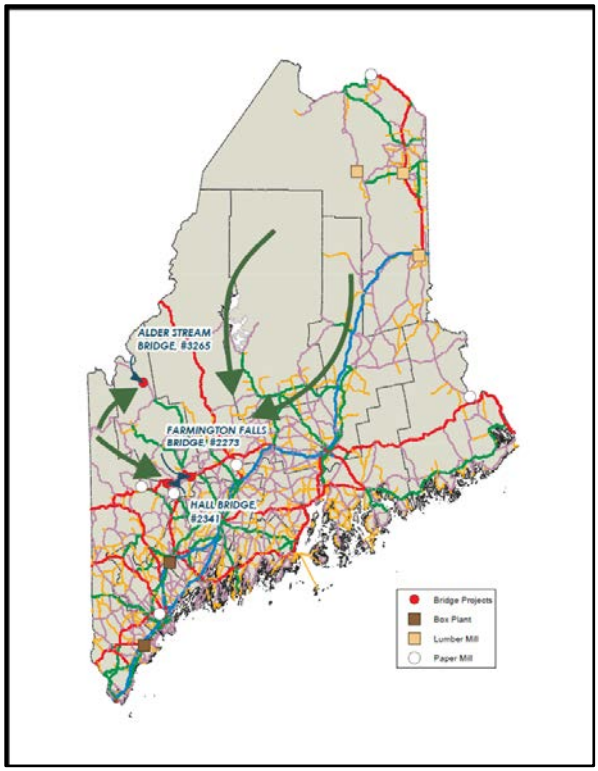
1) Economic Competitiveness

A. The Goods Economy

The bridges are an example of rural infrastructure supporting commerce and economic growth in a region that is economically challenged. In this rural area with no alternate means of transportation, existing roads are key to the economic and social livelihood of the area. A network of paved and unpaved rural local roads provides the foundation for residents and raw materials to connect to the economy outside their area. They afford the initial movement of the raw timber and forest products that feed the pulp and paper industry. These roads also provide a quiet, meaningful quality of life for those living along them. Rural local roads feed into rural minor collector roads. These roads feed and work in concert with the rural major collector roads to provide a vital link between rural areas and larger road arteries. Both the Farmington Falls and the Alder Stream Bridges encompass rural major collectors. These feed into rural minor arterial roadways which then feed into higher volume rural principal arterial – other roadways. Traffic gathered at these points can then access the largest rural artery of all, the rural principal arterial – interstate highways. Hall Bridge is located on a rural principal arterial. Interstate 95 acts as the primary artery through Maine.

The economic impact of Maine's forest products industry was estimated at $8.5 billion in 2016. There are 16,500 direct jobs and 38,900 indirect jobs statewide resulting from the industry, but it is an industry that has faced recent challenges competing in a global environment. Soft demand and high energy prices are the biggest factors in recent wood mill closures in Maine.[16] The industry is having to change its focus. The hope is that by increasing the variety of wood products produced both large (e.g., OSB) and small (e.g., golf tees) that will, in turn, make each remaining company more stable in the state and that will enhance investment in sustaining forest resources for generations, but the cost of transportation is a key factor in keeping the mills competitive. Replacing these bridges would provide the worry-free structural integrity required to handle raw timber materials, and finished lumber and paper goods, thus eliminating the threat of applying inadequate weight restrictions to materials traveling over the bridges. On the other hand, eliminating the bridges due to structural failure or even increasing weight restrictions that eliminate forest products movements would necessitate rerouting these raw materials and finished goods. Rerouting, in turn, drives up transportation costs which then drives up the cost of goods as manufacturers attempt to compete in the global marketplace.

International trade, including imports and exports, supports 177,519 Maine jobs, more than one in five. While total employment declined from 2004 - 2013, trade-related jobs grew by 24 percent, with large and small companies, farms and factories participating in global trade in the past decade.[17] Canada is Maine's largest trading partner and receives 47.5% of the state's exports. Meanwhile, 51% of Maine's imports originate from Canada. To the south, Maine is a one-day drive from the international shipping lanes that link U.S. goods via the ports of New York and New Jersey. Getting these wood products to compete in a global market begins by having them travel on rural roads.



