



# Capital District Trails Plan

*Advancing a Vision for Connecting Communities*

# CREDITS & ACKNOWLEDGEMENTS



This plan was prepared with funding and support from the Capital District Transportation Committee (CDTC).

For information about this plan, contact CDTC at the following address:

One Park Place, Albany, NY 12205  
(518) 458-2161 • [www.cdtcmpo.org](http://www.cdtcmpo.org)



## **Capital District Trails Plan**

*Advancing a Vision for Connecting Communities*

This plan was prepared by:

**BEHAN PLANNING AND DESIGN**  
**THE CHAZEN COMPANIES**  
**SIDEKICK CREATIVE**  
**CONSULTECON, INC.**  
**ROBERT BENGRAFF**

### ADDITIONAL THANKS TO THE FOLLOWING PEOPLE AND ORGANIZATIONS FOR THEIR INPUT AND SUPPORT:

**JENNIFER CEPONIS**  
Capital District Transportation Committee

**JASON KEMPER**  
Saratoga County Planning

**MIKE VALENTINE**  
Saratoga County Planning

**STEVE FEENEY**  
Schenectady County Planning

**LINDA VONDERHEIDE**  
Rensselaer County Planning

**SCOTT LEWENDON**  
Planning Board, Town of Bethlehem

**MARK KING**  
Executive Director of the Mohawk Hudson Land Conservancy

**WILLIAM ANSLOW**  
Albany County Department of Public Works

**JAMES MEARKLE**  
Albany County Department of Public Works

**KENNETH GUYER**  
Town of New Scotland Highway Superintendent

**LISA RAMUNDO**  
Commissioner, Albany County Dept. of Public Works

**KAREN BRADLEY**  
Schenectady County Public Library

**ADAM YAGELSKI**  
Town of East Greenbush

**CHRISTOPHER HAWVER**  
Albany Pine Bush Commission

**PEGGY ENDERS**  
Chair of the Lexington, MA Bicycle Advisory Committee

**TERRY GLEASON**  
Chair of the Bedford, MA Bicycle Advisory Committee

**CHRISTOPHER TONKIN**  
Chair of the Arlington, MA Bicycle Advisory Committee

# TABLE OF CONTENTS



<b>2</b>	<b>INTRODUCTION</b>
<b>5</b>	<b>THE CAPITAL DISTRICT TODAY</b>
5	Regional Market Context
6	Recreational Market Trends
10	The Socio-Economic Benefits of Trails
<b>18</b>	<b>PUBLIC OUTREACH</b>
18	Stakeholder Meetings
20	Wiki Map
20	Online Survey
22	Initial Branding & Marketing Concepts
<b>24</b>	<b>TRAILS VISION PLAN</b>
26	Capital District Vision
28	Albany County Detail
34	Rensselaer County Detail
39	Saratoga County Detail
44	Schenectady County Detail
<b>48</b>	<b>SOCIO-ECONOMIC BENEFITS</b>
48	Introduction
55	Future Trail Use
61	Other Socio-Economic Benefits
<b>68</b>	<b>IMPLEMENTATION STRATEGY</b>
68	Implementation Roadmap
72	Marketing Strategy
<b>81</b>	<b>TRAILS MANAGEMENT BEST PRACTICES</b>
82	Case Study: Friends of the Rail Trail (“FORT”)
89	Case Study: Farmington Valley Trails Council
94	Case Study: Saratoga County: Zim Smith Trail
99	Case Study: Massachusetts Bay Transportation Authority
105	Case Study: Parks & Trails New York
<b>109</b>	<b>APPENDIX</b>
109	Trail Resources
110	Appendix A: Trail Construction Impacts
112	Appendix B: Residential Property Value Impacts
114	Appendix C: Annual Trail Related Spending Impacts
118	Online Survey Results

# INTRODUCTION

## TO THE CAPITAL DISTRICT TRAILS PLAN



## PROJECT OVERVIEW

Multi-use paths and trails provide people of all ages and abilities with wonderful outdoor recreational opportunities and an alternative mode of transportation for people to get from place to place. These trails have many benefits, including opportunities to incorporate physical activity into daily routines and trips, safe spaces for bicycling and walking, improved quality of life for nearby residents, linear green spaces that preserve natural landscapes and unique habitats, improved air and water quality, economic revitalization, and preservation of community identity and history. It is no surprise that multi-use trails have grown in popularity around the country and have been expanding their network in the Capital District in recent years.

As the designated Metropolitan Planning Organization (MPO) for the Albany-Schenectady-Troy and Saratoga Springs metropolitan areas, the Capital District Transportation Committee (CDTC) has

been working to develop local transportation solutions for over 50 years. This planning work includes local roads, highways, public transit, and walking and bicycling facilities, such as multi-use trails. As part of this, the CDTC has worked to promote and encourage safe and diverse transportation options for area residents, including the planning and development of multi-use trails—or “greenways”—which complement our local roadway infrastructure and public transit systems. For the purposes of this plan, the terms “greenway” and “trails” are used generally to describe dedicated corridors for walking, jogging, bicycling and other non-motorized travel. Regional trails and greenways, in this regard, are paths which connect two or more villages, towns, cities or counties, and provide an alternative transportation connection between them—typically a mile or longer in length and paved. This complementary transportation network is born from the CDTC’s New Visions 2030 long range transportation plan, and is intended to balance and diversify our transportation system.

# INTRODUCTION

## TO THE CAPITAL DISTRICT TRAILS PLAN

Toward this goal, in 2007 the CDTC released “Tech Valley Trails: A Greenway Concept for the Capital District,” a regional plan which conceptualized a system of trails throughout the area which would create a connected regional network. This proposed system would provide an opportunity for our region’s different communities to work together on an achievable common vision that provides a safe space for walking and bicycling, protects the environment, improves quality of life, conserves energy, and promotes tourism and economic development. This planning work has been instrumental in helping to guide the planning and creation of many new network connections at the local level. Since that initial plan was published, user counts and survey data have shown an increased use of local trails, and progress has been made in establishing many new network links. Since 2007, over 40 miles of new trails have been constructed in the Capital District. In the spring of 2017, Governor Andrew Cuomo announced funding for the Empire State Trail, a 750-mile trail from New York City to Canada and from Albany to Buffalo, anticipated to be completed by 2020. The Empire State Trail would create a significant north-south and east-west spine of the regional trail network. This work would provide a strong foundation for our effort of further connecting local communities.

Today, ten years since Tech Valley Trails was released, it is time to take stock in what has been accomplished and update this plan accordingly so that it can continue to help all local communities access, plan for, and continue to develop a seamless, connected, regional trail network.



## PROGRESS SINCE 2007

Since 2007, with the publication of *Tech Valley Trails: A Greenway Concept for the Capital Region*, a number of new trails have been planned and/or implemented in the region.

- Vision concept for the Champlain Canal Trail expansion
- Vision concept for the Zim Smith Trail expansion
- Vision concept for the Albany Hudson Electric Trail
- Construction of segments along the Champlain Canal Trail
- Construction of Spring Run Trail
- Construction of Railroad Run Trail
- Construction of Crescent Ave & Towpath Trails
- Construction of Delaware Ave Trail
- Construction of Albany Shaker Trail
- Construction of Albany County Helderberg-Hudson Rail Trail
- Planned expansion for Zim Smith Trail
- Planned Watervliet Cycle-track
- Planned South End Bikeway Link
- Rensselaer Riverfront Trail
- South Troy Riverfront Bikeway (or “Uncle Sam Trail Extension”)

**OVERALL, SINCE 2009, TOTAL TRAIL MILEAGE IN THE CAPITAL DISTRICT HAS RISEN FROM 74 MILES TO OVER 118 MILES, AND IS CURRENTLY PROJECTED TO REACH 148 MILES BY 2020.**

In 2016, the CDTC conducted counts, as well as trail user and property owner surveys on nine trails as part of the Regional Trail Perspectives report, which showed an increase in support for trails since 2006, and estimated that there are now over 1 million visits to the Capital District per year.



# PROJECT GOALS

**THE OVERALL GOAL OF THIS PLAN IS TO DEVELOP AN UPDATED VISION for a seamless regional transportation network that connects cities, towns and villages throughout the Capital District.**

To this end, the following specific goals are identified as subsets of this effort:

- 1. DOCUMENT EXISTING AND PLANNED TRAILS.** Document the assorted local and regional trails which have already been established throughout the Capital District.
- 2. IDENTIFY GAPS.** Identify missing areas or gaps in the existing trail system which should be connected or could be connected as part of a larger regional network.
- 3. PUBLIC OUTREACH.** Reach out to the public to learn how they are using these existing trails, what new trail linkages they would like to see, and what types of uses or activities would be popular.
- 4. MEASURE ECONOMIC IMPACT AND OTHER BENEFITS.** Identify what the measurable economic benefits are of the local trail system, and project how these benefits might affect the Capital District as part of an expanded network.
- 5. PRIORITIZE DEDICATED OFF-ROAD TRAILS.** Where possible, identify and prioritize the creation of safe off-road trail corridors, while understanding that on-road bike paths may be necessary to help complete connections.
- 6. CONNECT POPULATION CENTERS AND BUSINESS NODES.** Provide trail connections with areas of concentrated residential and business activity to help support commuting travel.
- 7. ILLUSTRATE THE PLAN.** Develop an overall vision plan map and description for the future regional trail network which establishes the “core” regional network trails, and may also include some secondary trail connections which help to augment the core system.
- 8. PRIORITIZE THE NETWORK.** Establish a prioritization matrix for implementation, with emphasis on those connections which are more readily viable or shovel-ready.
- 9. VISUALIZE THE NETWORK.** Develop video footage of existing and planned trail linkages through the use of aerial drone photography which can be used to help support and market the local trail system.
- 10. BRANDING & MARKETING.** Develop an overall branding and marketing plan which would strengthen and support the regional trails network, and help support local economic development.

# THE CAPITAL DISTRICT TODAY

## AS PART OF THE PROCESS OF PLANNING A REGIONAL TRAIL SYSTEM,

it is important to understand where we currently are and what impacts multi-use trails and bike routes can have in terms of our quality of life, health, economic development, and how to best position ourselves to leverage these benefits.

This section reviews the current snapshot of the Capital Region today, reviews emerging recreational market trends, and attempts to quantify the many different benefits of having a local trail system. The purpose of this analysis is to help understand where we are today, so that we can compare and forecast the projected impacts of a larger regional trail system in the future. In a later section of this plan, Economic Benefits and Other Impacts, we calculate the anticipated benefits of an expanded future trails network proposed for the Capital District. Much of the analysis provided here is summarized from the full economic report, which is provided in the appendix.

## REGIONAL MARKET CONTEXT

The Capital District as a whole represents a population of over 800,000 people, and is projected to grow at a faster rate than the rest of New York State. Between 2020 and 2030, this area is estimated to grow at a rate of 1.6 percent, whereas the state overall will have a growth rate of only 0.5 percent. Total employment is also projected to grow 12.6 percent between 2014 and 2024, with 75,770 new jobs expected to be added in the Capital District in the coming years. While the unemployment rate for the Albany-Schenectady-Troy area peaked in 2010-2012



at around 7.3 percent, the rate has since continued to improve, and as of 2016, it is 4.1 percent. All of this is very good news for a metropolitan area which is striving to remain competitive, but it is important not to get complacent. As the local population and economy continues to grow, the Capital District needs to continue to provide amenities and services which will help attract new residents and businesses in this competitive market.

# RECREATIONAL MARKET TRENDS

**G**reenways and trails are a burgeoning national movement, responding to an increased national interest in outdoor recreation and exercise. Bicycling is one of the most popular outdoor sports in America. A recent 2014 benchmarking report from Breakaway Research Group (Breakaway Research Group; 2015) indicates that 34 percent of the U.S. population rode a bike at least once in the prior year. Bicycles are used for commuting to work as well as for pleasure and fitness. The same research indicated that 32 percent rode for recreation and as much as 15 percent rode for the purposes of transportation.

## ON A ROLL

Another research report by Gluskin Townley Group (Edmondson, B; 2011) identified trends in the U.S. Bicycle Market as follows:

### **BICYCLING IS NOT JUST FOR KIDS ANYMORE.**

The number of children who ride bicycles declined more than 20 percent between 2000 and 2010, while the number of adults who ride increased slightly.

### **ENTHUSIASTS ARE DRIVING GROWTH.**

More than 21.8 million American adults rode a bicycle 109 days or less in 2010, about the same as the number who rode that often in 2000. But another 3.4 million rode in 110 days or more, and the number of frequent cyclists increased 12 percent over the decade.

### **WOMEN ARE LESS INTERESTED IN BICYCLING.**

About 10.2 million women rode 109 days or less in 2010, a decrease of 13 percent since 2000.

### **...BUT FEMALE ENTHUSIASTS ARE ON THE RISE.**

The number of women who rode 110 days or more exceeded 1.3 million and increased 8 percent during the decade. At the same time, the number of men who ride that frequently increased 15 percent.

### **OLDER RIDERS RIDE MORE.**

Participation in bicycling falls off after the age of 55, particularly among women, but male riders who belong to the enormous baby-boomer generation show few signs of slowing down. In fact, riding days for men tend to increase after they reach age 65.



Recumbent Bikes



## RECREATIONAL MARKET TRENDS

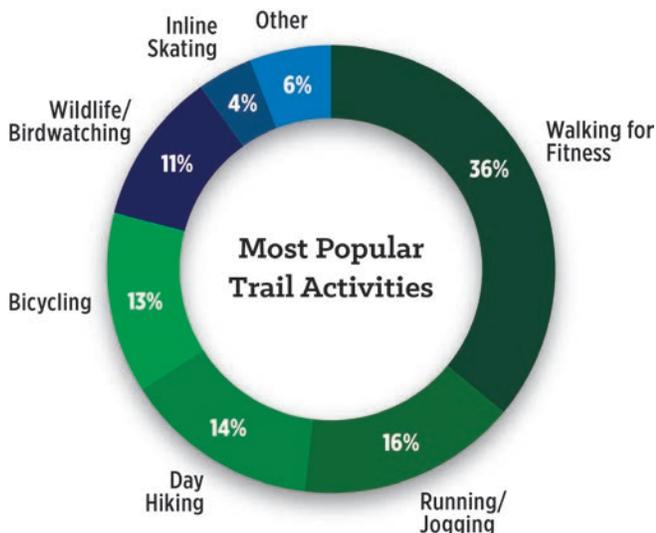
The report Active Transport and Real Estate (Urban Land Institute; 2016), identifies bicycling as the fastest growing form of transportation for commuters.

According to the National Bicycle Dealers Association, in 2013 the bicycle industry sold over \$6 billion worth of bikes and related equipment. There is also an observed correlation between miles of bike paths and number of bicycle dealers, as observed in Denver and Atlanta.

---

**Increasingly, renters and home buyers are prioritizing walkability and bike-friendly neighborhoods. As a result, the demand for bike-friendly cities is shaping the way that cities are designed as well as the bicycle industry, in addition to having measurable economic impacts.**

---



The building of physically separated bike lanes from roadways and pedestrians has increased significantly since 1991, with the passage of Intermodal Surface Transportation Efficiency Act which allocated federal funds to the construction of bicycle and pedestrian infrastructure. In 1992 only 50 bicycle infrastructure projects received federal funding, by 2010 that number grew to 2,763.

Bicycle sharing systems are an increasingly popular service in urban areas around the world. They provide rentable bikes at a low cost. A regional bike share system called *CDPHP Cycle!* launched in the Capital District in July 2017. Over 22,000 trips were taken in the Capital District on bike share bikes in 2018. The average trip is between 26 and 36 minutes and some of the most popular bike share hubs are located on or near Capital District multi-use trails.

Building trails and greenways can lead to booms in trail-oriented development, because they are an in-demand amenity. In fact, the building of the Minneapolis Midtown Greenway spurred more than \$750 million worth of new residential development.

Bicycle-friendly communities and destinations are beneficial for tourism and encourage tourists to have longer visits, spend more, and return more often. In South Carolina, the Sea Pines development had 15 miles of paved trails that led to the creation of a total of 112 miles of trails across Hilton Head Island because of a high demand for bicycling and bike rentals.

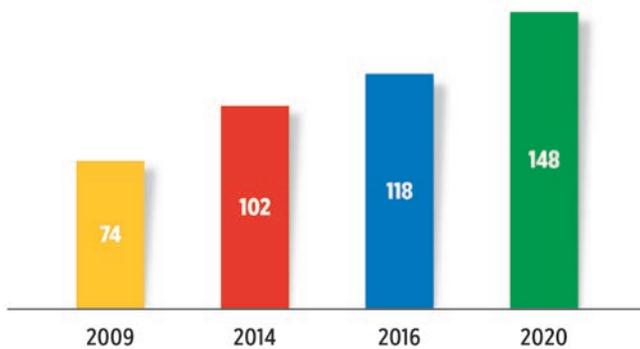
With the increasing trends in bicycling and recreational trail use, the Capital District should be positioning itself to take advantage of this growing market and provide amenities which attract these users.

## RECREATIONAL MARKET TRENDS

### THE EXISTING TRAIL NETWORK IS GROWING

The Capital District currently enjoys a growing network of on-and-off-road multi-use paths and bike routes which people use for recreation, exercise and transportation. Between 2009 and 2016, the local trail network has grown from 74 miles to 118 miles of dedicated off-road routes, with another four miles being added in just the past two years. This number is projected to continue growing, with an estimated 148 miles of off-road trails by the year 2020. In addition, there are now 214 miles of on-road bike routes (this includes state county bike routes but does not include bike lanes or sharrows).

**Total Trail Mileage**

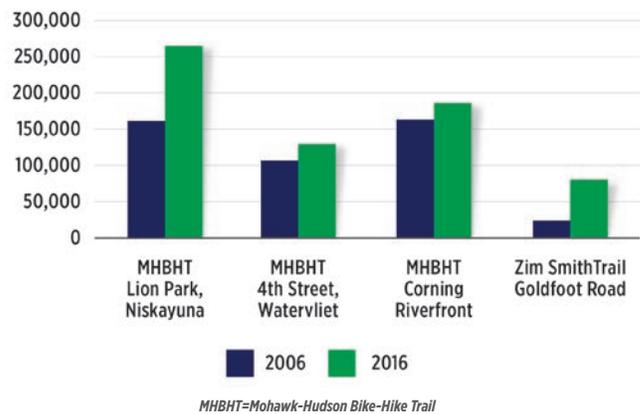


### THE NUMBER OF TRAIL USERS IS GROWING

The new trail counts provided in the 2016 Regional Trail Perspectives study show trail usage in the area has been on the rise. Lions Park in Niskayuna recorded a 60% increase over 2006 traffic, with 36,926 people on the trail during the month of August alone.

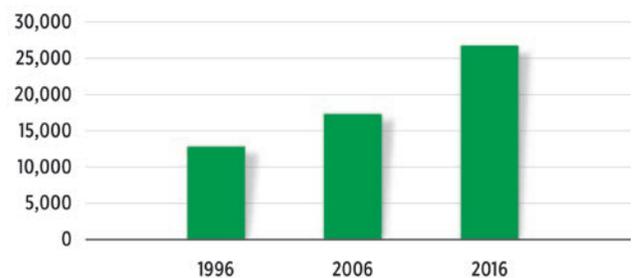
In that same period, the Zim Smith Trail recorded an increase of 252%. The 2017 annual report “Who’s on the Trail” by Parks & Trails New York showed that higher than average user counts were also being identified along much of the Erie Canalway Trail.

**Trail Usage Growth**



Of the three trails that were counted in both the 2006 and 2016 studies, overall trail use was up about 25%, with an estimated 1.6 million visits to the Capital Trails in 2016. One might conclude that this increase in users is simply attributed to the fact that more miles of trail have been constructed, however when comparing the number of users per mile of trail, it is apparent that those numbers are increasing as well. This trend of increased users is great news which supports the growing need for an improved local trail network.

**Users Per Mile**



## THE EMPIRE STATE TRAIL IS UNDERWAY

In the spring of 2017, \$200 million in funding was announced for the Empire State Trail, a 750-mile trail from New York City to Canada and from Albany to Buffalo, crossing right through the heart of the Capital District through each of the four counties. Anticipated to be completed by 2020, the Empire State Trail would create a significant north-south and east-west spine of our regional trail network. Capitalizing on this investment is a sound planning and economic development strategy.

miles of off-road trail, with 8 miles of enhanced on-road amenities for bicyclists and pedestrians. This project is currently in the public outreach and design phase, with construction scheduled to begin in 2019. Once complete, the AHET will connect Downtown Albany and the Mohawk-Hudson Bike-Hike Trail with the Hudson River Valley Greenway.



---

**The development of a larger Capital Region trail network which connects to this significant investment would successfully leverage these funds and serve a large audience of people throughout the area.**

---

In September of 2017, it was announced that \$12 million of the \$200 million Empire State Trail construction funding will go toward constructing 22 miles of multi-use trail and bicycle-friendly on-road enhancements along the Champlain Canalway Trail. The Champlain Canalway Trail serves as approximately one-third of the route between Albany and the Canadian Border.

The Albany-Hudson Electric Trail (AHET) will be a 35-mile shared-use bicycling and pedestrian trail between the City of Rensselaer and Hudson. This segment of the Empire State Trail includes 27



# THE SOCIO-ECONOMIC BENEFITS OF TRAILS

**THE EXPERIENCE OF TRAILS AND GREENWAYS NATIONALLY** has indicated that trail and greenway projects can promote job creation and employment by area residents and businesses in several ways.

Trails have a wide variety of use levels depending on their local market and physical context. Trail use studies estimate the volume of trail users, demographic of users, such as origin, age and household income; and trip characteristics. Studies are used to understand travel patterns, spending patterns and potential changes in use due to trail related improvements.

A survey of users on seven trails in Michigan found that most users used the trail for exercise or recreation and that the proportion of resident use ranged from 56% to 92% of trail users. (Vogt, Nelson and Steger; 2007)

According to a study of 10 trails in southern Nevada, enhancements in trail signage and wayfinding combined with a public marketing campaign increased trail use 33 percent within the period of a year. (Clark, Bungum, Shan, Meachamb, and Coker; 2014)

A survey conducted by Rails-to-Trails Conservancy on the expanding Erie to Pittsburgh trail found that 51.8% of trail goers are biking and 27.8% are walking; and the two most popular reasons were for health (54.5%) or recreation (42.8%). (Tomes and Knoch; 2014).



Zim Smith Trail



## THE SOCIO-ECONOMIC BENEFITS OF TRAILS

### CONSUMER SPENDING

Spending on leisure, jogging, biking and walking is a major aspect of the national economy, but more importantly, a focus of the spending for these activities is the neighborhoods in which the activity occurs. Capturing the spending potential depends on having retail and service businesses located on or near the corridor, and the businesses offering goods and services desired by users. The volume of trail usage and users is an important factor in overall spending potential on a trail.

A 2010 report on several trails in Orange County, Florida, used survey data to estimate that the average spending per trail user is \$20 per visit, spent on food and beverage, transportation, books and maps, bike maintenance, rentals, and other spending categories. Based on an estimated 1.7 million people using the trails annually, the total estimated expenditure was \$32.6 million, which multiplied to \$42.6 million in sales. (East Central Florida Regional Planning Council; 2010)

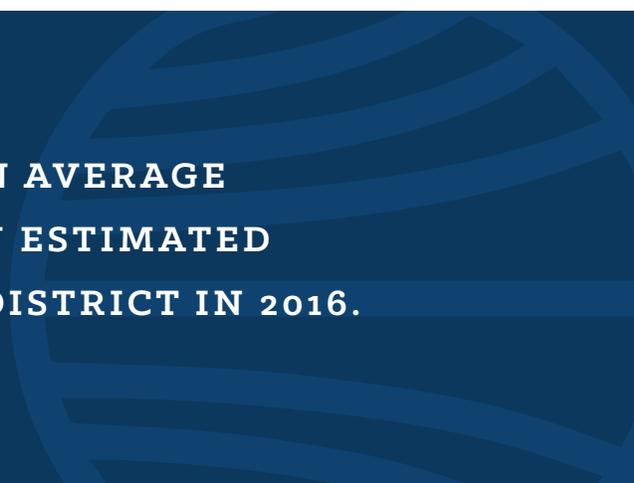
A report on the economic and health benefits of bicycling in Iowa is among many that quantified the economic impact of biking by surveying cyclists in the state. The survey resulted a model that estimated total spending per year by both resident and visiting bicyclists, and, multiplied the spending to reach a total indirect and direct spending impact of \$52.0 million.

On average, bicyclists spend over \$1,200 on an overnight trip on Iowa trails. (Bowles, Fleming, Fuller, Lankford, and Printz; 2011)

Some reports covered outdoor recreation on a broader scale, such as one report that estimated the economic impact of recreation in Washington State. It was estimated that of the \$21.6 billion spent on outdoor recreation in the state in a year, \$20.5 billion remained in the state, circulated through direct sales, supply chain activities, and household wages. Further analysis was conducted to estimate the impact of the type of land on which recreational activities were conducted and the activities themselves. (Briceno and Schundler; 2015)

One survey of visitors to and business owners on the Great Allegheny Passage trail sought to estimate the impact the trail had on trailside businesses. Based on financial statements and spending patterns by visitors, businesses estimated that 25 percent of their revenues were attributable to the trail and two-thirds of all businesses reported some increase in revenue because of their proximity to the trail. (Campos, Inc.; 2009)

A study completed in 2016 on the usage of Vermont trails determined that they are extremely valuable to the local economy. Out-of-staters bring \$30 million dollars in revenue—the key industries being food and beverage, lodging, and outdoor equipment. (Stowe Reporter; 2016)



**TRAIL TOURISTS SPEND AN AVERAGE  
OF \$190 PER DAY, ADDING AN ESTIMATED  
\$15.4 MILLION TO THE CAPITAL DISTRICT IN 2016.**

## THE SOCIO-ECONOMIC BENEFITS OF TRAILS



Spending by trail users varies by type of trail user. Tourists tend to spend more than local residents. An estimated 61 percent of visits were from within the Capital District, and 39 percent from outside the region. Trail tourists mostly visited the Mohawk-Hudson Bike-Hike Trail and the Albany County Helderberg-Hudson Trail and so that most of their spending is likely in businesses proximate to these two trails. CDTC survey data indicate that trail tourists spent on average \$193 per day on their trip, excluding the cost of their bicycle. Tourists accounted for approximately 5 percent of visits. Based on an estimated 80,000 tourist visits and the average spending per day on the trail, there was an estimated \$15.4 million of trail-related tourism spending in the Capital District in 2016. Survey respondents noted the lack of services, such as restrooms, and the need for better signage and wayfinding, but did not identify a large need for additional spending opportunities. Nonetheless, some respondents did spend on the trails and trail visitors would be induced to spend money during trail trips if given the opportunity. Local trail users mostly spent money at restaurants and bars and grocery and takeout food while

visiting the trail. Other trail related spending includes bicycle purchases, repairs and specialized footwear and clothing for bicycling, walking, skating, and running. Trails routes which are able to run adjacent to nearby shops and services therefore provide this additional economic benefit to the local community.

Capital District residents spend an estimated \$63.2 million, or an average of \$179 per household, on sports, recreation and exercise equipment annually. Only a portion of the spending in the category is trail related and supports trail use. For example, the average Capital District household averages \$29 in annual spending on bicycles, or 16 percent of the total for the entire category. Bicycles with total annual spending estimated at \$10.2 million annually are the third highest expenditure category after exercise equipment and gear, game tables at \$21.9 million, and hunting and fishing equipment at \$15.8 million. Other expenditure subcategories that may contain some portion of trail related expenditures include spending on camping equipment. Taken overall, the presence of these trails helps to support the regional economy both in terms of direct and indirect consumer spending.

## TRAIL PLANNING, CONSTRUCTION & MAINTENANCE

**T**rail construction requires initial capital expenditures to install new trail infrastructure. Funding for design, permitting and construction are required. The Hudson River Greenway, which is building out the Empire State Trail, estimates new trail development costs between \$1 million and \$1.5 million per mile, including land acquisition, construction costs, and design and permitting costs.

Various public and private partners operate and maintain trails in the Capital District and elsewhere. Trail maintenance costs are rarely tracked. The amount trail organizations spend annually for ongoing operations and maintenance can vary widely

depending on the amount of area and linear trail to maintain, type of trails, number of culverts, bridges, or other infrastructure beyond the trail, trail activity and use levels. Based on a national survey, the Rail to Trails Conservancy estimated 2014 average trail maintenance costs at \$1,971 per mile for asphalt surfaces and \$1,006 per mile for non-asphalt surfaces. The Hudson River Greenway estimates trail maintenance costs between \$1,000 to \$2,000 per mile. In looking at the impact this has on the region, one must look at both the direct monetary costs, but also consider the benefits these projects can have with regard to job creation and economic support of local construction businesses.



## PROPERTY VALUES

The effect on property values of a location near a park or open space has been the subject of several studies. Economic studies of the property value impacts of parks and open space have indicated that property values are affected by a property's proximity to a park, and that this effect has been observed at distances of up to 2,000 feet (Trust for Public Land; 2009). Review of multiple studies indicates that proximity to trails could make a positive and negative impact on property values. Property values are typically estimated based on surveys of sales in a given time period within a certain distance of the trail.

- In the case of the State of Delaware, an impact model indicated that the effects of proximity to bike paths increased home prices by an average of \$8,800. (Dhanju and Racca; 2006)
- Another survey of homes in Hennepin County, Minnesota indicated that proximity to trails in fact decreased the value of homes. (Shillcox; 2003)
- Study indicates that “proximity to greenways generally has positive, statistically significant effects on property values and that, when summed across the City of Indianapolis, these effects may be in the millions of dollars. We then show, however, that when particular greenways are separated out, some greenways do not appear to have significant effects on property values. In other words, some greenways clearly have enhanced property values while others may have had no effects at all. Although this result may complicate policymaking, it underscores the need for careful evaluation of the effects of public choices.” (Lindsey, Man, Ottensmann, and Payton; 2003)

- Trails are perceived as an amenity which can cause adjacent homes to be valued at a higher price. The benefits of living near a trail includes opportunities for recreation, commuting, physical activity, and related health benefits. Since trails increase property values, the local government receives more in property tax revenue. In Austin, Texas homes situated near or overlooking the greenbelt trail had a 6 to 20 percent premium in property value—which translates to approximately \$59,000 per year in additional tax revenue. (Lawson; 2016)
- Passive-use values of the trails refer to the benefits attained by people who do not use the trails. Specifically, in a 2011 study by the Connecticut Center for Economic Analysis identified a “green space bonus” for property owners adjacent to trail-ways, state parks, and/or forests (Brown and McDonald; 2015)



Parcel data in the Capital District indicates that a substantial number of parcels are within a short walking or biking distance of existing trails. Parcels most proximate to the Capital District trail system are most likely to have property value impacts due to the trails. A conservative range of the property value impact of the Capital District trail system would be no impact on property values at the low end to 2 percent at the high range with a mid-range property value impact of 1 percent on average on residential parcels within 800 meters of a trail. Based on the total residential market value of parcels within 800 meters of the trail system, the mid-range of market value impacts due to the trail system are \$27.5 million.

## THE SOCIO-ECONOMIC BENEFITS OF TRAILS



Taxes are based on assessed values and the applicable tax rate. The mid-range of assessed value impacts is \$23.8 million. The total tax rate can vary significantly depending on the location of the property in the Capital District. An analysis of 2015 tax rates in the Capital District indicates that tax rates ranged from a low of \$9.56 per \$1,000 to a high of \$52.67 per \$1,000. The 2015 median tax rate in the Capital District was \$27.90 per \$1,000. Applying the median tax rate to the \$23.8 million in assessed value due to the trail system would indicate that trail system generates mid-range \$6.6 million in annual local taxes to counties, cities, village, and school districts.

## ALTERNATIVE MODES OF TRANSPORTATION

Trails provide an alternative mode of transportation. Studies have estimated the transportation benefits of bicycle commuters based on the value of an individual commuter's time and the cost of traffic. Values are typically estimated based on surveys of sales in a given time period within a certain distance of the trail.

A stated-preference survey of bicycle commuters in the Minneapolis-St. Paul, Minnesota, Metropolitan Area tried to estimate the time value—and then dollar value—of different types of bicycle trails. The value of an on-street bicycle lane was highest, in that on average survey respondents were willing to add 16.3 minutes to a 20-minute commute in the event that this option was available. (Krizek; 2006)

The Greater Toronto Chamber of Commerce estimated that motor vehicle congestion costs the Greater Toronto Area \$1.8 billion per year. Reducing motor vehicle traffic and replacing it with bicycle traffic would greatly reduce that amount. (As cited in Koehl; 2009)

COUNTY	PARCELS BY DISTANCE FROM TRAIL			MARKET VALUE OF PARCELS BY DISTANCE FROM TRAIL			ASSESSED VALUE OF PARCELS BY DISTANCE FROM TRAIL		
	LESS THAN 400 METERS	400 TO 800 METERS	LESS THAN 800 METERS	LESS THAN 400 METERS	400 TO 800 METERS	LESS THAN 800 METERS	LESS THAN 400 METERS	400 TO 800 METERS	LESS THAN 800 METERS
<b>RESIDENTIAL PARCELS</b>									
Albany	39,582	12,745	52,327	\$6,829,462,229	\$2,860,237,357	\$9,689,699,586	\$6,273,667,269	\$2,860,237,357	\$9,133,904,626
Rensselaer	14,560	8,679	23,239	1,937,780,470	1,373,151,172	3,310,931,642	1,625,041,054	1,009,012,562	2,634,053,616
Saratoga	29,454	13,394	42,848	7,386,346,051	3,345,975,695	10,732,321,746	5,626,607,009	2,613,030,647	8,239,637,656
Schenectady	14,734	9,293	24,027	2,267,413,925	1,472,536,894	3,739,950,819	2,327,593,859	1,491,705,553	3,819,299,412
<b>TOTAL CAPITAL DISTRICT</b>	<b>98,330</b>	<b>44,111</b>	<b>142,411</b>	<b>\$18,421,002,675</b>	<b>\$9,051,901,118</b>	<b>\$27,472,903,793</b>	<b>\$15,852,909,191</b>	<b>\$7,973,986,119</b>	<b>\$23,826,895,310</b>
<b>PERCENT TO ALL RESIDENTIAL PARCELS</b>									
Albany	45.9%	14.8%	60.7%	40.1%	16.8%	56.9%	44.0%	20.1%	64.1%
Rensselaer	29.9%	17.8%	47.7%	23.3%	16.5%	39.9%	29.1%	18.1%	47.2%
Saratoga	40.0%	18.2%	58.2%	41.0%	18.6%	59.6%	39.4%	18.3%	57.7%
Schenectady	31.0%	19.5%	50.5%	29.4%	19.1%	48.5%	30.9%	19.8%	50.7%
<b>TOTAL CAPITAL DISTRICT</b>	<b>38.4%</b>	<b>17.2%</b>	<b>55.6%</b>	<b>36.1%</b>	<b>17.7%</b>	<b>53.8%</b>	<b>38.1%</b>	<b>19.1%</b>	<b>57.2%</b>

Source: Counties listed, NYS Office of Information Technology Services GIS Program Office (GPO) and NYS Department of Taxation and Finance's Office of Real Property Tax Services (ORPTS), and ConsultEcon, Inc.



## THE SOCIO-ECONOMIC BENEFITS OF TRAILS

### HEALTH AND THE ENVIRONMENT

Studies have estimated the health and environmental impact of trails due to decreased medical costs and reduction in the number of car trips which in turn reduces pollution.

- Several studies attempted to quantify the value of bike paths in terms of decreased medical costs by estimating the average cost of caring for non-active individuals with certain prevalent diseases, including diabetes, breast cancer, and heart disease. Assuming that these sedentary people were to use bike paths for fitness activities, the diseases would be less likely to occur, and the costs would be erased. In the case of Iowa, a conservative estimate of savings was \$73.9 million. (Bowles, Fleming, Fuller, Lankford, Printz; 2011)
- Similarly, the reduction of short car trips by replacing them with bicycle trips could make a positive impact on health. Reduction of short car trips by 20 percent was supposed to reduce, among other things, asthma exacerbation cases by about 110, which would result in a savings of about \$6,000 per year. Reducing short car trips by 20 percent generated a total economic benefit of \$85.8 million. (Grabow, Hahn, and Whited; 2010)
- The use of bikes reduces traffic pollution, which is estimated to cause 440 deaths in Toronto annually. Eliminating motor traffic pollution would reduce these deaths and save \$2 billion in mortality costs. (As cited in Koehl; 2009)
- The report on Wisconsin bicycle traffic estimated the savings in a carbon market, based on the European Climate Exchange. It was estimated that the State would save \$1.2 million if carbon dioxide emissions were offset by bicycle trips. (Grabow, Hahn, and Whited; 2010)

### OTHER ECONOMIC AND QUALITY OF LIFE BENEFITS

There are other community and quality of life benefits of trails that are reflected by the literature and are not as easily quantifiable by monetary measures as the economic impacts identified above. These other community and quality of life benefits include:

- Safety related to off-street trails compared to on-street use.
- Environmental benefits are related to natural area preservation and land conservation.
- New business attraction.
- Environmental justice within the trail planning process means ensuring that new trail plans consider creating equitable access to trails.
- Education benefits to children through integrated formal and informal outdoor learning opportunities and improved academic performance.

