

# ACTIVE TRANSPORTATION PLAN METRO-HARTFORD AND REGION



## The Case for a Walkable/Bikeable Central Connecticut

Presentation to the Rails-to-Trails Conservancy

## **Executive Summary**

The Hartford region looks forward to a future when walking and biking are viable means of transportation throughout the region. Today, more and more people are walking and bicycling, but they are limited by a lack of safe facilities and by concerns (some real and some perceived) for their safety. This Active Transportation Plan lays out the vision for a walkable bikeable community and identifies the actions that will translate the vision to reality.

Already, many positive steps have been taken. The City of Hartford is aggressively pursuing traffic calming and the development of bicycle lanes. Other municipalities have appointed bicycle and pedestrian task forces to identify needed improvements. Several multi-use path systems have been developed throughout the region. Advocacy groups are active in encouraging more walking and bicycling. These actions build upon a basic infrastructure, topography and climate that make walking and biking feasible. This progress can now be taken to the next level, creating a seamless system that enables bicycling and walking, connecting origins and destinations, and effectively linking to the public transportation system.

Safe and convenient bicycling and walking are vital elements of a healthy region. The benefits include improved mobility, a cleaner environment, a stronger economy, improved public health, and a stronger sense of community.

The primary actions recommended by the plan include:

- Complete the East Coast Greenway through central Connecticut.
- Create an on road bicycle network that will link important destinations.
- Continue local trail development.
- Invest in pedestrian safety improvements, including sidewalks.
- Create regional standards for bicycle and pedestrian design.
- Educate bicyclists, pedestrians and motorists.
- Encourage bicycling and walking.
- Provide targeted enforcement of traffic violations.

With this balanced program of improvements, with a focus not only on infrastructure, but also upon education, encouragement, and enforcement, the region will be transformed to a place where biking and walking are reasonable and expected choices for travelling.

## Introduction

*News Bulletin, May 2015: in recognition of National Bike Month, thousands of pedestrians and bicyclists converge upon the state capitol in Hartford to celebrate the rapid transformation of the region into a pedestrian and bicyclist mecca.*

*The groundwork for the transformation was laid in April of 2008 when the Capitol Region Council of Governments adopted its seminal Pedestrian/Bicycle Plan. Implementation began immediately and the infusion of federal dollars enabled by the 2009 Project Funding authorized by the 2009*



*The start of the 2007 Discover Hartford Tour*

*Surface Transportation legislation allowed the priority projects to be completed quickly. Motorists passing the celebration beep their horns in support, since the improved conditions for bicyclists and pedestrians have led to less congested streets and highways. Transit buses deliver many of the celebrants to the Capitol, some making use of the racks on the buses.*

Could this future news story actually come true? A coalition of individuals, businesses, and agencies in the Hartford region answers with a resounding yes. From September 2007 through April 2008, a group of stakeholders has come together to create a vision for a walkable/bikeable region. With staff assistance from the Capitol Region Council of Governments (CRCOG), the group has created a results-oriented plan for making the region a place where bicycling and walking are real options for transportation. The plan has been adopted as the CRCOG Pedestrian/Bicycle Plan and implementation has already begun. The goal of the plan is quite simple: get more people to walk and bike as a form of regular transportation.

This document summarizes the Pedestrian/Bicycle Plan and explains how implementation of the plan can transform the region into the walking and biking mecca we envision.

*Central Connecticut has a very real pent-up demand for more and better options allowing alternative modes of travel, recreation and tourism.*

## Our Vision



We envision a Greater Hartford Region where people will have the choice of being able to walk and bicycle as a way to travel, to be healthy and to relax. This will be a region where authorities, organizations and individuals have recognized the value of walking and bicycling; made a commitment to healthy, efficient and sustainable communities; and worked together to overcome the physical, social and institutional barriers which often limit people's choice to walk and bicycle.

Our vision enables us to imagine a transformed region where population centers are connected and people can ride their bikes or walk throughout the region on dedicated bike and pedestrian paths and ways, free from the increasing costs of automobile travel, pollution and noise.

### Our Specific Goals: By 2015

- all major commute routes to employment concentrations will have appropriate bike facilities (bike lanes, bike shoulders, wide curb lanes, or parallel multi use paths)
- the East Coast Greenway will be completed through the region
- all commercial developments will have safe and convenient pedestrian access
- all new residential development will provide the option of non-motorized access to surrounding neighborhood destinations
- standards for bicycle and pedestrian facilities will have been adopted throughout the region
- all the region's towns will have adopted bicycle and pedestrian plans
- bicycle commuting in the region will have increased significantly (to 5000 individuals)
- one percent of all non-commuting automobile trips will have shifted to bicycling or walking (a shift of 67,000 vehicle miles of daily travel)
- a robust regional trails fund will ensure the ongoing construction of multi use paths.

