

Basic Project Information	
What is the Project Name?	Presque Isle Freight and Mobility Priority Corridor Project
Who is the Project Sponsor?	Chris Mann, (207) 624-3513; Chris.A.Mann@maine.gov
Was an application for USDOT discretionary grant funding for this project submitted previously?	No (If Yes, please include project title and applicable grant programs)
A project will be evaluated for eligibility for consideration for all three programs, unless the applicant wishes to opt-out of being evaluated for one or more of the grant programs.	<input type="checkbox"/> Opt-out of Mega? <input type="checkbox"/> Opt-out of INFRA? <input type="checkbox"/> Opt-out of Rural?
Project Costs	
MPDG Request Amount	Exact Amount in year-of-expenditure dollars: \$44,100,000
Estimated Other Federal funding (excl. MPDG)	Estimate in year-of-expenditure dollars: \$21,220,000
Estimated Other Federal funding (excl. MPDG) further detail	Other Federal funding from Federal Formula dollars: \$21,220,000 Other Federal funding being requested from other USDOT grant opportunities?: \$ 0 From What Program(s)?: N/A
Estimated non-Federal funding	Estimate in year-of-expenditure dollars: \$16,330,000
Future Eligible Project Cost (Sum of previous three rows)	Estimate in year-of-expenditure dollars: \$81,650,000
Previously incurred project costs (if applicable)	Estimate in year-of-expenditure dollars: \$2,654,000
Total Project Cost (Sum of 'previously incurred' and 'future eligible')	Estimate in year-of-expenditure dollars: \$84,304,000
INFRA: Amount of Future Eligible Costs by Project Type	<ol style="list-style-type: none"> 1) A highway freight project on the National Highway Freight Network: \$ _____ 2) A highway or bridge project on the National Highway System: \$81,650,000 3) A freight intermodal, freight rail, or freight project within the boundaries of a public or private freight rail, water (including ports), or intermodal facility and that is a surface transportation infrastructure project necessary to facilitate direct intermodal interchange, transfer, or access into or out of the facility: \$ _____ 4) A highway-railway grade crossing or grade separation project: \$ _____ 5) A wildlife crossing project: \$ _____ 6) A surface transportation project within the boundaries or functionally connected to an international border

	<p>crossing that improves a facility owned by fed/state/local government and increases throughput efficiency: \$ _____</p> <p>7) A project for a marine highway corridor that is functionally connected to the NHFN and is likely to reduce road mobile source emissions: \$ _</p> <p>8) A highway, bridge, or freight project on the National Multimodal Freight Network: \$ _____</p>
<p>Mega: Amount of Future Eligible Costs by Project Type</p>	<p>1) A highway or bridge project on the National Multimodal Freight Network: \$ _____</p> <p>2) A highway or bridge project on the National Highway Freight Network: \$ _</p> <p>3) A highway or bridge project on the National Highway System: \$ _____</p> <p>4) A freight intermodal (including public ports) or freight rail project that provides public benefit: \$ _____</p> <p>5) A railway highway grade separation or elimination project: \$ _____</p> <p>6) An intercity passenger rail project: \$ _</p> <p>7) A public transportation project that is eligible under assistance under Chapter 53 of title 49 and is a part of any of the project types described above: \$ _____</p> <p>8) A grouping, combination, or program of interrelated, connected, or dependent projects of any of the projects described above</p>
<p>Rural: Amount of Future Eligible Costs by Project Type</p>	<p>1) A highway, bridge, or tunnel project eligible under National Highway Performance Program: \$ _____</p> <p>2) A highway, bridge, or tunnel project eligible under Surface Transportation Block Grant: \$ _____</p> <p>3) A highway, bridge, or tunnel project eligible under Tribal Transportation Program: \$ _____</p> <p>4) A highway freight project eligible under National Highway Freight Program: \$ _____</p> <p>5) A highway safety improvement project, including a project to improve a high-risk rural road as defined by the Highway Safety Improvement Program: \$ _____</p> <p>6) A project on a publicly-owned highway or bridge that provides or increases access to an agricultural, commercial, energy, or intermodal facility that supports the economy of a rural area: \$ _____</p> <p>7) A project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services: \$ _</p>

Project Location	
State(s) in which project is located	Maine
INFRA: Small or Large project	Large
Urbanized Area in which project is located, if applicable	N/A
Population of Urbanized Area (According to 2010 Census)	N/A
Is the project located (entirely or partially) in Area of Persistent Poverty or Historically Disadvantaged Community?	List census tracts that qualify as within these areas. County–No; Census tracts–Yes (2 of 3): 9518, 9520 (https://datahub.transportation.gov/stories/s/tsyd-k6ij)
Is the project located (entirely or partially) in Federal or USDOT designated areas	Yes/No. If yes, please describe which of the four Federally designated community development zones in which your project is located. Opportunity Zones: No (https://opportunityzones.hud.gov/) Empowerment Zones: Yes – Rural Renewal County (https://www.hud.gov/hudprograms/empowerment_zones) Promise Zones: No (https://www.hud.gov/program_offices/field_policy_mgt/fieldpolicy/promisezones) Choice Neighborhoods: Yes: Census tract 9518: 10-20% Poverty; 9519: 10-20% Poverty; 9520: 20-30% Poverty (https://www.hud.gov/program_offices/public_indian_housing/choice_neighborhoods)
Is the project currently programmed in the: <ul style="list-style-type: none"> • TIP • STIP • MPO Long Range Transportation Plan • State Long Range Transportation Plan • State Freight Plan 	Yes/No (Please specify in which plans the project is currently programmed, and provide the identifying number if applicable) Currently in the: STIP 2022-2025 State Long Range Transportation Plan (LRTP) 2050 State Freight Plan

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Standard Form 424, Application for Federal Assistance

Standard Form 424C, Budget Information – Construction Program

PROJECT NARRATIVE

I. PROJECT DESCRIPTION

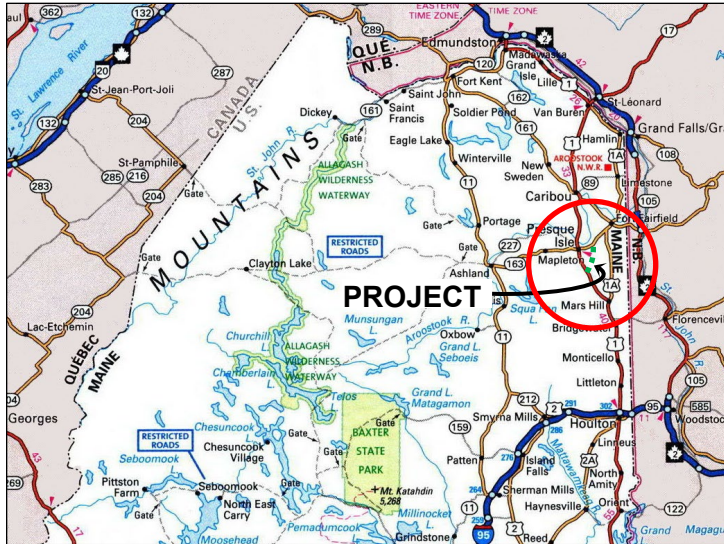
The *Presque Isle Freight and Mobility Priority Corridor Project* (“Project”) provides a critically-needed route for vehicles, including tractor-trailers, to travel around the City of Presque Isle (“PI”) in northern Maine instead of through it via Main Street (U.S. Route 1). The two-lane roadway bypass offers numerous benefits that will positively impact freight traffic as well as those living in and visiting northern Maine’s largest city, including:

- Reducing truck traffic, including hazardous materials haulers, through downtown Presque Isle so the city can focus on revitalizing its city center
- Greatly improving safety by decreasing traffic crashes involving trucks
- Taking the necessary steps that allow the Maine Department of Transportation (“MaineDOT”) and the City of Presque Isle to modernize downtown via a much-needed *complete streets* transformation
- Decreasing congestion and transit time for northern Maine freight, including for time-sensitive perishables traffic, as well as passenger vehicles
- Reducing greenhouse gas emissions while also making transportation more equitable for urban and rural individuals
- Becoming a catalyst to strengthen and diversify economic development in this very rural region
- Providing an available right-of-way for snowmobiles and ATVs that are critical to growing northern Maine tourism



Truck traffic dominates Maine Street in downtown Presque Isle. Photo courtesy MaineDOT.

Passenger vehicles, as well as trucks carrying freight along U.S. Route 1 (“US1”) – northern Maine’s primary north-south thoroughfare – must currently travel through downtown Presque Isle and negotiate city traffic, stoplights, cross streets, crosswalks, driveways, parking lots, bicyclists, pedestrians, shoppers, and the occasional train as they meander slowly along Main Street at 25 mph. Despite those obstacles, this route is part of the National Highway System (“NHS”). This segment has been identified as a “*freight bottleneck*” on Maine’s NHS network because it provides slower than anticipated speeds and/or congestion during key travel times. It’s one of six freight congestion points identified in the *Maine State Freight Plan*. Officials have



Map shows the Project (green dotted line) in the right center near Presque Isle. Map courtesy of ontheworldmap.com

considered building a bypass around Presque Isle for more than two decades. “The ACTS [Aroostook County Transportation Study] began in 1999 with a series of meetings with local residents and public officials. The Scoping Process for the ACTS DEIS [Draft Environmental Impact Statement] was initiated by a Notice of Intent to prepare an EIS published in the *Federal Register* (week of September 17, 1999). A series of Public Scoping Meetings were held on September 14, 15, and 16, 1999 in Frenchville, Presque Isle, and Houlton, Maine, respectively.”¹

In northern Maine, US1 is a two-lane rural highway of varying speeds as it passes farmland, forests and intersects the few small cities and towns. It’s the primary road for the entire northern half of Maine, linking the north end of Interstate 95 in Houlton near the eastern border with Canada to the far northern reaches of the state. The highway hosts nearly 16,000 vehicles daily through Presque Isle. The route is a MaineDOT electric vehicle priority corridor and downtown PI will be an ideal location to install EV chargers as part of city core improvements. A bypass would allow cars and trucks to avoid downtown PI, saving time and money while simultaneously making downtown safer. It would also clear the path to transform the city’s core into a much-desired pedestrian-friendly active transportation community. City officials and residents are extremely supportive of the Project and subsequent downtown improvements, as evidenced by a unanimous city council vote as recently as May 4, 2022, in support of the Project.