**“TRAILS BENEFIT THE ENVIRONMENT AS WELL AS THE PEOPLE THEY SERVE. TRAILS PROVIDE OPPORTUNITIES FOR HABITAT PROTECTION AND ENHANCEMENT, STORMWATER AND FLOOD RETENTION, IMPROVED WATER AND AIR QUALITY, CONSERVATION OF NATURAL AND CULTURAL RESOURCES, AND SCENIC VIEWS.”**

## THE SOCIO-ECONOMIC BENEFITS OF TRAILS

The importance of quality of life in an area is increasingly cited as a major factor in corporate and business location decisions. Parks and trails are significant contributors to the quality of life in communities and the attractiveness of the physical environment of neighborhoods, cities and regions. Thus, these neighborhoods, cities and regions as a whole are enhanced as locations for new and expanded businesses, as well as an attractive place to live.

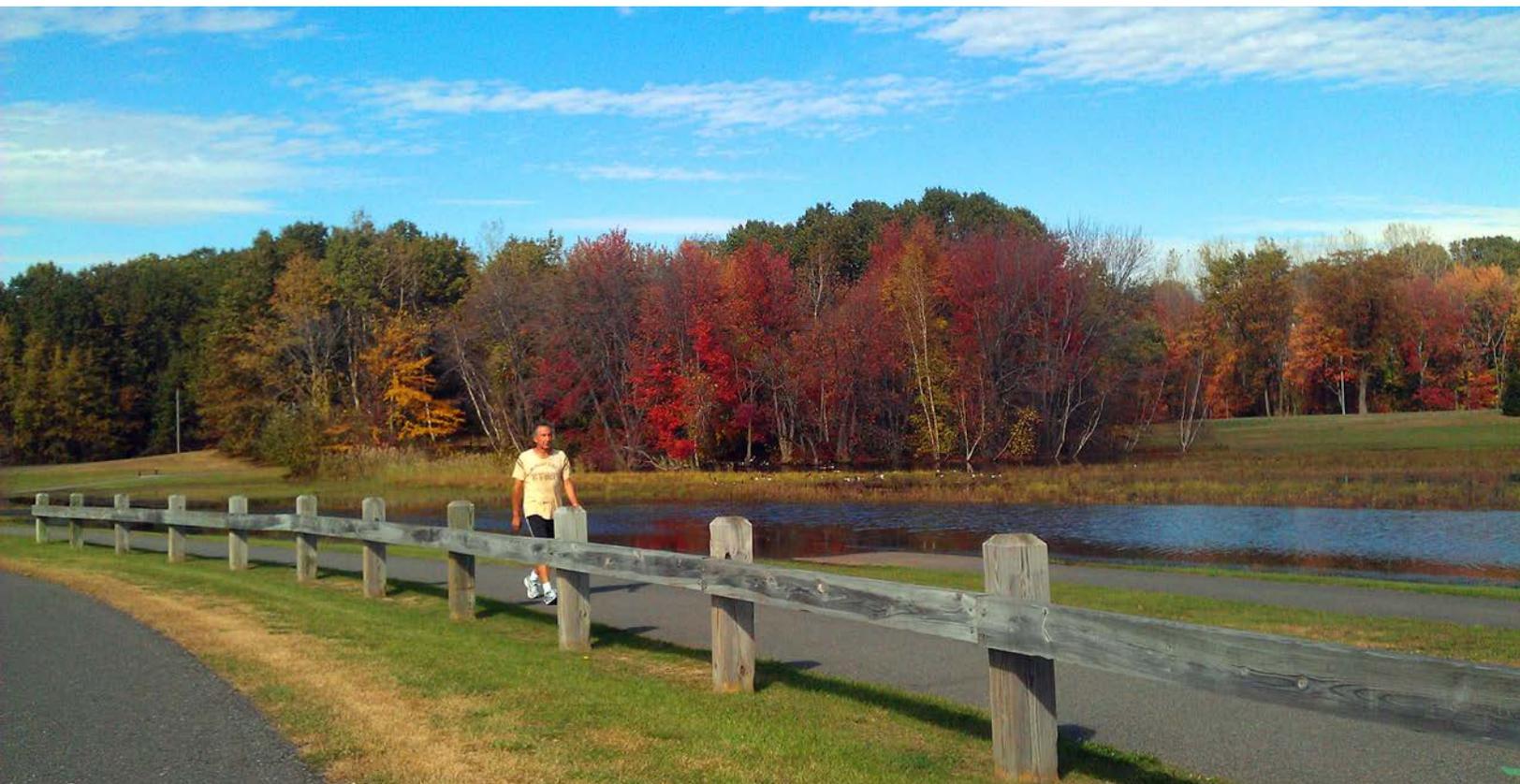
- The Erie Canal Trail is a valuable resource and contributor to quality of life; it serves 200 communities along its length. Of the visitors, 97% live in one of the 35 bordering counties of the trail. Since an overwhelming majority of trail users are locals, their quality of life is improved by having direct access to outdoor recreation, health and economic benefits. (Scipione, P.; 2014)



- The economic benefits of the New York State park system contributes to approximately \$2.9 billion of the state's GDP. However, this does not include external, less quantifiable, benefits of the trails system, like reducing polluting, mitigating climate change impacts, promoting healthy lifestyles, and placemaking. (Garrett-Peltier, H. 2017)

## LOOKING FORWARD

The existing trails in the Capital District are an amenity which provide exercise, recreational opportunities, improve health, support consumer spending, strengthen property values and drive local economic development and tourism. They also provide an alternative transportation option, help protect open space and the environment and can improve the overall quality of life. With a growing number of people using trails every year, and recent investments in a statewide trail system, it is now more important than ever to support this investment in the future.



# PUBLIC OUTREACH



## PUBLIC AND STAKEHOLDER OUTREACH

In order to ensure that residents and officials in local communities would have an opportunity to weigh-in on the regional trails plan, several outreach efforts were organized to help solicit comments and ideas from the public. At the commencement of the project, a new website was established to help provide a central location for news and information about the effort ([www.cdtcmpo.org/trails](http://www.cdtcmpo.org/trails)). This website provided an overview of what the project was about, as well as links to information about local trails and upcoming public meetings. The website was formally launched and advertised via an email announcement to over 200 local planning officials and stakeholder organizations to introduce the project, and was also advertised via press release and social media. An informational flyer about the project and the website was also developed and distributed at the Saratoga County Planning and Zoning Conference, CDTC Planning Committee, and CDTC Bicycle and Pedestrian Advisory

Committee meetings. This formal kickoff announcement was used as an introduction to the project, and was later followed by the announcement of four separate public stakeholder workshops which were held in each of the four counties as follows:

**SARATOGA COUNTY  
FEBRUARY 14<sup>TH</sup>, 2018**

**RENSSELAER COUNTY  
FEBRUARY 16<sup>TH</sup>, 2018**

**ALBANY COUNTY  
FEBRUARY 27<sup>TH</sup>, 2018**

**SCHENECTADY COUNTY  
MARCH 2<sup>ND</sup>, 2018**

## PUBLIC OUTREACH

Together, the public workshops were attended by over 65 different stakeholders. These workshops were designed to fully introduce the project to everyone, and provide working “breakout groups” with maps where participants could collaborate on ideas for envisioning new multi-use paths and bike routes in their county. Participants were encouraged to use provided markers to draw out routes on the printed maps and discuss ideas, and these maps were used to define some of the new basic trail system connections for the overall regional plan. These meetings were also used to float some initial ideas for branding and marketing of the regional trails system and introduce an online survey, which are discussed in later pages. After these initial workshop maps were prepared, the results were collected and were reviewed with county planning officials in each jurisdiction to note any remaining adjustments or gaps which should be addressed.





### Capital District Trails Plan

Advancing a Vision for Connecting Communities



#### What is the Capital District Trails Plan?

The Capital District Trails Plan is a strategy to link together the various multi-use trails in Albany, Schenectady, Rensselaer and Saratoga counties into a single connected network of trails for everyone in the region to enjoy. This planning effort will identify existing trail locations throughout the region and work with local communities to envision potential new trail routes which will infill missing segments, connecting to each other and to key points of interest. This plan, sponsored by The Capital District Transportation Committee (CDTC), will involve the input from residents, community leaders and stakeholders through different public meetings, workshops and surveys as they are scheduled throughout the coming year. The goal is to develop a vision for a connected, regional network of multi-use trails that is accessible to all Capital Region residents.

#### Get Involved!

Interested in future trail planning in your area? We will be holding stakeholder meetings in each of the four counties over the coming months to discuss the project and give people the opportunity to draw out desired new trail connections they would like to add to the plan. *Please RSVP to [mollens@cdtcmo.org](mailto:mollens@cdtcmo.org) to let us know which meeting you plan to attend.*

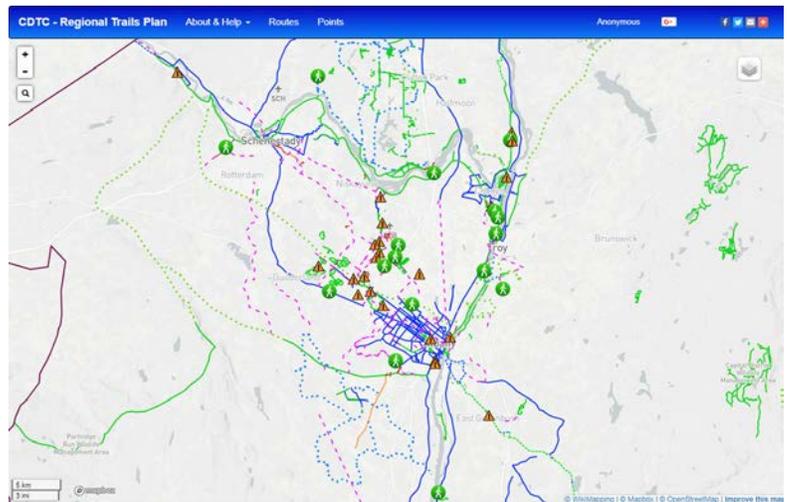
<b>Saratoga County</b>	<b>Where:</b> Saratoga County Offices 50 W. High Street, Auditorium Ballston Spa, NY	<b>When:</b> February 14, 2018 1:30 p.m. – 4:30 p.m.
<b>Rensselaer County</b>	<b>Where:</b> East Greenbush Town Hall 225 Columbia Turnpike Rensselaer, NY	<b>When:</b> February 16, 2018 9:30 a.m. – 12:30 p.m.
<b>Albany County</b>	<b>Where:</b> Pine Bush Discovery Center 195 New Karner Road Albany, NY	<b>When:</b> February 27, 2018 1:30 p.m. – 4:30 p.m.
<b>Schenectady County</b>	<b>Where:</b> Schenectady County Public Library 2400 Nott St E. Niskayuna, NY	<b>When:</b> March 2, 2018 10:30 a.m. – 1:30 p.m.

**Questions?** (518) 448-2161    **Contact:** Capital District Transportation Committee  
[www.cdtcmo.org/trails](http://www.cdtcmo.org/trails)    [trails@cdtcmo.org](mailto:trails@cdtcmo.org)

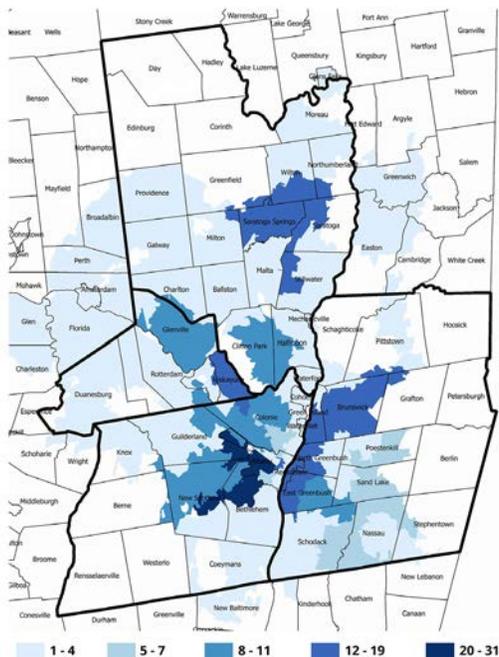


## WIKI MAP

In tandem with the public workshops, an online mapping “Wiki Map” tool was developed which allowed anyone in the public to visit an interactive website where they could draw their ideas for different trail connections and leave comments. This Wiki Map was introduced at the workshops and provided on the project website to allow people who were not able to attend the workshops an opportunity to provide their input. The Wiki Map collected dozens of comments over a two month period which were reviewed to identify trail ideas which could be integrated into the regional plan.



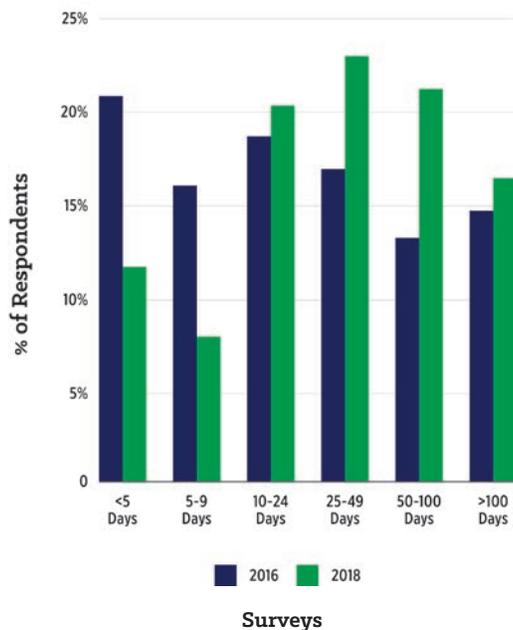
Survey Responses by Zipcode



# ONLINE SURVEY FINDINGS

Interestingly, when comparing the results of this question from the 2016 survey to the 2018 survey, there appears to be an overall increase in trail use. The number of respondents who indicated they only use local trails between 0 and nine days a year dropped in 2018. Conversely, the number of respondents who indicated they use local trails more than 9 days a year increased in 2018, with the highest percentage increase occurring in 50-100 day per year bracket. Although the relatively small sample size of 300-400 responses per survey make statistically valid comparisons difficult, it appears to show a trend of increased trail use overall.

How Many Days Per Year Do You Use a Trail?



## FINDINGS INCLUDE:

- An overwhelming majority (93%) indicated they use trails for “Health / Exercise / Recreation” (compared to 91% in 2016)
- A total of 7% indicated they generally use trails for travel purposes. Specifically, “Commuting to school or work” (5%), “Run errands or visit friends” (1%) or “Visit the library or other civic spaces” (1%). In 2016, 4% indicated they use the trails for “commuting”.
- A majority of respondents felt that the overall use of trails would increase if a regional trail system was established.
- 66% felt that they would be more likely to use the trail system for commuting, travel or other non-recreational trips if a regional trail system was established.
- 95% felt that they would be more likely to use the trail system for recreational use if a regional trail system was established.
- Among the most popular amenities or features which were requested along trail routes were: Restrooms (298); Benches (206); Bike Rentals/ Bike Share (165); Coffee/Ice Cream (156); Farmers Markets (142); Food Trucks (138); Pavilions (133); and Restaurants & Bars (132).

# INITIAL BRANDING & MARKETING CONCEPTS

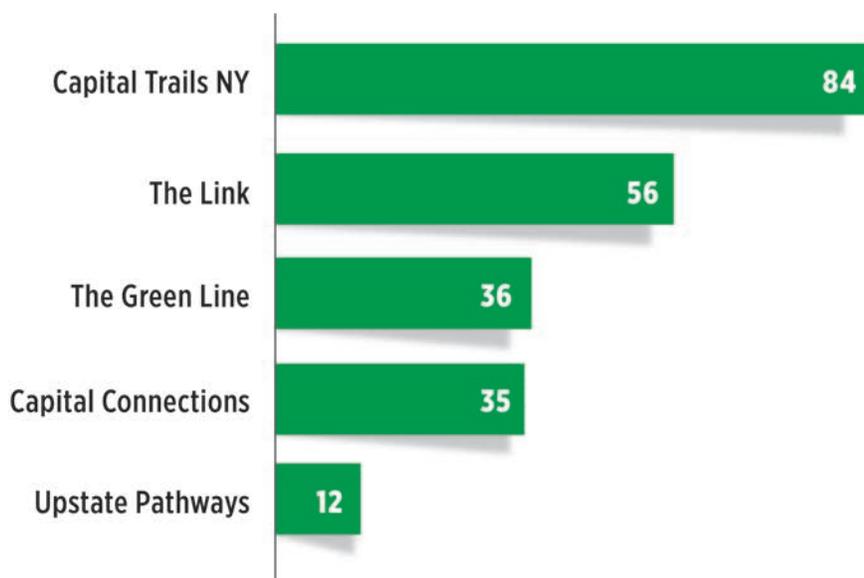
In order to help promote local trails as an amenity to the region and attract new residents and businesses, a branding and marketing plan was investigated. This branding would help to identify all of the area trails as part of a larger Capital District “network”. The plan would include a name for the trail system, graphic logo, signage examples and potential sponsorship solicitation packages. The online survey included some initial naming ideas for this branding campaign, including “Capital Trails NY,” “Upstate Pathways,” “Capital Connections,” “The Green Line,” and “The Link.”

Responses to the naming options provided in the survey were mixed. Generally most people preferred the “Capital Trails NY” option, however some respondents did not feel that any of them really captured the right theme, or questioned if a branding name was necessary at all.

These initial naming ideas were further developed with graphics and presented at the stakeholder workshops to gather additional feedback on how such a branding system might work, and what it might look like. Discussion on the branding included the importance of maintaining the existing local trail names and identities, having consistent signage, and how it would integrate with the new Empire State Trail. It was universally agreed that all of the local trails should keep their own names, and that the overall branding needed to be mindful of how to tie it all together.

When attendees in the stakeholder workshops were asked to rank their three favorites, “Capital Trails NY” and “The Link” emerged as the general favorites, and some suggestions for improvement were provided. These two concepts were selected for further advancement as the Capital District Trails Plan was developed.

## Logo & Name Options for Trail Network



## INITIAL BRANDING & MARKETING CONCEPTS



### THE LINK

- Has overtones of memorable transportation names like the Tube or the Metro
- Represents the relationship between the different trails in the region and between the Empire State Trail and the Capital District Trail Network
- Artwork alludes to a trail marker and a bike tire



### CAPITAL TRAILS NEW YORK

### CAPITAL TRAILS NY

- Easily recognizable as a trails network in the Capital District
- Similar to the Empire State Trail name and can be easily linked to the statewide efforts
- Artwork shows trails linking urban and rural regions



### CAPITAL CONNECTIONS

- Speaks to the goal of this network: to create trail connections in the Capital District
- The “C” icon portrays a trail, roundabout and a target



### THE GREEN LINE

- A reference to routes of mass transit and to alternative and “green” transportation
- Easily lends itself to maps that include the network laid out like a subway line



### UPSTATE PATHWAYS

- “UP” ties into New York State motto of “Ever upward”
- Artwork has transit feel and shows movement

READ MORE ABOUT THE FINAL BRANDING CONCEPTS AND THE PROPOSED MARKETING PLAN ON PAGES 72–78.

# TRAILS VISION PLAN



In developing an overall vision for a connected network of trails throughout the Capital District, the goal has always been about connections. Connecting from town to town, village to village, trails to trails, and people to people. This vision plan provides the framework for this network, interconnecting important routes throughout the four counties of Albany, Rensselaer, Saratoga and Schenectady.

The public involvement process from this vision planning effort resulted in a very high number of trail connections being proposed throughout the area. Not every idea proposed could be formalized in this plan, and it necessitated the prioritization of some connections over others. For this reason, the concepts developed in this plan have been categorized into two basic levels: “Core

Trails” and “Supporting Trail Networks”.

The Core Trails are those which have been identified and proposed as the primary transportation highways for non-vehicular travel around the Capital District. These routes often connect to areas outside of our four-county region and usually link together multiple towns or population centers.

The Supporting Trail Network is comprised of secondary connections which often serve lower population areas however are still very important to the functionality of the larger transportation network. In many ways, these trails are not unlike our secondary local road network, providing alternative routes, choices and access to the larger system.



# TRAILS VISION PLAN



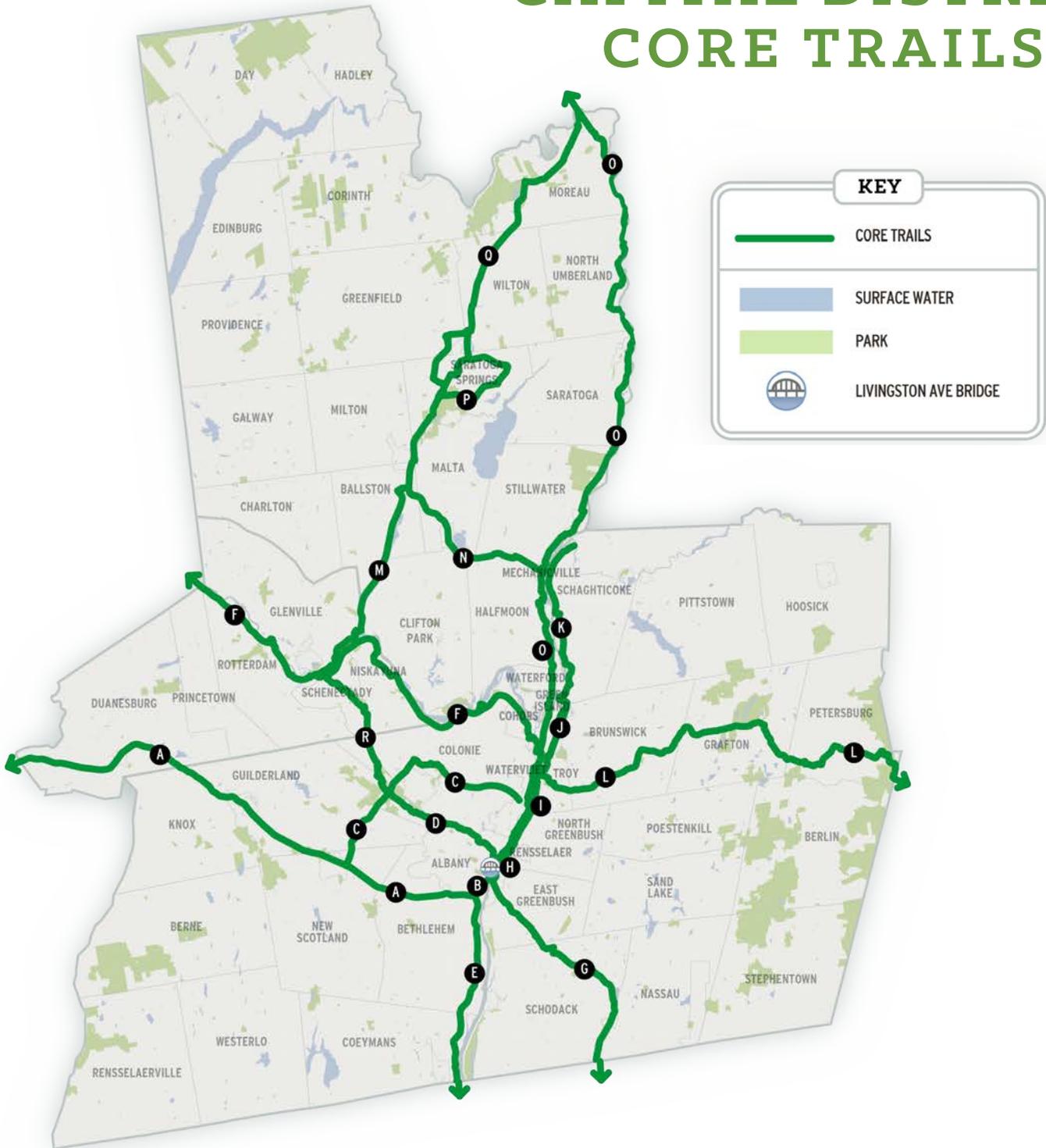
A total of 18 Core Trails and 34 Supporting Trail Network segments have been identified in this plan, which are summarized and described in more detail on a county-by-county level in the pages that follow. The 18 Core Trails identified would provide a total of over 214 miles of dedicated off-road trails and approximately 76 miles of on-road bike routes. This core trail network would successfully complete alternative transportation routes which connect Albany, Troy, Rensselaer, Schenectady, Mechanicville, Stillwater, Ballston Spa, Saratoga Springs, Schuylerville, Glens Falls and many other area communities.

Many of the trails described are already constructed, or have been planned for some time. For the purposes of identification in this document, temporary descriptive names have been

assigned to newly proposed trails, however it is not suggested that these should be the actual names. Wherever possible, proposed trails were categorized as likely being primarily offroad, on-road, or a mixture of both, depending on initial feasibility. Mileages shown are estimated for planning purposes only. The location and alignment of some of these trail corridors have been planned for many years, others are more conceptual and will require additional community input, planning and design to confirm trail location, alignment and feasibility of construction.



# CAPITAL DISTRICT CORE TRAILS



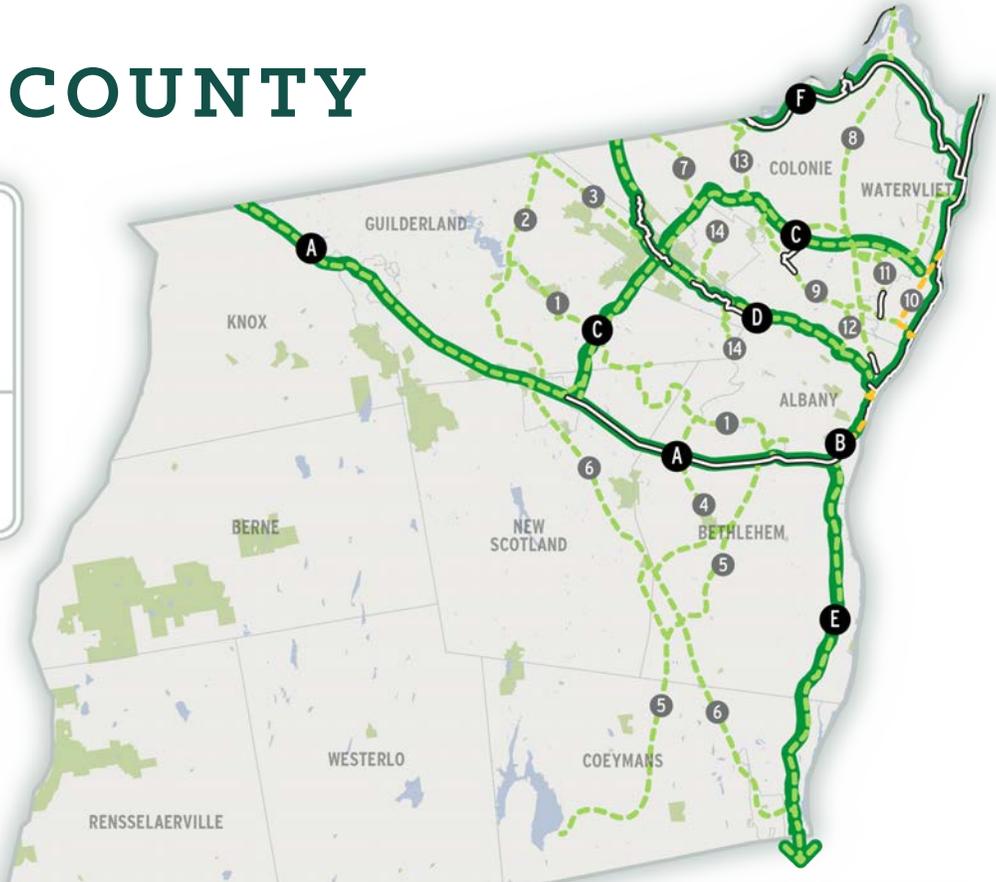
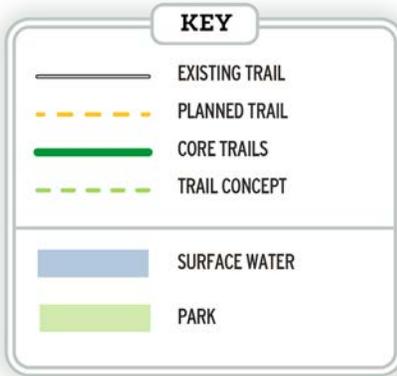
# CAPITAL DISTRICT CORE TRAILS

Map Key	Trail Identification	Primary Type	Total Miles	Miles Already Constructed	Miles To Be Completed
A	Albany County Helderberg-Hudson Rail Trail	Off-Road	31.1	8.7	22.4
B	South End Bikeway Connector	On-Road	1.5	0	1.5
C	Albany Loop	On-Road	15.2	0	15.2
D	Patroon Greenway	Off-Road	8.8	0	8.8
E	Hudson Northway	On-Road	11.7	0	11.7
F	Mohawk-Hudson Bike-Hike Trail	Off-Road	41.1	39.7	1.4
G	Albany Hudson Electric Trail (AHET)	Off-Road	15.6	0	15.6
H	Rensselaer Riverwalk/RPI Trail	Off-Road	5.1	2.3	2.8
I	South Troy Riverfront Bikeway	On-Road	2.3	1.1	1.2
J	Uncle Sam Bike Trail	Off-Road	4.2	4.2	0
K	River Road	On-Road	10.0	0	10.0
L	River to Ridge Path	On-Road	28.6	0	28.6
M	Ballston Veterans Bike Trail	Off-Road	12.5	3.4	9.1
N	Zim Smith	Off-Road	15.7	8.7	7.0
O	Champlain Canal Trail	Off-Road	44.5	11.4	33.1
P	Saratoga Greenbelt Trail	Off-Road	17.9	8.3	9.6
Q	Wilton-Moreau Trail	Off-Road	16.1	0	16.1
R	Schenectady Park Connector	On-Road	7.0	1.5	5.5
<b>Total</b>			<b>288.90</b>	<b>89.30</b>	<b>199.60</b>

Source: Counties listed, NYS Office of Information Technology Services GIS Program Office (GPO) and NYS Department of Taxation and Finance's Office of Real Property Tax Services (ORPTS), and ConsultEcon, Inc.



# ALBANY COUNTY



Capital District Trails—Albany

Core Trails		Supporting Trail Network	
A	Albany County Helderberg-Hudson Rail Trail	1	Normans Kill Greenway
B	South End Bikeway Connector	2	Schenectady-Helderberg Connector
C	Albany Loop	3	I-90 Patroon Greenway Extension
D	Patroon Greenway	4	Elm Avenue Bike Path
E	Hudson Northway	5	Reservoir Run
F	Mohawk-Hudson Bike-Hike Trail	6	Ravena-Voorheesville Link
		7	Consaul Road Bike Route
		8	Bike Route 9
		9	The Crossings Connection
		10	Route 32 Cycle Track
		11	Van Rensselaer Bike Path
		12	Tivoli Crossing
		13	Shaker Trail
		14	Albany-Colonie Connector

# CORE TRAILS

## A

### ALBANY COUNTY HELDERBERG-HUDSON RAIL TRAIL (HHRT)

**Off-Road Trail • 31.1 miles total** (20.3 in Albany)

The existing 9 miles of the Albany County Helderberg-Hudson Rail Trail provide an excellent foundation for the continuation of this popular trail northwest into Schenectady County, and improved connections northeast into the City of Albany. The existing trail, which is currently paved from South Pearl Street to Voorheesville, will continue to be improved to follow the rail line as a multi-use path to Voorheesville at the Albany County Rail Trail Pavilion on Grove Street. From there, new trail should be established along the rail bed to continue to the Village of Altamont, immediately adjacent to the Altamont Fairgrounds. A trailhead location for the village and fairgrounds—possibly near the Park Street & Fairview Ave intersection—is recommended to take advantage of the population center here and the high number of users which could connect during fairground events. A separate connection at the Altamont Oaks apartment complex would also be possible. This corridor could be rail-with-trail, or a complete rail-to-trail conversion, if the corridor were to become available. The planned future segment of this trail would ultimately connect with the planned **Schenectady-Helderberg Connector (2)**, **Ravena-Voorheesville Link (6)** and the **Albany Loop (C)**. Looking further into the future, this trail should continue north into Schenectady County, passing underneath Interstate 88, and into the Village of Delanson. From there, future considerations should be given to coordination with Schoharie County for a connection into Central Bridge. *(Refer to Schenectady section for more detail in that county.)*

## B

### SOUTH END BIKEWAY CONNECTOR

**On-Road Bike • Off-Road Trail • 1.5 miles**

At the eastern end of the **Albany County Helderberg-Hudson Rail Trail (A)**, the South End Bikeway Connector is planned to connect at the trailhead and provide a bike route up South Pearl Street to the trailhead of the **Mohawk-Hudson Bike-Hike Trail (F)** near the U.S.S. Slater. Also known as the Albany Waterfront Connector, this under 2-mile stretch of new connection completed its feasibility study in February of 2018, and is anticipated to start construction in 2019. This is an important connection which will ultimately link two heavily used and significant trails, creating a longer and uninterrupted route.

## C

### ALBANY LOOP (Route 155 Connector)

**On-Road Bike • 15.2 miles**

Born from the vision planning of local stakeholder meetings, the Albany Loop would complete a circle around greater Albany by connecting the **Albany County Helderberg-Hudson Rail Trail (A)** trail in the southwest and the **Mohawk-Hudson Bike-Hike Trail (F)** in the northeast. Commencing at the intersection of Voorheesville Avenue and the HHRT, this route would head north along Route 155 (State Farm Road), past Farnsworth Middle School, eventually becoming New Karner Road as it passes Western Ave. From there, it conceptually will continue north past Washington Avenue Extension, through the Albany Pine Bush Preserve to Watervliet Shaker Road, where it would turn east with Route 155 until Airline Drive, where it would turn off and connect to Heritage Lane and the Ann Lee Pond Trail. The loop would continue over toward the airport where it would connect with Albany Shaker



## TRAILS VISION PLAN

Road to the Northway. New designs for the Exit 4 interchange could incorporate the trail crossing underneath I-87, however an alternate route following Shakers Creek to Metro Park Road is envisioned. The trail would connect with The Crossings at Colonie, following Maxwell Road and Spring Street past Siena College to the rail corridor near Lincoln Avenue. From there, the rail corridor is envisioned to bring the path north past 25th Street where it could take advantage of two abandoned railroad bridges to cross over 2nd Avenue and I-787, linking to Green Island Bridge and the City of Troy.

### D

## PATROON GREENWAY

### Off-Road Trail • 8.8 miles

The Patroon Greenway is a planned multi-use trail route which would connect from the Albany waterfront to the Albany Pine Bush Preserve and points beyond to the Schenectady County line, taking advantage of slivers of greenway which are found along the I-90 corridor. Beyond the county line, the Patroon Greenway is projected to continue northwest along the I-90 corridor thru Rotterdam and eventually connect with the Mohawk River section of the **Mohawk-Hudson Bike-Hike Trail (F)** as part of the Empire State Trail. *(Refer to Schenectady section for more detail in that county and the Patroon Greenway Feasibility Study.)* Although the full Patroon Greenway extends to the Mohawk River, only a portion of it is considered a Core Trail for the purposes of this plan.

Commencing at the crossing of the Livingston Avenue Bridge, where it would connect with the Rensselaer Riverwalk/RPI Trail as well as the Mohawk-Hudson Bike-Hike Trail along the Hudson River, this trail is envisioned to follow the railroad bed northeast—through the wooded area behind Capital Woods apartment complex—and connecting with the established trail which winds its way through the Tivoli Lake Preserve. Branching off the Tivoli Preserve Trail, it would then head north and pass along the Transflo railyard on Anderson Drive. From this point, it is envisioned to continue following the I-90 corridor west just south of the railroad tracks to Six Mile Waterworks Park at Rensselaer Lake. Here, the Rensselaer Lake Trail could connect it through to trails within the Albany Pine Bush Preserve, where it could link up with the proposed **Schenectady Park Connector (R)** trail heading north into Schenectady.

The remainder of the Patroon Greenway would eventually continue to follow the I-90 corridor beyond the county line to connect with the Mohawk-Hudson Bike-Hike Trail in the vicinity of Dalys Island.

### E

## HUDSON NORTHWAY (Route 144)

### On-Road Bike • Off-Road Trail • 11.7 miles

A continuation of the **South End Bikeway Connector (B)**, this route would follow the Hudson River south, connecting downtown Albany with Coeymans. This route would commence at the trailhead of the **Albany County Helderberg-Hudson Rail Trail (A)** and head south along Route 32 / Route 144, where it becomes River Road, and would pass along the Normans Kill waterway and continue to follow River Road, however it is recommended that opportunities to get closer to the Hudson River should be considered as it is developed. At its southern terminus, this trail would link with the proposed **Ravena—Voorheesville Link (6)**. In the short-term, this route should be developed as an on-road bike path, with plans to upgrade it in the future to a dedicated off-road shared use path.

