



DATE: October 17, 2019
TO: Plan for Ashuelot Rail Trail Project Advisory Committee
FROM: SWRPC Staff
RE: Existing Conditions Assessment – Economic Benefit Analysis

Investment in active transportation infrastructure can attract spending in local economies as well as support jobs, increase the local tax base, and create cascading indirect benefits for the economy. Both in urban and rural economies, recreational amenities have been documented to lead to increases in property values of anywhere from 2-10%. In New Hampshire alone, the recreational economy accounts for \$8.7 billion in consumer spending and directly employs more workers than the state's high-tech sector. With many local and national examples of economic studies on the recreational economy and trails, this memo aims to find applicable lessons for the current and potential economic impact of the Ashuelot Rail Trail.

SWRPC staff compiled and reviewed a list of comparable studies to recommend future actions for an implementation plan as well as to create findings of similar or comparable projects and their economic impact on the rural economy. Documents reviewed include reports on the recreational economy, economic impact studies for trail projects in New England and nationally, studies regarding real estate and local business in connection to bicycle infrastructure, and general studies connecting active transportation to the economy. A full list of collected materials, along with findings and recommendations for future actions and study can be found in this memo.

Findings

- Active transportation's highest economic impact on local businesses comes from non-local, overnight visits.
- Spending profiles for visitors are key to understanding the economic impact of active transportation infrastructure improvements.
- Bicycle infrastructure can have significant impact on real estate and local business in rural economies as well as urban, with examples in Washington State showing a 10% premium on homes within a quarter mile of trails.
- New Hampshire itself currently has a substantial recreational economy with \$8.7 billion annually in consumer spending supporting over 77,000 jobs.
- There are a wide variety of models and methodologies to estimate the impact of active transportation infrastructure on the local economy. Vermont has a well-established and maintained statewide model that may be beneficial to New Hampshire.
- It is a goal of the State of New Hampshire to “[l]everage the benefits of trails and other connectivity projects as they relate to social and economic vitality among local and non-local users” according to the 2019-2023 Statewide Comprehensive Outdoor Recreation Plan.

- A “critical mass” of trails in a region significantly increases the benefit of additional active transportation infrastructure on the local economy, especially through increased overnight and out of state visitors.
- Comprehensive, regional trail systems can leverage significant consumer spending for a greater economic impact than a singular trail.
- Snowmobiles and off highway vehicles represent a significant portion of consumer spending in Northern New Hampshire, especially Coos County.
- Amenities for bicyclists and hikers that facilitate overnight stays, such as the AMC huts associated with the Appalachian trail, have been proven to have significant economic impact in the tri-county area of Grafton County, Carroll County, and Coos County in New Hampshire.
- Templates, including survey questions, currently exist for creating economic impact studies for trail systems.
- Both Plymouth State and the University of New Hampshire Cooperative Extension have been active partners for agencies wanting to estimate the impact of recreational amenities on the

Recommendations

- Consider creating a survey of trail users for both the Ashuelot Rail Trail and other regional trails to create an overall spending profile for local and non-local visitors in the Monadnock region.
- Create or adopt a high-level model that identifies economic indicators by which to study economic impact.
- Utilize the People for Bikes template for an expedient economic impact study process.
- Compile a list of businesses in the Monadnock region that are tied into the recreational economy and consider a separate business survey touching on the activities and spending businesses observe in relation to regional trails.
- Gather regional data related to the recreational economy to understand what industry and employment is tied to recreation in comparison to state level data.
- Consider reaching out to other New England recreational entities such as the Upper Valley Trails Alliance and Vermont Trails and Greenways Council to gain insights into conducting a larger scale economic impact study for the Ashuelot trail.

