Catskill Mountain Rail Trail: Economic & Fiscal Impact Analysis

Commissioned by the New York – New Jersey Trail Conference

June 2013



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EXECUTIVE SUMMARY

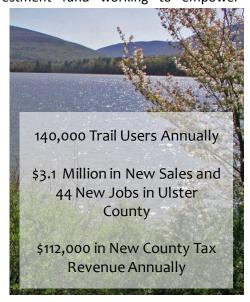
Introduction

Camoin Associates was commissioned by New York-New Jersey Trail Conference to conduct an economic impact analysis on a project intended to create a 32 to 38 mile rail trail connecting the City of Kingston with Belleayre Ski Resort in Ulster County, to be known as the Catskill Mountain Rail Trail "CMRT). The Trail Conference is 501(c)3 nonprofit that works with volunteers and outdoor recreation agencies to enable the public to safely access public open space. The Trail Conference maintains 2,000 miles of recreational trails in the greater New York metropolitan area, including the Catskills.

The report was completed with assistance from the Dyson Foundation and Ulster County Businessman Sean Eldridge. The Dyson Foundation works toward improving people's lives through grant funding, promoting philanthropy, and strengthening the capacity of nonprofit organizations. They have previously provided funding for the Walkway over the Hudson Project. Sean Eldridge is the CEO and Founder of Hudson River Ventures, a small business investment fund working to empower

entrepreneurs and build thriving businesses throughout the Hudson Valley. He sees the completion of the rail trail as a key driver for the economic development of this region.

The goal of the CMRT is to create a world-class tourism destination that enhances the current recreational resources in the Catskill mountain region by creating an interconnected rail trail network throughout the Hudson Valley and Catskills including links with other heavily used rail trails in the region such as the D&H Heritage Trail (Hurley or O&W Rail Trail), the Wallkill Valley Rail Trail, and the Hudson Valley Rail Trail. In addition, the CMRT will connect to the Belleayre Ski Resort, a number of campgrounds, day use areas, mountain biking trails, fishing areas, urban neighborhoods and rural hamlets, small businesses, and other recreational facilities throughout the Catskill region. Finally, it is envisioned that the CMRT will act as host to a number of events throughout the year including



running and hiking events, mountain biking races, triathlons, festivals, etc.

The purpose of this report is to project and quantify the likely economic and fiscal benefits of the CMRT on Ulster County and New York State. Specifically, the report determines the impact on sales, jobs, and wages. In addition to the economic impact resulting from the construction of the CMRT, Camoin Associates also considers the fiscal impacts on government revenues. The new business activity and wages resulting from visitor spending generates additional revenue for local and state governments in the form of sales and bed taxes. The following is a summary of the major findings of the report.

Estimated Visitation

Camoin Associates conducted research into trail use to develop a reasonable estimate as to the number of anticipated users of the CMRT on an annual basis. This involved reviewing previous trail user counts, regional and national impact analyses, discussions with local and state organizations, understanding of regional populations and an overall understanding of the proposed CMRT and the likely types of users. The research indicates that annual use of the CMRT will be approximately 140,000.

Ulster County

Using the estimated visitation figure, Camoin Associates was able to estimate the percent of visitors who would be from outside of Ulster County. Based on previous research in the area, it is assumed that 23% of CMRT users would be from places other than Ulster County. Using an average spending per person figure, we aggregated this new spending into major categories and ran them through an economic impact modeling system. The following table shows the direct and indirect economic and fiscal impacts of the CMRT on Ulster County.

Summary of Impact on Ulster County			
Annual Sales	\$ 3,107,667		
Direct Sales	\$ 2,044,518		
Indirect Sales	\$ 1,063,149		
Annual Jobs	44		
Direct Jobs	32		
Indirect Jobs	12		
Annual Earnings	\$ 1,156,000		
Direct Earnings	\$ 704,878		
Indirect Earnings	\$ 451,122		
Annual County Revenue	\$ 111,844		

The \$2 million in direct spending by non-local users results in nearly \$1 million in indirect "spillover effects" for a total of \$3.1 million in new sales in the County, 44 new jobs, and \$1.1 million in new earnings. In addition, Ulster County will receive \$111,844 annually in sales and bed tax revenue generated by this new economic activity.

New York State

Similarly, an analysis was conducted to determine the economic impacts of the CMRT on New York State. Using the same methodology described above, Camoin Associates found that 9% of total visitors would come from outside of the State, which would result in over \$916,571 in direct annual sales by non-state residents. The following table shows the economic and fiscal impacts of the CMRT on New York State.

Summary of Impact on New York State			
Annual Sales	\$ 1	1,860,638	
Direct Sales	\$	916,571	
Indirect Sales	\$	944,068	
Annual Jobs		18	
Direct Jobs		11	
Indirect Jobs		7	
Annual Earnings	\$	684,000	
Direct Earnings	\$	316,667	
Indirect Earnings	\$	367,333	
Annual State Revenue	\$	57,843	

The \$916,000 in direct sales results in \$1.8 million in total sales, 18 total jobs, and \$684,000 in new earnings. In addition, the State receives \$57,843 in sales tax revenue.