The *Forest Industry Flows and Key Plants Map* illustrates how potential reroutes would further increase costs for an industry already suffering from global competition. Looking forward to potential redevelopment of defunct mill sites, the need to maintain infrastructure cannot be overemphasized. These sites are ideally located at the confluence of private and public road networks and rail lines. With continuing research and development by the University of Maine and private sector corporations, new uses and product lines are being developed regularly. The now abandoned sites are being repositioned to receive the new technologies and processes. Situated in critical locations in the supply chain, these mills will likely see new investments and future job growth.

[16] http://tradepartnership.com/wp-content/uploads/2015/01/ME_TRADE_2013.pdf, p.13
[17] Supra note 25, Maine Trade, page 14

For workers in Franklin County, a rerouted drive to their place of employment would mean increased travel costs: fuel cost, time spent on the drive, added wear-and-tear to a vehicle, and added traffic on alternate-route roads and bridges. This would be financially burdensome to an area with a per capita personal income (PCPI) well below the national average. According to 2015 U.S. Census Bureau data, County's PCPI was $34,634, only 72 percent of the national average.[18] With PCPI in the mid $30,000s, simply the fuel cost that residents would incur if the bridges were closed and their daily commutes were extended, ranging from $622 to over $5,000 annually, would certainly eliminate any disposable income. The total additional costs to operate their vehicles for extended distances simply could not be afforded by the average resident.

Bridge	One-way Reroute Distance (Miles)	Annual Fuel Cost Impact*	Annual Total Vehicle Cost Impact**
Farmington Falls	11	**$5,078**	**$13,108**
Alder Stream	179	**$2,487**	**$6,420**
Hall	30	**$622**	**$1,605**

** Based on average US Fuel Economy and average Maine price per gallon on 9/26/17*

*** Based on 250 annual commutes and IRS expense for standard mileage rates used to calculate the deductible costs of operating an automobile for business*

B. THE SERVICE ECONOMY

The Project is focused on three bridges that are vitally important to sustaining the economy of Franklin County and the State of Maine. Much of the commercial traffic includes logging trucks heading to lumber and paper mills in the region. The bridges are important to area residents who increasingly must travel greater distances to work than was necessary in the past. They provide access to a multi-lake landscape that offers substantial year-round recreation and is also the home to many notable youth summer camps. Route 41 provides a direct route to Farmington, the gateway to Sugarloaf Ski Resort and the Rangeley area, one of Maine's premier tourist destinations, from southern Kennebec County and northern Sagadahoc and Androscoggin Counties.

Route 41 provides access to the Somerset SAPPI Global Mill in Skowhegan, manufacturer of nearly 800,000 metric tons of coated wood free paper and 525,000 metric tons of bleached chemical pulp for internal consumption and market pulp. This facility supports nearly 800 jobs on-site and relies heavily on the highway transportation system for delivery of essential raw materials and delivery of finished products to market. To the southwest of Wilton and Chesterville/Farmington is the town of Jay, which is home to the Androscoggin Mill, a division of VERSO Corporation. The mill currently has 2 paper machines that employs 400 workers and produces 250,000 tons of coated, uncoated, and specialty paper. The company made a decision in February, 2018 to upgrade a third paper machine which was idled in July, 2017. When fully operational the third machine will add an additional 120 workers in increase output by an additional 200,000 tons of paper product.

[18] http://www.statsamerica.org/distress/distress.aspx, US Commerce Department's Economic Development Administration

Located on US Route 2 approximately 22 miles west of Wilton is the town of Rumford, the home of the third paper mill that supports the economy of western Maine. The ND Paper-Rumford Mill produces 460,000 ton of kraft pulp and 565,000 tons of paper annually.

