

Lower Road Rail Corridor

PUBLIC MEETING

June 22, 2023

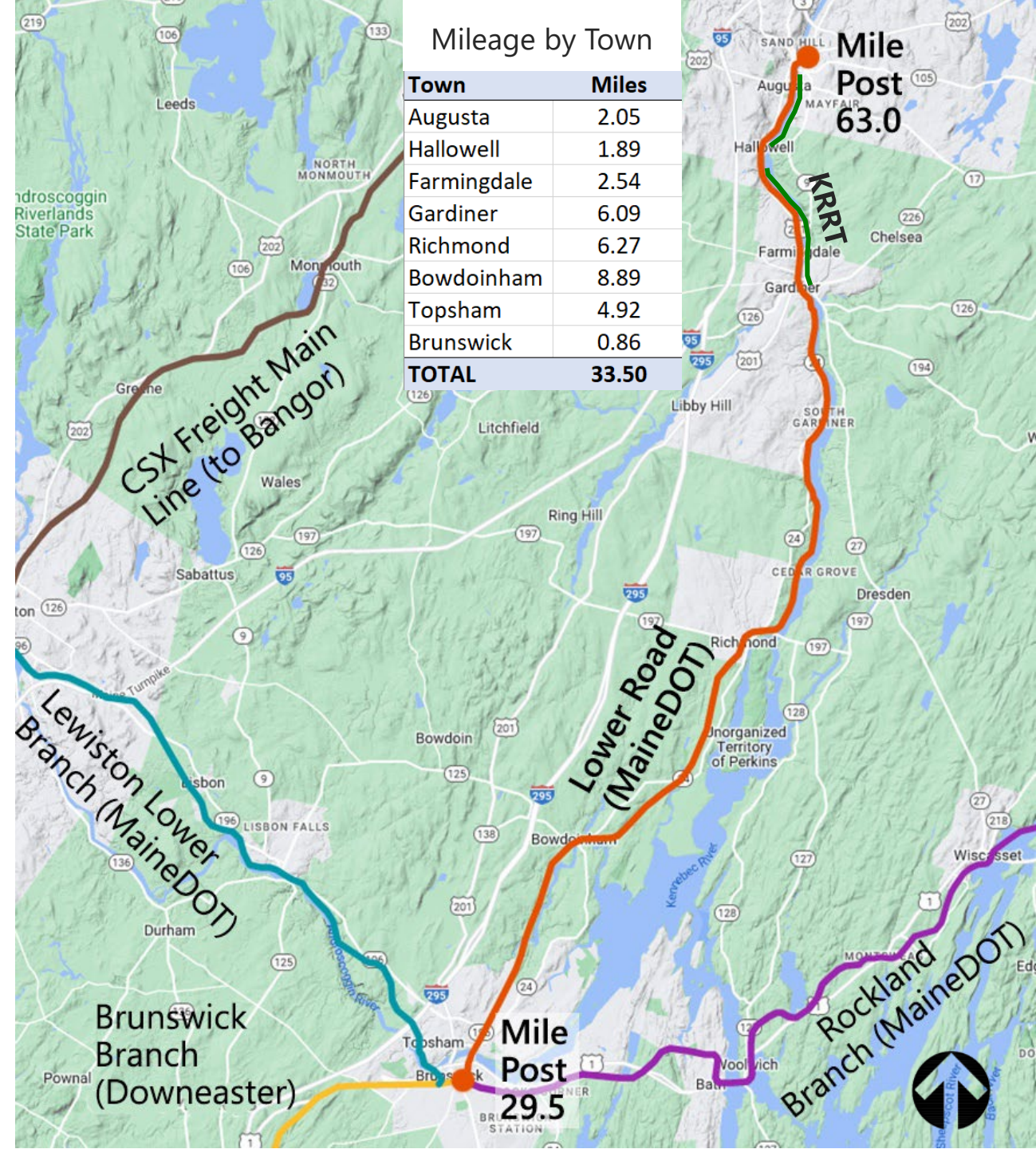


Scope of the Study

- 66'-99' wide state-owned Lower Road Rail Corridor through 8 towns
- Intent: Inform the recommendation of the Rail Use Advisory Council, per Maine LD 1133