Introduction

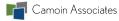
The CMRT is a proposed multi-use recreational trail that would connect the City of Kingston to the Ulster and Delaware County border near the Belleayre Ski Center. The total distance would span between 32 and 38 miles¹ and would run along the Ashokan Reservoir, along the Esopus Creek, and through or near a number of smaller Catskill communities including Pine Hill, Phoenicia, Boiceville, West Hurley, and others. The New York-New Jersey Trail Conference hired Camoin Associates to conduct an economic and fiscal impact analysis on the proposed CMRT. The Trail Conference is 501(c)3 nonprofit that works with volunteers and outdoor recreation agencies to enable the public to safely access public open space. The Trail Conference maintains 2,000 miles of recreational trails in the greater New York metropolitan area, including the Catskills.

The report was completed with assistance from the Dyson Foundation and Ulster County Businessman Sean Eldridge. The Dyson Foundation works toward improving people's lives through grant funding, promoting philanthropy, and strengthening the capacity of nonprofit organizations. They have previously provided funding for the Walkway over the Hudson Project. Sean Eldridge is the CEO and Founder of Hudson River Ventures, a small business investment fund working to empower entrepreneurs and build thriving businesses throughout the Hudson Valley. He sees the completion of the rail trail as a key driver for the economic development of this region.

The CMRT would run along the former Ulster & Delaware ("U&D") Railroad Corridor. The U&D Railroad Corridor was purchased by Ulster County in 1979 with the intention of using it for a major tourism railroad destination called "Steamtown, USA". When the proposed Steamtown project went to another state, the Corridor was leased to the Catskill Mountain Railroad ("CMRR") for tourism railroad operations. The most recent lease with CMRR is due to expire in 2016. The Catskill Mountain Railroad currently operates on less than 3 miles of track between Cold Brook and Phoenicia, as well as within the City of Kingston. Studies have been conducted regarding the transformation of the Corridor into rail with trail, but the scope of operations and future of the CMRR is unknown at this time. Therefore, this analysis does not consider the impact of a continued tourism railroad operation.

The intention of the CMRT is to create a world-class tourism destination that enhances the current recreational resources in the Catskill mountain region by creating an interconnected rail trail network throughout the Hudson Valley and Catskills including linking with the D&H Heritage Trail (also known as Hurley Rail Trail and O&W Rail Trail), the Wallkill Valley Rail Trail, and eventually, the Hudson Valley Rail Trail (including the Walkway Over the Hudson, which attracts an estimated 750,000 people each year). In addition, the CMRT will connect to the Belleayre Ski Resort, a number of campgrounds, public day use areas, hiking and mountain biking trail networks, fishing areas, and other recreational facilities throughout the Catskill mountain region. Finally, it is envisioned that the CMRT will act as host to a number of events throughout the year including running races, bike races, mountain biking events, triathlons, festivals, etc. It is interesting to note that the City of Kingston is within a two hours drive of 19 million people, making it a premier destination for those looking for recreational resources within close proximity.

¹ The range in the distance of the CMRT will depend on the County's future decisions regarding the continuance of a tourism railroad operation in 6 miles of the corridor. This area might be railroad use only or could be rail with trail if feasible.



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The completed CMRT will be surfaced with natural crushed stone although some portions, such as the City of Kingston section, will likely be asphalt. Ten miles of the CMRT will run along the Ashokan Reservoir, offering users magnificent views of the Catskill Mountains. The CMRT will also connect communities in the Catskills in a way that has never been possible before, including running alongside schools, downtown business districts, existing campgrounds and hiking trails, proposed mountain biking trails, and residential developments, including senior citizen housing.

The Catskill Mountain Rail Trail can be described as three unique, but interconnected, major sections of trail. The three segments include 1) an **urban section** in the City of Kingston, 2) the **Ashokan Reservoir section** running along the northern border of New York City's reservoir, and 3) a more **rural section** that connects Phoenicia to the Belleayre Ski Resort trails in Pine Hill and Highmount.

- 1) The **urban section** will run through the City of Kingston, serving the City's 23,000 residents and providing car-free access to and from midtown-Kingston and a major shopping center. Residents are currently using the corridor in an informal way, but with proposed rail removal and improved surface, the use is likely to increase dramatically, used both for modes of transportation and for recreation and exercise. In addition to improving the quality of life in Kingston and supporting nearby small businesses, this kind of urban linear-park could also increase property values along the Corridor. Prior research has demonstrated access to public trails and parks, including linear rail trail parks, have a positive impact on property values of nearby properties.²
- 2) The **Ashokan Reservoir section** will run approximately ten miles along the northern edge of the Ashokan Reservoir, offering beautiful views of the Catskill Mountains and the reservoir at the eastern and western ends of the Reservoir. This section of the trail could offer a connection to heavily used trails that are located on the southeast bank of the Ashokan using Reservoir Road that crosses the Reservoir near Shokan. This section of the CMRT has the potential to become a major destination in the region for local residents and visitors alike.
- 3) Finally, the **rural section** will run approximately 13 miles and connect areas north of Phoenicia to the Belleayre Ski Resort at the Delaware County border. The rural section will be more of a mountain trail



