

# Economic Impact Analysis of the WOW Trail



January 2012

Prepared by the Belknap County Economic Development Council  
383 South Main Street, Laconia NH 03246 / (603) 524-3057  
[www.bcedc.org](http://www.bcedc.org)



## Introduction

The WOW Trail is a proposed multi-use, non-motorized recreational pathway, which will ultimately connect the Town of Belmont, the City of Laconia and the Town of Meredith. The proposed pathway will be constructed adjacent to the railroad tracks used by the Winnepesaukee Scenic Railroad. The trail will be 10 feet wide and paved and will provide trail users with beautiful vistas of Lakes Winnisquam, Opechee and Winnepesaukee. The vision is for the WOW Trail to provide a trail system in Laconia that connects to trail systems in Belmont and Meredith, providing local residents and visitors with a substantial outdoor recreational opportunity that will also connect the three village/downtown centers. This potentially gives trail users access to a broad range of dining and shopping options during their use of the trail if they so desire.

The cost of building the entire WOW Trail as envisioned is approximately \$7 million. Phase 1, the first 1.3 miles of the trail, was constructed in 2010 at a cost of approximately \$820,000. This section of the trail begins adjacent to the Lake Opechee Inn & Spa in Lakeport and ends in downtown Laconia at North Main Street, adjacent to the Library. A portion of the first phase, located between Bisson Avenue and Lyford Street, runs along Messer Street. In this area, the sidewalk was widened and bike lanes added to the roadway. A four-foot high continuous chain link fence was installed between the trail and the active rail line on the entire stretch of Phase 1, as required by the NH Department of Transportation (NH DOT). The WOW Trail is currently working with NH DOT to devise more aesthetically pleasing alternatives to separate the trail from the rail line in Phases 2 through 4. This change is not likely to reduce the cost of completing the trail.

Phase 2 of the WOW Trail will run from Downtown Laconia at North Main Street to the Belmont town line. A short section of bike trail already exists at the Belmont town line and Route 3. The NH DOT built this short section of trail in anticipation of connecting the Laconia WOW Trail and the Town of Belmont's own BRATT trail. Phase 3 will run from Lakeport to Weirs Beach. Phase 4 will run from Weirs Beach to Meredith and eventually connect with Meredith's trail system.

The WOW Trail Board of Directors commissioned the Belknap County Economic Development Council (BCEDC) to conduct an economic impact analysis of the WOW Trail once it is completed to demonstrate the amount of new spending and jobs that this project can potentially generate for our local communities. In addition, BCEDC reviewed literature regarding the impact that recreational trails have on local property values and included a summary of various studies conducted throughout the U.S.

## Explanation of Economic Impact Analysis

Economic impact analysis estimates the total net changes in employment and earnings caused by an isolated change in a given economy. In this instance, the economy under study is Belknap County and the specific change being studied is the addition of the WOW Trail. The main drivers of the economic impact that the WOW Trail will have on Belknap County are referred to as “net new spending” and include the following:

1. Net New Construction Spending: Any funding for construction of the WOW Trail that comes from outside of Belknap County via state/federal grants or donations is counted as net new spending in Belknap County. Unfortunately, we cannot count local donations because that is money that comes from local businesses and individuals and we must assume that those entities have a relatively fixed budget for making such donations. If they do not donate to the WOW Trail, they will probably donate to some other local project and the money will be spent by that other project. According to the WOW Trail, 80% of the construction funding is anticipated to come from outside of Belknap County.
2. Net New Visitor Spending: Here again, we must try to isolate the amount of visitor spending that will be brought to Belknap County specifically by the WOW Trail. Spending by local residents who use the trail is not counted because we must assume that locals will spend a relatively fixed amount of money recreationally regardless of the trail’s existence. For example, if someone goes out to lunch during a stop in their bike ride on the WOW Trail one day, that person will forgo eating out another time or vice versa. For purposes of this study, we focus only on spending by visitors from outside of Belknap County.

