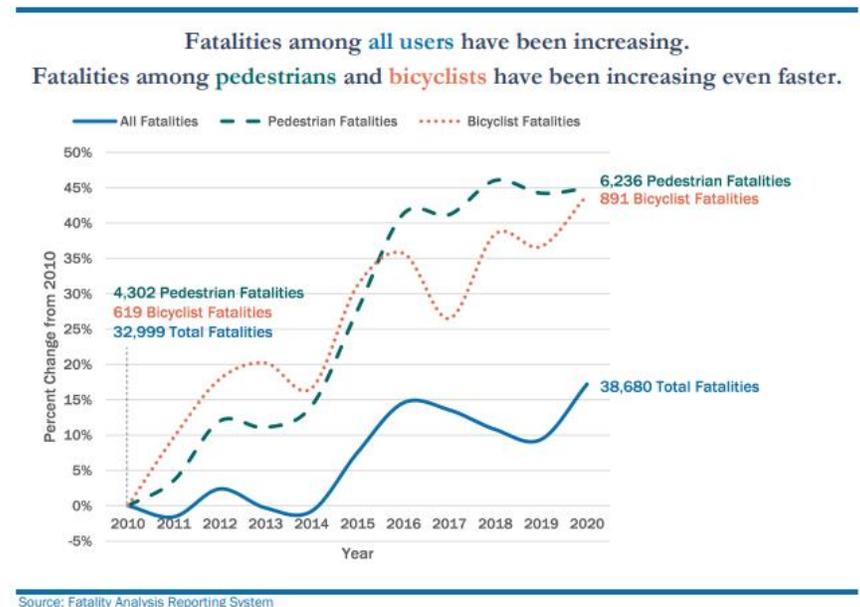


4. Merit Criteria

¹²4.1 Safety

MaineDOT and the Eastern Trail Management District (ETMD) seek to construct this 2.7-mile extension of the off-road Eastern Trail to protect pedestrians and cyclists by providing a dedicated off-road trail and removing vulnerable users from roadway hazards. Currently these two portions of the Eastern Trail operate on-road, meaning the right-of-way is shared with motorists and non-motorists. In 2020, 16% of all traffic fatalities in the United States (US) were fAccording to the CDC, nearly 1,000 bicyclists die in crashes annually and over 130,000 are injured on roads every year.³ Between 2017 and 2021, there were 1,296 crashes and 67 fatalities involving pedestrians in Maine.⁴ In York County, the location of this Project, there were 198 highway pedestrian crashes between 2017 and 2021, six of which were fatal.⁴ Between 2017 and 2021, there were 845 crashes and 10 fatalities involving bicyclists in Maine⁴. In York County, there were 171 highway bicycle crashes between 2017 and 2021 two of which were fatal.⁴ Based on the Fatality Analysis Reporting System, all user-based fatalities have been increasing nationwide and in particular, pedestrian and bicycle fatalities have been increasing at an even greater rate as demonstrated in Figure 4-1.⁵ There is an increasing safety concern for pedestrians and bicyclists as indicated by this national, State, and County crash data. Constructing a safe trail operating within its own right-of-way will reduce the number of safety risks and the potential for crashes with vehicles for non-motorized travelers.

Figure 4-1. Fatalities Among Pedestrians and Cyclists



¹ December 2020. *Maine Won't Wait* https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/MaineWontWait_December2020.pdf

² John Pucher, Ralph Buehler, Dafna Merom, and Adrian Bauman, 2011: *Walking and Cycling in the United States, 2001–2009: Evidence From the National Household Travel Surveys* American Journal of Public Health 101, S310–S317, <https://doi.org/10.2105/AJPH.2010.300067>

³ <https://www.cdc.gov/transportationsafety/bicycle/index.html>

⁴ State of Maine Pedestrian and Bicycle Crash History 2017–2021 Prepared by MaineDOT

<https://www.maine.gov/mdot/safety/docs/2023/Pedestrian%20and%20Bicycle%20Crash%20History%202017-2021.pdf>

⁵ USDOT National Roadway Safety Strategy <https://www.transportation.gov/sites/dot.gov/files/2022-02/USDOT-National-Roadway-Safety-Strategy.pdf>

Table 4-1: State of Maine/York County Pedestrian and Bicycle Crash Data

	State of Maine	York County
Population	1,377,238	214,591
Pedestrian Crashes	1,296	198
Pedestrian Fatalities	67	6
Bicycle Crashes	845	171
Bicycle Fatalities	10	2

Table Source: 2017-2021 State of Maine Crash Data⁴

MaineDOT has drafted its first ever *Maine State Active Transportation Plan (AT Plan)*, which provides a framework for MaineDOT’s efforts to enhance safety and accessibility for bicyclists and pedestrians throughout the State. This Project aligns with the goals of the *AT Plan* by providing safer off-road accommodations for vulnerable users and contributing to the incremental development of an interconnected, statewide active transportation system.

