



## FARMINGTON VALLEY TRAILS COUNCIL

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## Why Build Multi-Use Trails in Connecticut?

### Executive Summary

41.7 completed miles of the multi-use (asphalt surfaced) Farmington Canal Heritage Trail (FCHT) bisect Connecticut from New Haven to Suffield. Its sister loop trail, the Farmington River Trail, (FRT) boasts an additional 10.1 miles. They have proven to be a remarkable success. By connecting 13 towns, they allow point-to-point off-road travel providing a safe system of linear parks that can be accessed at multiple points by both able and handicapped users. The trails serve multiple positive purposes for their communities and the surrounding region. Unfortunately large gaps remain in both these trails.

### *The case for multi-use trails in Connecticut has been proven:*

They are used as recreational facilities for physical activity and health, as tourist destinations and sources of economic development, as an abatement of pollution and noise by replacing automobile trips, as a significant community amenity where people congregate and interact, and as a growing form of alternative transportation through commutation. Intermodal opportunities through connections with bus lines and other mass transportation are expanding and are slowly and steadily increasing in use.

- Every dollar spent building multi-use trails returns a multiple of that yearly.
- Immediate successes when built, indicating heavy demand, they attract thousands of users.
- Those local and out of town users add significantly to the economy;
- Residents are overwhelmingly positive about them, communities that have them are more desirable, and properties near trails sell faster at higher prices.
- These repurposed rail corridors are retained permanently as improved community open space.

### *Barriers remain:*

- The State of Connecticut has lagged behind its neighbors in recognizing walking and bicycling planning as an integral part of transportation.
- No dedicated state funding is available to communities for the planning, development, and construction of these facilities. Funds for feasibility and design studies are non-existent.
- Communities have relied on federal Transportation Enhancement dollars for 80% of project costs and the fate of that funding is now uncertain. They must raise the additional 20% alone.
- Limited funding does exist but many “shovel ready” trail programs languish unfunded.
- Municipalities that want multi-use trail facilities face steep hurdles because of these issues and this creates a chilling effect on their expansion.

***With an undeniable cost/benefit ratio, why are so many trail projects unfinished?***

## Introduction

Imagine Central Connecticut as a place where people can choose to use a bicycle or walk to travel from town to town, commute to work, stay healthy or just relax. It has steadily become a region where elected officials, organizations and residents have recognized the value of walking and bicycling and have made a commitment to change their communities. A mix of advocates, such as the FVTC, FCRTTA and Bike/Walk CT, municipalities, ConnDOT, DEEP, the Capital Region Council of Governments (CRCOG) and the Central Connecticut Regional Planning Authority (CCRPA) have worked together to overcome the physical, social and institutional barriers which have limited our choice to walk and bicycle. In all cases, when a multi-use trail has been built, it has become an immediate success. This indicates a very real pent-up demand.



Our hope is that this document will help to make a case for completion of the highly successful Farmington Canal Heritage Trail (FCHT) and the Farmington River Loop Trail (FRT) from Canton to Simsbury. This vision enables us to imagine a transformed region where population centers are connected and people can use this alternative transportation corridor of dedicated bike and pedestrian paths, free from the increasing costs of automobile travel, pollution and noise. The FCHT and the FRT now have almost 32 miles of contiguous paved off-road trail. The FRT will be one of a handful of long (30 miles) off-road contiguous loops in America and a major tourism draw. The historic 82-mile FCHT corridor echoing the Farmington Canal

from New Haven, CT to Northampton, MA, is also part of the East Coast Greenway which stretches 3,000 miles from Calais, ME to Key West, FL.

It is imperative that our communities continue to investment in sidewalks, bike lanes, wide shoulders, wide outside lanes, and multi-use trails. New pedestrians and bicyclists need fewer barriers in their quest to avoid inevitable clashes with automobiles. When asked, they are most concerned with having separate, off-road space. More experienced bicyclists appreciate separate facilities but are more willing to bicycle on the road. Intermodal connections are also critical, and the expansion of transit service with bike racks and pedestrian access to stops, stations, and commuter lots help this connectivity. Education on enforcement of traffic regulations for police, safe riding skills for bicyclists, and sharing the road for all users is also a key component.