² A study conducted on the Massachusetts Minuteman bikeway indicates that homes along the bikeway sold an average of three weeks quicker than those not along the bikeway and closer to their asking price. Another study on home values near the Little Miami Scenic trail in Ohio indicates that for the average home, homeowners were willing to pay \$9,000 extra to be located one thousand feet closer to the trail. Finally, a study about housing preferences of baby-boomers suggests that access to walking/jogging trails is the most important factor when considering retirement locations. All of this is to say that access to trails has a positive impact on property values and adjacent properties in Kingston and elsewhere in the Corridor can expect to see similar results.



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experience and will connect into a growing network of existing and proposed trails that are used for hiking, cross-country skiing, snow-shoeing, and mountain biking. This section of trail also has the potential to become a major recreation destination and access to the CMRT will complement and augment other available recreation opportunities in the NYS Route 28 corridor.

The following report projects and quantifies the economic and fiscal benefits of the CMRT on Ulster County and New York State. Specifically, the report determines the impact on sales, jobs and wages. In addition to the economic impact resulting from the construction of the CMRT, Camoin Associates also considers the fiscal impacts on government revenues. The new business activity and wages resulting from visitor spending generates additional revenue for local and state government in the form of sales and hotel tax.

METHODOLOGY

Data Sources

Camoin Associates reviewed data and information from a variety of sources including regional trail use studies, visitor spending surveys, local and regional visitor estimates, etc.

Visitor Counts Report of the 2012 New York State Trail User Count 2008 New York State Trail Survey Salem-Concord Bikeway Demand Estimate, November 2003

Economic Valuation Study for Public Lands in the Central Catskills, December 2012

Visitor Spending

- 2011 Walkway Over the Hudson visitor survey
- 2008 New York State Trail Survey
- 2011 Adirondack Rail Corridor Analysis

Other Visitor Estimates

- Discussions with HITS Endurance Race Management Organization
- D&L Trail 2012 User Survey and Economic Impact Analysis, December 2012
- Armstrong Trail, 2010
 User Survey and
 Economic Impact
 Analysis
- Pine Creek Rail Trail, 2006 User Survey and Economic Impact Analysis
- Ghost Town Trail, 2009
 User Survey and
 Economic Impact
 Analysis

Other Information

- National Park Service Planning Notes for the Ulster County Catskill Mountain Rail Trail Concept, May 2013
- Review of survey data collected in 2011 as part of an economic impact analysis of the Walkway Over the Hudson pedestrian bridge
- Discussions with Parks and Trails New York
- Discussions with the National Park Service
- Discussions with NYS Department of Environmental Conservation
- Discussions with the Woodstock Conservancy

Methodology Employed

Camoin Associates employed the following methodology to determine the economic impact of the Catskill Mountain Rail Trail:

- 1. Camoin Associates used a three-prong approach to project a reasonable number for total annual trail use including baseline, additional visitor capture, and hosting events. Please see the Visitor Count section of this report for more information.
- 2. Camoin Associates developed an estimate for the percent of users who will be coming from outside of the County based on a survey conducted at the Walkway Over the Hudson pedestrian bridge, which asked respondents for their zip code of origin. The percent of users from outside of New York State was based on a review of similar studies to come up with an average percent of trail users who are from out of the home state.
- 3. Based on the new visitation estimates developed in Step 1 and the number of local users on the CMRT identified in Step 2, Camoin Associates determined the number of new non-local users that would visit the CMRT as a result of the Project.
- 4. Based on information gathered from a previous visitor spending survey, Camoin Associates determined average visitation spending of a typical non-County and non-State CMRT user. This information was based on a visitor survey conducted at the Walkway Over the Hudson pedestrian bridge, which asked respondents about their spending habits related to their trip to the Walkway. This information was compared to other regional and national studies and was determined to be reasonable related to typical trail use spending habits.
- 5. Aggregated "new" spending by multiplying the average spending (Step 4) by the "new annual visitor" estimates (Step 3).
- 6. Calculated direct jobs/economic activity resulting from the "new" spending.
- 7. Modeled indirect impacts on jobs/economic activity using multipliers provided through the EMSI software package.
- 8. Arrived at total economic impacts as the sum of all direct and indirect impacts in the first full year of venue operation.
- 9. Calculated fiscal impact to Ulster County and State of New York (in 2013 current dollars).

Modeling Software

Economic Modeling Specialists, Inc. (EMSI) designed the input-output model used in this analysis. The EMSI model allows the analyst to input the amount of new direct economic activity (spending or jobs) occurring within the study area and uses the direct inputs to estimate the spillover effects that the net new spending or jobs have as these new dollars circulate through the study area's economy. This is captured in the indirect impacts and is commonly referred to as the "multiplier effect." See Attachment A for more information on economic impact analysis.