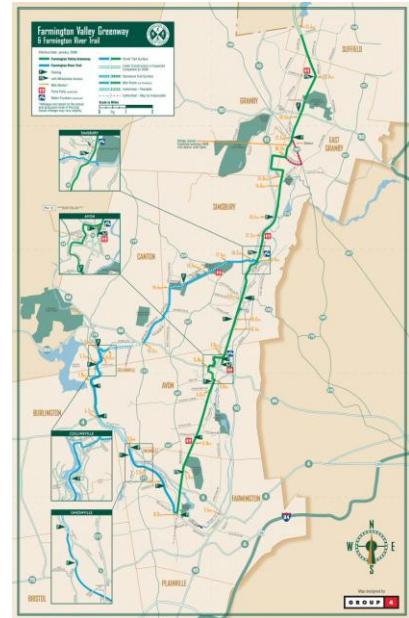
## Why Walking and Biking Matter

Walking and bicycling are low cost forms of transportation that are non-polluting and energy-efficient, and that provide health benefits. For many years, however, they have not been considered legitimate forms of transportation in the Hartford region and little attention has been paid to the pedestrian and bicycling environment or to the needs of pedestrians and bicyclists. Walking is not often considered a form of transportation, even though most trips, whether via automobile or transit, involve some element of walking. By the same token, bicycling is perceived less as an option for transportation and more as a vehicle for recreation. These views have led to a limited transportation system and have prevented the region from reaping the benefits of more walking and biking. On the positive side, the Hartford region, like many other regions in the country and the world, has begun to recognize the value of active transportation and to take steps to improve pedestrian and bicycle access and safety. Several towns in the region have developed committees to examine bike and or pedestrian issues. And, current trends indicate we are in the midst of a biking and walking resurgence which can be nurtured through strategic actions today.

To the west, 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. It is an important completed part of the East Coast Greenway. This greenway, along with the Farmington River Trail now have almost 30 paved miles of multi-use trail which serve and connect the town centers of Collinsville, Unionville, Farmington, Avon and Simsbury. It has become a very popular amenity for recreation, but more importantly, for commutation.

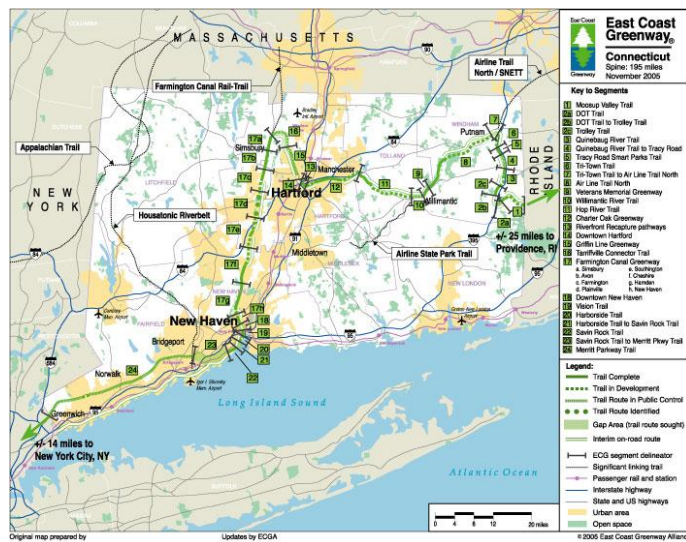


*Newly paved trail in Granby, Connecticut. Part of the Farmington Canal Heritage Trail heading up to the Massachusetts border.*



*The Farmington Canal Heritage Trail*

East of the Connecticut River several trails are in place. In the 1970's, the Town of Manchester pushed for the construction of trails as part of the development of the Interstate highway system. The resulting trails link the residential center of town to a shopping mall on the outskirts of town and four miles of path along Interstate 384 is a part of the East Coast Greenway. The towns of East Hartford, Manchester and Bolton are currently working to extend the East Coast Greenway east to downtown Hartford and west to the Hop River Greenway. The Town of Vernon has nearly 10 miles of rail trail available that link to the East Coast Greenway.



*The East Coast Greenway runs directly through Greater Hartford*

The most hopeful sign for creation of a robust trails system in the region is the City of Hartford's growing interest in creating trails. In the 1990's, the Riverfront Recapture effort embarked on a mission of creating multi use paths along the Connecticut River. More recently, the City appointed a bicycle task force which has identified several promising corridors for trail development. These trails will link with the extensive existing path system in City parks and will create commuter and recreational routes.

Numerous studies and research projects have established the benefits of a walkable/bikeable region. The societal benefits fall into five categories: mobility, public health, economy, environment, and community livability. In addition, there are several benefits that accrue to the individual.

### **Mobility – Walking and Biking**

Until recently, transportation officials viewed mobility in terms of movement of vehicles and not movement of people. When we focus on the movement of individuals, it is clear that walking and biking are essential elements in a region's mobility.

Everyone is a pedestrian. Walking, sometimes considered an "alternate" form of transportation, might better be considered 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. Certain segments of the population are more likely than others to depend upon walking for much of their travel: the young, the elderly, many members of the disabled community, and those who can't afford a car. It is estimated that 30% of the population cannot or does not drive. Likewise, certain segments of the population are more likely than others to depend upon bicycling for much of their travel: particularly the young and those who can't afford a car. **In the City of Hartford, a full 35% of households do not own a car.**

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. **The newly installed (Fall 2007) bike racks on buses are currently being utilized with regularity.**



### Public Health

An obesity epidemic, fueled by sedentary lifestyles has created new urgency for providing close-to-home opportunities for physical activity. Obesity increases the risk of developing many health conditions, including Type 2 diabetes, hypertension, coronary heart disease, stroke, colon cancer, and other cancers, gall bladder disease, osteoarthritis, and sleep apnea. It is estimated that poor diet and physical inactivity lead to 300,000 premature deaths each year, second only to deaths caused by tobacco. And these risks have a cost to the public: **it is estimated that Medicaid and Medicare costs in the state of Connecticut attributable to overweight and obesity are in excess of \$650 million annually**<sup>1</sup>. This includes only direct medical costs and not the costs of increased absenteeism and loss of productivity.

