



**DATE:** June 28, 2019

**TO:** Plan for Ashuelot Rail Trail Project Advisory Committee

**FROM:** SWRPC Staff

**RE:** Existing Conditions Assessment – Programs and Health Analysis

Physical exercise supports health and wellness in multiple ways. It helps control weight, reduces the risk of type 2 diabetes, reduces the risk of some cancers, can improve mental health, and contributes to a number of other positive health outcomes.<sup>1</sup> Rail trails and trails for non-motorized uses offer opportunities for physical activity. They can also facilitate social activities that in turn often contribute to improvements in mood and mental health.

In order to better understand the links between rail trails and public health, SWRPC staff examined previous research that documented health benefits of rail trails or trails more generally. They also compiled information about programs or activities known to occur on the Ashuelot Rail Trail in particular. Finally, staff studied programs and activities that occur on other rail trails and that hold potential for promoting increased use of the Ashuelot Rail Trail.

### **Documented Health Benefits of Trails**

There is a growing body of scholarly literature that investigates the connections between trails and public health. What follows is a brief overview of findings from reports and peer-reviewed articles that have examined the topic from various perspectives.

- **Trails support increased physical activity.** Through the use of on-trail intercept surveys, a 2005 study in Morgantown, West Virginia concluded that a substantial portion of trail users did not exercise regularly prior to using paved recreational trails. About 23 percent of survey respondents (n = 93) indicated that they did not exercise on a regular basis before they started using the trails and about 60 percent (n = 250) indicated that their physical activity increased after they began using the trails.<sup>2</sup>
- **Trails may help promote physical exercise among various demographic groups, including those most at risk for physical inactivity.** A study in 2000 that relied on telephone interviews found that trail users that were women, low-income individuals, and individuals with a high-school education or less were more likely to report increased physical activity than trail users overall.<sup>3</sup>
- **Cycling on rail trails produces health benefits that in turn lead to economic savings.** A 2018 study found that cycling activity in Northwest Arkansas led to about \$86 million

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<sup>1</sup> National Center for Environmental Health. <https://www.cdc.gov/healthyplaces/healthtopics/parks.htm#>.

<sup>2</sup> Abildso, C., S. Zizzi, S. Selin, and P. Gordon. 2012. "Assessing the cost effectiveness of a community rail-trail in achieving physical activity gains." *Journal of Park and Recreation Administration* 30(2): 102-113.

<sup>3</sup> Brownson, R., R. Housemann, D. Brown, J. Jackson-Thompson, A. King, B. Malone, and J. Sallis. 2000. "Promoting Physical Activity in Rural Communities: Walking Trail Access, Use, and Effects." *American Journal of Preventive Medicine* 18(3): 235-242.

in health benefits, from avoided health care costs and reduced mortality rates.<sup>4</sup> Cycling on shared-use paths formed a significant component of overall cycling activity.

- **Bike/pedestrian trails can have a positive cost-benefit ratio, when trails costs are weighed against health care savings from on-trail physical activities.** A 2005 study in Lincoln, Nebraska estimated that every \$1 invested in trails yielded \$2.94 in direct medical benefits. Trails included in the study were predominately surfaced with concrete and included several bridges. Annual trail costs were calculated by combining construction costs (amortized over a 30-year lifespan) and annual maintenance costs. Direct health benefits were estimated by multiplying the number of “active” trail users by the healthcare savings those users were expected to experience.<sup>5</sup>
- **Trails can serve as an important social setting that supports physical activity.** A number of social factors can influence an individual’s decision to exercise or not. As demonstrated in a 2001 study on the social and policy determinants of physical activity, one of those factors is access to a facility where other people are exercising.<sup>6</sup> While some may be able to afford gym memberships or exercise classes, trails offer free access to a facility where people can exercise together.

### **Programs and Activities on the Ashuelot Rail Trail**

SWRPC staff reached out to a variety of trail stakeholders most likely to use the trail for regularly organized activities. Staff made inquiries to parks and recreations departments in all four municipalities along the trail’s route, nearby schools, conservation groups, camps, cycling groups and health organizations. Some of these activities may yield direct health benefits, mental health benefits, or both. What follows is a summary of feedback received, organized by municipality.