Given the remarkable success of the FCHT and the FRT, it is truly sad that the remaining gaps in the system have yet to be filled. Considering the dramatic returns to both the communities and the region in which it has been built, and the tiny cost vs. the total ConnDOT budget, it becomes almost comical. Plainville has been working hard since 2004 to plan for the construction of the FCHT in their community, which is the last major gap in the system, along with southern Farmington and northern Southington; a 9.1 mile stretch. To the south the FCHT is completed with only a 4.7-mile gap in Cheshire left to construct.

*Why do walking and bicycling matter?*

*Because they are the lowest-cost form of transportation and are non-polluting, energy efficient and healthy.*

Yet for decades they have not been considered legitimate forms of transportation in Connecticut and little attention has been paid to the bike/ped environment or to their needs. Increasingly, Connecticut has been catching up to the rest of New England in recognizing the value of this form of “active transportation”, taking new and important steps to improve pedestrian and bicycle access and safety. Several towns in the region have newly active committees that are examining bike/ped infrastructure and issues. Simsbury was recently named a Bicycle Friendly Community by the League of American Bicyclists. They are first one in Connecticut, and one of only a handful in New England.

The towns of the Farmington Valley have successfully built the majority of the northern portion of the Farmington Canal Heritage Trail, which stretches from southern Farmington to the Massachusetts border. New Haven Hamden, Cheshire and Southington to our south have either finished or are close to finishing their sections. It is recognized nationally as an important completed part of the East Coast Greenway. This greenway, along with the Farmington River Loop Trail connects the town centers of Collinsville, Unionville, Farmington, Avon and Simsbury in the Valley, but will eventually connect 13 town centers together; a rarity in New England. It has become a very popular amenity for recreation, tourism, and the economy bringing in millions for its communities. It is also heavily used for point to point commutation.

Until recently, transportation officials viewed mobility in terms of movement of vehicles and not movement of people. At the base level, everyone is a pedestrian of some kind. Walking is in fact the primary form of transportation. Most trips involve some element of walking, whether from the home to the car, from the home to the bus stop, or from the vehicle to the final destination. A balanced transportation system must address motor vehicle needs along with public transit, walking, and bicycling. Our region cannot thrive if everyone drives for all their transportation needs. We do not have enough room nor can we afford to build enough roads and highways for this. In fact, walking and bicycling infrastructure make public transit more effective in meeting travel needs. Public transit is dependent upon safe and convenient pedestrian access to get patrons to and from their ultimate destinations. In addition, bicycle access to transit can expand transit’s reach, especially in suburban communities. “Cities with more bike paths and lanes have significantly higher bike commuting rates.” (Buehler, R., and J. Pucher. “Cycling to Work in 90 Large American Cities: New Evidence on the Role of Bike Paths and Lanes.” *Transportation*, 2012.) Apropos to this, a recent grant administered by CCRPA will allow for signage to be installed directing FCHT users in Farmington and Plainville to the nearest bus stop, giving directions and mileage, and bus users directions to the trail.



## Public Health

An obesity epidemic, fueled by sedentary lifestyles has created new urgency for providing close-to-home opportunities for physical activity. Our mode of travel is making us less healthy. According to the Thunderhead Alliance 2007 Benchmarking Report, between 1960 and 2000, levels of bicycling and walking to work fell 67% while adult obesity levels rose 241%. At the same time, the number of children who bike or walk to school fell 68% as levels of overweight children rose 367%. The Surgeon General recommends moderate physical activity, including walking, is one of the best antidotes to the obesity epidemic. Just ½ hour of walking, 5 times a week, can greatly change an individual's health status (CRCOG Regional Pedestrian Plan, "Walking Matters"). A recent report estimated that Portland, Oregon's regional trail network saves the city approximately \$115 million per year in healthcare costs. (Beil, K. *Physical Activity and the Intertwine: A Public Health Method of Reducing Obesity and Healthcare Costs*, 2011.)

