

4 Recommendations

4.1 Regional Network Recommendations

An extensive network of sidewalks, shared use paths, and on-road bicycle facilities continues to evolve in the County. Each of these networks is critical to the improved safety and mobility of pedestrians and bicyclists of all capabilities.

In developing a regional network, several considerations are important. To identify appropriate regional networks the following assumptions are made:

- Regional facilities provide safe and convenient access to major activity centers and transportation centers or hubs within the region. Local facilities, in contrast, primarily provide circulation within the broader community, resulting in a finer grained network of facilities.
- High quality connections between Town Centers and growth centers should be the fundamental framework for determining the number of facilities needed. These connections should accommodate bicyclists and pedestrians of all skill levels where practical and feasible. This may be accomplished in a corridor by a shared use path, an on-road bicycle facility, or both.
- The networks should form the basis for priorities for future funding of CCMPO projects and planning.

The most important function of the network is to identify corridors of regional significance from a bicycling and pedestrian perspective. The networks emphasize connections between communities, between major activity centers such as shopping and employment centers, town centers, educational facilities, major regional recreational resources, and to transportation centers.

The Regional On-Road Network

The regional on-road network has grown to incorporate new on-road facilities that have been designated since 2003 and common routes that are not yet designated but are an important part of the regional network. The information was reported by each municipality. In some cases on-road facilities proposed by one municipality were extended into the neighboring municipality to close new gaps in the network created by the recently proposed segments. A few segments, such as Old Stage/Woods Hollow/Brookside Road between Essex and Westford were added to provide more direct routes between municipalities. See **Map 4.1-A** for the complete network of on-road facilities.

The Regional Shared Use Path Network

The regional shared use path network has grown since the 2003 Update both in terms of sections that were built or designated in the years since 2003, and in the number of newly proposed segments of on-road facilities to increase connections between municipalities. **Map 4.1-B** shows the complete network of shared use paths. One new component of the shared use path network is the use of a few critical sidewalks and on-road links that connect existing shared use paths, or can serve as link between future shared use paths.

Critical Crossings

Major highways including I-89, I-289, and I-189, rivers, streams, and Lake Champlain all serve as barriers to connecting the regional bicycle and pedestrian network at key critical crossings shown in **Map 4.1-C**. These are all crossings that should be built and well maintained as part of a comprehensive bicycle and pedestrian network. **Table 4.1** below identifies each critical crossing by name and categorizes them by status. The categories are defined as follows:

- A: Existing: Few or no vehicular conflicts
- B: Existing: Nearby vehicular traffic but relatively safe separation and/or low traffic volumes
- C: Existing: Close proximity to high volume vehicular traffic
- D: Proposed

Table 4.1: Additional Information to accompany Critical Crossings Map

#	NAME	FEATURE CROSSED	LOCATION	CAT.	COMMENTS
1	US RT 2 Causeway	Lake Champlain	Milton/South Hero	C	Wide shoulders
2	US RT 2 Bridge	Lamoille River	Colchester/Milton	B	Wide road shoulders continue across span
3	US RT 2 Exit 17 Overpass	I-89	Colchester	B	
4	Heineburg Rd (VT RT 127) Bridge	Winooski River	Burlington/Colchester	B	Includes a separated shared use path on west side
5	US RTs 2 & 7 Exit 16 Underpass	I-89	Colchester	C	Pedestrian and bicycle improvements are funded but not yet implemented
6	Island Line Cut	Lake Champlain	South Hero	A	Limited August ferry service in place but seasonal expansion planned and partly funded.
7	US RTs 2 & 7, Winooski Main St. bridge	Winooski River	Burlington/Winooski	C	2003 Scoping report recommended a stand alone shared use bridge adjacent to this
8	VT RT 15 Underpass	I-89	Winooski	C	Significant choke point in high traffic volume corridor
9	Burlington/Colchester Bridge	Winooski River	Burlington/Colchester	A	Island Line shared use path bridge on former railroad bridge abutments
10	Blue Bridge	Winooski River	Burlington/Winooski	D	Shared use structure in vicinity of existing railroad bridge based on 2003 scoping report recommendation. Solution implementation likely long term
11	Lime Kiln Bridge	Winooski River	Colchester/South Burlington	B	Recently replaced with sidewalk and expanded shoulder
12	US RT 2 Williston-road Bridge	I-89, Exit 14	South Burlington	C	Features designated bike lanes and sidewalks but in an area with high traffic volumes and many conflict points