Route 27 is also an important international commerce route. Located at the north end of the route is a permit port of entry between the U.S. and Canada, established by the Canadian government. Despite a relatively low AADT of 800 vehicles per day, the primary commerce use of this crossing is by truckers for log products destined to Fontaine Lumber in Woburn, QC and to Stratton Lumber in Stratton, ME. Also, wood chips are delivered to Stratton Energy, the 48-megawatt biomass electric generating plant in Stratton. Logs used in the manufacture of paper and trucks carrying calcium oxide ("quicklime") from Quebec to the paper mills in Rumford, Livermore, and Skowhegan also depend on this route.

All three bridges included in this application are on vital travel routes in the supply chain for raw materials to the mills and finished product from the mills. All three bridges are in play with respect to the pulp and paper industry.

C. OPERATING COST SAVINGS

Costs to operate vehicles according to the BCA Guidance for Discretionary Grant Programs includes costs such as fuel prices, maintenance, tires and depreciation. Using the BCA Guidance suggested values, this project will result in operating costs savings of $117.7 million over the course of 30 years. Looking at each bridge independently, this project will result in a cost savings of $15,939,434 for Farmington Falls; $58,103,070 for Alder Stream; and $43,656,766 for Hall. These costs savings are significant, particularly for this rural region of Maine.

A key goal of the Trump Administration is to reduce America's dependence on foreign oil, which will serve the purpose of increasing the country's energy security. The project moves the United States closer to seeing a real reduction in the nation's dependency on foreign oil by reducing unnecessary fuel use due to having to detour miles each way.

Maintenance savings are a critical component of any highway infrastructure project. Maintenance costs are constant and make it difficult for the state to budget for large capital projects. This project will save Maine $1,973,613 over the course of 30 years. Looking at each bridge independently, this project will result in a cost savings of $808,549 for Farmington Falls; $787,152 for Alder Stream; and $377,912 for Hall.

The elimination of truck-miles from the highway decreases travel time for the average highway user thus improving mobility. The travel time that is critical to this project is avoiding the detour time of up to 1.2 hours each way for passenger and truck users of the bridges. Overall, the project will save $110.5 million in travel time costs over the course of 30 years. Looking at each bridge independently, this project will result in a cost savings of $17,034,220 for Farmington Falls; $47,991,484 for Alder Stream; and $45,524,453 for Hall.

2) Environmental Sustainability

MaineDOT recognizes that assuring sustainability of habitats, ecosystems and transportation infrastructure can occur in concert rather than in conflict. Toward that end, MaineDOT endeavors to exercise reasonable stewardship over both natural resources and transportation infrastructure through its commitment to addressing aquatic organisms, wildlife habitat and fish passage in cooperation with natural resource agencies, while weighing all aspects of a proposed project. An agreement between the Federal Highway Administration, Maine Division and the Maine Department of Transportation authorizes MaineDOT to determine on behalf of the FHWA whether a project qualifies for a NEPA Categorical Exclusion (CE) if the project does not have a significant effect on the human environment.[19] MaineDOT and various other state and federal departments have executed agreements to expeditiously but thoroughly review environmental impacts from projects *(and they are listed in Project Readiness.)*

Pollutants of Concern

Most heavy trucks are powered by diesel engines, which are major sources of emissions of nitrogen oxides (NO_x), sulfur dioxide and particulate matter (PM). NO_x reacts with volatile organic compounds to form ground-level ozone, commonly known as smog. Diesel exhaust is of specific concern because it is likely to be carcinogenic to humans by inhalation and may additionally cause non-cancer respiratory effects.[20] The avoided net costs of emissions of sulfur oxide and volatile organic compounds over the 30-year life of the project are projected to be approximately $16 million. Sulfur oxide is emitting at a rate of 0.097 g/mile has a social cost of $44,373 per mile attached to it. Volatile organic compounds emit at a rate of 0.445 g/mile with a corresponding value of $1,905 per mile. Likewise, the avoided costs of emissions of nitrogen oxide (NOx) over the course of the 30-year life of the project are projected to be approximately $215 million. Trucks produce approximately 9.191 g/mile of NOx which has an assigned social cost of $7,508 per mile. And the avoided costs of particulate matter (PM) emissions are valued at approximatley $230 million. Particulate Matter emitting at a rate of 0.215 g/mile has a social cost of $343,442 per mile attached to it. The overall net cost associated with these emissions over the 30-year project period is over $461 million.