By 2017, Portland, Oregon residents will have saved \$64 million in health care costs thanks to bicycling. By 2040, the city will have invested \$138-605 million in bicycling yet saved \$388-594 million in health care costs and \$143-218 million in fuel costs, a benefit-cost ratio of up to 4 to 1. (Gotschi, T. *Costs and benefits of bicycling investments in Portland, Oregon, Journal of Physical Activity and Health*, 8 (Supp 1), S49-S58, 2011)

Physically active people tend to have better mental health. Compared with inactive people, the physically active had higher scores for positive self-concept, more self-esteem and more positive "moods" and "affects." These findings seem similar in both young people and adults. Physical activity has also been used to treat mental health problems such as depression according to <http://www.americanheart.org>. Trails are beneficial in promoting physical activity. According to a Center for Disease Control funded study, this is especially true among those groups traditionally at highest risk for inactivity, especially women and individuals on lower socioeconomic groups (*Rails-to-Trails Conservancy*, "Healthy Places for Healthy People: Active Transportation and Health" 2007). Finally, there is a cost – but it seems cheap to us: "By building a bicycle trail, it costs just \$98 to help a person become more physically active." (Wang, G., et al. "Cost effectiveness of a bicycle/pedestrian trail development in health promotion", *Preventive Medicine*, 237-42, 2004)



## Pollution

Increasingly, more children are being driven to school and traffic congestion has mushroomed which has increased stress to drivers and risks to pedestrians and cyclists. Parents who drive their children to school make up about a quarter of morning commuters. More traffic also means more vehicular accidents, endangering the lives of children and the adults who drive them (NY Times, "Turning the Ride to School into a Walk", by Jane E. Brody 2007). If the number of kids who walk and bike to school returned to 1969 levels, it would save 3.2 billion vehicle miles, 1.5 million tons of CO2 and 89,000 tons

of other pollutants annually. This is the equivalent of keeping more than 250,000 cars off the road for a year. (Pedroso, M. *Safe Routes to School: Steps to a Greener Future*. 2008)

“When the complete life cycle of the following modes are taken into account, the carbon emissions are approximately: Bicycle, 21 g CO<sub>2</sub>/passenger/km traveled;  
Electric-assist bicycle, 22 g CO<sub>2</sub>/passenger/km traveled;  
Bus, 101 CO<sub>2</sub>/passenger/km traveled; and  
Passenger car, 271 g CO<sub>2</sub>/passenger/km traveled.”

(European Cyclists' Federation, *Cycle More Often 2 Cool Down the Planet: Quantifying CO<sub>2</sub> Savings of Cycling*. 2011)

Air pollution is very costly. According to the American Lung Association, health costs of air pollution are estimated at a minimum of \$10 billion a year, much of which comes from cars, trucks, and SUVs. Road traffic is a major contributor to air pollution. Fortunately for most healthy people, the symptoms of air pollution exposure usually go away as soon as the air quality improves. However, certain groups of people are more sensitive to the effects of air pollution than others. Children experience more illness, such as bronchitis and earaches, in areas of *high* pollution than in areas with cleaner air. People with heart or lung disease also react more severely to polluted air. During times of heavy pollution, their condition may worsen to the point that they must limit their activities or even seek additional medical care. (www.familydoctor.org). Five to fifteen percent fewer vehicle miles are traveled in communities with good walking and cycling conditions than in more automobile dependent areas (*Rails-to-Trails Conservancy*, “The Short Trip with Big Impacts: Walking, Biking and Climate Change” 2007).

