

Report on the financial implications of the proposed Squannacook River Rail Trail

Submitted jointly to the Townsend and Groton Board of Selectmen by the Townsend and Groton rail trail funding study committees

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Introduction

This report was prepared jointly by two individual town committees set up by the Board of Selectmen in Townsend and Groton. The Townsend committee was appointed in October 2008 by the Townsend Board of Selectmen, and was tasked with studying the fiscal implications to the town of converting the Massachusetts Bay Transportation Authority (MBTA) rail bed into a rail trail. The Groton committee

was formed in 2007 to supervise the preliminary environmental and engineering study made of this proposed rail trail, but was re-tasked in October 2008 with studying the fiscal implications to Groton of this rail trail conversion. The two committees have been meeting jointly since October 2008, with the location alternating between the two towns.

The financial implications studied by the two committees include design and building costs, on-going maintenance costs, costs associated with potential reconstruction as the trail ages, and potential liability costs.

The Financial Implications section of this report is broken into two sub-sections, with each sub-section focusing on a different approach towards building and maintaining the Squannacook River Rail Trail. These sub-sections are named:

- 1) MassHighway approach
- 2) Wachusett Greenways/DCR approach

These two different ways of building a rail trail have significantly different financial implications for the towns, and so are dealt with separately.

Members of the Townsend rail trail committee when it was first appointed were Hirk Fortin, Ken Gerken, Bill Martin, Steve Meehan, and Bill Rideout. Hirk Fortin served as chairman until Feb. 2009, at which time Steve Meehan became chairman. In Oct. 2010 Mark Cram replaced Ken Gerken on the committee.

The Groton rail trail originally consisted of Peter Cunningham, Bruce Easom, Pete Carson, Steve Legge, and Kevin McKenzie. In June 2010, Russ Murray replaced Kevin McKenzie. Peter Cunningham has served as chairman the entire period.

Background

The conversion of the Greenfield branch of the MBTA rail bed in Groton and Townsend began to be studied by a group of private citizens in 2002. In 2006 a non-binding referendum was held in Townsend on the rail trail conversion, and the vote was 1,021 in favor and 259 opposed. Between 2007 and 2008 a preliminary environmental and engineering study was undertaken by the engineering firm of Fay Spofford and Thorndike, paid for in Townsend by a Department of Conservation and Recreation grant and in Groton by Community Preservation Act funds. This study [1] concluded there were no serious environmental or engineering obstacles to the building of the rail trail. However, the boards of selectmen in both Groton and Townsend raised concerns about local costs and liability, and so formed town committees to study these aspects. This document is an interim report written jointly by those two town committees.

The 3.7 mile rail trail focused on in this study would begin at Depot Street in Townsend and follow the MBTA rail bed in a southeasterly direction to the Bertozzi Conservation Area in Groton – see Figure 1. A total of 2.8 miles of the trail would be located in Townsend, and 0.9 miles in Groton.

The MBTA is the owner of the entire corridor; the corridor is not simply a right-of-way. The MBTA can execute an Alternative Transportation Corridor lease agreement with a municipality or other

government agency for purposes of the installation, operation, maintenance and use as a rail trail. The term of the lease is 99 years for one dollar.