#	NAME	FEATURE CROSSED	LOCATION	CAT.	COMMENTS
14	Kimball Ave. Crossing	Muddy Brook	South Burlington/ Williston	D	Shared use path adjacent to road based on 2007 scoping report. Implementation expected near term
15	Spear St. Underpass	I-189	South Burlington	C	Falls within a stretch of poor bike/pedestrian accommodation with shared use path to the north and bike lane to the south.
16	Dorset St. Underpass	I-89	South Burlington	B	Shared use path on east side
17	Hinesburg Road Overpass	I-89	South Burlington	C	New bridge under consideration in context of proposed new interchange
18	US RT 7 Bridge	LaPlatte River	Shelburne	B	Newly constructed road bridge with sidewalks and wide shoulders
19	Webster Road path bridge	LaPlatte River	Shelburne	D	Proposed shared use path on abutments left from temporary road bridge
20	Jericho Village Rail Path bridge	Browns River	Jericho	D	Proposed shared use path on former RR alignment. Implementation likely long term
21	VT RT 2A	Winooski River	Williston/Essex Junction	C	2-3 ft. shoulders both sides
22	Circ Highway bridge	Winooski River	Williston	D	Proposed vehicle bridge to accommodate pedestrians and bikes. No plans to accommodate bicycles or pedestrians
23	North Williston-road Bridge	Winooski River	Williston/Essex	B	Recently replaced. Sidewalk on west side
24	VT RT 2A Underpass	I-89, Exit 12	Williston	C	Discontinuous sidewalk and no shoulders
25	US RT 2 Richmond Iron Truss (Checkered House Bridge)	Winooski River	Richmond	C	This bridge is slated for historic rehabilitation and widening
26	Bridge St. Iron Truss	Winooski River	Richmond	B	This bridge is slated for historic rehabilitation
27	Jonesville Bridge	Winooski River	Richmond	B	Recently replaced and includes wide shoulders
28	Williston Bike Path Overpass	Circ. Highway	Williston	D	Designed and scheduled for construction pending resolution of Circ. Highway segments A and B Environmental Impact Statement

4.2 Lower-Cost Facility Improvement Recommendations

Many lower-cost programs can be implemented in the near-term and will have immediate benefits to safety and rates of walking and bicycling. These programs include:

- Schedule the periodic review of signalized intersections where pedestrian signal equipment is located to ensure that it is functioning correctly and that signal heads are working.
- Use higher visibility crosswalks at unsignalized intersections (e.g., ladder style or raised crosswalks). Install advance crosswalk signs that reinforce “State Law: Yield for Pedestrians.”
- Identify opportunities on lower volume suburban and rural roadways to restripe the roadways to add a shoulder or increase the current shoulder width. Restriping should be done in a manner consistent with the design standards established in the Vermont *Pedestrian and Bicycle Facility Planning and Design Manual*.
- Place Share the Road signs at locations where on-road bicycle facilities end but where bicyclists will continue.
- Test and tune loop detectors at actuated signalized intersections to detect bicyclists.
- Identify locations to install bicycle boxes or advance stop lines for bicyclist at busier intersections. These markings allow bicyclist to start in front of motorists at intersections and to make left turns with less conflict.
- At signalized intersections with higher pedestrian volumes and concurrent pedestrian phasing, identify locations that may benefit from innovative pedestrian phasing such as leading pedestrian signals. Leading pedestrian signals allow pedestrians to begin crossing in advance of vehicle phases and can reduce conflicts between pedestrians and left turning vehicles. See *Alternative Treatments for At-Grade Pedestrian Crossings* (ITE, 2001) for an in depth description of the benefits and applications of innovative signal timing.



Share the Road Signs

4.3 Supporting Programs for Facilities

4.3.1 Facility Maintenance

Maintaining existing bicycle and pedestrian facilities is critical for the safety of users. There is a lack of resources for maintenance of bicycle and pedestrian infrastructure. This includes operational maintenance such as plowing of sidewalks and shared use paths in winter to make them accessible year-round and sweeping paved shoulders in the early Spring. Other important maintenance needs include repaving, restriping, patching or replacement of paths and sidewalks. There is currently a heavy burden on local funds, generally property taxes, to fund maintenance activities. Increasing funds and diversifying funds (beyond municipal general funds) available for use maintenance was cited during the Plan's development as an important issue to be resolved.