### **Economic Development Considerations**

Bike paths create economic vitality in the towns and neighborhoods through which they pass. The resurgence of Collinsville Center is a case in point, so too is the center of Southington with its brand-new trail. These facilities bring customers to the front door of businesses. Safe and convenient pedestrian and bicycle access enables more individuals full participation in the economy. In 2011 the *Orlando Sentinel* noted that the East Central Florida Regional Planning Council reported that three bike paths in Central Florida bring \$42 million to the local economy every year. There are now a preponderance of properly researched academic studies that confirm this success.

Trail-Oriented Development (TrOD) is an emerging planning tool that seeks to combine the active transportation benefits of a trail with the revitalization potential associated with well-designed and well-managed urban parks to help create more livable communities. TrOD aims to provide a network of local business and housing choices within a web of safe and enticing trails. The amenity of the trail provides a pull for home buyers and a new market for local businesses (*Rails-to-Trails Conservancy*, “From Trail Towns to TrOD: Trails and Economic Development”, 2007).

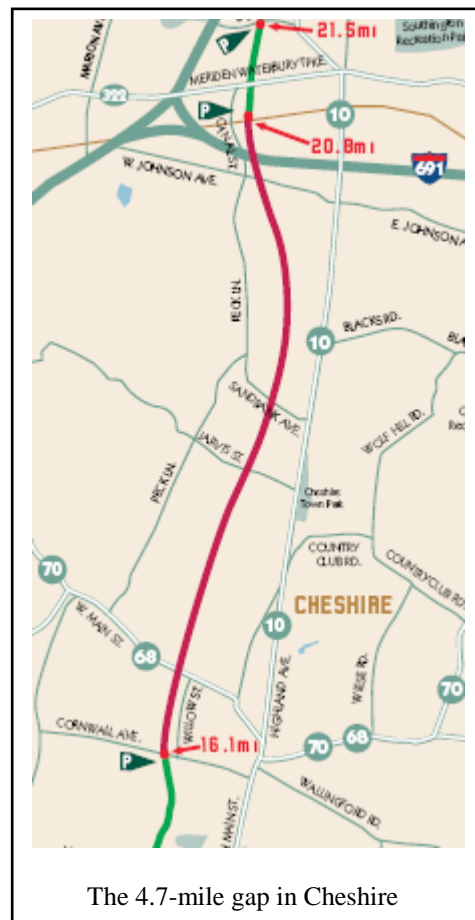
A report of the four federal Nonmotorized Transportation Pilot Program communities found that; 16 million miles were bicycled or walked that would have otherwise been driven in 2012; the number of bicyclists increased 49 percent on average between 2007 and 2010; the share of trips taken by bicycle increased 36 percent; driving mode share decreased 3 percent; and additional biking and walking trips saved the communities \$6.9 million by reducing the economic cost of mortality. (*Federal Highway Administration, 2012*, “Report to the U.S. Congress on the outcomes of the Nonmotorized Transportation Pilot Program SAFETEA-LU Section 1807”.)



From November 2006 to November 2007 the Farmington Valley Trails Council (FVTC) undertook a scientific *Trail Utilization Study*, which was an analysis of part of the Farmington Canal Heritage Trail in Simsbury, Connecticut. Based on the data collected, the FVTC concluded that the Farmington Canal Heritage Trail (FCHT) is heavily used and a major contributor to the economy of the Farmington Valley. A remote sensor laser traffic counter was located on the FCHT beginning in September of 2006. Comparing and contrasting other studies to their results, the FVTC was provided an opportunity to verify the economic impacts on the regional economy. In a full cycle of seasons covering a year, this single part of the trail attracted 110,000 individual visits and generated conservatively \$4 million dollars in revenues for Simsbury and the Farmington Valley. This study also offers more proof of demand in the Greater Hartford area for multi-use trails. Given the gross trail user count of 167,424; estimated trail use would be approximately 110,000 for 2007. Given the prevalence of multiple visits most studies use a multiplier of 6 visits (a blend of multiple studies’ data) to find out the actual number of habitual individual trail users. In this case it would be 18,333 discrete individuals.