Key Tasks:

- Cost estimates for the potential uses:
 - 1: Maintain and preserve rail corridor
 - Continue current maintenance activities
 - 1A: Reestablish freight rail service
 - 1B: Implement passenger rail service
 - 2: Interim Trail Until Rail
 - 3: Rail with Trail
- Environmental assessment
- Economic benefits analysis



Rail Corridor Context: Character



MP 29.5 – railroad “Y” at Federal St in Brunswick



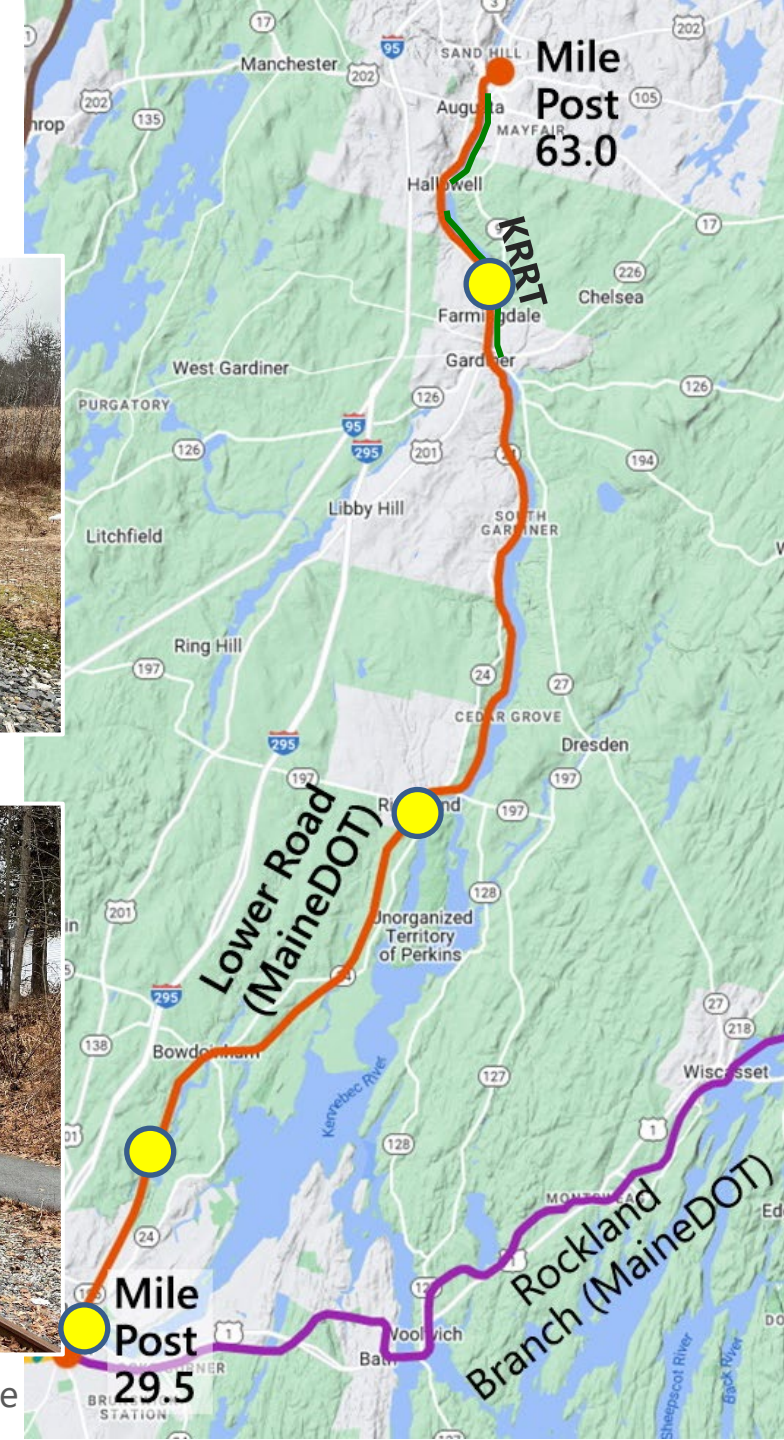
MP 33.9 – wooded area in Topsham



MP 44.7 – Pleasant St. crossing in Richmond



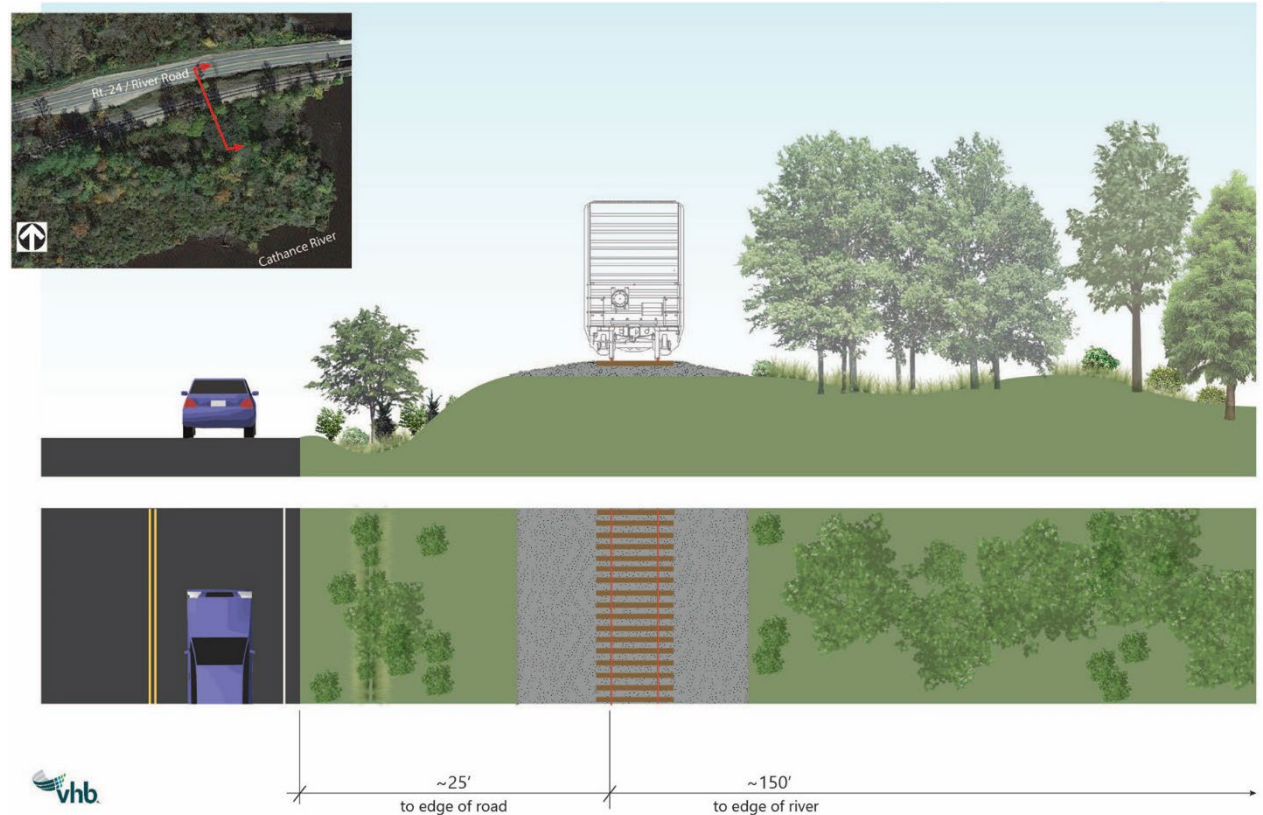
MP 57.6 – Kennebec R. Rail Trail in Farmingdale