Currently, it is estimated that more than 30% of the nation's adult population is categorized as obese. **A recent estimate indicates that in the City of Hartford, as many as 52% of adults and 32% of children are obese.**<sup>2</sup>

### Pollution/Climate Change

Air pollution is very costly. The American Lung Association estimates the health costs of air pollution, much of which comes from motor vehicle use, at a minimum of \$10 billion a year. 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

<sup>1</sup> Finkelstein, EZ, Fiebelkorn, IC, Wang, G. State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research* 2004; 12 (1):18-24

<sup>2</sup> City of Hartford Health and Human Services Department, Carlos Rivera, Director

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. Those with asthma, are particularly affected by air pollution. **The City of Hartford has extremely high rates of asthma: 41% for children.** During times of heavy pollution, their condition may worsen to the point that they must limit their activities or even seek additional medical care.

Motor vehicles are the chief producers of greenhouse gases. In the capitol region, it is estimated that 41% of the region's air toxics are from mobile, on-road sources. The state of Connecticut, in its Climate Change Action Program has identified increasing vehicle miles traveled (VMT) as a key area for continued growth in greenhouse gas emissions. And the report goes on to say that **“Connecticut's increasingly cleaner cars will be overshadowed by the fact that we continue to drive more.”** Providing safe bicycle and pedestrian facilities will provide more people with the opportunity to forego automobile trips. Studies have found that 5 to 15 percent fewer vehicle miles are traveled in communities with good walking and cycling conditions than in more automobile dependent areas.

### **Economic Considerations**

Bike paths create economic vitality in the towns and neighborhoods through which they pass. Bike facilities and pedestrian facilities bring customers to the front door of businesses. Safe and convenient pedestrian and bicycle access enables more individuals to fully participate in the economy.

From November 2006 to November 2007 the Farmington Valley Trails Council (FVTC) undertook a scientific *Trail Utilization Study*, and analyzed a part of the Farmington Canal Heritage Trail (FCHT) in Simsbury. Based on the data collected, the FVTC concluded that the (FCHT) is heavily used and a major contributor to the economy of the Farmington Valley. Through a remote sensor laser traffic counter located on the FCHT and comparisons to other studies, the FVTC was able to verify the economic impacts on the regional economy. **In a full cycle of seasons, 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.<sup>3</sup>

Communities that enable biking and walking have lower transportation costs per capita, leaving more disposable income available to go into the local economy. It is estimated that the average annual cost to get around in a car oriented city (Houston) is \$8000 versus a cost of \$5000 in a walkable/bikeable city (Chicago). With the drastic increase in fuel costs over the past 12 months, this differential is currently much higher. Automobile transportation also levies a

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<sup>3</sup> FVTC, “Trail Utilization Study: Simsbury, Connecticut”, 2007

community cost: in downtown Hartford and throughout the region significant land parcels lay fallow, serving only as parking lots.

### **Community Amenities 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.

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. **Locally, 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.**



*A rider on the Trail in Collinsville*

Walkable/bikeable communities are communities of choice. Richard Florida in his research and books on the creative class indicates that a disproportionate number of educated, creative knowledge workers choose to live in dense communities that enable walking and bicycling. We know from direct experience with realtors that homes abutting Greater Hartford area trails are in very high demand, sell faster, and for higher prices.

## Current Conditions and Potential

### How Many Walk and Bicycle?

Census statistics indicate great potential to increase walking and bicycling in the region as a means of commuting to work. While the rate for walking to work decreased from 1990 to 2000, it increased to a rate higher than 1990 in the 2006 census update. Likewise, bicycling mode share was very low in 1990 and 2000, but increased by 50% from 2000 to 2006.

#### Hartford Region Commutation Statistics

	% Travel to Work: Bicycle	% Travel to Work: Walk
1990 Census	0.16%	3.04%
2000 Census	0.17%	2.53%
2006 American Community Survey	0.26%	3.12%

Based on bicycle and pedestrian usage statistics in other cold weather cities (Burlington, VT, Boulder, CO, and Portland, OR), we can reasonably expect to double the walking rate and increase the biking rate tenfold.

### What Actions Can Increase Walking and Biking?

**An Active Transportation Initiative Survey was developed to learn about the barriers to walking and bicycling in the region.** The survey, conducted in 2007, was not administered in a statistically scientific manner; rather, it sought to learn the viewpoint of individuals with some interest in walking and biking in our region. The survey was set up to distinguish responses from those who walk or bike infrequently and those who walk or bike regularly. The survey indicates that many individuals would like to walk and bicycle more, but are prevented from doing so by development patterns and the lack of safe routes. Survey respondents called for:

- Changes in development patterns that result in shorter walking distances.
- Investments in sidewalks, bike lanes, wide shoulders, wide outside lanes, and multi use trails. (Infrequent bicyclists are most concerned with having separate space; more experienced bicyclists are more willing to bicycle on the road.)
- Provision of bicycle parking facilities, with a mix of lockers and racks.
- Provision of shower facilities convenient to employment locations.
- Expansion of transit service with bike and pedestrian access to stops, stations, and commuter lots.
- Enforcement of traffic regulations.
- Printing and promotion of maps showing safe and convenient bicycle routes.
- Education on safe riding skills.
- Education on sharing the road, for bicyclists, pedestrians and motorists.
- Events which encourage individuals to try biking and to try walking.