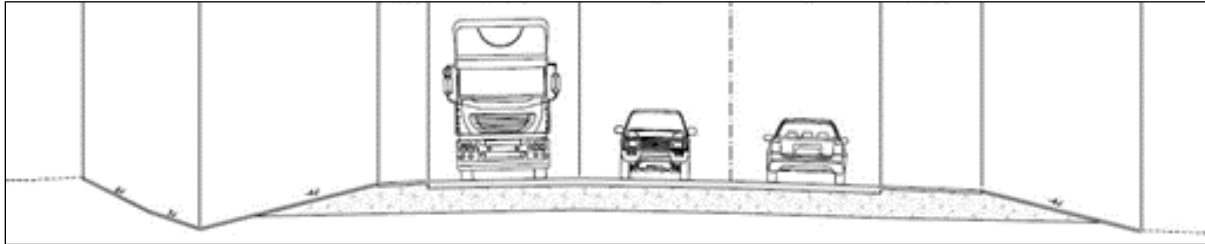
The total Project cost is \$84.304 million. MaineDOT estimates spending \$3,254,000 on the Project by the end of 2022, all of that for project engineering and right-of-way acquisition. A projected \$73.5 million, spent in years 2025 through 2027, will cover construction engineering and construction. Last year, MaineDOT received congressionally-directed spending of \$1.2 million for project engineering.

MaineDOT is spearheading the Project. As a cabinet-level state agency with primary responsibility for statewide transportation by all modes, the agency employs approximately 1,800 people and expends or disburses more than \$675 million annually, including federal, state, and local funds. The MaineDOT Project scope entails constructing a 6.3-mile-long, two-lane highway that would connect US1 south of the city to the current bypass section already in service. Components include:

- 12-foot-wide lanes in each direction and 4- to 8-foot paved shoulders on both sides
- Truck climbing lanes allowing acceleration at their pace without blocking traffic

¹ https://projects.vhb.com/aroostook/pdfs/Final_FEIS_Text_Jan2013.pdf, page 1-2

- A new interchange at US1 and Conant Road
- Four new overpasses to grade separate the bypass and Henderson Road, Easton Road, the state-owned railroad line and Conant Road
- Four box culverts and one precast concrete arch culvert, all accommodating the ability of wildlife to safely cross under the bypass
- A multiuse trail crossing at Conant Road as well as Henderson Road
- Adequate available space along the right-of-way for a future snowmobile/ATV trail located adjacent to the southbound (western) lane



Cross section roadway illustration shows truck climbing lane, to be located near northbound and southbound entry points.

The truck climbing lanes will be included at the south end (for northbound trucks) as well as the north end (for southbound trucks) of the new bypass section. A multi-use trail is proposed to cross under the bypass in an east/west direction under the new Conant Road overpass bridge. To facilitate existing snowmobile and ATV routes, the Henderson Road Overpass was designed to provide a trail crossing along the north side of Henderson Road under the bypass. Drainage infrastructure will be open ditch with cross culverts at several stream/brook crossings and at various locations along the corridor to convey flow underneath the new roadway. Property acquisitions will be required.

Due to financial constraints, MaineDOT was/is unable to construct the bypass in its entirety at one time. Early on, the bypass was broken down into three separate buildable and useable phases. **Section II/Phase I** (the middle section) was constructed and placed into service in 2019 via ‘high priority’ funding.

The subject of this application is a request to assist funding the construction of **Section I/Phase II** (the 6.3-mile southerly portion of the bypass) extending from US1 in Westfield, south of PI, to Conant Road, east of PI. It will connect with Section II/Phase I already in service.

Section III/Phase III (the northern third of the bypass) will be evaluated at a future date. It will extend from Fort Fairfield Road (Route 167), cross the Aroostook River via a new bridge, connecting back with US1 north of PI. Numerous benefits of the bypass will be realized even without completion of the third and final section because Sections I and II, combined with use of Route 163 and Route 167, bypass downtown and much of the commercial center. Once all three sections are completed, the bypass will allow drivers to avoid the final small stretch of the commercial center near the mall. The total length of all three sections will be 10 miles long.

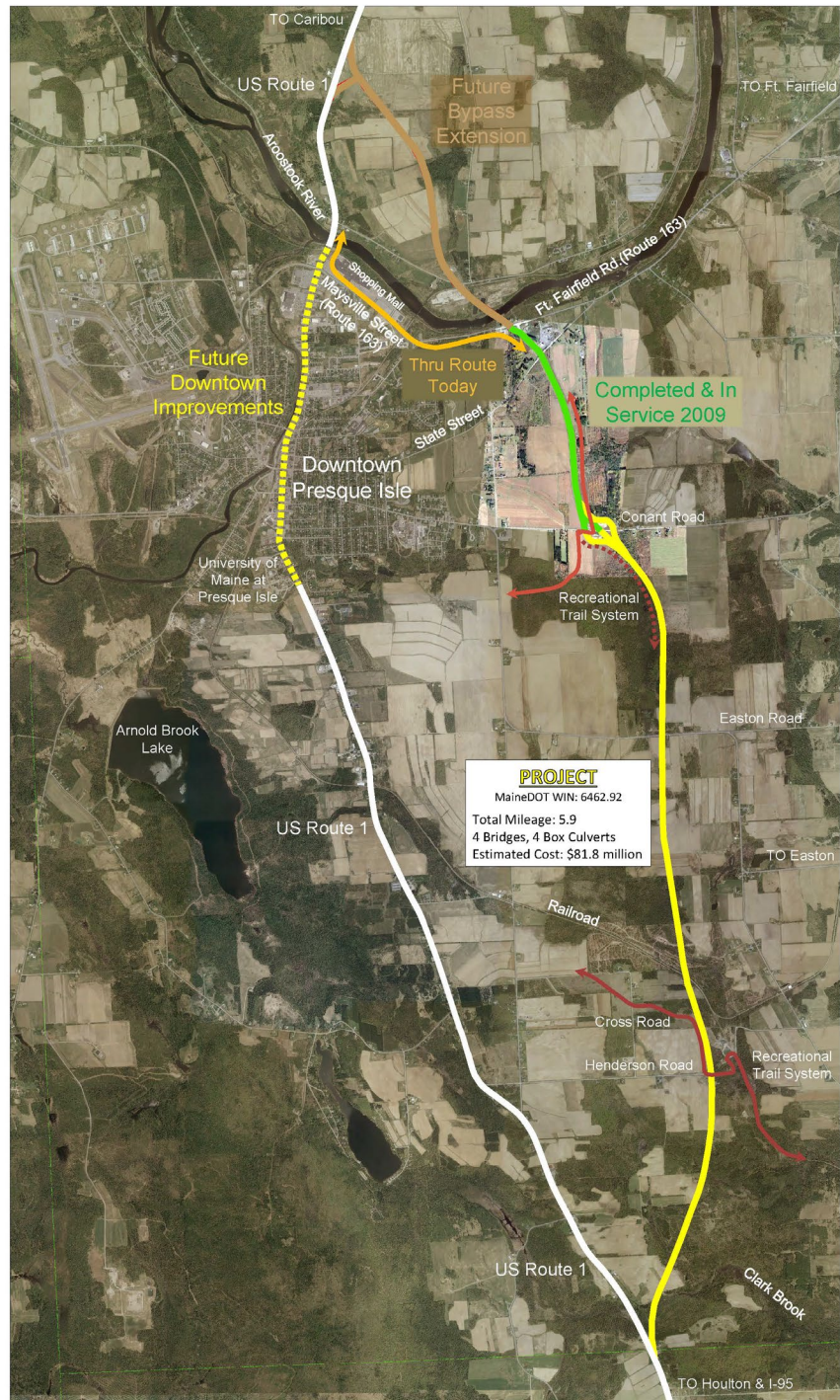
The Project yields a number of positive outcomes. These include improving safety and mobility through downtown PI, enhancing regional connectivity by reducing travel times along northern

PRESQUE ISLE FREIGHT AND MOBILITY PRIORITY CORRIDOR PROJECT

Maine's *primary* north-south thoroughfare and reducing vehicular conflicts resulting from a mix of local traffic (cars and SUVs) with through traffic (trucks, trailers and hazardous materials).

The Project eliminates the need for trucks to navigate different slow speed zones along 2.5 miles of US1 through downtown. It improves safety at five High Crash Locations (HCLs).²

Unrestricted roadway access frequently results in traffic congestion, crashes and other problems. The cumulative effect of numerous entry points onto a road can result in 'side friction' that impedes traffic flow. That's why the bypass will be a controlled access highway designed to reduce conflicts and safely support a significant speed increase. In PI, reducing through-traffic that includes trucks as well as personal vehicles will make Main Street, with its numerous entry points, safer for drivers and vulnerable roadway users visiting the primary commercial center in northern Maine. The Project provides needed separation between a variety of vehicles that doesn't exist today – from semi-trucks to bicycles and even horse and buggies commonly used by the region's Amish population.



Courtesy Maine GeoLibrary.

² A High Crash Location (HCL) is one experiencing eight or more traffic crashes and a Critical Rate Factor (CRF) greater than 1.00 in a three-year period. A road location with a CRF greater than 1.00 has a frequency of crashes that is greater than the statewide average for similar locations. It is a statistical measure to determine the "expected crash rate" compared to similar intersections in Maine.

The Project sets the stage to improve and modernize downtown Presque Isle and continue to advance project engineering that has already begun. Once through traffic begins using this section of the bypass, MaineDOT and city officials can begin creating *complete streets* changes that will introduce a wider range of transportation options, including active transportation choices better for the environment, to the downtown. That's been the plan, a strategy in search of funding, for decades. This plan is being advanced as part of a broader Aroostook County Transportation Study (ACTS). The Final Environmental Impact Study (FEIS) Record of Decision (ROD) for the bypass was received on April 15, 2013. On May 4, 2022, PI City Council voted unanimously on a resolution to support the Project and changes to downtown that will result. The Council's letter can be found in Appendix E.



Crumbling infrastructure along Main Street is evident in this photo. Courtesy MaineDOT.