The purpose of this Project is to extend an existing off-road trail that will safely accommodate bicycle and pedestrian use. The two 12-foot-wide trail segments in the Project would operate within their own ROW, exclusive from vehicular traffic. The segments will largely be constructed on a utility corridor that is located along a former rail corridor. For a short portion of Segment 2 along Warren’s Way, it is recommended that this section be constructed as a shared-use path adjacent to the roadway to avoid wetland impacts in this section.⁶ Warren’s Way currently serves as the on-road Eastern Trail route between Alfred Road and Alewife Road. The road is narrow with mainly residential traffic use, and acts as an access route for the Kennebunk Elementary School. Signage and lighting are present on the existing trail but would be improved following construction of the proposed segments. Improvements to signage enhance trail users experience and ability to safely travel. All signage will comply with Americans with Disabilities Act Accessibility Guidelines (ADAAG), ensuring a safe experience is provided to all users. **The preferred alternatives selected in the *Eastern Trail North-Berwick-Wells-Kennebunk Feasibility Study* address challenges for vulnerable roadway users by removing pedestrians and cyclists from active roadways.**

Improving the two outer segments of the 11-mile corridor of the Eastern trail will help increase safety for the Eastern Trail as a whole. Currently 22 miles of the 65-mile trail are off-road segments. Extending and expanding off-road segments will remove hazards to pedestrians/cyclists and promote increased trail usage. MaineDOT supports ETMD’s vision to create a continuous traffic-free trail from Florida to Maine.

⁶ See Figure 4-6 for location of Warren’s Way in proximity to Segment 2

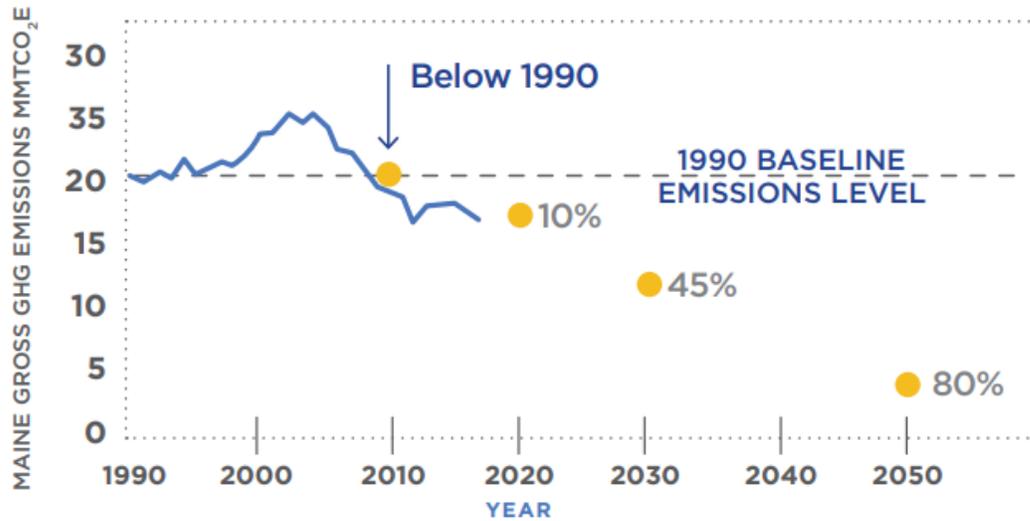
4.2 Environmental Sustainability

This Project will provide two new sections of dedicated off-road path for non-motorized travel, which in turn should reduce vehicle miles traveled by shifting a portion of vehicle trips to pedestrian and bicycle trips along this active transportation corridor. The more direct and safer route along the utility corridor will encourage pedestrian and bicycle trips that would otherwise be made by vehicles, thus reducing air pollution and greenhouse gas emissions. Both segments travel through residential and commercial areas and will provide increased access to the surrounding community. By providing a safe off-road alternative for pedestrians and cyclists, the region should see a reduction in the number of daily vehicle trips. **Environmental benefits from the Project will be realized through the reduction in vehicle miles traveled and greenhouse gas-emissions.** Not only do these segments provide benefits for the surrounding areas and communities, but the Project will also contribute to accomplishing the ETA and ETMD's larger future goal of completing an almost entirely off-road Eastern Trail.