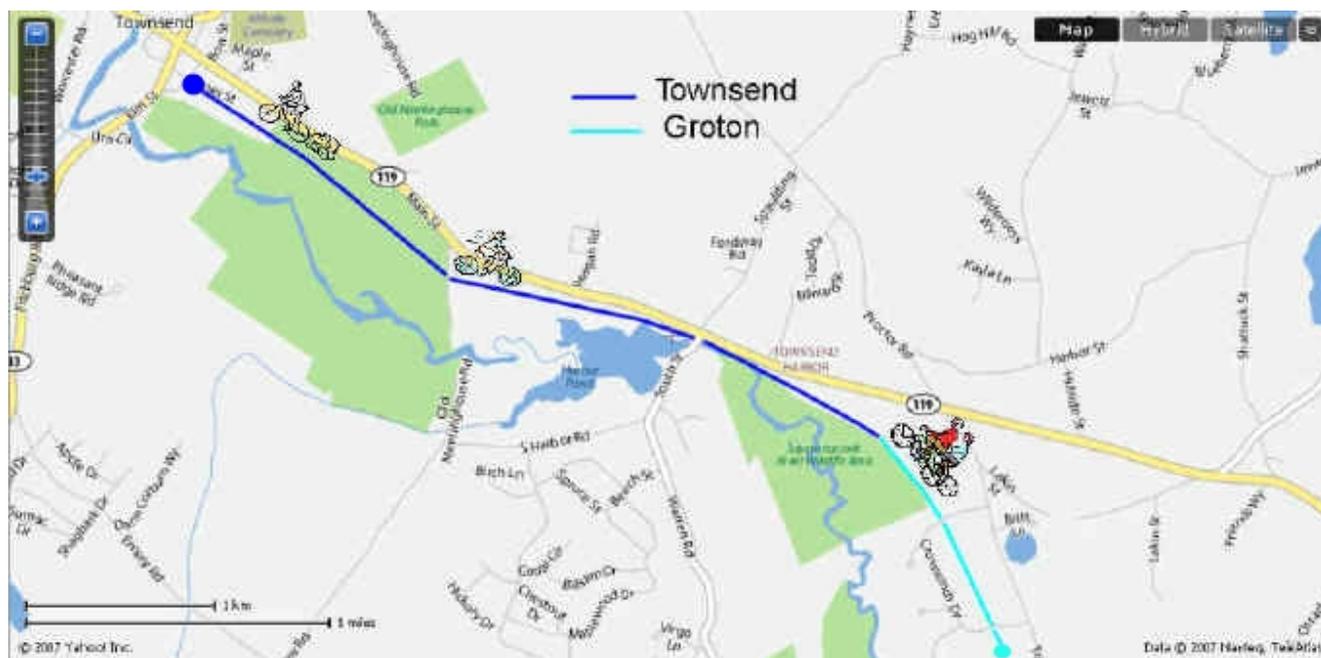


Figure 1: Map of proposed Squannacook River Rail Trail

Environmental Liability

According to their lease [2], the MBTA will not pay for any environmental clean up that might be needed in building the rail trail. Furthermore, the MBTA lease does not allow the lease signer to perform soil testing before the lease is signed. This environmental liability is a key issue in considering potential costs, and so back in December 2006 the rail trail advocates hired the environmental lawyer Steve Winslow to discuss this issue with the Townsend Board of Selectmen. Steve's presentation is summarized in the next few paragraphs.

When this first version of the MBTA lease was presented in 2001 to towns interested in rails to trails projects, they saw this environmental liability as a significant obstacle to their signing of the lease. For this reason, State Senator Pam Resor from Acton added language to the Municipal Relief Act, otherwise known as Chapter 46 of the Acts of 2003. This language amended Chapter 21E of the General Laws, which is the state's hazardous materials release and response act.

With this first legislation introduced by Senator Resor (the First Resor Legislation), towns were exempted from having to pay for cleaning up significant environmental problems, as long as the town was pursuing building a rail trail. This means that if a significant environmental problem was found while a rail trail was being built, the town's only responsibility would be to apply for grants to clean up the problem, and not to directly pay for the clean up.

As a follow-up to amending Chapter 21E, the Massachusetts Department of Environmental Protection issued Best Management Practices [3] to eliminate or minimize potential exposures to residual oil or

hazardous materials commonly found along railroad corridors being converted to rail trails. This document made it clear that standard railroad contaminants could be covered over as part of standard construction procedure, and it also discussed situations where additional steps would be needed. The goal of this document was to promote "rail-trail conversions that are both health-protective and cost-effective".

Based on this First Resor Legislation and the Best Management Practices document, some towns were willing to sign the MBTA lease, including Salisbury and Topsfield. However, even with these added protections, the MBTA lease still contained a clause requiring the towns to indemnify the MBTA for all liability relating to any pre-existing contamination. Some towns simply believed it was unfair that they had to take on the burden of applying for grants in the case of severe environmental contamination. This indemnification clause in the MBTA lease also raised the possibility that a town that signs the lease might even be liable for third-party suits, such as might arise if the environmental contamination from MBTA property affected an abutter's property.

To address the MBTA indemnification clause and third party liability issues, Senator Resor introduced another amendment to the 2006 Economic Stimulus bill. This amendment allows towns to purchase insurance to cover the cost of cleaning up rail trails found to be severely contaminated. Towns with this insurance would not have to apply for grants to fund this clean-up, and would also be protected against third party suits. However, under the insurance policy they would be liable for a \$50,000 deductible per incident. This amendment became law in July 2006. According to this statute, the state would cover 50% of such a policy. Other towns have been quoted prices near \$50,000 for such a policy, so that the town would need to cover \$25,000 of that cost.