The MaineDOT/PI partnership for this Project is a natural fit. Back in February 2019, MaineDOT issued its annual *3-Year Work Plan*. It consisted of three focus areas: *safety*, *innovation*, and *downtowns*. MaineDOT has been working diligently to help cities transform their downtowns to make them safer, more welcoming of active transportation, less impacted by pollution and prepared for a green future by designing climate change resiliency into the plans of downtowns statewide.

Quantitative Facts³

- The \$84,304,000 of total Project costs offers an estimated regional benefit of nearly \$400,000,000 in total over the 30-year analysis period.
- The Project has a benefit-cost ratio of at least 1.65:1 based on an NPV at a 7% discount rate over 30 years (CO₂ savings discounted at 3%).
- Savings come from safety improvements (reducing accidents and injuries downtown), mobility improvements (time savings that result from increasing the speed at which freight and motorists move via bypassing downtown, and the time through town with far fewer trucks and light vehicles) and increasing property values (reductions in CO₂ emissions, noise pollution, traffic congestion) as well as a reduction in road maintenance costs downtown due to fewer heavy trucks using that route.
- Total amount of INFRA 2022 funds requested: \$44,100,000, 52.31 percent of total Project cost.
- Matching funds are \$37,550,000, 44.5 percent of the total Project cost. This includes 19.4 percent state funding committed by MaineDOT.
- Previously incurred expenses are \$2,654,000 covering initial Project engineering and right-of-way acquisition as of September, 2022.

II. PROJECT LOCATION

- The Project is in Aroostook County, Maine.

³ See *Appendix A*, Benefit-Cost Analysis

- GPS coordinates – Begin: 46.59979708, -67.9682705; End: 46.6786227, -67.97450113.
- This is Maine’s 1st Congressional District, represented by Congressman Jared Golden (D-ME). The state is represented by U.S. Senators Susan Collins and Angus King.
- *Area of Persistent Poverty*⁴: County–No; Census tracts–Yes (2 of 3): 9518, 9520
- *Historically Disadvantaged Community*: No
- *Census-Designated Urbanized Area*⁵: No
- *Opportunity Zone*⁶: No; *Empowerment Zone*⁷: Yes; *Promise Zone*⁸: No; *Choice Neighborhoods*⁹: Census tract 9518: 10-20% Poverty; 9519: 10-20% Poverty; 9520: 20-30% Poverty

Maine has the highest portion of residents living in rural areas, 61.3 percent, according to Census Bureau data compiled by the website *stacker*.¹⁰ The state’s rural nature is understandable given that 89 percent of land in Maine is forestland.¹¹

Category	Presque Isle	Aroostook County	Maine	United States
Population, Census, April 1, 2020	8,797	67,105	1,362,359	331,449,281
Persons 65 years and over, percent	22.20%	24.90%	21.20%	16.50%
Mean travel time to work (minutes), workers age 16 years+, 2016-2020	14.3	18.5	24.3	26.9
Median household income (in 2020 dollars), 2016-2020	\$43,410	\$43,791	\$59,489	\$64,994
Per capita income in past 12 months (in 2020 dollars), 2016-2020	\$27,134	\$26,774	\$33,774	\$35,384
Persons in poverty, percent	15.80%	15.30%	10.60%	11.40%

Data courtesy U.S. Census Bureau.

The Amish community has found Maine favorable, although they are fairly recent settlers to the Pine Tree State. Most live in the region around PI and frequently commute via horse & buggy, a transportation tradition MaineDOT is respectful and supportive of. Changes to roads in the region will reflect the concerns of the Amish to ensure they are able to safely share the road with motor vehicles. The community first settled in the region quite recently – at the turn of the 21st century. In 2017 there were about 400, centered around Fort Fairfield, 10 miles northeast of Presque Isle. Farmland in the area was inexpensive and plentiful, allowing Amish families to start and cultivate their renown dairy farms. Presque Isle is about an hour away by horse-and-buggy and is relied upon for a variety of needs.¹²

MaineDOT is focused on numerous improvements to US1. Additional roadway infrastructure projects along US1 in the region, completed or underway, include a bypass around Caribou, part of the Aroostook Planning Study, multiple US1 reconstruction projects currently designed: two in Van Buren and two in Frenchville as well as the Madawaska International Bridge and Border Crossing – replacement of the 1920 international bridge between Madawaska and Edmundston at

⁴ https://www2.census.gov/geo/maps/DC2020/PL20/st23_me/censustract_maps/c23003_aroostook/DC20CT_C23003.pdf

⁵ https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/

⁶ <https://opportunityzones.hud.gov/>

⁷ <https://www.cmswotc.com/empowerment-zones-enterprise-zones-rural-renewal-counties-map/>

⁸ <https://www.hudexchange.info/programs/promise-zones/>

⁹ <https://www.huduser.gov/portal/maps/CN/home.html>

¹⁰ <https://stacker.com/stories/2779/states-biggest-rural-populations>

¹¹ <http://maineforest.org/wp-content/uploads/2016/09/Maines-Forest-Economy-10-12-2016.pdf>, page 2 of pdf

¹² <https://downton.com/features/thesettlers/#:~:text=Today%2C%20the%20Amish%20settlement%20in,people%20over%2050%20years%20old.>

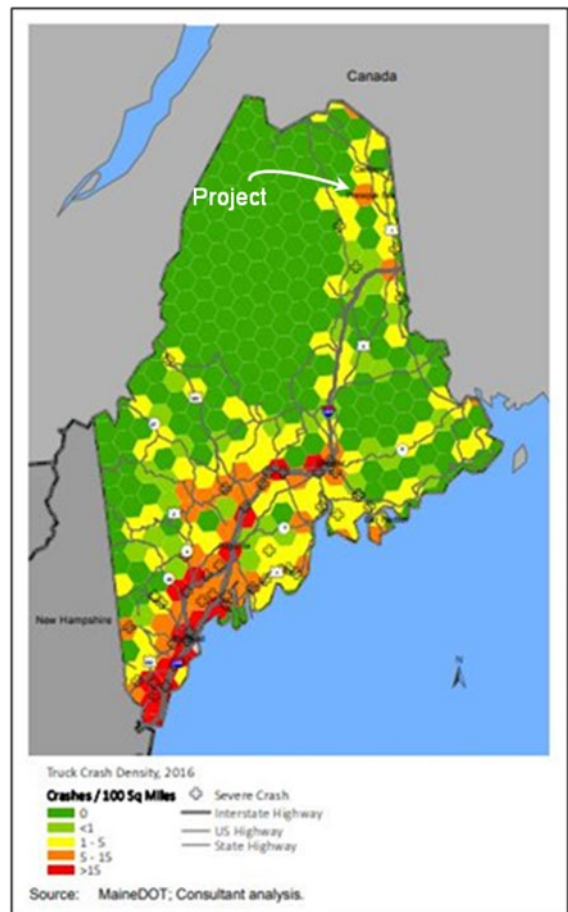
the northern part of Maine.

Agriculture is vital to Maine’s economy, generating a production value of more than half a billion dollars in 2021.¹³ Production and processing accounts for about 5 percent of the state’s GDP. Northeast Maine has rich, abundant farmland well suited for growing potatoes and broccoli. According to the *2017 Census of Agriculture*, Aroostook County leads the state with the highest number of potatoes grown, while the state ranks 17th nationwide in potato production. Some potatoes are shipped as harvested, while many are transported to local processors to be made into potato chips and French fries, which are then shipped throughout the eastern U.S. Farmers, processors and distributors rely on an efficient regional road system as an integral part of their ‘conveyor belt’. The system must also be able to handle tremendous future growth because the crop will be relied upon to feed populations farther away than ever before. In 2021, Maine potato production rose a significant 39 percent from the previous year – a fortunate increase because in the West, crop yields in Idaho and Washington declined due to wildfires and increasingly hot temperatures.¹⁴ As changes to the climate impede the West’s growing season, the U.S. will become even more dependent on the Pine Tree State’s crop. Therefore, while Maine potatoes feed much of New England and the Eastern Seaboard, a large portion of the crop was shipped west to cover Idaho’s crop decline, a trend that is expected to continue.

In downtown PI in 2021, MaineDOT calculated AADT (Annual Average Daily Traffic) of 16,630 vehicles as well as AADTT (Trucks only) of 627, more than 26 trucks per hour or one every 2.3 minutes. Of course, there are significantly more during key portions of the day than this average portrays. They often coincide with increases in pedestrian traffic as people visit town. Drivers encounter nine traffic signals, creating lengthy queues and pollutant-inducing idling, worsened by trucks and their harmful diesel emissions. Conflicts are exacerbated by large volumes of raw materials (potatoes and tree logs) trucked from north and west of PI to the McCain Foods potato processing plant and J.M. Huber Corporation’s engineered woods plant in Easton, east of PI.

The Presque Isle area is one of only two locations in the entire northern half of Maine (the other is Houlton) with a high truck crash density of between 5 and 15 crashes per 100 square miles.