## Making the Case: What Can Be Achieved in the Hartford Region?

### Quantifiable Benefits

To analyze the potential for a shift in travel choice from motor vehicle to walking and biking, we looked at the transportation patterns in the CRCOG region, other communities in the United States, and the United States as a whole. A combination of three different sources of data was used in our analysis: the CRCOG Transportation Model, US Census figures, and the National Household Travel Survey. Each data source has its own strengths and weaknesses, but by combining the information, *we estimate that we can realize significant savings in emissions and fuel costs by achieving a reasonable mode shift to walking and bicycling.*

### Commute Trip Shifts

Looking first at work trips, we estimate that as many as **5,000 to 10,000 commuters** can be expected to bicycle to work, if investments are made in bicycle facilities and encouragement, education, and enforcement programs. We believe this four to eightfold increase in bike commuters over the 2006 Census update is realistic. To achieve the lower estimate the region would need equivalent growth in its bicycle commute mode rate as was experienced in Portland, Oregon from 2000 to 2006, a time in which Portland focused upon creating a network of bicycle lanes. To achieve the higher number the region would need to reach the actual mode share experienced by comparable cold-winter cities in 2006, including Madison, WI; Portland, OR; and Boulder, CO. Looking closer to home, we examined the bicycle commute mode rate for the census blocks accessible to the Charter Oak Greenway in Manchester. Looking only at workers who commute to downtown Hartford, we found that in the 2000 census (detailed town by town information is not available in the 2006 update) this group already had a mode share for bicycling 10 times the regional average, again, making our high estimate appear reasonable. Finally, we used a method recommended by the Federal Highway Administration to estimate possible bike commuters by looking at the potential bicycle commuting population, those between the ages of 22 and 44. This again resulted in an estimate of 10,000 likely additional bike commuters.



Commute trips are extremely important when we consider shifting trips to other modes. While many more miles of travel are made on a daily basis for trip purposes other than work, work trips occur in the time periods that our roads are most heavily used. Subtracting trips during these periods has the greatest positive impact upon the operation of the transportation system.

### Non-work Related Trip Shifts

Non-work related trips are important to consider if we want to understand the potential impact of investing heavily in bike and pedestrian facilities and programs. According to the National Household Travel Survey, work-related trips represent less than 20% of all the trips that take place on a daily basis. Furthermore, the NHTS indicates that approximately 40% of trips are 2 miles or less. In addition, 70% of all trips are less than 5 miles with over 80% of those made in a motor vehicle. This indicates a vast pool of trips that might be converted to bicycling and/or walking. To estimate the potential shift in trips, we examined the mode share for walking, bicycling and motor vehicle (according to the NHTS) for trips of various lengths. Assuming that we could increase bicycling and walking mode share for non-work trips less than 5 miles by 10%, we estimate that we could eliminate 32,000 daily vehicle miles travelled (VMT). Looking at auto trips and assuming that we might shift as many as 1% of auto trips under 5 miles to biking and walking results in a daily VMT savings of 67,000. Finally estimating “reasonable” mode split percentages for bicycling and walking in each trip length category under 5 miles, we estimate the same **daily savings of 67,000 VMT**.

### Resulting Benefits

To assure that our calculations of resultant benefits are conservative, we have evaluated a range of savings in total VMT, fuel, and emissions saved, by assuming a low of 5,000 commuters and 32,000 daily VMT savings to a high of 10,000 commuters and 67,000 VMT. We expanded the daily estimates of change in travel to annual numbers by assuming that the daily totals can be applied 40 weeks out of the year and 3 days a week. This acknowledges weather issues. We also assume that the average bike commute trip length is 4 miles in each direction. This results in an **annual reduction in VMT of 8.8 to 17.4 million miles** and the following reductions in emissions. The VMT reduction compares quite favorably with estimates of VMT reduction for transit investments. Investments in a walkable/bikeable region are likely to enable even higher mode shifts for such transit projects.

#### Estimate of Benefits

<b>Estimated Reduction in Emissions and Fuel Use for Mode Shift to Bicycling and Walking</b>	
<b>Greenhouse Gas Emissions (lbs.)</b>	<b>8.8 to 17.4 million</b>
<b>NOx (lbs.)</b>	<b>11,000 to 21,000</b>
<b>Hydrocarbons (lbs.)</b>	<b>7,000 to 14,000</b>
<b>Carbon Monoxide (lbs.)</b>	<b>142,000 to 278,000</b>
<b>Fuel (gallons)</b>	<b>440,000 to 870,000</b>
<b>Fuel (cost)</b>	<b>\$1.3 to \$2.6 million</b>

## Recommendations: What needs to be done?

This section summarizes how to transform the region into a truly walkable/bikeable place. The actions are listed in topical areas and not in priority order (with the exception of the Trails recommendations, listed in Recommendation 4). It is expected that CRCOG will lead the implementation effort, but that participation of other stakeholders – businesses, advocacy groups, and the region’s municipalities – will be essential for success.

Studies and experience in other regions have demonstrated that, in order to be successful, a Pedestrian and Bicycle Plan must include strategies in the four “E’s”, Engineering, Education, Encouragement, and Enforcement. While improvements to infrastructure are vital, if they are not accompanied by efforts in the other areas, the infrastructure improvements will not realize their full potential.

### A. Engineering

The best strategy for the creation of a world class bicycle and pedestrian infrastructure is region-wide adoption of a **Complete Streets Policy**. Complete Streets is a movement that has been gaining steam over the past several years with many states and cities around the country adopting complete streets policies. Put quite simply, complete streets acknowledges that our roads and streets have many users and can only be considered complete if they meet the needs of all users. A road that handles motorized traffic effectively and efficiently, but does not provide for bicyclists, pedestrians, or transit users, is incomplete. A complete street is one that provides safety and convenience for all road users: pedestrians, bicyclists, transit users, and motorists.