Quality of Life

A region's quality of life is enhanced when residents have mobility and ease of passage. Mobility is a critical lifeline, especially in rural areas like Franklin County that simply have few transport options. Access to schools, shopping and the area's robust outdoor recreation activities requires dependable roads and bridges, especially during the region's harsh winters. A rural school bus network must work in concert with the educational system. Access to schools via direct bus routes over the three bridges prevents delay.

[19] Programmatic Agreement between the FHWA, Maine Division and the MaineDOT Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Project

While the small towns in this area offer minor opportunities for shopping and eating at restaurants, the town of Farmington is the region's main center of shops, restaurants, pharmaceutical needs, other essentials and quality of life needs.

Less time spent commuting daily adds to one's quality of life. For residents in the region, reroutes in the event the bridges are closed become costly. The reroute alternatives, which range from 11 to 179 miles each way, could add hours to drive time greatly diminishing quality of life. Also impacting quality of life is the noise pollution that would result to the region from the additional traffic miles that come from detours in the event of bridge closures. The noise pollution from cars and heavy trucks and tractor-trailers can be considerable, particularly in rural areas.

VII. Life-Cycle Costs and State of Good Repair

1. State of Good Repair

As previously mentioned, the bridges in the Project are each structurally deficient. The proposed design of the new bridges will eliminate vulnerabilities in the features of the current bridges, which were completed in the 1930s – 1960s, prior to the adoption of better, safer and more efficient bridge design elements. The new bridges are designed for a 100-year lifespan. Meanwhile, if not replaced, the remaining service life of the three bridges, as well as the cost to maintain the bridges during that timeframe, follows:

	Farmington Falls	**Alder Stream**	**Hall**
Remaining Service Life (Yrs)	**5-10**	**5-10**	**5-10**
Joint Replacement	$100,000	$50,000	-
Superstructure Rehab	$900,000	$700,000	$400,000
Zone Painting	-	$150,000	-
Substructure Rehab	-	-	-
ONE-TIME TOTAL:	**$1,000,000**	**$900,000**	**$200,000**
Annual:			
Deck Patching	$5,000	$5,000	$5,000
Bridge Inspections	$1,500	$1,500	$1,500
Bridge Washing	$500	$500	$500

Concrete deterioration, spalling and collision damage shown in the following photos will be eliminated with the replacement of new modern bridges.

Wilton, Hall Bridge – Patched Wearing Surface

Wilton, Hall Bridge – Heavy concrete deterioration

Chesterville/Farmington, Farmington Falls Bridge

Chesterville/Farmington, Farmington Falls Bridge

Jim Pond Township, Alder Stream Bridge - Beam end deterioration over pier

Jim Pond Township, Alder Stream Bridge – Beam end deterioration over abutment

The new bridges will be safer, more accommodating to users and employ innovative features in their construction.

2) Anticipated savings from bundling

Having one contractor for the project of three bridge replacements will simplify and streamline traffic control and scheduling. There will be many opportunities to effectively coordinate manpower, equipment, and materials to reduce costs. Significant savings from bundling are anticipated for Alder Stream in Jim Pond Twp. due to its remote northern location. As a stand-alone project, Alder Stream bridge would be expected to have inflated bids to compensate for additional costs to mobilize for construction. Many Preliminary Engineering activities can be made more efficient by bundling. Design team meetings, utility coordination, environmental permitting, right of way acquisition, to name a few can be combined among the bundled projects to reduce engineering costs. Bundling projects of reasonably similar scopes in remote locations significantly reduces the cost of mobilizing large construction equipment as this cost can be spread over multiple projects. Significant savings can also be realized on overhead staff such as project superintendents, surveyors, and project engineers. In addition, both the Department and the Contractors face a shortage of qualified construction personnel. Bundling of projects creates opportunities to be much more efficient with scarce human resources.