The FHWA commodity flow maps exhibit how US1 is essentially an extension of I-95. It provides



¹³ https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MAINE

¹⁴ <https://www.newscenemaine.com/article/money/economy/2021-maine-potato-harvest-highly-successful-opening-new-business-opportunities/97-cd5c1b0e-af0b-422a-a18e-a15a13ea87d7>

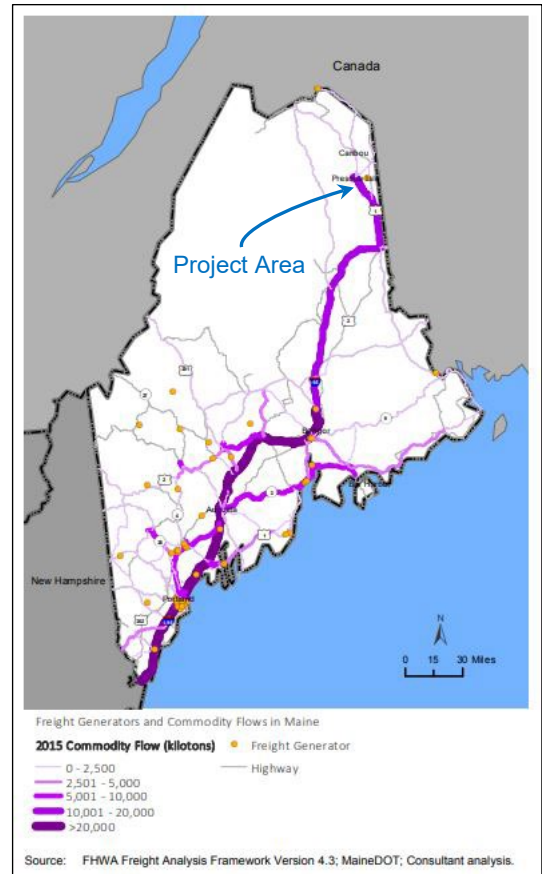
the critical reach for freight traveling to or from northern Maine, supporting needed jobs in the county with the highest unemployment rate statewide. Like many states, trucking is Maine’s dominant mode of freight movement, accounting for 86 percent of all tonnage shipped – inbound, outbound, intra- and inter-state. MaineDOT classifies US1 as a *Priority 1* road, in the same category as interstate highways and the Maine Turnpike. It is part of the National Highway System. The extensive 2017 Maine Integrated Freight Strategy outlines AADTT for 2013, 2014, 2015.¹⁵ Aroostook County was the state’s dominant freight producer in 2015, shipping 8.5 million tons and receiving 8.7 million tons of goods from other counties and states. That’s in addition to the 2.6 million tons of goods that moved intra-county. Aroostook County accounted for 21 percent of the 94 million tons shipped to, from, and within Maine in 2015.¹⁶

III. PROJECT PARTIES

MaineDOT is the state agency responsible for managing and funding all transportation modes statewide. Employing approximately 1,800 people, the agency expends or disburses more than \$675 million annually, including federal, state and local funds. The funding source of the Project match will be State General Obligation Bonds. In Maine, that comes from state bonds approved by the legislature and taxpayers in 2022. The Project is a MaineDOT priority. It is outlined in the *State Freight Plan* and is included in MaineDOT’s *2022-2024 Work Plan*. It is included in the *Statewide Transportation Improvement Program (STIP)* for 2022-2025 and is consistent with MaineDOT’s long-range plan.

The agency is an 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 no later than 18 months after the date of obligation of funds for the Project and complete the Project prior to 2028 without risk. There are no other public or private parties or funders involved in delivering the Project.

Maine’s population remains stagnant. As it does, the opportunity to grow gas tax receipts has challenged state lawmakers. The Infrastructure Investment and Jobs Act (IIJA), passed last year, will help. Under IIJA formula funding, Maine is to receive \$1.3 billion for federal-aid highway apportioned programs...over five years.¹⁷ MaineDOT Commissioner Bruce Van Note sees *cautious* optimism ahead. “At least three developments indicate that we soon may be able to



¹⁵ <https://www.maine.gov/mdot/ofps/docs/MaineDOT-FreightStrategy-Updt20171114.pdf>, page 3-23

¹⁶ <https://www.maine.gov/mdot/ofps/docs/MaineDOT-FreightStrategy-Updt20171114.pdf>, page A-17

¹⁷ <https://www.whitehouse.gov/wp-content/uploads/2021/08/MAINE-Infrastructure-Investment-and-Jobs-Act-State-Fact-Sheet.pdf>

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.”

First, the IJA 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%) – will be largely offset by construction cost inflation fueled by tight labor and material markets.”

Second, in 2021 Maine’s Legislature approved two General Fund initiatives providing nearly \$106 million to MaineDOT. This unprecedented level of General Fund support saved MaineDOT’s capital transportation program. It offset a state Highway Fund revenue hole from pandemic-related fuel tax revenue decreases and high construction cost inflation. Additionally, in November more than 70% of voters approved a \$100-million transportation bond providing much-needed state funds to match federal funds for capital programs.

Third, outreach and partnership efforts continue to grow, such as the new Village Partnership Initiative (“VPI”), which will help downtown PI once this portion of the bypass is completed and truck and other traffic volume is greatly reduced through downtown. “The Village Partnership will focus on lower-speed areas where people meet, walk, shop, and do business. The projects can vary from small, spot improvements to larger, once-in-a-lifetime, placemaking investments if we successfully partner to access federal discretionary funds.”¹⁸ MaineDOT continues the important task of focusing on the few but vitally-relied upon urban areas within the rural state, funding projects that have the greatest positive impact to the most people while ensuring rural residents are efficiently connected to commercial centers.

IV. GRANT FUNDS, SOURCES AND USES OF ALL PROJECT FUNDING

The Project is considered a large project; the cost breakdown follows:

Funds Requested:	\$44,100,000 – 52.31% of Total Project Cost
Other Federal Funds Matched:	\$21,220,000 – 25.17% of Total Project Cost
Non-Federal Funds Matched:	\$16,330,000 – 19.37% of Total Project Cost
Previously Incurred Expenses:	\$ 2,654,000 – 3.15% of Total Project Cost
Total Project Cost:	\$84,304,000

Budget

COSTS	MaineDOT	MPDG	Other Fed	TOTALS
Previously Incurred Preliminary Engineering (PE)	\$ 531,000	-	\$ 2,123,000	\$ 2,654,000
Previously Incurred Right-of-Way (ROW)				
Preliminary Engineering (PE)	\$ 1,630,000	-	\$ 6,520,000	\$ 8,150,000
Right-of-Way (ROW)				
Construction Engineering (CE)	\$14,700,000	\$44,100,000	\$14,700,000	\$73,500,000
Construction				
TOTALS	\$16,861,000	\$44,100,000	\$23,343,000	\$84,304,000
Percentage of Project Totals	20.00%	52.31%	27.69%	100%

MaineDOT has previously incurred \$2,654,000 in PE & ROW costs from Project start through September 2022. MaineDOT expects to incur another \$600,000 of those costs between October 2022 and end of 2022. Grant funding will be allocated to the construction and CE phases of the

¹⁸ https://www.maine.gov/mdot/projects/workplan/docs/2022/WORK%20PLAN%20FINAL1_21_2022.pdf, page 2

Project only. MaineDOT purchases right-of-way via a negotiation process and spends only MaineDOT funds and/or high priority federal funding. ROW purchase is currently underway.

Budget by Year

PROJECT ELEMENT BY YEAR	To Sept 2022	Remainder of 2022	2023	2024	2025	2026	2027	TOTALS
Preliminary Engineering (PE)	\$ 2,654,000	\$ 600,000	\$ 2,500,000	\$ 5,050,000				\$10,804,000
Right-of-Way (ROW)								
Construction Engineering (CE)	-	-	-	-	\$ 29,400,000	\$ 29,400,000	\$ 14,700,000	\$73,500,000
Construction								
TOTALS	\$ 2,654,000	\$ 600,000	\$ 2,500,000	\$ 5,050,000	\$ 29,400,000	\$ 29,400,000	\$ 14,700,000	\$ 84,304,000

Contingency

As with all previous Federal transportation grants applied for, MaineDOT has budgeted sufficient contingency amounts to cover unanticipated cost increases. None of the funds are contingent upon satisfying a condition. Similarly, none of the funds are available for expenditure only during a fixed period.

Federal Limits

None of the requested MPDG funds are subject to any Federal limits.

V. PROJECT OUTCOME CRITERIA

1. Safety

The Project greatly improves the safety of residents living in, and those visiting, Presque Isle because the primary Project outcome is to significantly reduce truck and vehicular traffic moving through downtown. That, in turn, reduces the potential for crashes, conflicts with vulnerable roadway users, harmful emissions from vehicle idling, heavy traffic, road deterioration, time lost in traffic and noise pollution. Once the bypass opens, officials expect to see a resulting AADTT (trucks) reduction downtown of 544 during the first year, gradually increasing to 870 trucks by the year 2052, including those carrying hazardous materials such as bleach and diesel fuel. Trucks utilizing the bypass will avoid: 147 commercial/residential driveways, 25 street intersections, 12 crosswalks, nine stoplights and one railroad crossing. Conversely, the bypass will be a very *limited access* road. Additionally, with fencing and well-designed animal pass-throughs, there will be minimal conflicts with wildlife in a region where large animals roam. The intersection with Conant Road, the bypass’ busiest, will have a flyover instead of a four-way intersection to eliminate conflicts. Also, rumble strips will be constructed along the shoulders to aid in warning motorists who may veer out of their lane.



Numerous trucks downtown, combined with traffic lights, make driving through town slow and challenging.

The reduction in truck traffic through downtown translates to an estimated 20.91 fewer total crashes per year, 4.87 fewer involving injuries and/or fatalities, .34 fewer of those with serious

injuries and 16 fewer property damage crashes. Using the proposed bypass generates a travel time savings of 5 minutes, 45 seconds vs going through downtown.

While the Project does not address the issue of commercial motor vehicle parking, there are wide shoulders along portions of the bypass allowing trucks to pull over briefly to check their safety appliances in a secure manner while allowing enough space for motorists to remain safely moving and unaffected.

2. State of Good Repair

The Project modernizes the primary north-south truck route through the northern half of Maine by creating a bypass around northern Maine’s busiest downtown. The bypass will be a modern, faster and limited access route. The Project, however, does more than create a highway improvement. It lays the fundamental groundwork for extensive repairs and design changes on a massive scale to the largest downtown in the northern half of Maine. Main Street in PI faces challenges typical of a downtown street suffering from heavy trucks moving at slow speeds and braking frequently for stoplights, traffic and pedestrian crossings. Damage to roads and curbs from heavy truck freight attempting to make right turns is never good, but it intensifies in the winter when roads are icy and treated with salt. The bypass will be constructed to withstand heavy freight, in part, because there will not be stoplights, stop signs, or driveways and very few access roads. The bypass will require less maintenance than the current route, especially that of a primary street through a busy downtown. The new bypass will be built to withstand a changing climate and other potential environmental vulnerabilities. In the event the Project does not move forward, the community will continue to face a high number of crashes and traffic delays through downtown on top of harmful emissions challenges.



South end of Phase I of the bypass looking south. Photo courtesy MaineDOT.