Given that the Lakes Region is a well-known tourist destination already, some portion of the trail users will be people who will come to the area for their vacation or day trip and their length of stay and spending will not be affected by the existence of the WOW Trail. Another portion will be trail enthusiasts who would not have come at all if the WOW Trail were not here. A third group will be people attracted to the Lakes Region for all it has to offer in general, but who may stay a little bit longer and spend a little bit more because they use the WOW Trail. There is no way to calculate exactly what these changes in spending will be; the trick is to develop an assumption that seems reasonable based on information that is available regarding trail users and visitor spending. These assumptions are explained in the section titled “Calculation of Net New Visitor Spending.”

Once the net new construction spending and net new visitor spending are calculated, the next step is to use an industry standard economic impact model to demonstrate how the net new spending changes total employment, earnings and economic output in Belknap County as the dollars circulate in the local economy. For this study, BCEDC used the model developed by Economic Modeling Specialists, Inc. The model receives the net new spending figures as primary inputs and, using geography-specific and industry-specific multipliers, calculates the change in total employment, earnings and economic output.

## Estimated Economic Impact of Construction

As stated above, the entire WOW Trail is anticipated to cost \$7 million. Approximately 80% of the funding (\$5.6 million) is anticipated to come from outside Belknap County. This \$5.6 million in net new construction spending in Belknap County will create approximately 75 construction jobs paying a total of \$2.7 million in earnings over the life of the project. Bear in mind that this includes spending and jobs associated with Phase 1, which has already been completed.

## Calculation of Net New Visitor Spending

### *Step One: Estimate the Number of Annual Trail Users*

The Rails to Trails Conservancy (RTC), a national organization that promotes rails with trails and the conversion of unused rail lines to recreational trails, has published numerous surveys documenting the utilization of trails across the U.S. BCEDC scoured studies documenting user preferences and user counts on 35 rail trails across the U.S. All studies were published on RTC’s website. BCEDC found five trails that were similar in nature to the proposed WOW Trail. Information on these five trails is displayed in the table below. These are all non-motorized trails that link two or more village areas and are relatively short (compared to some multi-use recreational trails that span several hundred miles).

All estimated user counts for the trails displayed below were based on data gathered by infrared scanners at various points along the trails. Raw data were adjusted using several assumptions to take into account trail users who may not have passed by an infrared scanner and those that may have passed by more than once. The list of studies is referenced at the end of this document if the reader is interested to learn more about the methodology employed in counting trail users.

Based on the location of each trail, BCEDC assumed how many months out of the year the trail is likely to be heavily used and then computed an average number of users per “heavy use month” per mile for each trail. As shown below, this resulted in an average number of users per month per mile of 1,810. Assuming that usage on the WOW Trail once it is completed will be similar, we multiplied 1,810 by 12 miles and then by seven months to arrive at an estimated number of annual users on the WOW Trail of 152,079. While the WOW Trail will technically be nine miles long, we assumed it will connect to the village centers in Belmont and Meredith, adding approximately three more miles to the total.

**Table 1. Annual Trail Users Based on Comparable Trails**

Comparable Trail Name	State	Length in miles	Annual # Users	# “Heavy Use” Months	Monthly Users	Monthly Users per Mile
Perkiomen <sup>1</sup>	PA	19	397,814	8	49,727	2,617
Ghost Town <sup>2</sup>	PA	36	75,557	8	9,445	262
Armstrong <sup>3</sup>	PA	34.8	80,638	8	10,080	290
Heritage Rail <sup>4</sup>	MD	21	394,823	9	43,869	2,089
Wash. & Old Dominion <sup>5</sup>	VA	45	1,707,353	10	170,735	3,794
<b>Average</b>						<b>1,810</b>
<b>WOW Trail (Est.)</b>		<b>12</b>	<b>152,079</b>	<b>7</b>	<b>21,726</b>	

*Source: Rails to Trails Conservancy – see references section for more details - and BCEDC.*

*Step Two: Separate Local Trail Users from Visitors*

Now that we have an estimated number of total annual users on the WOW Trail, the next step is to determine about how many of the trail users are visitors from outside the local area. BCEDC reviewed the percentage of local vs. non-local users for the five trails above, which was included in RTC's data. Based on the experience of these trails, 66% to 95% of trail users are locals. We assume the percentage for the WOW Trail will be somewhere in the middle, so we used 75% local, 25% visitors. As shown below, this leaves us with 38,020 trail users that are visitors bringing new spending to Belknap County.