A working group consisting of representatives of communities should be established to discuss opportunities for improved maintenance of bicycle and pedestrian facilities. This may include discussions related to:

- Available funding sources
- Maintenance methods
- Sharing of resources (equipment, personnel, information)
- Maintenance standards for facilities including frequency of sweeping of roadways and plowing of paths
- Pooled bids for roadway striping and marking for bicycle facilities (e.g., edge lines for paved shoulders or bike lanes, pavement markings such as bike stencils).

4.3.2 Other Initiatives

Other initiatives suggested for action include:

- Develop model ordinances for municipalities sponsored by the CCMPO and CCRPC, focusing on inclusion of bicycle and pedestrian considerations into site planning and impact fees.
- Under the sponsorship of the CCMPO and/or CCRPC, provide greater technical assistance, for local advocacy and planning of bicycle and pedestrian networks and programs and for creating improved development form (e.g., compact, walkable neighborhoods).
- Expand the tie-in with Cultural Heritage programs such as the Lake Champlain Bikeways, Byways, and Basin Programs and potential linkages to bike and rail tours (such as with the *Vermonters*).

4.4 Education & Encouragement Program Recommendations

Chittenden County and the State of Vermont have a series of active supporters and programs which have produced valuable educational materials aimed at bicyclists, pedestrians and motorists alike. In addition to the traditional partners promoting bicycling and walking, local municipalities are lending support through police departments, parks and recreation departments, recreation committees and other programs. With growing rates of asthma and diabetes, state and local health organizations too are playing an ever-increasing role in promoting bicycling and walking programs.

Drawing on the strengths of organizations that already offer programs, this plan recommends the following programs to expand education and encouragement efforts. The recommendations are broken into three categories:

- **Continuing Programs** that should be more widely offered and supported
- **Near-Term Recommendations** to be implemented in 0 to 5 years
- **Long-Term Recommendations** to be implemented 6 or more years in the future

The near and long-term recommendations in this report are not an absolute list. Appendix C has additional program ideas that are not part of the recommendations but could be implemented in the future. CCMPO should also remain open to new ideas developed by the bicycle and pedestrian community.



Burlington Bikeway

4.4.1 Continuing Programs

Safe Routes to School

Target	Parents, schoolchildren, administrators, city planners & engineers
Primary agency	VTrans, CCMPO, Local Motion, and school districts
Partners	Parent groups at schools, school neighbors
Key elements	Bicycle and pedestrian audit of infrastructure at elementary schools. Recommended route maps.
Time frame	Spring & Fall 2008
Cost	\$\$
Potential funding sources	VTrans Safe Routes to School grant funding; CCMPO SRTS Lite program, local, state or national health grants (e.g., Robert Wood Johnson Active Living by Design grants)
Sample programs	Portland Safer Routes to School Program: http://www.trans.ci.portland.or.us/saferoutes/

Helping children walk and bicycle to school is good for children’s health and can reduce congestion, traffic dangers and air pollution caused by parents driving children to school. Robust Safe Routes to School programs address all of the “Five E’s” (Engineering, Education, Encouragement, Enforcement, and Evaluation). This program is currently in progress under contract to CCMPO through the efforts of Local Motion with funds from VTrans and FHWA.



Students participate in a walkabout to evaluate pedestrian conditions

All schools participating in SRTS already have a school travel plan in place, and many schools are already working on their second review of their plan. CCMPO should work with Local Motion and Chittenden County school districts to continue to implement this *Education and Enforcement* phase of a Safe Routes to School Program in all county elementary schools.

The first step towards creating a school travel plan is doing a walkabout (also known as a bicycle and pedestrian audit) to assess walking and biking conditions of streets adjacent to elementary schools. Parents, students, neighbors, and city planners and/or traffic engineers should be invited to join in the walkabout. Safety concerns, issues, and ideas should be recorded.

