

Bristol TAP 21.

Pemi-Path, Phase 2, 0.7 mile

Waterfall to Turnabout to (Waterfall)

a 4 season alternative path to Rt 3A, 2.2 miles when completed.

Project description

Map

Cost allocations

Readiness

Feasibility

Financial

Connectivity

Safety

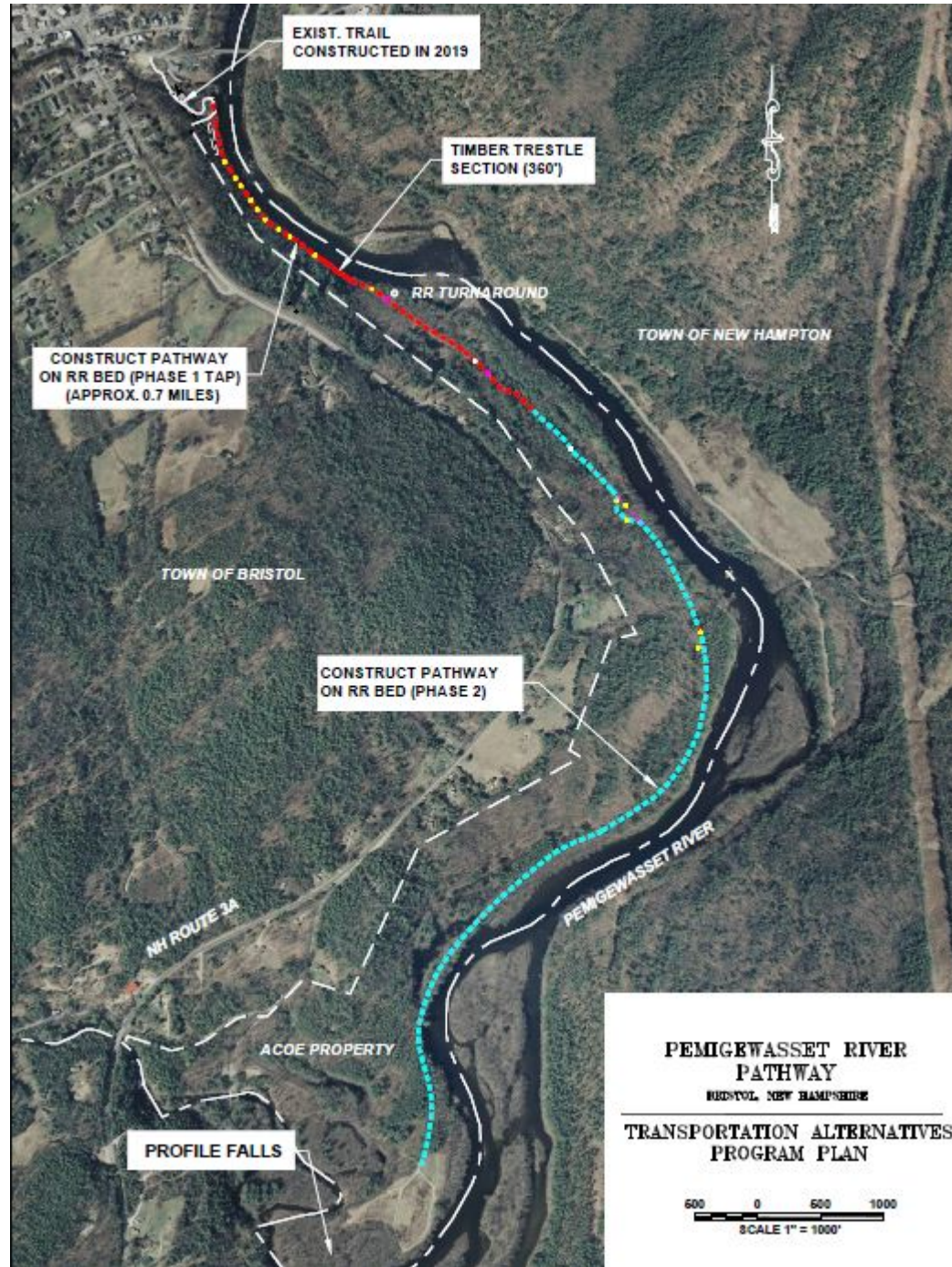
Safety Improvements

LOS

Pemi-Path project description

- Phase 2 (of 3), 0.7miles of trail to 1800's rail turnabout.
- Phase 1, Center St to Pemigewasset/Newfound confluence. -
900 ft ADA compliant pathway over 70 ft Newfound R waterfall.
- Lots of pedestrian traffic, now want to go to Rail Turnaround.
- Phase 2 entails
 - Environmental studies (NHDOT, NHDES, USACE) -
 - 0.7 miles of 8 ft wide restored rail bed (hardpack gravel)
 - 360 ft wooden trestle bridge along river edge -
 - Water Management-catchment basin and sediment pond

Map of Pemi-Path in Bristol



Project Major Cost Components

A) Design/Engineering:	\$243,100
(Costs for engineering study, preliminary design, environmental review, final design, and bid phase services)	
B) Right-Of-Way:	\$ 0
C) Construction:	\$675,455
(Cost of constructing project, materials, and labor)	
D) Construction Engineering:	\$280,931
(Cost of engineering oversight for the project (includes 20%~\$200K for Bristol/NHDOT mgt)	
Project Total:	\$1,199,486

Details in cost submission page KV partners

Readiness

- Project maturing since 2010 MP, provides a 4 season riverside trail alternative to Rt 3A, waterfall to waterfall.
- Phase 1 completed summer 2020 with Bristol management on time, within budget.
- Environmental reviews, permits and practices, 1800's bridge restored, ADA Compliant pathway, safety fencing.
- High praise from LWCF management, PRLAC, USACE, as shown in supportive LOS.
- Residents and Visitors frequent the nearby town square shops, providing an economic uplift and are requesting the trail extension to the rail turnaround.
- With these practices, capabilities and requests, Bristol is ready to take on Phase 2.

Feasibility