3) Partnership

The project has wide support from a variety of stakeholders. They stand ready to assist in completing approvals rapidly and constructing the three bridges with as little disruption as possible to traffic and adjoining communities. Appendix E contains numerous letters confirming stakeholder collaboration and project support. The stakeholders understand the importance of these bridges to residents, workers, tourists, emergency responders and area schools.

There will be another unique partnership at play in the Project. MaineDOT and FHWA have established several programmatic agreements to expedite the NEPA process handling state and federal reviews concurrently. These agreements cover Categorical Exclusions, programmatic wetlands findings, state and national historic preservation and the Federal Endangered Species Act. Signatories to these agreements also include US Army Corps of Engineers (ASACE), US Fish & Wildlife Service (USFWS), Advisory Council on Historic Preservation and Maine State Historic Preservation Officer, NOAA's National Marine Fisheries Service and the Maine Turnpike Authority. These partnerships greatly expedite construction projects such as the bridge replacements (*and will be discussed further in Project Readiness*) in the Project.

VIII. Project Readiness

1) Technical Feasibility

The bridges in the Project will be designed by and construction will be led by the Bridge Program team at MaineDOT. Over the last decade, that team has replaced 18 multi-span bridges over water, with expenditures more than $160 million. Those past structures have averaged 494 feet in length, far longer than any bridge in the Project. During that same time, the team has tackled well over 100 bridge projects and has secured permitting for all of them. While no bridge project is without some level of challenge, the bridges in the Project are all well within the

capability of the team and none have complicated engineering design challenges, neither civil nor mechanical.

The Cost Estimate of the Project by bridge and broad category is as follows:

Bridge	Preliminary Engineering (PE)	Right of Way (ROW)	Construction	Construction Engineering (CE)	Total
Farmington Falls	$600,000	$100,000	$4,700,000	$600,000	$6,000,000
Alder Stream	$360,000	0	$2,580,000	$360,000	$3,300,000
Hall	$170,000	$20,000	$1,140,000	$170,000	$1,500,000
Project Total	$1,130,000	$120,000	$8,420,000	$1,130,000	$10,800,000

2) Project Schedule/Gantt Chart

The proposed project milestones are as follows:

Project Schedule Key Events[21]

Project Milestones	
PDR/ Preliminary Plan	November 2019
Formal Public Contact	December 2019
NEPA Complete	July 2020
Environmental Approvals	July 2021
R/W Certified	July 2021
PS&E Complete	August 2021
Obligation of Funds	August 2021
Project Advertising	September 2021
Construction Begin	November 2021
Construction Complete	May 2024

The project plan for each bridge anticipates both obligation of funding and completion of the Project well within the September 30, 2021, and 2026 deadlines, respectfully.

A complete project schedule is included in Appendix D.

[21] *See* Appendix D for full Gantt Chart.

3) Required Approvals

Environmental Approvals

Communication with environmental agencies and interested parties has been initiated. Baseline data collection is underway to identify natural and cultural resources potentially affected. Alternatives will be evaluated under state and federal laws. The NEPA process will be completed prior to the final design of the preferred alternatives.

a) National Environmental Policy Act (NEPA)

The (NEPA) process will inform and be incorporated into preliminary design efforts. The project is anticipated to be classified as a Categorical Exclusion in accordance with 23 CFR 771.117(d) (13). The FHWA Maine Division will be the lead agency for NEPA review. NEPA is underway. Should any issues arise, MaineDOT will work directly with the respective agencies to quickly resolve them. The NEPA process is expected be completed by July, 2020. In the event of any issues forthcoming, there will be ample time to address them prior to the required CHBP Grant obligation date.

b) U.S. Coast Guard Permit

The Sandy River is navigable at the Farmington Falls Bridge location. However, it is expected that a U.S. Coast Guard permit exemption can be easily attained. As the waterways associated with the other two projects are not navigable, a U.S. Coast Guard permit will not be required to remove the existing structures to construct the new structures.

c) Other Federal and State Environmental Permits

A U.S. Army Corps of Engineers permit will be required for work being conducted within waters of the United States. A Maine Department of Environmental Protection permit or exemption will also be required. All permit approvals are expected to be received by July, 2021.

d) Historic and Archeological

The Section 106 process has begun, including identification of historic resources. At the Farmington Falls Bridge (#2273), Maine Historic Preservation Commission is currently completing Phase II Archaeology testing to determine if National Register-eligible archeological resources are present and to make recommendations for data recovery if necessary. This data will inform the project design.