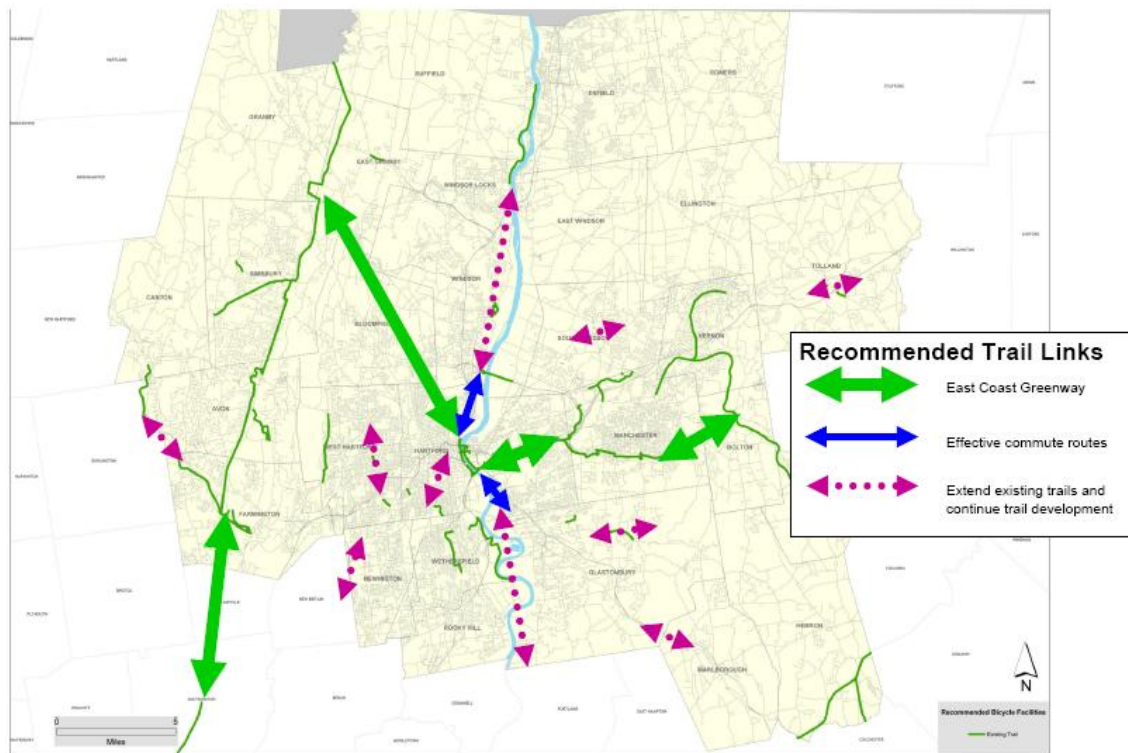
**Recommendation 1:** CRCOG will work with three towns per year to encourage the adoption of Complete Streets policies. We will develop information on the basics of such a policy, the impact and benefits of complete streets, and how complete streets can be implemented.

**Recommendation 2:** CRCOG will provide resources to towns to assist them in understanding bicycle and pedestrian needs and in designing bicycle and pedestrian facilities.

- Create a survey document that can be used by town staff or advocacy groups to identify pedestrian infrastructure needs.
- Develop regional design guidelines and guiding principles for pedestrian and bicycle facility design. This will also include the production of a checklist for site plan review. Develop regional trails maintenance guidelines.
- Data collection: CRCOG will develop a biennial program for sampling of pedestrian and bicycle volumes to provide a measure of pedestrian and bicyclist activity and to allow a focus upon areas with high levels of activity. CRCOG will also work with our Public Safety committee and an ongoing DOT effort to improve access to crash data to create more readily available pedestrian and bicycle accident data.