Order-of-Magnitude Cost Estimates*

Options Included

- Maintain and preserve rail corridor →
- 1: Restoration of Rail Service
 - Freight rail service: Class 1 track, 10 mph maximum authorized Speed (MAS)
 - Passenger rail service: Class 3 track, 60 mph MAS (40 mph if used for freight)
- 2: Interim Trail
- 3: Rail with Trail (RWT)
- *Annual Maintenance Costs (options 1-3)*



River Road segment, Bowdoinham

* all estimates include 30% contingency, 10% design, and 15% construction administration

Cost Estimate Option 1A: Freight Rail Service

Key Components/Assumptions

- Maintain single Mainline track to Class 1 conditions (10 mph for freight only)
- Partial Tie and Rail Replacement
- Rehab Roadway at-grade XINGS (select locations)
- Culvert work (minor rehab to total replacement at 26 locations, or 10% total)
- Includes new bridge over Rt. 24 in Richmond
- NOT included: future siding construction costs



Britt Gully Road crossing, Augusta

	Freight Only Service
Freight Rail Cost	\$55,000,000

Cost Estimate Option 1A: Freight Rail Service

Annual Maintenance Key Components/ Assumptions (*freight and passenger*)

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



Britt Gully Road crossing, Augusta

	Freight Only Service	Annual Maintenance
Freight Rail Cost	\$55,000,000	\$2,747,000

Cost Estimate Option 1B: 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
- Culvert work (minor rehab to total replacement at 26 locations, or 10% total)
- Includes new bridge over Rt. 24 in Richmond
- NOT included: passenger station construction

	Passenger Service	Annual Maintenance
Passenger Rail Cost	\$363,000,000	\$3,015,000

Order-of-Magnitude Cost Estimates*

Options Included

- Maintain and preserve rail corridor
- 1: Restoration of Rail Service
 - Freight rail service: Class 1 track, 10 mph maximum authorized Speed (MAS)
 - Passenger rail service: Class 3 track, 60 mph MAS (40 mph if used for freight)
- 2: Interim Trail →
- 3: Rail with Trail (RWT)
- *Annual Maintenance Costs (options 1-3)*



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

Cost Estimate Option 2: Interim Trail

Key Components/Assumptions

- Trail construction starts at MP 29.5 and incorporates the 6.3 miles of the KRRT
- Removal of existing tracks and replace with 10'-wide stonedust/gravel or asphalt trail surface
- New timber trail surface at bridge locations (plus new bridge over Rt. 24 in Richmond)
- Marked crosswalks, warning signs and potential flashing beacons at grade crossings
- Not included: environmental permitting/mitigation costs, or trailheads/parking areas



