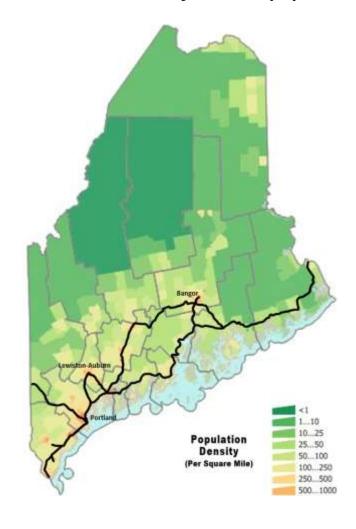
# MAINE ACTIVE TRANSPORTATION ARTERIALS

Connecting all of Maine's 25 largest municipalities and over two-thirds of Maine's population



### A Joint Vision of

















# MAINE ACTIVE TRANSPORTATION ARTERIALS

# Connecting All of Maine's 25 Largest Municipalities and over two-thirds of Maine's population

# **Executive Summary**

Climate change has elevated Maine's active transportation imperative from desirable to essential and urgent. Active transportation infrastructure enables emission-free transportation, outdoor recreation, and improved public health.

Maine's active transportation system should be anchored by regionally connected bikeway arterials between population centers, much like the National Highway System provides for motorized use. A modernized complete streets infrastructure within local communities can then feed into the regional bikeway arteries to convey wider access and local connectivity.

Seven existing bikeway plans together present a ready-made arterial network, directly serving *all 25* of Maine's largest cities and towns. They are the Eastern Trail, Mountain Division Trail, Casco Bay Trail Loop, Merrymeeting Trail, the East Coast Greenway's spine and coastal corridors, and Down East Sunrise Trail. Arterial connectors through Portland, Lewiston-Auburn, and Bangor complete this vision.

Together, these existing bikeway plans pass directly through communities with a combined population of 743,000 residents. An additional 175,000 residents live in communities within five miles of the proposed network, making the envisioned bikeway arterial network locally accessible to over two-thirds of all Mainers.

Off-road or traffic-separated bikeways transform the communities they pass through by providing a valuable resource for recreation, safe and emission-free transportation, commuting, exercise, tourism, environmental stewardship, and connection to the outdoors. An annual economic impact of \$400 million or more is envisioned by leveraging Maine's globally recognized outdoor reputation and brand.

This vision to connect all 25 of Maine's largest municipalities with bikeway arterials consists of 67 project segments of which 21 are completed or in process and 28 are prioritized for completion over the next several years. All 67 segments are described briefly in this report.

Several of the key regional bikeway arterials take advantage of state-owned rail corridors that are no longer used by trains. Most notably, Maine has two distinct rail corridors between Portland and Lewiston-Auburn, and between Portland and Bangor. In each case, based on their locations, current use, and condition, one of the corridors makes more sense for trains, and the other as a rail trail; thereby enabling both public purposes to be achieved.

The estimated cost of the 28 priority projects, which would complete a large portion of this arterial anchor for emission-free transportation in Maine, is \$160 million. They can be constructed by 2030 by investing just 2.5 percent of Maine's annual transportation budget. This should be a centerpiece of Maine's 2022 active transportation plan.

# MAINE ACTIVE TRANSPORTATION ARTERIALS

# Connecting All of Maine's 25 Largest Municipalities and over two-thirds of Maine's population

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### **Preliminary Release for Public Comment**

We welcome your comments and suggestions. A revised version of this report will be released later this year. You may <u>submit comments here</u>.

We hope that significant aspects of this report will be incorporated in MaineDOT's 2022 Active Transportation Plan. You may <u>submit recommendations to MaineDOT about their active transportation plan here</u>.

# I. MAINE'S ACTIVE TRANSPORTATION IMPERATIVE

The arrival and acceleration of climate change has elevated Maine's active transportation imperative from desirable to essential and urgent. Active transportation infrastructure enables emission-free transportation, outdoor recreation, and improved public health. The popularity and societal value of active transportation infrastructure is reflected in the multi-fold increase in documented trail use in 2020 and 2021, since the emergence of the coronavirus pandemic. Multi-use trails satisfy a basic human need for physical and mental health and connection to the outdoors and key destinations like workplaces and basic services.

Recognizing Maine's active transportation imperative, the Maine legislature unanimously passed legislation in 2021 directing the Maine Department of Transportation to adopt an active transportation plan "to serve as a prioritization framework for the development of trails for multimodal uses and other active transportation infrastructure of regional significance." The legislation defines active transportation as "any mode of transportation that is partially or wholly propelled by human power." The Maine Department of Transportation is writing its active transportation plan over the course of the 2022 calendar year.

This report describes a vision for active transportation arterials that would anchor all other aspects of Maine's active transportation infrastructure. Specifically, it proposes regionally connected bikeway arterials between all 25 of the largest population centers in the state, much like the National Highway System provides for motorized use. A modernized complete streets infrastructure within local communities can then feed into the regional bikeway arteries to convey wider access and local connectivity. The active transportation arterials describe in this report should be a centerpiece of Maine's 2022 active transportation plan.

The vision to connect all 25 of Maine's largest municipalities with active transportation arterials was developed as a joint effort of eight organizations that are among the most active in Maine in promoting active transportation: The <u>Bicycle Coalition of Maine</u>, <u>Casco Bay Trail Alliance</u>, <u>Down East Sunrise Trail Coalition</u>, <u>East Coast Greenway Alliance</u>, <u>Eastern Trail Alliance</u>, <u>Maine Trails Coalition</u>, <u>Merrymeeting Trailblazers</u>, and <u>Mountain Division Alliance</u>.

# The Community Benefits of Bikeways

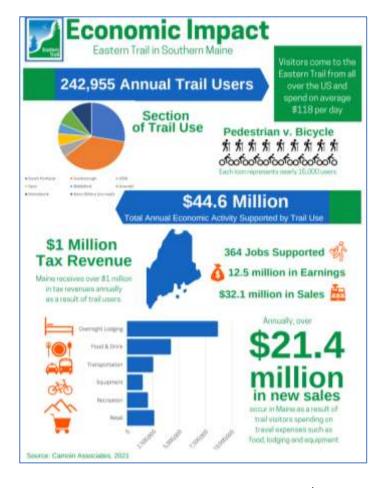
Off-road or traffic-separated bikeways transform the communities they pass through by providing a valuable resource for recreation, safe and emission-free transportation, commuting, exercise, tourism, environmental stewardship, and connection to the outdoors. They provide universal access for Maine's youngest in strollers, oldest in wheelchair, and everyone in between. They improve public health and reduce health care costs, lowering the odds of diabetes, heart disease, and other chronic conditions. Non-motorized transportation is also zero-emission transportation, decreasing reliance on fossil fuels, and reducing carbon emissions.

### The Economic Benefits of Bikeways

The prospective economic impact of bikeway infrastructure in Maine is profound and leveraged by Maine's well-established global reputation for outdoor recreation. Bikeways boost the economy by attracting new retailers and service providers, drawing more people to existing businesses, and attracting bicycle tourism. The creation and marketing of a world-class bikeway network, seamlessly connecting Maine's most populous cities, towns, and communities, would be game-changing for Maine's economic future.

The economic impact of bikeways is well documented in analyses of existing bikeways. A November 2021 study by the Southern Maine Planning and Development Commission (SMPDC) analyzes the Economic Impact of the Eastern Trail. It estimates that the trail had 243,000 user days in 2021, and an annual economic impact of \$44.6 million, including \$32.1 million in new sales, \$12.5 million in earnings, and over \$1 million in incremental tax revenue. This was the estimated impact of a trail that currently runs just 22 miles off-road; and thus represents a small fraction of the global draw of a completely integrated bikeway arterial network through the state.

There are many examples of economic impacts in other states too. A 2021 study of the <u>Great Allegheny Passage:</u> <u>Economic Impact Report</u>, estimates a total economic impact in 2019 of \$121



million from that 150-mile trail between Pittsburgh, PA and Cumberland, MD, or about \$800,000 per mile. This includes \$74.7 million in direct spending by tourists at businesses in the Trail Impact Zone. The GAP trail had an estimated 1.5 million visitors in 2020. An older 2014 study of <a href="The Economic Impact of the Erie Canalway Trail">Trail</a> estimates 1.6 million visitors to that trail annually, and an overall impact of \$253 million in sales and \$28.5 million in taxes. A 2019 study by the Railsto-Trails Conservancy, <a href="Active Transportation Transforms America">Active Transportation Transforms America</a> estimates the national spending impact of rail-trails at \$10.6 billion annually. It further estimates the health cost savings from increased physical activity due to active transportation at \$20 billion annually.

Maine is ideally positioned to create a similarly impactful bikeway destination. The economic possibilities are at least as profound as those already being realized by other long-distance bikeway systems in other states. An annual economic impact of \$400 million or more is envisioned by leveraging Maine's globally recognized outdoor reputation and brand.

# The Long-Term Prioritization of Bikeways in Maine Law

MaineDOT's active transportation plan, which is being prepared in 2022, should include a concrete implementation timetable for funding and constructing the state's highest-priority active transportation infrastructure. Such an implementation schedule would finally realize a long-established transportation priority in Maine law, dating back at least 50 years.

In 1974, the Maine Bureau of Parks and Recreation, Department of Conservation, and Department of Transportation released an inter-agency study report on <u>Bicycling in Maine: An Examination of Transportation, Recreation and Safety Aspects of Maine Cycling</u>. The report highlighted the benefits of bikeways, leading to the formal designation of bikeways in <u>Maine Statutes</u> in 1975.

# Title 23: TRANSPORTATION Part 1: STATE HIGHWAY LAW Chapter 10: BIKEWAYS

#### §611. Definition

For the purposes of this chapter, a bikeway is defined as a vehicle way, paved or unpaved, upon which bicycles, unicycles or other man-powered vehicles may be pedaled. Electric personal assistive mobility devices, as defined in Title 29-A, section 101, subsection 22-A, may also be operated on bikeways, unless prohibited by local ordinance or state or federal law. A bikeway may be part of a road or highway, or it may be adjacent to a road or highway.

#### §612. Authority of Department of Transportation

The Department of Transportation is authorized to construct bikeways within the existing rights-of-way of any state or state-aid highway. The department may also acquire additional rights-of-way adjacent to existing highway rights-of-way for the construction of bikeways. Such construction and acquisition of rights-of-way shall be accomplished in the same manner provided in this Title for highways.

The Department of Transportation shall consider development of bikeways when developing capital improvement programs.

Many of the themes of the 1974 report were highlighted again when Maine enacted the *Sensible Transportation Policy Act* in 1991 (MRSA Title 23, §73). This Maine law mandates that Maine's transportation planning and capital investment decisions "minimize the harmful effects of transportation on public health and on air and water quality, land use and other natural resources." It further requires the Department of Transportation to "give preference to transportation system management options, demand management strategies, improvements to the existing system, and other transportation modes before increasing highway capacity through road building activities."

These themes were reiterated yet again in a 2010 report, <u>Improving Maine's Quality of Place Through Integrated Bicycle and Pedestrian Connections</u>, prepared by the Maine Department of Transportation, State Planning Office, Department of Conservation, and Center for Disease Control and Prevention; and again last year, with the bill directing MaineDOT to develop an active transportation plan.

### The Current Opportunity

As detailed on pages 28-29 and in the segment descriptions in the Appendix, the estimated cost of the priority projects identified in this report is \$160 million. These projects could be completed by 2030 by investing just 2.5 percent of Maine's annual transportation budget. Still more could be accomplished with the one-time infrastructure opportunities made possible by the federal Infrastructure Investment and Jobs Act. If we do this, we will have created in Maine is a world-class infrastructure for emission free active transportation.



Alongside its investment in creating these active transportation arterials, the Maine Department of Transportation must reaffirm active transportation as a central aspect of its overarching mission. Bikeway arterials in particularly are a regional infrastructure resource that warrants a comparable long-term commitment to access, maintenance, and improvement as the commitment we already make to roads and bridges for motorized use.

# II. MAINE ACTIVE TRANSPORTATION ARTERIALS

Seven existing bikeway plans together present a ready-made arterial system for Maine, directly serving *all 25* of Maine's largest cities and towns.



The *Eastern Trail* (active transportation corridor A on the map) runs between the New Hampshire border in Kittery and Portland. The *Mountain Division Trail* (corridor B) runs between the New Hampshire border in Fryeburg and Portland. The *Casco Bay Trail Loop* (corridor D) runs between Portland, Lewiston-Auburn, and Brunswick. Arterial connectors through *Portland* (C) link downtown Portland to the Eastern Trail to the south, the Mountain Division Trail to the west, and the Casco Bay Trail Loop to the north. Arterial connectors through *Lewiston-Auburn* (E) assure that the network's connectivity runs seamlessly through downtown Lewiston and downtown Auburn. The *East Coast Greenway Spine Route* (corridor F) runs between Brunswick, Augusta, Waterville, and Bangor following an inland route. The *East Coast Greenway Coastal Route* (corridor G) runs between Brunswick, Rockland, Belfast, Bucksport, and Bangor following a coastal route. The *Down East Sunrise Trail* (corridor I) runs between Bangor, Ellsworth, Machias, and the Canadian border in Calais. Arterial connectors through *Bangor* (H) link downtown Bangor and Brewer to the East Coast Greenway's spine and coastal routes and the Down East Sunrise Trail. The plan also includes arterial spurs to Orono, Sanford, and York.

These arterials are fully integrated and connected with each other. When completed, one could travel by bike or foot, off-road (or on traffic-separated paths) and completely safe-from-traffic, between any of Maine's 25 largest municipalities and the many smaller communities in-between these population centers.

This arterial network passes directly through Portland (population 68,408), Lewiston (37,121), Bangor (31,753), South Portland (26,498), Auburn (24,061), Biddeford (22,552), Scarborough (22,135), Sanford (21,982), Brunswick (21,756), Westbrook (20,400), Saco (20,381), Augusta (18,899), Windham (18,434), Gorham (18,336), Waterville (15,828), York (13,723), Falmouth (12,444), Kennebunk (11,536), Wells (11,314), Orono (11,183), Standish (10,244), Kittery (10,070), Lisbon (9,711), Brewer (9,672), Topsham (9,560), Yarmouth (8,990), Old Orchard Beach (8,960), Bath (8,766), Freeport (8,737), Cumberland (8,473), Ellsworth (8,399), Winslow (7,948), Hampden (7,709), South Berwick (7,467), Belfast (6,938), Rockland (6,936), Eliot (6,717), Hermon (6,461), Gardiner (5,961), New Gloucester (5,676) and 58 other Maine municipalities, for a total of 743,000 residents. An additional 175,000 residents live in communities within 5 miles of the proposed network, making the envisioned bikeway arterial system locally accessible to more than two-thirds of all Mainers.