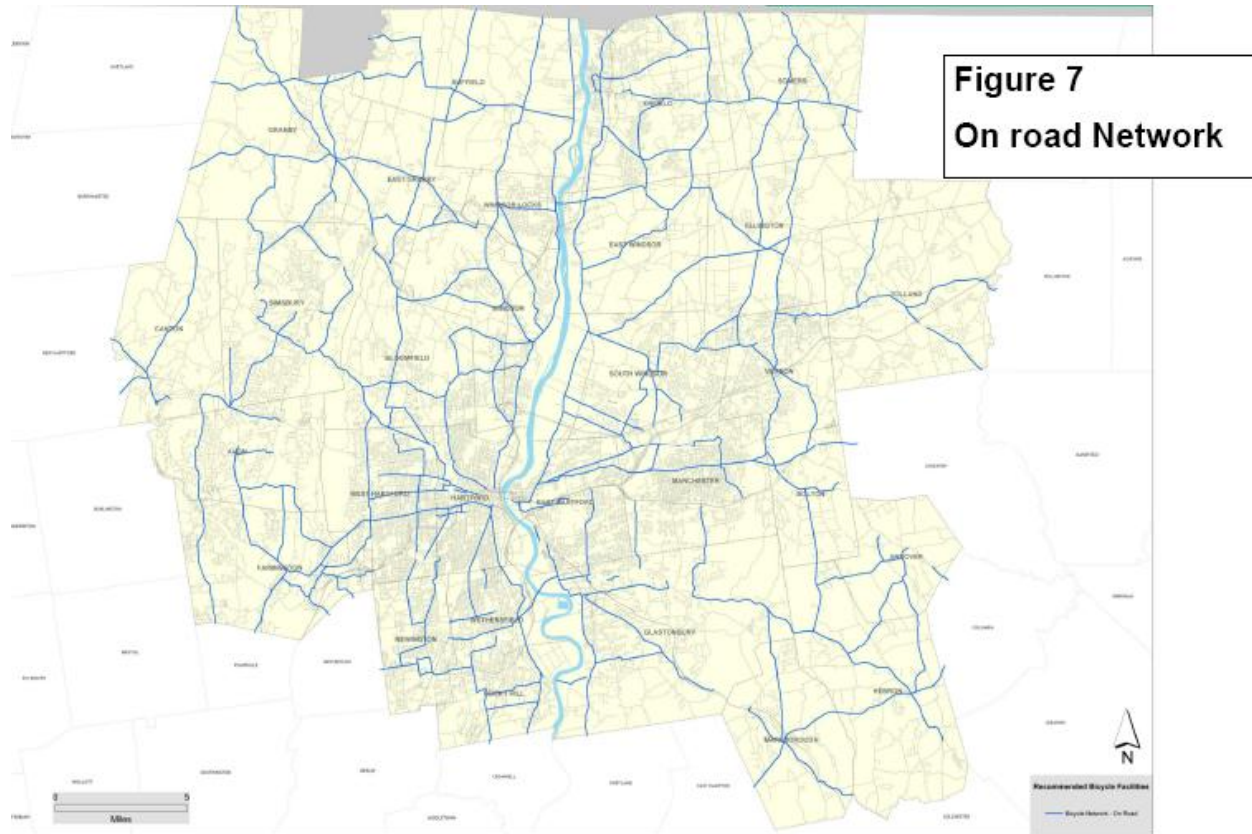
- Complete trails that can serve as effective bicycle commute routes. This includes very short trail segments extending north and south along the Connecticut River that will effectively connect large numbers of commuters to downtown Hartford.
- Extend other existing trail systems and continue local trail development.
- Create a regional trails fund. This fund will provide a vehicle for private donations for the development of trails. There has been no concentrated effort in the region to solicit or allow for individual and corporate donations to trail development and there appears to be great potential for this.



**Recommendation 4:** Provide other needed bicycle facilities.

- Create an on road bicycle network. Because it is impossible (due to funding constraints and lack of available rights of way) to create an extensive off road bike network that will serve all bicycle trips, the road network will provide the backbone of the region's bicycle infrastructure. The following map identifies those roads that are needed to provide effective linkage for bicyclists between towns and to commercial locations within towns. It includes linkages to the existing and proposed trail systems. It should be noted that this network does not illustrate recommended bicycle routes but shows the network needed to provide adequate access. These roadways need to be examined to determine if they are currently adequate for bicyclists and if not, what improvements will be needed. The map

is an important planning tool for towns and for the DOT. The map, with a list of roadways, will ensure that going forward, road projects include bicycle accommodations.



- Develop a campaign for a proliferation of bicycle racks.
- Provide bike stations at 2 locations, one in downtown Hartford, and one in the Day Hill Road corridor, where there is a concentration of employment, second only to downtown Hartford, and where many residential neighborhoods are located within easy bicycling distance.

## B. Education

Building bike lanes, trails, sidewalks and other facilities are important, but providing facilities alone will not cause vast numbers of people to change their travel mode. One of the big stumbling blocks in encouraging individuals to try bicycling and walking for regular transportation is that they feel very vulnerable to motor vehicle traffic, even with facilities provided. Furthermore, many pedestrians, bicyclists and motorists do not have a clear understanding of their respective rights and responsibilities on the streets and highways. Therefore, educational programs targeting all three groups: motorists, pedestrians, and bicyclists, are essential. Efforts designed to educate system users about basic traffic laws, need to be made regularly and will require ongoing collaboration between citizens, interest groups, and government agencies.

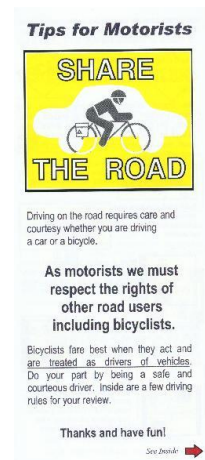
Getting the public to safely use the facilities by teaching safe user skills and demonstrating that walking and biking provides real benefits are equally important and support behavior change. Our strategy in the education area is to build upon existing programs and to build coalitions where this is possible.

**Recommendation 5: Educate Pedestrians:** The focus will be upon the City, where there are more pedestrians and will focus upon crosswalk law, the meaning of pedestrian signals, and how to be visible at night. Elements of this recommendation include the creation of an elementary level pedestrian safety education resource kit to be distributed to each town. Also the FHWA Pedestrian Safety Campaign Planner will be modified for local use.

**Recommendation 6: Educate Bicyclists:** This recommendation has several different elements, focusing upon different types of bicyclists. Firstly we will create an elementary level bicycle safety education resource kit to be distributed to each town. We will build upon the success of an existing middle, and high school bicycle education program. We will initiate adult education by adopting the League of American Bicyclists Cycling Instruction Program as the regional standard and train at least 10 League Cycling Instructors.

**Recommendation 7: Educate motorists and the general public:** There is compelling need for education of motorists of the rights and responsibilities of road users, including bicyclists and pedestrians. Many motorists believe that bicycles should not be on the road at all. Few motorists recognize their obligation to yield to pedestrians at crosswalks. The most effective campaign to educate motorists would be one conducted statewide, but for lack of such a program, we recommend the following actions be taken locally:

- Print additional Share the Road brochures that show how motorists and bicyclists can share the road.
- Develop a pedestrian Share the Road brochure and have copies printed.
- Create a media outreach campaign based upon the share the road brochures.