### F

## MOHAWK-HUDSON BIKE-HIKE TRAIL

### On-Road Bike • Off-Road Trail

### 41.1 miles total (19.1 miles in Albany)

An already established, constructed and popular trail, the Mohawk-Hudson Bike-Hike Trail continues to be one of the flagship trails in the regional Capital District system. This trail will provide a significant portion of the Empire State Trail as it passes through the Capital District on its journey toward Buffalo, and connects significant core regional trails such as the **Champlain Canal Trail (O)** and the planned **Schenectady Park Connector (R)** and **Ballston Veterans Bike Trail (M)** extension. Comprised of a segment on each of the Mohawk and Hudson Rivers, this trail follows the waterways from the Dunn Memorial Bridge in Albany to Rotterdam, where it is planned to extend to the Montgomery County line, and beyond as part of the Empire State Trail.

## SUPPORTING TRAIL NETWORK

1

### NORMANS KILL GREENWAY

**Off-Road Trail • 17.0 miles**

The Normans Kill Greenway would follow the meandering path of the Normans Kill along the City of Albany boundary, connecting up to French’s Mill Road at the Watervliet Reservoir in Guilderland. This off-road trail would provide wonderful scenic views in a natural setting, connecting from Delaware Ave at Mill Road (across a reconstructed Normanskill Drive bridge) to the proposed **Schenectady-Helderberg Connector (2)**. Along the way, it would also link with the existing **Albany County Helderberg-Hudson Rail Trail (A)**, New Scotland Road Bikeway, the proposed **Elm Avenue Bike Path (4)** and proposed **Albany Loop (C)**. This route should be developed as a bike-hike shared use path as much as possible, however there may be areas where an informal trail may be required.

2

### SCHENECTADY-HELDERBERG CONNECTOR

**Off-Road Trail • On-Road Bike  
11.7 miles total (8.3 miles in Albany)**

The Schenectady-Helderberg Connector would link the **Albany County Helderberg-Hudson Rail Trail (A)** in New Scotland with Vale Park in the City of Schenectady. Starting at the proposed Helderberg-Hudson Rail Trail extension, this separated off-road trail would conceptually proceed north onto Depot Road and around the Guilderland High School to Route 146. From here, it is envisioned to continue up French’s Mill Road, crossing French’s Hollow Falls, and linking with the planned **Normanskill Greenway (1)**. It would then conceptually continue north on Fuller Station Road to Western Avenue, where it would connect with a utility right-of-way which runs north parallel to Fuller Station Road. This utility corridor

route would take the trail to the Schenectady County line, where the trail would be continued to Vale Park. *(Refer to Schenectady section for more detail in that county.)* Along this proposed route, the trail would run adjacent to the Pine Bush Elementary School, St. Madeline Sophie School, Keenholtz Park and link with the **Patroon Greenway Extension (3)**.

3

### I-90 PATROON GREENWAY EXTENSION

**Off-Road Trail**

A continuation of the **Patroon Greenway (D)** core trail described above, this extension would branch off in the Village of Colonie and continue to follow the I-90 corridor northwest into Schenectady County, eventually connecting with the **Mohawk-Hudson Bike-Hike Trail (F)** in Rotterdam. Along the way, this trail route would also connect with the planned **Schenectady-Helderberg Connector (2)**. *(Refer to Schenectady section for more detail in that county.)*

4

### ELM AVENUE BIKE PATH

**Off-Road Trail • On-Road Bike • 6.1 miles**

This route would connect the hamlet of Feura Bush up to the New Scotland Road Bikeway in the City of Albany. This route is conceptualized to commence at West Yard Road, at the connection with the proposed **Ravena—Voorheesville Link (6)** and follow northeast along Feura Bush Road, connecting with existing trail segments in Elm Avenue Town Park. Although an exact route has not been established, this trail can potentially utilize existing trail segments from the town park along Delmar Bypass, Van Dyke Road, Delaware Ave and Fisher Blvd, ultimately connecting with the existing bikeway on New Scotland Road. There are opportunities for this trail to include new dedicated off-road trail segments through the town park. Along the way, this route would intersect with both the **Albany County Helderberg-Hudson Rail Trail (A)** and the **Normanskill Greenway Trail (1)** at the city line, with a connection to the Bethlehem Central High School.

5

## RESERVOIR RUN

**Off-Road Trail • On-Road Trail • 15.3 miles**

The Reservoir Run trail route would connect the Alcove Reservoir in Coeymans with the **Albany County Helderberg-Hudson Rail Trail (A)** in Delmar. Commencing in the vicinity of County Route 111 east of the reservoir, this off-road trail would conceptually follow the path of the Hannacroix Creek running northeast to Route 143. In the area near Blodgett Hill Road, the trail would be able to diverge onto the existing Albany water supply right-of-way which proceeds northeast across Blossom Hill Road. Following this utility corridor, the trail is envisioned to extend north to Starr Road where it could become a dedicated side path along the roadway up to Bridge Street, where it could pick up the utility corridor once again up to Albany Fuera Bush Filtration Plant and continue north to Indian Fields Road/State Route 32. From here, it would cross the railroad tracks as part of the **Elm Avenue Bike Path (4)**, follow along Feura Bush Road to the utility corridor where it would head north to the Delmar Bypass. Crossing the Bypass could be accommodated at Elsmere Avenue, once again connecting with the utility right-of-way north to the Albany County Hudson-Helderberg Rail Trail in the vicinity of East Poplar Drive. Along the way, this trail would also link with the proposed **Ravena—Voorheesville Link (6)**.

6

## RAVENA—VOORHEESVILLE LINK

**Off-Road Trail • On-Road Bike • 16.7 miles**

The Ravena—Voorheesville Link would connect the Village of Ravena in southeastern Albany County with the Village of Voorheesville. This conceptual trail would begin at the proposed **Hudson Northway (E)** in the vicinity of Church Street and proceed west along Route 143 and local roads to Winnie Avenue where it could connect to Fuller Road. In the area around Mosher Brook, the trail would conceptually diverge onto a former railroad bed where it would proceed north as an off-road trail for several miles, eventually aligning with West Yard Road in Fuera Bush. Continuing north, the trail would resume alongside Fuera Bush Town Park, following an existing path just west of the railroad, and crossing over in the vicinity of Unionville Fuera Bush Road to an electric utility right-of-way to the substation on Game Farm Road. This utility

corridor could be used to extend the trail further north, through New Scotland Town Park, past the Voorheesville Elementary School and eventually connecting with the **Albany County Helderberg-Hudson Rail Trail (A)** near Black Creek. Along the way, this trail route could connect with the proposed **Reservoir Run (5)** and the **Elm Avenue Bike Path (4)**.

7

## CONSAUL ROAD BIKE ROUTE

**On-Road Bike • 4.5 miles total (2.9 miles in Albany)**

This on-road bike route would link the proposed **Schenectady Park Connector Trail (R)** at Schenectady Municipal Golf Course to the proposed **Albany Loop (C)** on Route 155. Commencing at the proposed Albany Loop path on New Karner Road, this route is conceptualized to follow Consaul Road northwest to the Schenectady County Line. Along the way, it would run adjacent to the Town of Colonie Golf Course, Lisha Kill Middle School and Lisha Kill Sports Complex. *(Refer to Schenectady section for more detail in that county.)*

8

## BIKE ROUTE 9

**On-Road Bike • Off-Road Trail • 11.5 miles**

This route would connect from Broadway in Albany up north to the Mohawk River at Vischer Ferry Road, connecting to **Champlain Canal to Rexford Aqueduct Trail (25)** on the north side of the Mohawk River. Already established as an on-road bike path, this route is recommended to be further developed as a dedicated off-road shared use path in the future where feasible. Commencing at Broadway, this route would follow Loudonville Road and Route 9 north to the county line. Along the way, this bike route would intersect with the **Mohawk-Hudson Bike-Hike Trail (F)** and the proposed **Albany Loop (C)** core trails.

9

## THE CROSSINGS CONNECTION

**Off-Road Trail • 3.6 miles**

The Crossings Connection would connect the Village of Menands with



## TRAILS VISION PLAN

the public park space of The Crossings at Colonie. This off-road trail is envisioned to start in the vicinity of Broadway and Wards Lane in Menands, where it connects with the **Route 32 Cycle Track (10)** and **Mohawk-Hudson Bike-Hike Trail (F)**. From there it is conceptualized to proceed west adjacent to Menands School and follow an existing electric utility right-of-way, across Van Rensselaer Boulevard and through residential neighborhoods where it would link with the existing trail system in The Crossings.

10

### ROUTE 32 CYCLE TRACK

**On-Road Bike • 3.2 miles**

The Route 32 Cycle Track is a planned on-road bicycle route which extends from the **Mohawk-Hudson Bike-Hike Trail (F)** in Menands up to the Watervliet Museum, where it connects back to the Mohawk Hudson trail. A portion of this trail includes a connection east from Route 32 to the Exit 6 interchange of Interstate 787, where it can connect with the trail on the other side.

11

### VAN RENSSELAER BIKE PATH

**On-Road Bike • Off-Road Trail • 2.6 miles**

The route would connect between the proposed **Crossings Connection (9)** in the Village of Menands and the proposed **Bike Route 9 (8)**. At its southernmost point, the route is conceptualized to extend the existing bike route on Van Rensselaer Boulevard north where it would proceed to the Albany Rural Cemetery. From here, the trail is conceptualized to run north through the natural wooded areas to Spring Street Road where it could connect over to Route 9 at Sienna College.

12

### TIVOLI CROSSING

**On-Road Bike • Off-Road Trail • 1.5 miles**

The Tivoli Crossing would connect the proposed **Patroon Greenway (D)** in the Tivoli Lake Preserve north beyond Albany Shaker Road to

the proposed **Crossings Connection (9)**. Beginning in the Tivoli Lake Preserve, this trail is envisioned to head north along an existing easement/right-of-way which crosses interstate I-90 and runs parallel to Rosemary Drive. The trail would conceptually continue north through the Loudonville Reservoir, past the water tower on Fairview Road and connect to the proposed Crossings Connection, which leads to the Crossings of Colonie. In order for this trail connection to work, an adequate and safe way of crossing Interstate I-90 would need to be determined.

13

### SHAKER TRAIL

**Off-Road Trail • 2.8 miles**

The Shaker Trail, already providing an important north-south connection from Route 155 to the popular office park at British-American Boulevard, is planned to extend further north to connect with the Mohawk-Hudson Bike-Hike Trail. This trail would connect with the **Albany Loop (C)** and **Troy-Schenectady Road (35)**.

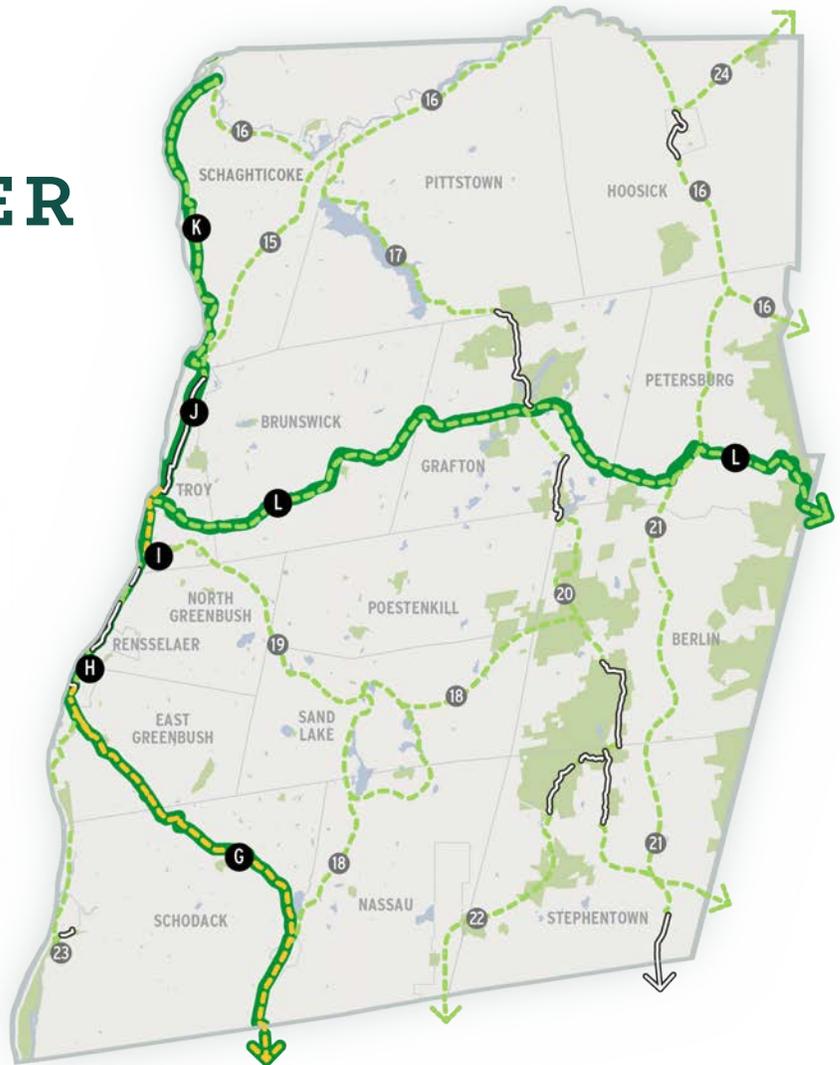
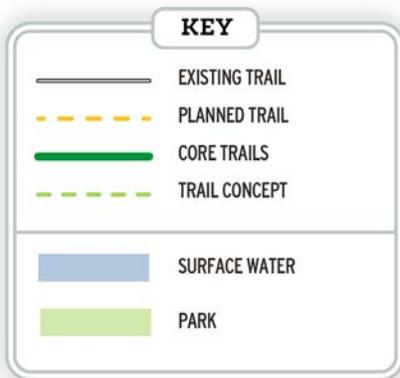
14

### ALBANY-COLONIE CONNECTOR

**Off-Road Trail • 4.5 miles**

The Albany-Colonie Connector would represent an important north-south link which spans across the divide created by the Interstate 90 corridor. Commencing at the SUNY Albany entrance on Western Ave, this off-road trail would utilize the newly constructed "Purple Path" which follows along East University Drive through the campus up to Tricentennial Drive. From here it would head northwest to Fuller Road, where it heads north under Washington Ave and I-90 at the existing underpasses, connecting to Six-Mile Waterworks Park at Rensselaer Lake. From here it would follow the existing path envisioned as part of the proposed Patroon Greenway (D) for a short distance until Rapp Road/Lincoln Ave. At Lincoln Ave, it would connect up to the roadway, following Lincoln Ave north to Petra Lane, Walker Way and Jupiter Lane, eventually reaching Central Avenue.

# RENSSELAER COUNTY



### Capital District Trails—Rensselaer

Core Trails		Supporting Trail Network	
G	Albany Hudson Electric Trail (AHET)	15	Uncle Sam to Mahican Trail Link
H	Rensselaer Riverwalk/RPI Trail	16	Mahican Trail
I	South Troy Riverfront Bikeway	17	Tomhannock North Ridge Run
J	Uncle Sam Bike Trail	18	Empire State - Rensselaer Plateau Link
K	River Road	19	Wynantskill Trolley Path
L	River to Ridge Path	20	Rensselaer Plateau Ridge
		21	Corkscrew Rail Trail
		22	Nassau - Stephentown Path
		23	Schodack—Papscanee Connection
		24	Hoosick to Bennington

## CORE TRAILS

### G

#### ALBANY HUDSON ELECTRIC TRAIL (AHET)

**On-Road Bike Path • Off-Road Trail • 15.6 miles**

The Albany Hudson Electric Trail is a major component of the Empire State Trail, extending from the southern border of Rensselaer County north to the Dunn Memorial Bridge Separated Bike & Ped crossing where it crosses the Hudson River into the City of Albany. Locally known as the Albany Trolley Trail to many, this trail connects from the City of Hudson into Rensselaer County through the Town of Schodack, Village of Nassau, Town of East Greenbush, and through the City of Rensselaer largely following the path of the former Albany-Hudson Electric Rail line. This major trail segment through Rensselaer County is currently in the public outreach and design phase, with construction scheduled to begin in 2019. Along the way, this trail route would connect with the proposed **Empire State – Rensselaer Plateau Link (18)**.

### H

#### RENSSELAER RIVERWALK/RPI TRAIL

**Off-Road Trail • 5.1 miles**

This primarily off-road trail passes along the eastern banks of the Hudson River from the Dunn Memorial Bridge in Rensselaer up to the City of Troy near Mill Street, effectively linking the **Albany Hudson Electric Trail (G)** to the **South Troy Riverfront Bikeway (I)**. Almost two miles of this trail have already been completed as part of the RPI Trail, with an additional 0.1 mile segment already constructed at Rensselaer Esplanade and a half-mile segment completed crossing the municipal line from North Greenbush into Troy. It is anticipated that this trail could

also connect across the Hudson River at the Livingston Avenue Bridge to the proposed **Patroon Greenway Trail (D)**.

### I

#### SOUTH TROY RIVERFRONT BIKEWAY

**On-Road Bike • 2.3 miles**

A planned extension of the Uncle Sam Bike Trail, the South Troy Riverfront Bikeway is currently under construction and is anticipated to be completed in 2018. This bikeway would connect to the Uncle Sam route on Federal Street, and extend south along Front Street, River Street and 1st Street down to Burden Avenue to Water Street, where it would eventually connect with the **Rensselaer Riverwalk/RPI Trail (H)**. Along the way, this route would connect with the proposed **River to Ridge Path (L)**.

### J

#### UNCLE SAM BIKE TRAIL

**Off-Road Trail • 4.2 miles**

The Uncle Sam Bike Trail is an existing off-road trail beginning at Middleburgh Street in Troy to Northern Dive. This trail connects with the **South Troy Riverfront Bikeway (I)** in the south, and the proposed **Uncle Sam to Mahican Trail Link (15)** in the north.

### K

#### RIVER ROAD TRAIL

**On-Road Bike • Off-Road Trail • 10.0 miles**

The River Road Trail would connect north Troy with the Village of Stillwater. This trail would conceptually follow River Road, commencing in the vicinity of New Schaghticoke Road and proceeding north along the former (now abandoned) roadway which follows the banks of the Hudson River. This trail would then conceptually connect back up with the functional River Road

(Route 121) and proceed north through Mechanicville and along Knickerbocker Road to the Hoosick River, where it would link with the proposed **Mahican Trail (16)**. At its southern terminus, this trail would potentially be connected to the **Uncle Sam to Mahican Trail Link (15)**.

L

**RIVER TO RIDGE PATH**

**On-Road Bike • 28.6 miles**

The River to Ridge Path would traverse Rensselaer County from the City of Troy through the Town of Petersburg and into the State of Massachusetts, largely following State Route 2. This path would commence in the City of Troy at the **South Troy Riverfront Bikeway (I)**, conceptually heading east along Congress Street until Pawling Avenue, where it would turn south along Pinewoods Avenue (Route 140), and eventually connecting back up with Brunswick Road (Route 2) in Eagle Mills. Here, the bike route would follow State Route 2 through Cropseyville into Grafton, where it would diverge off of Route 2 onto Old Road (Route 84) for about two miles before rejoining Route 2 once again for a brief period through Grafton hamlet. At Taconic Lake Road, the route would turn to head south again, becoming Toad Point Road, connecting with NYS Route 22 and heading north again into Petersburg where it would turn onto Main Street and connect back up with Route 2. From here, it would continue along Route 2 until the state border. This bike route would traverse the scenic Rensselaer Plateau, intersect with trails at Grafton Lake State Park, the proposed **Rensselaer Plateau Ridge (20)**, proposed **Corkscrew Rail Trail (21)** route, as well as with the existing Taconic Crest Trail at Petersburg Pass.



**SUPPORTING TRAIL NETWORK**

15

**UNCLE SAM TO MAHICAN TRAIL LINK**

**Off-Road Trail • 8.8 miles**

A northern extension of the existing **Uncle Sam Bikeway (J)**, this off-road trail would conceptually connect the northern limits of the City of Troy with the Village of Valley Falls, running roughly parallel with Route 40 and connecting to the proposed **Mahican Trail (16)**. Beginning at the current northern terminus of the Uncle Sam Trail on Northern Drive, this trail would proceed north through the woods to an existing electric utility right-of-way, where it could proceed parallel to Haughney Road. This corridor would continue across Turner Road and Calhoun Drive, eventually crossing Route 40 in the hamlet of Melrose, before continuing up near Schaghticoke. At its northern end, it would connect to the Mahican Trail.

16

**MAHICAN TRAIL**

**Off-Road Trail • 30 miles**

Providing a tour over the northern reaches of Rensselaer County, the Mahican Trail is conceptualized to follow the meandering Hoosick River, connecting the Village of Stillwater to Schaghticoke and Hoosick Falls, eventually continuing into North Pownal, Vermont. As it travels through Hoosick Falls, this trail would follow the existing Hoosick River Greenway. This trail would connect with the proposed **Tomhannock North Ridge Run (17)**, **Corkscrew Rail Trail (21)** and **Hoosick to Bennington (24)** trails, and should take advantage of the existing railroad line which follows the river along this route where feasible.

17

## TOMHANNOCK NORTH RIDGE RUN

**On-Road Bike • 14 miles**

This on-road bike route would connect the Village of Valley Falls south along the Tomhannock Reservoir and into the Rensselaer Plateau at Pittstown State Forest and Grafton Lakes State Park. Beginning at the **Mahican Trail (16)**, this route would conceptually head south from Valley Falls along Melrose-Valley Falls Road and then follow along the northern edge of the Tomhannock on Reservoir Lake Road to Route 7, providing wonderful views of the water. Continuing east on Route 7 for about 4/10th of a mile, it is envisioned to then turn south on Cambell Lane, connecting over to Tamarac Road and then up Keefe Road to Pittstown State Forest and into the Rensselaer Plateau. From here, existing informal trails connect south through to Grafton Lakes State Park and eventually to the proposed **River to Ridge Path (L)** on Route 2.

18

## EMPIRE STATE – RENSSELAER PLATEAU LINK

**On-Road Bike • 18 - 25 miles**

This on-road bike route would connect with the **Albany Hudson Electric Trail (G)** / Empire State Trail in the Village of Nassau up around Sand Lake and to the **Rensselaer Plateau Ridge (20)**. Commencing in the Village of Nassau, the route would conceptually head north on Nassau Averill Park Road up to Hoags Corners Road. From here, the route could split to create a loop around the greater Sand Lake area. The western leg would follow Burden Lake Road north, up around Crystal Lake, and down Miller Hill Road (Route 66) to Glass Lake. The eastern leg would follow Totem Lodge Road (Route 20) and then north around Crooked Lake on Route 66 to Glass Lake. From there, the two routes would

converge again and enter the Rensselaer Plateau heading up Route 42, where it would link up with the proposed **Rensselaer Plateau Ridge (20)** route. Along the way, this route would link with the proposed **Wynantskill Trolley Path (19)**.

19

## WYNANTSKILL TROLLEY PATH

**Off-Road Trail • 8.8 miles**

This off-road trail would connect the City of Troy with the Town of Sand Lake, following an old trolley line which extends from Wynantskill to Avril Park, where it could connect with the proposed **Empire State – Rensselaer Plateau Link (18)**. A portion of this route includes right-of-way owned by the Rensselaer County Sewer District, and was envisioned in the Sand Lake Hamlets Plan.

20

## RENSSELAER PLATEAU RIDGE

**Off-Road Trail • 22.4 miles**

This scenic route along the top of the plateau would connect Grafton Lakes State Park along the Rensselaer Plateau south to Stephentown and into Massachusetts. From Grafton Lake State Park, this route conceptually commences at the proposed **River to Ridge Path (L)** at the intersection of Route 85, turning onto Steve Odel Road (Route 86), and then Cranberry Pond Road where it would connect with an existing trail near Dyken Pond. This existing trail would extend the route south to the Dyken Pond Environmental Center, where the new trail would continue to Fifty Six Road. The route would then potentially continue south along Dyken Pond Road (Route 39) to Plank Road where it heads west for approximately 0.8 miles. This route could then turn south once again on Dutch Church Road down to Cherry Plain State Park where it connects with an existing trail/path off of Miller Road, and then connect across to Schaffer Road. Schaeffer Road

## TRAILS VISION PLAN

would continue south to Old Town Way and Black River Road into Stephentown Center, where the path would then follow Route 43 east to the state line. Along the way, this trail would connect to the proposed **Empire State – Rensselaer Plateau Link (18)** and the **Corkscrew Rail Trail (21)** trails.

21

### CORKSCREW RAIL TRAIL

**On-Road Bike • Off-Road Trail • 24.7 miles**

This proposed extension of the off-road bike trail would connect the proposed **Mahican Trail (16)** at North Petersburg south to the existing Corkscrew Rail Trail at Knapps Road in Stephentown, which then continues south into Columbia County and New Lebanon. Commencing in North Petersburg, this trail would run south, roughly parallel to Route 22, eventually following the abandoned rail line of the Rutland Railroad. Along the way, it would link with the proposed **River to Ridge Path (L)** and the **Rensselaer Plateau Ridge (20)** trails.

22

### NASSAU – STEPHENTOWN PATH

**On-Road Bike • Off-Road Trail • 9.2 miles**

This trail route would connect the Village of East Nassau to the Cherry Plain State Park, linking together the Kinderhook Creek

Preserve, East Nassau Community Forest, Robert Ingalls Preserve and the Cowee Forest protected lands along the way.

23

### SCHODACK—PAPSCANEE CONNECTION

**Off-Road Trail • 3.9 miles**

This route would connect the Schodack Island State Park and the Village of Castleton-On-Hudson to the Papscaanee Island Nature Preserve. Commencing at the entrance road to the state park, this off-road path would proceed north along Route 9J, connecting to the existing sidewalks in Castleton just south of Stimpson Ave. North of the village, it would proceed as a multi-use path parallel to River Road and the railroad tracks, potentially proceeding as a rail-with-trail alongside the railroad up to Staats Island Road.

24

### HOOSICK TO BENNINGTON

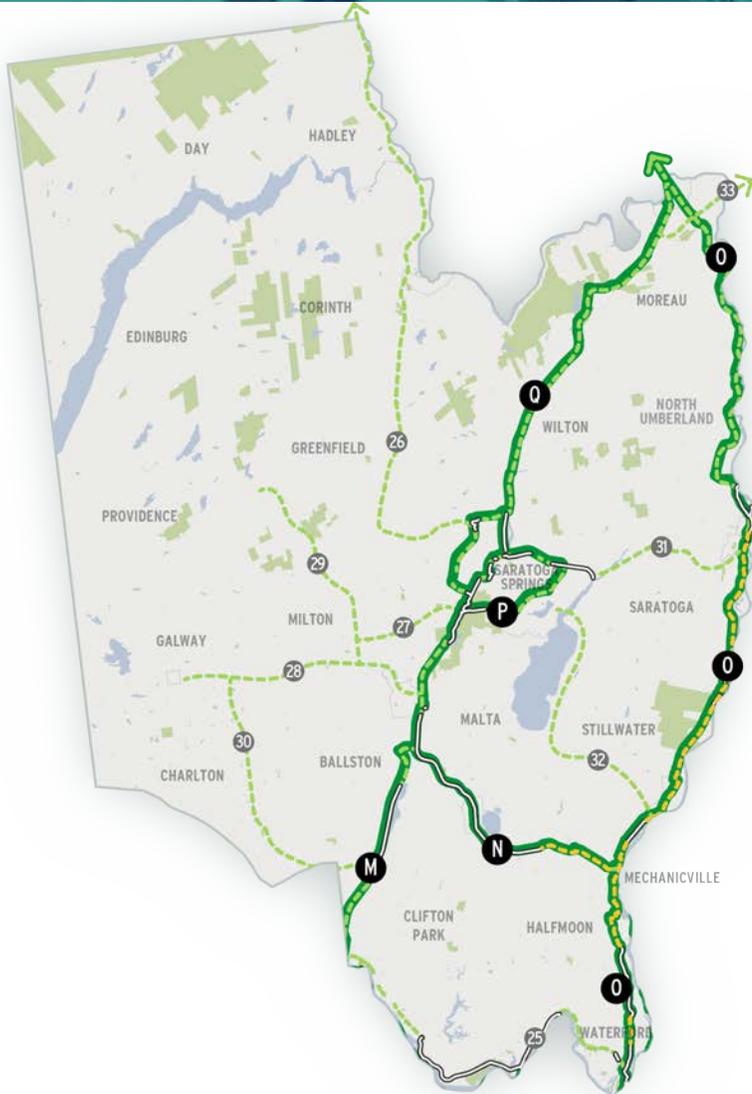
**Off-Road Trail • 5.2 miles**

This trail would conceptually connect the Village of Hoosick Falls from the **Mahican Trail (16)** and Hoosick River Greenway northeast into Shaftsbury/North Bennington, Vermont. This trail would conceptually follow an abandoned rail line which heads into Vermont.





TRAILS VISION PLAN



# SARATOGA COUNTY

**KEY**

- EXISTING TRAIL
- PLANNED TRAIL
- CORE TRAILS
- TRAIL CONCEPT
- SURFACE WATER
- PARK

Capital District Trails—Saratoga			
Core Trails		Supporting Trail Network	
M	Ballston Veterans Bike Trail	25	Champlain Canal to Rexford Aqueduct Trail
N	Zim Smith Trail	26	Greenfield Line
O	Champlain Canal Trail	27	Geyser Road Trail
P	Saratoga Greenbelt Trail	28	Ballston Spa-Galway Link
Q	Wilton-Moreau Trail	29	Lake Desolation Path
		30	Charlton Bike Route
		31	Saratoga-Schuylerville
		32	Stillwater-Saratoga Lake
		33	Bluebird Road Bike Path

## CORE TRAILS

### M

#### BALLSTON VETERANS BIKE TRAIL

**Off-Road Trail • 12.5 miles total** (8.5 miles in Saratoga)

The Ballston Veterans Bike Trail would complete the connection between the **Zim Smith Trail (N)** in the Town of Ballston to the **Mohawk-Hudson Bike-Hike Trail (F)** along the Mohawk River in downtown Schenectady. This trail largely follows parallel to the route of the Schenectady-Saratoga Trolley line. Several portions of this trail route have already been constructed, including a 3.4 mile stretch along Ballston Lake. A short-term priority connection for this route is to complete the approximately 2.2 mile link to the existing Zim Smith Trail along Brookline Road. An alternative connection could be made which runs behind Curtis Lumber, negating the need to cross Route 67 twice. The remaining 3.3 miles of this trail to the Schenectady County line would continue to run parallel to the railroad line until the vicinity of Glenridge Road, where it would follow local roads in the final leg to the Mohawk River. *(Refer to Schenectady section for more detail in that county.)*

### N

#### ZIM SMITH TRAIL

**Off-Road Trail • 15.7 miles**

The already popular Zim Smith Trail would complete the connection between Saratoga Springs and the City of Mechanicville, linking to the planned **Champlain Canal Trail (O)** along the Hudson River. A significant segment of this trail has already been constructed, linking the Village of Ballston Spa 8.7 miles to Coons Crossing Road in Halfmoon. The remaining segments to be

completed include the southern 3.3 miles of planned route into the City of Mechanicville and the northern 2.9 miles conceptually envisioned into Saratoga Spa State Park. At the southern end, this trail would likely need to convert to an on-road or path system along North Central Avenue to complete the short connection to the Champlain Canal Trail.

### O

#### CHAMPLAIN CANAL TRAIL

**Off-Road Trail • 44.5 miles**

The Champlain Canal Trail will connect the **Mohawk-Hudson Bike-Hike Trail (F)** on Green Island in Waterford north along the Hudson River all the way to the City of Glens Falls. This large regional trail will represent a portion of the north-south axis of the planned Empire State Trail, which will diverge over to the eastern side of the Hudson River north of Schuylerville. The Champlain Canal Trail will connect the municipalities of Mechanicville, Stillwater, Schuylerville and the Saratoga National Historic Park, providing beautiful views of the Hudson River at vantage points along the way. Along the way, this trail would link with numerous other trails including the **Zim Smith Trail (N)**, and the planned **Mahican Trail (16)**, **Stillwater-Saratoga Lake (32)** and **Saratoga-Schuylerville (31)** routes. Several segments of this planned off-road trail route have already been constructed, including areas around Schuylerville, Mechanicville and Halfmoon. While a majority of this route will include dedicated off-road paths, some segments will include on-road bicycle routes. Much of the southern portions of this route are anticipated to be constructed as part of the Empire State Trail by the end of 2020. At the northern one-third of this trail entering the Town of Northumberland, this trail route remains more conceptual.

P

## SARATOGA GREENBELT TRAIL

### Off-Road Trail • 17.9 miles

The Saratoga Greenbelt Trail represents a loop around the City of Saratoga Springs as well as a central spine which connects through the core of the city to points north, called the Downtown Connector. The Downtown Connector links together the Spa State Park, Congress Park and High Rock Park, continuing north to the Spring Run Trail. The eastern side of the loop runs along Crescent Ave and connects to Bog Meadow Brook Trail. On the western side, the Waterline Trail connects to Route 9 and trail connections heading further north. Several individual segments of this trail system have already been constructed, with the Downtown Connector anticipated to start construction in 2019. Overall, this planned loop creates an important local transportation hub which bridges the difficult urban gaps to link the supporting trail network discussed further below. These include the Geyser Road Trail (27) and the Greenfield Line (26) to the west, the Wilton-Moreau Trail (Q) to the north, the Saratoga-Schuylerville (31) and Stillwater-Saratoga Lake (32) paths to the east, and the Zim Smith Trail (N) to the south.

Q

## WILTON-MOREAU TRAIL

### Off-Road Trail • 16.1 miles

The Wilton-Moreau Trail is envisioned to connect the City of Saratoga Springs to the Village of South Glens Falls, largely running parallel to Route 9. Commencing at the intersection of the Maple Ave Route 9 Bike Route and the northern planned route of the **Saratoga Greenbelt Trail (P)**, this trail would conceptually follow the Niagara Mohawk utility Right-of-way corridor which runs along the east side of Route 9. Entering the

Town of Moreau, the trail is envisioned to branch off from the utility corridor along local roadways to access Moreau Lake State Park, continuing on Mountain Road, Spier Falls Road and eventually along Saratoga Road as it approaches the Village of South Glens Falls. In the north, this trail would connect to the **Champlain Canal Trail (O)**, as well as the **Bluebird Road Bikepath (33)**, discussed below.

## SUPPORTING TRAIL NETWORK

25

### CHAMPLAIN CANAL TO REXFORD AQUEDUCT TRAIL

#### Off-Road Trail • 18.0 miles

The **Champlain Canal to Rexford Aqueduct Trail** would connect across the southern border of Saratoga County, linking the **Champlain Canalway Trail (O)** to the **Mohawk-Hudson Bike-Hike Trail (F)** in Schenectady, as well as the proposed **Bike Route 9 (8)** as it crosses the Mohawk River at Loudon Road. Beginning at the Champlain Canal Trail in the vicinity of Division Street in Waterford, this route is envisioned to proceed west along Fonda and Flight Rock Roads, following the meandering Mohawk River. Entering the Town of Halfmoon, it would conceptually follow Mohawk Road/Church Hill Road until it connected with the existing off-road path constructed along Old Canal Road, leading into Clifton Park. The route would then connect back in the vicinity of Sugar Hill Road, and proceed to follow Riverview Road northwest to where it connects with the new improvements crossing Rexford Bridge to the Mohawk-Hudson Bike-Hike Trail. This trail would also continue west along Riverview Road into the Hamlet of Alplaus.

26

## GREENFIELD LINE

**Off-Road Trail • 25.7 miles**

The Greenfield Line would connect from the City of Saratoga Springs north through the towns of Greenfield, Corinth and Hadley to the county line at Stony Creek. Commencing at the **Saratoga Greenbelt Trail (P)** just northwest of the city, this trail would follow the Delaware & Hudson railroad right-of-way near Daniels Road. This railroad line snakes its way north into the Adirondack Park, connecting to the Town of Corinth, and following the west bank of the Hudson River where it could extend into Warren County and beyond.

27

## GEYSER ROAD TRAIL

**Off-Road Trail • 4.5 miles**

The Geyser Road Trail would connect the City of Saratoga Springs to the Town of Milton and points west. Commencing at the Saratoga Spa State Park where it links with the Saratoga Capital Trail, this off-road trail is currently in the planning and design stages to follow Geyser Road to the Milton town line. It is additionally planned that this trail could extend further along this route to Middle Line Road, where it would connect with the proposed **Lake Desolation Path (29)**.

