

St. Lawrence & Atlantic Berlin Subdivision Rail Corridor

PUBLIC MEETING

Greeley Center for the Arts, Cumberland
December 5, 2022



Scope of the Study

- State-owned Berlin Subdivision Rail Corridor
 - Begin: MP 0.0 at Ocean Gateway, Portland
 - End: MP 26.5 at the New Gloucester/Auburn line
- Intent: Inform the recommendation of the Rail Use Advisory Council, per Maine LD 1133
- Potential uses assessed:
 - 1: Maintain and preserve rail corridor
 - Continue current maintenance activities
 - Reestablish freight rail service
 - Implement passenger rail service
 - 2: Interim Trail Until Rail
 - 3: Rail with Trail
- Environmental and economic benefits analysis



Rail Corridor Context: Character



Veranda St. overpass, Portland



Adjacent to Middle Rd, Falmouth



E. Elm St. crossing, Yarmouth

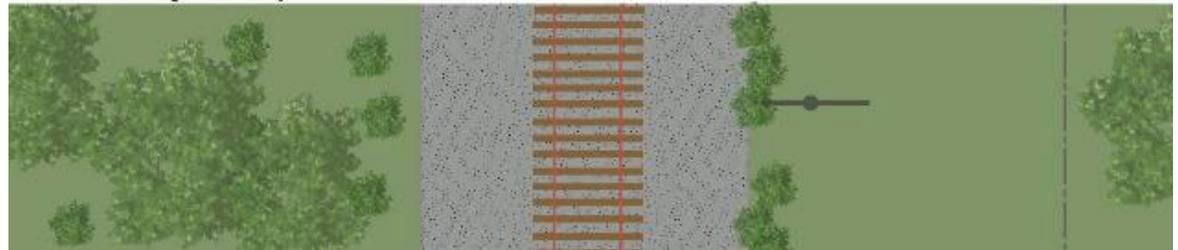
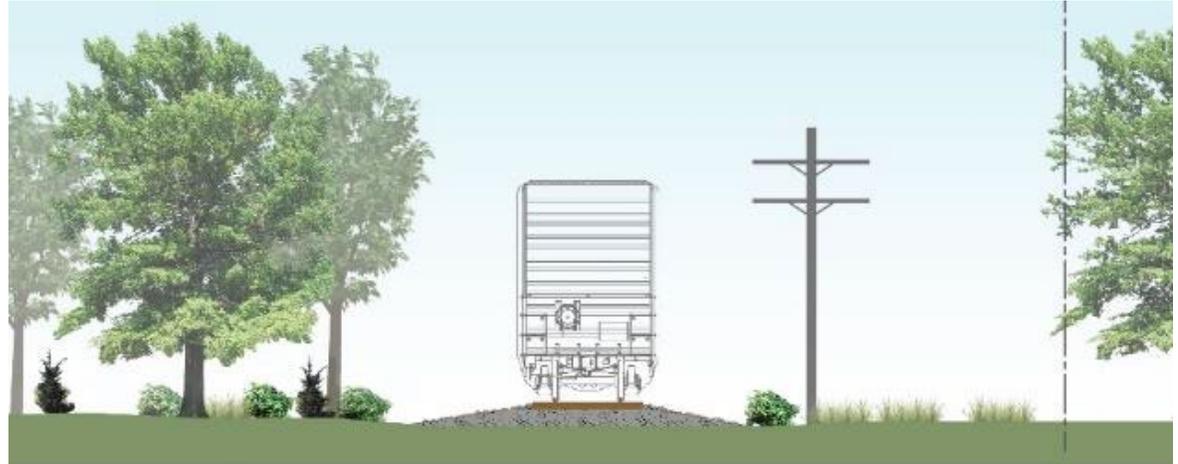


Below Rt. 231/Intervale Rd., New Gloucester

Order-of-Magnitude Cost Estimates*

Options Included

- 1: Maintain and preserve rail corridor →
 - Continue current maintenance activities
 - Reestablish freight rail service
 - Implement passenger rail service
- 2: Interim Trail Until Rail (TUR)
- 3: Rail with Trail (RWT)
- 4: Annual Maintenance Costs