In addition to connecting all of Maine's largest population centers, this vision would complete the Maine corridor of the <u>East Coast Greenway</u>, an envisioned 3,000-mile multiuse trail from Calais, Maine to Key West, Florida. That means that every one of these Maine communities would eventually be accessible by bike or foot, off-road (or on traffic-separated paths), completely safe-from-traffic, to or from, Portsmouth NH, Boston MA, Providence RI, New York NY, Philadelphia PA, Baltimore MD, Washington DC, Richmond VA, Raleigh-Durham NC, Wilmington DE, Charleston SC, Savannah GA, Jacksonville FL, Miami FL, and hundreds of other cities and towns in-between.

Maine's full arterial network vision can be broken down into 67 project/planning segments of which 21 are completed or in process (green in the table on the next page), 28 are prioritized for completion over the next several years (orange), and 18 are exploratory or require a new traffic-separated or off-road route to be identified (blue).

The 21 completed projects cover 149 miles. Aside from the Down East Sunrise Trail and the northern 17 miles of the Eastern Trail, these are mostly shorter segments of less than one mile to several miles. The 28 prioritized projects would add 176 new miles. At least as importantly, these 28 projects and their additional 176 miles would transform the largely isolated bikeway segments that exist today into a true arterial network.

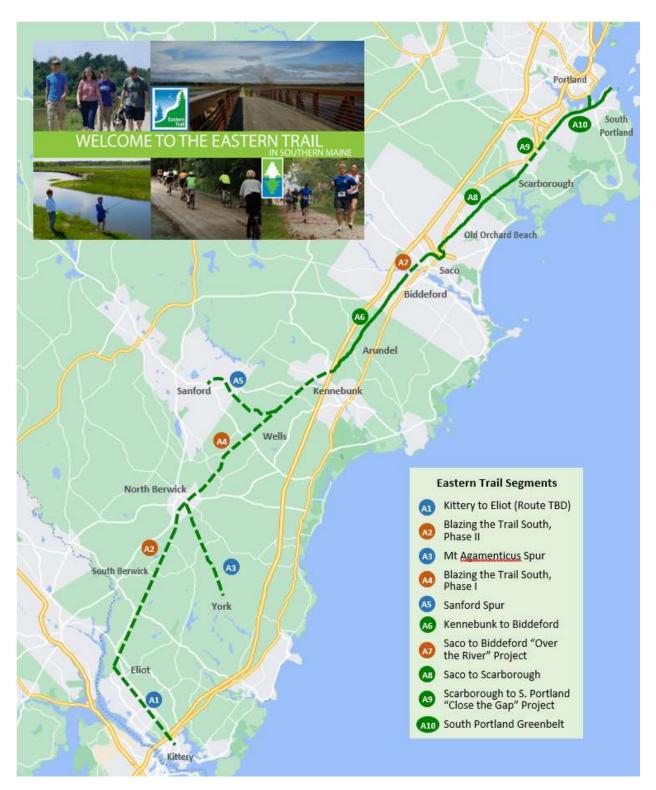
The major arterial corridors (A through I) and their component segments are described briefly in the following pages of section II. Also included (subsection J, on pages 28-29) is a cost overview of the prioritized projects, broken down by project and project phase: feasibility study, preliminary engineering, final design, and construction. As noted, the total cost to complete the prioritized segments is \$160 million, or about 2.5 percent of Maine's Transportation budget between now and 2030. Additional detail on each of the 67 segments, and their preliminary cost estimates, is provided in the Appendix.

# **MAINE BIKEWAY ARTERIAL SEGMENTS**

	Completed or In Process	Priority P	Projects Early Planning	
Eas	tern Trail	<u>Miles</u>	Lewiston-Auburn Connectors	Miles
A1	Kittery to South Berwick	11.0	E1 Auburn Border to Downtown L/A	8.0
A2	Blazing the Trail South, Phase II	8.2	E2 Lewiston and Auburn Riverwalks	1.6
А3	Sanford Spur	5.0	E3 Downtown L/A to Lower Rail Project	1.1
A4	Blazing the Trail South, Phase I	10.7	_	11
A5	Mount Agamenticus Spur	6.0		
A6	Kennebunk to Biddeford	6.2	ECG Coastal Route	Miles
Α7	Biddeford-Saco "Over the River"	3.1	G1 Androscoggin River Bike-Ped Path	2.6
A8	Saco to Scarborough	7.8	G2 Androscoggin to Kennebec Ext	4.4
A9	Scarborough to South Portland Gap	3.7	G3 Sahadahoc Bridge Project	0.3
A10	South Portland Greenbelt	5.4	G4 Bath to Rockland	48.0
		67	G5 Rockland to Bucksport	48.0
			G6 Bucksport Rail Trail	18.3
Мо	untain Division Trail	Miles	G7 Bucksport to Ellsworth Connector	20.0
B1	NH Border through Fryeburg	4.0	·	142
B2	Fryeburg to Standish	31.0		
В3	Standish Border to Windham	5.7	ECG Spine Route	Miles
B4	Windham to Westbrook	5.0	F1 Merrymeeting Trail	25.8
B5	Westbrook to Portland Trans Ctr	4.0	F2 Kennebec River Rail Trail	6.7
		50	F3 Bangor Street Project	0.5
			F4 Augusta to Waterville/Winslow	19.4
Por	tland Connectors	Miles	F5 Waterville/Winslow Trails	3.0
C1	Casco Bay Bridge	1.1	F6 Waterville/Winslow to Bangor	54.0
C2	Fore River Parkway Trail Extension	1.0		109
C3	Fore River Parkway Trail	2.6		
C4	Commercial, High, and York Streets	0.8	Bangor Connectors	Miles
C5	Eastern Promenade Trail	1.5	H1 ECG Spine to Bangor Waterfront	2.0
C6	Tukey's Bridge to Roux Institute	0.7	H2 Bangor Waterfront Trail	1.0
	,	8	H3 Kenduskeag Stream Trail	2.3
			H4 Orono Connector Trail	9.3
Cas	co Bay Trail Loop	Miles	H5 Penobscot Bridge	0.3
	Roux Institute to Presumpscot St	1.2	H6 Brewer Riverwalk	0.6
D2	Presumpscot St - Yarmouth	8.4	H7 Brewer Rail Trail Project, Phase I	2.1
D3	Yarmouth: Crosstown Pathway	0.3		18
D4	Yarmouth: Main St to Yarmouth Crossing	0.8		
D5	Yarmouth Crossing to Pineland Farm	7.0	Down East Sunrise Trail	Miles
D6	Pineland Farm to Auburn Border	6.8	I1 Brewer Rail Trail Project, Phase II	2.0
D7	Lewiston Lower Rail Project	13.0	12 Holden Rail Trail	5.7
	L-A Connector Projects E1/E3	9.1	13 Holden to Ellsworth	16.4
D8	Lisbon Papermill Rail Trail	2.1	14 Ellsworth Rail Trail	1.3
D9	Lisbon to Topsham	8.0	I5 Ellsworth Connector Trail	0.7
	Freeport Downtown to Brunswick	8.0	16 Ellsworth to Ayers Junction	87.9
	Freeport YMCA to Downtown	4.5	17 Ayers Junction to Baring	12.2
	Beth Condon Ext to Freeport YMCA	1.3	18 Baring to Calais	3.1
	Beth Condon Pathway	1.8	19 Calais Waterfront Walkway	0.9
213	20 Johnson Fallmay	72	110 Calais Waterfront Walkway Extension	0.1
		<i>,</i> -	- Calab Frace Holle Walkway Extension	130

#### A. Eastern Trail

The Eastern Trail (ET) is the southern gateway to Maine's bikeway arterial system. It runs from the New Hampshire border where the East Coast Greenway arrives in Maine, over the Route 1 Memorial Bridge from Portsmouth, and then from Kittery to Casco Bay Bridge into Portland, or to Bug Light Park in South Portland.



The Eastern Trail runs directly through Kittery, Eliot, South Berwick, North Berwick, Wells, Kennebunk, Arundel, Biddeford, Saco, Old Orchard Beach, Scarborough, and South Portland. Connecting spurs are envisioned to Sanford and York. Together, these communities have 193,000 residents. Another 127,000 people live in communities within 5 miles of the ET corridor. Most of the trail is built on the former Eastern Railroad right-of-way, which is now a natural gas corridor. A scenic highlight is the path across Scarborough Marsh.



Segment A8: Eastern Trail over Scarborough Marsh (Credit: Eastern Trail Alliance)



Segment A10: South Portland Greenbelt (Credit: Deb Dawson)

East	Eastern Trail		
A1	Kittery to South Berwick	11.0	
A2	Blazing the Trail South, Phase II	8.2	
А3	Sanford Spur	5.0	
A4	Blazing the Trail South, Phase I	10.7	
<b>A</b> 5	Mount Agamenticus Spur	6.0	
A6	Kennebunk to Biddeford	6.2	
Α7	Biddeford-Saco "Over the River"	3.1	
A8	Saco to Scarborough	7.8	
A9	Scarborough to South Portland Gap	3.7	
A10	South Portland Greenbelt	5.4	

**Completed or In Process** 

About 23-miles of the Eastern Trail is already constructed or in process and used actively for a wide range of emission-free transportation and recreational activities. Specifically, segments A6, A8, and A10 are completed; and A9 is in process.

**Early Planning** 

Segments A2, A4, and A7 are high priorities for completion and, we hope, become part of Maine's 2022 active transportation plan. Segments A1, A3 and A5 are in an earlier stage of planning.

The <u>Eastern Trail Alliance</u> is leading the effort to plan and support this active transportation arterial. The completion of Eastern Trail projects A2, A4, and A7 would create a fully connected 45-mile bikeway arterial from South Berwick to Portland. The preliminary estimated cost to complete these segments is \$24 million. Only the 11-mile segment from Kittery to South Berwick would remain for future work, as well as planned spurs to Sanford and the Mount Agamentus trails network. The Sanford spur is a key component of the <u>Sanford Trails Master Plan</u>, which was developed in 2019.

67

**Priority Projects** 



**Segment A3: Planned Route of Sanford Spur** 

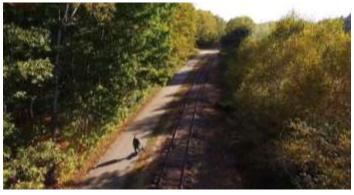
Preliminary work on a York spur is focused initially on connecting the Eastern Trail to the Mount Agamenticus Trail system. From there, the long-term plan is to extend the spur to the Short Sands Beach area of York. The Town of York has included \$400,000 in its 5-year Capital Program as matching funds for a trail bridge over I-95 for this purpose.

### **B. Mountain Division Trail**

The Mountain Division Trail is the western gateway to Maine's bikeway arterial system, running 50-miles from the New Hampshire border in Fryeburg to the Portland Transportation Center, and from there, to the <u>Portland Trails</u> network, the Eastern Trail, and the Casco Bay Trail. The Mountain Division Trail runs directly through Fryeburg, Brownfield, Hiram, Baldwin, Standish, Gorham, Windham, Westbrook, and Portland; communities with a combined population of 144,000 people. The eastern end of the trail travels through one of the busiest commuting corridors in the state; so much so that the Maine Turnpike Authority is considering a new motorized vehicle spur with an estimated \$220 million cost for just a 5-mile roadway.



This arterial follows the Mountain Division rail corridor, which is mostly state-owned and unused by trains. A Rail Corridor Use Advisory Council has just evaluated the best use of the corridor from Standish west (segment B2) and has recommended an interim rail trail. The corridor from Standish east to Portland (segments B3-B5) is envisioned as a rail with trail. The eastern portion is also commonly referred to as the Sebago to the Sea Trail.



**Segment B3: Mountain Division Trail** 

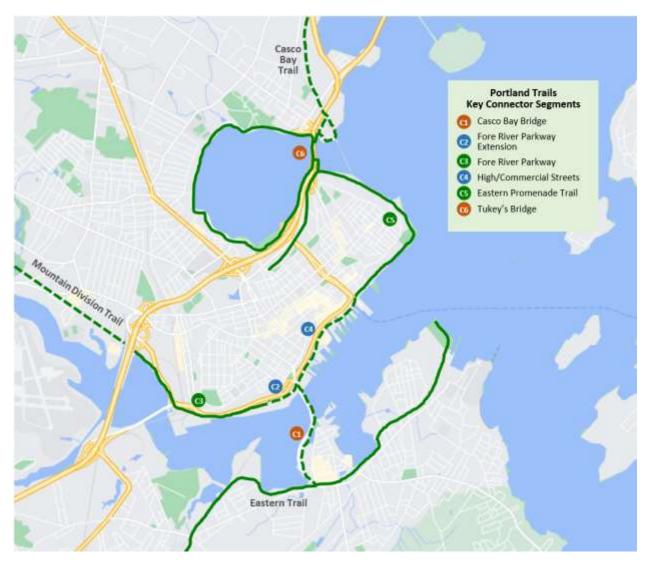
	Completed or in Process	Prio	rity Projects	Early Planning
Mo	ountain Division Trail	<u>Miles</u>	About 10 miles of	f the Mountain Division Trail are
B1	NH Border through Fryeburg	4.0	completed to dat	e, project segments B1 and B3.
B2	Fryeburg to Standish	31.0	Project segments B2, B4 and B5 are high prioritie	
В3	Standish Border to Windham	5.7	for completion of	ind, we hope, become part of
B4	Windham to Westbrook	5.0	-	tive transportation plan. These
B5	Westbrook to Portland Trans Ctr	4.0		complete the entire 50-mile
		50	arterial from Enve	burg to Portland The estimated

arterial from Fryeburg to Portland. The estimated cost to complete these segments is \$35 million. The <u>Mountain Division Alliance</u> is leading the effort to plan and support this active transportation arterial.

**Early Planning** 

# **C. Portland Connectors**

As Maine's largest city, Portland is an important hub for active transportation arterials. Trafficsafe bikeway connections are needed from downtown to the Eastern Trail to the south, the Mountain Division Trail to the west, and the Casco Bay Trail to the north.





Segment C5: Eastern Promenade Trail (Credit: Deb Dawson)

	Completed or In Process	Prio	rity Projects	Early Planning
Por	tland Connectors	Miles	There are six ke	y connector segments through
C1	Casco Bay Bridge	1.1	Portland. Segme	nts C3 and C5, the Fore River
C2	Fore River Parkway Trail Extension	1.0	•	d the Eastern Promenade Trail,
C3	Fore River Parkway Trail	2.6	•	he Eastern Promenade trail has
C4	Commercial, High, and York Streets	0.8		
C5	Eastern Promenade Trail	1.5		crown jewel" of Portland's trail
C6	Tukey's Bridge to Roux Institute	0.7		It along an old rail corridor and
		<u> </u>	offers spectacular	harbor and ocean views.

The arterial connection between downtown Portland and the Eastern Trail requires an improved active transportation facility across the Casco Bay Bridge, priority segment C1. Access to the Mountain Division Trail from downtown Portland requires an extension of the Fore River Parkway into and through the Old Port, project segments C2 and C4.