Calendar year 2008 data was downloaded from the counter unit (in the same position) in February of 2009. Unfortunately, the detail was lost in a computer crash, and we can only provide the gross count data which was 234,778 for the 12 months of 2008. Part of that growth was the fact that the trail in Simsbury was finally completely finished and through bike/ped traffic increased dramatically from the north and south.

Given the gross traffic count of 234,778; estimated trail use would be approximately 154,249 for 2008, which can be further broken down to a minimum of 25,708 discrete individuals. This equates to a gross year over year increase in usage of 40.2 percent. This also equates to approximately \$5.6 million in economic impact. Using this data it can be found that a peak summer Sunday would show approximately 1,120 trail users. (FVTC, “Trail Utilization Study: Simsbury, Connecticut”, 2008)

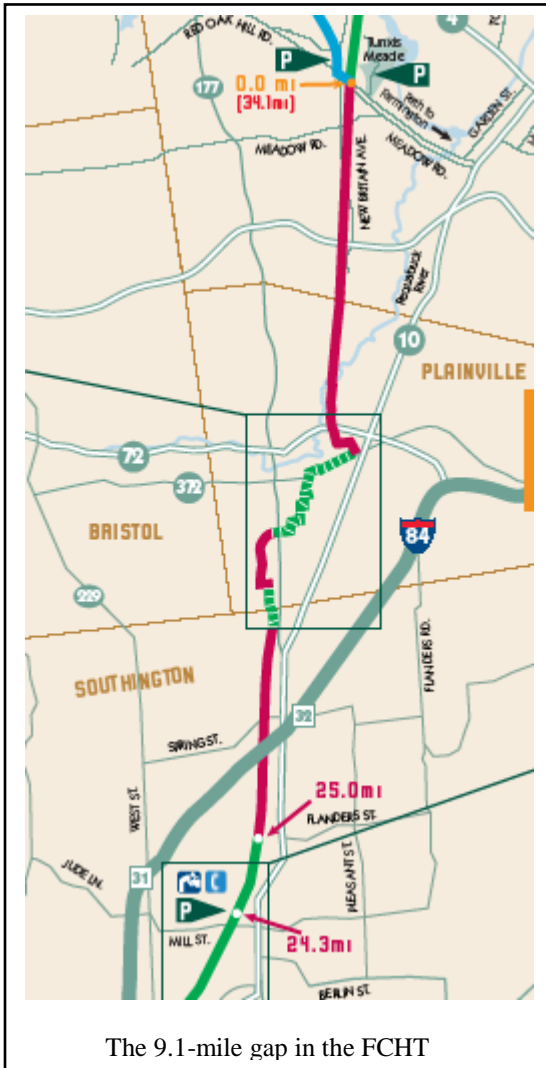


Nationally, bicycle tourists, who are a growing, affluent segment of the tourist market, contribute significantly to local businesses that are well-connected to trails. Along the Virginia Creeper Trail, a 17-mile (one way) "retired" railway corridor of the Virginia - Carolina Railroad in southwest Virginia, visitors spend \$1.59 million annually providing an estimated 27 full time jobs (*Rails-to-Trails Conservancy*, “From Trail Towns to TrOD: Trails and Economic Development”, 2007). Large group rides, bicycling events, local visitors, and day-trippers all purchase food and drinks along a trail and prompt return trips to visit other interesting features in the neighborhood.

The Lancaster, PA *Intelligencer Journal* printed the results of a study on June 4, 2012. It shows the existing 5.5-mile Conewago Recreation Trail and the 15-mile Lebanon Valley Rail-Trail are valued by area residents and stimulate local economies. The trails attracted an estimated 125,244 people in 2011 and pumped \$875,320 into the local economy. Combined with the purchase of durable goods, it's

estimated the trails had a \$1.3 million economic impact.  
 ([http://lancasteronline.com/article/local/661723\\_Study-says-rail-trails-are-a-boon.html#ixzz23Fxpofh](http://lancasteronline.com/article/local/661723_Study-says-rail-trails-are-a-boon.html#ixzz23Fxpofh))