Historical: This Phase 2 project is 0.7 miles long and will primarily be built along the former rail road bed of the 1848 Bristol and Franklin branch line. This line featured a rail turnaround, the foundation stone remnants of the turnaround, are the destination point for this section of trail which will be built on the original rail road bed.

Construction: This phase 2 section is 0.7 miles long and is the most complicated section of the overall project requiring both construction along the original rail bed and a 360ft wooden trestle bridge over sensitive drainage areas requiring sediment basin for water retention and to mitigate drainage into the Pemigewasset river.

Environmental: Reviews and permits will be required. The Pemi-path Phase 2 trail will be along a past rail route within 50 ft of the Pemigewasset River. Before development can begin Environmental reviews, reports and planning will be required by multiple agencies. These agencies include the NH Department of Environmental Services (NHDES), United States Army Corps of Engineers (USACE) and NH Department of Transportation (NHDOT). Bristol complied with similar environmental requirements for Phase 1. The affirming reports from Pemigewasset River Local Advisory Committee, (PRLAC) and USACE are included as two of the Letters of Support.

Maintenance: The Letter of Support and partnership outline from the USACE clarifies that maintenance of the 4 season path will be undertaken by the Bristol Municipal body.

Timeline: The Warrant Article for town matching funds will be conducted in March 2022. The environmental review and final agreements will then be conducted in Spring 2022 in parallel with the detail design of each section. This will ensure all parties are in full accord with the design and environmental management/mitigation approaches.

Construction will begin in Spring of 2023 and is expected to be completed by Fall 2024. Phase 1 followed a similar schedule and was in process of design, restoration and implementation over a 3 year period. It was completed on time and within budget to high praise from LWCF managers.