After the bicycle and pedestrian audit is conducted, maps are created for each elementary school showing recommended routes to reach school, along with high-traffic intersections and routes to avoid. These maps should be produced and distributed to students and their families.

As a final step, an initial infrastructure improvement plan should be produced for each elementary school, including cost estimates and a prioritized project list. This infrastructure improvement plan will serve as a blueprint for future investments, and can be used to apply for further grant funding. SRTS is already obligating funds for the phase 2 *Infrastructure* portion of the program at participating schools.

Youth Traffic Safety Education

Target	School-age children
Primary agency	CCMPO, school districts
Partners	Parent groups at schools, community volunteers
Key elements	In-school and/or after-school on-bike skills and in-classroom safety training
Time frame	Ongoing
Cost	\$\$\$
Potential funding sources	VTrans Safe Routes to School grant funding; local, state or national health grants (e.g., Robert Wood Johnson Active Living by Design grants)
Sample programs	LAB's Kids I and Kids II curriculum: http://www.bikeleague.org/programs/education/courses.php#kids1 BTA's Bike Safety Education Program: http://www.bta4bikes.org/resources/educational.php Washington Area Bicyclists Association Biking for Kids Program: http://www.waba.org/bikingforkids/

Nearly every child in America can look forward to in-depth training before receiving a driver's license. Bicycles are also vehicles that are used on the roads, but most Americans do not receive any training about the rules of the road, how bicycles work, or how to ride a bicycle on the roadway. There is also an opportunity to include safe walking information in the education program which would focus on safe crossing behavior and the importance of visibility.

SRTS already offers a traffic education program for kids as part of its curriculum. This program should continue and be offered to more schools. The curriculum should cover:

- Safe walking activities
- Importance of visibility
- Rules of the road
- Right of way
- Road positioning
- On-bike skills lessons (braking, turning, steering)



Volunteers assist Swiss children through a bicycle skills course

CCMPO can assist SRTS with this effort by helping to find funding to support the program. Additionally, a fleet of bicycles could be maintained by a partner organization for use in the bicycling skills section. A common concern with on-bike education programs is that the bikes are often poorly maintained and adjusted and may not be safe for use. A well maintained, dedicated bike fleet could eliminate some of the safety issues and would enable children without bikes to participate in the program as well.

4.4.2 Near-Term Recommendations (Implement in 0 - 5 years)

Chittenden County Walk - Bike Central Website	
Target	Current and potential cyclists
Primary agency	Local Motion with coordination from CCMPO
Partners	CCMPO Pedestrian and Bicycle Committee
Key elements	Resources, maps and map orders, safety, events, groups
Time frame	Ongoing
Cost	\$ - \$\$ (depending on design and scope)
Potential funding sources	Low cost; may not require outside funding
Sample programs	Vélo Québec website: http://www.velo.qc.ca/english/home.lasso , Bike Arlington website: http://www.bikearlington.com

Chittenden County currently has numerous resources for bicyclists and pedestrians, and more services and resources are planned for the future. Many current or potential cyclists and pedestrians do not know where to find information about laws, events, maps, tips, and groups. CCMPO could develop a “one-stop shopping” website for non-motorized travelers. A potential name for the website is Chittenden County Walk-Bike Central, though other names could be used.

The Chittenden County Walk-Bike Central website could contain:

- A list of all **related groups**, including clubs, advocacy groups, and racing teams
- Information about the CCMPO **Pedestrian & Bicycle Committee** (how to get involved, meeting times and dates, agendas and minutes)
- Information about **current projects and how to get involved** (e.g., public meetings, comment periods)
- **Maps and brochures** (links to online maps and brochures, where to find in person, and how to request mailed materials)
- Links to **laws and statutes** relating to bicycling and walking
- Links to all relevant **local jurisdictions and their bike contacts** (CCMPO, City of Burlington, Burlington Police Department, Chittenden County Sheriff’s Office, etc.)
- Information about **events** (walks, rides, classes, volunteer opportunities)
- A list of **local bike shops**, including phone number and address
- Relevant **phone numbers** (hotlines for sidewalk issues, pothole repair, parking enforcement, bike rack installation request, etc.)