Visitor Counts

In order to project the number of annual trail users, Camoin Associates pulled data from a wide variety of sources including those listed in the section above entitled Data Sources. Using the information from these sources as well as discussions with those familiar with the area and likely use, it became clear that the CMRT would generate traffic in three primary ways: 1) **Baseline**: typical trail usage based on regional averages for similar rail trails, 2) **Extended Stay Use**: increase in duration of visits by those already recreating in the Catskills, 3) **Event Use**: trail use and visitation as a result of specific events hosted on the CMRT. Further information and the calculations for these are listed below.



Baseline Use

All trails are unique in their visitation patterns and are dependent on location, surface type, signage/marketing, demographics, and proximity to other resources, which makes it difficult to project trail use on a currently non-existent trail. While it is difficult to pinpoint the exact numbers of users, multi-use rail trails are becoming more popular and widely-used and more studies are being conducted on typical visitation patterns that result from the existence of a trail that can serve as a baseline for the estimate. Many residents and visitors find the flat or gently slope grade and accessibility of rail trails as advantages over more rugged hiking trails, and rail trails can also be used by senior citizens, families with stroller and young children, and persons with disabilities. Using information gathered from the 2012 NYS Trail User Count report, Camoin Associates identified trails that have similar qualities to the proposed CMRT and came to an average use of 113,347 persons per year.

Average Use of Regional Trails				
Trail	Reason	Annual Users		
Burlington Waterfront Bikeway*	Near City/Views	292,000		
Genesee Valley Greenway - Mi .5-33	Type/Length	120,840		
Uncle Sam Bikeway	Near City	25,196		
Robert Moses Trail	Near City/Views	107,950		
O& W Rail Trail/D&H Canal Trail	Proximity/Type	81,157		
Harlem Valley Rail Trail- Millerton	Proximity	111,380		
Harlem Valley Rail Trail- Copake	Proximity	54,908		
Catskill Scenic Trail	Excluded	-		
Hudson Valley Rail Trail	Excluded	-		
Total		793,431		
Average Users (793,431/7)		113,347		

^{*} Used lowest estimate of 800 people per day

Note that the Catskill Scenic Trail was excluded due to an issue with the counting methodology and the Hudson Valley Rail Trail was excluded due to the high number of users as a result of the Walkway Over the Hudson pedestrian bridge.

Another way to estimate trail use is based on average use per mile. To complement the average use of regional trails, Camoin Associates also looked at average trail use per mile to come to an estimated use of the proposed 32 to 38 mile Catskill Mountain Rail Trail. We gathered information on trails that are similar to the Catskill Mountain Rail Trail in a few key ways, including the following: 1) they feature significant scenic views, 2) they include sections that are more rural in nature, and 3) they adjoin neighborhoods and communities along the route. The following table shows this calculation.

Average Use Per Mile				
Trail	Location	Length	Annual Users	
O& W Rail Trail/D&H Canal Trail	NY	10.4	81,157	
Red Cedar Trail	WI	14.5	40,000	
Harlem Valley Rail Trail*	NY	15	83,144	
Sugar River Trail	WI	23.5	47,566	
Elroy-Sparta Trail	WI	32	50,000	
Genesee Valley Greenway - Mi .5-33	NY	33	120,840	
Virginia Creeper Trail	VA	35	130,172	
Ghost Town Trail	PA	36	75,557	
Pine Creek Trail	PA	62.6	125,000	
Total		262	753,436	
Average Use Per Mile				
Number of Miles of CMRT			32	
Number of Users			92,023	

^{*} Average of two trailhead studies

Based on these two calculations and confirmed through conversations with those familiar with the CMRT, the assumption for a baseline trail use is estimated to be around 102,600 (average of two methods). It can be assumed that due to the proximity of the CMRT to other recreational resources, the existence of the CMRT will not be the sole reason trail users visit the area but rather an amenity that might extend visitor length-of-stay. Therefore, in addition to the baseline estimate, we also consider the CMRT's impact on extending the duration of stays from potential trail users, including from special scheduled public and private events, as described below.

Extended Stay Use

The Catskill Park is heavily used for recreation purposes. Popular activities include fishing and hunting, mountain biking, hiking, winter sports, camping, and swimming. The CMRT is unique from many rail trails in that it will be well connected to the high quality recreational resources in the Catskills, making it possible for visitors and residents alike to extend their recreation time in an area that already receives significant tourism visitation. A study conducted in 2012 estimated visitation to the Catskills for outdoor recreation to be approximately 2.5 million annually. Camoin Associates estimates that nearly 400,000 users of Catskill Lands are in close proximity to the CMRT and are doing similar types of activities. Based on discussions with the National Park Service, a review of literature on the topic of recreation, site visits, and discussions with others familiar with the area, it was determined that 5% of the current Catskill outdoor recreation visitors will likely be attracted to the CMRT and use it in addition to their current activities or during a different visit.