### C. Encouragement

Encouragement activities are essential if we want to convince individuals to give bicycling and walking a try for regular transportation. Our culture has become so accustomed to the car as the primary means of getting around, that those considering biking and walking need an extra push to convince them that walking and bicycling are doable and are effective ways to get around. For those considering bicycling, frequently they need to get some practice riding in group rides to develop confidence in their skills and abilities. Traffic can be daunting, so encouragement, combined with education is usually needed. There are many encouragement activities already taking place in the area and we propose building upon them. It is important the encouragement

activities target a variety of ages and income classes and that they take place throughout the region.

**Recommendation 8:** Build upon programs already existing in the region.

- CRCOG will continue to offer its Safe Routes to schools workshop series annually.
- Build upon the Central Connecticut Bicycle Alliance's existing programs: Bike Everywhere/to Work program and Discover Hartford Walking and Bicycling Tour.
- Provide towns with resource kits on encouragement programs.
- Working with corporate partners, build upon existing wellness programs.



**Recommendation 9:** Create a regional bicycle map. This task should not be tackled until more of the region's bicycle infrastructure is in place.

**Recommendation 10:** Develop a centrally available bicycle rental program, much like vel-lib available in Paris.

#### **D. Enforcement**

Enforcement is the final E and it is an essential element in a bicycle and pedestrian plan. Enforcement increases awareness of pedestrians and bicyclists and improves driver behavior. Partnered with a strong share the road campaign, it reinforces the share the road message. Bicyclists and pedestrians told us in our survey that they are very concerned with inattentive drivers. There is a particular need for enforcement related to yielding at crosswalks and in general.

**Recommendation 11:** Ensure that police officers are well informed relative to bicycle and pedestrian rights and responsibilities on the road.

- Create a bicycle and pedestrian law fact sheet that can be distributed to police officers in the region.
- Using successful programs from other states, develop resources that can be used for teaching bicycle and pedestrian safety in the police academy.

- Develop a targeted crosswalk enforcement program.

### What Will it Cost?

The major factor that might limit the region's ability to achieve its vision for a Walkable/Bikeable Hartford region is the availability of funding. Many of the elements of the plan can be accomplished at little or no cost, but significant investments are needed, particularly in infrastructure. The following table lays out a plan for investing \$50 million dollars to achieve a more walkable/bikeable region.

ITEM	COST
Investments in Trails	\$19,000,000
On Road Bicycle Facilities	\$15,000,000
Bike parking/other amenities	\$1,000,000
Pedestrian Facilities	\$14,100,000
Encouragement	\$250,000
Education	\$350,000
Enforcement	\$300,000
TOTAL	\$50,000,000

The region stands committed to becoming more walkable and bikeable. The availability of funding will determine how quickly we reach our vision. Over the next 12 months, the region plans to begin a program of regular education of bicyclists, to offer workshops on Safe Routes to Schools and how to become a Bicycle Friendly community. We will seek opportunities to implement the identified capital improvements as part of other transportation projects to the extent possible.

## Opportunities

### Why the Hartford Region?

The Hartford region has a deep history that recommends it for investments in bicycle and pedestrian infrastructure. The City of Hartford is the home of the nation's first voter-approved publicly financed park, and in the early 20<sup>th</sup> century its park network was recognized as one of the best in the nation. The parks continue to provide attractive routes for bicycle trips. In the early 20<sup>th</sup> century, the Hartford region was a hotbed of bicycle activity: the Columbia Bicycle Company was producing bicycles on its assembly line at a rate of one bicycle per minute. The Good Roads movement got its start through the efforts of Hartford citizen and Columbia Bicycle Company owner Col. Albert A. Pope. Pope also founded the League of American Wheelman (now the League of American Bicyclists.)

As development progressed in the 20th century, however, the City and the surrounding region focused upon automobiles for transportation and lost track of their wonderful bicycling legacy. In the 1970s and then again in the 1990s a band of visionaries began to buck the trend, laying out and building multi use paths segments and demonstrating that residents would use these facilities.

Today the region is at a crossroads. Investments over the next 10 years can knit the trail segments together, creating a functional network that will enable individuals to bicycle throughout the region. Failure to invest today will leave the region with short trails and short segments of bicycle lanes, used mostly for recreational travel and largely unavailable for regular people for regular transportation needs.

### Likelihood of Success

There are many indicators in the region that enable us to predict success with this plan.

**Local Efforts:** The City of Hartford and the surrounding region appear to be ready to commit to a walkable bikeable future. The City of Hartford, with its grid street system and compact development, is easily made more walkable and bikeable. The City has committed to a program of traffic calming that has already resulted in the installation of bicycle lanes and improvements in walkability. It is now closely examining river and rail corridors for expansions to its parks trail systems. In addition, it sought and received CMAQ funding for installation of bike parking racks. It has developed traffic calming plans for its major arterials, with sufficient funding, these plans can become reality.

The surrounding towns have recognized the value of investments in pedestrian and bicycle facilities with the growing popularity of the existing multi use paths. Throughout the region, citizen committees and task forces are endeavoring to improve walkability and bikeability on a town by town basis. This Active Transportation plan will provide synergy for these disparate efforts, to create a truly walkable and bikeable region.