Economic Impact Literature Review

Title and Date	Description
New Hampshire Examples	
New Hampshire Recreational Economy Report, 2017	<p>This report, published by the Outdoor Industry Association, outlines several statistics for the outdoor economy in New Hampshire and the nation including:</p> <ul style="list-style-type: none"> • 69% of New Hampshire Residents participate in outdoor recreation each year. • More jobs in New Hampshire depend on outdoor recreation (79,000) than the state’s high-tech sector (44,000). • In New Hampshire, outdoor recreation creates \$8.7 billion of consumer spending annually and \$2.7 billion in wages and salaries. • Outdoor recreation creates \$528 million in state and local tax revenue.
Strengthening Connections: Downtowns and Trails, Bristol, New Hampshire, 2019	<p>A study done by UNH Extension in partnership with the town of Bristol summarizes the community perception and current assets and opportunities surrounding an existing multi-use trail passing through town. The trail currently connects Newfound lake with downtown Bristol, and a significant aim of the study was to create a geographic index of assets and challenges along that stretch. In addition, the report created a spending profile of local and non-local visits to Bristol. Overall, the report found several recommendations with many involving specific infrastructure improvements (bathrooms and sidewalks) as well as wayfinding and marketing efforts.</p>
Nature Economy: The Economic Benefit of Trails, December 2018	<p>This factsheet, published by the University of New Hampshire Extension office, covers the economic benefit of trails as it defines the “nature economy”. The “nature economy” is defined by UNH Extension as “connect[ing] the environment and natural resources with community goals to create vibrant economies and high quality of life for all”. The factsheet outlines how the nature economy for bicycle trails can lead to higher property values and dollars diverted to local businesses and main streets as cyclists utilize trails that go through downtowns. In particular, this resource contextualizes the Ashuelot Rail Trail as part of a 558 mile statewide rail trail network, in addition to thousands of miles of hiking and OHV trails throughout the state.</p>
The Economic Impact of Spending by Snowmobilers on New Hampshire’s Economy, 2011	<p>Created by researchers at Plymouth State University for the New Hampshire Snowmobile Association, a mail survey to 1,000 registered snowmobilers estimated the impact snowmobiling has on the New Hampshire. Similar to other studies, it focused on the impact of residents versus non-residents, and found that non-residents spend \$1,179 on “hard costs” and had an average visitor spending of \$114 daily. Residents spent slightly more on “hard costs” at \$1,307 but had an average daily spending of \$79. The total impact of the activity on the state’s economy was \$586 million. Total fees and taxes from snowmobile activity totaled \$20.7 million, while \$2.7 million was paid to local governments in tax revenue.</p>
Impact of the Appalachian Mountain Club’s Huts and Lodges in New Hampshire, 2015	<p>This report produced by the Center for Rural Partnerships at Plymouth State University for the Appalachian Mountain Club estimates the economic impact of specifically non-local visitors who stayed overnight and came particularly to use AMC huts. It follows a similar methodology to Vermont models in prioritizing “net-new” spending and focusing particularly on overnight visits. In the three-county area of Coos, Carroll, and Grafton County it was estimated that the huts supported \$15.6 million in activity between June of 2014 and May of 2015, 64% of which were directed to businesses other than the AMC. This investment subsequently supported 169 jobs in the area, 54% of which were employed by businesses other than the AMC. Total income from labor was \$5.7 million and tax revenue in the tri-county area totaled \$1.15 million.</p>

[New Hampshire 2019-2023 Statewide Comprehensive Outdoor Recreation Plan, 2019](#)

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) is one of the requirements for utilizing Land and Water Conservation Fund Act (LWCF) funding, and is also submitted to the US Department of Interior and updated every 5 years. The SCORP establishes priorities and data sources to help guide partnerships in distributing LWCF, which is done through a statewide competitive grant process. The study cites many statistics and studies referenced above, but of particular interest is the fact that local parks contribute \$155 million to the local economy and are often in the top three factors for businesses when considering relocation. Perceived degradation of water clarity and purity was also estimated to cost the state \$18 million in lost income and over 800 jobs. In general, the State of New Hampshire has 5 goals in relation to economic vitality and recreation:

- Facilitate cooperative efforts among private and public entities to secure sustainable funding sources for existing and future resources.
- Collaborate with recreation organizations and communities to foster and create business and program enterprises associated with outdoor recreation in the State of New Hampshire.
- Engage in dialogues with healthcare organizations and residents to further explore and explain the economic health benefits of an active community.
- Leverage the benefits of trails and other connectivity projects as they relate to social and economic vitality among local and non-local users.