28

## BALLSTON SPA-GALWAY LINK

**On-Road Bike • 10.7 miles**

The Ballston Spa-Galway Link would connect the Village of Ballston Spa to the Village of Galway. Beginning in the Village

of Ballston Spa, this on-road bike route would conceptually begin at the **Zim Smith Trail (N)** on the east side of the village in the vicinity of Malta Avenue, and begin heading northwest along local roads into North Ballston Spa where it would pick up Northline Road heading west. Running along Northline, it would potentially continue onto Galway Road (Route 45) past the Pioneer Hills Golf Course and into the Village of Galway. Along its route, this trail would connect with the proposed **Lake Desolation Path (29)** and the proposed **Charlton Bike Route (30)**.

29

## LAKE DESOLATION PATH

**On-Road Bike • 9.2 miles**

The Lake Desolation Path would connect from the Town of Milton north to Lake Desolation in Providence. Beginning along Middle Line Road at the proposed **Ballston Spa-Galway Link (28)**, this on-road bike path would conceptually proceed north to Murray Road, through the Village of Middle Grove, and continue north along Lake Desolation Road (Route 12) to the lake at the edge of the Adirondack Park.

30

## CHARLTON BIKE ROUTE

**On-Road Bike • 11.8 miles**

The Charlton Bike Route would connect from the existing **Ballston Veterans Bike Trail (M)** in Ballston northwest through Charlton and into the Town of Galway, connecting with the **Ballston Spa-Galway Link (28)**. This on-road bike route would largely follow county and town roads. Commencing in the vicinity of Lake Hill Road, the route would conceptually head north through Charlton on Jockey Street.

31

### SARATOGA-SCHUYLERVILLE

**Off-Road Trail • 7.2 miles**

The Saratoga-Schuylerville Trail would connect the City of Saratoga Springs with the Village of Victory and Schuylerville, linking the Bog Meadow Brook Nature trail to the **Champlain Canal Trail (O)** which runs along the Hudson River. This route would commence near the termination of the Bog Meadow Brook Trail on Meadowbrook Road and follow the north side of Fish Creek, crossing in the vicinity of Brown Point Lane and continuing east along the waterway. From here, the route is conceptualized as winding its way through the undeveloped open space and coming in alongside Route 32 into Victory Mills, connecting to the Champlain Canal Trail in the vicinity of Evans Street.

32

### STILLWATER-SARATOGA LAKE

**On-Road Bike • 12.2 miles**

The Stillwater-Saratoga Lake Trail would provide a connection

between Saratoga Lake and the Village of Stillwater. This on-road bike route would conceptually begin at the end of Union Avenue, following Route 9P over the bridge and south along the eastern side of Saratoga Lake, and then following Lake Road/County Route 76 southeast into the village, where it would link with the **Champlain Canal Trail (O)**.

33

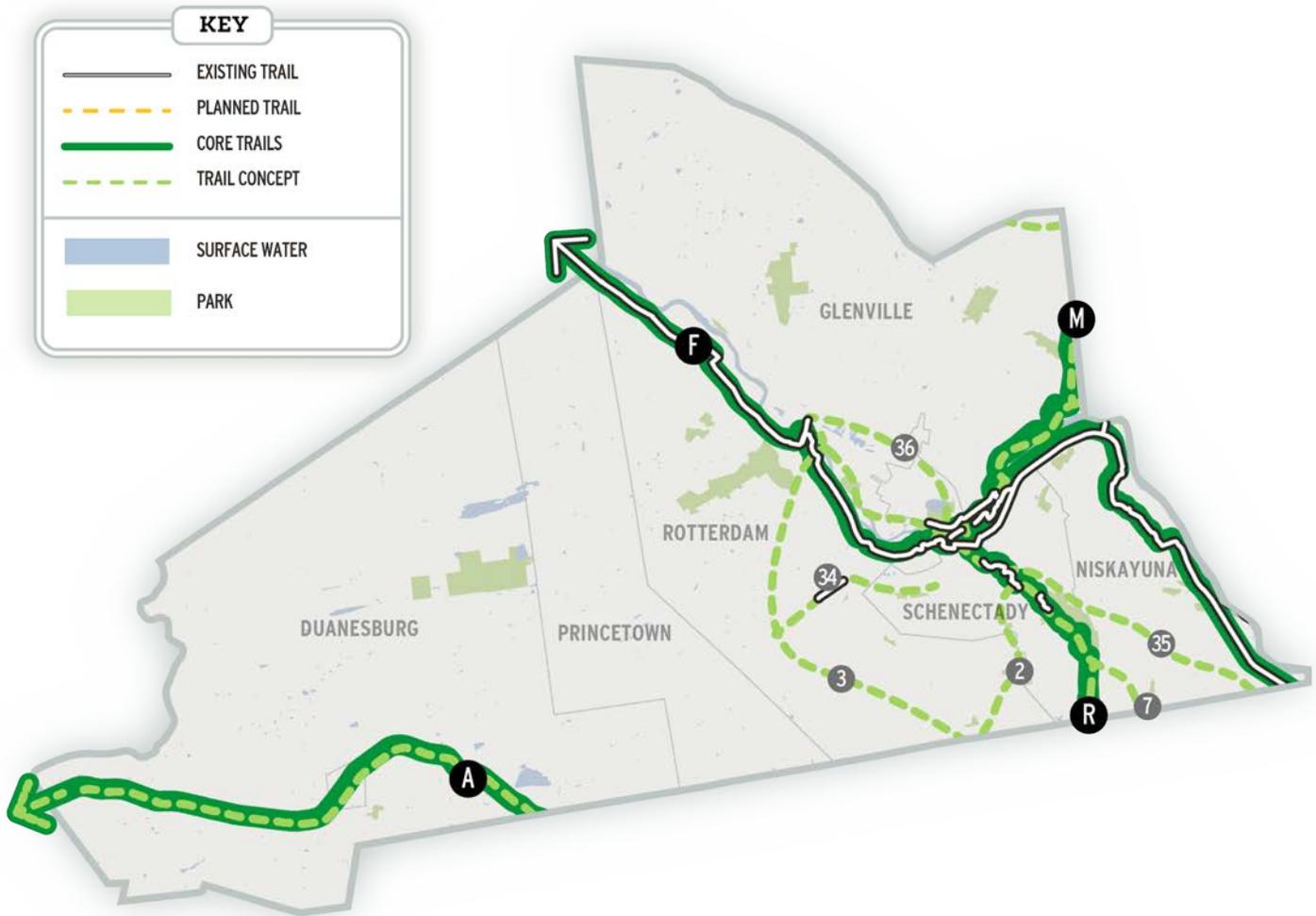
### BLUEBIRD ROAD BIKE PATH

**On-Road Bike • 3.7 miles**

The Bluebird Road Bike Path would connect across the Town of Moreau, from the proposed **Wilton-Moreau Trail (Q)** across the Hudson River to the Village of Hudson Falls. Along the way, it would link with the **Champlain Canal Trail (O)**.



# SCHENECTADY COUNTY



Capital District Trails—Schenectady

Core Trails		Supporting Trail Network	
F	Mohawk-Hudson Bike-Hike Trail	2	Schenectady-Helderberg Connector
A	Albany Hudson Electric Trail (AHET)	3	I-90 Patroon Greenway Extension
M	Ballston Veterans Bike Trail	7	Consaul Road Bike Route
R	Schenectady Park Connector	34	Greenway Link
		35	Troy-Schenectady Road
		36	Scotia Loop Path



## CORE TRAILS

R

### SCHENECTADY PARK CONNECTOR

**On-Road Bike • Off-Road Trail • 7.0 miles**

The Schenectady Park Connector is envisioned as a mix of off-road trail and on-road bike paths which are conceptualized to connect between downtown Schenectady and the Albany Pine Bush Preserve. Commencing at the **Mohawk-Hudson Bike-Hike Trail (F)** at the intersection of Union Street and North Jay Street, this path is anticipated to follow Jay Street south to Franklin Street, where it would connect to the existing Vale Park Trail which passes through the park to North Brandywine Avenue. From here, it proceeds east to Bradley Boulevard and Monument Hill in Central Park, where it links to the Central Park Trail. This trail could potentially continue through to the Schenectady Municipal Golf Course on Golf Road. This trail would then exit the golf course on Balltown Road, conceptually heading south and crossing State Street in the vicinity of Midland Ave. From here, the trail route is generally conceptualized to proceed southeast, connecting to existing trails within the Albany Pine Bush Preserve. Although an exact route has not yet been established, it is envisioned that a select route through the preserve could be upgraded with proper multi-use path surfacing for this connection. *(Refer to Albany section for more detail in that county.)* Here, it could ultimately connect with the proposed **Patroon Greenway Trail (D)** in Albany County. Along this route, the trail would

connect with the proposed **Schenectady-Helderberg Connector (2)**, **Troy-Schenectady Road (35)** and **Consaul Road Bike Route (7)** trails.

M

### BALLSTON VETERANS BIKE TRAIL

**Off-Road Trail • 12.5 miles total** (4.0 miles in Schenectady)

A continuation of the Ballston Veterans Bike Trail from Saratoga County, this trail would connect downtown Schenectady to the existing **Zim Smith Trail (N)**. Several portions of this trail route have already been constructed, including through the Schenectady Rivers Casino & Resort and Riverside Park. Commencing at the **Mohawk-Hudson Bike-Hike Trail (F)** along State Street, this trail is envisioned to proceed north along Washington Street to connect to the existing Riverside Park Trail, where it could be linked to the newly constructed trails along the casino waterfront. From there, it would cross the Mohawk River at Freemans Bridge, connect with the existing Scotia-Glenville Trail and follow the natural landscape along the river banks north near the Burnt Hills Rowing Association, where it would connect up with local roads in the vicinity of Alplaus Avenue. The trail would continue to follow local roads as a dedicated side path along Bruce Drive north until Glenridge Road. At this juncture, the trail would cross over to the former railroad right-of-way of the Schenectady-Saratoga Trolley line and continue north before crossing into Saratoga County. *(Refer to Saratoga section for more detail in that county.)*

A

### ALBANY COUNTY HELDERBERG-HUDSON RAIL TRAIL (HHRT)

**Off-Road Trail • 31.1 miles total** (10.8 in Albany)

A planned continuation of the HHRT trail in Albany, this trail

would continue north into western Schenectady County, passing underneath Interstate 88, and into the Village of Delanson. From there, future considerations should be given to coordination with Schoharie County for a connection into Central Bridge. *(Refer to Albany section for more detail in that county.)*

F

**MOHAWK-HUDSON BIKE-HIKE TRAIL**

**Off-Road Trail • 31.6 miles total** (21.8 miles in Schenectady)  
 The existing and highly popular Mohawk-Hudson Bike-Hike Trail already stretches 21.8 miles through the County of Schenectady, connecting Pattersonville to the town of Colonie. A major component of the Empire State Trail, this route links with several other existing and planned trails in the county, including the **Ballston Veterans Bike Trail (M)**, the proposed **Schenectady Park Connector (R)** and several others discussed below. The remaining section of this trail which includes the final 1.4 miles to the Montgomery County border along State Route 5S is in preliminary design and is scheduled to be completed in 2020.

**SUPPORTING TRAIL NETWORK**

3

**I-90 PATROON GREENWAY EXTENSION**

**Off-Road Trail • 21.5 miles total** (8.1 miles in Schenectady)  
 A continuation of the off-road trail from Albany County, the Patroon Greenway Extension would stretch 8.1 miles through the County of Schenectady, connecting the Albany waterfront to the

**Mohawk-Hudson Bike-Hike Trail (F)** on the Mohawk River. The Schenectady portion of the Patroon Greenway Extension would continue to follow the I-90 corridor northwest through Rotterdam where it could link with the Mohawk-Hudson Bike-Hike Trail in the vicinity of Dalys Island, and would also connect with the proposed **Greenway Link (34)**.

34

**GREENWAY LINK**

**Off-Road Trail • 3.6 miles**  
 The Greenway Link would connect Schenectady’s Mont Pleasant with the proposed **I-90 Patroon Greenway Extension (3)** which runs just outside of the city. Commencing in the vicinity of Broadway and Delaware Avenue, this off-road trail is envisioned to follow the railroad line west into the Town of Rotterdam, along the Poentic Kill waterway basin, and terminate at the Patroon Greenway Extension.

2

**SCHENECTADY-HELDERBERG CONNECTOR**

**Off-Road Trail • On-Road Bike**  
**11.7 miles total** (3.4 miles in Schenectady)  
 The Schenectady-Helderberg Connector would link Vale Park in Schenectady to the **Albany County Hudson Helderberg Rail Trail (A)** in New Scotland. Beginning at Vale Park on North Brandywine Avenue, this on-road bike route is envisioned to proceed south to Duane Avenue where it would follow the I-890 corridor south to Route 7 and the Stadium Golf Club. From here, it would conceptually proceed southwest, potentially using the railroad underpass to cross I-890, and follow an existing utility right-of-way behind the water tower near McKinley Avenue. This

utility right-of-way continues south to the county line in the vicinity of the New York State Thruway, where it would connect with the **I-90 Patroon Greenway Extension (3)** before continuing south in Albany County. *(Refer to Schenectady section for more detail in that county.)* Crossing the Thruway at this juncture could be accommodated by a short detour along the Patroon Greenway west to the overpass on Carmen Road, and returning to the utility corridor.

35

### TROY-SCHENECTADY ROAD

**Off-Road Trail • On-Road Bike**

**6.4 miles total** (5.9 miles in Schenectady)

The Troy-Schenectady Bike Route would connect Vale Park in Schenectady with the Town of Colonie. This trail would conceptually begin at the proposed **Schenectady Park Connector Trail (R)** in Vale Park in the vicinity of Lomasney Avenue, and continue east on Eastern Ave/Eastern Parkway to Oregon Avenue/Balltown Road, where it could transition one block north onto Route 146. The Route could then continue east along Route 7 / Troy-Schenectady Road through the Town of Niskayuna. At its eastern terminus, just over the county border into Albany, this path would connect to the **Mohawk-Hudson Bike-Hike Trail (F)** and British American Boulevard Bike Route.

7

### CONSAUL ROAD BIKE ROUTE

**On-Road Bike • 4.5 miles total** (1.6 miles in Schenectady)

This on-road bike route would link the proposed **Schenectady Park Connector Trail (R)** at Schenectady Municipal Golf Course to the proposed **Albany Loop (C)** on Route 155. Commencing at Balltown Road, this route would follow Consaul Road southeast to the Albany County Line. *(Refer to Albany section for more*

*detail in that county.)*

36

### SCOTIA LOOP PATH

**On-Road Bike • Off-Road Trail • 8.2 miles**

This proposed on-and-off-road route would connect the existing Scotia Glenville Trail to the **Mohawk-Hudson Bike-Hike Trail (F)**, providing a loop around the Village of Scotia. Beginning in the vicinity of the Washington Avenue and Schonowee Avenue intersection, the northern segment of this trail is envisioned to proceed north along Washington Avenue, continuing across Ballston Road to follow the existing utility line right-of-way which runs parallel to the railroad tracks. In the vicinity of Sacandaga Road, it would connect with Vley Road, turning south along the Thruway Bridge Interchange (Route 890) across the Mohawk River to the Mohawk-Hudson Bike-Hike Trail. The southern leg of this loop is conceptually planned to follow Route 5 along the Mohawk River, turning onto Maalwyck Park Road down to the river. From the park, it could proceed east connecting along local residential streets in the vicinity of Dongan Avenue and Engleman Avenue, connecting back with Schonowee Avenue in the vicinity of Glen Sanders Mansion and Freedom Park. Here, a second connection across the river is envisioned at Western Gateway Bridge over the Isle of the Cayugas.





# SOCIO-ECONOMIC BENEFITS

## OF THE CAPITAL DISTRICT GREENWAY AND TRAILS PLAN

### INTRODUCTION

This section provides an analysis of socio-economic impacts due to the implementation and full build out of the Capital District Greenway and Trails Plan over the next two to three decades. There is extensive literature available regarding the economic impacts and community-related benefits of trails. Most studies focus on one type of economic impact and focus on single trails or trail segments. Rarely are the economic impacts of regional trail systems studied in all potential categories of impacts. However, the evidence of trail related economic impacts in the literature can be applied to the Capital District experience to establish the framework for estimating economic impacts that will inform regional trail planning. Types of economic impacts quantified in this economic analysis include:

- **Impact of trail construction, planning and design**
- **Impact of trails on property values**
- **Residential property proximate to existing core trails**
- **Residential property proximate to existing, planned and concept core trails**
- **Net property value impacts of new planned and concept trails**
- **Impact of trail operations and maintenance**
- **Impact of sales of trail-related goods and services**
- **Spending by Capital District Trails users while on trips**
- **Existing trail use and overnight tourist spending**

Certain categories of direct expenditures—trail maintenance and operations, retail sales supporting trail use, and tourist spending—are evaluated for their indirect and induced economic effects, the “multiplier effects.” As direct net new trail related expenditures are spent in the “Local” Capital District, they create indirect and induced effects as money is spent and recycled within the local economy. In addition, some of the spending due to development of the trails will be net new to the State of New York as well. Therefore there would be direct and multiplier effects to the “Regional” State economy as well. Other socio-economic benefits of trails include expansion of the tourism economy, outdoor recreation opportunities, and the alternative transportation network; public health and environmental benefits; and other educational and quality of life benefits. Overall, the trails system promotes health and wellness and enhances the Capital District as a great place to live, work and play.

### CAPITAL DISTRICT TRAIL MILEAGE

Data in Table 1 summarize the planned trail system in the Capital District. Under the regional trail plan, the core trail system will triple in size after complete implementation of the trails plan. The existing trail system is approximately 89 miles. The planned and the concept trails add another 200 miles to the system for a total of approximately 289 miles.



SOCIO-ECONOMIC BENEFITS

**TABLE 1:**  
**SUMMARY OF TRAIL SYSTEM LENGTH BY TRAIL STATUS**  
**CAPITAL DISTRICT GREENWAY AND TRAILS PLAN**

Capital District Core Trails					
Map Key	Trail Identification	Primary Type	Total Miles	Miles Already Constructed	Miles To Be Completed
A	Albany County Helderberg-Hudson Rail Trail	Off-Road	31.1	8.7	22.4
B	South End Bikeway Connector	On-Road	1.5	0	1.5
C	Albany Loop	On-Road	15.2	0	15.2
D	Patroon Greenway	Off-Road	8.8	0	8.8
E	Hudson Northway	On-Road	11.7	0	11.7
F	Mohawk-Hudson Bike-Hike Trail	Off-Road	41.1	39.7	1.4
G	Albany Hudson Electric Trail (AHET)	Off-Road	15.6	0	15.6
H	Rensselaer Riverwalk/RPI Trail	Off-Road	5.1	2.3	2.8
I	South Troy Riverfront Bikeway	On-Road	2.3	1.1	1.2
J	Uncle Sam Bike Trail	Off-Road	4.2	4.2	0
K	River Road	On-Road	10.0	0	10.0
L	River to Ridge Path	On-Road	28.6	0	28.6
M	Ballston Veterans Bike Trail	Off-Road	12.5	3.4	9.1
N	Zim Smith	Off-Road	15.7	8.7	7.0
O	Champlain Canal Trail	Off-Road	44.5	11.4	33.1
P	Saratoga Greenbelt Trail	Off-Road	17.9	8.3	9.6
Q	Wilton-Moreau Trail	Off-Road	16.1	0	16.1
R	Schenectady Park Connector	On-Road	7.0	1.5	5.5
<b>Total</b>			<b>288.90</b>	<b>89.30</b>	<b>199.60</b>



## IMPLEMENTATION PERIOD

Data in **Table 2** illustrate the potential time horizon for the plan implementation period based on current and target trail building rates. Depending on the rate of trail development over time—7 miles per current CDTC building rate and 10 miles per target CDTC building rate—the plan implementation period may last two or three decades. This planned expansion to the core system is both ambitious and achievable given available resources and additional commitments of government and private partners that are invested in the plan’s implementation and long-term success.

**TABLE 2:**

### CURRENT AND TARGET RATE OF TRAIL CONSTRUCTION OF THE CORE TRAIL SYSTEM

#### CAPITAL DISTRICT GREENWAY AND TRAILS PLAN

Rate of Trail Construction			
	Current	Target	Unit
Miles of Trails that Need to be Constructed Annually	7	10.0	Miles
Number of Years to Full Build Out/Implementation Complete Based on Miles of Trails Constructed Annually	28.5	20.0	Years

Source: Capital District Transportation Committee, Chazen Companies, Behan Planning and Design, and ConsultEcon, Inc.

## OVERVIEW OF ECONOMIC IMPACTS

Economic impact evaluations measure the total net new economic activity that will occur in a defined geographic region as a result of an investment – in this case the implementation of the Core Trails of the Capital District Trails Plan. For the purpose of maintaining a conservative analysis, economic impact analysis is of the Core Trails only; the secondary trail system is excluded.

Net new economic activity excludes any activity associated with the project that replaces other economic activity in the area. All construction is considered net new activity. Trail use is supported by resident spending on bicycles and other sporting equipment and services that enable trail use. The trail system is already a well-used part of the region’s transportation infrastructure. It is a community amenity of recreation as well as a destination for tourists from outside of the Capital District. In addition to the planned recreational and environmental justice impacts, the plan has the potential to spur new business growth if developed at key intersections with complementary visitor amenities. Importantly, the regional trail system is a transportation facility, providing an alternative mode of mobility in the region which offers a unique set of benefits for users. While this plan represents a comprehensive regional vision, its implementation will be done mostly at the local level in communities that invest in the brick and mortar build out of the trail system.

Economic impact categories evaluated in this report include one-time economic impacts due to project construction, property value impacts due to more residential parcels being proximate to the Core Trails, and annual economic impacts in the Capital District for spending by cities and towns and counties and other partners on maintenance and operations and trail related spending by trail users during their trip and for recreational equipment such as bicycles that support trail use and recreation.

## IMPACT OF TRAIL CONSTRUCTION, PLANNING AND DESIGN

Trail infrastructure requires initial capital expenditures to install new trail infrastructure. Funding for design, permitting and construction are required. The Hudson River Greenway, which is leading the development of the Empire State Trail, estimates new trail development costs between \$1 million and \$1.5 million per mile, including land acquisition, construction costs, and design and permitting costs.

For analytic and planning purposes, the average total development cost to build new trails is estimated at \$770,000 per mile, including all construction costs, design and permitting costs, and contingencies. Acquisition costs can vary considerably and are not included in this analysis of trail costs. This is a conceptual estimate given the regional scale of the plan. Different trail segments will have different build out costs. Construction costs may be higher or lower depending on the scale of infrastructure expenditures for items, such as bridges and culverts and building in urban areas is typically more costly than in rural settings. Ultimately, the cost to construct new trails in the Capital District will vary from current planning estimates, segment by segment. This conceptual cost estimate is an important input into the economic impact analysis of trail construction, planning and design.

With roughly 200 planned and conceptual miles of trail to build out the core trail system, including planned and conceptual trails, the total development cost is estimated at \$154 million. The total construction cost is estimated at 74 percent of total development cost and design and permitting costs at 26 percent. Approximately 97 percent of the development costs are assumed to be expended in New York State.

Construction of the proposed planned and concept core trails identified in the plan will result in a beneficial impact on the New

York State economy during their construction periods. Data in **Appendix A** provides the full analysis of trail construction impacts, including estimates of total development project costs outlined above. The total economic impacts due to project construction are estimated at the state level and would occur over the entire development period. They include:

- **Total economic impacts would include approximately \$576 million in expenditures (economic activity) in the State economy, of which approximately \$153.2 million would be wages and salaries<sup>1</sup>.**
- **An estimated 3,952 total person-years of employment<sup>2</sup> (including the direct project-related employment and indirect and induced employment) are estimated to be supported due to project development. Much of this statewide direct impact would occur in the Capital District, which is the locus of the expenditure.**
- **In addition, the \$153.2 million of earnings would support approximately \$6.2 million in direct, indirect, and induced income taxes.**

<sup>1</sup> All estimates presented in current dollar values. Total economic impacts include direct, indirect and induced expenditures, wages and income, and employment. Construction impacts are assumed to occur on a one-time basis, in aggregate for analytic purposes. In reality economic impacts of construction would be realized over a multi-year period, according to the phase of project development and construction.

<sup>2</sup> Total jobs (person years of employment) include full time and part time employment, assumed to be in ratio with the distribution of jobs between actual full time and part time for regional and local economies as a whole.



## IMPACT OF TRAILS ON PROPERTY VALUES

Like the impact of parks and recreational programs on property values, proximity to trails has been shown in a number of studies to both positively and negatively impact property values or have no effect on property values. Trails impact property values positively when the home buyers value a property with proximity to the trail higher than a comparable property without proximity to a trail.

Prospective home buyers rate trails as important to their list of sought after public amenities. A recent study by the National Association of Homebuilders (Housing Preferences of the Baby Boomer Generation: How They Compare to Other Home Buyers, 2016) involved an opinion poll of more than 4,300 prospective home buyers found that access to walking/jogging trails was among the four most-wanted amenities for any of the generations studied.

In the Capital District, a majority of residents on or adjacent to trails did not believe that the trails impacted the resale value of their property or had no opinion. Regardless of what the economic analysis indicates, most property owners that responded to the survey did not perceive trails as significantly impacting their property values. Regardless of what home owners abutting a Capital trail may think, proximity and access to trails is often an important feature to new homebuyers.

Trails are recreational amenities that make living near one more desirable to people who recreate regularly, such as walkers, joggers/runners, bicyclists, skiers, and snowshoers, among other non-motorized activities. The value effects of trail proximity have also been shown to be lower the farther the trail is from a property.

Trails impact property values negatively when the owners value a property with proximity to the trail lower than a comparable property without proximity to a trail. If the trail or trailhead creates

congestion, issues with parking availability, litter and noise, the trail may have a negative impact on property values.

All property are unique goods and sales transactions are even more unique because they occur infrequently. Therefore, the value effects of trail proximity, among all the property attributes, is likely negligible or small in most instances and likely varies from property to property within a given area close to the same trail or trailhead.

The following property value analysis is informed by GIS and tabular analysis in [Appendix B](#).

## RESIDENTIAL PROPERTY PROXIMATE TO EXISTING CORE TRAILS

The existing Core Trails system comprises 89 miles of off-street or traffic separated multi-use trails for recreation and commuting. An estimated 6 percent of Capital District residential parcels are within ¼ mile of the existing trail system and 14 percent Capital District residential parcels are with ½ mile.

All together the assessed value of the residential parcels in the Capital District within ½ mile of the existing Core Trails was \$5.5 billion. A conservative property value impact assumption is that 1 percent of the value of residential property within ½ mile of the trail is due to its proximity to that trail. Applying county and median property tax rates in each county to 1 percent of total assessed value of residential property in each county within ½ mile of Core Trails yields \$1.4 million in total annual property tax revenue, including \$285,000 to four counties in the Capital District.

### RESIDENTIAL PROPERTY PROXIMATE TO EXISTING, PLANNED AND CONCEPT CORE TRAILS

The future Core Trails system comprises 290 miles of off-street or traffic separated multi-use trails for recreation and commuting. An estimated 14 percent of Capital District residential parcels are within ¼ mile of the trail system and 26 percent Capital District residential parcels are with ½ mile.

All together the assessed value of the residential parcels in the Capital District within ½ mile of the existing, planned and concept Core Trails was \$10.3 billion. A conservative property value impact assumption is that 1 percent of the value of residential property within ½ mile of the trail is due to its proximity to that trail.

Applying county and median property tax rates in each county to 1 percent of total assessed value of residential property in each county within ½ mile of Core Trails yields \$2.8 million in total annual property tax revenue, including \$516,000 to four counties in the Capital District.

### NET PROPERTY VALUE IMPACTS OF NEW PLANNED AND CONCEPT TRAILS

Overall, the new planned and concept trails would increase assessed property values an estimated \$4.8 million, resulting in \$231,000 in county property tax revenue and \$1.3 million in total county and other local property tax revenue.

### IMPACT OF TRAIL OPERATIONS AND MAINTENANCE

Various public and private partners operate and maintain trails in the Capital District and elsewhere. Trail costs are rarely tracked in the Capital District and elsewhere. The amount trail organizations

spend annually for ongoing operations and maintenance can vary widely depending on the amount of area and linear trail to maintain, type of trails, number of culverts, bridges, or other infrastructure beyond the trail, trail activity and use levels. Based on a national survey, the Rail to Trails Conservancy estimated 2014 average trail costs at \$1,971 per mile for asphalt surfaces and \$1,006 per mile for non-asphalt surfaces. The Hudson River Greenway, which is building out the Empire State Trail, estimates trail maintenance costs between \$1,000 to \$2,000 per mile.

**TABLE 3:**  
TRAIL MAINTENANCE AND OPERATING COST ESTIMATES OF CORE TRAILS IN CURRENT DOLLARS

Capital District Trails Plan			
Annual Trail Costs and Mileage	Core Trails Already Constructed	Core Trails to be Completed	All Core Trails
Average Per Mile Maintenance and Operating Cost	\$1,500	\$1,500	\$1,500
Capital District Core Trails in Miles	89.3	199.6	288.9
Total Maintenance and Operating Cost	\$134,000	\$299,000	\$433,000

Data in **Table 3** show the analysis of trail maintenance and operating costs. Assuming that maintenance and operating costs are approximately \$1,500 per mile, the 89 miles of existing Core Trails in the Capital District generates an estimated \$134,000 annually in direct spending in regional economy. Most all of these expenditures are spent in the Capital District for labor, services and materials to maintain and operate the trail systems. These

costs are the aggregate spending by public and private partners responsible for maintenance and operations of public trails and greenways. Local governments fund trail maintenance through annual parks and recreation or public works or other departmental budgets, and private partners deliver maintenance and operations through mix of public and private funds.

Assuming the same per mile maintenance and the full build out of the 289-mile Core Trails system, the trail maintenance and operations would require an estimated \$433,000 annually in maintenance and operating expenditures. This direct spending by public and private trail partners for trail maintenance and operations would support local contractors, employment, and wages, largely related to landscape maintenance on an ongoing basis and/or salaries and benefits from public employees responsible for trail maintenance.

### IMPACT OF SALES OF TRAIL-RELATED GOODS AND SERVICES

Sales of trail-related goods and services, including recreational apparel, shoes and equipment, such as bicycles and inline skates, and services, such as bicycle maintenance and tour operators, facilitate trail use. Recreational consumer expenditures by products and store types is readily available. Consumer expenditures are correlated with consumer participation in recreational activities.

As shown by data in **Table 4**, Capital District residents spend an estimated \$63.2 million, or an average of \$179 per household, on sports, recreation and exercise equipment annually. Only a portion of the spending in the category is trail related and supports trail use. For example, the average Capital District household averages \$29 in annual spending on bicycles, or 16 percent of the total for the entire category. Bicycles with total annual

**TABLE 4:**  
**CAPITAL DISTRICT RESIDENT**  
**EXPENDITURES ON SPORTS, RECREATION,**  
**AND EXERCISE EQUIPMENT, AND**  
**ESTIMATES OF TRAIL RELATED SALES, 2016**

Capital District Trails Plan		
	Average Spending per Household, 2016	Aggregate Household Spending Potential, 2016
<b>Sports, Recreation and Exercise Equipment</b>		
Exercise Equipment and Gear, Game Tables	\$61.77	\$21,861,267
Bicycles	\$29.00	\$10,263,315
Camping Equipment	\$17.93	\$6,346,951
Hunting and Fishing Equipment	\$44.56	\$15,768,477
Winter Sports Equipment	\$6.33	\$2,240,546
Water Sports Equipment	\$5.81	\$5.81 \$2,055,530
Other Sports Equipment	\$10.79	\$3,817,935
Rental/Repair of Sports/Recreation/Exercise Equipment	\$2.33	\$823,111
<b>Total</b>	<b>\$178.52</b>	<b>\$63,177,132</b>

Source: Esri, Consumer Spending data are derived from the 2014 and 2015 Consumer Expenditure Surveys, Bureau of Labor Statistics, and ConsultEcon, Inc.



## SOCIO-ECONOMIC BENEFITS

spending estimated at \$10.2 million annually are the third highest expenditure category after exercise equipment and gear, game tables at \$21.9 million, and Hunting and Fishing Equipment at \$15.8 million. Other expenditure subcategories that may contain some portion of trail related expenditures include spending on camping equipment.

The expansion of the Core Trails will increase local demand for trail related equipment and services at the regional level. In the future, increases in the amount of trail related use and activity will support retail sales growth in the Capital District in sports, recreation and exercise equipment. The expanded trail system and its use will also support the retaining of spending by residents related to trail activities who might otherwise go outside of the Capital District for similar recreational activities.

### SPENDING BY CAPITAL DISTRICT TRAILS USERS WHILE ON TRIPS

Spending by Capital District Trails users while on trips can be estimated based on visitor surveys and surveys of businesses adjacent to a trail. Trail visitors typically spend money for food and beverages, retail (e.g. gas for driving to the trail), transportation and other services, and accommodations if staying overnight on a trail. Overnight visitors and non-local visitors typically spend more on a trip than locals and day-trippers. Overnight visitors and non-local visitors are responsible for most of the economic impact associated with trail related spending. From an analytic perspective, local spending is not included in the evaluation of economic impacts.

### EXISTING TRAIL USE AND OVERNIGHT TOURIST SPENDING

There were an estimated 1.6 million trail users on 66 miles of Capital District Trails in 2016, up almost a quarter since 2006. Spending by trail users varies by type of trail user. Tourists typically

spend more than local residents. An estimated 59 percent of visits were from within the Capital District, and 41 percent from outside the region. Trail tourists mostly visited the Mohawk-Hudson Bike-Hike Trail and the Albany County Helderberg-Hudson Trail and so that most of their spending is likely in businesses proximate to these two trails. CDTC survey data indicate that overnight tourists spent on average \$193 per day on their trip, excluding the cost of their bicycle. Overnight tourists accounted for approximately 5 percent of trail users.

Trail use survey respondents noted the lack of services, such as restrooms, and the need for better signage and wayfinding, but did not identify a large need for additional spending opportunities. Nonetheless, some respondents did spend related to their trail use; and trail visitors would likely be induced to spend more money during trail trips if more relevant and proximate spending opportunities were available. Local trail users mostly spent money at restaurants and bars and grocery and takeout food while visiting the trail. Other trail related spending includes bicycle purchases and repairs and specialized footwear and clothing for bicycling, walking, skating, and running.

## FUTURE TRAIL USE

Future trail uses in 2040 is estimated to range from 2.6 to 4.0 million visits, with a midpoint trail use estimate of 3.3 million, as shown by data in **Table 5**. Future trail use was estimated by evaluating 2016 trail use estimates and trail user survey data on user origin and user mode of arrival and adjusting based multiple factors, including:

- **Baseline Trail Use Adjustment:** Because the 2016 trail counts and user surveys covered 66 miles of trails in the Existing Core Trails, 2016 trail use is adjusted upward 35%, the proportional increase to account for trail users on the 23 miles of trails in the existing Core Trail system that did not have user counts in 2016.

SOCIO-ECONOMIC BENEFITS

**TABLE 5:**  
ESTIMATES OF TRAIL USERS ON THE CAPITAL DISTRICT CORE TRAILS

Capital District Trails Plan					
	Estimated Trail Users	Total Trail Miles	Estimated Trail Users Per Trail Mile		
66 miles of Existing Core Trails with User Counts	1,600,000	66.0	24,242		
23.3 miles of Existing Core Trails without User Counts	564,848	23.3	24,242		
<b>Existing Core Trails</b>	<b>2,165,000</b>	<b>89.3</b>	<b>24,244</b>		
Percentage Change from 2016 Trail Use/Miles to Baseline Core Trails	35.3%	35.3%			
Trail Use by Visitor Origin	Percent to Total Baseline Trail User <sup>1/</sup>	Distribution of Baseline Trail User <sup>1/</sup>	Adjustment Factors for Growth in Trail Users <sup>3/</sup>	Estimated Future Trail User	Growth in Trail User due to the Plan Implementation
<b>Local (Capital District) Use <sup>2/</sup></b>					
Bike / Walk Arrival	34.4%	744,630	81%	1,348,869	604,238
Vehicle Arrival	24.9%	539,215	50%	808,822	269,607
<b>Total Local Use</b>	<b>59.3%</b>	<b>1,283,845</b>		<b>2,157,691</b>	<b>873,846</b>
<b>Non-Local Use</b>					
New York State	19.8%	428,670	30%	557,271	128,601
Out of State	20.9%	452,485	30%	588,231	135,746
<b>Total Non-Local Use</b>	<b>40.7%</b>	<b>881,155</b>		<b>1,145,502</b>	<b>264,347</b>
<b>Total</b>	<b>100.0%</b>	<b>2,165,000</b>		<b>3,303,192</b>	<b>1,138,192</b>
Total Rounded				3,300,000	
<b>Range of Potential Trail Use</b>				<b>Range of Trail Users</b>	
Low Range (rounded) - 20%				2,600,000	
Midpoint of Range				3,300,000	
High Range (rounded) + 20%				4,000,000	

<sup>1/</sup> Percent to Total Baseline Trail Use is based on visitor origin for Local and Non-Local Use and mode of arrival data reported in Regional Trail Perspectives 2016: A Survey of Capital District Trail Facilities. Source: Capital District Transportation Committee. <sup>2/</sup> Local trail users accounted for approximately 59% of trail users in 2016. Local use is distributed by the mode of arrival. <sup>3/</sup> See text for description of market and economic factors underlying the potential growth in trail use. Source: ConsultEcon, Inc.