**Table 2. Local vs. Non-Local Trail Users**

Type of Trail User	Percentage of Whole	Number of Trail Users
Local	75%	114,059
Non-Local	25%	38,020

*Step Three: Estimate the Amount of Spending by Visitors*

Until the WOW Trail is completed and we have the ability to survey the people who use the trail, we have no way of telling exactly where those people will be from, why exactly they are here in Belknap County, or how much they will spend per day. We must use the best information available to us to make reasonable assumptions upon which to base these estimates.

Visitor spending surveys for NH, VT and Northern NY were studied to determine a reasonable daily visitor spending figure to use in calculating the total net new visitor spending that would be generated by the WOW Trail. The daily visitor spending estimates developed by the Institute for New Hampshire Studies (INHS) for 2009-2010 average about \$70 per person. Estimates by the VT Department of Tourism & Marketing were \$94 per visitor per day. Estimates by the Northern NY Travel & Tourism Research Center were \$124 per visitor per day. BCEDC chose to use the mid-range figure from VT of \$94 in its calculations.

As stated in the introduction, we also need to make an assumption about how much of the daily visitor spending basket, on average, will be new spending attributable to the WOW Trail specifically. Some of the visitors using the trail will come to this area only to use the trail, some will be visitors who come to the Lakes Region because of all it has to offer and then choose to use the WOW Trail while they are here, and some visitors would have come anyway but will choose to stay a little longer because of the WOW Trail. For purposes of this study, we assume that on average, visitors using the WOW Trail will spend an extra half day here because of the trail. Some will spend more time (and therefore money), some will spend less. On average, we feel this is a reasonable assumption. The table below shows how much net new visitor spending is attributable specifically to the WOW Trail based on the assumptions outlined above.

**Table 3. Annual Net New Visitor Spending Due to WOW Trail**

Non-Local Trail Users	Daily Visitor Spending	Average Extension of Stay (Days)	Net New Visitor Spending
38,020	\$94	0.5	\$1,786,929

## Estimated Economic Impact of New Visitor Spending

BCEDC used the \$1.79 million in annual net new tourism spending as the input into the economic impact model. The table below shows the results. The net new spending attributable to the WOW Trail will create about 31 new jobs in Belknap County, which will provide approximately \$778,000 in annual wages to local workers. The vast majority of these jobs will be in retail and accommodation and food services.

**Table 4. Annual Economic Impact of WOW Trail**

New Jobs	Annual Earnings
31	\$778,400

## Impact on Downtown Laconia

One of the non-quantifiable impacts that the WOW Trail will have is to distribute recreational and tourism spending to new areas of Belknap County that do not currently attract a lot of visitors, particularly downtown Laconia. Because downtown Laconia is the middle stop on the trail, we can assume that many of the 38,000 visitors using the trail each year will probably stop there. In addition, local residents using the trail will be directed to downtown Laconia when they otherwise might not have a reason to go there. This would create a significant increase in foot traffic downtown, which creates the potential for new businesses catering to trail users.

## Positive Impact on Property Values

The Lakes Region Planning Commission is nearing completion of a new publication titled *Bicycling and Walking: Transportation Choices for New Hampshire's Lakes Region*. One of the chapters includes a section on the impact of trails on real estate sales and property values. LRPC points out that many studies of this topic have shown a slight, though statistically significant increase in both sale value and ease of sale (reduced days-on-market) for properties close to trails. Findings of these studies include:

- In 2006, the Center for Applied Demography & Survey Research at the University of Delaware published a study on the impact of non-motorized recreational trails on property values. The first part of the report provides a literature review of 16 studies documenting the effect of nearly 30 trails on property values across North America. The summary of findings among these studies is that the presence of a trail either increases property values and ease of sale or has no effect.