- **Keene**
  - According the Keene Parks and Recreation Department, the department performs maintenance on the trail, but doesn’t use it for organized activities.
  - The Center for Population Health at Cheshire Medical Center noted that Healthy Monadnock, one of its programs, organizes several 5k races from the Medical Center campus. Race routes likely utilize the Ashuelot Rail Trail. The organization collaborates with employers to promote worksite wellness, which includes promotion of nearby rail trails.
  - The Bicycle Mayor of Keene organizes occasional group rides, which sometime use the Ashuelot Rail Trail. For example, in May of 2019, she organized a ride that started at the Krif Rd. trailhead in Keene (at the driveway of the Keene State College athletic complex). She led a group of about a dozen riders south along the trail into Swanzey, and followed a route that visited each of the town’s five covered bridges. At each bridge, she gave a brief description of the bridge’s history and architectural features. She also emphasized best practices for safe group riding. Several ride participants expressed interest in future opportunities to bicycle in a non-competitive group environment. The bicycle mayor program is an international initiative aimed at supporting bicycling advocates across the world. The Bicycle Mayor of Keene has

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<sup>4</sup> BBC Research and Consulting. Economic and Health Benefits of bicycling in Northwest Arkansas. March 21, 2018. Prepared for the Walton Family Foundation and PeopleforBikes. <https://peopleforbikes.org/wp-content/uploads/2018/10/march-2018-nw-arkansas-final-report.pdf>

<sup>5</sup> Wang, G., C.A. Macera, B. Scudder-Soucie, T. Schmid, M. Pratt, and D. Buchner. 2005. “A cost-benefit analysis of physical activity using bike/pedestrian trails.” Health Promotion Practice 6: 174-179.

<sup>6</sup> Ross C. Brownson, Elizabeth A. Baker, Robyn A. Housemann, Laura K. Brennan and Stephen J. Bacak, “Environmental and Policy Determinants of Physical Activity in the United States,” American Journal of Public Health, Vol. 91 No. 12, pg. 1995-2003, 2001.

worked with the City on several projects, including Safe Routes to School programming.

- **Swanzy**

- The Director of Parks and Recreation in Swanzy reported that the Town occasionally holds a trail awareness day on the rail trail, usually after completing new improvements. He also noted that the Elijah Barret Memorial Half Marathon uses the trail for a segment of the race. According to the most recent route map, the race picks up the trail at Sawyers Crossing Road and departs from the trail at Railroad Street. In the past, turnout has reached 500 entrants. In 2018, the race was scheduled for September 2<sup>nd</sup>.
- Swanzy's Director of Parks and Recreation also suggested that the local equestrian club uses the trail with some frequency.
- A council member for Friends of Pisgah reported that the organization has not planned events for the trail, but equestrian groups that she's involved with have organized rides. Most notably, the Monadnock Happy Trails Association organizes an annual ride in April or May that starts by Matthews Bridge in Swanzy. They usually ride 3-4 miles south and turn around. She noted that, with recent bridge upgrades, trail footing is safe even for old or green horses. Parking presents an issue for equestrian users who need to park trailers. Monadnock Happy Trails Association is an adults-only group, with an annual membership of about 30. For each ride, about fifteen members participate.
- The president of the Monadnock Happy Trails Association reported that the group organizes the Matthews Bridge-Pine St ride in Swanzy both in the spring and the fall. During the summer, the trail is too busy to use. The trail is narrow at points and bikes and dogs can spook the horses. The groups used to ride from West Swanzy to Route 10, but the trail is in such poor condition that the group no longer does the ride.
- The principal at the Cutler Elementary School in Swanzy reported that the school's running club uses the trail one or twice in the spring and fall.

- **Hinsdale**

- The guidance counselor at Hinsdale Middle/High School noted that the students use the trail to walk to school, but the Middle/High School is less involved than the Elementary School in Safe Routes to School programming. The track and field and cross country teams use the trail on a daily basis in the spring and fall. Biology classes use the trail to access and study the river. English classes have also walked the trail as part of literature and nature lesson plans. Physical education classes use the trail in the winter for snowshoeing.
- The Executive Assistant and Wellness Coordinator at the Hinsdale School District noted that an employee walking group used the trail on a weekly basis during May and June of 2018. The weekly walks weren't well attended (with busy schedules at the end of the school year, it's difficult to recruit school staff for additional events). The walking group has yet to discuss weekly walks during the fall.

- **Winchester**

- President of the Winchester Trail Riders (snowmobile club) didn't indicate that the rail trail is used for any club-organized rides, although riding parties can range in size significantly.