Expand upon the “LIVE FREE” brand to emphasize the flexibility of economic opportunity and overall welcoming business culture of the state of New Hampshire.

Title and Date	Description
New England Regional Examples	
Economic and Fiscal Impact Analysis of the Vermont Trails and Greenways Council, 2016	<p>This report prepared by the Vermont Trails and Greenways Council outlines the fiscal impact of four trail systems in Vermont by asking “What would change in the State if the trails ceased to exist?”. Particular attention was paid to the “net-new” impacts, which is spending done by outside non-Vermont residents that would not happen sans the trails. Overall the trails had 410,000 visitors annually across multiple forms of use (bicycling, hiking, and ATV vehicles primarily) leading to a total impact of \$30.8 million. Food & drink and lodging were the predominant forms of spending, although transportation, equipment, recreation, and gifts all had around \$1-2 million in impact. Annual visitor counts from member organizations were paired with survey data and statistical modeling software to estimate the usage for each category of visitor resulting in a spending profile for said categories. Impacts and spending per visitor was also broken down by trail system. Important to note is the indirect impacts that were identified in the report, calculated by modeling the impact of direct spending on the local economy.</p>
Potential Economic Impact of Outdoor Recreation in the Barre Town Forest, Vermont, 2012	<p>This study, published by Headwaters Economics, covers the possible economic impacts of a new 370 acre Barre Town Forest in Barre, Vermont. Based off of conservative 10% growth rates and a typical dollar amount per visit of \$100 for mountain biking purposes, the study identified about \$6.5 million for the local economy in a decade and over 100 jobs. It is important to note that the site currently includes over 70 miles of trails and that the potential forest is a mountain-bike based recreation area. The majority of dollars spent in the local economy would be directed towards the restaurant and hotel industries, indicating that many visitors would be either eating in the area or staying overnight.</p>
Health Impact Assessment: Quequechan Rail Trail Phase 2, 2012	<p>Although a document primarily focused on the health impacts of a rail trail extension in Fall River, Massachusetts, the assessment details the economic impact of the urban trail extension through the city. The study assessed the background information and studies done on other rail trails in Massachusetts, and then analyzed the current employment, housing, and income characteristics in a mile radius from the trail to come to the conclusion that the rail trail extension can bring property values up to the city’s average and that the trail connects major employers and tourist destinations.</p>
Economic Impact of Bicycling and Walking in Vermont, 2012	<p>A follow up on an existing and well maintained economic impact model, this report consists of a survey and analysis of existing data to quantify four main factors: the jobs created from bicycle/pedestrian infrastructure, the labor earnings from those jobs, output for local businesses, and the state budget fiscal impact. The three factors that are analyzed as inputs in the study include capital investments into infrastructure, bicycle and pedestrian related businesses, and visitor spending related to bicycle and pedestrian infrastructure/events. Indirect benefits from the reduction of vehicle miles traveled and real estate costs are estimated, but not included in the model. Overall, over 1,400 jobs were supported statewide, leading to \$41M for labor earnings and an overall impact on the local economy of \$83 million.</p>

[Pine Hill Partnership
Economic Impact
Analysis, 2019](#)

An infographic created by the Pine Hill Partnership, an association in charge of Pine Hill Park in Rutland, Vermont, describes the economic impact of the trail system in Pine Hill Park on the local economy. In total, the trail system was estimated to have a \$1.3 million dollar impact on the Rutland economy. Like similar studies, it found that the vast majority of that impact was estimated to stem from overnight, non-local visitors and non-local day users. Data for this infographic was collected through trail counters and a 7 month long survey process.