MaineDOT understands the potential concerns of repair vs. replace. Constructing a new road where none currently exists seemingly adds to an already plentiful maintenance log. However, very few new roads have been built in northern Maine, not to mention roads designed to handle today’s heavy truck traffic. The US1 truck route used today has become symbolically ‘placed on top of’ the road over time, a road that has become the primary route between northern Maine and Canada. The existing road was not designed for the long, heavy trucks of today.

3. Economic Improvements, Freight Movement, and Job Creation

1) *Supply chain reliability, reduced bottlenecks, improved freight connectivity*

US1 through downtown PI is the primary freight bottleneck in the northern half of Maine because the principal north-south passenger vehicle route has also become the key freight lane between northern and southern Maine. Additionally, it serves as a prominent route between New England and Canada – the largest trading partner with the U.S. Separating cars and freight trucks via a bypass will reduce costs and increase fuel economy and freight efficiency for an estimated

870 daily truckloads projected to use the route by 2052. It will connect northern Maine to other parts of the state, to additional geographic points in New England and to North American and global economies faster than ever before.

2) *Improve multimodal transportation and affordable options for better mobility of people and goods*

While the Project does not directly incorporate multimodal options on the bypass or nearby, it does create improved mobility in two ways: by presenting a faster route for people and goods around downtown instead of through it and by fostering the ability of Presque Isle officials and MaineDOT to begin transforming downtown into an active transportation area featuring a *complete streets* concept that will improve mobility for residents and visitors to PI.

3) *Decrease transportation costs and provide access to employment and jobs*

Improved roads deliver savings to manufacturing and agricultural firms. By improving the flow and speed of goods via this Project, manufacturers and transportation companies are able to turn trucks and trailers faster, move goods to market sooner and keep truck drivers moving and making money especially considering many are compensated by mileage traveled, not by hours worked. Considerations such as these are needed to retain truck drivers, a workforce vital to the economic well-being of the U.S. Efficient roads also allow employees to reach their job location quicker and with less fuel cost. This is particularly important during winter in northern Maine, when snow piles up downtown and further adds to congestion and decreased speeds.

4) *Significantly improve region and city economic strength via land, capital, labor productivity and rural/urban links*

Northern Maine has abundant forests and fertile farmland. Farms and forests can be more productive through faster transportation speeding products to market. That's an important impact to make a region more competitive in a global economy. In fact, efficient transportation is a requirement for the perishables that are grown throughout the region. Fast transportation cycles help companies turn their assets such as trucks and trailers more efficiently, thus reducing costs. Improved cycle times mean increased labor productivity because drivers can cover more miles and make more money – an important factor considering the challenges facing driver hiring and retention. A faster, safer and more efficient link between rural and urban communities is critical to daily life in remote parts of the U.S., especially those facing harsh weather. Roads such as US1 provide the vital connection to food, shopping, medical needs, employment, education and entertainment – facets that create a thriving local economy.

5) *Access to tourism and recreation*

Manufacturing and lumber-related jobs, once abundant, declined in Maine towards the last half of the previous century and as they did, tourism became key to the state's economic survival. Tourism is vital to northern Maine but often challenging to develop because the region lacks an ocean coastline or National Park (such as Acadia) that attracts tourists with the same strength that southern Maine does. MaineDOT recently completed improvements to Hallowell, near Augusta, making it more pedestrian friendly. PI envisions the same changes for its downtown.

Winter tourism is one regional bright spot. As climate change increases its impact on snowfall in North America, winter tourism drifts further north in Maine chasing greater snowfall amounts. PI is positioning itself to be the center of winter tourism since it's the largest city in the region. Snowmobiling is northern Maine's primary winter sport, estimated to generate more than \$606 million during the 2018-2019 season. That's a significant amount of winter spending, much of it in rural areas. It supports 2,279 direct jobs and an additional 1,060 indirect jobs.¹⁹ That's why MaineDOT has preserved local trails in the bypass design. To sustain winter tourism activity, PI will need to greatly improve primary city streets, reduce the number of big trucks moving through downtown, and create durable and reliable roads able to withstand winter weather in order to attract additional tourists. The Project assists all these needs by relocating truck traffic.



An artist's rendition of downtown Hallowell, Maine, showing improvements that make the city more pedestrian-friendly.

6) *Supporting good-paying jobs with a free and fair choice to join a union and incorporate strong labor standards*

7) *Workforce opportunities for historically underrepresented groups to support project development*

The Project does not directly enhance criterion six or seven.

8) *Foster economic growth and development while creating long-term high-quality jobs, addressing acute challenges, such as energy sector job losses in energy communities*

This region of the nation does not have a connection to energy sector jobs. It is; however, deeply connected to truck driving. A frustrating component of the occupation is sitting in traffic, especially for drivers who receive productivity-based pay (mileage) versus time-based pay (hourly). Also, fast, efficient transportation and a safe and growing downtown in the region's commercial center are factors many manufacturers look for when choosing to relocate. While this part of Maine is centered on agriculture and tourism, it is focused on attracting additional manufacturing.

9) *Support integrated land use, economic development and transportation planning to improve the movement of people and goods, facilitate greater public and private investments and strategies in land-use productivity, including rural main street revitalization or increase in the production or preservation of location-efficient housing*

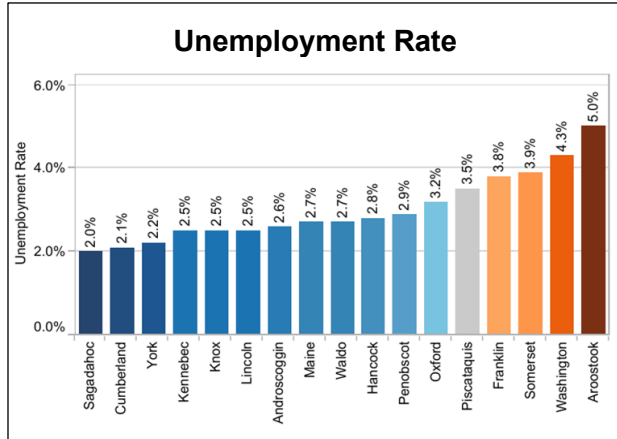
The primary way to support economic development and transportation planning simultaneously in the region is ultimately to separate the movement of people and goods. Downtown PI's primary north-south route can no longer handle the mix of freight and passenger vehicles safely or efficiently. By separating them under this Project, both are improved. MaineDOT's 2019 3-

¹⁹ <https://www.mesnow.com/pdfs/EconomicImpactMaine.pdf>, page 1

Year Work Plan consisted of three focus areas: *safety, innovation, and downtowns*. Presque Isle commissioners and MaineDOT came together to plan a downtown that improves walkability, local transportation options and fosters additional downtown investment and economic development.

10) *Help the US compete globally by locating industries, innovations and technologies here and facilitating efficient and reliable freight movement*

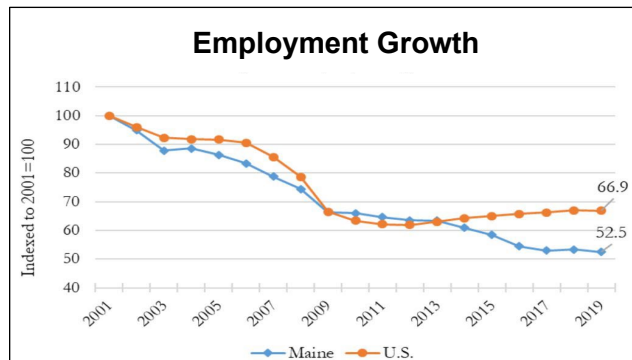
Aroostook County residents and officials welcome additional business and industry to the region for important reasons. First, the unemployment rate. In a May 2019 snapshot chosen to capture



the pre-pandemic era and non-winter timeframe, the county led the state – as it usually does – with an unemployment rate of five percent.²⁰ Secondly, like many parts of the U.S. struggling with high unemployment rates, the region was dependent on one industry – forestry – which has suffered the past 30 years due to increasing foreign competition. The story of forestry workers is not unlike that of coal miners in Appalachia who have witnessed their fortunes fall as the region experiences a sudden and dramatic weakening of their significant commodity.

Forest products employment in Maine has fallen by 47 percent since 2001. Employment had largely tracked nationwide forestry employment losses until 2013, when Maine’s employment decreases accelerated while US employment remained steady.²¹

The region can help the U.S. compete globally for a few reasons. Unlike numerous urban and suburban areas in New England, this region has ample land to house large industries. Additionally, Aroostook County is logistically ideal to locate a business, given its proximity to Canada, the number one trading partner of the U.S., a rail system with capacity to connect to all parts of North America, coastal Atlantic ports able to export products to Europe and the East and lastly, better access to Interstate 95. The local road system in general, and US1 in particular, has the potential to be an efficient ‘conveyor belt’ moving products to all of the connections mentioned. But to locate here, industries will require assurances that the ‘first mile’ of freight’s journey will be reliable and efficient.



4. Climate Change, Resiliency, and the Environment

²⁰ <https://www.maine.gov/labor/cwri/laus.html>

²¹ <https://formaine.org/wp-content/uploads/2021/07/Technical-Appendices.pdf>, page 22

The bypass will traverse farmland and wetlands but does not significantly encroach on floodplains or areas that experience wildfires. The bypass route has been designed to avoid as many residences, business or towns in the area as possible so it does not ‘relocate’ noise and emissions effects from one community to another. That greatly reduces negative environmental impacts on these very remote rural communities, including Native American and Amish communities. Careful consideration has been given to avoid environmentally-sensitive areas and preserve waterways for aquatic species. Conversely, the Project also reduces harmful emissions in one of the most remote cities in New England, the final city prior to reaching Canada. It is estimated to save 168,000 tons of CO₂, 82 tons of NO_x, 4 tons of particulate matter and 1 ton of Sulfur Dioxide over a 30-year period.

The Project is expected to reduce air pollution and greenhouse gas emissions. Lower-carbon pavement will be used. Animal pass-throughs will be constructed. The Project will incorporate best practices for managing soil erosion and sedimentation. Permanent measures for treatment of stormwater quantity and quality will be incorporated in accordance with Chapter 500 regulations and the Memorandum of Agreement for Stormwater Management Between MaineDOT, MTA and Maine DEP. The Project has no connection to brownfield sites and does not significantly encroach on a floodplain. The Project promotes energy efficiency and reduced greenhouse gas emissions by decreasing truck idle time. It enhances public health because of improved air quality and less conflict between trucks and personal vehicles and pedestrians. The route is an EV priority corridor and MaineDOT will ensure EV charging is a key part of the future of this route.