In June 2019, Governor Janet Mills signed LD 1679 into law to create the Maine Climate Council to combat climate change. The Council developed a Four-Year Plan for Climate Action titled *Maine Won't Wait* to put Maine on a trajectory to decrease greenhouse gas emissions by 45% by 2030 and 80% by 2050 and achieve carbon neutrality by 2045. With such a large portion of the state's emissions coming from transportation, reductions in this sector are critical to reaching emission reduction targets. The *Maine Won't Wait* plan intends to reduce Vehicle Miles Traveled (VMT) by reducing light-duty VMT over time with a 10% reduction by 2025 and a 20% reduction by 2030. This Project aligns with the *Maine Won't Wait* plan to reduce VMT by promoting and encouraging bicycling and walking along the Active Transportation corridor.⁷ The construction of these two segments and the improvement of the Eastern trail as a whole will help push forward Maine's statewide goals in reducing greenhouse gas emissions by providing alternative, non-motorized transportation options for residents and workers in Kennebunk, North Berwick, and Wells. The larger Eastern Trail may eventually have significant environmental benefits by supporting a mode-shift along a proposed 55-mile off-road corridor in Southern Maine.

⁷ December 2020. *Maine Won't Wait* https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/MaineWontWait_December2020.pdf

Figure 4-2. Maine's Annual Greenhouse Gas Emissions and Reduction Goals



Source: Maine Department of Environmental Protection 8th Report on Progress toward GHG Reduction Goals.

In addition to aligning with State Climate goals, the Project also reflects decarbonization plans on a local level. The Southern Maine Planning & Development Commission (SMPDC) has established a Regional Sustainability and Resilience Program which Kennebunk and Wells participate in. They conducted a Regional Sustainability and Coastal Resilience Assessment in 2021 which includes regional priorities and indicators that include collaboration to develop sustainable and resilient transportation options. The Town of Kennebunk inventoried Municipal and Community Greenhouse Gas Emissions for 2016-2018. The report recommends encouraging more walking and biking to reduce emissions. The Town of Kennebunk's 2022 Comprehensive Plan includes the following transportation policy: "To promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize vehicle miles traveled."

It is anticipated that environmental impacts from construction of these two segments will be minimal. Wetland avoidance is incorporated in the preferred alternatives and as design progresses, mitigation efforts will continue. Any unavoidable impacts to wetlands will include best management practices (BMPs). There are no eligible historic properties within the Project area, and no impacts to above-ground cultural resources are anticipated. The Project site does not travel through Section 4(f) properties, however Section 4(f) consultation will be kept in mind as the Project progresses.

4.3 Quality of Life

These two new off-road portions of the Eastern Trail will improve the quality of life for nearby residents and businesses by expanding an affordable transportation option, improving access to daily destinations, and improving public health. These trail improvements will increase active transportation use (i.e., walking or biking) for their surrounding areas. A study published in the

Figure 4-3. Cyclists on the Eastern Trail



American Journal of Public Health (AJPH) found that active transportation contributes to daily physical activity, cardiovascular health, and improves individual health through the reduction of air pollution, carbon emissions, congestion, noise, and harmful impacts from automobiles.⁸

Providing a safe alternative mode of travel creates more equitable and livable communities. This Project expands access to daily destinations and alleviates vehicle dependency. ETA has anecdotally heard from trail users on the mental health benefits from access to the Eastern Trail.

Once completed, over 2,100 employees at Pratt & Whitney will have access to the 2-mile trail Segment 1 right outside their door. Segment 2 is directly adjacent to Kennebunk Savings Bank and will provide similar benefits to their employees. In addition to the existing surrounding residential users, Avesta Housing will be constructing 70 affordable housing units on land previously owned by Kennebunk Savings Bank, and residents will also have direct access to this healthy, safe, active off-road transportation alternative that will connect them with West Kennebunk Village, Kennebunk Elementary School, and the existing off-road Eastern Trail to the regional service center of Biddeford.