Preliminary Environmental and Engineering Study

From November 2007 through August 2008 the engineering firm of Fay, Spofford and Thorndike (FST) undertook a preliminary environmental and engineering study of the proposed Squannacook River Rail Trail. Townsend's portion of this study was financed by a DCR Recreational Trails Grant, and Groton paid for its share with Community Preservation Funds. This study included a public meeting held on June 12, 2008 at North Middlesex Regional High School, which was attended by about 150 residents. This study also included an inspection of the rail bed by a Licensed Site Professional, who visually found no sign of environmental contamination. FST's report found no significant environmental or engineering impediments to building the rail trail. [1] Much of the FST report makes the assumption that the rail trail would be built via the MassHighway approach, to be discussed in the next section. A copy of the full report can be found on the Squannacook River Rail Trail web site at http://www.squannacookriverrailtrail.org/pdf/SRRT_Assessment.pdf.

Financial Implications

In this section, the financial implications to the towns of the two approaches to building a rail trail, 1) MassHighway and 2) Wachusett Greenways/DCR, are examined in detail.

MassHighway approach

In the MassHighway approach, the builder of the Squannacook River Rail Trail would be MassHighway (now known as The Massachusetts Department of Transportation Highway Division). A recent example of a MassHighway approach rail trail would be the paved Bruce Freeman Rail Trail in Chelmsford and Westford. To date, every rail trail built by MassHighway has been a paved one.

In the MassHighway approach, the town is the signer of the MBTA lease and is ultimately responsible for the trail. As such, with the MBTA approach, the town would have to incur the environmental liability of the MBTA lease. As mentioned before, environmental insurance could be purchased at a cost of approximately \$50,000, with the state covering half that cost, and the town the other half.

With the MassHighway approach, the trail is typically paid for with federal transportation funds with state and town cost sharing. According to the FST report, the design cost using this process is typically \$100,000 per mile, and the construction cost is up to \$1,000,000 per mile. Construction of phase 1 of the Bruce Freeman Rail Trail, completed in 2008, cost 4.24 million dollars for 6.8 miles, or \$623,000 per mile, according to the MassHighway web site.

At the March 10, 2009 meeting, Arthur Frost from MassHighway spoke to our group about how state and local matching requirements work. Arthur noted that the matching formulas were different, depending on whether the funding was from an earmark in the federal highway bill, or from a standard funding source such as the Transportation Enhancements portion of the federal highway bill. These formulas are summarized in Table 1.

<i>Funding Source</i>	<i>Stage</i>	<i>Federal %</i>	<i>State %</i>	<i>Local %</i>
Earmark	Design	80	0	20
	Construction	80	20	0
Normal	Design	80	10	10
	Construction	80	10	10

Table 1: MassHighway approach – cost sharing

Given design cost of \$100,000/mile and construction cost of \$1,000,000/mile, the total town cost for Groton's 0.9 miles and Townsend's 2.8 miles are given in Tables 2 and 3.

	<i>Groton – Earmark</i>	<i>Groton – Normal</i>
Design	$0.9 \times 100000 \times 0.2 = 18,000$	$0.9 \times 100000 \times 0.1 = 9,000$
Construction	$0.9 \times 1000000 \times 0.0 = 0$	$0.9 \times 1000000 \times 0.1 = 90,000$
Total	18000	99000

Table 2: Local cost to Groton for MassHighway approach for earmark and non-earmark scenarios.

	<i>Townsend – Earmark</i>	<i>Townsend - Normal</i>
Design	$2.8*100000*0.2 = 56,000$	$2.8*100000*0.1 = 28,000$
Construction	$2.8*1000000*0.0 = 0$	$2.8*1000000*0.1 = 280,000$
Total	56000	308000

Table 3: Local cost to Townsend for MassHighway approach for earmark and non-earmark scenarios

From these tables, it is clear that the local match is significantly lower for earmarked funds than for non-earmarked funds. Going from standard funding to earmark funding reduces Groton's match from \$99,000 to \$18,000, and Townsend's match from \$308,000 to \$56,000.

Our committee also spent a good deal of time researching routine maintenance costs for a paved rail trail. Due to its proximity, we researched the maintenance costs of the Nashua River Rail Trail. The research included contacting both the Massachusetts Department of Conservation and Recreation (DCR), the operators of the rail trail, and the various towns it passes through who also participate in certain trail maintenance activities. The total yearly cost for the eleven mile rail trail was \$17,200, or \$1564 per mile. This cost does not include any capital equipment costs.