* includes 30% contingency, 10% design, and 15% construction administration

Cost Estimate Option 1: Freight Rail Service

Key Components/Assumptions

- Maintain single Mainline track to Class 2 conditions (25 mph for freight only)
- Partial Tie and Rail Replacement
- Rehab Roadway at-grade XINGS (select locations)
- Culvert work (minor rehab to total replacement)
- NOT included: future siding construction costs



Old Field Road XING in Yarmouth

	Freight Only Service - LOW	Freight Only Service - HIGH
Segment 1 (MP 0.0 to MP 1.7)	NA	NA
Segment 2 (MP 1.7 to MP 26)	\$13,400,000	\$31,000,000
Total Cost	\$13,400,000	\$31,000,000

Cost Estimate Option 1: Passenger Rail Service

Key Components/Assumptions

- Operate at Class 3 track conditions (60 mph)
- Double track where feasible to allow for operation of multiple train sets
- Install mainline signal system with PTC/ATC
- Rehab all public roadway at-grade XINGS
- Replace Timber Decks at all private/farm XINGS
- New bridge over Back Cove in Portland
- Culvert work (minor rehab to total replacement)

- NOT included:
 - passenger station construction
 - any improvements needed at Danville Junction

	Passenger Service
Segment 1 (MP 0 to MP 1.7)	\$60,000,000
Segment 2 (MP 1.7 to MP 26)	\$214,000,000
Total Cost	\$274,000,000

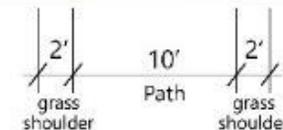
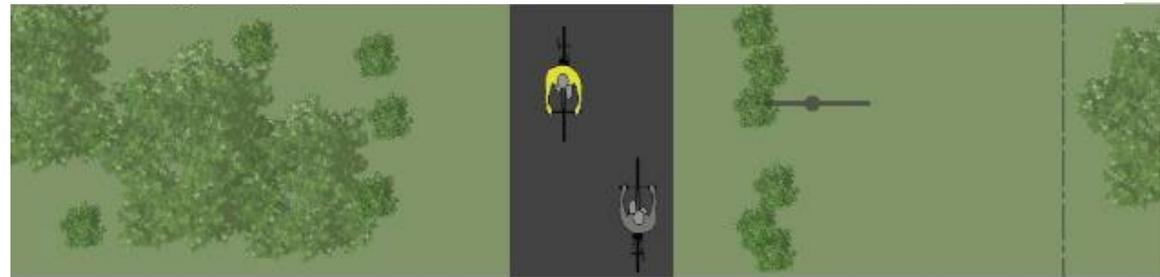


Back Cove Bridge in Portland

Order-of-Magnitude Cost Estimates*

Options Included

- 1: Maintain and preserve rail corridor
 - Continue current maintenance activities
 - Reestablish freight rail service
 - Implement passenger rail service
- 2: Interim Trail Until Rail (TUR) →
- 3: Rail with Trail (RWT)
- 4: Annual Maintenance Costs



* includes 30% contingency, 10% design, and 15% construction administration

Cost Estimate Option 2: Interim Trail Until Rail

Key Components/Assumptions

- Trail construction starts at MP 1.2
 - Eastern Prom Trail continues south
- New Back Cove trail bridge
- Remove existing tracks and replace with stonedust/gravel or asphalt trail surface
- Marked crosswalks, warning signs and potential flashing beacons at grade crossings

Not Included:

- Environmental mitigation costs
- Trailheads/parking

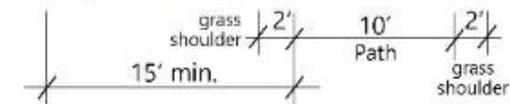
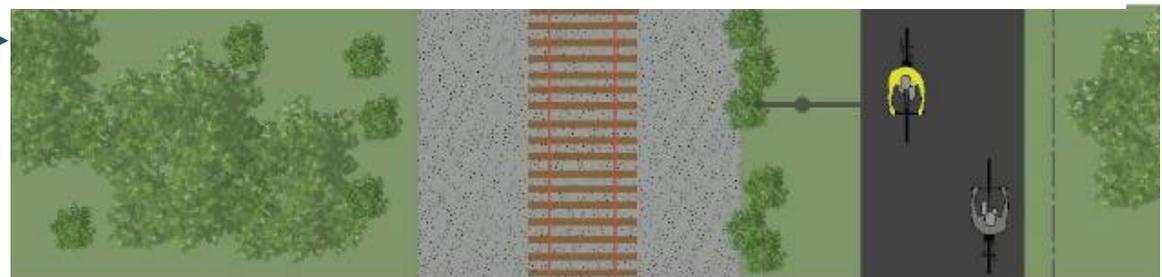
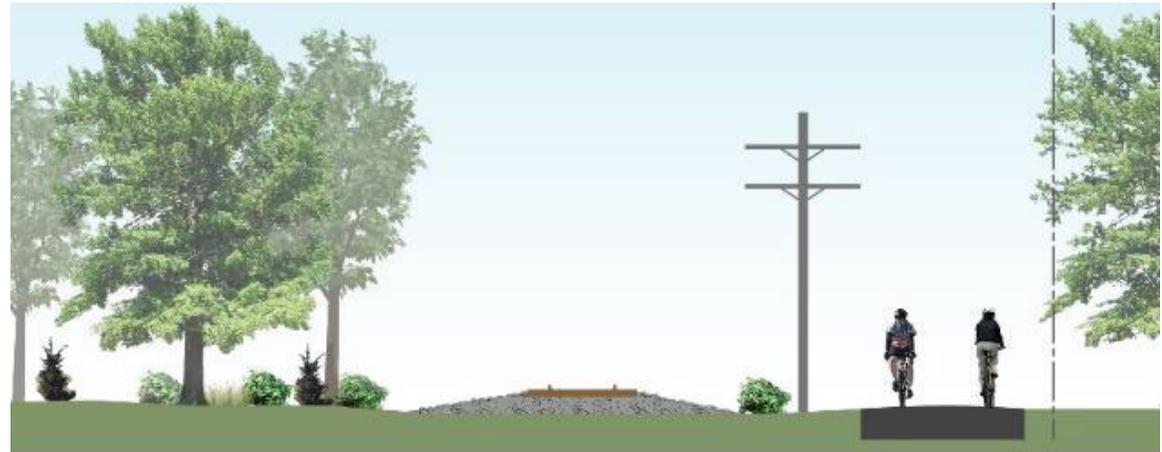


	Gravel Path	Paved Path
Segment 1 (MP 1.2 to MP 1.7)	\$19,100,000	\$19,200,000
Segment 2 (MP 1.7-26.5)	\$28,400,000	\$35,800,000
Total Cost	\$47,500,000	\$55,000,000

Order-of-Magnitude Cost Estimates*

Options Included

- 1: Maintain and preserve rail corridor
 - Continue current maintenance activities
 - Reestablish freight rail service
 - Implement passenger rail service
- 2: Interim Trail Until Rail (TUR)
- 3: Rail with Trail (RWT) →
- 4: Annual Maintenance Costs



* includes 30% contingency, 10% design, and 15% construction administration

Order-of-Magnitude Cost Estimates*

Options Included

- 1: Maintain and preserve rail corridor
 - Continue current maintenance activities
 - Reestablish freight rail service
 - Implement passenger rail service
- 2: Interim Trail Until Rail (TUR)
- 3: Rail with Trail (RWT) →
- 4: Annual Maintenance Costs



Rail with Trail in Ellsworth (MaineDOT-approved 10.5' offset with fence)