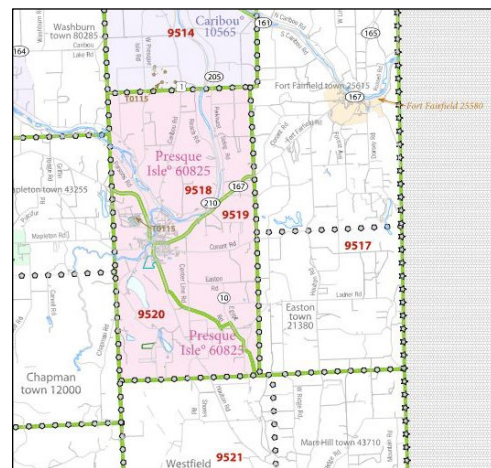
Addressing Environmental Sustainability

- 1) *The project results in greenhouse gas emissions reductions relative to a no-action baseline:* Yes, estimated to save 168,000 tons of CO₂, 82 tons of NO_x, 4 tons of particulate matter and 1 ton of Sulfur Dioxide over a 30-year period.
- 2) *A Local/Regional/State Climate Action Plan is prepared:* The state climate action plan is located at: https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/MaineWontWait_December2020.pdf. The Project would support this plan by eliminating truck idling and congestion downtown and would encourage bike/ped modes of travel.
- 3) *The regional TIP or STIP is based on integrated land use and transportation planning and design that increases low-carbon mode travel, reduction of greenhouse gases and vehicle miles traveled or multimodal transportation choices and/or incorporates electrification or zero emission vehicle infrastructure:* Yes
- 4) *The project sponsor has used environmental justice tools such as the EJSCREEN to minimize adverse impacts to environmental justice communities (<https://ejscreen.epa.gov/mapper/>):* Yes.
- 5) *A Local/Regional/State Energy Baseline Study has been prepared and the project directly supports that study:* The Climate Action Plan includes a plan for renewable energy. Specifically, it outlines a strategy to grow Maine’s clean energy economy that includes: taking advantage of new market opportunities and supporting clean energy jobs. This includes supporting the farming and forest products industries by providing safe, reliable and efficient transportation within and between markets.

- 6) *The project supports a modal shift in freight (e.g., from highway to rail) or passenger movement (e.g., from driving to transit, walking, and/or cycling) to reduce emissions. The project utilizes demand management strategies to reduce congestion, induced travel demand, and greenhouse gas emissions:* A primary purpose of the Project is to allow for downtown PI to rebuild Main Street as a *Complete Streets* route that supports active transportation options.
- 7) *The project incorporates electrification infrastructure (e.g., installation of electric vehicle charging stations, zero-emission vehicle infrastructure, or both):* With downtown improvements, PI will become a destination, allowing the opportunity for EV charging. US1 is an EV priority corridor.
- 8) *The project promotes energy efficiency:* No
- 9) *The project serves the renewable energy supply chains:* No, although there is currently a windfarm just 10 miles away from the Project area.
- 10) *The project improves disaster preparedness and resilience to all hazards:* Yes; the bypass creates a safer route for motorists traveling in the region, including during snowy conditions. It has been built to withstand any threats from flooding, fires and high winds. The Project is supported by regional EMS.
- 11) *The project avoids adverse environmental impacts to air or water quality, wetlands, and endangered species, such as through reduction in Clean Air Act criteria pollutants and greenhouse gases, improved stormwater management, or improved habitat connectivity:* Yes
- 12) *The project repairs existing dilapidated or idle infrastructure that is currently causing environmental harm (e.g., brownfield redevelopment):* No
- 13) *The project supports or incorporates the construction of energy- and location-efficient buildings, including residential or mixed-use development:* No
- 14) *The project proposes recycling of materials, use of materials known to reduce or reverse carbon emissions, or both:* No

5. Equity, Multimodal Options, and Quality of Life

Living in a rural area is a life many enjoy; however, with it comes the challenge of everyday conveniences being located further from home. Roads are a lifeline for rural residents, but *efficient* roads can be a lifesaver. The bypass will make US1 more efficient for those wanting to simply go around Presque Isle as they travel north or south, as well as for emergency services that need to arrive at a location rapidly. For many, US1 through downtown is a barrier that restricts efficiency. However, designs are underway that will increase the ability of vulnerable road users to have the accessibility needed to work, live, and play downtown and move freely with or without a vehicle.



Census tract reference map courtesy census.gov.

The bypass will be a time savings benefit for residents of the region and tourists, especially in the winter when driving conditions can be challenging. Census tracts 9518 and 9520 are Areas of Persistent Poverty. The southernmost portion of the Project touches 9520, while the majority of the Project is in 9519. The third and final phase of the Project (Section III/Phase III) travels

through 9518. The Project proactively addresses barriers to opportunity in a rural region by creating improved access for these underserved communities. The new bypass will serve as a connection to goods and job opportunities in this rural region.

It is important to MaineDOT to know what individuals think of a project. MaineDOT has always meaningfully engaged people in communities affected by projects by advertising and holding public participation meetings that are accessible to all, regardless of race, color, national origin, disability, age, and sex. As this Project has developed, MaineDOT has fostered public involvement, beginning in 1999 with a series of meetings with local residents and public officials in Frenchville, Presque Isle, and Houlton, Maine, respectively. Additional public hearings were held in Presque Isle, Frenchville, and Houlton in 2002. Meetings with the local agricultural community helped identify highly productive farmland, locations of active fields, key field access points, storage facilities and locations where farm equipment crosses highways in order to steer the Project away from these areas. MaineDOT has coordinated with local communities and organizations throughout the study to obtain information on existing conditions as well as transportation and economic needs. This level of communication will continue through Project completion.

MaineDOT recently updated its Public Involvement Plans to ensure disadvantaged populations and underserved areas are afforded meaningful opportunities for public involvement, available at: <https://www.maine.gov/mdot/env/NEPA/public/index.shtml>. MaineDOT is updating other tools that will help identify how the organization can reach underserved populations even more closely than is done today. MaineDOT has also launched a new Diversity, Equity and Inclusion (DEI) initiative that includes an external equity statement of the commitment to ensure all Mainers have access to safe and reliable transportation options.

6. Innovation Areas: Technology, Project Delivery, and Financing

Technology

No portion of the Project is believed to meet this outcome criteria. While EV charging is not part of this Project, this portion of US1 is an EV priority corridor and the Project clears the path for charging stations to be located in Downtown PI as part of its future revitalization.

Project Delivery

The parties involved in this grant application are applying an innovative means with respect to NEPA and permitting for this Project through Programmatic Agreements to ensure timely and consistent reviews and accelerate project delivery. MaineDOT and various other state and federal departments have executed agreements to expeditiously but thoroughly review environmental impacts from projects. MaineDOT will take advantage of the following agreements, where applicable, to streamline the environmental review and approval process:

1. 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
2. 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

3. Cooperative Agreement between U.S. Department of the Interior Fish and Wildlife Service (USFWS), FHWA and MaineDOT for State Transportation Reviews by USFWS in Maine
4. Maine Atlantic Salmon Programmatic Consultation finalized January 23, 2017
5. 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
6. 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
7. Memorandum of Agreement for Stormwater Management Between the MaineDOT, MTA and Maine Department of Environmental Protection

Financing

No portion of the Project is believed to meet this outcome criteria.

VI. BENEFIT COST ANALYSIS

The BCA (detailed in Appendix A) estimates nearly \$400 million in total benefits over the 30-year analysis period resulting from the \$84.3 million investment. On a discounted NPV basis (7% for all costs and benefits; exclusive of CO₂ – discounted at 3%), the Project yields a strong benefit-cost ratio of 1.65:1. Benefits accrue due to the improved transit time for trucks and light vehicles utilizing the new bypass and the safety and fluidity that results through the town of Presque Isle. There are on-going maintenance net savings, property value enhancements as well as significant emissions reductions due to shorter transit time and reduced idling at traffic signals. The bypass will make transit through PI safer because hundreds fewer trucks and thousands fewer light vehicles will share downtown with pedestrians and cyclists. These changes will enhance residential and commercial property values and pave the way for a more vibrant city core ripe for additional enhancements that will improve property values even more and life to a great extent.

Net Maintenance Costs – A modest overall benefit to the Project is the reduced maintenance required post-bypass construction with equivalent annual maintenance needs enhanced by reduced frequency of ‘mill and fill’ projects from every 10 years in a no-build scenario to only one-time during the 30-year analysis period. This comes at less cost per occurrence. The NPV of the net savings in the build vs. no-build scenario is **\$930,946**.

7% NPV Summary over 30 Years (CO ₂ at 3%)		
	Costs	Benefits
CAPEX - Project Cost	\$66,910,488	
Maintenance Costs		\$930,946
Property Value Enhancements		\$4,220,165
Safety Savings		\$12,859,105
Time Savings Utilizing Bypass		\$44,126,928
Emissions Savings Utilizing Bypass*		\$8,132,127
Time Savings Through Town		\$32,751,355
Emissions Savings Through Town*		\$4,063,680
Residual Value of the Project		\$3,354,359
TOTAL	\$ 66,910,488	\$110,438,666
Benefit-Cost Ratio		1.65

Property Value Enhancements – The Project is estimated to reduce by 85 percent the amount of truck traffic through town along with a 30 percent reduction in light vehicle traffic. Overall property values in Presque Isle will rise as traffic abates, emissions are reduced and the city is poised for a vibrant renewal. The bypass, meanwhile, will be located in an area mostly free of commercial and residential properties. Overall, net property values will be enhanced, just as many studies conclude. Maine Revenue Services has previously noted that changes in property values are driven by, and hence reflect, the value associated with local changes in community impacts (**accessibility, safety...visual amenity, and community cohesion**), as well as economic development impacts (**business productivity**). In general, a transportation project would only lead to changes in property values (and subsequent land use) if it causes a direct change in one or more of these other local factors that affect the desirability of a location. This Project specifically targets the items in bold above. The analysis utilizes the valuation that Maine Revenue Services calculated for Presque Isle. It presumes a very modest one-time one percent improvement to values upon Project completion.²² First, previous studies have concluded that infrastructure improvements yield increases to property values in excess of six percent; this analysis only presumes one percent.²³ The analysis uses the nominal value of the 2020 property valuation assessment and does not assume any increase between now and Project completion when benefits are included. The NPV of those enhancements is **\$4,220,165**.