Catskill Lands Visitation			
Site	Visitation		
DEC Region 3 Hiking, Equestrian, Mtn Biking	82,290		
DEC Pine Hill Lake	21,098		
DEC Region 3 Camping	82,515		
Windham, Hunter, Plattekill Summer	192,500		
Private Preserves Open to the Public	2,000		
Private Cross Country Facilities	10,000		
Total	390,403		
Capture Rate	5%		
Captured Visitors Using CMRT	19,520		

Source: Economic Valuation Study for Public Lands in the Central

The tourism industry is always looking for ways to increase the amount of time people are spending in a particular destination. The greater number of activities and tourism amenities that exist, the more time and money the visitors will spend. The existence of the CMRT will increase the total number of recreational resources that are available to a Catskill Park visitor, not only creating a destination in itself, but also providing another point of interest and reason for visitors to the Catskill area to extend stays or come back to the area.

Event Use

Finally, in addition to the baseline visitation and the visitors coming from other recreation sites in the Catskills, the CMRT could also serve as a host for a number of major and minor events each year and become both a Statewide and nationwide draw. Healthy living events are becoming more popular and the proximity to the New York Metropolitan area, Boston, the Capital Region, and other major population centers in the northeast make the Catskills a prime location for competition sports participants looking to add an event to their schedule, both beginners and advanced. Speaking to local race management companies, Camoin Associates estimated the likely use of the CMRT for events that would draw local and non-local participants and their families. Likely events on the CMRT could include triathlons, running races, horse events, mountain biking events, festivals, charity walks, etc. The running and biking events would benefit from the long distance, off-road trail, and the ability to avoid having to send competitors onto street surfaces with other traffic. Many bicycle competition promoters look for

trail networks with 40 or more miles of connected bike paths and trails.

Based on conversations with those in the race management industry, it can conservatively be assumed that the CMRT will be the venue for at least 3 major events, 6 medium sized events, and 10 minor events per year. A major event could include a multi-day triathlon series that draws at least 3,500 people or a similarly sized multi-



day running race event that draws people for a half-marathon or marathon, which are increasingly popular. These kinds of large events can typically be held twice a year in the fall and spring. Medium sized events are likely to include 5k and 10k races, cause-based run/walk events, single distance triathlon events, and bike races. The medium sized events are held throughout the year, but primarily during the spring, summer, and fall as they rely on attracting participants who may not be interested in a winter event. Finally, the minor events could include community 5k runs and walks, local fundraisers, mountain biking events, equestrian outings, cross country skiing, winter 5k series, snowshoe races, etc. These smaller events could take place throughout the year; many running clubs are starting to hold winter race series events and the connection of the CMRT to Belleayre Ski Resort could create demand for cross country skiing events. Note that the true number of minor events is likely to be higher, as local running and bicycling clubs are very active. With a venue like the CMRT they would be able to host events throughout the year and all along the CMRT without conflict. It is important to state that the event numbers represent the number of new events being held in the County based on growth in the industry and demand locally, regionally, and nationally.³

In total, events could draw at least 17,500 people annually, including both the primary attendees and family/friends that are coming to provide support or watch. Based on conversations with race management professionals, these figures are a conservative estimate and as the events and the venue become more well-known, the frequency, event scope, and participation will likley increase as more people and organizations become familiar with the trail.

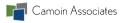
CMRT Events				
Event	Number	Event		
Major (3,500 people)	3	10,500		
Medium (750 people)	6	4,500		
Minor (250 people)	10	2,500		
Total		17,500		

Total Trail Use

In total, baseline, extended stay, and events related to CMRT are expected to generate nearly 140,000 users per year.

CMRT Total Visitation			
Baseline	102,685		
Extended Stay	19,520		
Events	17,500		
Total	139,705		

³ Based on conversations with those familiar with race management, the CMRT represents an opportunity to capitalize on the growth of the racing industry in the northeast and around the United States. As more people are interested in healthy and active lifestyles, including aging "baby-boomers," there has been growing demand for running, bicycle, skiing, and triathlon competitions. The CMRT will provide a venue that is attractive to race management companies looking for safe and accessible routes in reasonable proximity to New York City that avoid major roadways and traffic. The race management company contacted for this report, HITS Endurance, indicated that their large events would attract 5,000-10,000 people multiple times (and get larger as they become more well known) a year but for the purposes of this analysis Camoin Associates used a more conservative estimate.



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ECONOMIC IMPACTS ON ULSTER COUNTY

New Visitation Estimates

As summarized in the following table, net new visitation is considered the number of visitors to the Catskill Mountain Rail Trail who originate from outside of Ulster County. Camoin Associates gathered information from a variety of studies that indicate the percent of trail users who are from outside of the trail's "home" county. The table below shows the findings of the research as well as the average. For this analysis, we assume that just fewer than 25% of the total users of the CMRT will be from outside of Ulster County. It is not expected that visitation to the CMRT will be as heavily non-local as the Walkway Over the Hudson pedestrian bridge but the unique aspects of the CMRT could generate more non-county visitation as compared to some of the other NYS trails.