* includes 30% contingency, 10% design, and 15% construction administration

Cost Estimate Option 3: Rail With Trail

Key Components/Assumptions

- Trail construction starts at MP 1.2
 - Eastern Prom Trail continues south
- New Bridge Cove trail bridge
- Trail incorporates the min. 15' offset
- Marked crosswalks, warning signs and potential flashing beacons at grade crossings
- Retaining walls etc. used to ensure RWT design stays within the ROW (no on-road bypasses)
- Bridges carrying rail tracks include new adjacent structure to carry the trail
- Some roadway overpasses rebuilt to provide more width to accommodate rail + trail
- Rail corridor to remain as-is (no restoration of rail service included)

	Gravel Path	Paved Path
Segment 1 (MP 1.2 to MP 1.7)	\$19,300,000	\$19,300,000
Segment 2 (MP 1.7 to MP 26)	\$70,700,000	\$75,000,000
Total Cost	\$90,000,000	\$94,300,000

Not Included:

- Environmental mitigation costs
- Trailheads/parking areas

Cost Estimate: Ongoing Maintenance

Restoration of Rail Options

- Includes ongoing track/signal system inspection and maintenance
 - Replacement of cross ties
 - Road crossing improvements and repairs
 - Switch maintenance
 - Cutting back brush and vegetation

	Annual Cost (per Track Mile)	Annual Cost (26-mile corridor)
Freight Service	\$82,000	\$2,132,000
Passenger Service	\$90,000	\$2,340,000

Trail Options (TUR or RWT)

- Estimates per Rail to Trails Conservancy and Pennsylvania Dept. of Conservation & Natural Resources 2015 study
 - Patching root damage
 - Restriping/repairs of road crossing treatment
 - Cutting back brush and vegetation

	Annual Cost (per Trail mile)	Annual Cost (26-mile corridor)
Gravel Path	\$3,500 - \$5,500	\$91,000 - \$143,000
Paved Path	\$3,000 - \$5,000	\$78,000 - \$130,000

Note: MaineDOT policy promotes agreements w/ local municipalities or non-profit entities to fund maintenance of the trail

Economic Analysis: Restoration of Rail Service

Benefits (Freight Rail)

- Temporary (construction) and permanent (maintenance) job creation
- Potential additional investments such as expanded maintenance facilities
- Reduction of demand for heavy truck traffic to carry freight

Freight Rail

	Capital Construction	Annual Maintenance
Cost	\$22.2m	\$2.1m
Job Creation	281 (temporary)	18 (permanent)
Labor Income	\$15.2m	\$1.4m
“Value added”*	\$19.0m	\$2.0m
Total Output	\$42.4m	\$4.1m

* - Value added: concept of a dollar spent re-circulating through the economy, creating the “ripple effect”

Economic Analysis: Restoration of Rail Service

Benefits (Freight Rail)

- Temporary (construction) and permanent (maintenance) job creation
- Potential additional investments such as expanded maintenance facilities
- Reduction of demand for heavy truck traffic to carry freight

Benefits (Passenger Rail)

- Reduction in vehicle traffic and associated emissions along the Auburn/Portland corridor
- Potential changes in the development mix and resulting land values (especially with the potential build-out of future passenger rail stations)

* - Value added: concept of a dollar spent re-circulating through the economy, creating the "ripple effect"

	Capital Construction	Annual Maintenance	
Freight Rail	Cost	\$22.2m	\$2.1m
	Job Creation	281 (temporary)	18 (permanent)
	Labor Income	\$15.2m	\$1.4m
	"Value added"*	\$19.0m	\$2.0m
	Total Output	\$42.4m	\$4.1m
	Passenger Rail	Cost	\$274.0m
Job Creation		3,474 (temporary)	20 (permanent)
Labor Income		\$187.0m	\$1.6m
"Value added"*		\$234.8m	\$2.2m
Total Output		\$523.4m	\$4.5m

Economic Analysis: Passenger Rail Service

Development Impact

- Four station *locations* (not specific sites)
 - Auburn, just south of Danville Junction
 - Pineland East, North Pownal
 - Yarmouth Junction (transfer point to Amtrak)
 - Ocean Gateway, Portland