The gateway from downtown Portland to the Casco Bay Trail is through the planned Roux Institute campus in East Deering. The campus plan has bicycle and pedestrian paths and prioritizes both a trail loop around the campus and a trail connector beneath Tukey's Bridge to the Back Cove Trail, Bayside Trail, and Eastern Promenade Trail. There is an existing bikeway over Tukey's bridge on the west side, but a path underneath Tukey's bridge on the north side (in yellow on the map to the right) will need to be constructed to connect it with the Roux campus trails and Casco Bay Trail. This is priority segment C6.



**Segment C6: Illustration of Tukey's Bridge Underpass** 



Roux Institute Campus Vision
(Copied from Roux Institutional Development Plan)

Priority projects C1 and C6 have a preliminary estimated cost of \$2.6 million. Projects C2 and C4, while also important, are in earlier stages of planning. Other projects will be part of Portland's Better Bikeways Initiative.

# D. Casco Bay Trail Loop

The Casco Bay Trail loop is a 72-mile off-road bicycle and pedestrian pathway connecting 14 communities between Portland, Lewiston-Auburn, and Brunswick. The Casco Bay Trail loop directly connects Portland, Falmouth, Cumberland, Yarmouth, North Yarmouth, Pownal, New Gloucester, Auburn, Lewiston, Lisbon, Durham, Topsham, Brunswick, and Freeport; communities with a combined population of 225,000 people.

The corridor from Portland to Yarmouth and forking right to Brunswick is referred to as the Casco Bay Trail. It is on another of the busiest commuting corridors in the state. The corridor forking left in Yarmouth to Auburn is referred to as the Royal River Greenbelt. It passes near many of the public preserves and parks of the Royal River watershed, including Royal River Park, Riverfront Woods Preserve, Chandler Brook Preserve, Baston Park, the Bradbury-to-Pineland Trail, and the Pineland Farm Trail network, Pisgah Hill Preserve, Intervale Preserve, and Thurston Wildlife Marsh. The corridor from Lewiston-Auburn to Lisbon and on to Brunswick-Topsham is tentatively referred to as the Androscoggin Trail.

The Casco Bay Trail loop would be anchored by a 25-mile rail trail on the St. Lawrence and Atlantic rail corridor from Portland to Auburn, which is state-owned and no longer used by trains. It is represented by segments D1 through D6 on the map on the next page. The Casco Bay Trail Alliance has obtained municipal resolutions from Portland, Falmouth, Cumberland, Yarmouth, North Yarmouth, and Pownal, each of which asks Maine DOT to appoint a *Rail Corridor Use Advisory Council* for the St. Lawrence and Atlantic corridor, and to evaluate the prospective use of the corridor as a rail trail through their community.



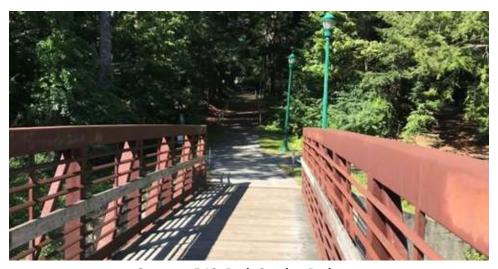
Excluding the Lewiston-Auburn connectors (section E below), just 4 miles of the Casco Bay Trail Loop are completed to date: the Lisbon Papermill Trail (segment D8) and Beth Condon Pathway (segment D13). Priority projects D1-D6 create the rail trail from Portland to Auburn. Project D7 is a proposed rail trail from Lewiston to Lisbon, where it would connect to the Lisbon Papermill Rail Trail. Priority projects D11 and D12 connect downtown Yarmouth and downtown Freeport.

Casco Bay Trail Loop			
D1	Roux Institute to Presumpscot St	1.2	
D2	Presumpscot St - Yarmouth	8.4	
D3	Yarmouth: Crosstown Pathway	0.3	
D4	Yarmouth: Main St to Yarmouth Crossing	0.8	
D5	Yarmouth Crossing to Pineland Farm	7.0	
D6	Pineland Farm to Auburn Border	6.8	
D7	Lewiston Lower Rail Project	13.0	
	L-A Connector Projects E1/E3	9.1	
D8	Lisbon Papermill Rail Trail	2.1	
D9	Lisbon to Topsham	8.0	
D10	Freeport Downtown to Brunswick	8.0	
D11	Freeport YMCA to Downtown	4.5	
D12	Beth Condon Ext to Freeport YMCA	1.3	
D13	Beth Condon Pathway	1.8	
		72	

These nine priority projects, along with connector trails through Lewiston and Auburn, would create a continuous 54-mile arterial between Portland, Auburn, Lewiston, and Lisbon; and, forking right in Yarmouth, an 18-mile arterial between Portland and downtown Freeport. The estimated cost of these prioritized Casco Bay Trail projects is \$33 million. These segments are high priorities for completion and, we hope, become part of Maine's 2022 active transportation plan. Segments D9 and D10 are in an earlier stage of planning. The Casco Bay Trail Alliance is leading the effort to plan and support this active transportation corridor.



Segment D8: Lisbon Papermill Trail (Credit: Deb Dawson)



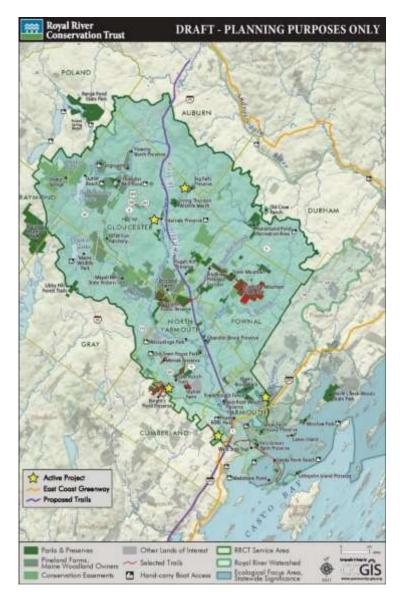
**Segment D13: Beth Condon Pathway** 



Segment D2: Aerial View of SLA Corridor Approaching Portland



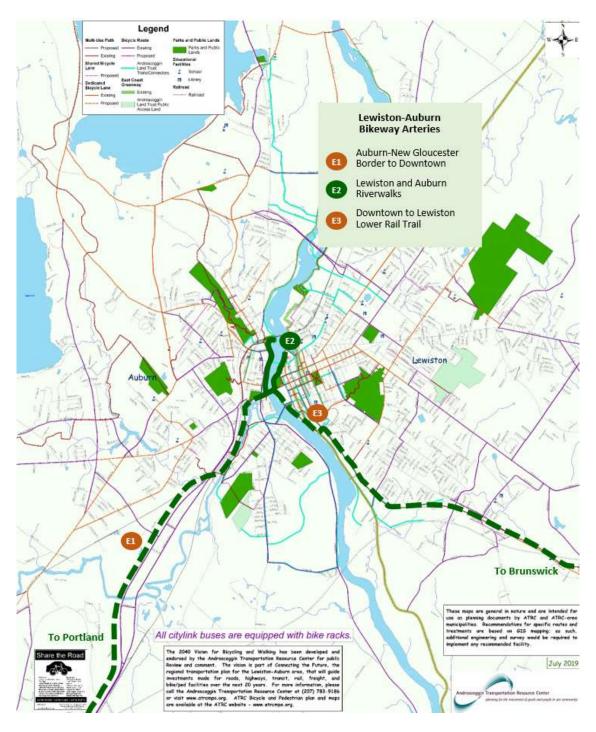
Segment D5: SLA Corridor through Chandler Brook Park



Segment D2-D6 Connecting Parks in the Royal River Watershed

#### E. Lewiston-Auburn Connectors

As Maine's second most populous metropolitan area, bikeway connectivity through Auburn and Lewiston has particular importance to the arterial vision being developed in this report. A comprehensive bikeway facilities plan was prepared by the Androscoggin Transportation Resource Center in 2019: <u>Bridging the Gaps: A Long-Range Facilities Plan for Bicycling and Walking in the ATRC Region</u>. Its accompanying <u>map</u> includes corridors for bikeways (purple), multi-use paths (red), and dedicated bicycle lanes (orange). An illustrative routing for a proposed regional arterial connector is superimposed in green on the ATRC map below.



Completed or In Process	Priority Projects	Early Planning
Lewiston-Auburn Connectors	<sub>Miles</sub> In conjunction w	ith this Complete Streets vision
E1 Auburn Border to Downtown L/A	8.0 for the Lewisto	n-Auburn region, a dedicated

bikeway arterial should be established to convey longer distance connectivity. In one direction (segment E1), the arterial would run from

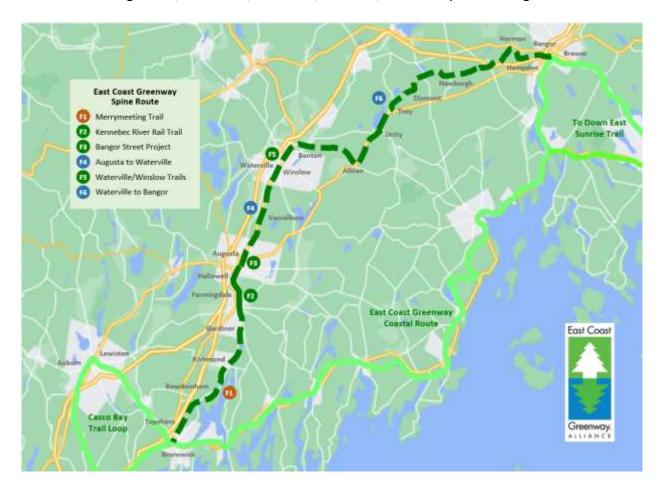
downtown to the Royal River Greenbelt, thereby connecting L-A to Portland and other population centers to the south and southwest. In the other direction (segment E3), the arterial would run from downtown to the envisioned Lewiston Lower Rail Trail, connecting L-A to Lisbon, Topsham, Brunswick, and other population centers east and northeast. The preliminary estimated cost to complete these priority projects is \$20 million.

# F. East Coast Greenway, Spine Route

E2 Lewiston and Auburn Riverwalks

Downtown L/A to Lower Rail Project

Along its 3,000-mile path between Maine and Florida, the East Coast Greenway has several sections where it divides between inland and coastal routes. One of those divisions is between Brunswick and Bangor. The "spine route" offers an inland routing from Brunswick through Augusta and Waterville to Bangor. The "coastal route" connects the coastal communities from Brunswick through Bath, Wiscasset, Rockland, Camden, and Bucksport to Bangor.



ECC	ECG Spine Route		
F1	Merrymeeting Trail	25.8	
F2	Kennebec River Rail Trail	6.7	
F3	Bangor Street Project	0.5	
F4	Augusta to Waterville/Winslow	19.4	
F5	Waterville/Winslow Trails	3.0	
F6	Waterville/Winslow to Bangor	54.0	
		109	

The arterial vision for the ECG "spine route" from Brunswick and Topsham to Augusta has a well-defined route using the state-owned Lower Road railroad corridor, which is no longer used by trains. The 6.7-mile Kennebec River Rail Trail between Augusta and Gardiner, segment F2, is already completed. The Merrymeeting Trail, segment F1, would effectively extend the Kennebec River Rail

Trail another 26 miles, thereby connecting Augusta and Brunswick. Segment F1 is a priority for completion and, we hope, becomes part of Maine's 2022 active transportation plan. The preliminary estimated cost to complete this project is \$15 million.

The Merrymeeting Trail would run through downtown areas and with large stretches along the Cathance and Kennebec rivers. At its northern end, the Merrymeeting Trail would connect to the Kennebec River Rail Trail in Gardiner. On the southern end, it would connect to the Casco Bay Trail loop, the existing Androscoggin River Bicycle and Pedestrian Path in Brunswick, and the East Coast Greenway coastal corridor to Bath and Rockland, before rejoining the East Coast Greenway spine route in Bangor. A <u>project feasibility study</u> was completed in 2011, and a vision document for the larger <u>Capital to Coast</u> trail was completed in 2016. The <u>Merrymeeting Trailblazers</u> are leading the effort to plan and support this active transportation arterial.

Segments F4 and F6 between Augusta, Waterville, and Bangor have no off-road or traffic-separated route identified, and so are in the earlier stages of planning. While construction is underway on segment F1, planning should also begin to identify an arterial route between Augusta, Waterville, and Bangor.

# G. East Coast Greenway, Coastal Route

The East Coast Greenway "coastal route" from Brunswick to Bangor and Ellsworth is the least welldeveloped arterial route in this report, but it is important, because of its scenic beauty and its significant tourism potential. The 2.6-mile Androscoggin River Bicycle and Pedestrian one Path is the completed section, segment G1, which runs from downtown Brunswick toward Bath.



Segment G1: Androscoggin River Bicycle and Pedestrian Path



ECG Coastal Route Mil		
G1	Androscoggin River Bike-Ped Path	2.6
G2	Androscoggin to Kennebec Ext	4.4
G3	Sahadahoc Bridge Project	0.3
G4	Bath to Rockland	48.0
G5	Rockland to Bucksport	48.0
G6	Bucksport Rail Trail	18.3
G7	Bucksport to Ellsworth Connector	20.0

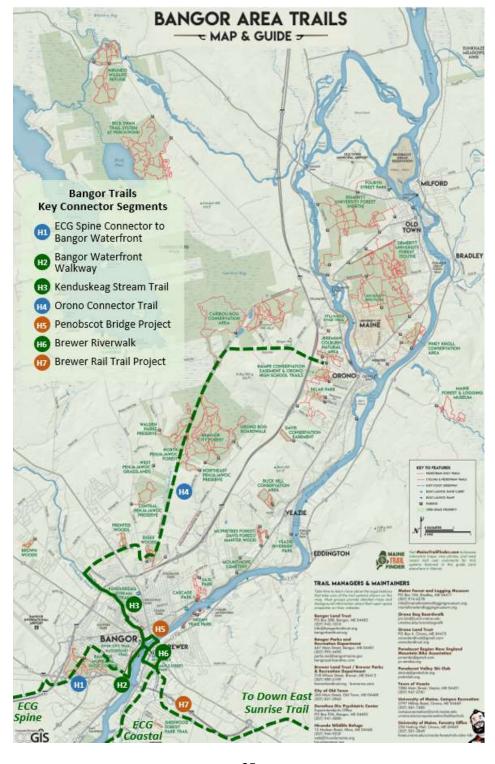
Segment G2, the continuation of the Androscoggin Bicycle and Pedestrian Path to Bath, and Segment G3, improvements to the Woolwich entry to the Sagadahoc bridge are prioritized projects. Together with project F1 above, these segments would complete the envisioned 40-mile "Capital to Coast" arterial from Augusta to Bath. The preliminary estimated cost of projects G2 and G3 is \$11 million.

Project G6, the Bucksport Rail Trail (to Brewer) is another prioritized project. It takes advantage of an 18.3-mile inactive rail corridor, though the corridor is privately-owned currently. The City of Bucksport is interested in a potential rail trail on this corridor because there are no businesses in the former mill site that anticipate needing freight service. The preliminary estimated cost for project G6 is \$9 million, plus corridor acquisition costs.