**Regional Efforts:** The Capitol Region Council of Governments has committed itself to achieving this vision by adopting the Regional Pedestrian/Bicycle Plan and by passing a resolution in support of the Active Transportation Campaign. Over the past several years CRCOG has sponsored annual design workshops on bike and pedestrian issues.

Bike racks have been installed on all CTTransit buses in the Hartford division.

**State Efforts:** The state of Connecticut is committed to investing in alternate modes of transportation. The DOT is currently updating its bicycle and pedestrian plans and recently formed a statewide Bicycle and Pedestrian Advisory Committee. The 2007 Connecticut Climate Change Action Plan Progress Report notes a key area for action is decreasing vehicle miles travelled in the state.

The state legislature has passed 2 important pieces of legislation: State Bill 5746, passed by the state legislature in May 2008, provides for a 3 foot passing law (for motor vehicles passing bicycles) and addresses the need for a statewide Share the Road campaign. In 2007 the state legislature approved the development of a fund for bicycle facility development. This fund, when implemented, will provide \$6 million per year.

Share the road language was added to the Department of Motor vehicles manual which addresses pedestrian and bicyclist rights and responsibilities and related motorist responsibilities on the roads of the state.

**Advocacy Efforts:** A regional bicycle advocacy group, the Central Connecticut Bicycle Alliance, was formed in 2005. This organization has taken over responsibilities for the Bike to Work program developed by CRCOG, is currently running a “bike everywhere” promotion, and held a bicycling and walking tour in Hartford in September 2007 which attracted over 1300 participants.

The state wide AARP chapter has expressed an interest in the development of walkable communities locally.

Local trail advocacy groups have been active in urging completion of existing trails and extensions to new areas. The Farmington Valley Trails Council has been effective in pushing forward the completion of the Farmington Canal trail in the region. The Connecticut Forest and Parks Association, currently responsible for hiking paths, has begun investigating involvement with multi-use paths.

The Active Transportation Initiative Working Group created to oversee the development of this plan included individuals from all walks of life and areas of the region.

**Regional Characteristics:** The region is characterized by rolling hills, which are well suited for bicycling. In addition, the density leads to relatively short trip lengths. With average temperatures above freezing 9 months of the year, bicycling and walking are viable for much of the year.

The development of this Active Transportation Plan was overseen by a hardworking group of volunteers representing a diverse set of interests. Representatives from the following organizations participated:

**State agencies:**

Connecticut Department of Transportation  
Connecticut Department of Environmental Protection  
Connecticut Department of Public Health

**Advocacy Organizations:**

AARP  
Central Connecticut Bicycle Alliance  
Connecticut Bicycle Coalition  
Connecticut Forest & Parks Association  
Connecticut River Heritage Trail  
Farmington Valley Trails Council  
Hartford Preservation Alliance  
Riverfront Recapture, Inc.  
West Hartford Bicycle Task Force

**Health Care:**

Connecticut Association of Directors of Health  
St. Francis Hospital

**Educational Institutions:**

Berlin High School  
Goodwin College  
Hartford Public Library  
Trinity College

**Corporations**

Aetna  
CIGNA  
Northeast Utilities

**Government**

State and local elected officials  
Municipal and regional staff

**Individuals**

Various individuals coming from a variety of backgrounds, with professional skills in transportation and/or a keen interest in the walkability and bikeability of the region.

The Working Group provides the foundation for a **Coalition** which will steer the plan to implementation.

## Capitol Region Council of Governments

241 Main St., Hartford, CT 06106

### Resolution Endorsing the Active Transportation Campaign

**WHEREAS**, the Capitol Region Council of Governments recently adopted an updated Pedestrian/Bicycle plan which is targeted toward facilitating greater use of biking and walking for regular transportation (active transportation); and

**WHEREAS**, funding is needed to enable realization of the goals of the newly adopted Pedestrian/Bicycle Plan; and

**WHEREAS**, federal legislation, SAFETEA-LU, created the Non-motorized Transportation Pilot Program for the construction of a network of non-motorized transportation infrastructure facilities in urban communities to demonstrate the extent to which bicycling and walking can carry a significant part of the transportation load and play a major role in transportation solutions; and

**WHEREAS**, a national non-profit multi-modal transportation advocacy organization, the Rails-to-Trails Conservancy, seeks to expand this program in the next federal transportation reauthorization to include at least 40 communities, with \$50 million per community over six years, to promote "active transportation" (trails, biking and walking) for mobility; and

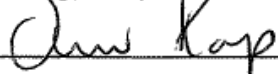
**WHEREAS**, the Rails-to Trails Conservancy has identified the Hartford region as a potential candidate for the expanded program, called the 2010 Campaign for Active Transportation; and

**WHEREAS**, municipalities in the CRCOG region and CRCOG itself continue to plan and develop active transportation infrastructure to:

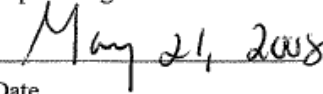
- Improve air quality
- Promote economic diversity and vitality
- Decrease dependency on carbon fuels
- Relieve motorized traffic congestion
- Improve the efficiency of transportation infrastructure
- Create safe alternate transportation routes
- Promote healthy lifestyles

**NOW, THEREFORE, BE IT RESOLVED** that the Capitol Region Council of Governments supports the 2010 Campaign for Active Transportation, which has a goal of significantly increasing federal funding for walking and bicycling facilities.

*I certify that the following is a true copy of the resolution adopted by the CRCOG Policy Board at its meeting on May 21, 2008.*



Susan Karp, Secretary  
Capitol Region Council of Governments



Date