## SOCIO-ECONOMIC BENEFITS

- **Proximity to More Potential Trail Users:** There will be 81% more residential properties within ½ mile of a trail upon full implementation of the Core Trail System. Therefore, there will be more potential trail users from the population living in those residential properties that are within a short walk or bike ride of the trails. 2016 survey data indicate that 58% of trail users arrived on foot or on bicycle. For analytic purposes the local use component that is arriving on foot or on bicycle is increased 81% commensurate with the increase in residential population proximity to the trail system. The vehicle arrival component of local trail users is projected to increase as well due to increased proximity to trails and shorter vehicle trips, greater options for trails, more accessibility of popular destinations, transit hubs and workplaces; and more extensive trails to ride or walk. Growth in this segment will be supported by increased vehicular parking areas at trail heads, as well as public relations and promotional activities of CDTC and its partners.
- **Growth in Capital District Population:** Based on Capital District Regional Planning Commission population projections, the population is projected to increase 5% between 2016 and 2040. This means a larger population of local trail users. This factor will also increase trail use.
- **Change in Patterns of Trail Use by Existing Users:** Existing trail users will use the trail system more extensively. They may increase the frequency of use, spend more time on the trails and visit different segments of the system. Because existing users may not have more time available for recreation in the future, there might be only modest percentage increases in using the trails for recreational purposes. However, with additional commuters using the trails, there will be increased frequency of trips by the commuting segment of the trail users.
- **Attracting More Non-Local Users and Overnight Tourists:** The trail plan will enhance the attractiveness of the trail system to non-local users and tourists because of the extent, connectivity, quality and attractiveness of the trail system. 2016 data indicate that almost 40 percent of trail use was from non-local users and 5 percent were overnight tourist trail users. In the future, with the system improvements and appropriate consumer and tourism marketing and promotion, trail use among non-local and tourist users will increase.
- **Range of Trail Use:** The trail use in the future may well vary based on future circumstances. A range of +/-20% of the estimated trail use is used to reflect potential variations in the factors that influence trail use overall. The conceptual nature of regional trail planning, changing rates of population growth and future market conditions, changes in consumer behavior and recreational participation, and the level of marketing and promotion of recreational activity and the trail system, as well as other social and environmental factors will affect future use of trails. Therefore, planning within a range helps to establish broad parameters that inform economic and other analyses of the proposed plan and helps to maintain a conservative analytic approach.
- **Additional Trail Use:** The estimate of trail users is designed to support the economic impact of trail visitor spending. A key focus of this analysis is on identifying the extent of local and non-local use, and the overnight tourists from outside of the Capital District and outside of the State of New York to isolate new spending in the local economy. Therefore, the trail use estimates used could be viewed as conservative. Beyond the base of trail use included in this report there will be increases in use of the trail system related to the connection and expansion into a true regional system. The 290-mile future core trail system will be more than 3 times larger than the

current system and will connect every city and virtually every population center together. Thus, there may be increases in use of the trail system based on a trail system “network effect.” A major portion of such network effects would be the transference of on-street bicycle and pedestrian use to the trail. Additional use may account for hundreds of thousands or millions more additional uses of the trail system than the range included in this report. In addition, it is likely that the network effects will increase the average distance traveled for all transportation modes particularly bicycle. Therefore, the growth in system use will increase more on a mileage traveled, basis than in number of uses. Finally, the frequency of use by individuals will likely also increase at a greater rate than the number of individual users.

---

## OVERNIGHT TOURIST SPENDING POTENTIAL

Current per diem tourist spending is assumed to reflect future spending. The expansion of the trail system to connect major tourist travel corridors with other areas of the region which will offer bike tourists and other trail users additional side trip travel routes that can contribute to longer stays and therefore more spending in the region. In the future, due to the enhancements to the trail system, tourist trips will likely account for a larger share of the overall usage of the trail system. It is reasonable to assume that overnight tourist trips may account for 7 percent of all tourist trips in the future after full plan implementation up from the current 5 percent of all tourist trips. Certain trails will account for more tourist travel and over time those routes may develop more supportive visitor infrastructure and hospitality to encourage spending in local economy. With appropriate consumer and tourist marketing programs focused on trail activity and use, tourist and local use will be enhanced and improved overall.

Assuming 7 percent of all tourist trips in the future after full plan implementation and the midpoint of the range of future annual use of the Core Trails of 3.3 million visits, there would be an estimated 231,000 tourist trips in the Capital District on an annual basis. This level of use is also estimated to generate 123,000 new tourist trips. At current average spending levels, the new overnight trips would generate additional \$23.7 million tourist spending annually in the Capital District. Data in **Table 6** show the analysis of overnight tourist trips and spending due to the Capital District Core Trails.

## SPENDING BY NON-LOCAL DAY USERS

Non-local trail users that are not on an overnight trip also have economic impact due to the spending during their trip. To maintain a conservative analysis, and because of the lack of applicable CDTC survey data on day-use spending, non-local day user spending is not estimated. Nonetheless, the non-local day-use segment will also generate substantial amounts of new spending in the Capital District.

## NEW OPPORTUNITIES TO SPEND

Given the current overall lack of commercial uses nearby to the trails and associated spending opportunities, future trail users will have more limited trail related spending impacts without increased opportunities to spend money. Because of the seasonal nature of trail use, to address this situation, small businesses and enterprises can create temporary or pop up businesses. This tactical approach can be easily implemented in parks and recreational sites and parking lots and adjacent areas to capitalize on the peak activities areas of the trail system. These interventions are temporary and so require relatively low levels of resources

## SOCIO-ECONOMIC BENEFITS

**TABLE 6:**  
**OVERNIGHT TOURIST SPENDING ESTIMATES ON EXISTING AND  
 FUTURE CORE TRAILS IN CURRENT DOLLARS**

Capital District Trails Plan			
	Existing Core Trails	Difference Between Existing and Future Core Trails	Future Core Trails (Existing, Planned, and Concept)
Potential Trail Use Estimates	2,165,000	1,135,000	3,300,000
Percent Users that are Overnight Tourists	5%	11%	7% <sup>1/</sup>
Overnight Tourist Trail Users	108,000	123,000	231,000
Average Overnight Tourist Daily Spending <sup>2/</sup>	\$193	\$193	\$193
Potential Total Tourist Spending	\$20,844,000	\$23,739,000	\$44,583,000
Origin of Tourist Trips (Non-Local Use) <sup>3/</sup>			
New York State	49%	49%	49%
Out of State	51%	51%	51%
Distribution of Spending by Origin			
New York State	\$10,140,324	\$11,548,703	\$21,689,027
Out of State	\$10,703,676	\$12,190,297	\$22,893,973
Total Tourist Spending	\$20,844,000	\$23,739,000	\$44,583,000

1/ Assumed future tourist use rate after full buildout of trail system

2/ Average daily spending of tourists on overnight trail trip. Source: Regional Trail Perspectives, 2016 . Capital District Transportation Committee.

3/ Assumes no tourist trips are originating from inside the Capital District. Origin of tourist trips is assumed to be the same the same ratio for Non-Local Use from New York State and from Out of State to Total Non-Local Use, derived from percent to total baseline trail user shown in Table 5.

Source: Capital District Transportation Committee, and ConsultEcon, Inc.

and can be part of community-led initiatives promoting entrepreneurship and local, small businesses. Other complementary commercial, recreational and public uses would promote extending the duration of trips on the trail system which would in turn create additional spending opportunities that support longer trail trips by users. Providing visitor amenities and additional parking will also reinforce other investments and solidify activity nodes with appropriately scaled commercial enterprise that will enhance the overall trail experience and use. In addition, appropriate marketing, online information and outreach to trail users can alert them to spending opportunities nearby to the trail system.

### MULTIPLIER EFFECTS OF SPENDING

The new trail related spending will form a stream of economic benefits to the municipal and counties in the Capital District and the State of New York as a whole. The following evaluates the additional direct new trail related spending and its total impacts (the “multiplier” effect) to the Capital District and the State of New York. Total potential economic impacts are evaluated using Type II multipliers from the U.S. Bureau of Economic Analysis. Data in **Table 7** and the text below summarize the economic impact analysis. Detailed tabular analysis is incorporated in **Appendix C**.

- **Net New Annual Trail Related Spending:** The economic impacts of the Trail System are based on the net new expenditures due to the expansion in the Capital District trails system. The additional staff and operating budget required for trail maintenance and operations results in additional spending of \$299,000 annually in the Capital District. New overnight tourist spending is estimated to generate new spending of \$23.7 million. By far the largest category of new direct spending is due to expansion of

tourist trips and their associated spending.

- **Local (Capital District) Economic Impacts:** As the multiplier effect works its way through the local Capital District economy, the net direct economic activity due to the expansion of the Core Trails has the potential to generate a total estimated annual direct and indirect impacts of \$48.9 million. Of that, \$13.9 million will be wages and salaries supporting 417 total jobs<sup>3</sup> in the Capital District.
- **Regional (New York State) Economic Impacts:** As the multiplier effect works its way through the New York State economy as a whole, the direct economic activity due to trail related spending has the potential to generate a total estimated annual impact of \$18.7 million in expenditures. Of that, \$5.2 million will be wages and salaries, supporting 150 total jobs in the state. While Capital District included net new spending from other areas of New York and out of states, New York State spending is net new spending and subsequent multipliers considered the out of state tourist spending only for regional economic impacts.
- **Fiscal Impacts:** An estimate of selected tax types generated due to the expansion of the Core Trails system was prepared. This includes direct taxes and, for selected tax types, taxes generated due to direct expenditures and selected multiplier effects. Spending generates employment directly and which in turn generates sales and income taxes through employment wages and spending. Such spending has the potential to generate annual fiscal revenues of \$512,000 to New York State and \$1.4 million to Capital District counties and municipalities.

<sup>3</sup> Total jobs include full time and part time employment, assumed to be in ratio with the distribution of jobs between actual full time and part time for the Capital District. This applies to the Capital District and the State of New York as a whole.

**TABLE 7:**  
**SUMMARY OF ESTIMATED ECONOMIC IMPACTS OF EXPANSION OF THE CAPITAL DISTRICT CORE TRAILS ON THE CAPITAL DISTRICT COUNTY AND MUNICIPAL AND STATE OF NEW YORK ECONOMIES**

1/ At the statewide level, the economic impact effects overlap the support of jobs and economic activity within and outside of the Capital District. The economic impacts for the Capital District and State of New York are NOT additive. The statewide impacts are lower than the spending in the Capital District because the spending of New York residents is excluded from the state impact calculations.

2/ Employment includes full-time and part-time jobs.  
 Note: The economic model includes rounding that is reflected in individual results, factors and totals.

Source: ConsultEcon, Inc.

**OTHER SOCIO-ECONOMIC BENEFITS**

There are other community and quality of life benefits of trails that are reflected by the literature and are not as easily quantifiable by direct spending and monetary measures as the economic impacts identified above. These other community and quality of life benefits include:

- **Access to employment locations in/near trail promotes commuting by bicycle and recreational opportunities for employees to exercise during the workday.** A report Active Transport and Real Estate (Urban Land Institute; 2016) also indicates that bicycling is the fastest growing form of transportation for commuters. Increasingly, people are prioritizing walkability and bike-friendly neighborhoods. As a result, the demand for bike-friendly cities is shaping the design of cities and changing the bicycle industry, in addition to having measurable economic impacts.

Direct Expenditures		
	Total Net New Spending in the Capital District	Total Net New Spending In State of New York
<b>Distribution of Potential Net New Direct Trail Related Spending</b>		
Parks and Recreation	\$269,100	\$284,050
Accommodations	8,005,773	2,740,715
Food & Beverage	3,315,274	1,134,959
Retail	7,588,294	2,597,794
Entertainment / Other	2,455,759	840,710
<b>Total Net New Spending</b>	<b>\$21,634,200</b>	<b>\$7,598,228</b>
<b>Total Direct, Indirect and Induced Effects of Trail Related Spending Expenditures, Earnings and Employment on the Geographic Areas Evaluated <sup>1/</sup></b>		
Preliminary Estimate	Total Spending In the Capital District	Total Spending In State of New York <sup>1/</sup>
Expenditures	\$48,915,000	\$18,713,000
Earnings	\$13,864,000	\$5,199,000
Employment <sup>2/</sup>	417	150
<b>Fiscal Benefits - Selected Net New Tax Revenue Generation</b>		
Direct Impacts	Total Spending In the Capital District	Total Spending In State of New York
Sales Taxes Generated by Trail Related Spending	1,236,720	258,939
Indirect Sales and Income Taxes Generated by Directly Supported Employee Wages and Salaries	58,254	102,470
Indirect Sales and Income Taxes Generated by Other Multiplier Effect Employee Wages and Salaries	56,127	150,357
<b>Total Net New Tax Revenue Generation (Rounded to \$000)</b>	<b>\$1,351,000</b>	<b>\$512,000</b>



## SOCIO-ECONOMIC BENEFITS

- **Trails are an amenity that contributes to quality of life in the Capital District.** The trail system helps employers attract new employees to the region and economic development officials to attract new businesses and retain current businesses. There may also be opportunities in targeted locations for trails to be integrated with community revitalization, downtown and waterfront redevelopment.
- **Trails help diversify and expand the regional tourism economy through new visitor infrastructure.** Most trail visitation from visitors that reside outside the Capital District is focused on two trails (Mohawk-Hudson Bike-Hike Trail and the Albany County Helderberg-Hudson Trail). Ensuring that these trails have appropriate visitor amenities will contribute to a better visitor experience. Connecting them to other trail segments may increase trail system usage by tourists.
- **Trails, proximity and access to trails promotes exercise and thus better health.** The average non-exercising population uses more health care than active people. The economic benefits of trails include reduced medical and health care use by exercising populations thereby reducing systemwide health care costs. According to its website, “The Albany-Hudson Electric Trail (AHET) will improve the health and well being for local resident and visitors as access to outdoor activities increases participation in healthy lifestyles and improves the academic performance of children. Regular exercise reduces the likelihood of heart and respiratory disease. People with access to trails exercise more regularly than those without access to similar recreational opportunities.”
- **The trails provide an alternative mode of transportation** that displaces vehicle trips, thereby reducing traffic congestion and the environmental impacts / greenhouse gas creation of driving trips.
- **Public safety is enhanced** as riders and pedestrians switch to off-street trails compared to on-street travel.
- **Trails create education benefits to children** by providing opportunities to integrate formal and informal outdoor learning opportunities and improve academic performance.
- **Environmental benefits of trails are related to natural area preservation and land conservation.** According to its website for the Albany-Hudson Electric Trail, “Trails benefit the environment as well as the people they serve. Trails provide opportunities for habitat protection and enhancement, stormwater and flood retention, improved water and air quality, conservation of natural and cultural resources, and scenic views.”
- **Environmental justice considerations have been included in the trail planning process.** This includes ensuring that new trail plans consider creating equitable access to trails. The following section provides a more thorough review of environmental justice in the Capital District Trail Plan.

## ENVIRONMENTAL JUSTICE REVIEW

Environmental justice is about the fair treatment of low-income communities and communities of color related to lawmaking, development, implementation, and enforcement of environmental regulations. Historically, these communities have had to share a disproportionate burden of environmental pollution and have had less access to green space than their high income and white counterparts. A part of the Capital District Greenway and Trail Plan is an environmental justice review to evaluate if the trail system is being shared equitably between all communities in the region, particularly low income and minority households.

## **PRESENCE OF POVERTY AND MINORITY HOUSEHOLDS IN THE CAPITAL DISTRICT**

The Capital District encompasses four counties with distinct urban areas centered in the cities of Albany, Troy, Rensselaer, Schenectady, and Saratoga Springs. Within these urban areas, there are higher proportions of minority populations and households in poverty.

The city of Albany has the largest concentration of minority households in the Capital District—it has approximately nine census tracts with a 60 percent or higher minority population. The city of Schenectady has the second highest proportion of minority populations in the Capital District, with seven census tracts having a population of 60 percent or higher. The urban areas of Rensselaer in Rensselaer County and Saratoga Springs in Saratoga County have lower proportion of minority populations than Albany, Troy and Schenectady. Minorities are concentrated within these urban centers. The proportion of the population that is minority decreases substantially outside of the cities. Data in **Table 8** show the total population and total minority population in the Capital District cities and counties, in comparison to the district, state and country.

Poverty is also concentrated in the urban areas of Albany, Schenectady, and Troy. In each city, nearly one-third of households are in poverty. This poverty is often concentrated in specific census tracts, rather than being equally distributed throughout the city. The city of Rensselaer has slightly less than one-third of households in poverty. Saratoga Springs has relatively low ratios of households in poverty at 16.2 percent of households, which is lower than the proportion for the entire Capital District. Overall, the Capital District has a lower proportion of poverty households than the State and the U.S. as a whole. Data in **Table 9** show the total households and total poverty households in the Capital

District cities and counties, in comparison to the district, state and U.S.

## **EXISTING TRAIL SYSTEM CONNECTIVITY**

The largest contiguous trails in the region, the Mohawk Hudson joins low income and impoverished communities in Schenectady and Albany to each other and to natural amenities. These trail systems connect only indirectly to Troy and Rensselaer through on-road systems to trails in those communities. There are a few trail segments that run through the urban centers, however, they are punctuated and not connected to the larger, regional trail system.

## **HOW THE PLANNED AND CONCEPT TRAIL SYSTEM WILL IMPROVE CONNECTIVITY AND ACCESS TO MINORITY AND LOW-INCOME HOUSEHOLDS**

The planned and concept trails, if built out entirely, will dramatically increase the connectivity and the network of trails in the Capital District. Though the majority of the proposed and concept trails will traverse areas of low poverty and low diversity; there are a few key proposed trails. The most opportune trails include the Patroon Greenway, Connector Trails and the Central Park Trail that makes the connection from downtown Albany to downtown Schenectady; and the Rensselaer Riverwalk Trail and the South Troy Riverfront Bikeway that connects the city of Troy and Rensselaer to each other. All of these concept trails run through areas with large minority and impoverished populations. Access to these trails provides these communities with economic opportunity and an increased quality of life.

<sup>4</sup> Poverty in this study was defined as having an annual household income less than \$25,000

SOCIO-ECONOMIC BENEFITS

**TABLE 8:**  
MINORITY POPULATION IN THE CAPITAL DISTRICT

Capital District Trails Plan			
	Total Population	Total Minority Population	Percent Minority Population
<b>Albany County</b>			
City of Albany	98,425	48,153	48.9%
Albany County Less City of Albany	209,466	33,061	15.8%
<b>Total Albany County</b>	<b>307,891</b>	<b>81,214</b>	<b>26.4%</b>
<b>Schenectady</b>			
City of Schenectady	65,855	29,924	45.4%
Schenectady County Less City of Schenectady	88,990	9,887	11.1%
<b>Total Schenectady County</b>	<b>154,845</b>	<b>39,811</b>	<b>25.7%</b>
<b>Rensselaer</b>			
City of Troy	49,881	16,947	34.0%
City of Rensselaer	9,435	2,250	23.8%
Rensselaer County Less City of Troy and Rensselaer	100,643	5,929	5.9%
<b>Total Rensselaer County</b>	<b>159,959</b>	<b>25,126</b>	<b>15.7%</b>
<b>Saratoga</b>			
City of Saratoga Springs	27,447	2,906	10.6%
Saratoga County Less City of Saratoga Springs	193,513	16,254	8.4%
<b>Total Saratoga County</b>	<b>220,960</b>	<b>19,160</b>	<b>8.7%</b>
<b>Total Capital District</b>	<b>843,655</b>	<b>165,311</b>	<b>19.6%</b>
<b>State of New York</b>	<b>19,697,457</b>	<b>7,030,044</b>	<b>35.7%</b>
<b>United States</b>	<b>318,558,162</b>	<b>84,901,084</b>	<b>26.7%</b>

Source: U.S. Census Bureau: 2012-2016 American Community Survey 5-year estimates, and ConsultEcon, Inc.

**TABLE 9:**

**POVERTY HOUSEHOLDS IN THE CAPITAL DISTRICT**

Capital District Trails Plan			
	Total Households	Total Poverty Households	Percent Poverty Households
<b>Albany County</b>			
City of Albany	40,885	13,514	33.1%
Albany County Less City of Albany	83,223	11,884	14.3%
<b>Total Albany County</b>	<b>124,108</b>	<b>25,398</b>	<b>20.5%</b>
<b>Schenectady</b>			
City of Schenectady	20,260	6,986	34.5%
Schenectady County Less City of Schenectady	34,767	4,560	13.1%
<b>Total Schenectady County</b>	<b>55,027</b>	<b>11,546</b>	<b>21.0%</b>
<b>Rensselaer</b>			
City of Troy	19,837	6,448	32.5%
City of Rensselaer	4,088	1,102	27.0%
Rensselaer County Less City of Troy and Rensselaer	39,628	4,409	11.1%
<b>Total Rensselaer County</b>	<b>63,553</b>	<b>11,959</b>	<b>18.8%</b>
<b>Saratoga</b>			
City of Saratoga Springs	11,767	1,904	16.2%
Saratoga County Less City of Saratoga Springs	79,129	10,368	13.1%
<b>Total Saratoga County</b>	<b>90,896</b>	<b>12,272</b>	<b>13.5%</b>
<b>Total Capital District</b>	<b>333,584</b>	<b>61,175</b>	<b>18.3%</b>
<b>State of New York</b>	<b>7,266,187</b>	<b>1,620,360</b>	<b>22.3%</b>
<b>United States</b>	<b>117,716,237</b>	<b>26,250,721</b>	<b>22.3%</b>

Source: U.S. Census Bureau: 2012-2016 American Community Survey 5-year Estimates, and ConsultEcon, Inc.

## CONCLUSIONS

The planned trails that go through low income and minority neighborhoods may be prioritized for building and completion for environmental justice. A priority of the plan is to increase people’s ability to access off-road trails between Capital District cities, which can be achieved while prioritizing the identified concept trails that link Schenectady, Albany, Rensselaer, and Troy. By building these trails that go through cities and dense urban areas with high proportion of minority and poverty households, the plan can also achieve environmental justice goals.

# PROJECTED EXPANSION

## of the CAPITAL DISTRICT TRAIL SYSTEM

AFTER IMPLEMENTATION



*\*Midpoint of Range of Use Projected  
for the Future Trail System*



NUMBER of POTENTIAL PEAK-HOUR  
VEHICLE TRIPS REMOVED  
from OUR ROADS

# PROJECTED ECONOMIC

## IMPACT *to the* CAPITAL REGION

AFTER IMPLEMENTATION



**\$23.7**  
MILLION

ANNUAL INCREASE  
*in*  
DIRECT TOURISM  
SPENDING  
*in the*  
CAPITAL REGION



**\$1.4**  
MILLION

PER YEAR  
*in*

LOCAL TAX  
REVENUE



**\$48.9**  
MILLION

PER YEAR *in* TOTAL ECONOMIC  
ACTIVITY *in the* CAPITAL DISTRICT



**\$1.3**  
MILLION

INCREASE  
*in*  
LOCAL PROPERTY  
TAX REVENUE

Sources: CDTC, Behan Planning and Design, Chazen Companies, and ConsultEcon, Inc.

# IMPLEMENTATION STRATEGY

OF THE CAPITAL DISTRICT GREENWAY AND TRAILS PLAN

## IMPLEMENTATION ROAD MAP:

### CONTINUING TO ADVANCE THE CAPITAL DISTRICT TRAIL SYSTEM

Community advocacy and support will continue to be an important factor in advancing trail projects from concept development and feasibility analysis, to project capital funding, environmental clearance and right-of-way acquisition through final design and construction. Reaching this latter “shovel-ready” stage has been an important milestone of the region’s growing group of trail advocates. In fact most of the trails that have been developed in the region started and were promoted by a small group of advocates. These dedicated individuals became organized and consistently over a period of many years volunteered their time and talent to promote trail development. Those efforts ultimately have been recognized with support from government leaders, at all levels, and other organizations who have taken on the trail projects and advanced them into reality.

**The Elements of Successful Trail Development.** Three elements stand out as foundational to advancing the development of a trail from concept to completion; advocacy, planning and leadership.

Trail advocates typically are the foundation of a trail project—defining and promoting the concept and providing a voice of continual support for the initiative and helping secure and advance the creation of a conceptual plan that describes the vision for the trail. A creative plan and design is also important to document the various aspects of the trail including what it will provide in terms of benefits, where it would connect and how it can be accessed and developed. Without leadership and support from the elected officials, public trail projects would otherwise die on

the proverbial vine. Leadership is a key component toward marshaling the financial and other resources needed to secure the right-of-way and approvals required to open a trail up for public use.



## ESTABLISHING AND ADVANCING PRIORITY TRAIL SEGMENTS

Each core trail is part of the overall concept of creating what can serve as a dedicated alternative transportation system for the region. The trails identified as part of the supporting trail network comprise an important secondary system that are critical to the function and usability of the overall network by expanding access to a greater share of the region’s population. These systems provide a framework that would also connect to local bicycle and pedestrian systems to make a more dedicated and interconnected system. The CDTC Bicycle & Pedestrian Priority Network that had been previously developed included a sound methodology that was utilized as a reference in creating this plan for the regional trail system. As part of that priority network, the CDTC established



## IMPLEMENTATION ROAD MAP

“tier 1” and “tier 2” pedestrian districts to prioritize transportation project funding. Tier 1 districts in general correspond to the denser portions of the region’s urbanized areas based on population and employment. This methodology also considers proximity to schools, shopping centers, hospitals, parks and trails as well as Environmental Justice Areas. Similarly, the CDTC also examined bicycle priority considering the tier 1 and tier 2 pedestrian districts and roads that are: part of a designated bike route, located within population/employment density area, a component of a Scenic Byway, or connect two pedestrian generators.

The regional trail planning process (including public/stakeholder input) intuitively included many (if not all) of the above-cited criteria when establishing the planned regional trail network. To further inform the bicycle trail network priority the CDTC tier 1 and 2 pedestrian districts were mapped, as well as local, county, state park and open space resources, schools and colleges, and other high density population centers located outside of the tier 1 and tier 2 areas. The planned system was reviewed and contrasted with the existing trail network. High value improvements were identified by exploring proximity and connectivity to the noted resources and generators of bicycle and pedestrian trips. Missing gaps in the regional trail network were considered including partially completed segments that, when completed, would provide enhanced regional connectivity, connection to the NYS Empire State Trail, and/or provide access in resource concentration areas.

For ongoing trail development programming and planning, an initial screening matrix (Capital District Core Trails: Prioritization Screening Tool, below.) has been developed to assist decision makers in establishing priority projects. These criteria address four important elements of trails as part of the regional transportation system. The relative scores (in asterisks) represent

high (three stars), average (two stars) and low (one star) relative rating for the respective category:

- 1. Transportation potential:** The Potential Peak PM Traffic Bike Trips per Trail Mile represent the transportation modeling results for the potential use of the proposed trail network. These ratings represent the relative magnitude of potential peak hour commute trips of 10 miles or less that would have access to the proposed trail. (Note this does not necessarily represent demand, just the potential relative number of commute trips per mile of trail that could be made via the trail rather than driving alone. The range of potential use could vary depending on the characteristics of potential demand for that section of the trail.)
- 2. Population Served:** The Population Served per Mile of Trail represents the average population density (by census tract) per linear mile of trail.
- 3. Environmental Justice:** The Relative Proximity to Environmental Justice Area represents the relative extent to which the trail runs through an environmental justice area or is connected to an environmental justice area.
- 4. Project Readiness:** The Project Readiness for Development represents the overall status of the trail project in terms of planning, design, funding commitment and availability of right-of-way.

Please note the screening tool is considered a point of departure for prioritizing projects for the regional trail system and that additional information including local support and advocacy, availability of resources including funding, right-of-way, and coordinating with other programs and related capital improvement projects will be among the factors that will help advance a trail project forward toward completion in a timely manner.

## IMPLEMENTATION ROAD MAP

### KEY CONNECTIONS

Throughout the Capital District there are many obstacles—including major highways and wide rivers—which inherently make suitable trail connections from one community to another challenging. These major features present barriers to pedestrian or bicycle travel because the available crossing points are often few and far between. There are however existing opportunities. One of the most significant crossing opportunities is the Livingston Avenue Bridge which connects an active railroad line across the Hudson River between Rensselaer and Albany. The south side of the bridge has a pedestrian boardwalk which formerly allowed

pedestrian travel across the water from one county to the other, however this pedestrian passage was closed over a decade ago. Restoring this pedestrian connection as part of future bridge renovations would constitute a vitally important east-west trail link in the region, and would directly connect the Mohawk-Hudson Bike-Hike Trail with the Rensselaer Riverwalk/RPI Trail.

This bridge connection should be considered a priority project for local leaders in the coming years. In the short-term, Albany and Rensselaer County may wish to consider a temporary solution with the creation of a ped/bike ferry which crosses the river in this area.

Capital District Core Trails: Prioritization Screening Tool

Map Key	Trail Identification	Primary Type	Potential Peak PM Traffic Bike Trips Per Trail Mile	Population Served Per Trail Mile	Relative Proximity to Environmental Justice Area	Project Readiness for Development	Initial Priority Level
B	South End Bikeway Connector	On-Road	...	...	...	..	I
I	South Troy Riverfront Bikeway	On-Road	...	...	...	..	I
J	Uncle Sam Bike Trail	Off-Road	...	...	...	.	I
R	Schenectady Park Connector	On-Road	...	...	...	.	I
D	Patroon Greenway	Off-Road	...	...	..	.	II
G	Albany Hudson Electric Trail (AHET)	Off-Road	...	..	.	...	II
H	Rensselaer Riverwalk/RPI Trail	Off-Road	...	..	..	..	II
C	Albany Loop	On-Road	...	...	.	.	II
F	Mohawk-Hudson Bike-Hike Trail	Off-Road	.	..	..	...	II
P	Saratoga Greenbelt Trail	Off-Road	..	..	.	...	II
A	Albany County Helderberg-Hudson Rail Trail	Off-Road	.	..	.	...	II
N	Zim Smith Trail	Off-Road	.	..	.	...	II
M	Ballston Veterans Bike Trail	Off-Road	..	..	.	.	III
Q	Wilton-Moreau Trail	Off-Road	..	..	.	.	III
E	Hudson Northway	On-Road	.	.	..	.	III
O	Champlain Canal Trail	Off-Road	.	.	.	..	III
K	River Road	On-Road	.	.	.	.	III
L	River to Ridge Path	On-Road	.	.	.	.	III

## IMPLEMENTATION ROAD MAP

Additional highway and road underpass crossing opportunities exist in many other places throughout the Capital District, such as Fuller Road passing beneath Washington Avenue and Interstate 90. It is recommended that as these strategic crossing points are added or upgraded in the future, additional clear width be considered to accommodate trail connections.

**Project Partners.** Securing local and regional sponsors of trail projects will continue to be a critical piece for advancing this trail plan. Local and county government have taken increasing roles in trail development and the State of New York through its agencies have been a national leader in building the trail system in the region and across the state. Private corporations and nonprofits have increasingly collaborated in advocating, planning and advancing trail projects across the region and this plan supports the expansion of those partnerships.

**Funding Opportunities.** State and federal transportation funds will continue to be important to the development of the regional trail system. For federal transportation funds to be allocated projects must be “principally for transportation purposes rather than for recreation purposes”. These projects must also be listed on the regional Transportation Improvement Program (TIP) and the State Transportation Improvement Program (STIP) as certified by the Federal Highway Administration. Some good sources of information include:

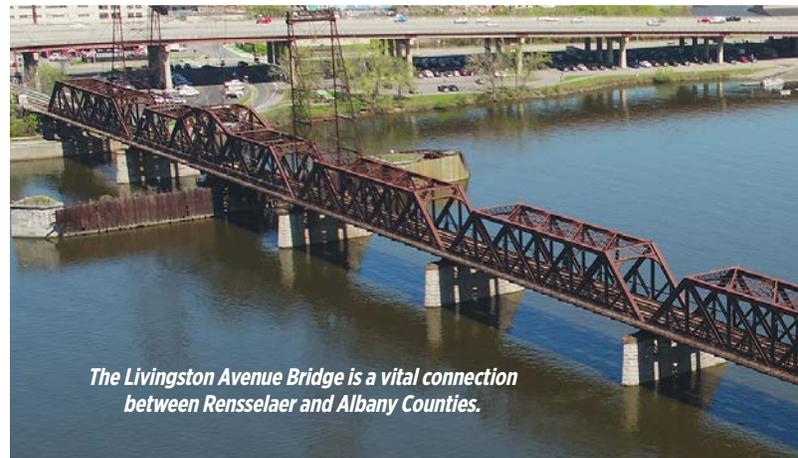
- Bicycle and Pedestrian Funding Opportunities: US Department of Transportation, Federal Transit, and Federal Highway Funds
- FHWA Guidance for State and Local Governments
- Bicycle and Pedestrian Legislation in Title 23 United States Code (U.S.C.)

The New York State Department of Transportation (NYSDOT), administers a number of federally-funded programs intended to promote walking and bicycling. These include:

- New York State Congestion Mitigation and Air Quality program
- Transportation Alternatives Program (TAP):
- Recreational Trails Program

The Consolidated Funding Application (CFA) process has centralized many of New York State’s grant programs <https://apps.cio.ny.gov/apps/cfa/>. The Capital Region Economic Development Council sets regional priorities for the program <http://www.regionalcouncils.ny.gov/capital-region>.

Despite these substantial resources, these programs alone will not be sufficient to create an interconnected, comprehensive regional trail system as envisioned. Securing other sources of funding will be increasingly important including local/county government as well as nonprofits and foundations along with private sector companies that see support for trail projects as part of their community improvement objectives.



*The Livingston Avenue Bridge is a vital connection between Rensselaer and Albany Counties.*

**“I AM 81 YEARS OLD, LIVE IN SOUTHERN SARATOGA COUNTY, RETIRED 20 YEARS AGO, AND ROAD-BIKE 2-3 TIMES PER WEEK—60 MILES PER TRIP (4 thousand+ miles per year; 60,000 miles total thus far). Most of my riding is on road shoulders, and on the Ballston Veterans Trail and the Zim Smith Trail. Inter-connectivity of trails would be a big improvement over these bike-ride distances. One thing that could be implemented for bikers is a requirement that road shoulders be widened to some minimum safer width, suitable for cyclists riding single file. This is particularly urgent, because the motor vehicle traffic continues to increase.”**

# MARKETING STRATEGY

**THIS PLAN PROVIDES A COMPREHENSIVE MARKETING STRATEGY TO BUILD AWARENESS of existing trails and the potential of new trails to create a multi-county trail network in the Capital District. This trail network provides alternative routes of transportation, connections and commuter options while also providing greater access to the outdoors and endless recreational opportunities. The plan needs to appeal to the general public, local businesses and elected officials alike in order to build support and progress.**

This brand and marketing strategy should be used to promote the region and network as a whole and should provide tools to municipalities and tourism promotion agencies (TPAs), as well as independent trail networks and recreation facilities to help promote their own trails.

## TARGET AUDIENCE

- COMMUTERS
- CYCLISTS
- LOCALS
- TOURISTS
- NATURE LOVERS
- FAMILIES
- RUNNERS
- CASUAL TRAIL USERS
- HIKERS
- BUSINESSES & EMPLOYERS
- GOVERNMENT OFFICIALS

## PROMOTERS

- LOCAL BUSINESSES
- TOURISM PROMOTION AGENCIES
- CHAMBERS OF COMMERCE
- CITIES, TOWNS & VILLAGES
- PARKS & RECREATION DEPARTMENTS
- LAND TRUSTS & CONSERVANCIES
- NON-PROFIT ORGANIZATIONS
- EMPLOYERS





# CAPITAL TRAILS

NEW YORK

## BRANDING

While there are many individual trails that make up this trail network, an overall brand that represents the entire trail network and the connections that it creates between communities is recommended. The branding will provide a cohesive look for all trail network materials while upholding the existing trail brands on sections within the network. Existing trail brands are already well known to the public and will remain the primary brand while the trail network brand will be secondary within their sections.

The goal of this brand is to become a household name within the Capital District, to create a consistent look and message that encapsulates the region and the trail network, and to make this trail network a destination that people want to experience and support.

When marketing the trail network, consistency is key. A brand system that is easily recognizable with strong visual elements that can work across various applications has been developed for this network of trails.