Title and Date	Description
National Examples	
The Outdoor Recreation Economy, 2017	<p>Published by the Outdoor Industry Association, this document is a high level overview of the national recreational economy. Some key statistics of the national recreational economy include:</p> <ul style="list-style-type: none"> • \$887 billion in consumer spending annually • 7.6 million jobs involved in the industry • \$65.3 billion in federal tax revenue • \$59.2 billion in state and local tax revenue <p>In the New England region, this translates to \$51.5 billion in spending, 432,000 jobs, \$4.1B in federal revenue and \$3.5B in state revenue.</p>
Active Transportation and Real Estate, 2016	<p>A report from the Urban Land Institute, the document covers several case studies of real estate projects and development surrounding active transportation around the country. The report covers a variety of real estate projects, citing increased property values and economic development tied to bicycle trail expansions. Bicycle tourists were found to spend more than regular tourists, and those who access businesses via bicycle were shown to have more frequent trips to these businesses. Overall, bicycle infrastructure is shown to be spurring major investment nationally and abroad and investments in trails and other infrastructure has significant return on investment.</p>
Measuring Trails Benefits: Business Impacts, 2016	<p>Part of a series created by Headwaters Economics, this fact sheet covers some of the basics of estimating the impact of trails on local businesses. In general, it is noted that overnight visits generate the largest impacts, and that non-local spending needs to be differentiated from local resident spending. Overall, visitor counts and spending profiles of visitors need to be determined through models like IMPLAN or REMI, and in places that attract high numbers of non-local visitors or overnight trips capital investment in trails can leverage many times more spending in the local economy.</p>
Measuring Trails Benefits: Property Value, 2016	<p>Another fact sheet in the series by Headwaters Economics, this document provides several examples of the impact of trails on property values in a variety of contexts. In urban contexts, trail premiums on home values can range anywhere from 2-10% depending on the trail user profile and access to the trail. In an example in rural Washington, a 10% premium was observed for homes within a quarter mile of the trail. Overall, statistical analysis analyzing the impact of the trail, while holding for other factors, can provide insights into the real estate impact of trails on the local economy.</p>
Ghost Town Trail Survey and Economic Benefit Analysis, 2009	<p>Ghost Town Trail, a multi-use path in Southwestern Pennsylvania, was studied by the Rails to Trails Conservancy in 2009 through a user survey. The trail has similarities to the Ashuelot given moderate use and an older user base, and it was found that bicycling was the predominant use of the trail. The study surveyed consumers' about their "hard" costs (bicycles and equipment) and "soft" costs (drinks, meals, services, etc.). The trail is similar in length (36 miles) and overall the economic impact could be similar for Ashuelot trail given improvements. With an annual user base of 75,600, the trail ultimately had an economic impact of over \$2.3 million that took into account consumers' hard costs, soft costs, and accommodation.</p>

[Economic Impacts of MVSTA Trails and Land Resources in Methow Valley, 2005](#)

Prepared by private consultants for the Methow Valley Sports Trails Association, this report highlights how the Methow Valley, Washington, a rural region with lower population and economic growth rate than the state average, benefits significantly from the largest Nordic trail system in the country. Although the primary industry is skiing, trails are used year round in a diverse array of activities. Total direct economic impacts included:

- Over \$200 per visitor in spending
- Support for 128 full time equivalent positions
- Over \$12 million total for the local economy

In addition to direct economic impacts, it was measured that a 10% premium on properties within .5 miles of a trail in the network and several tens of thousands of dollars of hotel/motel tax was recorded. Overall, the trail network is able to provide significant economic benefits to a rural economy otherwise facing distress and lower growth rates than average.

Title & Date	Description
Resources & Templates	
Evaluating Non-Motorized Transportation Benefits and Costs, November 2011	<p>This report, created by the Victoria Transport Policy Institute, describes a variety of indicators to evaluate the benefits of non-motorized transportation in contrast to traditional transportation valuation. Of particular interest to the project is the value estimates as it relates to reduction of vehicle miles.</p>
People for Bikes Economic Impact Templates, 2018	<p>A series of Microsoft Excel spreadsheets provides survey questions and analysis tools to help measure the economic impact of cycling such as: cycling events, resident spending, bicycle business, and tourism. Originally used as part of an economic impact study commissioned by the Walton Foundation in Northern Arkansas, this resource can be used to estimate current and potential economic impacts of the trail.</p>
Bicycle Level of Service Model, 2007	<p>This document, created by Sprinkle Consulting, outlines a mathematical model to calculate the level of service for bicycles on urban roadways. Although the project is primarily pertaining to an off-road multi-use trail, with road crossings being major concerns nearly universally as indicated by our survey this model can provide an insight into ranking the “barrier effect” of roadways as it relates to the Ashuelot Rail Trail.</p>