The Alder Stream Bridge (#3265) is located within the Arnold trail to Quebec Historic District, which is listed on the National Register of Historic Places. MaineDOT will assess potential effects to the Historic District and will work with the Maine Historic Preservation Commission to make recommendations to avoid adverse effects to the historic district.

e) Section 4(f) of the Department of Transportation Act

Identification of 4(f) resources is complete. If the proposed design requires use of an identified resource, MaineDOT will work with FHWA to obtain approval under Section 4(f).

f) Endangered Species Act (ESA) and Essential Fisheries Habitat (EFH)

The Farmington Falls Bridge and the Hall Bridge is located within the range of the Gulf of Maine Distinct Population segment and Atlantic salmon Essential Fish Habitat. The Alder Stream Bridge is within the range of Canada Lynx. MaineDOT and FHWA will coordinate with federal agencies during project design to avoid and minimize effects to ESA/EFH. MaineDOT and FHWA will complete the required consultations prior to July, 2021.

4) Risks & Mitigations

Environmental permitting/Restriction • Due to the potential presence of Atlantic Salmon at the Farmington Falls Bridge, environmental permits may limit in stream work time and limit noise generated during construction • Potential presence of archaeological resources	Minimize in water work • Collaborative agreements with MaineDOT, USFWS, USACE, FHWA and MTA under the Endangered Species Act through a process that expedites endangered species consultations and aims to meet both wildlife and project goals[22] • Choose a final design that minimizes in water work and disturbance to archaeological sites. • Constructability reviews will be completed during preliminary design to insure the selected alternative is buildable given the various environmental restrictions
Cost control • While the preliminary design phase has begun for the bridges, the final recommended improvements at these bridges could lead to scope and cost increases if additional required work is identified.	Thorough preliminary evaluation • Multiple alternatives will be evaluated during preliminary design with many scenarios of how to maintain traffic being considered • Constructability reviews will be a key focus during preliminary design with a focus on ***most constructible*** and cost effective. Design Build Process may be employed • Will result in higher probability to achieve cost estimates • Better constructability issue resolution
ROW acquisition • There is limited right of way acquisition for each of the bridges in the Project	State of Maine law for required takings[23] • Statutes in the State of Maine allow for this process to be completed expeditiously and according to an existing process that MaineDOT executes often. • Follows a 5-step process 1. Mapping 2. Appraisal 3. Negotiation 4. Offer 5. Condemnation • The process cannot be stalled at any phase including condemnations as there is a separate appeals process that allows the project to proceed with no delay • The entire Right of Way process is allotted up to a year in the project schedule • There are no local statutes or challenges that can impact the process

[22] http://www.maine.gov/mdot/maspc/

[23] See MaineDOT's The Land Owner's Guide to the Acquisition Process *Revised 12/2014,* http://www.maine.gov/mdot/publications/docs/brochures/landownersguideoct2014.pdf

Further mitigating any project delay are numerous programmatic agreements MaineDOT has with reviewing agencies. MaineDOT will take advantage of the following agreements to streamline the environmental review and approval process:

i. Cooperative Agreement between US Department of the Interior Fish and Wildlife Service (USFWS), FHWA and the MaineDOT State Transportation Reviews by the USFWS in Maine 2015-2020
ii. Cooperative Agreement between USFWS, FHWA and the MaineDOT State Transportation Reviews by the USFWS in Maine 2016-2021
iii. Maine Atlantic Salmon Programmatic Consultation between the USFWS, MaineDOT, U.S. Army Corps of Engineers (USACE), and the Maine Turnpike Authority (MTA) finalized on January 23, 2017, which covers activities that involve work in streams to construct, preserve and maintain the state transportation system
iv. 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
v. Programmatic Agreement between the FHWA, Maine Division and the MaineDOT Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Project
vi. Programmatic Agreement for the State of Maine Between MaineDOT, FHWA Maine division, USFWS Regarding Endangered Species Act Section 7 Consultation for Canada Lynx
vii. Section 106 Tribal 106 Programmatic Agreement
viii. Memorandum of Agreement for Stormwater Management Between the MaineDOT, MTA and Maine Department of Environmental Protection

MaineDOT and the Bridge Program Division has years of experience completing bridge replacement projects on time and within budget. The Project will meet all statutory deadlines required for a grant.