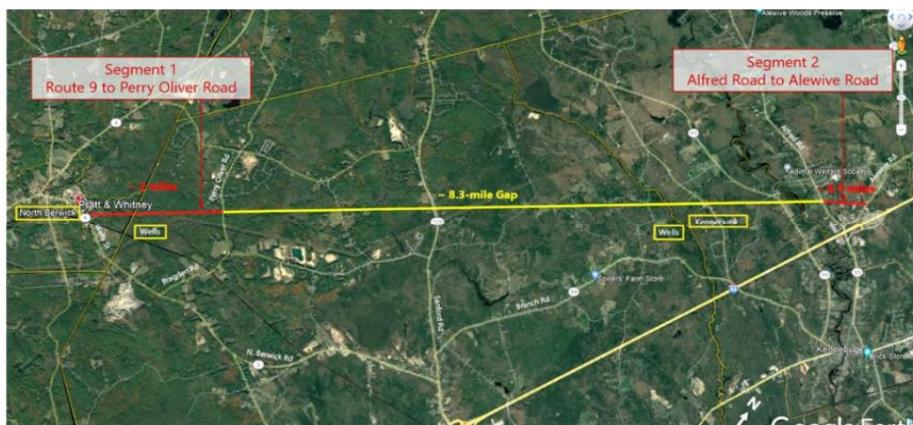
The benefits from each of the two segments will not only occur within the local and surrounding areas, but also help contribute to the overall benefits from the Eastern Trail as a whole. As mentioned before, this Project is a part of a larger vision of the ETA to increase the percentage of off-road portions of the Eastern Trail and improve connectivity between segments. As the larger effort moves forward, the quality of life will not only be improved for residents of the North Berwick-Wells-Kennebunk community but also residents of the Southern Maine region.

Reducing transportation barriers throughout Southern Maine will have positive impacts on the health and well-being of community members.

4.4 Mobility and Community Connectivity

As Shown in Figure 4-4, construction of the two outer segments of the larger 11-mile corridor will connect communities in North Berwick, Wells, and Kennebunk along the Eastern Trail. Currently, the Eastern Trail is popular and well-used, with an estimated 242,955 trail users in 2021. The existing off-road trail section in Kennebunk, which would be extended as part of Segment 2

Figure 4-4. Project Area



under this Project, was estimated to carry approximately 25,000 users in 2021. However, the existing trail has limited connectivity and gaps with sections both on and off-road making travel

⁸ John Pucher, Ralph Buehler, Dafna Merom, and Adrian Bauman, 2011: *Walking and Cycling in the United States, 2001–2009: Evidence From the National Household Travel Surveys* American Journal of Public Health 101, S310_S317, <https://doi.org/10.2105/AJPH.2010.300067>

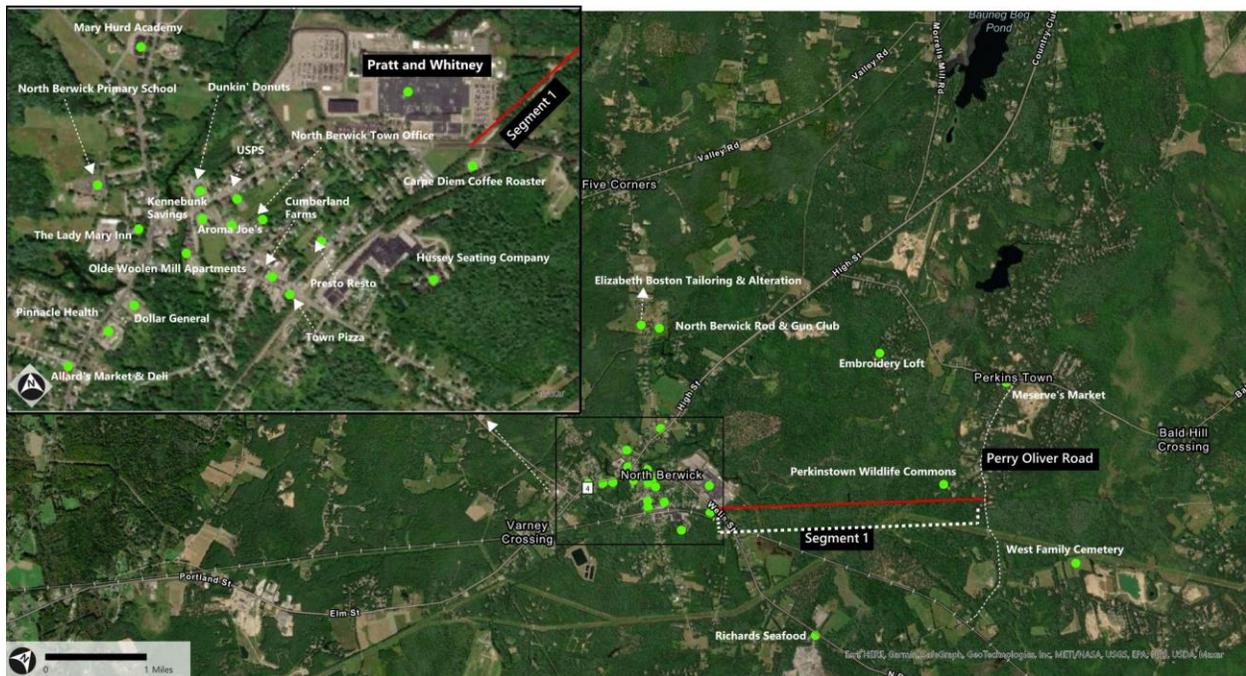
disjointed for users. **This Project is one step forward in improving mobility and community connectivity throughout Southern Maine for pedestrians and cyclists.**