Non-Ulster County Trail Users			
Trail	Non-County Trail Use		
Catharine Valley Trail Survey	20.83%		
Chautauqua Rails to Trails	35.19%		
Erie Canalway	17.24%		
Genesee Valley	15.07%		
Lehigh and Auburn Trails	9.62%		
Mohawk Hudson	17.21%		
North/South County	6.57%		
O/W Rail Trail	11.72%		
Walkway Over the Hudson	48.00%		
D&L Rail Trail (Pennsylvania)	45.90%		
Average	23%		

Using the total visitor estimate established in the previous section, the table below shows that 31,762 visitors to the CMRT will be net new to the economy and, therefore, their spending will have an economic impact.

Net New Annual Visitation			
Ulster County			
Total Visitation Estimate 139,705			
Percent Non-County Users 23%			
Net New Out of County Visitors 31,762			

Visitor Spending by Category

The next step in the analysis is to calculate the types and amounts of non-county resident visitor spending. In general, the types of purchases that are expected to occur as a direct result of the CMRT include spending on lodging, transportation, recreation and entertainment, food, and retail. As stated previously, this analysis will use visitor spending information collected during a survey at the Walkway Over the Hudson pedestrian bridge in 2011. The table below shows the non-county resident spending reported in the survey responses.

Visitor Spending				
	Non-Ulst	er County Users		
Spending Categories	Spending Per Person Per Day			Net New Spending (31,762 Visitors)
Food	\$	24.09	\$	765,146
Retail	\$	3.87	\$	122,919
Recreation	\$	2.90	\$	92,110
Lodging	\$	23.80	\$	755,935
Transportation	\$	5.78	\$	183,584
Other	\$	3.93	\$	124,825
Total	\$	64.37	\$	2,044,518

Source: Camoin Associates, 2011 Walkway Over the Hudson Impact Analysis Report

The above table also calculates the direct spending in Ulster County resulting from the CMRT by multiplying the total spending per category by the number of annual non-county resident visitors to the CMRT ("net new" visitors). Direct spending that is occurring in Ulster County as a result of the CMRT is equal to \$2 million.

Total Impacts on Ulster County

Based on the projections for new visitation, \$2 million in direct net new spending by non-county residents was used as the input for the EMSI economic impact model. The EMSI model allows the analyst to break down the total spending by NAICS code to get an accurate read for how one dollar spent in a specific sector multiplies throughout the local economy. To analyze the impact of the Trail on Ulster County, the total spending is broken down into a variety of NAICS codes that capture the

spending habits of a typical rail trail user.

The table below outlines the direct and indirect economic impact of the CMRT on Ulster County. The indirect impacts are those that occur as the dollars from direct impacts cycle through the economy. For example, new employees receive wages and in turn spend a portion of those dollars in the local economy for daily needs, and other housing expenses, and proportion of those dollars are again re-spent

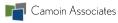
in the local economy. As those dollars continue to circulate, additional jobs and business activity are created. This effect is captured in the indirect impacts. Taking into account the direct and indirect

economic impacts, the CMRT is estimated to create a total of \$3.1 million in new sales, 44 new jobs⁴, and \$1.1 million in new earnings.

Economic Impact					
Ulster County					
	Direct Indirect Total				
Sales	\$ 2,044,518	\$ 1,063,149	\$ 3,107,667		
Jobs	32	12	44		
Earnings	\$ 704,878	\$ 451,122	\$ 1,156,000		

Source: EMSI, Camoin Associates

⁴ Note that in this impact analysis, "jobs" is defined as a Full Time Equivalent (FTE) position, which includes both full time employees and well as two or more part time employees that when their working hours are added together equal at least 35 hours per week. The CMRT will generate a demand for more employees as well as increased hours for certain employees throughout the year; the "jobs" impact is not exclusively full time positions.



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ECONOMIC IMPACTS ON NEW YORK STATE

Camoin Associates followed the same process as above to determine the economic impact of the Catskill Mountain Rail Trail on New York State. In order to capture the impact of the CMRT on the State, Camoin Associates used information from the Walkway Over the Hudson visitor survey that was specific to non-NYS residents as well as other research into out of state visitation to trails.

New Visitation Estimates

Using information from the 2008 Office of Parks, Recreation and Historic Preservation Trail Survey as well as survey information from the Walkway Over the Hudson analysis and a recent report prepared by the Rails-to-Trails Conservancy on the D&L Rail Trail in Pennsylvania, it can be assumed that approximately 9% of the CMRT users will be from out of New York State. The non-state use is not expected to be as high as the Walkway Over the Hudson due to the uniqueness of the Walkway and the broad based marketing campaign backed by NYS. However, the views of the Ashokan Reservoir and a long distance rail trail are likely to be a strong draw for non-NYS residents. In addition, the trail's location in the Catskill Park means that many visitors already traveling through the area will be from out of state.