There is no identified off-road or traffic separated coastal route between Bath, Rockland, Bucksport, and Ellsworth (segments G4, G5, and G7); though there is a state-owned rail corridor between Brunswick and Rockland that is not currently being used by trains, though expanded Amtrak or seasonal scenic service has been proposed on this corridor too. As the priority projects are in construction, work should also be initiated to plan an off-road or traffic separated coastal route between Bath, Rockland, Bucksport, and Ellsworth.

# **H.** Bangor Connectors

As Maine's third largest city, the juncture between the East Coast Greenway's spine and coastal routes, and the regional home to Maine's flagship university campus in Orono, Bangor has particular importance for bikeway connectivity. A <u>regional trail map</u> was created and made available to the public by Bangor Greendrinks, a local networking, grantmaking, and trail friendly non-profit organization.



The map illustrates an abundance of trail systems in and around Bangor that provide a foundation for incorporating an arterial vision, but these systems are largely unconnected today. We have superimposed on the map a combination of planned and illustrative arterial connectors through the city. Completed segments include the Bangor Waterfront Walkway (segment H2), the

Kenduskeag Stream Trail (segment H3), and the Brewer Riverwalk (segment H6).

The arterials from downtown to the envisioned ECG coastal route and to the Down East Sunrise Trail have natural potential routes as rail trails or rail-with-trail facilities on existing corridors from Wilson Street in downtown Brewer. Off-road connectors to the ECG spine route (segment H1) and to a potential connector corridor to Orono and the University of Maine campus (segment H4) are exploratory.



**Segment H6 Brewer Riverwalk** 

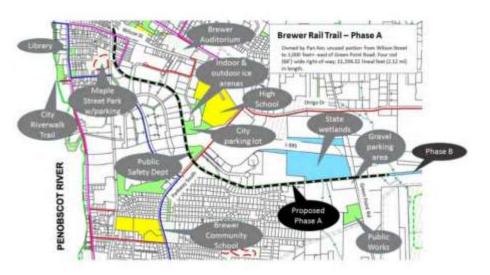
Comp	leted	or In	Process
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#### **Priority Projects**

#### **Early Planning**

Ban	Bangor Connectors		
H1	ECG Spine to Bangor Waterfront	2.0	
H2	Bangor Waterfront Trail	1.0	
Н3	Kenduskeag Stream Trail	2.3	
H4	Orono Connector Trail	9.3	
H5	Penobscot Bridge	0.3	
Н6	Brewer Riverwalk	0.6	
H7	Brewer Rail Trail Project, Phase I	2.1	

Priority segments H7, the Brewer Rail Trail Project, would provide connectivity from the waterfront toward the Down East Sunrise Trail. A 2016 description of the project by the Brewer Land Trust describes the increased connectivity this project would provide to the local community and beyond. Priority segments H1 and H7 have a combined estimated cost of \$2.4 million



Segment H7: Brewer Rail Trail, Phase 1

An arterial spur from downtown Bangor to Orono is important for future development, because Orono is the 20<sup>th</sup> most populous municipality in Maine, as well as being home to the University of Maine campus and its 12,000 students. Part of this spur might be located on the abandoned Veazie railroad corridor on the west side of Route 95, much of which is already a trail. From Essex Woods, the trail might cross west along the Husson University campus, and then follow the Kenduskeag Stream Trail to downtown Bangor.

#### I. Down East Sunrise Trail

The Down East Sunrise Trail is the northeastern gateway to Maine's bikeway arterial system, as well as to the 3,000-mile East Coast Greenway. It also connects internationally with Canada's Coastal Link and Trans Canada Trails. The Down East Sunrise Trail is routed on the Calais Branch railroad line, a 127-mile state-owned rail corridor that runs from Brewer to Ellsworth, Cherryfield, Machias and Calais. Most of the eastern part of the corridor is already a multiuse trail.



While most of the corridor is unused by trains, the Downeast Scenic Railroad company offers seasonal scenic tours on weekends on a 6-mile section of the corridor between Washington Junction and Ellsworth Falls; and a rail-with-trail facility has been constructed on parts of this joint-use segment. Through some combination of rail-with-trail and interim rail trail facilities, the rest of the corridor can become the fully linked bikeway arterial for this region



Segment I6: Down East Sunrise Trail

Completed or In Process Priority Projects Early Planning

Dov	wn East Sunrise Trail	Miles
11	Brewer Rail Trail Project, Phase II	2.0
12	Holden Rail Trail	5.7
13	Holden to Ellsworth	16.4
14	Ellsworth Rail Trail	1.3
15	Ellsworth Connector Trail	0.7
16	Ellsworth to Ayers Junction	87.9
17	Ayers Junction to Baring	12.2
18	Baring to Calais	3.1
19	Calais Waterfront Walkway	0.9
110	Calais Waterfront Walkway Extension	0.1
		130

The completion of Down East Sunrise Trail priority projects I5, I7, and I10 would extend the current continuous DEST arterial from 88 miles to 102 miles, covering most of the distance through Ellsworth to near Calais. The preliminary estimated cost of these projects is \$7.3 million. An important additional priority is improving the surface of the existing corridor. The <a href="Down East Sunrise Trail Coalition">Down East Sunrise Trail Coalition</a> is leading the effort to plan and support this active transportation corridor.

#### J. Cost Overview

The following table breaks down the preliminary estimated cost of prioritized projects into the feasibility study, preliminary engineering, final design, and construction phases. The estimated total cost of all projects is approximately \$160 million. They can be constructed by 2030 by investing just 2.5 percent of Maine's annual transportation budget.

I — The feasibility study estimates are for incremental future costs only. They do not include amounts already expended for past or current surveys or completed feasibility studies. The estimates are based on a study budget of \$20,833 per mile, which was the average cost of two 2021 feasibility studies conducted by VHB for the Eastern Trail.

II/III — The design estimates are based on project specifics costs, when available. When not available, the estimates use a permile figure, based on other comparable projects. The estimates do not include right-of-way costs (~\$5,000 per non-impacted abutter, \$25,000 per impacted abutter as of 2019).

IV — When available, construction estimates are based on completed feasibility studies and/or engineering designs, adjusted upward to reflect 2021 construction costs. They do not include mobilization or contingency costs, unless otherwise noted.

# MAINE BIKEWAY ARTERIAL - COST ESTIMATES Prioritized Segments

Created by: Kristine Keeney, East Coast Greenway Alliance, April 2022

	Miles	Status	Feasibility Study <sup>l</sup>	Preli Engineering"	Final Design'''	Construction (\$2021) <sup>IV</sup>	Total
Eastern Trail							
A2 - S Berwick & N Berwick	8.2	Planning	\$170,831	\$370,455	\$555,682	\$5,364,486	\$6,461,453
A4 - N Berwick- Kennebunk	10.7	Design	\$0	\$0	\$0	\$7,000,000	\$7,000,000
A7 - Saco-Biddeford Connector	3.0	Planning	\$0	\$0	\$1,000,000	\$9,500,000	\$10,500,000
Mountain Division Trail							
B2 - Standish to Fryeburg	31.0	Planning	\$0	\$1,092,390	\$728,260	\$14,004,999	\$15,825,649
B4 - Westbrook to Windham	5.0	Design	\$0	\$0	\$0	\$9,657,175	\$9,657,175
B5 - Westbrook to Portland	4.0	Planning	\$83,332	\$772,576	\$360,000	\$7,725,740	\$8,941,648
Portland Connectors							
C1 - Casco Bay Bridge	1.1	Design	\$0	\$0	\$0	\$21,002	\$21,002
C6 - Tukey's Bridge to Roux Inst	0.7	Planning	\$14,583	\$135,201	\$202,801	\$2,216,667	\$2,569,252
Casco Bay Trail Loop							
D1 - Roux Inst to Presumpscot St	1.2	Planning	\$0	\$231,772	\$347,658	\$2,317,722	\$2,897,152
D2 - Presumpscot St - Yarmouth	8.4	Planning	\$0	\$379,490	\$569,235	\$3,794,902	\$4,743,627
D3 - Crosstown Pathway	0.3	Planning	\$0	\$13,553	\$20,330	\$135,532	\$169,415
D4 - Yarmouth Main St to Crossing	0.8	Planning	\$0	\$36,142	\$54,213	\$361,419	\$451,774
D5 - Yarmouth to Pineland Farm	7.8	Planning	\$145,831	\$316,242	\$474,363	\$3,162,418	\$4,098,854
D6 - Pineland to Auburn Border	6.8	Planning	\$141,664	\$307,206	\$460,809	\$3,072,063	\$3,981,743
D7 - Lewiston Lower Rail Trail	10.5	Planning	\$0	\$474,359	\$711,543	\$10,500,000	\$11,685,902
D11 - Freeport YMCA to Downtown	4.5	Planning	\$93,749	\$203,297	\$304,947	\$2,032,983	\$2,634,976
D12a - Cousins River to YMCA	0.3	Design	\$0	\$0	\$0	\$846,000	\$846,000
D12b - Exit 17 to Cousins River	0.5	Design	\$0	\$0	\$211,500	\$1,410,000	\$1,621,500
Lewiston-Auburn Connectors							
E1 - Auburn border to Riverwalk	7.0	Planning	\$145,831	\$1,352,008	\$2,028,005	\$13,520,045	\$17,045,889
E3 - L/A to Lewiston Lower Rail Trail	1.1	Planning	\$22,916	\$49,695	\$379,311	\$2,000,000	\$2,451,922
ECG Spine Route							
F1 - Merrymeeting Trail	25.8	Planning	\$0	\$1,165,577	\$1,748,365	\$11,655,769	\$14,569,711
ECG Coastal Route							
G2 - Brunswick to Bath Connection	4.4	Planning	\$0	\$2,192,392	\$876,957	\$7,143,548	\$10,212,897
G3 - Sagadahoc Bridge Project	0.3	Planning	\$6,250	\$13,553	\$20,330	\$846,000	\$886,133
G6 - Bucksport Rail Trail	17.5	Planning	\$364,578	\$663,362	\$995,043	\$6,633,620	\$8,656,603
Bangor Connectors							
H5 - Penobscot Bridge	0.3	Planning	\$5,208	\$11,294	\$16,942	\$1,170,000	\$1,203,444
H7 - Brewer Rail Trail- Phase 1	2.1	Planning	\$43,749	\$94,873	\$142,309	\$948,725	\$1,229,656
Down East Sunrise Trail							
15 - Ellsworth Connector Trail	0.7	Design	\$0	\$0	\$159,000	\$1,059,333	\$1,218,333
17 - Ayers Junction to Baring	12.2	Planning	\$254,163	\$462,458	\$693,687	\$4,624,581	\$6,034,889
I10 - Calais Waterfront Walkway Ext	0.1	Design	\$0	\$500	\$0	\$75,000	\$75,500
	176.3	•	\$1,492,685	\$10,338,394	\$13,061,290	\$132,799,729	\$157,692,099

# III. ACTIVE TRANSPORTATION ARTERIALS IN OTHER STATES

#### Illustration 1 — Empire State Trail, New York

The <u>Empire State Trail</u> is a 750-mile bikeway arterial running East-West and North-South through the state of New York. It builds upon several existing trails, including the Erie Canalway Trail; and it traverses 27 New York counties, 130 municipalities, and 35 state parks. The Empire State Trail functions like a spine, connecting many other trails into a statewide network.

The launch of the Empire State Trail vision is described in some detail in a 2017 New York Times article. Like the Maine vision presented in this report, the New York vision involved "capitalizing on the popularity of the rails to trails movement" and connecting "a patchwork of existing multiuse trails" into a fully integrated trail network. The New York state legislature set aside \$200 million in the 2018 budget alone to catapult forward this vision.



# Illustration 2 — State Trail System, North Carolina

The North Carolina General Assembly has established an official <u>State Trail System</u>. Each of the 12 trails officially designated as part of State Trail System is "a linear corridor on land or water, separated from vehicular traffic, providing public access for non-motorized recreation or transportation." The trails "offer opportunities for regional connectivity and public access to some of North Carolina's most significant and scenic landscapes." The East Coast Greenway is one of the officially designate pieces of the State Trail System in North Carolina.

#### **North Carolina State Trail System**





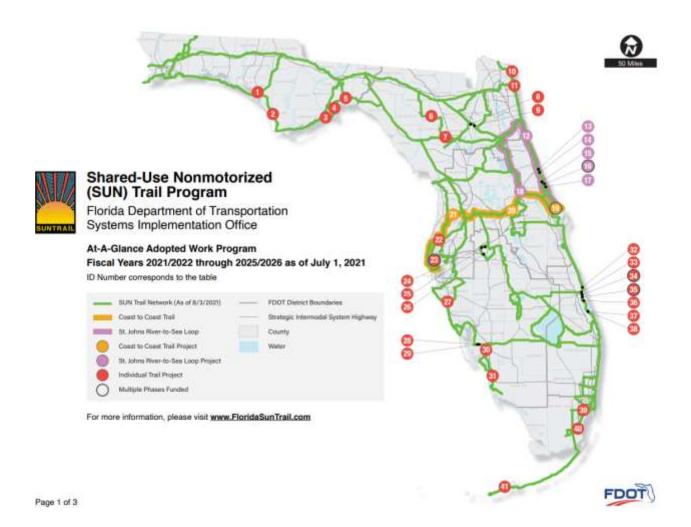


To support the State Trail System, North Carolina also created a *Complete the Trails Fund* that is exclusively available for projects that advance the State Trail System. There is also a permanent Trail Coordinator position in state government with focused responsibility for overseeing these projects. The North Carolina General Assembly allocated \$29.15 million in their 2021 budget for *Complete the Trails* funding.

# Illustration 3 — Shared Use Non-Motorized (SUN) Trail Network, Florida

The <u>Shared Use Non-Motorized (SUN) Trail Network</u> in Florida is made up of connected paved arterials for bicyclists, pedestrians, and other non-motorized uses. Like the Maine vision, and New York's vision, the Florida SUN network integrates together a combination of existing, planned, and conceptual multiple-use trails. Also like the Maine and New York visions, a significant part of the envisioned Non-Motorized Trail Network is also part of the East Coast Greenway. The Florida Department of Transportation refers to the vision as one that "increases the reliability of Florida's transportation system," though it also broadens its access dramatically for non-motorized use.

The Florida SUN program has dedicated funding to advance the vision with projects sequentially prioritized over time. The following map illustrates both the statewide vision and the prioritized projects to be funded over the next five years. The subsequent table these prioritized segments and their costs. It is remarkably similar to the itemized segment list on page 29 of this report. The total planned 5-year investment is \$122 million.