The website may also feature:

- Events calendar
- Request form for route planning assistance
- Message boards
- Blog featuring stories and news
- Photo galleries from events and submitted by readers
- Popular riding and walking routes
- Basic safety information on how to walk and bicycle
- How to report safety issues that pedestrians, cyclists, and motorists experience or observe

Note that these additional features may increase the cost to set up and maintain the website.

A one-stop website will not be difficult to set up, but it will only be successful if the site is both easy to use and updated regularly. All website content should be reviewed at least annually for accuracy.

The bicycle and pedestrian community can assist in keeping the site up to date. CCMPO should consider adding a standing agenda item for the Bicycle and Pedestrian Advisory Committee to discuss the website in order to hear about new content that should be added or out-of-date content that should be updated or removed.

Public Service Announcements

Target	General public
Primary agency	CCMPO
Partners	Vermont Bicycle and Pedestrian Coalition, Local Motion
Key elements	Awareness campaign with TV spots
Time frame	Late spring or early summer, 2009
Cost	\$ - \$\$\$ (depending on whether airtime is purchased or donated)
Potential	Local television stations (for donated airtime), traffic safety
funding sources	foundations and grant programs; hospitals and insurance companies
Sample programs	Bicycle Transportation Alliance "Decide to Ride" PSAs: http://www.bta4bikes.org/at_work/decidetoride.php

Public Service Announcements (PSAs) are an important part of creating awareness of bicycling and walking. They are an effective way to reach the general public and reinforce other education and outreach messages.

A well-produced PSA will be memorable and effective, but producing a good PSA from scratch is an expensive effort. In 2006 the Vermont Bicycle and Pedestrian Coalition created and aired a number of PSAs which could be tailored specifically to the Chittenden County area and reused.

The Bicycle Transportation Alliance (Portland, Oregon) has produced six high-quality PSAs that are available for rebroadcast at a reasonable cost. The 30-second spots were produced on film, not video, and cover the following messages:

"What If?"	Encourages viewers to give bicycling and walking a try
"Look Right, See Right"	Reminds drivers to look over their shoulder before changing lanes
"See and be Seen"	Encourages cyclists and pedestrians to use lights and reflective material at night
"Close Call"	Encourages both drivers and cyclists to stop at stop signs
"Bike Lanes"	Reminds drivers that bike lanes are not for vehicle use
"Wrong Way"	Reminds cyclists not to bicycle against traffic

It is recommended that CCMPO air one or more of these PSAs every spring when the weather becomes more favorable to bicycling and walking. Many television stations are willing to donate airtime for public service announcements. This would bring the cost down greatly and should be pursued.

Share the Road Campaign

Target	Motorists and Cyclists
Primary agency	CCMPO
Partners	Vermont Bicycle and Pedestrian Coalition, Local Motion, local cycling clubs and groups
Key elements	Awareness campaign with TV spots
Time frame	Late spring or early summer, 2009
Cost	\$ - \$\$\$ (depending on whether airtime is purchased or donated)
Potential funding sources	Bike shops (in-kind donations); transit agencies and local news outlets (donated ad space); traffic safety foundations and grant programs; hospitals and insurance companies
Sample programs	Bicycle Coalition of Maine http://www.bikemaine.org/pr-psa.htm League of American Bicyclists http://www.bikeleague.org/action/sharetheroad.php Oak Ridge National Library's Bicycle Safety for Motorists http://www.ornl.gov/info/reporter/no16/bicycle.htm

There is often tension between drivers and cyclists because not all drivers understand the rights of cyclists or know how to safely share the road with cyclists, and not all cyclists know the rules of the road. Share the Road Campaigns help motorists and cyclists understand their rights and responsibilities towards the other. These campaigns are carried out primarily through public service announcements, and through informational brochures. Safety tips are given for both cyclists and motorists, and include:

For Motorists

- Be alert. Like motorcycles, bicycles are harder to see than autos.
- Don't honk. This can startle a cyclist and cause him or her to swerve.
- Give bicyclists 3 feet of space when passing and be sure to clear the cyclist before moving back into your lane.
- Cyclists who are not on the extreme right- hand side of the lane are not being careless, but are in fact attempting to avoid hazards that could cause an accident.
- Drivers turning left in front of oncoming cyclists cause a large percentage of car/cycle accidents.
- Overtaking, then making a right turn in front of the cyclist is also a cause of many accidents.