Non-NY Trail Users			
Trail	Non-State Trail Use		
Catharine Valley Trail	6.00%		
Chautauqua Rails to Trails	12.90%		
Erie Canalway	6.00%		
Genesee Valley	2.30%		
Lehigh and Auburn Trails	2.40%		
Mohawk Hudson	1.60%		
North/South County	2.30%		
O/W Rail Trail	3.47%		
Walkway Over the Hudson	28.00%		
D&L Rail Trail (Pennsylvania)	22.50%		
Average	9%		

Based on the annual visitation numbers estimated earlier in this report, the table below shows that just under 12,225 visitors to the CMRT are net new to New York State, and therefore, their spending has an economic impact on the state economy.

Net New Annual Visitation		
New York State		
Total Visitation Estimate	139,705	
Percent Non-State Users	9%	
Net New Out of State Visitors	12,224	

New Visitation Spending Estimates

Similar to the analysis conducted for Ulster County benefits, the following table breaks down the non-NYS resident survey responses into total spending by category. Based on the survey respondents' report

of the number of people in their party and their spending habits, the following table establishes average spending per person estimates. As seen below, the average spending per non-State resident trail user is \$74.98 per day.

Visitor Spending				
Non-New York State Users				
Spending Categories	Spending Per Person Per Day			Net New Spending (12,224 Visitors)
Food	\$	25.77	\$	315,018
Retail	\$	3.71	\$	45,352
Recreation	\$	3.39	\$	41,440
Lodging	\$	27.07	\$	330,909
Transportation	\$	6.62	\$	80,924
Other	\$	8.42	\$	102,928
Total	\$	74.98	\$	916,571

Source: Camoin Associates, 2011 Walkway Over the Hudson Impact Analysis Report

Using the average per person spending and the number of non-NYS resident annual visitors, the table above shows the direct net new spending that is attributable to the CMRT. Spending occurring in New York State as a result of the CMRT totals \$916,571. The impact of the CMRT on NYS is less than that on the County because some of the new visitors to Ulster County will be residents of New York State and are, therefore, not bringing "new dollars" into the state.

Total Impacts on New York State

The direct net new spending by non-NYS residents was used as the input for the EMSI economic impact model (described above). Taking into account the indirect economic impacts, the CMRT is estimated to create \$1.8 million in sales, 18 jobs and \$684,000 in new wages in New York State each year.

Economic Impact								
New York State								
		Direct	Indirect			Total		
Sales	\$	916,571	\$ 944,068		\$	1,860,638		
Jobs		11	7			18		
Earnings	\$	316,667	\$	367,333	\$	684,000		

Source: EMSI, Camoin Associates

LIMITED FISCAL IMPACT STUDY

Fiscal impacts of the CMRT on Ulster County include sales tax revenue from direct sales and earnings and hotel tax revenue. New York State will also enjoy additional sales tax revenue related to the project. The section below outlines the additional municipal revenue associated with CMRT.

Ulster County Fiscal Impacts

Sales Tax Revenue

County sales tax is generated in two ways: total direct sales related to the CMRT and spending related to job creation and new earnings.

First, of the \$3.1 million in new sales generated as a result of the CMRT, the majority would be taxable and, therefore, result in the generation of sales tax revenue for Ulster County. Based on the analysis, direct sales would result in \$87,015 in new local sales tax revenue for Ulster County.

Ulster County Sales Tax Revenue - Total Sales			
Total Sales	\$	3,107,667	
Percent Taxable		70%	
Taxable Sales	\$	2,175,367	
County Sales Tax Rate		4%	
New Local Tax Revenue	\$	87,015	

^{*} Not all sales will be subject to sales tax

Source: Camoin Associates, Ulster County

Secondly, the additional earnings described by the total economic impact of the ongoing use of CMRT (see the previous section) would lead to additional sales tax revenue for the County. It is assumed that 70% of the earnings are spent within Ulster County and that 30% of those purchases are taxable.

Ulster County Sales Tax Revenue - Total Earnings				
Total New Earnings	\$	1,156,000		
Amount Spent in County (70%)	\$	809,200		
Amount Taxable (30%)	\$	242,760		
County Sales Tax Rate		4%		
New Local Tax Revenue	\$	9,710		

^{*} Some earnings will be spent outside of Ulster County and not all sales will be subject to sales tax

Source: Camoin Associates, Ulster County

Under these assumptions, the County will receive approximately \$9,710 annually from the earning related economic impacts of CMRT.

Bed Tax Revenue

In addition to the sales tax revenue, Ulster County would also receive additional bed tax revenue from the new visitation lodging spending. With a 2% bed tax, Ulster County will receive \$15,119 in additional revenue annually.

Ulster County Bed Tax				
New Visitation Lodging Spending	\$	755,935		
Bed Tax		2%		
New County Bed Tax Revenue	\$	15,119		

Source: Camoin Associates, Ulster County

Summary of Ulster County Revenue

Based on the figures calculated in the above sections, CMRT is projected to generate \$111,844 in annual revenue for Ulster County.

