

CAPITOL REGION BICYCLE PLAN

EXECUTIVE SUMMARY

The Capitol Region Bicycle Plan was developed under the guidance of the Bicycle Subcommittee of the Capitol Region Council of Governments' (CRCOG) Transportation Committee. The Subcommittee was formed in November 1998 and its membership included representatives from each CRCOG member town, from the Connecticut Department of Transportation, as well as citizens at large, including members of the Connecticut Bicycle Coalition. Anita Mielert, First Selectwoman of Simsbury, chaired the Subcommittee throughout the development of the Plan.

INTRODUCTION

Bicycling is a **low-cost** transportation alternative that is **non-polluting, energy-efficient**, and provides **health benefits**. Bicycling can be a form of recreation, or an individual's primary means of transportation. Using a bicycle as a primary transportation means, or mode, has also been shown in heavily congested areas to **reduce traffic congestion** and **improve air quality**. Bicycles provide an efficient form of transportation to all socioeconomic levels at a very low cost. Additional benefits of bicycle use include a **reduced requirement for roadway and parking space** per traveler.

The historic and current trend in America is a continued outward growth through suburban development, which is quite apparent in the Capitol Region. This trend, while prevalent throughout our country's history, has been facilitated in the last 50 years by the availability and the convenience of the personal automobile. Over the years in the US, the bicycle has been used less as an option for transportation and more as a toy for recreation. Currently in the Capitol Region, less than 1% of all trips are made via bicycle. Longer trip distances, easy availability of automobiles, and seemingly limitless investment in facilities to move automobiles have all contributed to this situation. Also, heavy traffic and high vehicle speeds on popular arterials have made bicycling appear to be too dangerous for the average individual.

Although bicycling, indeed, has become more difficult, and in places, more dangerous, transportation agencies have begun to recognize the value of cycling as a transportation mode and consumer choice. In areas where the bicycle has been planned into the roadway system, the percentage of bicycle trips is significant. For example, in Davis, CA over 20% of all trips are made by bike and in Madison WI, 11% of all work trips are by bicycle. Since 1991, Federal Transportation Policy as expressed in the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and the 1997 Transportation Equity Act for the 21st Century (TEA-21) has recognized bicycling as an essential element of a more balanced intermodal transportation system. With this Plan, the Capitol Region Council of Governments recognizes the need to make cycling a more viable option in the Capitol Region.

The Capitol Region has a rich history of involvement in the bicycling industry. Col. Albert A. Pope founded the Pope Manufacturing Company in 1877 (which eventually produced one bicycle per minute at its Capitol Avenue factory) and is considered the father of the American bicycle industry. At the turn of the last century cycling was a popular way to travel and the cyclists'

demands for better roads led to the modern highway movement. As the following photo shows, cyclists sometimes “ruled the road” in Hartford.



With a resurgence of interest in bicycling in the Capitol Region today, it seems the time has come to recapture the legacy of Col. Pope. Surely the Capitol Region can re-establish itself as a leader and innovator and become a model for bicycle friendly regions. This Bicycle Plan is committed to moving in that direction as evidenced in its Vision.

OUR VISION

This Plan is based in a Vision:

That by the Year 2010, residents and visitors of the Region will be able to safely and conveniently walk, bicycle, or take another type of non-motorized vehicle via roads and multi-use trails, to employment centers, shopping areas, bus and train centers, recreation and cultural attractions, and schools. Residential and commercial land use planning and development will incorporate walking and bicycling as legitimate transportation modes, providing people of all ages with efficient and enjoyable transportation options within development clusters and to nearby destinations. It is our intent that such steps will promote a sense of community and friendliness in our communities, while enhancing our appreciation of the natural environment.*

It should be recognized that to realize the vision established through adoption of this regional bicycle plan, State, regional, local, public/private, and non-profit agencies must participate in a positive partnership working cooperatively toward a common set of goals wherever and whenever opportunities arise. CRCOG will need to maintain a primary focus on nurturing the regional characteristics of the plan and planning logical connections to local systems. The local agencies will need to focus on extending and complementing those regional connections to better serve their communities. ConnDOT and DEP will need to focus on accommodating the needs of motor vehicles and bicycles sharing State roadways and developing bike trails through parklands, rail and utility corridors, and other open spaces. By working together, the involved agencies can establish a viable system of safe and enjoyable bicycle facilities that meets the needs of the Capitol Region’s bicycling community.