These impacts do occasionally lead to new businesses or jobs, but they can more often make existing businesses more profitable. Walkable, bikeable communities are communities of choice. We know from direct experience with realtors that homes abutting Greater Hartford area trails are in very high demand,



The 9.1-mile gap in the FCHT

sell faster, and for higher prices. *Home Sales near Two Massachusetts Rail Trails* by Craig Della Penna, came out in 2006. He examined sales in the seven Massachusetts towns through which the Minuteman Bikeway and Nashua River Rail Trail run. Statistics on prices and days on the market show that homes near these rail trails sold closer to their list price and much faster than other homes in the area.

The *New York City Department of Transportation* in 2011 reported that rents along New York City's Times Square pedestrian and bicycle paths increased 71% in 2010, the greatest rise in the city.

A good example of the metric of cost vs. rate of return was a recent study in Wyoming. “Biking and hiking trails in Teton County, Wyoming create an annual economic benefit of more than \$18 million. The trail system cost \$1.7 million to build over the last decade.” (Kaliszewski, N. *Jackson Hole Trails Project Economic Impact Study*, University of Wyoming, 2011.)

The Great Allegheny Passage is a 141-mile trail built on abandoned rail lines that stretch from Cumberland, MD to Homestead, PA, just outside of Pittsburgh. A 2009 study reported in the Summer 2011 issue of the *American Trails Magazine* concluded that the GAP hosts over 800,000 trips a year and in 2008 generated over \$40 million in direct annual spending and another \$7.5 million in wages, making the trail an important economic generator for its “trail towns” that benefit hugely from visitor spending.

### A Community Amenity for Families

Quality of life, providing a safe place to learn to ride a bike, spending time with family away from the TV, making connections with your neighbors, fostering pride, walkability and bikeability build community. Surveys, both national and local, have consistently shown the lure of such communities. Many community leaders have been surprised at how trails have become sources of community identity and pride. These effects are magnified when communities use trails and greenways to highlight and provide access to historic and cultural resources. Many trails and greenways themselves preserve historically significant transportation corridors.



Start of the Discover Hartford Tour, 2007

A recent survey conducted by Smart Growth America and the National Association of Realtors indicates that for 72% of the population, having sidewalks and places to walk is an important factor when buying a home. A 2000 Regional Development Issues Survey, conducted for CRCOG by the Center for Survey Research and Analysis at the University of Connecticut indicated that in all three communities surveyed (Hartford, West Hartford, and Suffield), strong majorities (86%, 81% and 65% respectively) agreed that more places where people can walk, rather than drive, from their home to shops, work, and recreation are needed.

### **Trail Construction Realities**

Overall trail costs must include acquisition of land, easements and licenses, trail design costs (feasibility, engineering and town in-house costs) and construction cost including fencing, bollards and trail/roadway intersection improvements (lights, signage, etc.). The vast majority of funding has been 80% Transportation Enhancement dollars from the federal Transportation Acts since ICE-TEA in 1992.

In a very well researched and documented study for the CT Greenways Council in 2010, the engineering firm Vanasse, Hangen Brustlin, Inc. (VHB) of Middletown, CT stated unequivocally that “According to the research material found, the economic benefits of a properly designed and built multi-use trail significantly outweigh the costs associated with the design and construction of the trail.” They went on to say that multiple cost benefit studies [cited within] indicate that ‘...even in poor economic times it makes sense to expend state and federal funds on projects that provide proven economic benefits to the users of the facilities, the businesses in the general vicinity, the property owners adjacent to facilities and which also benefit the environment.’”

Acquisition of land to build out the Farmington River Trail is proving to be difficult north of Route 44 in Canton and Simsbury. Historically, most of the railroad right of ways that our towns have used are owned by the state and leased back. In some areas however, there are legitimate and large costs involved in securing the land to be used. Recently, Konover Corp. has graciously offered to build out the FRT at its CVS site in Canton, providing for a gateway to the northern part of the loop trail across a very active Route 44. Canton would be excited to work with abutting landowners to continue to extend the trail in this area where the ROW has been lost. Design costs could be minimal due to not needing any major engineering and the use of in-house assets.