### THE BRAND: CAPITAL TRAILS NY

A brand for this trail network, called Capital Trails NY, has been developed. Five initial name and logo options were created and presented to the public via online surveys and stakeholder workshops, which were held in each of the network's four counties. From there, it was narrowed down to two distinct favorites and edits were made to both based on the feedback received. The two options were then presented at the Capital District Trails Plan Open House where Capital Trails NY was a clear favorite among stakeholders and community members.



# CAPITAL TRAILS

NEW YORK

## CAPITAL TRAILS NY

The name Capital Trails NY is straightforward and to the point. It immediately implies trails in New York's Capital District. The name can be easily linked to the Empire State Trail and other statewide trail efforts. It's also a nod to the fact that the heart of the Empire State Trail Network (the Erie Canalway National Heritage Corridor and the Hudson Valley National Heritage Area) lies within the Capital District.

The artwork depicts a city skyline in the background and a trail in the foreground to symbolize the trail connections between urban and rural communities in the region. The typeface used for Capital Trails is bold yet approachable, with letterforms in all caps, softened by their rounded edges. The blue and yellow color palette ties into New York State's official colors and will be easily readable on signage.

As seen within this marketing strategy section, multiple versions of the logo have been created so that branding can work across a range of applications. A Brand Standards Guide has been developed with guidelines on how to use the logo; how to use in concert with other trail names and logos; and what fonts, colors and branding elements should be used in marketing materials. This document will ensure consistent and cohesive execution of the Capital Trails NY brand.

# MARKETING PLAN

A brand is only as successful as its roll out plan. It must be put to work through consistent applications and marketing efforts so that the brand's visibility will increase and interest will peak. The following deliverables are recommended to market this trail network.

## WEBSITE

A website is an important platform to reach all audiences and to inform and engage the public and stakeholders. It can be the hub for all information and resources related to this project and can be tailored to each different audience. For trail users it can include trail maps, locations of trail heads, information on different trails amenities and difficulty levels, and links to existing individual trail websites. For stakeholders it can provide the overall plan, updates on progress and information on how to become involved. For sponsors it should provide sponsorship information and access to brand assets. The website should be responsive (optimized for phones, tablets and computers alike) so it's mobile-friendly and offers access to every user. From a content standpoint, the site should be heavily branded and include compelling professional photography of the trail network.

### Recommended Website Features:

- **Trail Network Map (downloadable & printable)**
- **Interactive Map**
- **About Section**
- **A list of trails within the network and links to trail websites, if available. Additional information could include:**
  - **Trailhead Locations**
  - **Trail Amenities & Accessibility Information**
  - **Difficulty Level**
  - **Types of Trail Use (Hiking, Biking, Horseback, etc.)**
  - **Informational Descriptions & Historical Context (if applicable)**
  - **Connections to Other Trails**

- **Schedule of Trail-related Events**
- **Reports on Progress of Trail Plan**
- **Copy of Trails Plan**
- **Sponsorship Information**
- **List of Sponsors**
- **Tools for Project Partners, Existing Trails & Sponsors**
  - **Logos**
  - **Brand Guidelines**
  - **Social Media Graphics**
  - **Photography**
  - **Downloadable Trails Report Plan**
  - **Downloadable Maps**
- **Blog Posts/News Section\***
- **Contact Info**

\*Guest bloggers could be invited to develop content that can be shared on the website blog, social media and email blasts.

## SOCIAL MEDIA

Social media platforms such as Facebook, Instagram & Twitter are great places to share information and resources and to engage with your audience. Given that this network represents a vast amount of trails in the region and this brand is meant to help promote not only the network, but the individual trails, content from specific trails and existing trail users is already abundant. Project partners and trail users should be encouraged to submit photos and content and to share their experiences on the trail network.

---

## SOCIAL MEDIA RECOMMENDATIONS

- Feature and thank sponsors
- Share photos & videos
- Share updates on progress of trail network plan
- Share blog posts and news articles relating to project
- Link to project website whenever possible
- Create occasional graphics using trail network branding elements to promote events, openings of new trails and to thank sponsors
- Create a hashtag for the network and encourage audience to use the hashtag in their own posts
- Engage by liking, commenting and reposting other content
- Hold periodic contests to boost following and engagement
- Identify and engage with social media influencers that have a similar target audience
- Hold Instagram Takeovers with social media influencers
- Boost posts on social media to increase following, engagement and general awareness

## SIGNAGE

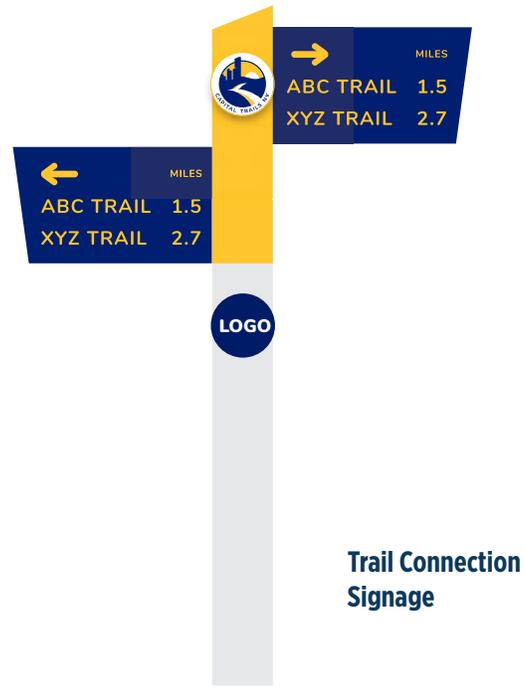
Signage is not only crucial for wayfinding in trail networks, but it's great way to drive your brand. Signage should be developed to alert people that they are either on a trail that is part of the trail network and can connect to other trails, or they are near a trail that can connect them to another destination. This network's trail signage can be used by itself or in conjunction with existing trail signage. Different types of signage should be developed for trail heads, trail connections, road routes, trail routes, and shared trails.

- **Kiosks:** In high traffic areas, a kiosk should be placed that contains a trail map, the trail network map, the trail network brochure, a sign-in sheet, and any trail specific collateral or information.
- **Pole Banners:** In high traffic areas where infrastructure allows, pole banners that indicate you are on a network trail with the trail's name and logo should be installed.
- **Trail Connection Signage:** Directional signage with distance information and trail names should be placed at key connection points within the trail network.
- **Banners:** Large format vinyl banners with grommets are great for trail specific events and can be easily moved from place to place. Banners can include sponsor logos and trail network branding.
- **Trail Head Signage:** Trail head signage with trail network branding and trail information should be placed at trail access points.
- **Trail Markers:** Trail markers should be placed on trees or posts throughout trail network routes.
- **Road Signs:**
  - **Route Signs:** Signage for on-road routes to let people know they are on the trail network.
  - **Directional Signs:** Many people are unaware of trail access points, especially if they are not local. Directional signs along roads that are close to access points should be installed.

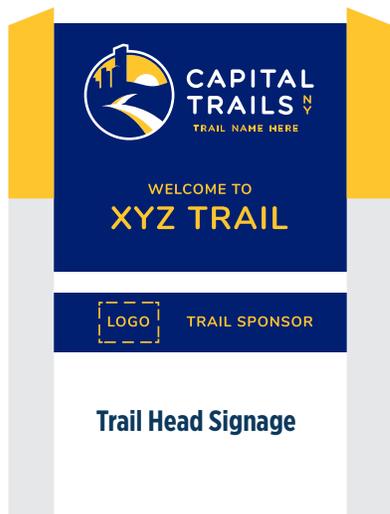
SIGNAGE EXAMPLES



Pole Banners



Trail Connection Signage



Trail Head Signage



Kiosk

## EMAIL MARKETING

Periodic email blasts are a great way to keep your audience involved and up-to-date. Stakeholders and project partners should get consistent emails that keep them up-to-date on the progress of the network and should provide information on more ways to get involved. A clear call-to-action should be placed on the trail network website for people to sign up for your e-newsletter. Sign-in sheets should be placed at trail heads so users can submit contact information. Trail users and people who sign up on the website should receive e-newsletters that include new trail announcements, suggested day trips and upcoming trail-related events. Existing databases should be used to communicate with stakeholders and interested citizens on the growth of the trail network and to provide reminders of how to get involved. Databases can be grown with an email sign-up page on the website, sign-in sheets at trail heads, and sign in sheets at events, meetings and other public forums.

## BROCHURE & TRAIL MAP

A brochure with a trail network map targeted to everyday trail users and tourists is a great way to promote the trail network as a destination and to provide people with necessary information on using the trails. The brochure and trail map should be pocket-sized and should include information on access points, trail amenities, trail uses, and difficulty. It should also include website and social media information. The brochures should be distributed to visitor centers, rest-stops, recreation hubs, and at trail head kiosks.

## OUTREACH

Connecting with the media and regional and statewide Tourism Promotion Agencies is an important piece of the marketing strategy. By connecting with the right media outlets with the right story you'll be able to reach your target audience online and in print publications, such as newspapers and magazines.

## OUTREACH RECOMMENDATIONS

- Send targeted press releases to media outlets. Keep in mind the readership of each publication and tailor the content accordingly
- Reach out to regional social media influencers and travel and sports writers, (For example, Pure Adirondacks), and pitch them on stories
- Seek out opportunities to get the website shared on directory sites, like AllTrails.com, Trails.com and ILoveNY.com
- Reach out to popular hiking and outdoor bloggers to see if they will feature the trail network
- Provide suggested day itineraries to TPAs (Tourism Promotion Agencies), bloggers and social media influencers

## SUGGESTED OUTREACH:

- The Times Union
- The Saratogian
- Adirondack Sports
- Saratoga Living
- Saratoga Today
- The Daily Gazette
- The Record
- Discover Albany
- Albany Convention & Visitors Bureau
- New York State Conservationist
- Rensselaer County Tourism
- Online & Social Media:
  - [saratoga.com](http://saratoga.com)
  - [albany.com](http://albany.com)
  - [cliftonpark.com](http://cliftonpark.com)
  - [nyfallfoliage.com](http://nyfallfoliage.com)
  - [alloveralbany.com](http://alloveralbany.com)
  - [discoverschenectady.com](http://discoverschenectady.com)
  - [iloveny.com](http://iloveny.com)
  - [pureadirondacks.com](http://pureadirondacks.com)
  - [exploresaratoga.com](http://exploresaratoga.com)

## BRANDED MERCHANDISE

People love swag! Affordable branded merchandise can be handed out to trail users, sponsors, and project partners to spread the word about the trail network. More substantial merchandise options can be sold to raise money for the trail network. The key is to create quality products that people will want and will proudly use or display.

### MERCHANDISE RECOMMENDATIONS:

- Vehicle Decals
- T-shirts
- Tote Bags
- Water Bottles
- Keychains
- Embroidered Patches
- Carabiners
- Field Guides
- Magnets
- Mugs
- Mini Flashlights
- Ornaments
- Deck of Cards
- Prints
- Greeting Cards
- Postcards
- Bike First Aid Kits
- Pens



## SPONSORSHIPS

Sponsorship opportunities are a great way to get businesses and residents involved with the development of the trail network and to give back. Sponsorship levels that fit all budgets should be available and multiple levels of sponsor recognition should be developed.

### CORPORATE SPONSORSHIP RECOGNITION OPPORTUNITIES

- Promotion on trail network website, social media and email blasts
- Event sponsorship
- Guided staff hikes
- Hosted volunteer trail upkeep workdays
- Company logo on shirts, brochures, bags, and other trail network merchandise

### RESIDENT SPONSORSHIP RECOGNITION OPPORTUNITIES

- Bench plaques
- Pavers
- Tree plaques/signage

### ADOPT-A-TRAIL

- This can be offered as a premium level of support. It can be offered both to businesses and individuals to sponsor a trail section with larger donations. Trail adopters can get involved by helping with the upkeep of the trail and they can be recognized by the trail network with signage at each end of their trail segment and with branded merchandise giveaways.



Sponsorship Opportunities Brochure

## KEY MARKETING PLAN TAKEAWAYS:

- All project materials should have a cohesive look and message so that the brand becomes easily recognizable.
- Project partners and sponsors should be provided with the tools (and free swag!) they need to help promote the trail network.
- Consistent engagement with the media and the public is key to gaining awareness and building support.
- Signage, print collateral, social media, and all other trail network materials and platforms should be treated as branding and marketing opportunities.

\*Marketing will not necessarily be the responsibility of the Capital District Transportation Committee.

# TRAILS MANAGEMENT

## BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

The Capital District Transportation Committee (CDTC), as the designated MPO for the Albany, Rensselaer, Saratoga and Schenectady metropolitan area, provides stewardship and vision for transportation planning throughout the Capital District. A growing component of our local transportation system includes the bicycle and pedestrian multi-use paths which our communities have been developing. These multi-use paths are an amenity which improve quality of life, offer recreational opportunities, and provide an increasingly popular alternative to driving.



RAILROAD RUN

To support this future vision, it is important that local communities and trail advocates have the information and tools they need to plan and organize the development of their own trails at the local level. There are numerous examples of successful trails throughout the Capital District and the larger region which can be used as case studies. It is the goal of this section to showcase some examples of these successful trails—how were they developed, what lessons were learned—so that other communities can follow their example and be better prepared for implementing their own trail efforts.

These case studies include a mix of different sponsorship/partnership types which have been used to develop and build successful trails, including arrangements between public municipalities, county and state agencies and not-for-profit groups:

- **FRIENDS OF THE RAIL TRAIL (“FORT”):**  
The Albany County Helderberg-Hudson Rail Trail
- **FARMINGTON VALLEY TRAILS COUNCIL:**  
Farmington Canal Heritage Trail and Farmington River Trail
- **SARATOGA COUNTY:** Zim Smith Trail
- **MASSACHUSETTS BAY TRANSPORTATION AUTHORITY:**  
Minuteman Bikeway Trail

A stand-alone copy of this case study guide—which also includes an Example Trail Proposal and an Example Trail Agreement—is available from the Capital District Transportation Committee as its own guide for distribution and sharing.

---

**It is our hope that these examples in trail planning and organization will inspire future groups to take up the mantle of trail advocacy and use this information to begin developing successful trails of their own which will add to the growing network of the Capital District.**

---

# FRIENDS OF THE RAIL TRAIL (FORT)

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

## THE ALBANY COUNTY HELDERBERG-HUDSON RAIL TRAIL

### Partnership: Public/Private

Albany County (Landowner)

Town of Bethlehem

Town of New Scotland

Village of Voorheesville

Mohawk Hudson Land Conservancy (Lessee)

**Supported by Mohawk-Hudson Cycling Club**



## BACKGROUND

The Albany County Helderberg-Hudson Rail Trail (HHRT) is constructed on the former bed of the Delaware and Hudson railroad, which ran from Albany, through Delmar and Slingerlands, and eventually connecting to Binghamton. This section of rail line provided passenger train service from 1863 up until the 1930's, and continued freight service up until the 1990's, after which it became dormant and the railroad tracks were eventually removed in 2004.

In 2010, Albany County purchased over nine miles of the railway corridor for approximately \$700,000—with funding equally split between Scenic Hudson and a grant from the New York State Office of Parks Recreation and Historic Preservation—for the purposes of creating the multi-use path. A year after the purchase, a collection of volunteer trail advocates formed the Friends of the Rail Trail (FORT), established as a committee of the Mohawk Hudson Land Conservancy (MHLC). This advocacy group was instrumental in organizing the effort and encouraging local

officials to move forward on the project of creating the trail that is in use today.

Due to a unique agreement between Albany County, the Town of Bethlehem and the Mohawk Land Conservancy, the conservancy was able to lease a 1.9 mile stretch of the rail corridor. This lease agreement allowed volunteers to begin clearing and cleaning up the trail route, which helped to generate local support and excitement for what was to come. The first section of the trail, which extended from Veterans Memorial Park to the Firefighters Park in Slingerlands, was opened to the public in June of 2011. To help maintain the active portions of the trail which it was leasing, the Mohawk Hudson Land Conservancy developed the "Trail Ambassador" program, which recruited volunteers who were eager to keep the trail active, safe and clean. The success of this initial strategy led to similar leases on new sections of the corridor, which eventually reached five miles in length to the Village of Voorheesville.

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FRIENDS OF THE RAIL TRAIL (FORT)



## CURRENT STATUS

Since its official opening, approximately 9.1 miles of the trail have been successfully paved and opened to the public, extending from South Pearl Street in Albany to Voorheesville, with the last four miles being just recently completed in 2018.

They have recently completed a signage program that was funded by a grant from the Hudson River Valley Greenway. This signage program was developed as part of communication plan which sought to create a “brand identity” for the Albany County Helderberg-Hudson Rail Trail that was easily identifiable, educate the public about the history of the rail line and encourage local

support. The sign program included a new logo and trailhead identification to help welcome visitors and establish its identity.





**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FRIENDS OF THE RAIL TRAIL (FORT)**

## **TRAIL EVENTS & ACTIVITIES**

**T**he FORT advocacy group helps to organize and sponsor events throughout the year which boost activity and local support. Some examples of these events and supporting groups are:

- **FAIRY TALES AND FIREFLIES**  
Summer Solstice (Annual) twilight walk
- **TRAIL CLEARING WORK PARTY**
- **BIKE-TO-WORK DAY (ANNUAL)**
- **EDIBLE & MEDICINAL  
PLANTS OF THE RAIL TRAIL**
- **ART OF THE RAIL TRAIL (ART)**

This committee works to support and improve the trail by creating public works of art, enriching the lives of Rail Trail visitors and encouraging a sense of community ownership for the trail.

## **MAINTENANCE & UPKEEP**

In order to keep the trail maintained and active, Friends of the Rail Trail (FORT) developed a program of Rail Trail Ambassadors – Over 50 local volunteers, directed by a coordinator, help to monitor the trail and provide weekly reports on trail conditions and issues. The purpose of the Trail Ambassadors is to greet trail users and provide a sense of comfort and security on the trail. They also provide the eyes and ears for the management of the trail, reporting back any issues which need to be addressed. The clear list of guidelines and procedures which was developed for the Trail Ambassadors has been instrumental in giving clear direction to volunteers so that everyone knows what is expected of them. A list of their duties and responsibilities include:

- **Walk and monitor the condition of a section of trail at least once a week**
- **Meet and greet trail users**
- **Observe trail conditions and potential hazards**
- **Observe improper uses and encroachments**
- **Perform light maintenance**
- **Report trail conditions**
- **Place brochures in the holders placed at entrances to the trail**

To aid them in their volunteer effort, Trail Ambassadors were encouraged to always wear a trail vest, hat and ID tag which were provided to help readily identify them as stewards of the trail to the general public. They were also advised to carry with them a notebook and pencil, trash bag, camera/cellphone and trail brochures when on the trail. These items would allow them to help keep the trail clean and document any issues they may come across.





**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FRIENDS OF THE RAIL TRAIL (FORT)**

**T**rail Ambassadors are given weekly assignments to walk the trails, with staggered schedules set up to assure that people could fill in for others if they had a schedule conflict, with particular emphasis on monitoring the trail during heavy weekend peaks and just after storm events. Ambassadors are always encouraged to greet people on the trail and ask about their experience to learn about any issues and concerns people may have. Specific guidelines were provided on how to handle situations such as unleashed dogs, motor bikes/ATVs and other prohibited activity. When faced with potential confrontations, they are advised to avoid conflict but photograph or document any prohibited activity so that the police or other officials could follow up. Above all, they were reminded that they should always be friendly, acting as ambassadors to the trail, and not the “trail police”.

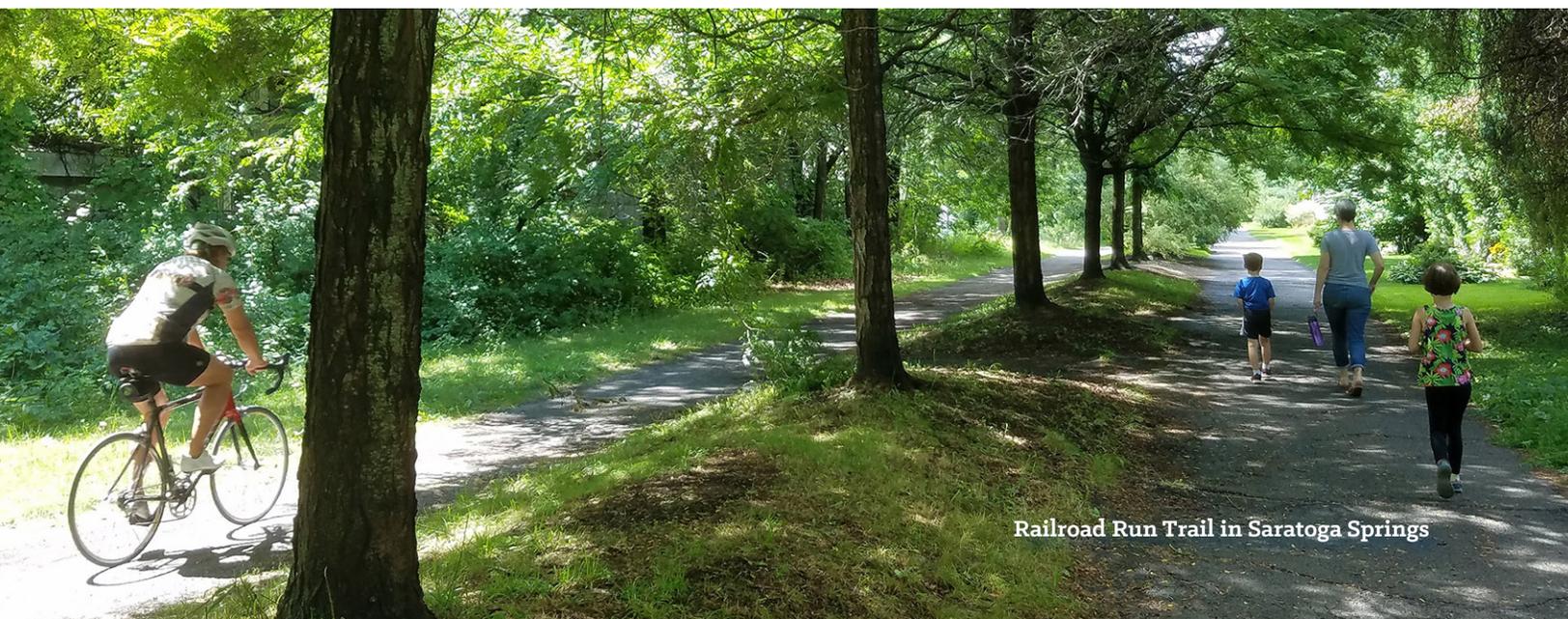
Trail ambassadors are also expected to perform some regular light maintenance, including filling in any holes which could be tripping hazards, removing fallen branches and monitoring culverts for wash-outs or blockages. After completing a trail walk, ambassadors are asked to submit an email report to the Trail Steward, even if just to say they found no issues. The Trail Steward would then identify any items which needed action, and report those directly to the appropriate people, such

as the Town, Village, Highway Superintendent, Police, County or State DOT. In order to help effectuate reporting, mile markers are planned to be installed along the trail to better identify locations for follow up.

Other maintenance had been provided by the local village or town DPW, such as mowing the grass when it could be combined with other mowing efforts nearby. In general, the grass was mowed when it reached a height of six inches or more, however springtime mowing is often delayed to allow for more wildflower growth. This maintenance arrangement has since been changed, and Albany County Department of Public Works now provides all of the trail maintenance.

Based on estimates from the Albany County Department of Public Works, the costs of equipment and labor for regular trail maintenance is roughly \$70,000 per year for the 9.5 miles of trail. This would equate to approximately \$7,300 per mile of trail per year.

In terms of more significant maintenance, it is anticipated that the asphalt pavement will need to be repaired or overlaid after about 15 years of use. The Department of Public Works estimates that the cost to overlay the 10 foot wide trail in today’s dollars would be approximately \$31,000 per mile.



**Railroad Run Trail in Saratoga Springs**

**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FRIENDS OF THE RAIL TRAIL (FORT)**

**ALBANY COUNTY HELDERBERG-HUDSON RAIL TRAIL  
COMMON TRAIL MAINTENANCE COSTS**

EQUIPMENT COST	COST/HOUR	HOURS/DAY	DAYS/WEEK	WEEKS/YEAR	TOTAL EQUIPMENT COST/YEAR
Mower	\$20	6	2	32	\$7,680
Weed Wacker	\$1.65	6	3	32	\$950
Plow Truck	\$40	1	1	20	\$800

**SUBTOTAL:**

**\$9,430 PER YEAR EQUIPMENT COSTS**

LABOR COST	COST/HOUR	HOURS/DAY	DAYS/WEEK	WEEKS/YEAR	TOTAL EQUIPMENT COST/YEAR
Mowing	3 @\$20/hr	6	2	32	\$23,040
Weed Wacking	3 @\$20/hr	6	3	32	\$34,560
Inspection	1 @\$20/hr	1	5	32	\$3,200
Plowing	1 @\$20/hr	1	1	30	\$400

**SUBTOTAL:**

**\$61,200 PER YEAR LABOR COSTS**

**TOTAL:**

**\$70,630 PER YEAR TOTAL EQUIPMENT AND LABOR COSTS**

*Source: Albany County Department of Public Works*

## LONG-TERM GOALS

Building upon the previous successes, the remaining 4 miles of unpaved surface were recently paved in 2018, connecting Slingerlands to the Village of Voorheesville. Additional improvements are also planned, such as trailhead information kiosks, benches, signage, beautification improvements and the creation of the adjacent Captain Joseph Hilton Town Park in New Scotland. Adjacent property near the trail has been purchased by the county, with plans to repurpose some of the area to provide additional amenities, such as bathrooms.

The eventual long-term plan for this trail is to connect it from its eastern terminus at South Pearl Street to the Corning Preserve in Albany, where it can link into the Mohawk-Hudson Hike-Bike Trail. This stage would allow it to become an integral link of the Empire State Trail which connects Albany to Buffalo.

A planned linkage between the current trail terminus on South Pearl Street in the south end of Albany and the Corning Preserve along the Hudson River in Albany will connect the HHRT to the Mohawk Hudson Bikeway.



BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FRIENDS OF THE RAIL TRAIL (FORT)

## PROJECT SUCCESSES & KEY TAKEAWAYS

- A key to the success of this trail program was having a dedicated leadership. The stewardship of the Trail Ambassadors program, which had developed very clear guidelines to assist volunteers in what they needed to know and do, greatly helped to advance their goals.
- Successful trail projects like this often start with an advocate at either the grass-roots level (working its way up) or at the highest government level (working its way down). When the HHRT project started, it started as a grass-roots movement that worked its way up. Either way it is done, the overall success of a trail project requires building strong buy-in and support at all levels.
- Trail projects often suffer from start/stop pauses that can halt momentum and lose public attention. It is important to have a plan in place that will help to bridge the gaps during the inevitable pauses and help keep a feeling of momentum so that you don't lose public support.
- When the land was initially purchased by Albany County, they didn't have the money to construct the trail, and so "No Trespassing" signs had to be erected until construction money could be acquired. This caused a large delay. In order to bridge this gap and maintain some momentum, they developed a strategy of accomplishing a small interim project which would hold the interest of the public and show results. They identified a two-mile section of trail between two town parks which could easily be converted to pedestrian use. By obtaining liability insurance through the conservancy, and developing a three-way licensing agreement with the town, county and the conservancy, they were able to get the No Trespassing signs removed and volunteer labor to open up a small section of the trail and have a ribbon cutting. This interim project was seen as a great success and milestone to maintaining the public support through seeing a goal achieved.
- Once they had the initial success and ribbon cutting of the interim project, they found it was easier to get the same partnerships together for the next section of trail between the Town of New Scotland and the Village of Voorheesville.
- Each successful segment of the trail which was achieved made building support and getting approval for subsequent work that much easier.
- It is recommended that early on in the process, supporters should focus on building an interested constituency and strategic partnerships.
- Always make sure to give ample credit to those who helped make the trail possible – especially policy makers and people in government who help provide crucial funding and approvals.
- When the rail line was originally abandoned, there were five separate advocacy groups who were looking to build a trail. To consolidate efforts, the five groups were consolidated into a central committee of the Mohawk Hudson Land Conservancy.

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FRIENDS OF THE RAIL TRAIL (FORT)

## PROJECT SUCCESSES & KEY TAKEAWAYS (CONTINUED)

- In order to help maintain momentum, they chose projects which were commensurate with their available resources by picking “low hanging fruit,” making sure there was a role for volunteers, and making sure their work had high visibility.
- It is important to always be doing something, always keep going, and develop programs that will keep people involved and create a sense of ownership. The Trail Ambassador program was essential in this regard.
- Availability of food and drink along the trail corridor are in high demand, as are public restrooms.

---

### CONTACT INFO:

#### ALBANY COUNTY

[Lisa.Ramundo@albanycountyny.gov](mailto:Lisa.Ramundo@albanycountyny.gov)

#### MOHAWK HUDSON LAND CONSERVANCY

[mhlc@mohawkhudson.org](mailto:mhlc@mohawkhudson.org)

#### TOWN OF BETHLEHEM

[rleslie@townofbethlehem.org](mailto:rleslie@townofbethlehem.org)

#### TOWN OF NEW SCOTLAND

[tcampana@townofnewscotland.com](mailto:tcampana@townofnewscotland.com)

---



## WHAT IS RAILBANKING?

Albany County Rail Trail was developed through railbanking. In 1983, an amendment was established to Section 8(d) of the National Trails System Act to allow a railroad to remove all of its equipment, with the exception of bridges, tunnels and culverts, from a corridor, and turn the corridor over to any qualified private organization or public agency that has agreed to maintain it for future rail use. This allows for corridors that would otherwise be abandoned to be converted to trails in the interim to future rail. A railbanked corridor gives railroads the right to transfer all forms of ownership, including easements, to a trail group. Keeping the railroad intact is beneficial to both the railroads and trail groups – the railroad saves money in transaction costs by selling an entire corridor instead of pieces, and trail groups acquire a corridor that would otherwise be vulnerable to ownership challenges and high costs. Railroad corridors make good trail corridors because they usually connect population centers and key destinations, and are generally flat and conducive to non-motorized travel.

For more information on how to railbank, visit:

[www.railstotrails.org/buildtrails/trail-building-toolbox/acquisition/howto-railbank/](http://www.railstotrails.org/buildtrails/trail-building-toolbox/acquisition/howto-railbank/)

Source: Rails-to-Trails Conservancy

# FARMINGTON VALLEY TRAILS COUNCIL

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

## FARMINGTON CANAL HERITAGE TRAIL & FARMINGTON RIVER TRAIL

### Partnership: Intermunicipal Public

#### The Towns of:

Avon	East Granby	New Haven
Burlington	Farmington	Plainville
Canton	Granby	Simsbury
Cheshire	Hamden	Southington



## BACKGROUND

Built on the site of an abandoned railway and canalway, the Farmington Canal Heritage Trail is an 80-mile trail connecting New Haven, Connecticut to Northampton, Massachusetts. In the early 1800's the Farmington Canal was built and operated briefly before being converted into a railway in the mid 1800's. By the 1980's the railway was almost entirely abandoned and the state of Connecticut secured the right of way as part of a railbanking program. When the Intermodal Surface Transportation Efficiency Act (ISTEA) was passed in 1991, funding was available to build the trail. Six towns came together to provide a 20% cash match for federal grant funding and work on the first segment began. The Farmington Valley Trails Council (FVTC) was formed as a 501(c) 3 in 1992 to support the development of the trail.

In 1993 the first sections of the trail opened. The Connecticut Department of Energy and Environmental Protection (DEEP) built and owns the Farmington Canal Heritage Trail. Local municipalities have been responsible for the trails upkeep which the FVTC has played a role in coordinating.

The FVTC has served as an advocacy and educational group for the development of the trails and has allowed for regular coordination between trailside communities as they have advocated for the trails completion.



# BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT: FARMINGTON VALLEY TRAILS COUNCIL

## CURRENT STATUS

### THE TRAIL

The Farmington Canal Heritage Trail is almost complete. The primary gap in the 80 miles trail is located at the Town of Plainville, the other 75+ miles are completed or under construction.

There are over 35 official parking areas for The Farmington Canal Heritage Trail throughout 11 towns.

Many trailheads include informational kiosks, public restrooms, and parking spaces. Others are dirt parking lots with simple signage. The FVTC maintains a database of trailhead location and details on what types of amenities they offer.

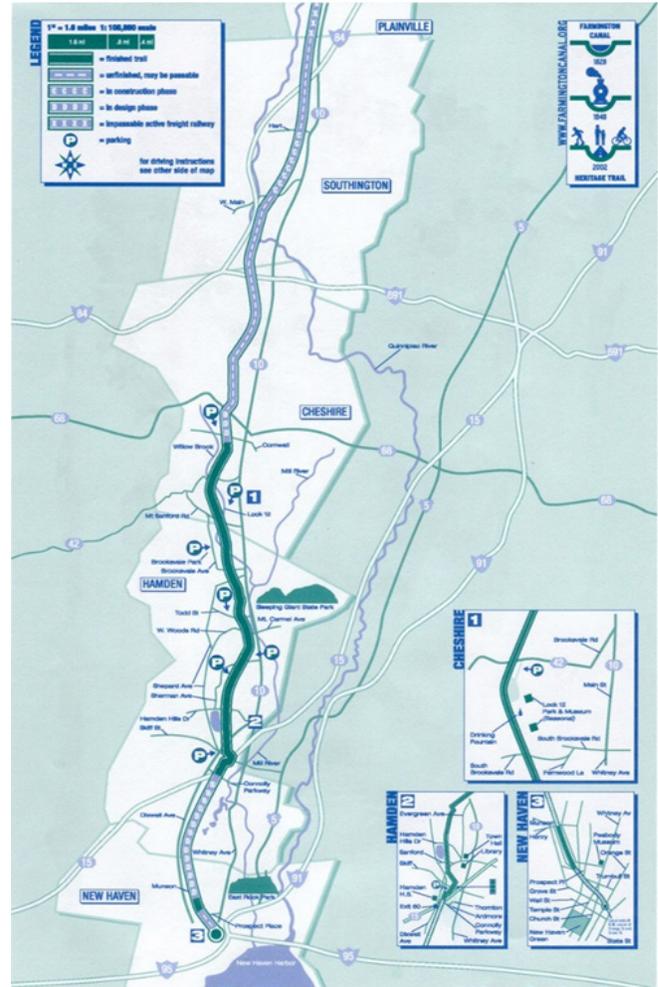
Trail usage has been rising along the trail. In 2013 the FVTC counted 262,874 total trail users and 326,050 in 2015. This number is estimated to have increased since additional portions of the trail have been completed since.

### THE FVTC

The FVTC has over 800 paying members. According to the FVTC, their spending on maintenance, construction, and amenities averaged over \$38,000 a year over a 7-year period.<sup>1</sup> None of the operational funding for the FVTC comes from municipalities.

FVTC programs include a Maintenance Matching Fund, trail etiquette signage, and commercial signage standards.

The FVTC organization includes 10 committees: Strategic Planning, Advocacy & Outreach, Volunteer, Membership, Maintenance & Enhancements, Publicity, Electronic Communications, Finance, Safety & Education and Fundraising/Corporate Liaison Committee.



FVTC maintains a website that features events, newsletters, safety updates, trail closures, and information about municipal decisions regarding the trail throughout all of the communities so that members can stay abreast of what the status of trail improvements and expansions are.

In addition to their website the FVTC maintains a Facebook page to engage a wider audience.

<sup>1</sup><http://fchtrail.org/pdfs/FVTC%202016%20Ambassador%20Package.pdf>



**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FARMINGTON VALLEY TRAILS COUNCIL**

## **TRAIL EVENTS & ACTIVITIES**

The Farmington Canal Heritage Trail has become a vital part of the communities it passes through. Some of the events hosted by trail groups, not for profits and the FVTC include:

- In the Town of Cheshire community groups organize events like half marathons, bike rides, 5k races and Dog Parades.
- The FVTC celebrates National Bike Month each May by organizing a 30-mile Fun Ride.
- Local “friends of” groups help coordinate annual bulb plantings, statewide trail census data collection days, long range vision information sessions, work days and spring clean ups.
- The New Haven Friends of the Farmington Trail work with community groups to sponsor family fitness programs on the trail including wellness walks and Zumba classes.
- Working with the Hamden Land Trust, Audubon Connecticut developed an “Urban Oasis” for migratory birds. This program helps establish pockets of habitat in otherwise urbanized areas. Volunteers and students learn about the importance of habitat protection and beautify the trail.
- FVTC runs a Trail Ambassador program, which allows trained volunteers to patrol trails for maintenance and safety issues, advocate for the FCHT, and promote trail etiquette.
- Trail Safety Expos are held at local community gathering spaces to educate trail users on safety and etiquette.
- Yale University in New Haven contributed to the completion of the final portion of the trail. Yale has since incorporated the trail into wellness programs and advertises their proximity to the trail in marketing materials.