LEARNING FROM THE EXPERIENCE OF OTHERS

In order for the Capitol Region to become bike friendly many actions are required. No single action can be taken to implement the Plan’s vision; rather action in several areas is required. By

examining programs in bike friendly communities across the country we have discovered characteristics which lead to bike friendliness. It is important to note that climate is NOT the determining factor of how bike friendly a place is, rather, strong public policy with governmental support is the major determinant in a community's success in becoming more bike friendly.

• **COMMON CHARACTERISTICS OF BIKE FRIENDLY COMMUNITIES:**

- A commitment to a **“share the road” ethic**.
- Strong **public education** programs.
- A willingness to **commit funding** to realize improvements in conditions for cycling.
- **An emphasis on renovating existing streets in urban areas** because they are already in place and best meet travel needs.
- A recognition that long-term success relies upon **good road design** that addresses cyclist needs.
- Involvement of **community based cycling advocacy groups** in planning and implementation.
- A willingness to address cyclist needs through **zoning codes**.
- **Cooperation** between all levels of government, and a variety of agencies.
- **Long-term commitment** to planning and designing for bicyclists.
- **Long-term recognition** of cycling as a viable mode of transportation.

EXISTING IMPEDIMENTS TO REACHING OUR VISION

Using a variety of study techniques: surveys of cyclists, interviews with municipal officials, field surveys, and public meetings we have gathered information on the difficulties associated with cycling in the Capitol region today. There are many reasons why individuals choose to use, or not to use bicycles as a means of travel (and/or recreation); the following are the major impediments.

- Motorists and cyclists do not understand the “rules of the road” as they apply to cyclists.
 - Most motorists do not respect the cyclist right to use the road
 - Most cyclists do not understand how to ride in traffic (cf. to ride in the same direction as traffic, to obey traffic signals)
- Streets that “get people where they want to go” do not feel safe for most cyclists.
 - Narrow shoulders
 - High speeds
 - High volumes
 - Bikes prohibited
- Sufficient bicycle parking is not available.
- Trail system is not extensive enough to replace on-road travel.
- Lack of awareness of where cyclists and planners can go to access information regarding cycling (including location of facilities, rules of the road, educational resources)

Overall, our cyclist research results have highlighted two overarching issues for cyclists in the Capitol Region:

- **Cyclists need adequate physical space on roadways - within curb lanes or shoulders.**
- **The safety and comfort of cyclists depends on a multi-modal “Share the Road” ethic.**

The interdependence of these issues supports a planning approach, which develops parallel programming for both public education and facilities/engineering.

PLAN TO REACH OUR VISION

Our Plan to overcome the impediments to bicycling and achieve our vision of a bicycle friendly Capitol Region is contained in five major recommendations:

- 1. Facilities**
- 2. Education and Enforcement**
- 3. Pro Cycling Culture**
- 4. Planning and Administrative Supports**
- 5. Funding**

Each of these areas is discussed below.

1.0 IMPROVE FACILITIES

There are four elements to our recommendations to improve facilities for cyclists.

1.1 REGIONAL GREENWAY SYSTEM

The priority with regard to the region’s Greenway system is to link the trails being developed east of the Connecticut River (the Charter Oak Greenway) with those being developed to the west of Talcott Ridge (the Farmington Canal Greenway) to provide a connection through Hartford. A specific location for a connection between the Charter Oak Greenway and the Farmington Canal Greenway has not yet been identified. The plan also recognizes the interest of many of the region’s towns in providing local trails to tie into the existing greenways. The plan makes clear that CRCOG will continue to work with towns in coordinating these extensions.