As for the two remaining gaps in the FCHT, the acquisition of two railroad corridors in Plainville and Southington has proven to be difficult and is holding up activity there. Plainville, uniquely, will have to be a mix of both on-road and off-road as the rail line is still partially active in town. Cheshire continues



to try to fund the final design and construction of their 4-mile gap. It is useful to note for comparison purposes that construction cost for multi-use trail has been approximately \$450,000 per linear mile. Unlike other New England states, Connecticut does not participate in funding at the state-wide level and as a result, funding for initial design and feasibility has been especially difficult as each town must try to find it on their own. A small grant program is run through DEEP, but it cannot come close to keeping up with demand. For additional information, the FVTC has published white papers on design standards, trail barriers, signage, and root remediation among others. They can be found at [fvgreenway.org](http://fvgreenway.org).

**We are pleased to offer this position paper and are at your disposal in our collective advocacy for the completion of the Farmington Canal Heritage Trail and the Farmington River Trail.**

This document has used portions of text and some citations from “*Active Transportation Plan, Metro-Hartford and Region: The Vision for a Walkable, Bikeable Central Connecticut*”. (A presentation to the Rails-to-Trails Conservancy) CRCOG, June, 2008.

R. Bruce Donald, President, FVTC

August, 2012

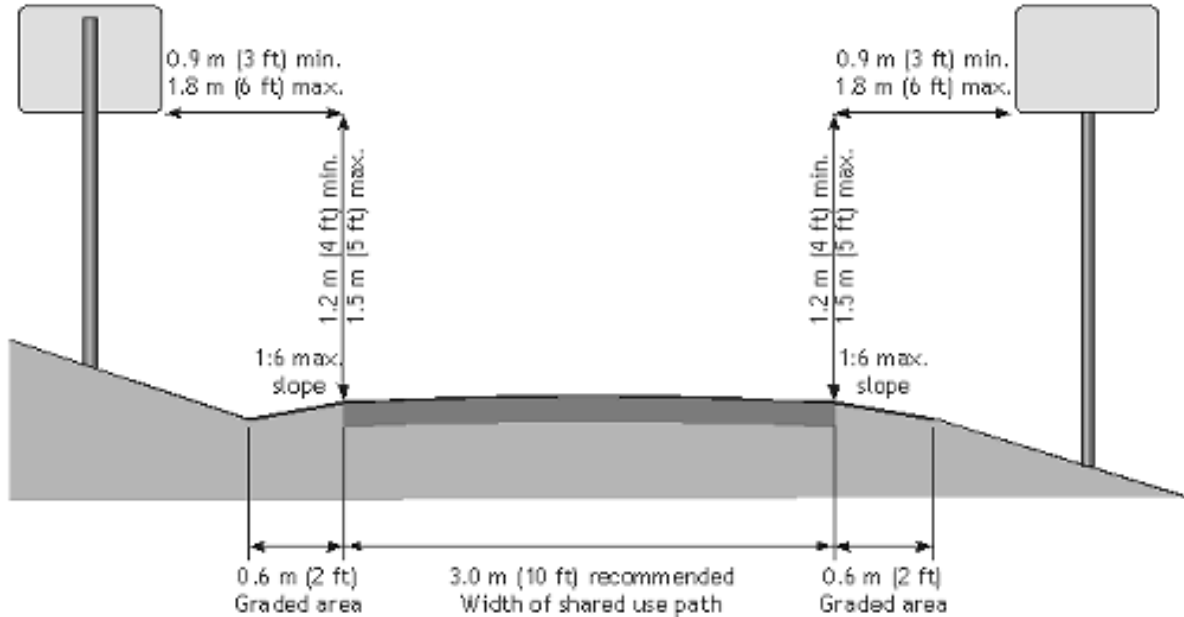
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#### **About the FVTC**