## **MAINTENANCE & UPKEEP**

Each municipality along the FCHT is responsible for their own section of trail. The state of Connecticut owns the Farmington Canal Heritage Trail but does not maintain it. The FVTC serves as a clearinghouse for best practices and public works departments plow trailheads, maintain bathrooms and repave the trails. Volunteer groups organized by the FVTC and ‘friends of’ groups help patrol the trails, sponsor clean-up days and perform landscaping along the trails.

The FVTC helps secure grants for trail maintenance and will support municipalities pursuing grants for trail projects. FVTC helps keep municipalities informed of grant opportunities.

FVTC makes recommendations to towns on path and parking lot design and repairs.

The FVTC has a symbiotic relationship with local departments of public works. Recently the FVTC secured a grant from the outdoor company REI to purchase five bike repair stations. The FVTC worked with municipal departments of public works to install them. Similarly, the FVTC coordinates volunteer trail improvements like fundraising for pedestrian bridges, helping Eagle Scouts with projects along the trails, and coordinating with other charitable groups on trail improvements like benches, signage and gazebos.

The FVTC shares best practices amongst the member communities. Monthly meetings of the FVTC board keep community representatives in touch with current issues and opportunities along the trail.

## BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT: FARMINGTON VALLEY TRAILS COUNCIL

### LONG-TERM GOALS

In early 2018, the “Gap Closure Trail Study” was published, outlining potential routes that would close the final 4-mile gap in the FCHT through Plainville, CT. This final gap may be closed as soon as 2019.

The FCHT is part of the East Coast Greenway, a 3,000-mile trail envisioned to run from Florida to Maine. As the East Coast Greenway continues to grow, the FCHT may see an increase in users from even further distances.

As the Farmington Canal Heritage Trail nears completion, local municipalities are taking harder looks at how they can develop their own, internal bike and pedestrian networks. Some communities are working to strengthen their sidewalk networks while others are developing comprehensive bike and pedestrian plans.



### PROJECT SUCCESSES & KEY TAKEAWAYS

- The Farmington Canal Heritage Trail benefited immensely from railbanking in the 1990’s. Proactively identifying opportunities to secure large rights of way is immensely helpful for establishing a multi-use trail.
- The FVTC has helped to coordinate volunteers and local department of public works to get trail improvements done for low to no cost.
- Identifying with a larger trail network like the East Coast Greenway lends more significance to a local trail project. A local understanding of where the FCHT fits into a bigger project can help set long-term goals.
- Since the FCHT has opened, community groups have used the trail for public health and engagement activities. Many areas around the trail have benefited from community pride and more active lifestyles.
- State ownership but municipal maintenance of the FCHT has allowed for fewer long-term costs from the state.
- Volunteer groups like the FVTC are invaluable. But, the ultimate responsibility for maintaining and operating a trail is that of the municipality. Local DPWs need to be trained and have the proper equipment to maintain their trails in the same way they have specialized equipment and training to maintain their local roads.
- When first building the trail, consider the implications of material choices. For example, split rail fences are a lower cost option to install, but they will need more maintenance over the long-term.
- When planning a multi-use trail, work with the local police department to establish a presence on the trail (bike or otherwise).

**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
FARMINGTON VALLEY TRAILS COUNCIL**



## CANALWAY TRAIL AMBASSADORS

The Canalway Trails Association New York (CTANY), in collaboration with Parks & Trails New York and the New York State Canal Corporation, initiated the Canalway Trail Ambassadors to provide a presence on the Erie Canalway Trail, which includes the Mohawk-Hudson Bike-Hike Trail, and enhance the experiences of trail users. The program began in 2008 in Schenectady County as a pilot project by the Friends of the Mohawk-Hudson Bike-Hike Trail. In 2012 the program expanded to Rochester and has continued to expand in areas from Albany to Buffalo.

Trail Ambassadors assist and inform trail users on locations about locations of trailheads, restrooms, food and water sources, and other key information and services. They carry a copy of the Cycling the Erie Canal guidebook and report issues to local governments and state agencies responsible for managing the trail and NYS Canal Corporation. Ambassadors also promote trail courtesy, safety and awareness through their interaction with people on the trail. They do not enforce rules but do provide information in a friendly and positive manner. Lastly, Trail Ambassadors serve as “cheerleaders” for the Canalway Trail. They foster an appreciation of the rich history and significance the Erie Canal played in New York history, and the route that trail users now get to enjoy.

There are currently 26 ambassadors serving across the system, with an estimated 5,000 miles logged in just 2016. More information about how to get involved in the Trail Ambassador program can be found at: [www.ptny.org/get-involved/volunteer/trail-ambassadors](http://www.ptny.org/get-involved/volunteer/trail-ambassadors)

Source: Parks & Trails New York

---

### CONTACT INFO:

**BARBARA COLLINS**  
PRESIDENT OF THE FVTC  
[barbcollins@mac.com](mailto:barbcollins@mac.com)

**DR. JOSHUA T. MEDEIROS**  
ED. D., CPRP  
DIRECTOR OF RECREATION,  
TOWN OF CHESHIRE, CT  
[jmedeiros@cheshirect.org](mailto:jmedeiros@cheshirect.org)

**GEORGE NOEWANTE, JR.**  
DIRECTOR OF PUBLIC WORKS AND  
ENGINEERING, TOWN OF CHESHIRE, CT  
[gnoewatne@cheshirect.org](mailto:gnoewatne@cheshirect.org)

**SCOTT THARAU**  
DIRECTOR OF PUBLIC WORKS,  
BURLINGTON, CT  
[stharau@yahoo.com](mailto:stharau@yahoo.com)

**GERRY TONER**  
DIRECTOR OF CULTURE, PARKS AND  
RECREATION DEPARTMENT,  
TOWN OF SIMSBURY, CT  
[gtoner@simsbury-ct.gov](mailto:gtoner@simsbury-ct.gov)

**SCOTT ZENKE**  
HIGHWAY AND GROUNDS  
SUPERINTENDENT,  
TOWN OF FARMINGTON, CT  
[zenkes@farmington-ct.org](mailto:zenkes@farmington-ct.org)

---

# SARATOGA COUNTY: THE ZIM SMITH TRAIL

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

## THE ZIM SMITH TRAIL

### **Partnership: Intermunicipal Public and Not-for-Profit**

Albany County (Landowner)

Town of Ballston

Town of Malta

Village of Halfmoon

Village of Round Lake

**Supported by Saratoga PLAN**



## BACKGROUND

The Zim Smith Trail is a nine-mile multi-use trail in Saratoga County. The trail's northern terminus is in the Village of Ballston Spa and the southern terminus is in the Town of Halfmoon. The trail gets its name from Zimri Smith, an outdoor recreation advocate who developed the concept for the trail in the 1980's. Saratoga County purchased most of the trail right-of-way in 1968 with the intent of using it for a sewer line.

The trail connects highly developed areas of the Capital District and is intended serve as a recreational amenity as well as a practical alternative to automotive travel.

The Saratoga County Planning Department has been instrumental in organizing property acquisition and leases as well as pursuing state and federal grant funding. The local not-for-profit Saratoga PLAN (Preserving Land and Nature) has provided technical

assistance and worked out agreements with landowners for trail easements. Saratoga PLAN organizes the Countywide Trails Committee which serves as a forum for municipalities to prioritize and coordinate trail improvements, extensions and connections.

The Zim Smith Trail has been under development since the early 2000's. In 2002 Saratoga County captured almost \$1 million in federal funding through the Transportation Equality Act for the 21st Century to begin construction of the trail. The first 6 miles were officially opened at a ribbon cutting in 2010. Since then the trail has been extended north and south as planning efforts, land acquisition and development funds become available.

In recognition of the trail's importance, the Zim Smith Trail was designated a National Recreation Trail by the U.S. Department of Interior and National Park Service in 2012.

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
SARATOGA COUNTY: THE ZIM SMITH TRAIL



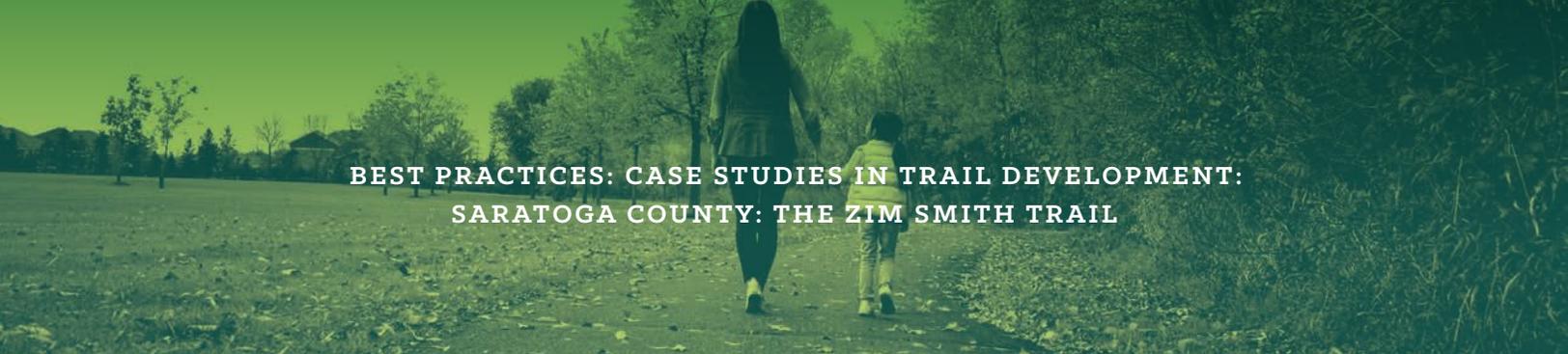
## CURRENT STATUS

Since the first 6-mile section was officially opened in 2010, the Zim Smith Trail has been extended to 9 miles. Increased efforts to expand the Champlain Canal Trail (on the eastern edge of Saratoga County) and the Erie Canalway Trail (on the southern edge of Saratoga County) are providing an opportunity for the Zim Smith to serve as a major link to the statewide trail system.

An approximately 2.5 mile extension from the current northern terminus in Ballston Spa to the Saratoga Spa State Park would connect the trail with the city of Saratoga's trail system and to points further north. Portions of a railroad right-of-way have been identified as a potential route, but private ownership of other parcels along this route have caused this portion of the project to stall.

\$4.94 million has been secured to connect the trail from Coons Crossing Road in Halfmoon to the City of Mechanicville as well as to pave sections of the trail that are currently stone dust. \$2 million of this is from federal transportation funding that is matched by state and county funds, including a \$500,000 grant from the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). Construction of this portion should be completed in 2018.





**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
SARATOGA COUNTY: THE ZIM SMITH TRAIL**

## **TRAIL EVENTS & ACTIVITIES**

Various groups and trailside communities host events on the Zim Smith Trail throughout the year. The trail has also proven to be an attractive place to locate some types of businesses. Some examples of these events, businesses and supporting groups are:

- **NATIONAL TRAILS DAY**  
Trailside events hosted by The Town of Malta Parks and Recreation Department.
- **THE CHARLTON SNOWMOBILE CLUB**  
Provides information about trail conditions and keeps snowmobilers up-to-date on trail closures.
- **CROSSFIT ROUND LAKE**  
Gym opened in 2015 on the Zim Smith Trail and incorporates the trail into workout regimens.
- **THE CROOKED CANES**  
A social and exercise group of retirees uses the trail on a regular basis for organized outings.

## **MAINTENANCE & UPKEEP**

In order to keep the trail maintained and active, Saratoga County budgets approximately \$3,500 for upkeep and devotes one full-time County Department of Public Works (DPW) employee. While the trail is a county initiative, support from town supervisors and local DPWs is vital to the trail's success. Diligence and creativity by the County Planning Department have enabled improvements to trailheads and the trail itself to occur at the same time as other road improvement and maintenance projects on nearby roadways. Coordination with utility transmission projects have allowed for valuable site preparation work to be done at a fraction of the cost. Most municipalities have taken responsibility for the maintenance of trailheads.

The Zim Smith Trail is not plowed during the winter as it is used for snowshoeing, snowmobiling and cross-country skiing. Snowmobile clubs have taken the initiative to provide trail maintenance support at various points along the Zim Smith Trail.



BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
SARATOGA COUNTY: THE ZIM SMITH TRAIL

## LONG-TERM GOALS

The Zim Smith Trail will ultimately connect to Saratoga Springs to the north and to the Erie Canalway to the South. Once connected, the Zim Smith Trail will serve as an important link between the two statewide trails.

The county has taken a formal approach to managing and developing the trail. In 2007 the Saratoga County Board of Supervisors Economic Development Committee established the “Zim Smith Trail Use Policy Committee” to craft a series of policies to guide the development of the trail and its operation.

The Saratoga County Planning Department grants \$100,000 on a semi-annual basis to trail programs. This has incentivized local communities to take responsibility for developing connections to the Zim Smith Trail, ultimately making the regional trail network stronger.



---

## PROJECT SUCCESSES & KEY TAKEAWAYS

- Long range vision has been key to the Zim Smith Trail. From Zimri Smith’s first conceptual drawings to the day to day efforts of the Saratoga County Planning Department, there has been a clear vision for the trail.
- Strong support from the Saratoga County Board of Supervisors and Planning Department has enabled the project to be developed as a regional priority. Coordination at the county level as opposed to the municipal level has ensured that all involved parties can see the ‘big picture.’
- A partnership with Saratoga PLAN, the local land trust has been crucial to engaging property owners and securing leases and easements. The technical and staff capacity that they provided in the early stages of trail development have been vital.
- Careful attention to pending development proposals and utility projects have allowed the county to help municipalities and developers reach agreements to secure trail right-of-ways.
- New businesses like CrossFit Round Lake and existing businesses like Leah’s Cakery and housing developments are incorporating their location along the Zim Smith Trail into their business plans, highlighting the trails positive contribution not only to residents’ quality of life but to the regional economy as well.



**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
SARATOGA COUNTY: THE ZIM SMITH TRAIL**



## **D.C. TRAIL RANGERS**

The Washington (D.C.) Area Bicyclists Association established a Trail Ranger program to support and encourage a growing community of trail users by putting a fresh set of eyes on D.C. area trails. The Association identified a grant funding source which enables them to pay trail rangers. The rangers cover nearly 25 miles of DC area trails from May to September, during morning and evening peak travel times and on weekends. The program gives trail users peace of mind and help when they need it. The program also encourages volunteers to pitch in throughout the spring and summer on group clean ups, lending tools and providing snacks for volunteers. Monthly coffee hours on the trail help foster a sense of community and connect trail users with the rangers.

To learn more about the D.C. Trail Ranger program, visit:  
[www.waba.org/programs/d-ctrail-ranger](http://www.waba.org/programs/d-ctrail-ranger)

Source: Washington Area Bicyclists Association

---

### **CONTACT INFO:**

**SARATOGA COUNTY  
PLANNING DEPARTMENT**  
518-884-4705

**SARATOGA PLAN**  
518-587-5554

---



# MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

## MINUTEMAN BIKEWAY TRAIL - BOSTON, MA

### Massachusetts Bay Transportation Authority (Owner)

Town of Bedford (lessee)

Town of Lexington (lessee)

Town of Arlington (lessee)

Town of Cambridge (lessee)

Bedford, Lexington and Arlington Bike Committees (advocate/volunteer groups)

The trail property is owned by the Massachusetts Bay Transportation Authority, which leases the land to each of the municipalities which the trail passes through.



## BACKGROUND

The Minuteman Bikeway Trail is said to follow the route that Paul Revere famously took on his historic ride, marking the beginning of the American Revolution in 1775. This passage was later developed as a rail line by the Lexington and West Cambridge Railroad and the Middlesex Central Railroad in the mid and late 1800's. These rail lines operated successfully for over 100 years until 1977 when passenger service was discontinued, and eventually all rail service was discontinued shortly after in 1981. The trail today occupies the formerly active railroad right-of-way land.

The idea for the trail first began in 1974 due to the tireless efforts of local advocates who wanted to see this abandoned line converted into a useful resource. The current Red Line commuter subway—which terminates at Alewife Station—had been proposed to continue further north along the old rail line route, however there was much local opposition to this plan. Many homeowners and residents were not happy with the idea of the

train passing through their neighborhood every day. As an alternative, local trail advocates proposed the idea that the former rail line could be converted into a bicycle trail. Their intent was to market it as a “commuter” bicycle transportation alternative at a time when bicycles were not seriously considered as a viable method of transport. At the time, many government departments, including the local transportation authority, did not take the idea seriously and laughed at the idea of funding it.

Over time however, the movement persisted. Local trail advocates spent almost 20 years planning and lobbying for the construction of the trail. As the plans developed, and the idea of the trail began to be taken more seriously, it began to get opposition from residents abutting the rail line who feared that it would be inviting strangers into their backyards. There was fear of increased crime. The pros and cons of the trail were debated fiercely at many town meetings, with large numbers of people showing up in force to argue both sides of the issue.



## BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT: MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

By 1991, the design plans to convert the former rail line into a multi-use trail were eventually approved for construction. The Minuteman Commuter Bikeway was officially completed in 1993, and was later expanded from East Arlington to Cambridge several years later. The popularity of the new trail grew immediately. Due to its widespread success, the Rails-to-Trails Conservancy inducted the Minuteman Bikeway into The National Rail-Trail Hall of Fame in 2008. Today, it still holds its place there as 5th in the nation.

## CURRENT STATUS

This year marks the 25th anniversary of the Minuteman Bikeway. It is today considered one of the most popular and successful rail-trails in the United States, providing over 10 miles of paved multi-use path in Middlesex County just outside of the metro Boston area. The bikeway currently connects from the City of Cambridge to the north through Arlington, Lexington and into the Town of Bedford. Along this route are dozens of points of interest, including parks, picnic areas, historic sites, nature paths, hiking trails, wildlife preserves, museums, shops and restaurants and the popular Alewife bus and subway transit station. At its southern end, the bikeway connects with four other area bike paths, and at the northern end, it connects with two additional rail trails which together greatly expand the reach of the combined trail network.

Area residents use the bikeway for walking, jogging and inline skating, however bicycling remains the most popular mode of travel by far. During the winter, it was often enjoyed by cross country skiers, although today the popularity of the trail as a commuter route has grown so much that the full length of the trail is now plowed to keep it free and clear of snow and ice as much as possible. Motorized vehicles are not permitted on the trail, except for powered wheelchairs, snowplows and emergency vehicles.

### MINUTEMAN BIKEWAY COUNTS

September 19, 2015

Bicycles	2,467	72%
Pedestrians	545	16%
Joggers	307	9%
Baby Carriages	52	1.5%
Rollerbladers	51	1.5%

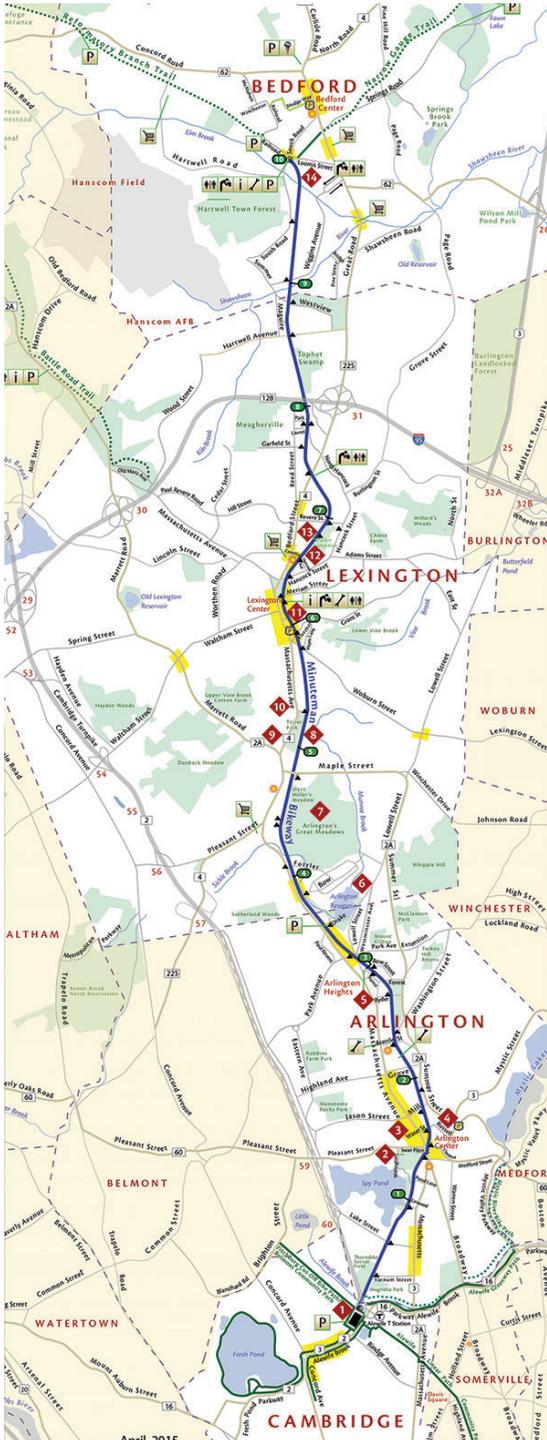
**TOTAL: 3,422**

The popularity of the trail can be seen in the extremely high number of users it experiences every day. A trail user study in 2015 counted more than 3,400 people passing along one point of the trail on a single Saturday, with a peak of over 400 people per hour. With an estimated 2 million users per year, it is one of the busiest rail trails in the country. The trail's growing popularity has forced them to look into widening portions of the trail in high volume areas to help accommodate the rising number of users and look for new ways to reduce bicycle and pedestrian conflicts.

The abutting property owners—who were once opposed to the construction of the trail—have now found it is an amenity. Properties for sale along the path now showcase the Minuteman Trail as a selling point feature.

**A wonderful video profiling the making of the Minuteman Trail: “Revival: The Story of the Minuteman Commuter Bikeway” can be watched on YouTube at: <https://youtu.be/gBY81vjAD2E>**

BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY



## TRAIL EVENTS & ACTIVITIES

- There are informal “Bike-to-Work” week events which occur each year in May.
- Large events, such as foot races or charity rides, are generally not permitted on the trail due to issues of crowding, and need to get approval from the towns.
- There are a number of events planned along the trail this year as part of the 25th anniversary.



**BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT:  
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY**

## MAINTENANCE & UPKEEP

The overall trail is divided into segments which are individually managed and maintained by the respective municipalities it passes through. Overall, trail maintenance is provided through a mixture of volunteer efforts and the local Department of Public Works (DPW) offices, which is an arrangement that has evolved over time.

- Since there is no single entity which oversees the entire trail, this work is left to the three individual bike committee groups in Bedford, Lexington and Arlington.
- The three town bike Committees meet a couple times each year to review the status of the trail and identify items which need to be addressed. They have found that it

is often difficult to make decisions since each bike committee can only report to their own town officials and request assistance, but there is little assurance that their town will approve their request, or that the same decisions will be made in each town.

- In order to help lobby local officials for needed trail work, volunteer “Conservation Stewards” will often go out to help discuss important issues with town selectmen.
- During the winter months, the entire length of the trail is plowed to remove snow, but a majority of the trail does not use salt due to the proximity of many sensitive natural areas.

### MINUTEMAN BIKEWAY – TRAIL SEGMENT MAINTENANCE RESPONSIBILITY

TRAIL SEGMENT	DISTANCE	SNOW REMOVAL	LEAF/LITTER CLEANUP	MOWING	FUNDING ORGANIZATION
Bedford		DPW	DPW	DPW	DPW
Lexington	5.5 miles	Private contractor through donations	Weekly cleanup by DPW  Volunteer spring and fall cleanup events	Every 4-6 weeks by DPW  Pruning twice a year by volunteers	Lexington Bikeway Advisory Committee
Arlington	3.5 miles	DPW	Volunteer Spring cleanup with DPW assistance		Lexington Bikeway Advisory Committee
Cambridge	Although the trail technically connects slightly into Cambridge, the City of Cambridge typically has very little role in maintenance, and it is generally not considered one of the “three towns” of the trail.				



## BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT: MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

- Snow removal through the Lexington segment is paid for by donations to the Friends of Lexington Bikeways, who contract with a private snow removal company. Volunteers also help to keep things in order with Spring and Fall cleanup events. On average, it typically costs about \$4,000-\$5,000 per year to plow the 5.5 miles of trail, although in heavy winters it has cost as high as \$10,000.
- In Arlington, the Department of Public Works provides all snow removal. Other maintenance, such as litter and leaf pickup, is provided by volunteers during a Spring cleanup event where the DPW picks up bags collected by volunteers.
- Originally—to the delight of cross-country skiers—the Arlington segment of the trail was not plowed, however as more and more trail visitors began to rely it, the demand increased and eventually long-term plans were set up to keep it clear from snowstorms.
- In Bedford, the local DPW handles all regular trail maintenance, however they plan a volunteer cleanup each spring.
- Improvements along the Lexington portion of the trail are partially funded through the Friends of the Lexington Bikeways group, a 501(c)(3) non-profit organization, which helps to raise money for the trail.
- Generally speaking, safety can be an issue in areas that do not have local police on bike patrols, which can be a budget problem for most towns.
- Bikeway visitors are kept informed of trail conditions via regular posts on the Minuteman Bikeway twitter account (@bikeminman)
- A common issue in maintaining trails is dealing with root invasion. Asphalt trails built near encroaching trees often suffer damage from heaving due to the growth of tree roots underneath. This leads to complaints from many users who recognize the tree roots as creating hazardous tripping/biking conditions or barriers to accessibility. Fixing these hazards after they have occurred is often costly. The installation of root barriers is recommended to help limit the costs of future maintenance, however they must be installed properly to be effective. It is recommended that they be installed at a depth of about two feet to minimize the likelihood of trail damage.

## FUTURE PLANS

- The Minuteman Trail is expected to be extended an additional two miles along the existing rail line to the Town of Concord.
- Other related future trail connections include a proposed path from Lexington to the Battle Road Trail, and another to the Charles River Bike Path.
- Due to the popularity of the Minuteman Trail and the high volume of users it experiences, the trail has been found to be too narrow in some areas to properly handle the amount of visitors passing each other. For this reason, it has been recommended that some areas which experience the highest use need to be widened to 14 or 16 feet.

## PROJECT SUCCESSES & KEY TAKEAWAYS

- The trail would not have been possible without the grassroots organization efforts and perseverance of local trail advocates. The heavy opposition to the trail was overcome by repeated lobbying work—and in the pre-internet age before email was available—utilizing “phone-chains” to get supporters to show up for town meetings.
- It is important to determine who is going to maintain the trail and how it will be maintained before it is built. When the Minuteman Trail was constructed, the state paid for it, however the local towns did not want any responsibility for maintenance. After some time, as the trail began to deteriorate, the towns were reluctantly forced to step in and begin taking care of it. Because the trail had deteriorated, it cost much more to repair than it would have if it had been maintained normally.
- With local town ownership, there are the benefits of lots of volunteer work and pride that goes a long way in making a path more than just a path. Another benefit is that users constantly compare how maintenance and management are handled differently in each municipality. Good practices in one town are praised, acting as a role model for the other towns to aspire to and emulate.
- A downside of having the trail being managed by 3 separate entities is that it is often difficult to get the three separate municipalities to agree on the same thing. The goals, vision and priorities of each town can often be very different. This creates a disjointed effort that can make progress more difficult than it normally would be. Other trails that have a single entity in charge--such as the Cape Cod Rail Trail--have much more consistent funding and overall management.
- There are trade-offs on having the trail being managed by multiple municipalities instead of being managed by a single entity.
- It is recommended that advocates should figure out who the trail users should be in advance, and establish clear rules and etiquette that accommodate all users in a safe and fair fashion. Because the Minuteman Bikeway was originally established as a “commuter bikeway,” its original premise was solely for efficient bicycle transportation. When it evolved into more of a multi-use path with walkers, joggers and small children, this created conflicts and some disputes over who should be on the trail.
- It is recommended that advocates properly address and clarify the legal rules for safe travel where the trail crosses public roadways. There is often confusion over who has legal right-of-way in some areas. On portions of the Minuteman Trail, the police had to order all bicycles to dismount and walk their bikes through the road crossing to prevent accidents. This has led to new signage being needed which is more “context sensitive,” allowing trail users to “yield” instead of requiring them to come to a full stop in areas where it was appropriate.

---

### CONTACT INFO:

**MINUTEMANBIKEWAY.ORG**

EMAIL: [mmbikeway@gmail.com](mailto:mmbikeway@gmail.com)

---

# PARKS & TRAILS NEW YORK:

ROAD AND TRAIL INTERSECTION SAFETY RATING  
BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

## Road and Trail Intersection Safety Rating



**Instructions:** Use the following checklist to assess the safety of a Road and Trail Intersection. The checklist is split into three sections; add the scores from all three sections to determine the final rating. The three sections focus on the characteristics of the roadway leading up to and through the intersection (in either direction, where applicable); the characteristics of the trail leading up to and through the intersection (again, in either direction where applicable); and the characteristics of the intersection itself.

This rating system is primarily designed for intersections where a multi-use trail crosses a public road and continues in either direction. However, the rating system can also be used where a trail terminates at a roadway or continues along the roadway, or where a road has a dead-end stop.

Complete a separate checklist for each trail approach if conditions are substantially different. The final score calculated in the checklist corresponds to the Safety Rating included on Page 3.

Please consider uploading your intersection to the statewide database maintained by PTNY. You can also check the database to see how others have scored your local intersection. Guidance related to the completion of each question is included on the sheet. More information can be found online at ([ptny.org/intersection-safety](http://ptny.org/intersection-safety))

<b>Trail Name</b>	
<b>Intersecting Roadway</b>	
<b>Location (City/State/Zip)</b>	
<b>County</b>	
<b>Date</b>	
<b>Rating</b>	

v. 8.18

Funded by the National Highway Traffic Safety Administration with a grant from the New York State Governor's Traffic Safety Committee



# PARKS & TRAILS NEW YORK:

## ROAD AND TRAIL INTERSECTION SAFETY RATING BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

Roadway Characteristics		Score	Guidance
1	What is the nature of the road? Neighborhood or Side Street <b>(20)</b> Secondary or Rural Road <b>(10)</b> Major Arterial <b>(0)</b>		Generally, neighborhood or side streets are unstriped, while secondary or rural roads and major arterials have full markings. Major Arterials are generally those used by more than 5,000 cars per day (AADT or Annual Average Daily Traffic), while Secondary or Rural Roads have 2,000 to 5,000 AADT, and neighborhood or side streets have fewer than 2,000 AADT.
2	What is the posted speed limit for the section of road being crossed? 30 mph or less <b>(20)</b> 31-40 mph <b>(15)</b> 41-50 mph <b>(5)</b> 55+ mph <b>(0)</b>		The speed limit posted on the nearest sign approaching the intersection. If posted speeds are not the same in both directions, use the higher of the two posted speeds.
3	How many travel lanes (including turning lanes) does the roadway have at this point? 2 lanes <b>(15)</b> 3 lanes <b>(5)</b> 4 lanes <b>(0)</b>		How many total traffic lanes would a trail user need to cross to continue the trip? One travel lane in each direction would be a 2 lane road; a 2-lane road with a turning lane would be 3 lanes, etc.
4	Do motorists have a stop or yield sign, traffic signal, or Pedestrian Hybrid Beacon at the intersection? Pedestrian Hybrid Beacon or Traffic Signal with phase for trail crossing <b>(10)</b> Stop Sign on Road <b>(7)</b> Yield Sign on Road <b>(5)</b> Traffic Signal, but no trail crossing phase <b>(2)</b> No traffic sign or signal at intersection <b>(0)</b>		Are motorists required to slow or stop at either a sign, traffic signal, or another form of traffic control? Choose the traffic control characteristic from this list that most closely resembles that found at the intersection.  A Pedestrian Hybrid Beacon (or HAWK Signal) as is seen to the right, is activated only when a pedestrian is entering the intersection.
5	Are stop/yield lines used on road as it approaches the intersection? Yes <b>(2)</b> No <b>(0)</b>		Are lines painted on the road clearly marking where vehicular traffic should stop to allow cyclists or pedestrians to cross?
6	Are there signs alerting motorists to the upcoming trail intersection? Yes, far from the intersection <b>(4)</b> Yes, but only in one direction, or too close to the intersection <b>(2)</b> No <b>(0)</b>		The recommended distance between signs and the intersection varies based on the speed and design of the roadway, and on how much motorists are directed to slow down. Generally, 100 feet from the intersection will suffice; although additional distance is required on higher speed roads.
7	Is additional signage present or are other means used to alert motorists of trail crossing ahead? Yes <b>(2)</b> No <b>(0)</b>		Additional measures may include supplemental plaques with distance or other information, signs that notify road users who has right of way at the intersection or direct motorists to reduce speed, or flashing beacons that alert motorists to trail users crossing ahead.
8	Is traffic calming infrastructure or median islands used on the roadway? Yes, multiple kinds <b>(4)</b> Yes, one kind <b>(2)</b> No <b>(0)</b>		Traffic calming attempts to bring motor vehicle speeds closer to those of bicyclists. Traffic calming infrastructure can include (but are not limited to) speed humps/tables, curb bump outs, pinch points, or chicanes, or median Islands allowing for multi-stage crossing
9	Is on-street parking permitted near the trail crossing? Yes <b>(0)</b> No <b>(2)</b>		Per New York State law, parking is not allowed within 20 feet of a crosswalk at an intersection, or within 30 feet of a traffic light, stop or yield sign, unless explicitly permitted by posted signs or meters.
10	Is there a bicycle lane available on the roadway being crossed? Yes <b>(3)</b> No <b>(0)</b>		If the roadway is used to cyclists access the trail, motorists are likely to be more aware of the presence of cyclists and pedestrians, calming traffic.
<b>ROADWAY TOTAL SCORE</b>			Add score from Questions 1 through 10



# PARKS & TRAILS NEW YORK:

## ROAD AND TRAIL INTERSECTION SAFETY RATING BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

Trail Characteristics		Score	Guidance
11	Are measures that prevent vehicular access (bollards, gates, signs) used properly?	Yes <b>(2)</b> No bollards or improperly used <b>(0)</b>	Bollards and/or gates that prevent vehicular access should be located no closer than 20 feet from intersection, and should permit passage without dismounting for cyclists. Bollards should be at least 3.2 feet tall and indicated with diamond-shaped pavement marking. Signs saying "No Motor Vehicles" should be easily readable.
12	Is trail paved in asphalt, concrete or other "hard" surface within 20 ft. of intersection?	Both sides paved <b>(2)</b> Only one side paved <b>(1)</b> Neither side paved <b>(0)</b>	Paving decreases the likelihood of exposed roots, overgrowth that infringes the travel way and other negative trail conditions, as well as allowing use of safety measures such as pavement marking and centerlines on intersection approach.
13	Are advance warning signs or pavement markings present on trail?	Yes, both signage and pavement markings <b>(5)</b> Yes, either signage or pavement markings <b>(2)</b> No <b>(0)</b>	Advance warning signage or pavement marking should be placed at least 50 feet from intersection. Signage includes "Stop", "Yield", and "Traffic Control Ahead" signs, among others. Pavement markings include "X ING AHEAD" in white lettering.
14	Is there a painted centerline present on intersection approach?	Yes <b>(2)</b> No <b>(0)</b>	A solid centerline (4 - 6 inches in width) is preferred within 50 feet of the intersection to indicate a no passing area. Edge lines may also be added at intersection approach.
15	Are there working lights on the trail within 75 feet of the intersection?	Yes <b>(2)</b> No <b>(0)</b>	If it is not possible to assess whether lighting is functioning, the presence of lighting within 75 feet of the intersection is sufficient.
16	Does the trail have a significant grade approaching the intersection? If so, are measures used to mitigate?	Significant grade with mitigation <b>(2)</b> Significant grade without mitigation <b>(0)</b> No grade <b>(4)</b>	Does the trail have a significant grade approaching the intersection (5% or greater)? If so, are measures such as a switchback, signage, and/or other interventions used to mitigate?
17	Is curb cut and ramp of equal width of trail available for crossing use?	Yes <b>(2)</b> No <b>(0)</b>	Curb cuts and ramps should be at least as wide as the trail; for high volume trails/intersections where queuing may be an issue, wider ramps should be considered.
18	Are there surface conditions, overgrowth or other trail issues that affect safety within 50 ft. of intersection?	Yes <b>(0)</b> No <b>(2)</b>	Negative conditions could include overgrowth that infringes on the travel way, exposed roots, pavement deterioration, holes, standing water, and the presence of loose rock or soil.
19	What is the distance between the trail/road intersection and the next closest road/road intersection?	More than 24 feet <b>(4)</b> Between 6.5 and 24 ft. <b>(2)</b> Less than 6.5 feet <b>(0)</b>	Sidepaths, or trails that travel alongside and parallel to roadways, should maintain physical distance from the parallel roadway through the crossing, to ensure that visibility is maintained for all users.
20	If the next closest intersection is less than 24 feet from the trail intersection, is there a traffic signal or signage warning motorists to the presence of the trail intersection?	Yes, traffic signal with specific signal for trail users <b>(4)</b> Yes, signage warning of trail <b>(2)</b> No <b>(0)</b> Next intersection more than 24 feet away <b>(2)</b>	Are motorists turning from a parallel road onto the road that intersects the trail made aware of the potential presence of trail users, either by means of signage or a traffic signal?
<b>TRAIL TOTAL SCORE</b>			Add score from Questions 11 through 20