# Shared-Use Nonmotorized (SUN) Trail Program

Florida Department of Transportation Systems Implementation Office



At-A-Glance Adopted Work Program - Fiscal Years 2021/2022 through 2025/2026 as of July 1, 2021

	Tler	THE	District	County	Trail Name	Segrent	Cent	Phase	Tear
1	840	447392-1	3	Bay	Mexico Beach Greenway and Itali	SR 30/US 98 and CR 385A/98h St	\$185,000	95	2922
1	IND	439928-1	3	Bay	Lynn Haven Rails to Trails	SR 75/US 23I to E 10th St	\$4,583,402	CON	2022
3	IND	437090-2	3	Franklin	Camebelle to Capital City to the Sea Trails	SR 30/US 98 from Kenneth B Cope to east end of Ocklocknee River bridge	\$2,000,000	POE	2026
4	NO	439926-3	3	Wokufla	Capital City to the Sea: Countal Trail West	SR 30/US 98 hors S of Tower Rd to SR 61/US 389	\$3,165	CON	2022
5	IND	440550-1	3	Wokufia	Capital City to the Sex Coestal Trail East	SR 36/US 98 from W of SR 363/Woodwille Hwy to Lighthouse Rd	\$1,521,275	CON	2024
6	IND	447065-1	2	Suwannee	Suwarmee River Greenway	SR 20/US 27 from W of Ichetucknee River to SW Riverside Dr	\$450,000	CON	2023
7	IND	439054	2	Alachus	Newberry to Jonesville Irail	SR 26 hum Newberry to Janesville	\$750,000	FE	2024
	110	433171-3	2	Bradford	Palatka to Lake Butler State Trail	CR 325 to CR 18 at Hampton Trailhead	\$896,467	CON	2022
3	IMD	433071-5	2	Bradford	Palatka to Lake Butler State Trail	CR 16 from SR 100 to SE 36th Ave	\$3,387507	CON	2022
10	IND	437337-2	2	Nessau	East Coast Broanway: Amolia Island Pkwy Trail	SR AIA/8th St to Bailey Rd	\$686,976	CON	2024
	IND	433164-1	2	Doval	East Coast Greenway: Timucuan Trail	SR AIA/Hockscher Dr from Huguenot Park to Fort George River bridge	\$5,073,371	CON	2026
12	SIRX	447064-1	2	St. Johns	East Coast Greenway: St. Johns County	SR AIA from Flagler County to Fort Matanzas	\$2,200,000	PE	2022
13	SIRICC	439665-2	5.	Volunia	East Coast Greenway: South Daytona	Palmetts Ave from Ridge Stvd to Beville Rd	\$1,986,775	CON	2025
14	SIR2C	439865-3	5	Volusia	East Coast Greenway: Port Orange	Spruce Creek Rd from S of Selin Cir to Herbert St	\$421,800	CON	2023
15	SIR2C	447963-1	5	Volunia	East Coast Greenway: New Strynta	SR 44/Lytle Ave to US 1	\$750,000	PDE	2025
15	SIR2C	439954-1	5	Volusia	East Coast Greenway: New Smyrita	Myrtle Ave from 10th St to SR 44/Lytle Ave	\$526,997	FIGW	2022
15	SIREC	439864-1	5	Volunia	East Coast Greenway: New Smyrma	Myrtle Ave from 10th St to SR 44/Lytle Ave	\$1,972,317	CON	2024
17	SIRIC	435862-2	5	Volusia	East Coast Greenway: Edgewater	US I to Dale Ave	\$5,889,944	CON	2023
Ħ	SIRX	439639-6	5	Volusia	Heart of Florida: Spring-to-Spring Phase 3C	W Highbanks Rd to Dellary Plantation Blvd	\$1,173,000	CON	2024
19	C2C	437093-2	5	Brevert	Space Coast Trail	Mornitt Island National Wildlife Rehage entrance to W of Kennedy Pkwy	\$500,000	DW.	2022
19	CSC	437093-2	5	bread	Space Coast Trail	Merritt Island National Wildlife Refuge entrance to W of Kennedy Pkwy	\$500,000	EW	2023
20	C2C	436433-1	5	Orange	Heart of Florida: Drange County Gap Segment 2	N Hammassee Rd to N of SR 414	\$7004,514	CON	2025
21	C2C	437264-2	7	Hernando	Good Neighber Trail Gap	W of SR SG/Cortez Blvd to Good Neighbor Irail	\$10,316,845	ROW, CON	2022
22	IND	442265-1	7	Pasco	Grange Belt Yolf Segment 1	£ of Little Rd to SR 54	\$3,87(366	CON	2025
23	840	440093-3	7	Pinofiles	SW Gulf Coast: Pinellas Itali Phase 4	126th Ave N to Ulmerton Rd	\$293,627	PE	2022
23	(MD	440093-3	7	Pinellas.	SW Gulf Coast: Pinellas Trail Phase 4	128th Ave N to Ulmerton Rd	\$2,000,630	CON	2024

24	IND	A43606-I	1	Polit	Tenoroc Trail Segments 2 to 6	E of Lake Crago/Lake Parker Park to Braddock Rid	\$2,000,000	POE	2024
25	IND.	440358-2	1	Polk.	Tenoroc Trail Segment 1	Lake Crago Dr to SH 33 at Old Combee Rd	\$1,259,579	CON	2024
26	IND:	4406031		Polk	Fort Frauer Trail Extension	SR 540/Winter Lake Rd to Glendale St	\$2,000,000	CDN	2024
27	110	440448-1	1	Saranota	SW Gulf Coast: Legacy Trail Overpasses	SR 72/Clark Rd and SR 758/Bee Ridge Rd	\$2312,674	CON	2023
28	IND	4435031	(3)	Loc	SW Gulf Coast: Kismet Ploxy Trail	Sel Prada Blied to NE 24th Ave	\$414,625	FE	2022
29	IND	440236-2	. 1	Lee	SW Gulf Coast: Kismot Plwy Trail	Notson Rd to Del Prado Blvd	\$6,196,959	CDN	2025
30	IND.	447515-1	1	1.00	SW Gulf Coast: John Varborough Linear Park	S of Colonial Blvd to Hanson St	\$5,563,814	CON	2026
21	IND	447514-1	1	Collier	SW Guff Coast: Livingston Rd - FPL	Radio Rd:Rich King Memorial Greenway to Lee County	\$1,000,000	PDE	2026
32	1105	443506-1	4	St. Lucie	East Coast Greenway, Indian Floor Lagoon Souric Hwy	N SR AIA from Fart Pierce Inlet State Park to Indian River County	\$1,072556	EW, PE	2026
33	IND	440034-2	4	St. Lucie	East Coast Greenway: Historic Highwayman	Indian Hills Dr to Georgia Ave	\$762,0%	CON	2023
34	IND	440032-1	4	St. Lucie	East Dast Greenway: FEC Overpass	Savanna Rec Area to S of Savannah Rd	\$445,000	PE	2022
34	110	440032-1	4	St. Lucie	East Coast Greenway: FEC Overpasa	Savanna Rec Area to 5 of Savannah Rd	\$165,000	ENV	2023
34	IND	440032-1	4	St. Lucie	East Coast Greenway: FEC Overpass	Savonna Rec Area to 5 of Savonnah Rd	\$60,000	CON	2024
34	IND	440032-1	4	St. Lucie	East Coast Greenway: FEC Overpasa	Sayanna Rec Area to 5 of Sayannah Rd	\$2,738,340	CDN	2075
35	IND	439999-1	4	St. Lucie	East Coast Greenway: Savanna Preserve Gap	Lennard Rd to Savannas Rec Area	\$135,000	EW	2022
35	IND	439999-3	4	St. Lucie	East Coast Greenway: Savanna Preserve Gap	Lennand Rd to Savannas Rec Area	\$2,734,883	CON	2021
36	110	439999-2	4	St.Lucie	East Coost Greenway: Savanna Preserve Gap	Waltes Rd to Lennard Rd	\$6,582,637	CON	2023
37	IND	447399-1	4	St. Lucie	East Coast Greenway: Part of Fort Pierce Overpass	Dixie Hwy from 2nd St to Fisherman's Wharf	\$250,000	55	2022
38	1110	447396-1	4	Mortin	East Coast Greenway: Sailfish Capital	Olsie Hwy from SE Grafton Ave to NW Wright Blvd	\$845,000	F5	2026
39	IND	410850-4	. 6	Miami-Dade	Ludlem Trail	NW 7 St to SW 40 St	\$8,000,000	CON	2024
40	IND	439856-1		Miami-Dade	Biscayne Trail Segment D Phase 2	SW 117 Ave to SW 137 Ave	\$1,254,731	CON	2024
41	IND	440909-2		Monroe	East Coast Greenway: FL Keys Overseas Heritage	SR S/US I from Upper to Lower Sugarloaf Keys	\$10,000,000	COM	2025
					2 E	STATEMOS TOTAL:	C121 #30 NC2		



# IV. BALANCING TRAIN AND TRAIL PRIORITIES ON RAIL CORRIDORS

The bikeway arterials described in this report take advantage of several state-owned and privately-owned rail corridors that are no longer used by trains or are infrequently used by trains. This motivates an important discussion about what train services might be reestablished on selected corridors, how different corridors might be prioritized for trains, trails, or trail-with-rail facilities, and how the public good can best be served in the state's continuing management of these resources.

When a corridor is prioritized as a trail, the construction of the trail can be completed at much lower cost by using the same berm that at one time carried trains – essentially replacing the rails with a trail surface. For some corridors, however, a rail-with-trail facility is the better option. Existing examples of rail-with-trail construction include the Eastern Promenade Trail in Portland, the Kennebec River Rail Trail between Gardiner and Augusta, the Mountain Division segment in Gorham and Windham, and the Ellsworth Rail Trail.

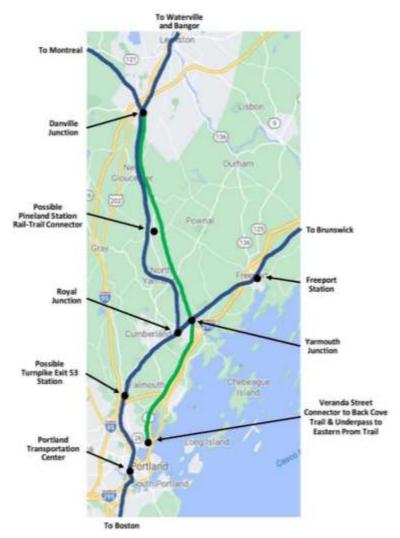
Maine currently has at least 37 rail trails, totaling some 400 miles of off-road pathways that were at one time used by trains. (See Maine Rail-Trail Plan, 2020-2030.) Thus, the precedent for evaluating an unused rail corridor and prioritizing its modern-day use for a purpose other than trains is well-established. Because our coalition supports public transportation, and passenger trains, as well as greenways, we have examined thoughtfully the overall rail infrastructure of the state to assess the suitability of different corridors for trains, trails, or both. Our examination of the rail infrastructure suggests substantial complementarities in these public purposes: trains and trails, simply by prioritizing corridors for their most sensible use and, in some cases, constructing trails alongside the rails.

2022 is an important year at the Maine Department of Transportation, as it conducts its own comprehensive planning for various transportation modes, including roads and highways, trains, and active transportation by bicycles and pedestrians. Maine DOT is also planning for the significant new federal infrastructure funding that will become available for transportation projects in Maine. This is a prime opportunity for exploring the complementarity of visions, and the prioritization of trains and trails, both broadly, and for the unused state-owned rail corridors specifically. Also under consideration are potential expansions in passenger train service from Portland to Lewiston-Auburn and Bangor.

We need to be thoughtful in how we balance priorities and expectations. For example, how should we weigh the value of a rail corridor that is used for infrequent shipments of low-value freight, relative to a publicly accessible rail trail that could be used by hundreds or even thousands of people daily for active transportation, recreation, health, and tourism? Maine DOT has established a *Rail Corridor Use Advisory Council* process that will consider these issues on state-owned corridors. *Rail Corridor Use Advisory Councils* are appointed to evaluate specific corridors at the request of one or more municipalities along a rail corridor. Councils have already been appointed for the Mountain Division rail corridor from Windham to Fryeburg and the St. Lawrence and Atlantic rail corridor from Portland to Auburn. A request has also been submitted for a Council to evaluate the Lower Road corridor from Topsham to Augusta.

#### Portland to Lewiston-Auburn – Train and Trail Complementarity

Maine has two distinct rail corridors between Portland and Lewiston-Auburn. Based on their locations, current uses, and conditions, one of them makes much more sense for trains, and the other makes more sense as a rail trail; thereby enabling both public purposes to be achieved. These corridors are shown in blue (for trains) and green (for trails) on the following map.



There are many good reasons for prioritizing the active Pan Am corridor (in blue) for trains. It is a corridor that is already actively used by trains. It connects to the Portland Transportation Center, and thus with all train and bus services to Boston. It provides opportunities for new train stops at Turnpike Exit 53 and Pineland, as well as Lewiston, Auburn, and destinations north.

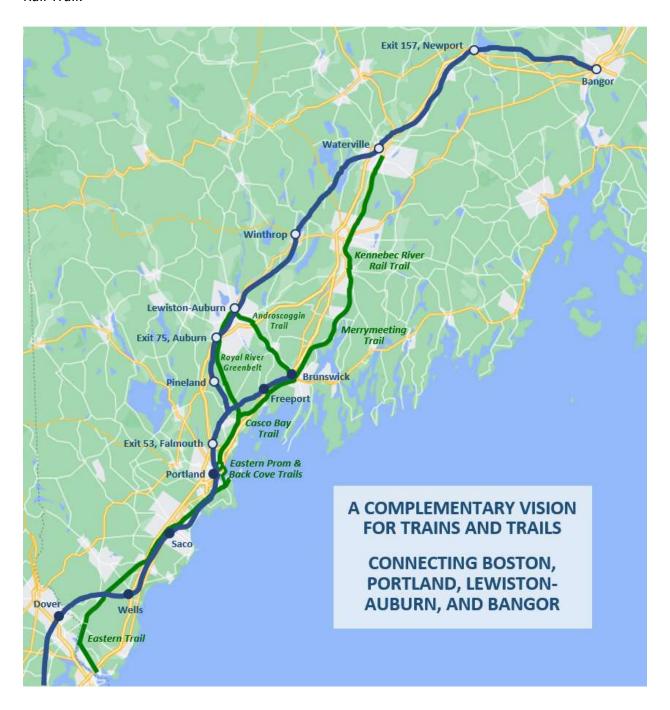
There are equally good reasons for prioritizing the inactive and state-owned St. Lawrence and Atlantic corridor (in green) as a trail. It is a corridor that is not being used by trains and would cost more to refurbish for trains. It is a corridor that dead ends at Veranda Street. It is a corridor that connects to many other trails and would be a key part of the bikeway arterial network described in this report.

#### Portland to Bangor – Train and Trail Complementarity

Maine also has two distinct rail corridors between Portland and Waterville, on the way to Bangor. In this case, too, based on their respective locations, current uses, and conditions, one of them makes much more sense for trains, and the other makes more sense as a rail trail. These are shown in blue (for trains) and green (for trails) on the map on the next page.