Cost escalation factors of 3% per year have been factored into the design and construction costs

Financial Readiness

Phase 1 was funded jointly by LWCF and 20% matching funds from the town in a reimbursement program.

There is a huge demand from the townspeople and visitors that are enjoying the access to the river and waterfall views provided by this Phase 1, ADA compliant path, to extend the path to the historic rail turnaround and onto the Smith River confluence (a total of 2.2 miles).

The new 2021 Select Board have committed (March 18, 2021 LOS), to bring a Warrant Article to the townspeople in March 2022 to provide the required 20% matching funds for this reimbursement TAP21 funding of Phase 2.

It is expected that with the demand and the economic boost the town is experiencing from Phase 1, Phase 2 will funding will be readily adopted by the townspeople as was done with the LWCF funded Phase 1 project.

Phase 1 plan was completed on time and within budget, earning high praise from the LWCF managers for the quality management Bristol municipal management provided in completing the Phase 1 project on schedule, with all environmental practices in place and requirements met, along with the native plantings beyond the scope of the original project plan.

Bristol is committed to ensuring the same quality in design, construction, finance, management, joint party cooperation (NHDOT, DES, USACE) and schedule, are deployed in this Phase 2 project.

Connectivity

The Northern end of this trail (Phase 1/Phase 2) provides extended connectivity to existing four season multiuse walking and bicycling trails from Kelly park in Bristol, that extend via Mill Stream pathway to Newfound Lake.

The Southern end (Phase 3) will meet with walking, cycling, mushing and snowmobile trails that come to Smith River and its Profile Falls from Franklin and Hill village. The Franklin end of the trail ties into the Great Northern Rail Trail linking 87 continuous miles back to Lebanon NH, on the banks of the Connecticut and Mascoma rivers.

These are well used as four season alternative routing trails, featuring access to crowd-seeking, 70 foot vertical and profile waterfall views that will be interlinked by an alternative route, rail bed riverside trail.

Safety

Start: The current stress level is F.

This level is accorded because the existing rail-bed is overgrown with tree saplings that make it extremely difficult to walk or ride on the old rail-bed. Standing water and associated sediment flow needs to be managed and contained.

Construction:Original rail-bed requires clearing and reconstruction.

Water crossing require culverts, sediment basin and a wooden trestle bridge (360ft). Once the rail-bed is reconditioned, with water crossing and mitigation practices in place, the overgrowth will be gone and ready riding or pedestrian travel will be available.

Completion: At this time the stress level will reach to a Level A.

With the environmental and water management practices along with path reconstruction in place, ease of travel for adults and children, will be readily achieved, ensuring a great trail at an A level.

Safety Improvements

For safety improvements, this grant application includes a 360 foot wooden pedestrian bridge and retaining wall at the rivers edge, just before the historic rail turnabout. This bridge provides a path-way over what is considered to be a dangerous section of the original rail-bed. This is in the location where the steep topography of the hinterland plunges directly into the Pemigewasset River. It is at this same section of the planned pathway that the former rail-track was supported on concrete piers placed at the rivers edge.

Appropriate fencing and protective landscaping will be deployed to provide a safe environment for recreational enjoyment. Use of native vegetation along the edges of the trail will curb encroachment by pedestrians, cyclists and snowmobiles off the trail and prevent potential damage to the natural environment.

These practices were deployed on the phase 1 trail and have kept the visitors safely on the trail and on the bridge over the river and waterfall.

Letters of Support

Bristol Municipal government- Warrant Article assurance and Phase 1 record of financial, environmental and construction management practices.

Pemigewasset River Local Advisory Committee stewards of good practices along the river, praise Phase 1 practice, Support for phase 2 implementation to provide drainage water management.

United States Army Corps of Engineers, (USACE), agreement for partnership contingent on environmental studies and design details.

Newfound Pathways. Safe Hiking and Bicycling group for the Newfound Region. Good reputation with NHDOT.