Safety – The calculated nominal *annualized* safety benefit is \$1.345 million and yields an overall NPV of **\$12,859,105**. These savings are based on an estimated number of net reduced crashes that result from far fewer intersections on the limited access bypass vs. the multi-intersection US1 through downtown Presque Isle and reduced congestion in the city core along with a shift of traffic to the rural route.

Time and Emissions Savings Utilizing the Bypass – The primary benefits to the Project result from truck and other vehicle savings. With a fairly high AADT for a rural area, hundreds of trucks and thousands of vehicles will save more than five minutes per vehicle traversing the eight miles through Presque Isle. That results in significant operator and emissions savings. The NPV of the time savings is **\$44,126,928** and the NPV of the emissions savings is **\$8,132,127**.

Time and Emissions Savings for Vehicles Through PI on US1 – The reduction of an estimated 85 percent of truck traffic through town and more than 30 percent of other vehicle traffic also generates times savings for significant AADT. These vehicles will encounter less congestion and are expected to move into and out of PI more quickly as well, saving approximately two minutes per vehicle. That, too, results in significant operator and emissions savings. The NPV of the time savings is **\$32,751,355** while the NPV of the emissions savings is **\$4,063,680**.

Residual Value – In terms of savings, the life of Project improvements greatly-exceed the 30-year analysis period and yield an NPV of **\$3,354,359**. The useful life of the Project is 50-60 years for the pavement while the bridges will have useful lives of 75 years.

²² <https://www.maine.gov/revenue/taxes/property-tax/state-valuation>

²³ <https://publications.iadb.org/publications/english/document/The-Impact-of-Upgrading-Municipal-Infrastructure-on-Property-Prices-Evidence-from-Brazil.pdf> & <https://www.povertyactionlab.org/evaluation/increasing-access-infrastructure-and-property-values-through-urban-investment-mexico>

VII. PROJECT READINESS AND ENVIRONMENTAL RISK

During the development of the INFRA package, numerous risks were contemplated but each has a comprehensive mitigation strategy. Preliminary design is currently underway and coordination between the design team and the environmental team will continue to ensure that the Project goals and community needs are met while avoiding, minimizing, and mitigation potential environmental impacts.

The Environmental Impact Statement (EIS) is complete. There are 20 acres of wetland impacts and 60 acres of farmland impacts. All three sections of the bypass affect a total of 27 structures. This segment has only one structure remaining to be acquired. The Project falls within seven USACE 750-foot critical terrestrial habitat vernal pool buffer zones and requires 10 stream crossings. Preliminary Design Review (PDR) is complete. Final Design is underway. Regarding ROW – some parcels already acquired, but still more to do.

Six culvert crossings over existing streams have been designed to accommodate wildlife passage:

- PI Bypass over Clark Brook: a new 30-foot span, 20-foot high, 3-sided arch
- PI Bypass over Tributary to Clark Brook: a new 12-foot span, 10-foot-high box culvert
- PI Bypass over Tributary to Williams Brook: a new 8-foot span, 8-foot-high box culvert
- PI Bypass over Williams Brook: a new 17-foot span, 9-foot-high box culvert
- PI Bypass over Tributary to Merritt Brook: a new 12-foot span, 18-foot-high box culvert
- Conant Road Tributary to Merritt Brook: a replacement 14-foot span, 8-foot-high culvert

All of these crossings have been designed in accordance with MaineDOT Habitat Connectivity Design (HCD) standards to provide aquatic and terrestrial wildlife passage based on field geomorphic evaluations of each crossing location. For each individual crossing, culvert spans were set at least 1.2 times the bankfull width (BFW) of the stream, and culvert elevations were set to accommodate the longitudinal profile of the stream. Each crossing includes a constructed simulated natural channel through the culvert with banks and terrestrial wildlife passage shelves, including streambed with at least 2 feet of natural streambed material infill covering the bottom of the structure. The Clark and Tributary to Clark culverts have been designed to accommodate large animal passage (deer and moose) with higher vertical clearance and/or wider wildlife shelf geometry. The Conant Road culvert replaces an existing perched 30-inch diameter RCP culvert that currently acts as a barrier to fish passage. In addition, two stream relocation/restorations have been designed to accommodate wildlife passage:

- 280 linear feet of Clark Brook to eliminate the existing US1 culvert and abandoned Old Route 1 bridge crossings
- 550 linear feet of Tributary to Merritt Brook to relocate a section of stream to be filled by the proposed PI bypass and Conant Road intersection interchange

Both stream restorations have also been designed in accordance with HCD and Rosgen Geomorphic Channel Design to replicate pre-development natural stream channels providing wildlife habitat and passage. The Clark Brook stream restoration removed an existing perched CMP pipe arch culvert under US1 that currently acts as a barrier to fish passage.

The Project is currently in the preliminary design stage by VHB.

Technical Feasibility/Scope of Work

Once MaineDOT has called for, received and analyzed bids for the Project, a contractor will be selected and awarded. All affected parties and nearby landowners will again be notified prior to construction commencing. Materials needed for construction will be obtained and delivered to construction staging areas. Next, general clearing of land will take place, followed by grubbing of the location. Excavation will take place to carefully move earth to fill in low areas and smooth out high areas along the roadway alignment corridor. There could be a few locations where rock may need to be safely blasted to remove a top layer of bedrock in order to reach the correct elevation. While this work is taking place, culverts and bridges will be constructed along the alignment. Culverts will ensure safe water and wildlife passage and bridges will ensure motorists and users of the state’s trail system on intersecting roads can adequately cross the bypass. Once the correct subgrade elevation is reached, a gravel base will be applied to the alignment as specified by road construction regulations, followed by the asphalt road surface built to USDOT specifications. Guardrails will be installed at all locations governed by all USDOT and MaineDOT regulations. Wildlife/right-of-way fencing will be erected the entire length of the Project. If selected for funding, MaineDOT looks forward to signing a comprehensive agreement with USDOT that includes a detailed Statement of Work outlining all parameters of the Project and the steps to follow for cost reimbursement. MaineDOT also welcomes the opportunity to create periodic construction and performance reports as required.

“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.”²⁴

Project Schedule

Construction on the Project is expected to begin in a timely manner in the Spring of 2025 as weather allows. All components will be presented to contractors in one advertisement. A date of December 12, 2024 has been selected, in part, based on previous history of positive winter season advertisement outcomes. All grant funds will be obligated on or prior to January 11, 2025. Therefore, construction will commence well under 18 months after that.

Item Description	Completion Date
SECTION 7 SIGNOFF	4/15/2013
NEPA COMPLETE	4/15/2013
INITIAL TEAM MEETING	8/24/2015
PRELIMINARY ALIGNMENT COMPLETE	10/1/2016
DRAFT PDR DISTRIBUTION	3/10/2017
PDR/ PRELIMINARY PLAN COMPLETE	12/29/2020
PUBLIC CONTACT	8/21/2022
PLAN IMPACTS COMPLETE	11/3/2022
R/W CERTIFIED	10/25/2024
UTILITIES CERTIFIED	10/26/2024
ENVIRONMENTAL APPROVALS COMPLETE	10/26/2024
PS&E COMPLETE	11/24/2024
PROJECT ADVERTISING	12/12/2024
CONTRACT AWARD	1/11/2025
CONSTRUCTION BEGIN	2/11/2025
CONSTRUCTION/EFFORT COMPLETE	10/20/2027

Required Approvals

MaineDOT has initiated communication with environmental agencies and interested parties. Preliminary baseline data collection to identify natural and cultural resources potentially

²⁴ <https://www.maine.gov/mdot/civilrights/title-vi/>

affected by the Project is nearly complete. This information will be refined during design and will be used to avoid and minimize impact while meeting the purpose and need of the Project.

1. **National Environmental Policy Act (NEPA):** FHWA issued a Record of Decision for the Aroostook County Transportation Study, Tier II Presque Isle Bypass on April 15, 2013, which includes the Project. This document will inform project design, and all commitments made to mitigate adverse impacts will be incorporated into the Project. MaineDOT is working with FHWA Maine Division to re-evaluate NEPA and update consultations as necessary. A Supplemental Environmental Impact Statement is not anticipated. Public involvement will continue in accordance with MaineDOT Public Involvement Plan and the MaineDOT NEPA Public Involvement Plan. These plans can be found at: <https://www.maine.gov/mdot/env/NEPA/public/index.shtml>. The anticipated date for NEPA re-evaluation completion is October 26, 2024.
2. **Historic and Archeological:** MaineDOT and FHWA completed the Section 106 process for all Project elements in 2011. The process concluded with Maine Historic Preservation Commission concurrence that no historic resources are present in the project area. MaineDOT Historic Coordinator will review and update the 2011 survey and consult with the State Historic Preservation Officer in accordance with 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*. FHWA and MaineDOT will update and consult with Federally-recognized Tribes.
3. **Section 4(f) of the Department of Transportation Act:** The MaineDOT Cultural Coordinator has reviewed the Project and did not identify Section 4(f) resources.
4. **Endangered Species Act (ESA) and Essential Fisheries Habitat (EFH):** The Aroostook River and its tributaries are designated an Essential Fish Habitat. MaineDOT and FHWA completed EFH consultation in 2012 and will incorporate conservation recommendations provided by NMFS. The Project is located within the range of Federally-threatened Canada lynx. In 2012, U.S. Fish & Wildlife Service (USFWS) concurred with FHWA's determination that the Project is not likely to adversely affect Canada lynx. The Project is located within the range of the Federally threatened northern long-eared bat, a new designation since completion of the Record of Decision. MaineDOT anticipates that the Project may affect, but not adversely, the northern long-eared bat. The Project will be eligible for Streamlined Section 7 Consultation pursuant to the USFWS northern long-eared bat 4(d) Rule and/or the USDOT and USFWS Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat. MaineDOT and FHWA will coordinate with Federal agencies during Project design to avoid and/or minimize effects to EFH and ESA species and to update the required consultations as applicable in accordance with the Project schedule.
5. **Section 404 Clean Water Act Permit (U.S. Army Corps of Engineers):** Approximately 20 acres of freshwater wetland impacts are expected in order to perform the required work. MaineDOT will avoid and minimize temporary and permanent wetland impacts to the extent practicable. MaineDOT anticipates that wetland impacts and associated in-water work require an Individual Section 404 Permit. A site search for permittee-responsible mitigation is underway. In addition, MaineDOT anticipates use of in-lieu fee mitigation payment to the Maine Natural Resources Compensation Program to compensate for unavoidable impacts.