The Pan Am corridor (in blue) makes more sense for trains because it is already used actively by trains, and because it allows service through Lewiston-Auburn on the same track to Bangor, thereby eliminating the need to upgrade and maintain separate corridors. If restoration of passenger train service to Lewiston-Auburn, Waterville-Winslow, and Bangor-Brewer is

determined to be a cost-effective public transportation option, it can be achieved most cost-effectively on a single continuous line, rather than separate lines. By contrast, the Lower Road corridor (in green) is unused and would cost a considerable amount to refurbish for trains, including reconstruction of one or more bridges. It is also the current site of the Kennebec River Rail Trail.



By prioritizing these distinct corridors between Portland, Lewiston-Auburn, and Waterville, complementary visions of both trains and trails can be achieved. This relates to the potential rail trails in segments D1-D6 of the Casco Bay Trail loop, and segments F1-F4 of the East Coast Greenway spine route.

#### V. MAINE'S DIVERSE TRAIL SYSTEMS

Maine's broader trail network boasts iconic destinations from Acadia National Park to Baxter State Park to Moosehead Lake to the Western Mountains to Katahdin Woods and Waters National Monument to the Northern Forest Canoe Trail to the Appalachian Trail to the Allagash Wilderness Waterway, and so much more. The bikeway network described here enhances our diverse trail opportunities. The goals differ by the topography of the region: hiking trails have a comparative advantage in wilderness regions, and bikeways have a comparative advantage in more populous regions, though both have recreational and economic value in all regions.

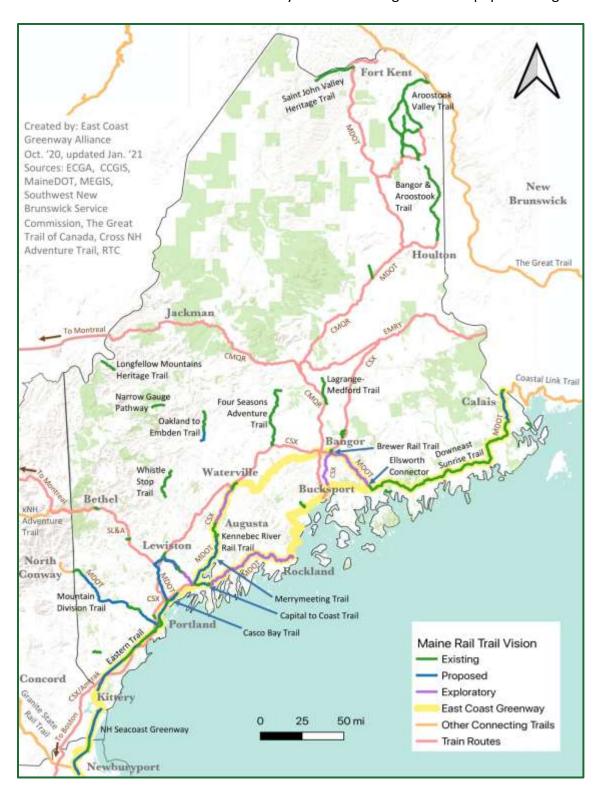
The vision outlined here is a strong start, focused on the 25 most populous municipalities in the state as arterial anchors for Maine's active transportation network. The Maine Trails Coalition in 2020 released a report that describes rail trail facilities in other locations too, highlighting at least 37 existing rail trails, totaling some 400 miles of off-road pathways statewide.



### Table 1 Existing Maine Rail-Trails

- 1. Auburn Riverwalk (1.6 miles)
- 2. Aroostook Valley Trail (28.0 miles)
- 3. Bangor and Aroostook Trail (62.3 miles)
- 4. Bangor Waterfront Trail (1.0 mile)
- 5. Bayside Trail (1.0 mile)
- 6. Belfast Rail Trail (2.2 miles)
- 7. Calais Waterfront Walkway (1.5 miles)
- 8. Down East Sunrise Trail (87 miles)
- 9. Eastern Promenade Trail (2.1 miles)
- 10. Eastern Trail (22 miles)
- 11. Eastern Trail/South Portland Greenbelt (5.6 miles)
- 12. Ellsworth Rail Trail (1.3 miles)
- 13. Four Seasons Adventure Trail (29.8 miles)
- 14. Farmington Whistle Stop Trail (14.0 miles)
- 15. Kennebec River Rail Trail (6.5 miles)
- 16. Kennebec Valley Trail, Bingham to Madison (14.5 miles)
- 17. Lagrange-Medford Trail (11.4 miles)
- 18. Longfellow Mountains Heritage Trail
- 19. Mountain Division Trail, Windham to Gorham (5.7 miles)
- 20. Mountain Division Trail, Fryeburg to NH (4.0 miles)
- 21. Narrow Gauge Pathway, Carrabassett Valley (6.6 miles)
- 22. Norway Branch Rail Trail (0.6 mile)
- 23. Old Narrow Gauge Volunteer Trail, Randolph (1.3 mile)
- 24. Old Pond Railway Trail, Hancock (2.9 miles)
- 25. Papermill Trail (2.1 miles)
- 26. Presque Isle Bicycle and Pedestrian Walkway (2.0 miles)
- 27. Riverside Trail, (2.0 miles)
- 28. Riverton Rail Trail (1.5 miles)
- 29. Rotary Centennial Trail (1.5 miles)
- 30. Saint John Valley Heritage Trail (17.0 miles)
- 31. Sandy River & Rangeley Lakes Railroad Trails
- 32. Sanford-Springvale Rail Trail (5.9 miles)
- 33. Sherman to Patten Trail (4.5 miles)
- 34. Sipayik Trail, Perry (1.8 miles)
- 35. Southern Bangor and Aroostook Trail (38.8 miles)
- 36. Stillwater River Trail, Orono (2.0 miles)
- 37. University of Maine Bicycle Path, Orono (3.1 miles)

<u>Maine Rail-Trail Plan 2020-2030</u> also advances a statewide trail vision with other significant long-distance trails in the areas of <u>Farmington</u>, the <u>Carrabassett Valley</u>, <u>Newport to Dover-Foxcroft</u>, <u>Oakland to Embden</u>, <u>Bingham to Madison</u>, <u>the Aroostook Valley</u>, the <u>Saint John Valley</u>. Still other projects are in the works in <u>Aroostook County</u> and other regions. There are enormous synergies between our iconic destinations and a bikeway network through our most populous regions.



### **VI. CONTACTS**

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#### **Mountain Division Alliance**

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# APPENDIX SEGMENT DESCRIPTIONS

**Completed or In Process** 

**Priority Projects** 

**Early Planning** 

#### **Eastern Trail**



Kittery to South Berwick Status: Early Planning

This 11-mile segment through Kittery, Eliot, and the southern part of South Berwick (at York Woods Rd) is the only segment of the entire ET corridor where no definitive off-road route has been identified. There are, however, several options under consideration, using utility easements along Route 236. Unitil, the owner of most of the existing and planned Eastern Trail corridor, may allow the trail's continuation right up to the point where their natural gas pipeline crosses the Piscataqua River, just north of Kittery. Other utility easements are being explored for the short remaining distance from there to the Route 1 bridge in downtown Kittery.

A2

Blazing the Trail South, Phase II

**Status: Planning** 

Preliminary Cost Estimate: \$6,461,453<sup>2</sup>

This 8.2-mile segment extends from York Woods Rd in South Berwick to Route 9 in North Berwick. It follows the same Unitil natural gas corridor that is used for most of the completed segments of the ET. Both the South Berwick and North Berwick communities strongly support the extension of the ET along this corridor and are working to fund an updated existing conditions survey and related feasibility study.



The Sanford spur is a key component of the <u>Sanford Trails Master Plan</u>, which was developed in 2019. This component of the master plan describes a spur from the Eastern Trail to the retail area near Sanford airport. Other projects extend this spur to other parts of Sanford, including as part of the Industrial Park Connector, the Birding Ponds Connector, the Downtown Connector project, and the High School to Route 4 Connector project. Access to the Eastern Trail is identified as a key connectivity objective of each of these complementary projects.

<sup>&</sup>lt;sup>2</sup> A MaineDOT PPI feasibility study will be completed in spring 2022 for the section from Route 9 in North Berwick to Perry Oliver Rd in Wells. Only very preliminary planning has been completed to date in South Berwick.



Preliminary Cost Estimate: \$7,000,000<sup>3</sup>

This 10.7-mile segment runs from North Berwick at Route 9, through Wells, and into Kennebunk, where it connects to the largely completed ET corridor from Kennebunk to South Portland. The juncture between the new segment and the completed corridor in Kennebunk is at Alewive Road, just before Kennebunk Elementary School, which is also connected to the trail. Moving forward with this segment has the support of all three towns, the corridor owner (Unitil), and local businesses Pratt and Whitney, Hussey Seating and Pike Industries. An existing conditions survey and feasibility study have been completed, funded in part through the MaineDOT Partnership and Planning Initiative (PPI) matched with local funding. Final design for the corridor will begin in 2022 using a \$700,000 federal earmark, and about \$210,000 in local matching funds.



Preliminary work on a York spur is focused initially on connecting the Eastern Trail to the Mount Agamenticus Trail system. From there, the long-term plan is to extend the spur to the Short Sands Beach area of York. The Town of York has included \$400,000 in its 5-year Capital Program as matching funds for a trail bridge over I-95 for this purpose.



This 6.2-mile segment of completed trail runs from Alewive Road in Kennebunk, through Arundel, to West Cole Road in Biddeford. The trail has a stone dust surface, and runs through largely wooded areas, across the Kennebunk River, and with entry points from many of the residential communities along the way. A widely recognized bike and pedestrian bridge crosses the Maine Turnpike near the southern end of this segment.

Biddeford to Saco "Over the River" Project
Status: Planning
Preliminary Cost Estimate: \$10,500,0004

This 3.1-mile segment through Biddeford and Saco fills a critical gap between the completed 6-mile ET corridor south to Kennebunk and the completed 8-mile ET corridor north to Scarborough. The cities of Saco and Biddeford are working together with the Eastern Trail Alliance to plan this section. A feasibility study was completed in 2022, using funding from the MaineDOT Partnership and Planning Initiative (PPI) and matching local funds. The study addressed the challenge of how to cross the Saco River. A bicycle and pedestrian facility will need to be constructed using a cantilever design off the existing railroad trestle across the river. The project also requires a rail

<sup>&</sup>lt;sup>3</sup> A survey is completed, and the project received a congressional earmark to fund the final design. A MaineDOT PPI feasibility study will be completed in spring 2022 for the segment from Alfred Rd to Route 35 (Alewive Road) in Kennebunk. \$910,000 final design funded by federal earmark FY22.

<sup>&</sup>lt;sup>4</sup> Estimates are based on a MaineDOT PPI feasibility study wrapping up in spring 2022.

with trail facility along an infrequently used but still active freight line. The Eastern Trail Alliance has requested a \$3.5 million FY2023 federal earmark to fund the design and 25% construction.

### Saco to Scarborough Status: Completed

This 7.8-mile completed segment of the Eastern Trail runs from Thornton Academy in Saco to Black Point Road in Scarborough. The corridor passes through the beautiful scenery, birds, and other wildlife of Scarborough Marsh.

### Scarborough to South Portland "Close the Gap" Project Status: In Process

This 3.7-mile segment fills a critical gap between the completed 8-mile ET corridor south to Scarborough and the completed 5-mile ET corridor north to Bug Light in South Portland. Filling the gap involves the use of Eastern Road for 1.4 miles from the current ET trailhead at Black Point Road, followed by a 0.7-mile wooded path along the Nonesuch River, and then a 1.6-mile stretch of more complex crossings to reach Wainwright Field in South Portland. The project includes two larger bridges, one over the Nonesuch River, and a second over the rail yard just south of Pleasant Hill Road. The bridge over the rail yard will be roughly 210 feet long to accommodate the Amtrak Downeaster underneath. There are four additional water crossings that range between 14 feet and 28 feet to minimize impacts to wetlands. The project is anticipated to go out to bid in the spring of 2022, with construction likely through 2024 given the complexity.

### South Portland Greenbelt Status: Completed

This 5.4-mile paved path runs from Wainwright Field in South Portland to Bug Light Park on Casco Bay. The path connects many residential and commercial areas of South Portland, and to the Casco Bay Bridge into downtown Portland.

#### **Mountain Division Trail**

New Hampshire Border through Fryeburg
Status: Completed

This 4-mile paved rail trail runs from the New Hampshire border through Fryeburg, ending near Andrews Preserve.



Preliminary Cost Estimate: \$15,825,649<sup>5</sup>

This 31-mile segment follows Route 113 and the Saco River in the western part of the state and continues to the southern tip of Sebago Lake in Standish. There has been no active rail use on this corridor for over 40 years. The segment passes through Fryeburg, Brownfield, Hiram, Baldwin, Steep Falls, and Standish. As directed by emergency legislation enacted in 2021, Maine DOT appointed a Rail Corridor Advisory Council to evaluate future uses of this corridor, including as a rail trail. As part of this process, MaineDOT commissioned a draft <u>feasibility study</u> detailing alternative uses. The final report of the Advisory Council is expected in the coming months.

### Standish to Windham Status: Completed

This 5.7-mile paved trail runs from the Standish-Gorham border through Gorham and Windham. The eastern section passes near Shaw Park, crosses the Presumpscot River, and then cuts through the Gambo Recreation Area. The western end, near Otter Ponds, connects with the Sebago Lake Land Reserve.

Windham to Westbrook Status: Design

Preliminary Cost Estimate: \$9,657,1756

This 5-mile segment follows the Presumpscot River from the existing rail trail in South Windham to East Bridge Street in Westbrook. Maine DOT recently awarded a \$350,000 grant to conduct a design and engineering study for a rail-with-trail on this segment, which will be combined with \$100,000 in local funds.

Westbrook to Portland Transportation Center Status: Planning
Preliminary Cost Estimate: \$8,941,648<sup>7</sup>

From the Portland Transportation Center, this 4-mile segment travels west through Fore River Sanctuary, over the Presumpscot River, and ending at East Bridge Street in Westbrook. Unlike segments B1-B4, which are owned by the state, this segment is owned by Pan Am and is part of the pending sale of Pan Am assets to CSX. It is used by two companies for freight: SAPPI occasionally and Dead River Company more regularly. The track appears to be used about once a day for transporting propane gas from the depot on Terminal Road. Some of the corridor is double track and the trains use the track on the north side. The track on the south side is inactive. A rail-with-trail facility is proposed to continue to allow these dual public purposes.

<sup>&</sup>lt;sup>5</sup> Estimates are based on a 2021 feasibility study by HNTB using a trail-until-rail design.

<sup>&</sup>lt;sup>6</sup> Estimates are based on a 2021 feasibility study by HNTB using a rail-with-trail design. The project has \$450,000 already designated for final design.

<sup>&</sup>lt;sup>7</sup> Estimates are based on a 2021 feasibility study by HNTB using a rail-with-trail design, because the corridor is privately owned and actively used for freight transportation.