Estimating long-term maintenance costs such as repaving is very difficult to do. It is almost certain that the formula for state and local matches will have changed numerous times before the time comes to repave the trail.

Finally, it should be noted that the MassHighway approach is a difficult one. The towns involved with the Bruce Freeman Rail Trail fought for decades to get their trail built, and raising local matching funds was not one of their major issues.

Wachusett Greenways/DCR approach

The Wachusett Greenways/DCR approach is in many ways the complete opposite of the MassHighway approach. In this case the builder of the trail is neither the town nor the state, but a local non-profit.

The model for this approach is the Mass Central Rail Trail as built by the non-profit Wachusett Greenways [4]. Some members of our committee toured this stone dust rail trail with one of the organization's founder's Ed Yaglou, and all on the tour were impressed by the quality of the biking

experience. The stone dust lead to slower bicycle speeds, and gave the trail a more rural feel than the Nashua River Rail Trail. Ed explained that his non-profit was responsible for both building and maintaining the trail.

The Mass Central Rail Trail is on property with a variety of owners. None of the present Mass Central Rail Trail is presently owned by the MBTA, so the Wachusett Greenways group has not dealt with issues of the MBTA lease. However, part of the rail bed of the Mass Central Rail Trail is owned by DCR. DCR and Wachusett Greenways have a signed memorandum of agreement, which calls for Wachusett Greenways to build and maintain that rail trail.

This model, where DCR controls the rail bed, but signs an agreement with a non-profit to build and maintain a stone dust rail trail, is what we call the Wachusett Greenways/DCR approach. For the case of the Squannacook River Rail Trail, the one variation would be that DCR does not own the rail bed, but instead would sign the MBTA lease.

Our group has had a number of conversations with DCR officials about this approach. Our main points of contact have been Conrad Crawford, Director of Partnerships, Tom LaRosa, General Counsel, and Rick Sullivan, former DCR Commissioner and present Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs. DCR said that they were very interested in such public/private partnerships. The overall preliminary response from DCR has been very positive.

The costs to the individual towns of the Wachusett Greenways/DCR approach are very limited. The town would not be responsible for the building or maintenance of the trail, now or in the future. There would be no environmental liability to the town, since it would not sign the MBTA lease. There may be public safety costs; however, the police chiefs of Pepperell and Groton have downplayed any additional costs related to the existing Nashua River Rail Trail and did not give committee members any figures.

The actual costs to build and maintain such a stone dust rail trail are not directly relevant to this report, because they are not costs that would be born by the towns. However, they are briefly discussed here for comparison to the MassHighway approach. Wachusett Greenways estimates they pay \$50,000 - \$100,000/mile for building a stone dust trail. Wachusett Greenways built their trail in an area where the track had already been removed, and rail tracks can have significant salvage value.

The non-profit Iron Horse Preservation Society has built a number of stone dust rail trails recently in Massachusetts where the entire project cost has been covered by salvage of the tracks. In most cases, these were rail beds owned by the MBTA, who have let the lease signers salvage the tracks. A representative from Iron Horse has inspected our tracks and found the tracks to be in very good shape, but the ties have little salvage value. The salvage value of the tracks can mitigate the construction costs of the rail trail.

Wachusett Greenways does their maintenance through volunteer efforts. There are aspects of

maintenance where some towns assist, but that assistance is minimal. A significant advantage of a stone dust surface is that most repairs require only a wheel barrow and hand tools.

Other topics investigated

There were a number of other topics that might have some financial implications to the town that were investigated. These topics are unrelated to the particular scenario by which the rail trail would be built, and are therefore in their own section. These two topics are freight rights and routing alternatives in Townsend Harbor.

Freight rights

During FST's study, Bob LaVita of Transit Realty Associates, the real estate branch of the MBTA, noted that he did not have any record of the then Boston and Maine railroad surrendering their freight rights to the section of the rail bed being considered for the rail trail. While the MBTA is the in-fee owner of that rail bed, Boston and Maine did have freight rights to the line when the MBTA took the line in 1977. Bob told FST that he could not sign the lease if those freight rights were not surrendered. The Boston and Maine Railroad is now a subsidiary of Pan Am Railways. Our committee's initial discussions with Pan Am indicated that Pan Am would desire remuneration for going through the process of giving up these rights.