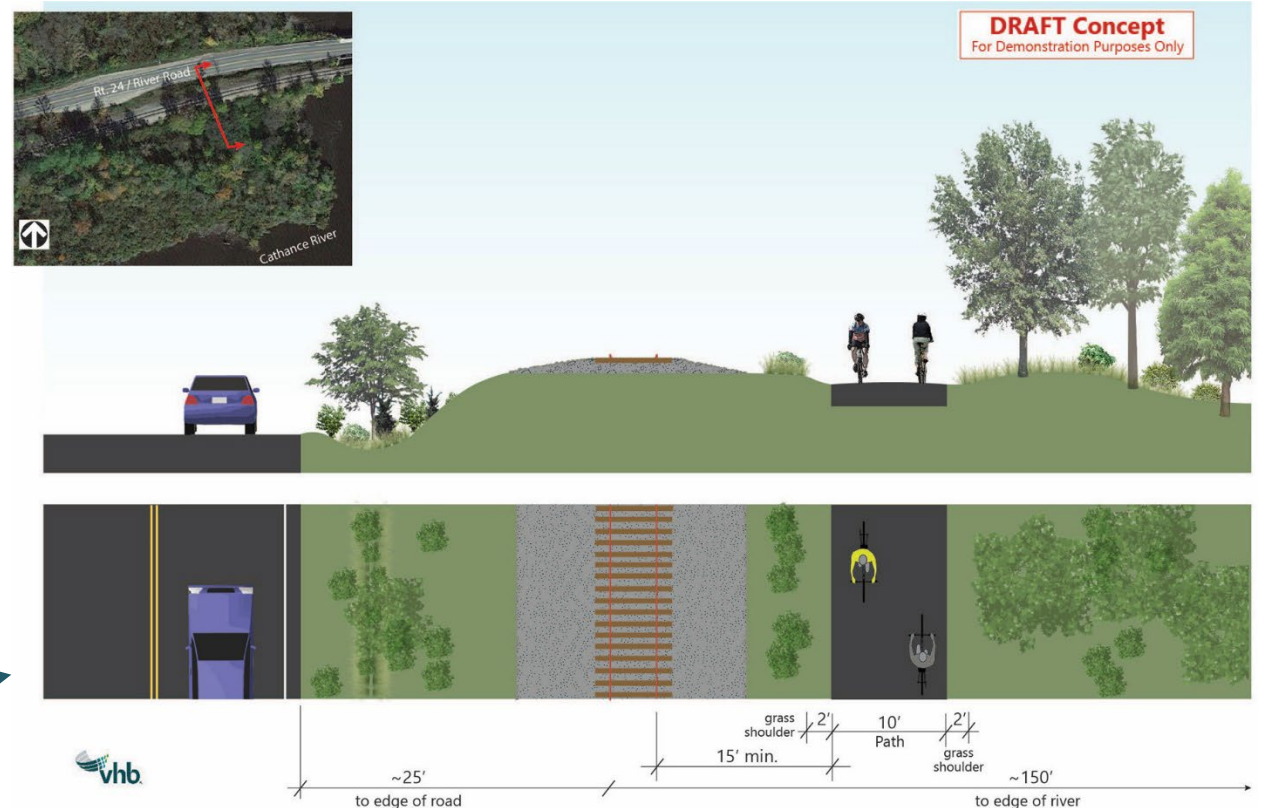
Down East Sunrise Trail (photo: Sarah Cushman)

	Gravel/Stonedust	Paved Surface
Interim Trail Cost	\$34,300,000	\$43,000,000

Order-of-Magnitude Cost Estimates*

Options Included

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- 1: Restoration of Rail Service
 - Freight rail service: Class 1 track, 10 mph maximum authorized Speed (MAS)
 - Passenger rail service: Class 3 track, 60 mph MAS (40 mph if used for freight)
- 2: Interim Trail
- 3: Rail with Trail (RWT) →
- *Annual Maintenance Costs (options 1-3)*



River Road segment, Bowdoinham

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Cost Estimate Option 3: Rail with Trail (RWT)

Key Components/Assumptions

- Trail construction starts at MP 29.5 and incorporates the 6.3 miles of the KRRT
- Existing tracks to remain; 10'-wide trail with minimum offset 15' from the nearest rail
- New bridges and wider underpasses where needed
- Marked crosswalks, warning signs and potential flashing beacons at grade crossings
- Not included: additional ROW, environmental permitting/mitigation costs, or trailheads/pkg areas



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

	Gravel/Stonedust	Paved Surface
Rail with Trail Cost	\$146,300,000	\$151,800,000

Cost Estimate: Trail Maintenance

Interim Trail or Rail with Trail Options

- 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

	Gravel/Stonedust	Paved Surface	Annual Maintenance
Interim Trail Cost	\$34,300,000	\$43,000,000	\$93,800 - \$147,400
	Gravel/Stonedust	Paved Surface	Annual Maintenance
Rail with Trail Cost	\$146,300,000	\$151,800,000	\$80,400 - \$134,000

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

Cost Estimate Comparison

			Annual Maintenance
Freight Rail Cost	\$55,000,000		\$2,747,000
			Annual Maintenance
Passenger Rail Cost	\$363,000,000		\$3,015,000
	Gravel/Stonedust	Paved Surface	Annual Maintenance
Interim Trail Cost	\$34,300,000	\$43,000,000	\$93,800 - \$147,400
	Gravel/Stonedust	Paved Surface	Annual Maintenance
Rail with Trail Cost	\$146,300,000	\$151,800,000	\$80,400 - \$134,000