- 1) Identify and endorse needed additions to the regional trail system
- 2) Identify planning studies required to implement item 1) above.
- 3) Correct unsafe trail sections or access points.
- 4) Establish a coordination plan for trail maintenance activity.
- 5) Install standardized signs on roadways to indicate trail access points and on trails to direct cyclists to town centers and retail facilities.
- 6) Investigate trail design standards in Connecticut and elsewhere with an eye to cost effectiveness.
- 7) Continue to coordinate local extensions to the trail system
- 8) Consider the feasibility of making use of other possible greenway locations: the Griffin Corridor, the New Britain Busway corridor, the Connecticut Southern rail corridor, the North

Meadows rail corridor, the Park River corridor, and the dike system in Hartford and East Hartford,

- 9) Encourage communities to consider the feasibility of providing parallel multi-use trail facilities whenever reconstructing roadways (an important consideration here is safety, especially if the roadway has frequent intersections. When there are frequent intersections, a parallel trail can be less safe than an on-road facility.)
- 10) The Connecticut Department of Transportation has played, and will continue to play an important role in the development of greenways in the State of Connecticut and the Capitol Region. Their role is critical because they own many sections of abandoned railroad right-of-way that can accommodate greenways, they own many miles of freeway right-of-way that can sometimes accommodate multi-use trails, they undertake many major roadway projects that sometimes provide opportunities for including sections of greenways, and they are the agency primarily responsible for the distribution of federal funds that can be used for greenway projects (examples: STP-Enhancement, and Congestion Mitigation and Air Quality). With this plan we will encourage ConnDOT to continue its role and to expand its role in the development of a statewide system of greenways. Their role should include helping to plan and fund greenway projects within their own rights of way as well as others. They also have an important role to play in helping to coordinate local and regional efforts to knit individual greenways into multi-regional greenway systems.

PRIORITY:

- *Complete missing links in Farmington Valley and Charter Oak greenway systems and connect the systems.*
- *Remove obstacles for access to existing trails*

1.2 BIKE FRIENDLY ROADWAYS

A majority of cycling in the region will continue to take place on the region's roads and therefore it is very important to work to improve our roadway systems' accommodation of cyclists. Our research has found that the two strategies that have the greatest impact in improving actual bicycle safety and cyclists perception of safety are wide curb lanes and wide shoulders (4 feet or more). Why do these work? An experienced and effective cyclist will make use of wide curb lanes and shoulders in this way: if traffic is heavy, the cyclist will stay to the right in the wide lane or on the shoulder (unless making a left turn), when traffic is lighter the cyclist may move into the travel lane, always watching for traffic coming from behind and ready to move further to the right so a vehicle can overtake the cyclist. This plan has not identified specific strategies for roadway improvements but sets as a priority the identification and improvement of good radial routes for commuter cyclists into and out of Hartford.

Experience in other cities has indicated that it is difficult to suggest changes to existing roads unless we know that there will be significant bicycle use. To that end the Connecticut Bicycle Coalition (CBC) and CRCOG asked cyclists to let us know what routes they use to commute by bicycle to work. These ought to be the first set of roadways examined to determine if they present particular hazards to cyclists and to identify remediation.

The Plan's recommendations for Bicycle Friendly Roadways are:

- 1) Identify preferred commuter routes, locations with major obstacles to on-road cycling, and potential improvement activities
- 2) Compile guidelines and/or a manual of best practices for road maintenance and redesign.

- 3) Create technical memos and info packages for town public works departments (cf. drainage grates, railroad crossings, other bicycling hazards, liability concerns). Pay particular attention to the implications of and opportunities associated with traffic calming.
- 4) Create a checklist for transportation decision makers (including the STC process) on bicycle friendly and pedestrian friendly design considerations.
- 5) Help towns set local targets for improvements.
- 6) Encourage communities to consider the feasibility of providing parallel multi-use trail facilities whenever reconstructing roadways (an important consideration here is safety, especially if the roadway has frequent intersections. When there are frequent intersections, a parallel trail can be less safe than an on-road facility.)
- 7) The Connecticut Department of Transportation owns and maintains many miles of road in the State of Connecticut. As the agency responsible for such an extensive system of roadways, ConnDOT needs to give full consideration to the needs of the bicyclist when designing new roads, reconstructing existing roads, or performing normal maintenance and repair on existing roadways. With this plan we will encourage ConnDOT to give this consideration to all projects in the region.