The second part of the Delaware study is an empirical analysis of property values near bike paths in the state of Delaware. Using Geographic Information Systems (GIS), the researchers mapped out all the bike paths in the state and analyzed tax parcel data for properties that lie within a 50 meter buffer zone on either side of the trails using a special property value model. The property value model is used to calculate the premium that buyers pay to purchase a

property in close proximity to a particular amenity based on actual real estate sales. The dataset included information on 63 different variables for over 150,000 parcels. The results showed that there was a statistically significant premium paid for properties within the 50 meter buffer zone and that the average premium paid was \$8,800.

- A 2002 study of the perceived impacts of the Pere-Marquette Rail Trail in Midland County, MI conducted by Michigan State University's Department of Parks, Recreation and Tourism Resources showed that 80 percent of nearby businesses felt that the trail had very positive impacts on their business. 28 percent of nearby residents felt that the trail would reduce the selling time of their home, while most others felt it had no effect.
- A 2006 study by a Northampton, MA realtor of the impact of two rail-trails on local residential property found that homes near trails were on the market for 42% fewer days than more distant homes, and that homes near trails sold 1.3 percent closer to the list price than more distant homes.

## References

- 2006 Economic Impact of Expenditures on Northern New York State*. Northern NY Travel & Tourism Research Center at SUNY Potsdam, 2006.
- A Benchmark Study of the Economic Impact of Visitor Expenditures on the Vermont Economy – 2009*. Prepared by Economic & Policy Resources, Inc. and published by the VT Department of Tourism & Marketing, 2009.
- Bicycling and Walking: Transportation Choices for New Hampshire's Lakes Region*. Lakes Region Planning Commission, January 2012.
- Bowker, JM., Bergstrom, John C., Gill, Joshua, and Lemanski, Ursula. (December 9, 2004). *The Washington & Old Dominion Trail: An Assessment of User Demographics, Preferences and Demographics*. USDA Forest Service, University of Georgia Department of Agriculture and Applied Economics, National Park Service.
- Institute for New Hampshire Studies (INHS). (2011). *Seasonal Visitor Surveys Summer/Fall/Winter/Spring 2009-2010*. Retrieved from <http://oz.plymouth.edu/inhs/VisitorSurveys/>
- Knoch, Carl R., Tomes, Patricia A. (December 2010). *Armstrong Trail 2010 User Survey and Economic Impact Analysis*. Rails to Trails Conservancy. Retrieved from [www.railstotrails.org/resources/documents/resource\\_docs/Amstrong\\_Survey\\_Final\\_low\\_res.pdf](http://www.railstotrails.org/resources/documents/resource_docs/Amstrong_Survey_Final_low_res.pdf)
- Knoch, Carl R., Tomes, Patricia A. (December 2009). *Ghost Town Trail 2009 User Survey and Economic Impact Analysis*. Rails to Trails Conservancy. Retrieved from [www.railstotrails.org/resources/documents/wherewework/northeast/Ghost\\_Town\\_Trail\\_User\\_Survey\\_LR.pdf](http://www.railstotrails.org/resources/documents/wherewework/northeast/Ghost_Town_Trail_User_Survey_LR.pdf)
- Knoch, Carl R., Tomes, Patricia A. (December 2008). *Perkiomen Trail 2008 User Survey and Economic Impact Analysis*. Rails-To-Trails Conservancy. Retrieved from [www.railstotrails.org/resources/documents/resource\\_docs/Perkiomen\\_Trail\\_Users\\_Survey\\_Final.pdf](http://www.railstotrails.org/resources/documents/resource_docs/Perkiomen_Trail_Users_Survey_Final.pdf)
- Knoch, Carl R. (November 2007). *Heritage Rail Trail County Park 2007 User Survey and Economic Impact Analysis*. York County Rail Trail Authority.
- Racca, David P., Dahnju, A. (November 2006). *Property Value/Desirability Effects of Bike Paths Adjacent to Residential Areas*. Center for Applied Demography & Survey Research.