High-level Environmental Assessment

Key Issues

- Restoration of Freight Rail Service
 - No Issues * (uses current corridor and rail bed)
- Restoration of Passenger Rail Service
 - Requires min. 10'-wide expansion of rail embankment for three, 2-mile-long sidings in some areas
 - Impact to wetlands: 0.7 acre
- Interim Trail Configuration
 - No Issues * (uses current corridor and rail bed)
- Rail with Trail Configuration
 - Requires min. 25'-wide expansion in some areas to provide space for 10' path and 15' setback
 - Potential 35'-expansion where sidings are needed
 - Impact to wetlands: 7-8 acres



MP 41.8 – Bowdoinham

* - work on existing culverts or bridges may require permit approvals

Economic Analysis: Restoration of Rail Service

Quantitative Benefits

- Temporary (construction) and permanent (maintenance) job creation
- Tax revenues from new jobs
- Potential additional investments such as expanded maintenance facilities

Freight Rail

	Capital Construction	Annual Maintenance
Cost	\$55.0m	\$2.7m
Job Creation	624 (temporary)	26 (permanent)
Labor Income	\$35.5m	\$1.5m
“Value added” *	\$47.6m	\$2.1m

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

Economic Analysis: Restoration of Rail Service

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	Capital Construction	Annual Maintenance	
Freight Rail	Cost	\$55.0m	\$2.7m
	Job Creation	624 (temporary)	26 (permanent)
	Labor Income	\$35.5m	\$1.5m
	“Value added” *	\$47.6m	\$2.1m
Passenger Rail	Cost	\$363.0m	\$3.0m
	Job Creation	4,118 (temporary)	29 (permanent)
	Labor Income	\$234.1m	\$1.6m
	“Value added” *	\$314.3m	\$2.3m

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

Economic Analysis: Passenger Rail Service

Qualitative Benefits: Development Impact and Quality-of-Life Issues

- *Based on annual passenger rail use estimate of 75,190 trips*
- Higher land values and opportunities for Transit Oriented Development (TOD) close to potential future rail stations
- Increased mobility and convenient transportation options
- Improved access to employment, education, and essential services
- Reduction in vehicle traffic and associated emissions along the I-295 corridor



TOD plan and development in Brookhaven NY (VHB)



Economic Analysis: Trail Options

Additional Spending by Trail Users

- *Based on annual trail use (any option) estimate of 63,750 to 96,000*
- Visitors to the region anticipated to be approx. 23% 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: \$1.7 - \$2.6 million annually

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



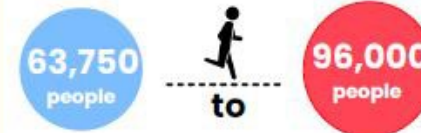
Kennebec River Rail Trail (image: Trail Link web site)

Economic Benefits Summary

Lower Road Rail Corridor

Trail Use & Spending

Trail usage from in area users would range from



Research indicates about



... of all trail users are from out of state.

This is approximately 14,663 to 22,080 annual out of state users.

Annual spending from out of state trail users
\$1.73 million - \$2.61 million

Construction of Rail with Trail paved path could offer a return to Maine economy of
\$131.42M

Construction of Interim Trail paved path could offer a return to Maine economy of
\$37.14M

Potential Trail Benefits

\$287,331

in annual savings from health-related purchases due to trail utilization (*added physical activity*)

Potential Rail Upgrade Benefits

For either Passenger Rail or Freight Rail

Development of new residential units, positively impacting property values and local tax receipts

Development of commercial, industrial, and warehouses

Increase in new employment opportunities

Construction of Passenger Rail could offer a return to Maine economy of
\$314.23M

Construction of Freight Rail could offer a return to Maine economy of
\$47.62M

Passenger Rail Impacts

Estimated annual spending from rail passengers could total

\$112,275

Estimated Value Added impact to Maine economy

\$130,174

Lower Road Rail Corridor

PUBLIC COMMENTS

More Info:

<https://www.maine.gov/mdot/ofps/ruac/lowerroad/>