Bike Friendly Roadways Checklist

- Removal of sand and debris from shoulders.
- Repaving of rough surfaces, upgrading of grates and R.R. crossings.
- Widening shoulders or curb lanes on frequent cycling routes.
- Ensuring access on all bridges (across rivers and highways) and across ridges (e.g. Talcott Mountain).
- Correcting unsafe intersection signals.
- Clearly striping vehicle lanes, appropriate to signed speeds.
- Installing signage (e.g. Share the Road signs, destination signs for cyclists, etc.)

PRIORITY:

- *Identify, promote and improve good radial routes for commuter cyclists in and out of Hartford Center.*
- *Focus on the elimination of obstacles identified by on-road cyclists.*

1.3 BIKE FRIENDLY LAND USE

The main areas of concern with regard to bike friendliness of land use are: can a cyclist access a development by bike and once at a development, is there a place to securely park a bike?

Provision of adequate bicycle storage facilities can help to increase the use of bicycles as a serious means of transportation. Given that parking is a number one issue for motorists, it shouldn't surprise us that provision of secure and convenient parking is also important to cyclists. The difficulty of finding appropriate parking racks is clearly enough to discourage many people from using bicycles as their travel mode when they have the ability to choose. The installation of bike parking facilities is a relatively inexpensive way to introduce new cycling facilities that allow people to ride more, while raising the profile of cycling in the land use environment.

With this plan we will develop a campaign for the proliferation of bicycle parking and develop manuals of "best practices" for planners and zoning officials:

- 1) Develop a campaign for the proliferation of bike parking facilities (racks or lockers).
- 2) Develop guidelines and/or a manual of best practices for retrofitting existing developments.
- 3) Create technical memos, info packages and a decision-makers' bike/pedestrian checklist for town planning departments.
- 4) Help towns set local targets for improvements.
- 5) Identify best practices for new developments and zoning.
- 6) Create a checklist for land use decision-makers on bicycle friendly and pedestrian friendly planning considerations.
- 7) Assure bike accommodations, on and off road, are identified in State plan of Conservation and Development.
- 8) Provide model language for local plans of Conservation and Development.
- 9) Provide model details and specifications for local public works departments and subdivision regulations.

Bike Friendly Land Use Checklist

- Well-situated and secure bicycle parking
- Bicycle access between schools and residential areas
- Clear and safe bike/pedestrian access from street and between buildings
- Adequate lighting
- Change and shower facilities for bike/running commuters at workplaces

PRIORITY:

- ***Retrofit public parks and government buildings***
- ***Highlight examples of best practices***

1.4 BIKE FRIENDLY TRANSIT

Cycling can be feasible for a greater number of individuals if a cycling trip can be combined with a transit trip. Secure storage for bicycles at transit stops is important for some commuters. Other

commuters would like the convenience of taking their bike with them on a transit trip; bus mounted racks can make this possible. At this time, the Plan does not identify specific actions to be taken to accommodate bike-transit trips. What is most important is that CT Transit be at the table as these issues are discussed.

- 1) Secure CT Transit involvement with the bike planning committee.
- 2) Working with CT Transit, investigate potential for bike access on buses.
- 3) Working with CT Transit, develop bus service to greenways.
- 4) Install bike parking at inter-modal connections (e.g. Union Station, park 'n ride lots).
- 5) Work with RideShare Corp to explore parallel inter-modal opportunities.

PRIORITY:

- *Secure CT Transit partnership to develop mixed-mode ridership*

2.0 INSTITUTE BIKE SAFETY AND ENFORCEMENT PROGRAMS

Cyclists experience difficulties due to motorist behavior. We have discovered an alarming lack of knowledge on the part of the average motorist relative to the bicyclist's right to be on the roadways. In addition to lack of knowledge on the part of motorists, many cyclists are unaware of their rights and responsibilities on the road and some law enforcement officials are unsure of what they should expect of cyclists.

Enforcement of the rules of the road as they apply to cyclists can have the effect of reinforcing proper behavior. If neither cyclists nor motorists are cited for infractions of these rules, many people remain unaware of when they have operated their bicycle or motor vehicle illegally. Regular enforcement reinforces the rules for the uninformed.