Summary Comparison of Potential Benefits - by Station Study Area	Auburn		Pineland East		Yarmouth Junction		Ocean Gateway Portland
	Low	High	Low	High	Low	High	
New Housing (1)	37	58	17	26	85	172	NOTE: Potential development at this station not analyzed because the area is generally considered to be built out
Owner Units	26	43	13	22	60	135	
Renter Units	11	15	4	4	25	37	
Change in HH Spending in \$1,000's	\$898.7	\$1,427.0	\$538.4	\$871.9	\$3,425.9	\$5,416.1	
Development Potential	4,559		5,073		15,682		
Retail SF	666		4,580		11,342		
Non-Retail SF (2)	3,894		493		4,340		
Potential Employment (3)	62		8		74		
Potential Spending	\$99,674		\$12,886		\$118,794		
Potential Fiscal Impacts (FY22)	Low	High	Low	High	Low	High	
Owner Value (4)	\$5,328.67	\$8,812.80	\$3,830.67	\$6,482.67	\$17,680.00	\$39,779.99	
Renter Value (5)	\$1,447.37	\$1,973.69	\$481.72	\$481.72	\$3,010.74	\$4,455.90	
Total Residential Value \$1,000's	\$6,776.04	\$10,786.49	\$4,312.38	\$6,964.38	\$20,690.74	\$44,235.89	
Estimated Gross Property Tax	\$161,405	\$256,934	\$59,511	\$96,109	\$409,677	\$875,871	

Economic Analysis: Trail Options

Additional Spending by Trail Users

- Trip estimates: 129,750 to 195,000 per year
- Visitors to the region anticipated to be approx. 25% of trail users
- Trail users estimated to spend, on average, \$118 per day* on:
 - Recreational equipment and misc. retail
 - Transportation cost
 - Lodging
 - Food and drink
- Total spending: \$3.5-5.3 million annually

* - includes snowmobiles; spending will be significantly less in segments where snowmobile use is not allowed



Eastern Prom trail in Portland

Economic Analysis: Trail Options

Potential Residential Property Value Benefits

- Currently, within the Berlin Subdivision Rail Corridor:
 - **3,382** single family units
 - Average per unit valuation of **~\$347,500**
- Estimated impact of proximity to green space or trails varies, but generally offers a 5% to 10% benefit to home value
 - **At 5%:** average impact of **~\$17,375**
 - **At 10%:** average impact of **~\$34,750**

Summary Residential Values by Town - Berlin Subdivision Rail Corridor					
Single Family Units					
Location	# of Units	Total Valuation (in millions)	Average Value per Unit	5% Value Increase	10% Value Increase
Auburn	6	\$1.12	\$186,250	\$9,313	\$18,625
Cumberland	338	\$153.73	\$454,833	\$22,742	\$45,483
Falmouth	530	\$297.62	\$561,541	\$28,077	\$56,154
New Gloucester	189	\$42.90	\$226,977	\$11,349	\$22,698
North Yarmouth	284	\$105.00	\$369,726	\$18,486	\$36,973
Portland	1,096	\$248.08	\$226,353	\$11,318	\$22,635
Pownal	45	\$4.73	\$105,098	\$5,255	\$10,510
Yarmouth	894	\$321.99	\$360,172	\$18,009	\$36,017
Totals or Averages	3,382	\$1,175.17	\$347,479	\$17,374	\$34,748

Economic Analysis: High-level Takeaways

Restoration of Rail Service

- Potential development opportunities at passenger station(s)
- Positive fiscal and economic benefits to communities impacted
- Increased employment and economic activity (with either freight or passenger)
- Potential reduction in auto traffic, emissions, transportation costs along the Lewiston/Auburn to Portland corridor

Interim Trail or Rail with Trail

- Relatively strong anticipated use for any trail scenario
- Potential for increased consumer spending estimated at \$3.5m to \$5.3m annually (includes snowmobile use)
- Offers a “nearby” facility for increased recreational activity = more active population and reduced health care costs
- Potential positive fiscal impact on neighboring residential property values