The Project will create an important active transportation connection for non-motorized users traveling for work or other purposes including recreation in the Study area. A new multi-use trail in these areas will provide direct economic opportunities to communities in Southern Maine, specifically related to outdoor recreation and tourism. Sections of the Eastern Trail near Portland and Saco/Biddeford have a growing community of commuters using the trail to get to work. Improving any portion of the Eastern Trail provides long-term mobility benefits for the entire Southern Maine region. There is overwhelming general support for the Project from the local communities, including public officials, residents, and business owners. Two public meetings were held during the Feasibility Study for each segment to discuss local concerns and potential coordination between the communities and MaineDOT. The major take-away from all Project public meetings showed there is positive support for construction of these trails.

The Segment 1 connection between North Berwick and Wells would provide connectivity from the area neighborhoods and proposed parking area on Perry Oliver Road to conservation area trails in Wells and to business areas in North Berwick.

2

Figure 4-5. Segment 1 Project Area



In addition to providing alternative off-road transportation options for all, the extension of the existing trail in Kennebunk via Segment 2 would allow off-road users from as far away as Biddeford to enjoy visiting a variety of services and restaurants along Alfred Road in Kennebunk. It would also improve access to safe active transportation options for residents of the planned affordable housing development adjacent to the trail.

Figure 4-6. Segment 2 Project Area



Creating these two off-road segments for the outer portion of this proposed 11-mile corridor connects communities directly to affordable transportation options. These multi-use paths will be ADA compliant and designed for all users in mind. The Eastern Trail promotes long-term economic opportunities through an equitable lens by providing expanded transportation options.

4.5 Economic Competitiveness and Opportunity

The Project will continue to promote and build upon the existing tourism activity and fiscal benefits currently generated by the Eastern Trail. An Eastern Trail Economic Impact study was completed by Camoin Associates in 2021 and analyzed the economic impacts of the Eastern Trail on the regional and state economy. The identified economic impacts were not only direct, the most immediate to the trail, but also indirect and induced. Indirect impacts occur at businesses within the region that supply goods and services to businesses that Trail users visit. Induced impacts occur when direct and indirect workers of impacted businesses spend their wages within the state. The Eastern Trail has created a larger “ripple” effect for Maine’s economy.