2.1 SCHOOL PROGRAMS FOR YOUNG CYCLISTS

Currently, most bicycle safety education is found in the elementary schools. Some towns have long term programs operating; others are just starting up programs.

- 1) Identify Capitol Region expertise in safety education for young cyclists.
- 2) Adopt recommended models for in-class education and bike rodeos.
- 3) Share information on curriculum and resources among town police departments.
- 4) Offer program training and resource materials to towns.

PRIORITY:

- *Make available educational resource materials and models*

2.2 ON-ROAD PROGRAMS FOR ADULT CYCLISTS

Many adult cyclists are unaware of the rules of the road as they apply to cyclists and are unsure how to operate their bicycle safely.

- 1) Adopt the League of American Bicyclists' Effective Cycling curriculum as a standard recommended program for adult cyclists.

- 2) Build partnerships with local community-based cycling and public safety organizations to sponsor skills training opportunities for adult cyclists.
- 3) Address need for redressive education for those who were taught incorrectly as children (especially regarding side of road to ride).

PRIORITY:

- *Support initiatives for education for adult cyclists*

2.3 ENFORCEMENT PROGRAMS

Enforcement of the rules of the road reinforces the rules and the cyclists' and motorists' understanding of their rights and responsibilities.

- 1) Encourage enforcement of the existing motor vehicle act and traffic laws.
- 2) Identify Capitol Region expertise in the enforcement of cycling-related traffic laws.
- 3) Coordinate training opportunities for police departments, and work with the state to integrate cycling education into police academy certification and recertification.
- 4) Monitor program activities and results.

PRIORITY:

- *Improve awareness of cyclists' rules of the road among enforcement officials and the general public*
- *Commitment to enforcement*

2.4 PUBLIC EDUCATION FOR AUTOMOBILE DRIVERS

Many motorists are unsure of how they should react when they see a cyclist on the road; general education of motorists will improve the safety of bicyclists.

- 1) Work with DMV:
 - Locate good examples and advocate for improvements to DMV driver education manuals and testing (completed by CBC October 1999)
 - Investigate whether DMV could work with school systems to create a bike safety calendar, like the fire safety calendar they currently prepare.
 - Advocate for DMV to include an insertion regarding bicycle safety (and specifically "Share the Road") in driver's license renewals.
- 2) Develop a public education factsheet on "Sharing the Road Safely" (and seek distribution through vehicle tax mailings, AAA, the DMV, (see above) and other mechanisms).
- 3) Advocate for ConnDOT to conduct a multimedia "Share the Road" campaign.

PRIORITY:

- *Facilitate ongoing education*

3.0 PROMOTE A PRO-CYCLING CULTURE

By promoting a pro-cycling culture, we will encourage more people to bicycle and create concrete evidence of the Capitol Region's commitment to cycling as a viable mode. With these

actions we will build upon the base of current cyclists, expand the visibility of cycling, and engage new partners, particularly, the business community.

3.1 PROMOTIONAL ACTIVITIES

- 1) Research and recommend opportunities for towns to collaborate with community-based groups on local activities and events related to cycling.
- 2) Support the Connecticut Bicycle Coalition in developing a plan for region-wide campaigns, events and/or awards that raise the profile of cycling for transportation, commuting and recreation.

3.2 PRIVATE SECTOR DEVELOPMENT

- 1) Promote economic development opportunities in bike related business (e.g. manufacturing of racks, retail services, map development). Currently an effort is underway (coordinated by the Connecticut Bicycle Coalition) for the development of a map of bicycle facilities in the area. This map is being developed by a private company and will be available for sale.
- 2) Help merchants' associations cultivate cyclist patronage of local establishments.
- 3) Encourage employers to improve bike facilities and encourage bicycle commuting.
- 4) Encourage bicycle-related tourism. Already, Simsbury has located its visitors center on the Farmington Canal Greenway. This setup is designed to encourage cyclists to patronize retail establishments in Simsbury, rather than just "passing through".