However, due to excellent research by DCR's General Counsel Tom LaRosa, this entire topic became moot. Tom found that Boston and Maine had surrendered freight rights on April 28, 1983 and sent us a copy of the final ruling. We forwarded that to Bob LaVita, who agreed freight rights were no longer an issue. A copy of that ruling [5] was included in the Townsend meeting minutes of Oct 14, 2010.

Routing alternatives in Townsend Harbor

FST looked at two alternative routings in the Townsend Harbor area (see sections 11.2 and 11.3 of their study) . The first route simply stays on the rail bed in that area the entire way. The second route would follow a sidewalk on the south side of Route 119 in front of the Shepherds' business and cross South Road at the Route 119 light. It would then continue on a sidewalk in front of the Reed Homestead, two private residences, and Harbor Church. The alternative route would return to the rail bed via the Harbor Church parking lot. Figure 2 shows this proposed alternative route:



Figure 2: Sidewalk and rail bed alternative routes. Green: proposed sidewalk. Blue: return to rail bed via Harbor Church parking lot. Red dashed line: MBTA rail bed.

Only a small portion of this proposed sidewalk presently exists. Only the town is able to build such a sidewalk, so ultimately the second routing alternative is only possible if the town builds such a sidewalk. Our committee discussed the advantages and disadvantages of both routes, including financial impacts. For the route that stays on the rail bed, the advantages included a more scenic route and not needing the town to build the sidewalk. However, the committee voted unanimously to support the sidewalk routing for the following reasons:

- 1) It would eliminate the need to improve the only two bridges on the trail, saving money.
- 2) It would cross South Street at the safest point, the intersection with Route 119.
- 3) It would satisfy the Townsend Historical Society's expressed interest in keeping the railroad bed intact behind the Reed Homestead.
- 4) It would relocate the trail from behind the only residential ab-utter north of the trail without a 46 1/2 foot buffer between the center line of the trail and the abutter's property line (74 Main Street).
- 5) It would relocate the trail from an area described as prone to possible flooding.

Ultimately, the routing of the rail trail depends on the town building a sidewalk, and that is clearly a town decision. However, the committee felt that while either route is possible, the sidewalk route is strongly preferred. It should be noted that there was no interest in routing the trail to a sidewalk if the sidewalk were on the north side of Route 119, which would require crossings of that busy state highway.

Summary

Both the Townsend and the Groton Board of Selectmen tasked our committees with studying the financial implications of the proposed rails-to-trail conversion. The Groton Board of Selectmen requested a financially prudent approach, and the Townsend Board of Selectmen set the more rigorous criteria of no town money being spent for construction and maintenance, and no environmental liability to the town.

Our committee looked at two separate approaches to building a rail trail. The costs of the MassHighway approach depend critically on whether earmarked funds are used, but in either case local money would be required that is presently very tight.

The Wachusett Greenway/DCR approach removes the towns from responsibility for construction or maintenance or liability of the trail, and so meets the criteria of both Boards of Selectmen. It is our committee's recommendation that this approach be taken.

While no direct action is required from either Board of Selectmen to pursue the Wachusett Greenways/DCR approach, a letter of support to DCR and to the non-profit to be formed (tentatively titled Squannacook Greenways) would be appreciated by those committee members who will go on to work further on this trail via this non-profit. The Townsend committee would also like to encourage the Townsend Board of Selectmen to pursue building a sidewalk on the south side of Route 119 as discussed above.

Finally, both our committees would like to thank the many people who have helped us these past few years, and especially the two Boards of Selectmen, who have handled this often contentious subject with dignity and respect shown to all sides.

References

- 1) Squannacook River Rail Trail Preliminary Environmental and Engineering Assessment, Fay Spofford and Thorndike, August 2008, http://www.squannacookriverrailtrail.org/pdf/SRRT_Assessment.pdf
- 2) See draft MBTA lease from October 2006 at <http://www.squannacookriverrailtrail.org/TRAATCLease10.31.pdf>
- 3) Best Management Practices for Controlling Exposure to Soil during the Development of Rail Trails: <http://www.mass.gov/dep/cleanup/laws/railtrai.doc>
- 4) Wachusett Greenways: www.wachusettgreenways.org

5) Boston and Main decision:

http://www.squannacookriverrailtrail.org/pdf/BM_April_28_1983_attach2_oct_14_2010.pdf