- The President of the Friends of Pisgah reported that the organization focuses on trail maintenance inside of Pisgah State Park. They don't organize activities on the rail trail.
- **Other**
  - The president of the NH Rail Trails Association reported that since the association is currently in the process of reactivating after a long period of dormancy, the group has yet to organize events on any rail trail in the state. Currently the group functions primarily as a contact point for parties interested in the rail trail. It also advocates for rail trail-related legislation.
  - A member of the New England Mountain Bike Association (the Keene-Brattleboro chapter) reported that the only rail trail that group uses is the northern section of the Cheshire Rail Trail. The group uses the rail trail primarily to access single-track mountain biking trails.
  - A member of the Ashuelot River Local Advisory Committee reported that, in the past, the group has organized hikes and walks using the rail trail, typically with board members participating. It has been years since an organized hike has occurred, due mostly to the change in board makeup and diminished interest in holding such events.

### **Programs and Activities on other Rail Trails**

In addition to researching currently organized activities or events on the trail, SWRPC staff assembled a list of potential trail activities or events. The list draws from examples from other locations, focusing on suburban and rural areas. Potential trail activities include:

1. **Events targeting bike commuters.** For example, in the Pioneer Valley of western Massachusetts, multiple municipalities host events for bike commuters, often in coordination with Baystate Bike to Work Week, a statewide bike commuting initiative. Activities have included commuter breakfasts held on or near well-traveled rail trail routes; "coffee with helmet" meet-ups; trailside bike maintenance clinics; and after-work pub tours.
2. **Events that highlight trailside wildlife and ecology.** As part of bike commute week in Amherst, Massachusetts organizers held a twilight bird and beaver observation tour along a rail trail with extensive wetland areas.
3. **Walking school buses.** A walking school bus is simply a group of students that walk to school together, accompanied by adult chaperones. The group picks-up additional students as it walks along its route to school. A variation on the walking school bus is the bicycle train, where adults supervise students biking to school along a fixed route. The idea is simple, but can make a walking or biking commute to school more fun. The group of walkers or bikers can also convince additional students to walk or bike to school. Considering that the Ashuelot Rail Trail runs by several schools along its route, it could become a safe, care-free segment of a walking school bus route.
4. **Leaf-peeper tours.** The Ashuelot Rail Trail passes through and along large expanses of deciduous forest, representing an opportunity for foliage-related tourism. Each year, thousands of tourists flock to rural New England to witness the explosion of natural color. The majority of leaf-peeping occurs via automobile, but there's increasing interest and market demand for experiencing fall color on bicycle or on foot. For example,

according to a 2009 New York Times article, bike tourism companies in Vermont organize rides tailored for leaf-peepers venturing north from more urban areas.<sup>8</sup>

## Findings

- The connections between increased physical activity and improved health are well established. A growing body of scholarly literature demonstrates that multi-use trails such as rail trails promote physical activity. The health care savings that result from increased physical activity can far outweigh the costs of constructing and maintaining trails.
- The Ashuelot Rail Trail accommodates a wide range of activities. Some have more obvious direct health benefits, while others provide opportunities for building social connections, which in turn can support improved mental wellbeing. Activities often yield combined physical and mental health benefits.
- Documented activities suggest that certain segments of the Ashuelot Rail Trail are utilized more extensively for organized programming than others. For example, no organized activities were identified to occur in Winchester.
- No identified programs or activities focused on wintertime uses, e.g. snowshoeing or skiing.

## Recommendations

- Further develop a list of on-trail programs and activities. Additional programs and activities may be identified through PAC discussion and/or the municipal surveys included in the Plan scope. A comprehensive inventory of on-trail activities could prove useful in a number of ways. Municipalities and non-profit organizations could use it when crafting grant proposals for trail improvement funding. Such an inventory could prove a useful tool for community organizers interested in building a multi-sector coalition for trail improvement advocacy. It could also prove a resource to Chambers of Commerce, municipalities, or economic development organizations interested in marketing trail-related assets and activities.
- Consider emulating previous academic research in order to quantify the direct medical benefits produced by rail trail use. The 2005 study in Lincoln, Nebraska by Wang et al. (cited above) serves as a good model. Developing and implementing an effective research design may require collaboration with researchers from institutions of higher education, state agencies, or private consulting firms. Direct medical benefits could be compared with trail construction and maintenance costs, which would likely demonstrate a positive cost-benefit ratio.
- Consider developing a toolkit for groups interested in organizing larger, high-profile on-trail events, such as the Elijah Barret Memorial Half Marathon in Swanzey. Such a toolkit could include a checklist and information about how to work with municipal staff/officials and state agencies. The checklist could specify appropriate municipal/state contacts and any approvals needed to host on-trail events. It could also establish safety measures and other best practices.

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<sup>8</sup> Zezima, Katie. *Pedal peepers in Vermont*. October 14, 2009.  
<https://www.nytimes.com/2009/10/18/travel/18bike.html>