3.3 A REGIONAL CYCLING MAP

- 1) Produce a free regional map for cyclists to highlight "best commuter routes", multi use trails and other cycling resources across the region.
- 2) Distribute the map through cycling organizations, town halls, bike and athletic shops.

PRIORITY:

- *Create concrete evidence of the Capitol Region's commitment to cycling as a viable mode*

4.0 ESTABLISH PLANNING AND ADMINISTRATIVE SUPPORTS

Our bike plan will not move forward without the proper administrative supports.

4.1 COMMIT ONE STAFF PERSON (APPROXIMATELY ½ TIME) TO ONGOING BIKE/PED PLANNING

- 1) Establish annual pedestrian/bike action program within Transportation Work Program
- 2) Create awareness of Bike/pedestrian issues throughout organization

PRIORITY:

- *Begin to institutionalize bike/pedestrian concerns*

4.2 A PERMANENT CYCLING/PEDESTRIAN SUBCOMMITTEE OF TRANSPORTATION COMMITTEE

- 1) Expand the current committee to ensure representation from town planning and public works departments, police departments, cycling organizations, walking advocates, public health and safety organizations, cycling related businesses, tourism organizations, large employers, parks, environmental groups, environmental justice groups, community groups. Be certain the Committee is multiracial and represents cyclists who don't own cars.

- 2) Outline needs for the development of a pedestrian plan.
- 3) Meet regularly to direct activities and evaluate progress in meeting plan objectives.

PRIORITY:

- *multistakeholder involvement and regular meetings*

4.3 RESOURCE DEVELOPMENT

- 1) Support the development and collection of resource materials relevant to bicycle plan implementation, including CBC efforts and expansion of CRCOG resources.
- 2) Develop a system for the collection of basic data relevant to future planning and evaluation efforts.
- 3) Encourage the development of bicycle and pedestrian planning expertise within CRCOG member towns.

PRIORITY:

- *develop resources for ongoing planning and improvement activities*

5.0 FUNDING

In order for this Bicycle Plan to be accomplished, funding needs to be secured for continued planning and implementation. There are no easy answers as to how to fund bicycle facilities, the following recommendations lay out a framework for investigating and securing funding.

5.1 COMMITTEE ADMINISTRATION AND PROGRAM FUNDING

- 1) Commit CRCOG budget to continue bike/pedestrian planning efforts and to implement recommendations under 2.0, 3.0 & 4.0

5.2 FUNDING FOR INFRASTRUCTURE

- 1) Federal funding:
 - TEA 21 enhancement funds are very limited because of the drop in STP funds coming to the state. Need to encourage Congress to restore this money in the next Surface Transportation Act.
 - CMAQ monies can be used for Bike/pedestrian facilities but they are also limited in the Capitol Region because 70% of the state's share must go to Southwest Connecticut.
 - Recreational Trail funding (available through DEP). Only about \$450,000 available per year statewide.
- 2) Non federal funding:
 - Explore options for increased state funding for bike projects (DOT, DEP, and DED).
 - The easiest non-federal funding is in kind services provided to match federal dollars. Barriers to matching available federal dollars can be difficult (as in East Hartford).
 - Some municipalities in the country have pledged a certain percent of their annual transportation expenditures to bike/pedestrian projects.

- Non profit funding: this source has not been utilized to as great an extent as it might be. Also, a vehicle could be provided to enable individuals, corporations and others to make donations for the development of local bike/pedestrian facilities.
- 3) Locate Funding for non-federal match for TEA-21 High Priority Projects (to match federal money). This includes the East Hartford Bikeway and two Hartford Riverwalk Projects.
- 4) Support the sale of Greenway license plates (for example, East Hartford has already purchased 50 plates for use on municipal vehicles).
- 5) Expand the scope of transportation projects to include bicycle/pedestrian accommodations (for example, Hartford New Britain Busway, Route 6, Griffin Line.)
- 6) Look to UConn stadium planners to integrate Charter Oak Greenway Section of East Coast Greenway in their plans.
- 7) Provide education to member towns regarding the transportation funds that they might access for bicycle facilities development.

PRIORITY:

- *adequate staff resources for the committee*
- *partnership development among public, private and non-profit sectors*
- *outsourcing of appropriate programs to community-based organizations*