IX. Results of Benefit Cost Analysis

A benefit-cost analysis was conducted for the replacement of these bridges comparing the replacement to the no-build scenario. The analysis was performed over a 30-year period with the benefits and costs adjusted to present value using a 7% discount rate. The analysis conservatively estimates that a no-build scenario will lead to some manner of shutdown for an average of two weeks per year until the remaining service life of the bridge has been exceeded and will then need to be closed. The analysis looks at the project from the standpoint of society as a whole, and accounts for the net benefits and net costs based on the criteria described in the U.S. DOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs. The analysis presented here addresses benefits from travel time savings, user costs, safety, and emissions reduction. Several other benefits of the bridge replacements are difficult to quantify. These benefits include increased economic competitiveness, livability enhancement, productivity increases, and national security. The matrix below summarizes key results of the analysis.

	Costs	Benefits
CAPEX	$7,194,637	
O&M	$347,058	$2,320,671
Travel Time Savings		$110,550,158
Safety		$45,984,146
Emissions		$461,204,025
Operating Costs		$117,699,270
TOTAL	**$7,541,695**	**$737,758,270**
Benefit-Cost Ratio		**97.82**

See Appendix A for detailed BCA

X. Cost Share

This grant is needed to supplement the additional funding MaineDOT has been spending and is committed to spend on bridges as part of its 8,800-mile state-jurisdiction highway network. MaineDOT commissioned an important bridge report in 2007 *Keeping Our Bridges Safe (KOBS).* The 2007 Report was written to meet an Executive Order issued after the August 1, 2007 bridge collapse in Minneapolis, Minnesota. Maine responded appropriately to the results of the report and increased funding for bridges in the state through a bond program that increased funding from $70 million annually to $110 million during the 4-year period ending in 2013.[24] MaineDOT Commissioner David Bernhardt then directed this report to be reviewed in 2014 to determine progress towards achieving the goals. The 2014 update recommended spending $140 million per year to put Maine's bridges into a state of good repair and extend bridge life as needed.[25] Funding challenges for bridges in this rural state remain. The 2018-2020 MaineDOT Work Plan expects to complete 260 bridge projects and spend some $353 million which while ambitious still lags the 2014 KOBS report by nearly $70 million.[26] Rural Maine needs the impact of a Grant to help maintain highway access through Franklin County. Once the Project is completed, MaineDOT is committed to allocating funds to maintain the new bridges to the appropriate standards over their lives.

XI. Federal Wage Rate Certification

See Appendix G.

[24] Supra Note 11, Keeping our Bridges Safe, page 1
[25] Supra Note 11, Keeping our Bridges Safe, page 1
[26] https://www.maine.gov/mdot/projects/workplan/docs/2018/MaineDOTWork_Plan_2018_2019_2020.pdf page ii

Grant Request Supporters

MaineDOT's grant request for CHBP 2018 funds is supported by a diverse group of elected officials, and stakeholders due to the significant impact the Project will have on the region. This list of supporters includes:

Members of Congress

U.S. Senator Susan Collins
U.S. Senator Angus King
U.S. Congressman Bruce Poliquin

State Elected Officials/Offices

Governor Paul LePage
State Senator Tom Saviello
Franklin County Commissioners
Town of Wilton, ME – Town Manager
Town of Farmington, ME – Town Manager

State and Local Organizations
Maine Forest Products Council – Executive Director

Please visit https://www.maine.gov/mdot/grants/

****** As additional letters of support are submitted, MaineDOT will place them on the website noted above.

APPENDIX