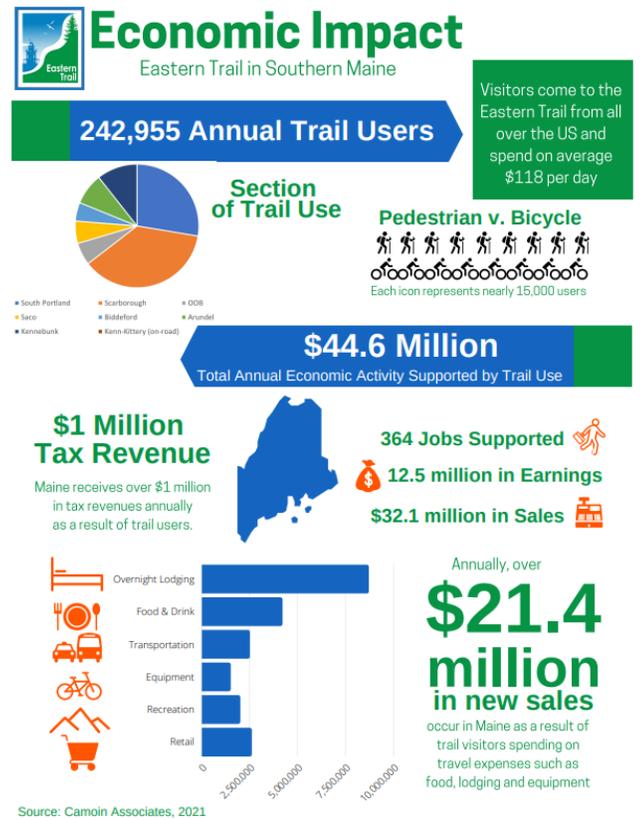
One of the largest economic benefits seen from the Eastern Trail is its facilitation of tourism opportunities. As shown in Figure 4-7, Trail use supports \$21.4 million in new sales of travel expenses (including food, lodging, and equipment) for the state of Maine, with an average of \$118 spent by visitors per day. Overall, the total annual economic activity supported by trail use is \$44.6 million. The Eastern Trail Economic Impact Study conducted an expansion scenario to understand the economic impacts of adding new users to the Eastern Trail. If trail users grow by just 1,000 net new visitors (0.4% increase in current total usage), total visitor spending would result in \$118,030.⁹ Extension of the trail will increase the number of users which in turn will increase tourism and expand economic benefits throughout the region and Maine.

Economic activity associated with the Eastern trail generates fiscal benefits for the state of Maine in terms of new property and sales tax revenue. It is estimated that \$136,484 in total sales tax revenue is attributed to the Eastern trail.¹⁰ The economic activity surrounding the Eastern Trail has improved property values and in turn increased property tax revenue. Residential and commercial development has been drawn to the region due to the attractiveness of the Eastern Trail. Studies show proximity to an active pathway can escalate home values sizably. For single family home sales, being a quarter mile closer to an advanced bikeway translated to a \$4,039 premium.¹¹ The Eastern Trail Alliance has indicated the primary reason several organizations relocated to the region was because of proximity to the Eastern Trail.¹² Southern Maine Healthcare partners with the Eastern Trail to provide parking and trail access via their parking lot. The hospital includes signage around their property indicating the benefits the trail has to human health.

Similarly, the Eastern Trail has an agreement with the Kennebunk Elementary School to allow parking for the Eastern Trail and provides a trailhead area with signage and a path leading from the parking area to the trail. Segment 2 will extend this current end point further into the town to provide access to local restaurants. The Town of Wells is also partnering with the Eastern Trail to provide a parking area on Perry Oliver Road to provide access to Segment 1 of the Project, providing access into North Berwick and their local business district. **The Eastern Trail promotes long-term economic growth, generates tourism and is seen as a valuable asset to some of Maine’s largest organizations.**

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Figure 4-7. Eastern Trail Economic Impact



⁹ November 2021, Economic Impact of the Eastern Trail

¹⁰ Ibid

¹¹ <https://trec.pdx.edu/news/better-bikeways-associated-higher-home-values>

¹² November 2021, Economic Impact of the Eastern Trail

4.6 State of Good Repair

The existing on-road facilities for both segments are currently reliant on MaineDOT and the ETMD (including the municipalities of North Berwick, Wells, and Kennebunk) for maintenance and upkeep. The proposed Project will utilize portions of the existing Unitil/Granite State Gas Transmission corridor to extend the Eastern Trail off-road segments.

The construction impacts from this Project will be minimal. Most work will occur within the Unitil/Granite State Gas Transmission corridor right-of-way and for the portion along Warren's Way, impacts to traffic will be minimal and short-term.