# PARKS & TRAILS NEW YORK:

## ROAD AND TRAIL INTERSECTION SAFETY RATING BEST PRACTICES: CASE STUDIES IN TRAIL DEVELOPMENT

Intersection Control / Right of Way		Score	Guidance
21	At what angle does the trail cross the road?	Less than 60 degrees <b>(0)</b> Between 60 and 90 degrees <b>(8)</b> Approx. 90 degrees <b>(12)</b>	Midblock crossings should intersect the roadway at as close to a 90-degree angle as is possible, with 60 degrees being the minimum acceptable crossing angle.
22	What type of crossing treatment is used?	No crosswalk <b>(0)</b> Marked Crosswalk <b>(3)</b> Raised and/or High Visibility Crosswalk <b>(6)</b>	A marked and signed crosswalk should be used at all trail intersections. A basic crosswalk consists of two parallel lines running across the roadway; while a high visibility (also known as continental or ladder) crosswalk consists of a series of lines 12" to 24" in width and separated by gaps of 12" to 60".
23	Is it clear which user has right of way at the intersection - is the higher use travelway afforded right of way?	Yes <b>(4)</b> No or Unclear <b>(0)</b>	At unmarked or uncontrolled trail intersections, bicyclists and pedestrians are required to yield to vehicles in the roadway. At marked crosswalks, drivers are required to yield to pedestrians. Sidepaths should be given the same priority through intersections as the parallel roadway. For the purposes of this checklist, those evaluating the intersection should answer "No" only when right of way assignment is not clearly defined or assigned in error to the lower volume roadway.
24	Are crossing signals timed for use by pedestrians?	Yes <b>(2)</b> No or No Signal <b>(0)</b>	Standard crossing intervals are 3.5 feet per second for pedestrians (i.e a 35-foot wide roadway would require a 10 second pedestrian crossing phase).
25	Are crossing signal push button detectors clearly identified and located in accessible spot?	Yes <b>(2)</b> No or No Signal <b>(0)</b>	If a push button detector is used, path users of all dimensions should be able to access it without leaving the trail, including cyclists. Push buttons should be used at a height of 3.5 feet.
26	Are accessible crossing signals (audible tones or speech messages) and/or detectable warning pavers used to facilitate intersection crossing?	Yes <b>(2)</b> No <b>(0)</b>	Detectable warning pavers alert visually-impaired trail users to their location at a transition from curb to crosswalk or roadway. They are generally installed within the curb ramp. Accessible crossing tones include a variety of audible signals that transmit crossing information to users, such as announcing the time left on the crossing signal phase or loud beeping that indicates the crossing phase.
<b>INTERSECTION TOTAL SCORE</b>			Add score from Questions 21 through 26
<b>OVERALL SCORE</b>			Add Roadway Total Score, Trail Total Score, and Intersection Total Score to get overall score

TOTAL SCORE	SAFETY RATING	DESCRIPTION
<59	<b>F</b>	Significant safety issues present that may lead to high likelihood of motorist-trail user conflicts at intersections; candidate for engineering/planning attention
60-74	<b>D</b>	Safety issues present that may degrade trail user experience; candidate for engineering/planning improvements
75-84	<b>C</b>	Potentially serious safety issues present; candidate for safety enhancements
85-94	<b>B</b>	Few safety issues present; candidate for safety enhancements
95+	<b>A</b>	Few safety issues present; case study candidate

<b>Trail Name</b>	
<b>Intersecting Roadway</b>	
<b>Location (City/State/Zip)</b>	
<b>Date</b>	



# TRAIL RESOURCES

## RESOURCES TO HELP START YOUR TRAIL PROJECT

[Getting Started: A Guide to Planning Trails in New York State, Parks & Trails New York](#)

[Getting on Track: Working with Railroads to Build Trails in New York State, Parks & Trails New York](#)

[Railbanking and Rail-Trails: A Legacy for the Future, Rails-to-Trails Conservancy](#)

[Acquiring Rail Corridors: A How to Manual, Rails-to-Trails Conservancy](#)

[Secrets of Successful Rail-Trails: An Acquisition and Organizing Manual for  
Converting Rails into Trails, Rails-to-Trails Conservancy](#)

[Rails-to-Trails Conversions: A Legal Review, Rails-to-Trails Conservancy](#)

[National Trails System Act, 16 U.S.C. 1247\(d\)](#)

[Universal Access Trails and Shared Used Paths: Design, Management, Ethical,  
and Legal Considerations, Pennsylvania Land Trust Association](#)

[Designing Sidewalks and Trails For Access Part I and Part II,  
U.S. Department of Transportation Federal Highway Administration](#)

[Sample Easement for Right-of-Way](#)

[Rail-Trail Maintenance & Operation: Ensuring the Future of Your Trail –  
A Survey of 100 Rail-Trails, Rails-to-Trails Conservancy](#)

[Rail-Trails and Liability: A Primer on Trail-Related Liability Issues and  
Risk Management Techniques, Rails-to-Trails Conservancy](#)

[Begin the Process of Converting a Rail Corridor Into a Trail and File a Public Use and Trail Use Request](#)

[Trail Construction and Maintenance Notebook, U.S. Department of Transportation  
Federal Highway Administration Recreational Trails Program](#)

[What's Under Foot? Multi-Use Trail Surfacing Options, Alta Planning + Design](#)

# APPENDIX A

## TRAIL CONSTRUCTION IMPACTS



**TABLE A-1**  
TOTAL DEVELOPMENT COSTS FOR IMPLEMENTATION

Capital District Trails Plan				
Cost Category	Per Mile Trail Costs in Current Dollars <sup>1/</sup>	Current Dollar Cost for Planned and Concept Trail Implementation	Estimated Percent Expended in New York <sup>2/</sup>	Estimated New York Expenditures
Land Acquisition	<b><i>To be Determined</i></b>			
<b>Trail Construction</b>				
Materials	\$228,000	\$45,600,000	90%	\$41,040,000
Labor	\$342,000	\$68,400,000	100%	\$68,400,000
Soft Costs - Design & Engineering & Permitting	\$200,000	\$40,000,000	100%	\$40,000,000
<b>Total Trail Costs</b>	<b>\$770,000</b>	<b>\$154,000,000</b>	<b>97%</b>	<b>\$149,440,000</b>

<sup>1/</sup> Source: CDTC and planning team analysis of various sources of construction costs, including recent construction projects.

<sup>2/</sup> Estimates based on current concept level plan and so subject to variance. The actual percentages expended in New York will vary based on the actual design, construction and implementation contracts that occur. Source: Capital District Transportation Committee, Behan Planning and Design, Chazen Companies, and ConsultEcon, Inc.

# APPENDIX A

## TRAIL CONSTRUCTION IMPACTS

### TABLE A-2

ESTIMATED CONSTRUCTION PERIOD IMPACTS TO THE STATE OF NEW YORK  
DUE TO THE DEVELOPMENT OF THE CAPITAL DISTRICT TRAILS PLAN

	Construction	Architecture & Design	Total
Estimated Preliminary Construction and Development Related Expenditures <sup>1/</sup>	\$114,000,000	\$40,000,000	\$154,000,000
Estimated Project Development Expenditures for the Capital District Trails Plan within the State of New York <sup>2/</sup>	\$109,440,000	\$40,000,000	\$149,440,000
Estimated Salaries and Wages with the State of New York	\$68,400,000	\$32,000,000	
Estimated Average Annual Industry Wages <sup>3/</sup>	\$68,000	\$99,000	
Direct Person-Years of Employment <sup>4/</sup>	805	259	1,064
<b>Multipliers <sup>5/</sup></b>			
<b>Applicable Multipliers, State of New York</b>	<b>Expenditures</b>	<b>Earnings</b>	<b>Person-Years of Employment <sup>6/</sup></b>
Construction	1.7963	0.5604	10.3423
Architectural, engineering, and related services	2.0137	0.6351	10.5011
<b>Indirect and Induced Impacts in the State of New York By Project Component</b>			
Construction	\$196,587,072	\$61,330,176	1,078
Architecture & Design	\$80,548,000	\$25,404,000	1,095
<b>Total Direct, Indirect &amp; Induced <sup>7/</sup></b>			
<b>Impacts in the State of New York</b>	<b>Expenditures</b>	<b>Earnings</b>	<b>Person-Years of Employment <sup>8/</sup></b>
Total Indirect and Induced Impacts	\$277,135,072	\$86,734,176	2,173
Total Direct Impacts	\$149,440,000	\$80,381,000	1,064
Estimated Total Economic Impacts	\$426,575,072	\$167,115,176	3,237
Rounded	\$426,600,000	\$167,100,000	3,237
<b>Estimated State Income Tax Revenue from Total Direct, Indirect, and Induced Construction Period Earnings <sup>9/</sup></b>		<b>\$6,566,000</b>	

1/ Source: Capital District Transportation Committee, Chazen Companies, Behan Planning and Design, and ConsultEcon, Inc.

2/ It is estimated that an average of 97 percent of the project development costs will be spent within the State of New York, based on an analysis of the various labor and materials cost categories, including soft costs and trail construction costs. Development costs associated with land acquisition are to be determined and therefore not included in this analysis.

3/ The average annual construction wage is \$66,500, based on the 2017 average weekly construction industry wage according to the State of New York and U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages for the Albany, NY Metropolitan Statistical Area, and inflated by change between 2017 annual average CPI and June 2018 CPI. Architectural & Engineering services had an annualize average weekly wage of \$96,600 in 2017, also inflated by CPI change.

4/ Construction wages and overhead are estimated to equal approximately \$40 million, with 100% expended in New York State. Architecture & Design wages assumed to be 80% of total expenditures in state. All workers are assumed to have 25% overhead costs in addition to annualized salary.

5/ Multipliers from a custom run of the Bureau of Economic Analysis/ RIMS II Input-Output Model.

6/ 2016 average value.

7/ The total effects shown include the direct, indirect and induced spending in New York for the development of the Capital District Trails.

8/ Direct employment impacts are construction industry jobs, Design and Engineering jobs. Indirect and induced employment impacts includes full time and part time jobs at a ratio similar to the mix of the economy as a whole. These are person-years of employment.

9/ Estimated as the total direct, indirect, and induced construction period earnings multiplied by the New York State's average effective tax rate for Fiscal Year 2016-2017, which was estimated at 3.93 percent. Source: New York State Department of Taxation and Finance.

Note: All estimates are in current dollars. The economic model includes rounding that is reflected in individual results, factors and totals.

Source: Capital District Transportation Committee, Behan Planning and Design, Chazen Companies, and ConsultEcon, Inc.

# APPENDIX B

## RESIDENTIAL PROPERTY VALUE IMPACTS

### TABLE B-1

SUMMARY OF PROPERTY VALUES BY COUNTY FOR ALL PARCELS AND FOR RESIDENTIAL PARCELS

County	Number of Parcels	Market Value	Assessed Value
<b>ALL PARCELS</b>			
Albany	111,370	\$34,436,471,737	\$29,483,602,633
Rensselaer	66,185	\$16,472,423,530	\$11,028,563,915
Saratoga	97,108	\$27,020,038,920	\$21,623,471,983
Schenectady	57,447	\$11,311,106,461	\$11,341,780,286
<b>Total Capital District</b>	<b>332,110</b>	<b>\$89,240,040,648</b>	<b>\$73,477,418,817</b>
<b>RESIDENTIAL PARCELS</b>			
Albany	86,182	\$17,042,652,651	\$14,260,234,724
Rensselaer	48,687	\$8,306,431,385	\$5,582,751,073
Saratoga	73,561	\$18,018,253,240	\$14,281,532,791
Schenectady	47,545	\$7,707,143,468	\$7,532,155,963
<b>Total Capital District</b>	<b>255,975</b>	<b>\$51,074,480,744</b>	<b>\$41,656,674,551</b>

Source: Counties listed, NYS Office of Information Technology Services GIS Program Office (GPO) and NYS Department of Taxation and Finance's Office of Real Property Tax Services (ORPTS), and ConsultEcon, Inc.

## TABLE B-2

### SUMMARY OF PROPERTY VALUES BY COUNTY FOR RESIDENTIAL PARCELS WITHIN A QUARTER AND A HALF MILE OF A EXISTING CORE TRAILS IN THE CAPITAL DISTRICT

COUNTY	NUMBER OF PARCELS BY DISTANCE FROM TRAIL			MARKET VALUE OF PARCELS BY DISTANCE FROM TRAIL			ASSESSED VALUE OF PARCELS BY DISTANCE FROM TRAIL		
	WITHIN A QUARTER MILE	A QUARTER MILE TO A HALF MILE	WITHIN A HALF MILE	WITHIN A QUARTER MILE	A QUARTER MILE TO A HALF MILE	WITHIN A HALF MILE	WITHIN A QUARTER MILE	A QUARTER MILE TO A HALF MILE	WITHIN A HALF MILE
<b>RESIDENTIAL PARCELS</b>									
Albany	6,372	7,220	13,592	\$1,141,766,349	\$1,166,623,199	\$2,308,389,548	\$942,832,380	\$1,166,623,199	\$2,109,455,579
Rensselaer	2,597	4,240	6,837	240,088,075	426,989,537	667,077,612	228,292,324	354,885,511	583,177,835
Saratoga	3,999	4,274	8,273	930,403,251	1,195,694,736	2,126,097,987	730,173,842	944,281,925	1,674,455,767
Schenectady	3,314	4,263	7,577	405,044,666	626,494,448	1,031,539,114	447,717,684	677,187,708	1,124,905,392
<b>TOTAL CAPITAL DISTRICT</b>	<b>16,282</b>	<b>19,997</b>	<b>36,279</b>	<b>\$2,717,302,341</b>	<b>\$3,415,801,920</b>	<b>\$6,133,104,261</b>	<b>\$2,349,016,230</b>	<b>\$3,142,978,343</b>	<b>\$5,491,994,573</b>
<b>PERCENT TO ALL RESIDENTIAL PARCELS</b>									
Albany	7.4%	8.4%	15.8%	6.7%	6.8%	13.5%	6.6%	8.2%	14.8%
Rensselaer	5.3%	8.7%	14.0%	2.9%	5.1%	8.0%	4.1%	6.4%	10.4%
Saratoga	5.4%	5.8%	11.2%	5.2%	6.6%	11.8%	5.1%	6.6%	11.7%
Schenectady	7.0%	9.0%	15.9%	5.3%	8.1%	13.4%	5.9%	9.0%	14.9%
<b>TOTAL CAPITAL DISTRICT</b>	<b>6.4%</b>	<b>7.8%</b>	<b>14.2%</b>	<b>5.3%</b>	<b>6.7%</b>	<b>12.0%</b>	<b>5.6%</b>	<b>7.5%</b>	<b>13.2%</b>

Source: Counties listed, NYS Office of Information Technology Services GIS Program Office (GPO) and NYS Department of Taxation and Finance's Office of Real Property Tax Services (ORPTS), and ConsultEcon, Inc.

## TABLE B-3

### SUMMARY OF PROPERTY VALUES BY COUNTY FOR RESIDENTIAL PARCELS WITHIN A QUARTER AND A HALF MILE OF A EXISTING, PLANNED AND CONCEPTUAL CORE TRAILS IN THE CAPITAL DISTRICT

COUNTY	NUMBER OF PARCELS BY DISTANCE FROM TRAIL			MARKET VALUE OF PARCELS BY DISTANCE FROM TRAIL			ASSESSED VALUE OF PARCELS BY DISTANCE FROM TRAIL		
	WITHIN A QUARTER MILE	A QUARTER MILE TO A HALF MILE	WITHIN A HALF MILE	WITHIN A QUARTER MILE	A QUARTER MILE TO A HALF MILE	WITHIN A HALF MILE	WITHIN A QUARTER MILE	A QUARTER MILE TO A HALF MILE	WITHIN A HALF MILE
<b>RESIDENTIAL PARCELS</b>									
Albany	11,142	11,939	23,081	\$2,100,017,023	\$2,103,203,785	\$4,203,220,808	\$1,695,722,085	\$2,103,203,785	\$3,798,925,870
Rensselaer	9,332	6,616	15,948	1,226,270,540	925,862,422	2,152,132,962	965,517,823	759,150,131	1,724,667,954
Saratoga	9,329	6,788	16,117	1,994,095,945	1,814,546,317	3,808,642,262	1,710,235,034	1,502,620,484	3,212,855,518
Schenectady	4,863	5,709	10,572	622,689,385	860,412,351	1,483,101,736	655,608,831	904,161,196	1,559,770,027
<b>TOTAL CAPITAL DISTRICT</b>	<b>34,666</b>	<b>31,052</b>	<b>65,718</b>	<b>\$5,943,072,893</b>	<b>\$5,704,024,875</b>	<b>\$11,647,097,768</b>	<b>\$5,027,083,773</b>	<b>\$5,269,135,596</b>	<b>\$10,296,219,369</b>
<b>PERCENT TO ALL RESIDENTIAL PARCELS</b>									
Albany	12.9%	13.9%	26.8%	12.3%	12.3%	24.7%	11.9%	14.7%	26.6%
Rensselaer	19.2%	13.6%	32.8%	14.8%	11.1%	25.9%	17.3%	13.6%	30.9%
Saratoga	12.7%	9.2%	21.9%	11.1%	10.1%	21.1%	12.0%	10.5%	22.5%
Schenectady	10.2%	12.0%	22.2%	8.1%	11.2%	19.2%	8.7%	12.0%	20.7%
<b>TOTAL CAPITAL DISTRICT</b>	<b>13.5%</b>	<b>12.1%</b>	<b>25.7%</b>	<b>11.6%</b>	<b>11.2%</b>	<b>22.8%</b>	<b>12.1%</b>	<b>12.6%</b>	<b>24.7%</b>

Source: Counties listed, NYS Office of Information Technology Services GIS Program Office (GPO) and NYS Department of Taxation and Finance's Office of Real Property Tax Services (ORPTS), and ConsultEcon, Inc.

# APPENDIX C

## ANNUAL TRAIL-RELATED SPENDING IMPACTS

**TABLE C-1**  
**DISTRIBUTION OF NEW TRAIL TOURIST**  
**SPENDING BY INDUSTRY CLASSIFICATION**

Capital District Trails Plan		
Industry Classification	Percent to Total <sup>1/</sup>	Distribution of Potential Net New Tourist Spending
Accommodations	37.5%	\$8,895,303
Food and Beverage Services	15.5%	\$3,683,638
Retail, includes Food Stores	35.5%	\$8,431,438
Entertainment	11.5%	\$2,728,621
<b>Total</b>	<b>100.0%</b>	<b>\$23,739,000</b>

<sup>1/</sup> Distribution derived from survey data on aggregate spending for Capital District tourist trail users on overnight trips. Due to small number (5) of responses to the question, the data is subject to sample size bias and caution should be exercised interpreting data. Does not include used or new bicycle expenditures. Source: Regional Trail Perspectives, 2016, p. 36. Source: ConsultEcon, Inc.

**TABLE C-2**  
**DISTRIBUTION OF NEW TRAIL RELATED SPENDING IN THE**  
**CAPITAL DISTRICT AND NEW YORK STATE**

Capital District Trails Plan					
Industry	Potential New Trail Related Spending	Percent in the Capital District	Potential New Trail Related Spending in the Capital District	Percent in New York State	Potential New Trail Related Spending in New York State
Parks and Recreation	\$299,000	90%	\$269,100	95%	\$284,050
Accommodations	\$8,895,303	100%	\$8,895,303	51%	\$4,567,859
Food and Beverage Services	\$3,683,638	100%	\$3,683,638	51%	\$1,891,598
Retail, includes Food Stores	\$8,431,438	100%	\$8,431,438	51%	\$4,329,657
Entertainment	\$2,728,621	100%	\$2,728,621	51%	\$1,401,184
<b>Total</b>	<b>\$24,038,000</b>		<b>\$24,008,100</b>		<b>\$12,474,347</b>

Source: ConsultEcon, Inc.

# APPENDIX C

## ANNUAL TRAIL-RELATED SPENDING IMPACTS

Capital District Trails Plan					
	Estimated Total Spending	Total Spending Adjusted to Retail Margin	Estimated Percent Net New to Capital District	Estimated Net New Spending in Capital District	Estimated Net New Spending in Capital District Adjusted to Retail Margin
<b>Estimated Potential Direct Trail Related Spending in Capital District</b>					
Parks and Recreation	\$269,100	\$269,100	100%	\$269,100	\$269,100
Accommodations	8,895,303	8,895,303	90%	8,005,773	8,005,773
Food & Beverage (Retail Margin 75%)	3,683,638	2,762,728	90%	3,315,274	2,486,456
Retail (Retail Margin 50%)	8,431,438	4,215,719	90%	7,588,294	3,794,147
Entertainment / Other	2,728,621	2,728,621	90%	2,455,759	2,455,759
<b>Total Spending</b>	<b>\$23,739,000</b>	<b>\$18,602,372</b>		<b>\$21,365,100</b>	<b>\$16,742,134</b>
<b>Economic Impacts - Capital District, New York</b>	<b>Multipliers <sup>1/</sup></b>				
<b>Total Indirect &amp; Induced</b>	<b>Expenditures</b>	<b>Earnings</b>	<b>Employment <sup>2/</sup></b>		
Museums, historical sites, zoos, and parks	1.8616	0.5481	14.7596		
Accommodations	1.5736	0.431	11.396		
Food & Beverage	1.6464	0.4907	17.616		
Retail	1.6293	0.4684	16.179		
Entertainment/Other	1.7004	0.4887	17.5293		
<b>Estimated Economic Impacts</b>	<b>Expenditures</b>	<b>Earnings</b>	<b>Employment</b>		
Parks and Recreation	\$500,957	\$147,494	4		
Accommodations	12,597,885	3,450,488	87		
Food & Beverage	4,093,701	1,220,104	42		
Retail	6,181,804	1,777,178	58		
Entertainment/Other	4,175,772	1,200,129	41		
<b>Total</b>	<b>\$27,550,117</b>	<b>\$7,795,393</b>	<b>232</b>		
<b>Plus Net New Direct Effects</b>					
Parks and Recreation	\$269,100	\$79,230	2		
Accommodations	8,005,773	2,192,735	55		
Food & Beverage	3,315,274	988,098	34		
Retail	7,588,294	2,181,524	71		
Entertainment/Other	2,455,759	705,792	24		
Total Direct	\$21,365,100	\$6,068,150	185		
<b>Total Direct, Indirect &amp; Induced</b>	<b>\$48,915,217</b>	<b>\$13,863,543</b>	<b>417</b>		
<b>Rounded to Nearest \$1,000 (except Employment)</b>	<b>\$48,915,000</b>	<b>\$13,864,000</b>	<b>417</b>		

**TABLE C-3**  
**ESTIMATED ECONOMIC IMPACTS ON THE ECONOMY OF CAPITAL DISTRICT IN A STABILIZED YEAR**

1/ Multipliers are from a custom run of the Bureau of Economic Analysis' RIMS II Input-Output Model. This model uses multipliers from Tables 1.5 and 2.5 according to the item. Accommodations uses the Accommodation multipliers (Item 61) Food & Beverage uses the Food services and drinking places (Item 62); Retail uses the General Merchandise Stores Multipliers (Item 452000); Entertainment and other uses the Other Amusement and recreation industries multipliers (Item 713900); Parks and Recreation operations use the Museums, Historical Sites, Zoos, and Parks Multipliers (Item 712000).

2/ In jobs per million dollars of expenditures. Jobs per million factored to June 2018 value from the 2016 average value. RIMS II employment multipliers are factored at the 2016 value of the dollar. Employment includes a mix of full-time and part-time employment.

All estimates are in current dollars. The economic model includes rounding that is reflected in individual results, factors and totals.

Source: ConsultEcon, Inc.



# APPENDIX C

## ANNUAL TRAIL-RELATED SPENDING IMPACTS

Capital District Trails Plan					
	Estimated Total Spending	Total Spending Adjusted to Retail Margin	Estimated Percent Net New to New York	Estimated Net New Spending in New York	Estimated Net New Spending in New York Adjusted to Retail Margin
<b>Estimated Potential Direct Trail Related Spending In Capital District</b>					
Parks and Recreation	\$284,050	\$284,050	100%	\$284,050	\$284,050
Accommodations	4,567,859	4,567,859	60%	2,740,715	2,740,715
Food & Beverage (Retail Margin 75%)	1,891,598	1,418,698	60%	1,134,959	851,219
Retail (Retail Margin 50%)	4,329,657	2,164,829	60%	2,597,794	1,298,897
Entertainment / Other	1,401,184	1,401,184	60%	840,710	840,710
<b>Total</b>	<b>\$12,190,297</b>	<b>\$9,552,569</b>		<b>\$7,314,178</b>	<b>\$5,731,542</b>
<b>Economic Impacts - New York</b>	<b>Multipliers <sup>1/</sup></b>				
<b>Total Indirect &amp; Induced</b>	<b>Expenditures</b>	<b>Earnings</b>	<b>Employment <sup>2/</sup></b>		
Museums, historical sites, zoos, and parks	2.1059	0.5753	15.3105		
Accommodations	1.7832	0.4803	12.4683		
Food & Beverage	1.9032	0.5537	19.0987		
Retail	1.8204	0.5276	17.7217		
Entertainment/Other	1.9562	0.5222	17.9311		
<b>Estimated Economic Impacts</b>	<b>Expenditures</b>	<b>Earnings</b>	<b>Employment</b>		
Parks and Recreation	\$598,181	\$163,414	4		
Accommodations	4,887,243	1,316,365	33		
Food & Beverage	1,620,040	471,320	15		
Retail	2,364,512	685,298	22		
Entertainment/Other	1,644,597	439,019	14		
<b>Total</b>	<b>\$11,114,574</b>	<b>\$3,075,416</b>	<b>88</b>		
<b>Plus Net New Direct Effects</b>					
Parks and Recreation	\$284,050	\$77,598	2		
Accommodations	\$2,740,715	\$738,204	19		
Food & Beverage	1,134,959	330,195	11		
Retail	2,597,794	752,909	24		
Entertainment/Other	840,710	224,424	7		
Total Direct	\$7,314,178	\$2,045,733	60		
<b>Total Direct, Indirect &amp; Induced</b>	<b>\$18,712,802</b>	<b>\$5,198,747</b>	<b>150</b>		
<b>Rounded to Nearest \$1,000 (except Employment)</b>	<b>\$18,713,000</b>	<b>\$5,199,000</b>	<b>150</b>		

**TABLE C-4**  
**ESTIMATED ECONOMIC IMPACTS ON THE ECONOMY OF STATE OF NEW YORK IN A STABILIZED YEAR CAPITAL DISTRICT TRAILS PLAN**

1/ Multipliers are from a custom run of the Bureau of Economic Analysis' RIMS II Input-Output Model. This model uses multipliers from Tables 1.5 and 2.5 according to the item. Accommodations uses the Accommodation multipliers (Item 61) Food & Beverage uses the Food services and drinking places (Item 62); Retail uses the General Merchandise Stores Multipliers (Item 452000); Entertainment and other uses the Other Amusement and recreation industries multipliers (Item 713900); Parks and Recreation operations use the Museums, Historical Sites, Zoos, and Parks Multipliers (Item 712000).

2/ In jobs per million dollars of expenditures. Jobs per million factored to June 2018 value from the 2016 average value. RIMS II employment multipliers are factored at the 2016 value of the dollar. Employment includes a mix of full-time and part-time employment.

All estimates are in current dollars. The economic model includes rounding that is reflected in individual results, factors and totals.

Source: ConsultEcon, Inc.



# APPENDIX C

## ANNUAL TRAIL-RELATED SPENDING IMPACTS

**TABLE C-5**  
**ESTIMATED POTENTIAL NET NEW TAX REVENUE**  
**GENERATION IN SELECTED CATEGORIES**

Capital District Trails Plan				
	Capital District (County) Sales Tax <sup>1/</sup>	Capital District (County) Occupancy Tax <sup>1/</sup>	New York State Sales Tax <sup>2/</sup>	New York State Income Tax <sup>3/</sup>
Tax Rate	4%	6%	4%	3.93%
<b>Sales Taxes Generated By Potential Net New Expenditures<sup>4/</sup></b>				
Accommodations	\$320,231	\$480,346	\$109,629	
Meals	\$132,611		\$45,398	
Retail	\$303,532		\$103,912	
<b>Total Direct Taxes</b>	<b>\$1,236,720</b>		<b>\$258,939</b>	
<b>Indirect Taxes Generated by Net New Wages and Salaries of Directly Supported Employment</b>				
Income Taxes				\$80,377
Sales Tax <sup>5/</sup>	\$58,254		\$22,094	
<b>Indirect Taxes Generated by Net New Employee Wages and Salaries due to Multiplier Effects</b>				
Income Taxes				\$120,833
Sales Tax <sup>5/</sup>	\$56,127		\$29,524	
<b>Total Indirect Taxes</b>	<b>\$114,381</b>		<b>\$252,827</b>	
<b>Total County Tax Revenue Generation</b> (Rounded to nearest \$1,000)	<b>\$1,351,000</b>			
<b>Total State Tax Revenue Generation</b> (Rounded to nearest \$1,000)			<b>\$512,000</b>	

1/ Four counties in the Capital District have varying sales and occupancy tax rates. For illustrative purposes a “county” sales tax rate of 4% and an occupancy tax rate of 6% are used. Actual tax revenues would vary by county depending on economic geography of industries where spending would occur.

2/ New York State’s sales tax rate is 4%. Source: New York State Department of Taxation and Finance.

3/ New York State’s average effective income tax rate for 2016-2017 was estimated at 3.93 percent. Source: New York State Department of Taxation and Finance.

4/ Hotel, retail, food and beverage spending is only partially net new at the County and State levels, with this Tax analysis focusing on the net new portion of sales.

5/ Based on 40% of income spent on retail goods and services, of which 75% is in taxable categories. Directly supported employment personal sales taxable expenditures estimated at 80% in the Capital District with 10% elsewhere in New York (90% total in the State of New York). Other direct, indirect and induced employee (multiplier effects) taxable expenditures estimated at 60% in the Capital District with 20% elsewhere in New York (80% total in the State of New York).

Note: All estimates are in current dollars. The economic model includes rounding that is reflected in individual results, factors and totals.

Source: ConsultEcon, Inc.

# ONLINE SURVEY RESULTS

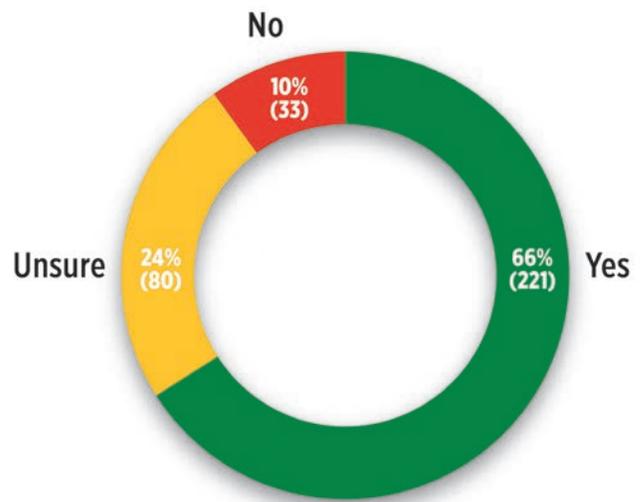


## DESIRED CONNECTIONS

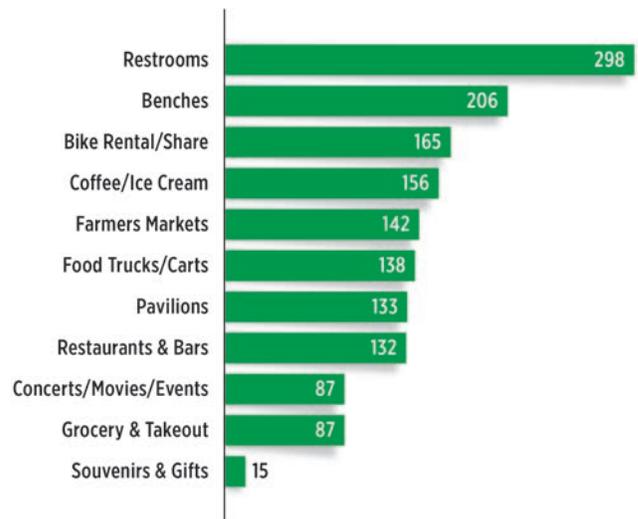
Graphic representation of the most popular trail connections proposed. Thicker lines represent higher popularity. For clarity, connections shown do not represent actually proposed routes, but illustrate general connections only. See page 17 for full listing of responses.



If there was a complete regional trail system in place that connected the four counties of the Capital District with some of the major points of interest, would you be more likely to use the trail for commuting, travel or other non-recreational trips?

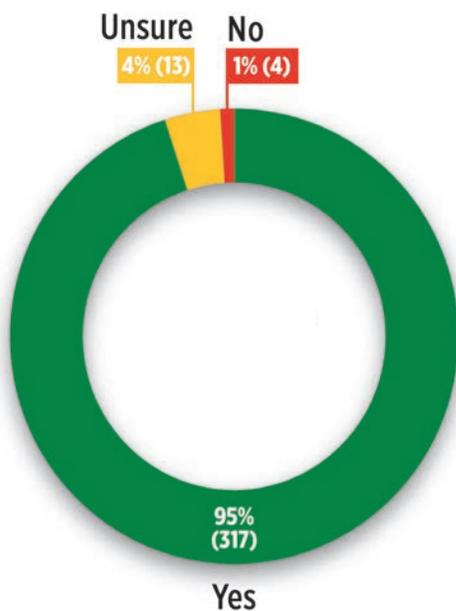


Which of the following activities or amenities would you like to see on the trail? Select all that apply.

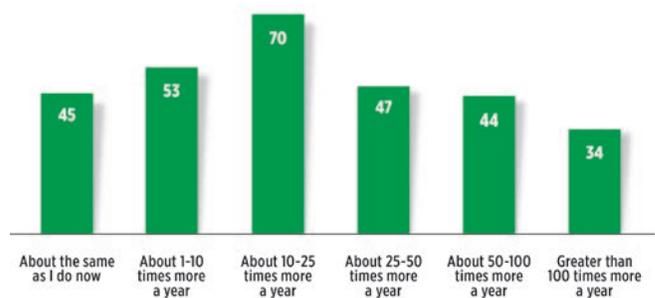


# ONLINE SURVEY RESULTS

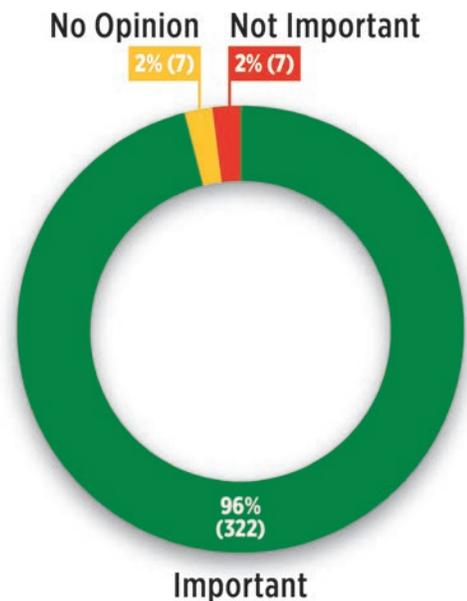
If there was a complete regional trail system in place that connected the four counties of the Capital District with some of the major points of interest, would you be more likely to use the trail for recreational trips?



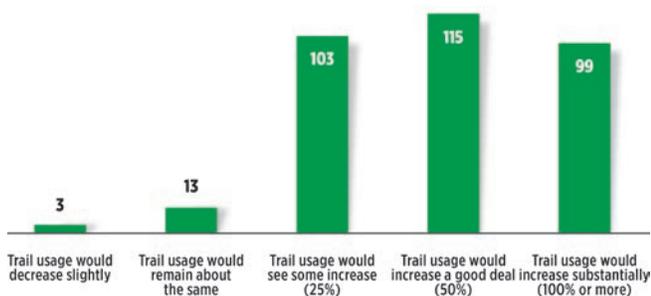
If the trail you suggested above was built, how many more times a year would you use this and other local trails than you do now?



In general, how important is it to have a trail system in the Capital District so citizens can safely travel from town to town or place to place by walking and biking?



If there was a complete regional trail system in place that connected the four counties of the Capital District with some of the major points of interest, in your opinion would the overall use of the trails increase or decrease?





# Capital District Trails Plan

*Advancing a Vision for Connecting Communities*