6. **Natural Resources Protection Act (Maine Department of Environmental Protection):** Wetland and stream impacts are regulated by the Maine Natural Resources Protection Act. MaineDOT anticipates wetland and stream impacts associated with the Project will require an Individual Permit process.
7. **Stormwater (Maine DEP):** The Project will incorporate best management practices for temporary and permanent management of soil erosion and sedimentation. Permanent measures for treatment of stormwater quantity and quality will be incorporated in accordance with Chapter 500 regulations and the Memorandum of Agreement for Stormwater Management Between MaineDOT, MTA and Maine DEP.
8. **Floodway/Floodplains:** The Project will not impact any designated floodways. It is a new alignment. No flooding or disaster impacts have been noted where the proposed alignment ties into existing infrastructure. The Project will require construction of new crossings at waterbodies with designated Zone A and Zone B floodplains. All crossings will be designed to avoid/minimize encroachments in flood zones in accordance with Executive Order 11988.

Project Risks

Wetland impacts: MaineDOT will avoid and minimize wetland impacts during design and will engage the Corps of Engineers, Maine DEP and EPA early to ensure acceptable compensatory mitigation is developed.

Right-of-Way Acquisition

The Project will impact 20 properties. Once detailed mapping is finalized, there could be a few additional small impacts. There will be only one complete acquisition with residential improvements as part of the Project. MaineDOT and Sanford follow Federal law and guidelines regarding contact, appraisal and acquisition of land.

Environmental Justice

MaineDOT utilizes the EPA EJSCREEN for all Federally-funded projects. According to U.S. Census Block Data, the percentage of the population below the poverty level in the City of Presque Isle ranges from 8-24 percent and averages 14 percent along much of the proposed alignment. The Project area is adjacent to neighborhoods identified as disadvantaged under the Climate and Economic Justice Screening Tool at: <https://screeningtool.geoplatform.gov/en/>. Portions of PI east of the proposed alignment tract exceed the Health Burden threshold for asthma rates and the Clean Energy & Energy Efficiency thresholds for energy burden. They also exceed the low income and higher education non-enrollment thresholds.

The Project will result in one residential single-family relocation and in impacts to waterbodies and wetlands. The Project will improve existing roads and infrastructure and will reduce safety risks for all users of the transportation system, including vehicles and vulnerable roadway users. It will improve the safety and quality of access to the commercial center and jobs. The team will engage the public and work to ensure impacts will not disproportionately affect people of color, low-income individuals or disadvantaged populations. MaineDOT recently updated its Public Involvement Plans, which outline the Department's efforts to ensure disadvantaged populations are afforded meaningful opportunities for public involvement. The Plan is available at: <https://www.maine.gov/mdot/env/NEPA/public/index.shtml>.

VIII. PROJECT REQUIREMENTS

Statutory Selection Requirements

Guidance #1

- *Economic impacts*: removes the primary freight bottleneck in state's northern half; faster movement of freight, especially perishables, to transportation hubs; faster connections to national and international networks; less costly transportation; better truck driver occupations
- *Mobility impacts*: reduction of truck traffic through downtown clears the path for active transportation improvements; reduces time cost of traveling through downtown
- *Safety impacts*: fewer truck vs pedestrian impacts downtown; fewer truck vs personal vehicle impacts downtown; fewer hazardous materials transported through downtown; higher speed route created with numerous modern safety amenities
- *Scale of Impact (national or regional)*: tremendous regional impact of travel time reliability; faster freight and personal transportation while maintaining critical connection to downtown

Guidance #2

- *Highlights of BCA*: more than \$400 million in total benefits over 30 years; strong benefit-cost ratio of 1.65:1 due to improved transit time for trucks and light vehicles; numerous improvements to safety and fluidity through downtown PI; maintenance net savings; property value enhancements; significant emissions reductions and subsequent savings

Guidance #3

- *Specify the Section 150 Goals and summarize how the project contributes to Section 150 goals*:
 - 1) *Safety* – MaineDOT estimates the Project translates to an estimated 20.91 fewer total crashes per year, 4.87 fewer involving injuries and/or fatalities, .34 fewer with serious injuries and 16 fewer property damage crashes.
 - 2) *Infrastructure condition* – MaineDOT will maintain the new highway infrastructure in accordance with the highest standards. The US1 bypass route will be designated part of the NHS and classified as Highway Corridor Priority 1.
 - 3) *Congestion reduction* – The Project is expected to reduce congestion on US1 through downtown by 4,100 personal vehicles and 544 freight trucks the first year and up to 4,720 and 870 respectively, by 2052.
 - 4) *System reliability* – Transportation reliability will improve when truck freight, and some personal vehicles, transfer to the bypass and around a downtown.
 - 5) *Freight movement and economic vitality* – This Project will be on the National Highway Freight Network. It will strengthen the ability of this rural region to access national and international trade markets while also supporting regional economic development. It lays the groundwork for the region to attract jobs by 'selling' the area's fast connection to national and international markets.
 - 6) *Environmental sustainability* – The Project protects and enhances the environment in meaningful ways, including by being designed as to keep wildlife off the right-of-way while also maintaining the connection of wildlife and water to both sides of the bypass.
 - 7) *Reduced project delivery delays* – MaineDOT will work to eliminate delays in Project development and delivery by communicating with contractors and working to resolve any delays rapidly. MaineDOT reduces regulatory burdens and improves agencies' work practices by incorporating cooperative agreements into the work process. MaineDOT looks forward to abiding by current performance measures or creating new ones and providing reports for all aspects of any project, including condition levels, injury measures, congestion mitigation, emissions reductions, freight movements,

establishing/reporting on performance targets, and addressing freight bottlenecks.

Guidance #4

- *The following activities have been completed as of the date of application submission:*

Environmental Assessments: Yes	Topographic Surveys: Yes
Metes and Bounds Surveys: Yes	Geotechnical Investigations: Yes
Hydrologic Analysis: Yes	Utility Engineering: No
Traffic Studies: Yes	Financial Plans: Yes
Revenue Estimates: Yes	Hazardous Materials Assessments: Yes
General estimates of the types and quantities of materials: Yes	
Other work needed to establish parameters for the final design: Yes	

Guidance #5

- *Funding source(s) and amounts, broken down by independent project component. Demonstrate funding is stable, dependable, and dedicated to this project by referencing the STIP/TIP, a letter of commitment. State the contingency amount available for the project:*

Funds Requested:	\$44,100,000 – 52.31% of Total Project Cost
Other Federal Funds Matched:	\$21,220,000 – 25.17% of Total Project Cost
Non-Federal Funds Matched:	\$16,330,000 – 19.37% of Total Project Cost
Previously Incurred Expenses:	\$ 2,654,000 – 3.15% of Total Project Cost
Total Project Cost:	\$84,304,000

The Project is a MaineDOT priority outlined in the *State Freight Plan*, is included in the *Statewide Transportation Improvement Program (STIP)* for 2021-2024 and is consistent with MaineDOT’s long-range plan. MaineDOT’s Funding Match Commitment Letter can be found in Appendix F. Contingency amount available: \$11 million for construction, or 15 percent.

Guidance #6

- *Describe potential negative impacts on project if the MPDG grant was not awarded.*
 - 1) Project scope affect if MPDG (or other Federal funds) not received? The 2019 portion of the bypass would continue to serve the region to the ability it does; however, it does not provide a full and adequate pathway for vehicles to bypass PI. An unsafe mix of cars and trucks would continue downtown.
 - 2) Project schedule affect if MPDG (or other Federal funds) not received? The Project would be held in limbo because it has not been determined how the Project would otherwise be financed.
 - 3) How would the project cost be affected if MPDG (or other Federal funds) were not received? Total Project cost would most likely increase due to annual inflation rise.

Guidance #7

- *Provide expected obligation date and construction start date, referencing project budget:* Construction on the Project is expected to begin in a timely manner in Spring of 2025. All components of the Project will be advertised on December 12, 2024. All grant funds will be obligated on or prior to January 11, 2025. The Project does not have multiple independent components, nor will it be obligated and constructed in multiple phases.

Grant Request Supporters*:

MaineDOT's grant request for INFRA funds is supported by a diverse group of elected officials, and stakeholders due to the significant economic impact the Project will have on the region.

This list of supporters includes:

Members of Congress: *(letters will be sent directly to the Secretary's office)*

U.S. Senator Susan Collins (R-ME)

U.S. Senator Angus King (I-ME)

U.S. Congressman Jared Golden (D-ME)

State Elected Officials/Offices: *(letters will be sent directly to the Secretary's office)*

Governor Janet Mills

Maine Senator Trey Stewart (R-Aroostook)

Other Organizations:

A.R. Gould Hospital

Aroostook County Tourism

Bike Board & Ski

Central Aroostook Chamber of Commerce

Huber Engineered Woods

Ignite PI

MI'KMAQ Nation

Northern Maine Community College

Northern Maine Development Commission

Presque Isle City Council

Presque Isle Community Development Assn.

Presque Isle Historical Society

Presque Isle Industrial Council

Presque Isle Public Safety

Please visit <http://www.mainedot.gov/mdot/grants/infra/>

* MaineDOT will post all received letters on our website noted above.

APPENDIX

Benefit-Cost Analysis	A
Map	B
Cost Estimate/Project Budget	C
Gantt Chart	D
Letters of Support	E
Funding Match Commitment Letter	F
EPA Environmental Justice Screen Information	G