#### **Portland Connectors**

Casco Bay Bridge
Status: Design

Preliminary Cost Estimate: \$21,0028

This 1.1-mile segment over the Casco Bay Bridge is the critical connector between downtown Portland and all the Eastern Trail communities to the south. The bridge currently has a sidewalk with jersey barrier and on-road bike lanes in both directions. An upgraded bicycle facility would offer greater separation from motor vehicle traffic and reduce conflicts on the existing sidewalk, which is currently used frequently by cyclists who do not feel safe using the on-road bike lanes near speeding traffic. Improvement in the bridge access corridors for bicycles are also needed to clearly delineate where cyclists, pedestrians, and drivers should operate.





There is currently no off-road trail, side path, or traffic-separated bike lane on the 1-mile corridor between the Portland side of the Casco Bay Bridge and the Fore River Parkway to the west. A safe-from-traffic bikeway arterial is important on this corridor because it would connect the Mountain Division Trail to downtown Portland, as well as to the Eastern Trail going south and the Casco Bay Trail going north. The current buffered bike lanes painted on West Commercial Street do not offer this safe-from-traffic separation. An extension of the Fore River Parkway Trail along West Commercial Street and on to the southbound ramp to the Casco Bay Bridge could take the form of a side path or a separated bike lane and would provide a more suitable bikeway arterial through the City of Portland's peninsula.

<sup>&</sup>lt;sup>8</sup> City of Portland, East Coast Greenway Alliance, and Bicycle Coalition of Maine developed a design with flex posts on existing bike lanes and additional paint at intersections.

### Fore River Parkway Trail Status: Completed

This 2.6-mile trail runs along Fore River from West Commercial Street, across the front of the Mercy Hospital campus, and on to the Portland Transportation Center, where it will connect to the envisioned Portland-to-Fryeburg Mountain Division Trail.



There is currently no off-road trail, side path, or traffic-separated bike lane on the 0.8-mile corridor between the Portland side of the Casco Bay Bridge and the Eastern Promenade Trail to the east. A safe-from-traffic bikeway arterial is important on this corridor because it would link together all three primary arterials into downtown Portland: the Casco Bay Trail to the north, the Mountain Division Trail to the west, and the Eastern Trail to the south. The interim East Coast Greenway route through Portland is on-road, using parts of Commercial, High and York streets. None of these roadways currently have dedicated safe-from-traffic bicycle facilities. Moreover, the intersection of York Street and the Casco Bay Bridge is among the highest crash locations for cyclists in all of Portland. This should be a high priority for a future bikeway arterial.

# Eastern Promenade Trail Status: Completed

This popular 1.5-mile waterfront multi-use trail has been called the "crown jewel" of Portland's trail network. It is built along an old rail corridor and offers spectacular harbor and ocean views. It connects directly to Tukey's Bridge and the Back Cove Trail.

Tukey's Bridge to Roux Institute
Status: Planning
Preliminary Cost Estimate: \$2,569,2529

The gateway from downtown Portland to the Casco Bay Trail is through the planned Roux Institute campus in East Deering. The campus plan highlights bicycle and pedestrian access, and prioritizes both a trail loop around the campus, and a trail connector beneath Tukey's Bridge to the <u>Back Cove Trail</u>, <u>Bayside Trail and Eastern Promenade Trail</u>. There is an existing bikeway over Tukey's bridge on the west side, but a pathway underneath Tukey's bridge on the north side will need to be constructed to connect it with the Roux campus trails and Casco Bay Trail.

<sup>&</sup>lt;sup>9</sup> The Roux Institute campus plan includes a multi-use trail loop with a connector beneath Tukey's Bridge to the Back Cove & Eastern Promenade Trails.

#### **Casco Bay Trail Loop**

D1

Casco Bay Trail, Roux Institute to Presumpscot Street

Status: Planning

Preliminary Cost Estimate: \$2,897,152<sup>10</sup>

From the waterfront at the planned Roux Institute campus, the first 1.2-mile segment of the Casco Bay Trail presents distinct exploratory considerations, first because of the connectivity it offers to the East Deering neighborhood of Portland and the Presumpscot Elementary School, second because of the trail connector possibilities into the planned Roux Institute campus, and third because the Maine Yacht Center uses the rails to transport boats from the marina to its warehouses on Presumpscot Street. A rail-with-trail arrangement would allow for continued transportation of boats along the corridor. Also important to the planning for this segment is the restoration of public access to the full corridor to the shoreline. There is a potentially productive collaboration of interests between the Casco Bay Trail Alliance, Maine Yacht Center, Roux Institute, and other abutting property owners, making this segment a high priority for accelerated study of a rail with trail design.



Casco Bay Trail, Presumpscot Street to Downtown Yarmouth

Status: Planning

Preliminary Cost Estimate: \$4,743,62711

This 8.4-mile segment parallels Route 295, connecting Portland, Falmouth, Cumberland, and Yarmouth. As noted, all four of these communities have passed resolutions of support for the *Rail Corridor Use Advisory Council* process that will evaluate its potential use as a rail trail. Key features of this segment include a picturesque bridge over the Presumpscot River, and linkage points with METRO in the East Deering neighborhood of Portland, near Lunt Road in Falmouth, at the Exit 15 Park n' Ride in Yarmouth, and in downtown Yarmouth.



Crosstown Pathway, Yarmouth

Status: Planning

Preliminary Cost Estimate: \$169,415

This 0.25-mile segment from Cleaves Street to Main Street in Yarmouth is a potential fast-track project, because of its double track, thereby allowing a rail with trail facility to proceed on a faster timetable than required to authorize a rail-to-trail conversion. It is important to the Yarmouth community because it connects Main Street with the existing Cleaves Street trailhead to Yarmouth High School.

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<sup>&</sup>lt;sup>10</sup> Per-mile estimates are based on the 2021 feasibility study that was conducted by HNTB for the Mountain Division Trail, in this case using their estimates for a rail-with-trail facility.

<sup>&</sup>lt;sup>11</sup> For segments D2-D6, per-mile estimates are based on the 2021 feasibility study that was conducted by HNTB for the Mountain Division Trail, in this case using their estimates for a trail-until-rail design.



Royal River Greenbelt, Main St to Yarmouth Crossing

Status: Planning

Preliminary Cost Estimate: \$451,774

This 0.8-mile segment runs from Main Street through Royal River Park, past the Yarmouth History Center on East Elm Street, and over a picturesque bridge crossing the Royal River. The segment ends at Yarmouth junction, where the SLA corridor crosses the active Amtrak train corridor.



Royal River Greenbelt, Yarmouth Crossing to Pineland Farm

Status: Planning

Preliminary Cost Estimate: \$4,098,854

This 7.0-mile segment runs through the Royal River watershed, connecting Yarmouth, North Yarmouth, Pownal, and New Gloucester. Three of these communities passed resolutions of support for the *Rail Corridor Use Advisory Council* process that will evaluate its potential use as a rail trail. The route follows the Royal River near many park lands, including <u>Riverfront Woods Preserve</u>, <u>Chandler Brook Preserve</u>, Baston Park, the <u>Bradbury-to-Pineland Trail</u>, and the <u>Pineland Farm Trail</u> network.



Royal River Greenbelt, Pineland Farm to Auburn Border

**Status: Planning** 

Preliminary Cost Estimate: \$3,981,743

This 6.8-mile segment continues to follow the Royal River from New Gloucester to the Auburn border. It is the northern terminus of the state-owned St. Lawrence and Atlantic corridor and, like segment D5, crosses beautiful landscapes and is near several parks and preserves, including, Pisgah Hill Preserve, Intervale Preserve, and Thurston Wildlife Marsh.



Lewiston Lower Rail Trail Project

Status: Planning

Preliminary Cost Estimate: \$11,685,902<sup>12</sup>

This 13-mile segment from Lewiston to Lisbon would use the inactive Lewiston Lower Rail corridor. It has been envisioned as a rail trail for 25-years. The corridor is owned by Pan Am and is part of the pending sale of Pan Am assets to CSX. The Lewiston-Auburn Railroad Company and the Androscoggin Land Trust are the groups leading this trail development vision, and an engineering assessment has already been conducted by Sebago Technics. Further negotiations and progress likely await the completion of the CSX purchase of the corridor.



Lisbon Papermill Rail Trail

Status: Completed

This 2.1-mile paved rail trail runs along the Sabattus and Androscoggin Rivers and through fields and woods in the town of Lisbon and Lisbon Falls.

<sup>&</sup>lt;sup>12</sup> A feasibility study was already completed by Sebago Technics in conjunction with Lewiston-Auburn Railroad Company with support from Pan Am. The preliminary construction cost estimate is based on \$1 million/mile.

#### ng Lisbon to Topsham Status: Early Planning

The state owns the 8-mile rail corridor between Lisbon and Topsham. The corridor is used for freight transportation, but trips are rare. Because it is an active corridor, discussions about the potential use of this corridor as a rail trail or rail-with-trail have not been initiated to date. But given the infrequency of its use by trains, and its ownership by the state, its potential use as a rail trail or rail-with-trail seems worth exploration.



#### Topsham-Brunswick to Downtown Freeport Status: Early Planning

While no specific route has been identified for this 8-mile segment, introductory meetings have been held with representatives from Freeport and Brunswick, and both communities have expressed support for bikeway connectivity, and for the Casco Bay Trail vision more generally.

D11 Downtown Freeport to Freeport YMCA Status: Planning

Preliminary Cost Estimate: 2,634,976<sup>13</sup>

The Freeport Active Living Committee is leading a process called Connect Freeport, which among its priority projects, is a multi-use trail on this 4.5mile segment from the Freeport YMCA downtown Freeport. The Committee has identified preliminary routing and is working with property owners and others on the necessary approvals. Also, as part of its headquarters redevelopment project, L.L. Bean negotiated a TIF agreement with the town of Freeport that includes substantial funding for

the Concord Brook Trail section on their property. The route through L.L. Bean headquarters and its flagship store is an additional feature of this trail, and its prospective economic development impact. The segment fully connects the downtowns of Freeport and Yarmouth, and with the METRO bus system at multiple locations along the corridor. The Casco Bay Trail Alliance, in coordination with the Town of Freeport and East Coast Greenway Alliance, has requested a \$1.25 million FY23 federal earmark to fund the design and construction of this segment.

<sup>13</sup> These estimates assume that no funding is needed for feasibility study due to a GIS assessment in 2020, though some additional feasibility analysis may still be needed. The construction estimates are based on a paved rail trail design (multi-use trail). The costs might be less if some portion of the corridor uses a stone dust surface rather than a paved surface. Total mileage could also change, depending on the final route selection.

### Beth Condon Pathway Extension to Freeport YMCA Status: Design

Preliminary Cost Estimate: \$2,467,50014

This 1.3-mile segment runs under Route 295 at exit 17 in Yarmouth to the Cousins River, across the Cousins River bridge, and on to the Freeport YMCA. Most of this project is authorized and likely to be completed by 2024. The Exit 17 project has a detailed MaineDOT workplan in process. PACTS has funded a preliminary design report on the continuation segment from there to the Cousins River. The bridge across Cousins River is on the MaineDOT 2024 workplan. Funding still needs to be identified for the remaining distance from the Cousins River to the YMCA.

# Beth Condon Pathway Status: Completed

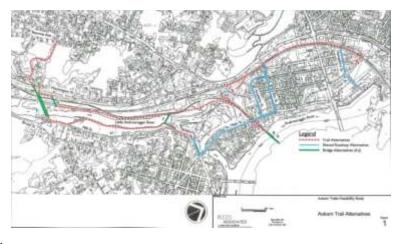
This 2.6-mile paved path begins at the intersection of Route 1 and Portland Street in Yarmouth, and continues through the Royal River Park, and on to the Yarmouth-Freeport line. The southern end of the Beth Condon Pathway connects back to the St. Lawrence and Atlantic Rail corridor, and the envisioned rail trail back to Portland (segments D1 and D2). The Beth Condon Memorial Pathway is named in honor of a Yarmouth student who was struck by a drunk driver while walking along US Route 1.

#### **Lewiston-Auburn Connectors**

Auburn Border to Downtown
Status: Planning

Preliminary Cost Estimate: \$17,045,889<sup>15</sup>

While no specific route has been identified for this 8-mile segment, a future connector trail might consist of a rail-with-trail facility between the Auburn border and route 202, and then take advantage of an existing public right-of-way on the western side of the Route 202 corridor. The latter part of this segment was considered in a 2000 study by Rizzo Associates to go from the Riverwalk to Washington Street and then to span Washington Street.



<sup>&</sup>lt;sup>14</sup> These estimates come from a 2021 feasibility study for the Beth Condon Pathway. Preliminary design for the segment from Exit 17 to the Cousins River was funded by PACTS for FY2022.

<sup>&</sup>lt;sup>15</sup> These are rough estimates based on a rail-with-trail design along an active corridor from the New Gloucester border to Route 202, and then a sidepath along Route 202. The 2.2-mile rail with trail component is based on the per-mile estimates in 2021 HNTB feasibility study for the Mountain Division Trail.

#### Lewiston and Auburn Riverwalks Status: Completed

This 1.6-mile trail runs along the western and eastern banks of the Androscoggin River in Auburn and Lewiston, respectively. The riverside segments are connected by a pedestrian bridge between Bonney Memorial Park in Auburn and Simard-Payne Memorial Park in Lewiston. The longer trail on the western side of the river overlooks Great Falls.

👩 Downtown to Lewiston Lower Rail Trail

Status: Planning

Preliminary Cost Estimate: \$2,451,922<sup>16</sup>

The ATRC "Bridging the Gaps" plan includes a multi-use path that extends the downtown Riverwalk on the Lewiston side of the river for another 0.7 miles down the Androscoggin River. A parallel multi-use path would follow the Lewiston Lower Rail corridor about 500 feet east of the river, beginning near Cedar Street. Some combination of these paths can be used to connect the Riverwalks, downtown Auburn, and downtown Lewiston with the Lewiston Lower Rail Trail to Lisbon.

#### **East Coast Greenway, Spine Route**



F1 Merrymeeting Trail Status: Planning

Preliminary Cost Estimate: \$14,569,711<sup>17</sup>

The 26-mile Merrymeeting Trail would connect the communities of Topsham, Bowdoinham, Richmond, and Gardiner. It would be located on the Lower Road rail corridor, which was purchased by the state in 1991, and is unused by trains. The Merrymeeting Trail would run through downtown areas and with large stretches along the Cathance and Kennebec rivers. At its northern end, the Merrymeeting Trail would connect to the Kennebec River Rail Trail in Gardiner. On the southern end, it would connect to the Casco Bay Trail loop, the existing Androscoggin River Bicycle and Pedestrian Path in Brunswick, and the East Coast Greenway coastal corridor to Bath and Rockland, before rejoining the East Coast Greenway spine route in Bangor. A project feasibility study was completed in 2011, and a vision document for the larger Capital to Coast trail was completed in 2016. The Merrymeeting Trailblazers are leading the effort to plan and support this active transportation arterial.