The Eastern Trail has a colocation agreement to be within the Unitil/Granite State Gas Transmission corridor and Unitil sees the construction of the trail along their corridor as a benefit as it will allow them to better maintain their corridor with improved access. **Unitil and the Eastern Trail have been good partners and stewards of the environment and share the commitment to maintaining the state of good repair for these two segments and for the Eastern Trail as a whole.**

Figure 4-8. Existing Eastern Trail looking north at Alewife Road in Kennebunk



4.7 Partnership and Collaboration

MaineDOT and the Eastern Trail Management District (ETMD) have worked collaboratively to move this Project forward. The partnership began with the Eastern Trail Connectivity Feasibility Study, which was completed in May 2022. MaineDOT and the ETMD evaluated and analyzed the alternatives to extend the off-road Eastern Trail segments. During the feasibility study, there was collaboration with each municipality, and a public outreach process that involved public officials, residents, and additional stakeholders. The Project considered the public's vision for the project, concerns, and local information provided during the study. The first public meeting was held on November 4, 2021, which was conducted virtually as an online webinar due to Covid restrictions. The major take-away from this first public meeting yielded an overwhelming general support for this project to move forward. A second virtual public meeting was held on February 17, 2022, to gather public input on the proposed alternatives. **The support for the trail remained positive and the recommended alternatives received favorable comments to move the project forward.** During the Engineering phase of the Project, public meetings will occur at

important milestones to receive comments on the design as it progresses, accompanied by stakeholder coordination with agencies and adjacent private property and business owners.

The ETMD has partnered with The Town of Wells Conservation Commission (the applicant) for Land For Maine’s Future (LMF) Funding to purchase approximately 30 acres along Perry Oliver Road. As shown in Figure 4-9, this property has nearly 800 feet of dry road frontage which will provide parking and access to the Eastern Trail Project. This parking will also provide access for the Perkinstown Wildlife Commons a 250-acre town parcel that is under a conservation easement held by the local land trust that abuts the Eastern Trail corridor. Providing a large parking lot on this parcel will help make the trail more usable and accessible in this section. The current target date for closing is April 1, 2024.

Figure 4-9. 30-Acre Parcel for Parking on Perry Oliver Road



Resulting from the feasibility study, MaineDOT, ETA, and ETMD have engaged adjacent landowners to each trail segment. Segment 1’s engagement has included Pratt & Whitney in North Berwick.¹³ Over 2,100 employees at Pratt & Whitney will have access to the 2-mile trail segment right outside their door. The company has been highly supportive of the future extension of the Eastern Trail off-road segments and how the trail would benefit their employees. Kennebunk Savings Bank and Avesta Housing in Kennebunk have been engaged and are in support of Segment 2.¹⁴ Kennebunk Savings Bank employees and the 70 housing units on the Avesta Housing property will have direct access to the trail along Segment 2. The second segment of the Project largely abuts Kennebunk Savings Bank to the east. In this area the Unitil Corridor is moderately wet with challenging features for trail construction. Kennebunk Savings Bank has openly expressed their support and willingness to accommodate the Eastern Trail development where feasible on their land

Figure 4-10. Proposed Eastern Trail - Kennebunk



Figure 4-113. Proposed Eastern Trail - North Berwick



¹³ See Figure 4-5 for map of Segment 1’s surrounding area

¹⁴ See Figure 4-6 for map of Segment 2’s surrounding area

to help avoid potential wetland impacts. Segment 2 would also be a vital active transportation corridor to the local Elementary School. Letters of support from all three landowners are provided in Appendix B.

4.8 Innovation

Innovative Technologies – This Project will be designed using the latest 3D engineering modeling tools which will allow the Project Team, the public, and project stakeholders to review the various aspects of the trail design more effectively and better visualize the proposed improvements and their related impacts.

In addition, there are several retaining wall, bridge, and culvert structures that will need to be evaluated for installation, potential improvement, or replacement, and as these are being evaluated, use of newer materials and technologies will be considered. The Feasibility Study identified at least one new bridge structure in Kennebunk, and further project engineering efforts will consider the use of newer materials based on the most recent technological advances.

Innovative Project Delivery – 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.

The parties involved in this grant application are committed to ensure timely reviews and accelerate project delivery as feasible. This will be done, with respect to NEPA and permitting, through Programmatic Agreements.

Programmatic Agreements

MaineDOT and various other state and federal departments have executed agreements to review environmental impacts expeditiously but thoroughly 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 the MaineDOT for State Transportation Reviews by the 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, Maine Turnpike Authority, and the Maine Department of Environmental Protection.
8. Memorandum of Agreement between United States Army Corps of Engineers (USACE), New England District and MaineDOT for Expediting Permit Application Evaluations under Section 214 of the Water Resources Development Act of 2000, as amended, and Section 139(j) of Title 23, United States Code, Assistance to Affected State and Federal Agencies, July 2022.

Innovative Financing – There is no innovative financing involved with this Project.