Combined New County Revenue			
Sales Tax - Total Sales	\$	87,015	
Sales Tax - Total Earnings	\$	9,710	
Bed Tax	\$	15,119	
Combined County Revenue	\$	111,844	

Source: Camoin Associates

New York State Fiscal Impacts

Sales Tax Revenue

Sales and earnings associated with the Catskill Mountain Rail Trail will generate 4% sales tax on most goods purchased in New York State. The following tables calculate the State sales tax revenue.

Sales tax generated from the new spending in NYS associated with the CMRT will generate \$52,098 in sales tax receipts for NYS. This assumes that approximately 70% of the goods purchased by non-NYS resident CMRT users are taxable.

New York State Sales Tax Revenue - Total Sales			
Total Sales	\$	1,860,638	
Percent Taxable		70%	
Taxable Sales	\$	1,302,447	
State Sales Tax Rate		4%	
New Local Tax Revenue	\$	52,098	

^{*} Not all sales will be subject to sales tax

Source: Camoin Associates

In addition, the new earning in NYS associated with CMRT will also lead to additional sales tax for New York State. It is assumed that 70% of the earnings are spent within the State and that 25% of those purchases are taxable.

New York State Sales Tax Revenue - Total Earnings			
Total New Earnings	\$	684,000	
Amount Spent in County (70%)	\$	478,800	
Amount Taxable (30%)	\$	143,640	
State Sales Tax Rate		4%	
New Local Tax Revenue	\$	5,746	

^{*} Not all sales will be subject to sales tax

Source: Camoin Associates, Ulster County

Combined, New York State will receive \$57,843 annually in sales tax associated with the CMRT.

Combined New State Revenue			
Sales Tax - Total Sales	\$	52,098	
Sales Tax - Total Earnings	\$	5,746	
Combined State Revenue	\$	57,843	

Source: Camoin Associates

Attachment A: What is an Economic Impact Analysis?

The purpose of conducting an economic impact study is to ascertain the total cumulative changes in employment, earnings and output in a given economy due to some initial "change in final demand.". To understand the meaning of "change in final demand", consider the installation of a new widget manufacturer in Anytown, USA. The widget manufacturer sells \$1 million worth of its widgets per year exclusively to consumers in Canada. Therefore, the annual change in final demand in the United States is \$1 million because dollars are flowing in from outside the United States and are therefore "new" dollars in the economy.

This change in final demand translates into the first round of buying and selling that occurs in an economy. For example, the widget manufacturer must buy its inputs of production (electricity, steel, etc.), must lease or purchase property and pay its workers. This first round is commonly referred to as the "Direct Effects" of the change in final demand and is the basis of additional rounds of buying and selling described below.

To continue this example, the widget manufacturer's vendors (the supplier of electricity and the supplier of steel) will enjoy additional output (i.e. sales) that will sustain their businesses and cause them to make additional purchases in the economy. The steel producer will need more pig iron and the electric company will purchase additional power from generation entities. In this second round, some of those additional purchases will be made in the US economy and some will "leak out." What remains will cause a third round (with leakage) and a fourth (and so on) in ever-diminishing rounds of spending. These sets of industry-to-industry purchases are referred to as the "Indirect Effects" of the change in final demand.

Finally, the widget manufacturer has employees who will naturally spend their wages. As with the Indirect Effects, the wages spent will either be for local goods and services or will "leak" out of the economy. The purchases of local goods and services will then stimulate other local economic activity; such effects are referred to as the "Induced Effects" of the change in final demand.

Therefore, the total economic impact resulting from the new widget manufacturer is the initial \$1 million of new money (i.e. Direct Effects) flowing in the US economy, plus the Indirect Effects and the Induced Effects. The ratio between Direct Effects and Total Effects (the sum of Indirect and Induced Effects) is called the "multiplier effect" and is often reported as a dollar-of-impact per dollar-of-change. Therefore, a multiplier of 2.4 means that for every dollar (\$1) of change in final demand, an additional \$1.40 of indirect and induced economic activity occurs for a total of \$2.40.

Key information for the reader to retain is that this type of analysis requires rigorous and careful consideration of the geography selected (i.e. how the "local economy" is defined) and the implications of the geography on the computation of the change in final demand. If this analysis wanted to consider the impact of the widget manufacturer on the entire North American continent, it would have to conclude that the change in final demand is zero and therefore the economic impact is zero. This is because the \$1 million of widgets being purchased by Canadians is not causing total North American demand to increase by \$1 million. Presumably, those Canadian purchasers will have \$1 million less to spend on other items and the effects of additional widget production will be cancelled out by a commensurate reduction in the purchases of other goods and services.

Changes in final demand, and therefore Direct Effects, can occur in a number of circumstances. The above example is easiest to understand: the effect of a manufacturer producing locally but selling globally. If, however, 100% of domestic demand for a good is being met by foreign suppliers (say, DVD players being imported into the US from Korea and Japan), locating a manufacturer of DVD players in

the US will cause a change in final demand because all of those dollars currently leaving the US economy will instead remain. A situation can be envisioned whereby a producer is serving both local and foreign demand, and an impact analysis would have to be careful in calculating how many "new" dollars the producer would be causing to occur domestically.

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