F2 Kennebec River Rail Trail Status: Completed

This existing 6.5-mile rail trail follows the Kennebec River through the communities of Gardiner, Farmingdale, and Hallowell, and ending in Waterfront Park in downtown Augusta.

<sup>&</sup>lt;sup>16</sup> These estimates are based on a similar Saco/Biddeford project that includes a bridge and riverbank safety features as well as electrical lighting.

<sup>&</sup>lt;sup>17</sup> A feasibility study was conducted in 2011. Updated per-mile cost estimates are based on the 2021 feasibility study that was conducted by HNTB for the Mountain Division Trail, in this case using their estimates for a trail-until-rail design.

### Bangor Street Project in Augusta Status: In Process

MaineDOT has received a federal earmark of \$4.8 million to redesign Bangor Street in Augusta. The project was funded "to improve safety of a section of Bangor Street in Augusta, including for pedestrian and bicycle use. There have been at least 16 pedestrian and 10 bicycle crashes on this section of roadway in the last 10 years, including a fatal pedestrian crash." Bangor Street is close to the northern entry point to the Kennebec River Rail Trail on Front Street. Construction design for the Bangor Street Project is expected to begin in 2022, and this could include a bikeway arterial in the form of a sidepath or traffic-separated bikeway that improves connectivity with the Kennebec River Rail Trail arterial.

### F4 Augusta to Waterville/Winslow Status: Early Planning

There is a privately owned rail corridor from downtown Augusta to downtown Waterville that might be considered for a rail trail or rail-with-trail, but no discussion of the idea has been initiated to date. If the corridor is found to be unused, or infrequently used by trains, it could be well-suited for an active transportation arterial. The rail corridor currently dead ends in Augusta (where the Kennebec River Rail Trail begins) and, as laid out in section IV below, there is another still-active train corridor between Portland, Lewiston-Auburn, Waterville, and Bangor that could be prioritized for train use. Further evaluation is needed to better evaluate the appropriate prioritization of public purposes on these respective corridors.

# Waterville/Winslow Trail Status: Completed

The non-profit Kennebec Messalonskee Trails manages a trail network in the communities of Waterville, Winslow, Benton, Fairfield, and Oakland. The existing East Coast Greenway spine route includes several of its trail segments: Two Cent Bridge, Head of Falls Trail, East Kennebec and Rotary Centennial Trails.

### Waterville/Winslow to Bangor Status: Early Planning

An off-road or traffic-separated corridor has not yet been identified between Waterville and Bangor to provide a safe experience for cyclists and pedestrians.

#### East Coast Greenway, Coastal Route

Androscoggin River Bicycle and Pedestrian Path Status: Completed

This 2.6-mile paved trail follows the Androscoggin River from Water Street to Grove Lane in Brunswick. It uses the right-of-way strip between Route 1 and the river.



Androscoggin to the Kennebec Bicycle Path, Extension to Bath

Status: Planning

Preliminary Cost Estimate: \$10,212,89718

This proposed 4-mile path would extend the existing Androscoggin River Bicycle and Pedestrian path from Grove Lane in Brunswick, through West Bath and into downtown Bath. A feasibility study was completed in 2004, initiated by the municipalities of Bath and Brunswick and funded by MaineDOT using Federal Enhancement funds, along with a 20% local match. The project is also part of the "Capital to Coast" vision, which combines the Kennebec River Rail Trail, Merrymeeting Trail, Androscoggin River Bicycle and Pedestrian Path, and this 4-mile segment into Bath.



**G3** Sagadahoc Bridge Project

Status: Planning

Preliminary Cost Estimate: \$886,133<sup>19</sup>

This 0.3-mile project would increase the safety of bicycles and pedestrians entering or exiting the sidewalk over Sagadahoc Bridge from the east side in Woolwich. The project involves widening the sidewalk on the Woolwich side of Route 1 to better connect to the existing bicycle and pedestrian tunnel that crosses under Route 1 on the Woolwich side of the bridge. The project would facilitate the use of both the tunnel and the Sagadahoc Bridge sidewalk, significantly reducing traffic exposure.



G4 Bath to Rockland **Status: Early Planning** 

The state of Maine owns a picturesque rail corridor from Brunswick (through Bath) to Rockland. The corridor is not currently used by trains, but has been considered for extended Amtrak service, or for seasonal scenic train service. The corridor could also serve as an extraordinarily popular rail trail with magnetic attraction for active tourism. A process like MaineDOT's Rail Corridor Use Advisory Councils could evaluate these possibilities, including the potential for a rail-with-trail on this picturesque state-owned resource.



**Rockland to Bucksport** Status: Early Planning

No off-road or traffic-separated corridor has yet been identified for the roughly 48-mile East Coast Greenway coastal corridor between Rockland and Bucksport. As this is a beautiful route in terms of coastal scenery, and since it connects with other key parts of the arterial network vision, planning should be initiated to identify a safe-from-traffic bikeway arterial through these communities.

<sup>&</sup>lt;sup>18</sup> These estimates are based on a feasibility study completed in 2004 (which includes mobilization and contingency expenses) with all components indexed to 2021 dollars.

<sup>19</sup> The estimate is to expand the existing sidewalk to 8-10' width over the 0.3 mile segment at the eastern approach to the Sagadahoc Bridge to connect to the Woolwich bicycle and pedestrian tunnel.



Preliminary Cost Estimate: \$8,656,603<sup>20</sup>

This 18.3-mile inactive rail corridor is privately-owned by Pan Am and will be part of the planned CSX acquisition of Pan Am assets. The City of Bucksport has begun to explore a potential rail trail on this corridor, because there are no businesses in the former mill site that anticipate needing freight service. Local snowmobile groups are also interested in its use as a trail. The bikeway arterial vision presented in this report extends the East Coast Greenway coastal corridor along this unused rail corridor to Bangor, where it would rejoin the East Coast Greenway spine route, either back toward Waterville, Augusta, and Brunswick through interior Maine, or east to Ellsworth and Calais on the Calais Branch rail corridor or Down East Sunrise Trail.

### Bucksport to Ellsworth Connector Status: Early Planning

No off-road or traffic-separated corridor has yet been identified for the roughly 20-mile East Coast Greenway coastal corridor between Bucksport and Ellsworth. As this route runs along the beautiful Blue Hill Peninsula and connects with other key parts of the arterial network vision, planning should be initiated to identify a safe-from-traffic bikeway arterial through these communities. This segment also connects to scenic bicycling in Castine, Blue Hill Peninsula, and Deer Isle, as well as mountain biking in the Orland Wildlands.

#### **Bangor Connectors**



The current largely on-road ECG spine route south from Bangor is marked on the Bangor Area Trails map on the previous page as the interim ECG route. Identifying and constructing a separated bikeway, either off-road or alongside a roadway is important to the arterial vision proposed. No definite route has been identified yet.

Bangor Waterfront Walkway
Status: Completed

This 1.0-mile trail follows the west side of the Penobscot River in downtown Bangor through Bangor's Waterfront Park.

<sup>&</sup>lt;sup>20</sup> Per-mile estimates are based on the 2021 feasibility study that was conducted by HNTB for the Mountain Division Trail, in this case using their estimates for a trail-until-rail design with a stone dust surface.

### H3 Kenduskeag Stream Trail Status: Completed

This 2.3 mile follows the Kenduskeag Stream from the Bangor waterfront on the Penobscot River, passing through scenic woods and historic mill sites, and ending soon after the I-95 underpass near the Husson University campus, where it might connect to an arterial spur to Orono.



Orono is the 20<sup>th</sup> most populous municipality in Maine and home to the University of Maine campus and its 12,000 students. Thus, the addition of an arterial bikeway spur from downtown Bangor to Orono is another priority of this active transportation vision. Part of this spur might be located on the abandoned Veazie railroad corridor on the west side of Route 95, much of which is already a trail. From Essex Woods, the trail might cross west along the Husson University campus, and then follow the Kenduskeag Stream Trail to downtown Bangor.

Penobscot Bridge Project
Status: Planning

Preliminary Cost Estimate: \$1,203,444<sup>21</sup>

This bridge project is necessary to improve the bikeway connectivity between the Bangor Waterfront walkway and the Brewer Riverwalk and Brewer Rail Trail. Currently the bridge has two traffic lanes on each side and a narrow 5' sidewalk on one side. Traffic volumes should be evaluated to determine whether four lanes are necessary, or whether a sidepath bikeway might better serve the active transportation needs of these communities. The intersections on both sides of the bridge are also poorly designed for non-motorized users. The Brewer Riverwalk is within 200 feet of the Penobscot Bridge span, so it would be easy to make a direct connection between the trail and a sidepath facility. Further evaluation is needed on how to connect the Bangor side of the bridge to the Bangor Waterfront Walkway along Washington Street and in the green space between Washington and Broad Streets.

Brewer Riverwalk
Status: Completed

This 0.6-mile trail follows the Penobscot River waterfront on the Brewer side of the river, passing through the Brewer Children's Garden.

<sup>&</sup>lt;sup>21</sup> This estimate is for the addition of a bi-directional sidepath to be added to the bridge.

Brewer Rail Trail Project, Phase I Status: Planning

Preliminary Cost Estimate: \$1,229,656<sup>22</sup>

This rail trail project runs from Wilson Street in downtown Brewer to at least the Holden town line, though the town of Holden supports its continuation through Holden as well. The 2.1-mile phase 1 project from Wilson Street runs over I-395 and continues to state owned wetlands at Green Point Road. This part of the corridor directly abuts Maple Street Park, the city's public safety building, an outdoor ice rink, and valuable wetland and wildlife habitats. Within a very short walk to the rail corridor is the Brewer High School, an indoor ice arena, Brewer Auditorium, and Brewer Library. The corridor also runs over I-395. Most of the corridor is state-owned. A short portion at the beginning of the envisioned trail at Wilson Street is owned by Pan Am and will be part of the planned CSX acquisition of Pan Am assets.

#### **Down East Sunrise Trail**

Brewer Rail Trail Project, Phase II
Status: Early Planning

This 2-mile segment extends the proposed Brewer Rail Trail (segment H6) from Green Point Road to the Brewer-Holden border.

Holden Rail Trail Project
Status: Early Planning

This 5.7-mile segment extends the proposed Brewer Rail Trail from the Brewer-Holden border to the Holden-Dedham border. The Holden Land Trust and the Town of Holden are both supportive of this extension.

Holden to Ellsworth Rail Trail
Status: Early Planning

This 16.4-mile segment extends from the Holden-Dedham border to Ellsworth, where it connects with the existing Ellsworth Rail Trail. The end of the corridor would likely require a trail-with-rail facility to allow for the continued operation of the Downeast Scenic Railroad. A process like the Rail Corridor Use Advisory Councils could be set up to explore the feasibility of advancing both public purposes on the corridor.

Ellsworth Rail Trail
Status: Completed

This 1.3-mile rail trail connects Ellsworth Falls, Ellsworth High School, and downtown Ellsworth.

<sup>&</sup>lt;sup>22</sup> A feasibility study was completed by University of Maine engineering students in 2016, including cost estimates for materials only. These updated estimates use the per-mile cost estimates from the 2021 HNTB feasibility study for the Mountain Division Trail, in this case using a trail-until-rail design.

# Ellsworth Connector Trail Status: Design

Preliminary Cost Estimate: \$1,218,333<sup>23</sup>

This 0.7-mile connector project fills the gap between the existing Ellsworth Rail Trail and the 87-mile completed portion of the Down East Sunrise Trail. The City of Ellsworth supports the project, and just received \$370,000 in MaineDOT funding for preliminary engineering. The 20 percent required local funding for the engineering study has already been approved. Funding is still needed for final design and construction.

### 6 Ellsworth to Ayers Junction Status: Improvements Needed

This 87-mile trail is the longest completed segment of the East Coast Greenway. It passes through a natural landscape of green forests and marshes, habitat for iconic moose, beavers, eagles, wild turkeys, and white tail deer. The trail is open to bicycles, walking, horses, cross country skiing, ATVs, snowmobiles, and the occasional dog sled. As part of Maine's envisioned bikeway arterial system, the surface of this trail should be upgraded to improve the bicycling experience.

7 Ayers Junction to Baring Status: Planning

Preliminary Cost Estimate: \$6,034,889<sup>24</sup>

This 12.2-mile segment runs from Ayers Junction in Pembroke to Baring Street/Route 1 in Calais. The rail line runs through Pembroke, Charlotte, Baring, and Calais. Several studies have been done to look at the feasibility of completing this extension toward Calais, including a Routing Study by the Washington County Council of Governments.

Baring to Calais
Status: Early Planning

There is a privately owned 3.1-mile rail corridor from Route 1 north to Calais that accommodates freight service across the Canadian border. A rail with trail facility on this corridor would allow the Down East Sunrise Trail to be extended from Route 1 to the Calais Waterfront Walkway, completing the East Coast Greenway to downtown Calais and making the connection to Canada and the Coastal Link Trail & Trans Canada Trail possible.

<sup>&</sup>lt;sup>23</sup> These estimates are based on a feasibility study completed and funded by MaineDOT and the City of Ellsworth in 2021. The construction costs reflect Recommended Alternatives (Birch Ave to Main St) and Alternative 2 (Main St to Sunrise Trail) and include a 10% mobilization expense. MaineDOT funded preliminary design for FY2022.

<sup>&</sup>lt;sup>24</sup> Per-mile estimates are based on the 2021 feasibility study that was conducted by HNTB for the Mountain Division Trail, in this case using their estimates for a trail-until-rail design with a stone dust surface.

### 19 Calais Waterfront Walkway Status: Completed

The 1.5-mile Calais Waterfront Walkway is built on a former railroad right-of-way and provides a beautiful view along the Saint Croix River on the border between Calais and Canada. It is also the northern gateway to the 3,000-mile East Coast Greenway.

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Calais Waterfront Walkway Extension

Status: Design

Preliminary Cost Estimate: \$75,500<sup>25</sup>

This short 0.1-mile segment would extend the existing Calais Waterfront Walkway through an underutilized green space on the Calais waterfront closer to the Canadian border. The project vision also includes a prominent trailhead kiosk with maps of the many outdoor recreation trail connections in the region, including the Bold Coast Scenic Bikeway, Maine Island Trail paddling route, and the Coastal Link Trail & Trans Canada Trail in New Brunswick. The project includes ADA accessible benches and picnic tables, trash/recycling receptacles, and landscaping/plantings. The trail extension is located on land owned by the City of Calais and a private landowner who has already granted the city an easement for the trail. The project is supported by the City of Calais, Downeast Acadia Regional Tourism, the Sunrise County Economic Council, the Wabanaki Cultural Center and Museum, and the Calais Downtown Revitalization Coalition.

<sup>25</sup> This project was designed by a local landscape architect and includes a 2021 project budget that includes the "trail gateway" treatment.