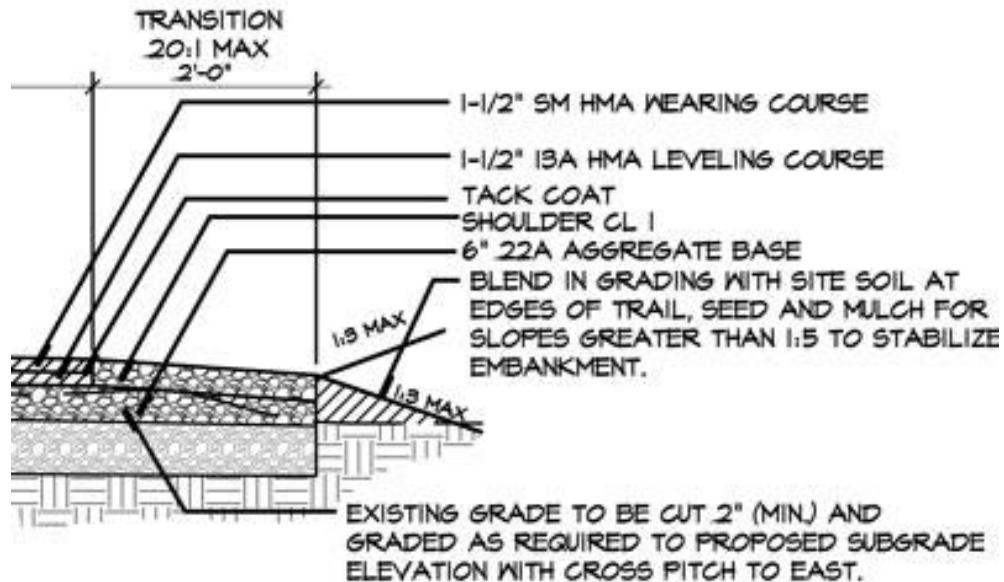
- We use an unusually small amount of money for general operating expenses (4.8%) as we are an all-volunteer organization. The rest goes 100% to the trails and trail programs;
- our current paying membership has gone from 270 to 1,614 in six years;
- volunteerism is important to us, and after the Halloween Storm of 2011, volunteers had 30 miles of trail cleared (along with town crews) in three weeks, and this year we had over 200 volunteers for our 8-town Clean-up Day on April 15<sup>th</sup>;
- annual budgetary spending on construction, amenities and education has gone from \$7,100 to \$47,000 in six years;
- a number of very significant projects including trail amenities, educational programs and actual construction grants have been completed at a total outlay of \$310,000, including both our own funds and outside grants;
- we have become one of the largest rail-to-trail advocacy groups in New England;
- our Adopt-a-Trail program provides basic maintenance for every mile of trail in our 8 completed towns, and now has 64 volunteers;
- we produce the only high quality trail mapping of the entire trail system and print up to 20,000 folding maps per year;
- we created, published and wrote the *Farmington Canal Heritage Trail and Farmington River Trail Guide*. Tariffville, CT: Farmington Valley Trails Council, 2009. (a 22-page spiral-bound comprehensive guide with 11 maps and text);
- we have written a number of white papers on various issues regarding the building, maintenance and safety of the trail system;
- we work closely with our towns (both elected officials and staff), regional planning agencies, and other advocacy groups like CRCOG, CCRPA, the Rails to Trails Conservancy, the East Coast Greenway, the Farmington Canal Rail-to-Trail Association, and many other groups both new and existing;
- we have held Trails-in-Motion, a multi-event walk/skate/ride tour with 400 participants, for the last 15 years on National Trails Day, the first Saturday of June; and
- please see our new Website, [www.fvgreenway.org](http://www.fvgreenway.org) for further information.

## Appendix A: Basic Multi-Use Trail Specifications

### Standard AASHTO Guidelines



### Standard Construction Detail



**Appendix B: Farmington Valley Loop Trail (The FCHT and the FRT)**