For Cyclists

- Always wear a helmet. This is your most important piece of safety gear.
- Be alert. Always be aware that a motorist might not see you.
- Signal your intentions—use hand signals to indicate turns and stops.
- Use a mirror. This allows you to be aware of traffic approaching from behind.
- Follow traffic rules as if you are driving an automobile. Ride with traffic, not against it.

- Ride as near to the right-hand side of the road as practical, while avoiding road hazards that could cause you to swerve into traffic.
- Be predictable. Do not weave in and out of traffic or parked cars.
- As is the case with all slow moving vehicles, according to Vermont law, an operator who is impeding traffic shall pull off the highway at the first opportunity to let traffic pass before proceeding.

As with other recommended public service announcements, it is recommended that CCMPO work with partner agencies such as the Vermont Bicycle and Pedestrian Coalition and Local Motion to develop a PSA directed at motorists and then air it every spring when the weather becomes more favorable to bicycling and walking. The Bicycle Coalition of Maine has separate PSAs for motorists and for cyclists on how to share the road which can be used as examples. Once the PSA is developed, many television stations are willing to donate airtime for public service announcements. This would bring the cost down greatly and should be pursued.

“Your Bike Resources” Sticker

Target	New bike owners
Primary agency	Local bike shops
Partners	CCMPO
Key elements	Bicycle resources sticker to be distributed with every new purchased bike.
Time frame	Ongoing
Cost	\$
Potential funding sources	Low cost; additional funding may not be necessary
Sample programs	None

Cyclists often are unaware of resources available to them, and jurisdictions are not sure how to reach these cyclists. The moment a bicyclist purchases a bike is an ideal time to provide them with more information to make cycling easier for them.

CCMPO should develop a removable sticker that lists bike resources and partner with local bike shops to distribute this sticker with every purchased bike. The bike owner can stick the resource sheet on their refrigerator, desk, etc.

The CCMPO “Your Biking Resources” stickers should include:

- The URL of the **Chittenden County Walk-Bike Central** website
- Instructions on how to request **maps and brochures**
- Phone numbers for local **bicycle coordinators**
- Relevant **phone numbers** (hotlines for pothole repair, parking enforcement, bike rack installation request, etc.)
- If desired, additional stickers may be printed and distributed through other means as well (e.g., at transportation fairs, at public meetings, through local clubs and organizations, etc.).



This removable sticker from Portland, OR lists resources for cyclists

Visibility Campaign: “Be Safe Be Seen”

Target	Cyclists (especially students and low-income bicycle commuters) and pedestrians
Primary agency	Police Departments, The University of Vermont
Partners	CCMPO, Local Motion, Green Mountain Bicycle Club, Vermont Bicycle and Pedestrian Coalition
Key elements	Media outreach, enforcement, bike light and reflective material giveaways or subsidies
Time frame	Fall, annually
Cost	\$\$ - \$\$\$ (depends on scope of program)
Potential funding sources	Bike shops (in-kind donations); transit agencies and local news outlets (donated ad space); traffic safety foundations and grant programs; hospitals and insurance companies
Sample programs	Portland’s “See & Be Seen” campaign: http://www.portlandonline.com/transportation/index.cfm?&c=deibb&a=bebfnh Dutch “Lights On” campaign: http://www.fietslichten.nl/

While Vermont state law requires bicyclists to use lights at night, cyclists riding without lights are common in Chittenden County. Many cyclists, especially students, are unaware that lights are required by law, or they have not purchased or repaired lights. Research shows that cyclists who do not use lights at night are at much greater risk of being involved in bike-car crashes. For these reasons, increasing bicycle light usage and improving visibility for pedestrians at night is a top priority for Chittenden County. A successful effort will reduce crash risk for all non-motorized travelers at night or in low-light situations.

Every fall in the Netherlands, as days get shorter, a national “lights on” campaign reminds cyclists to use bicycle lights. This “lights on” campaign focuses several complementary strategies into a short time frame for maximum impact, pairing media messages (ads, posters, radio spots, and TV ads) with police enforcement of ‘fix it’ tickets. In the Washington, DC region, jurisdictions have been giving out free bike lights on popular bike commuting routes each fall, coinciding with the switch from daylight savings to standard time.

A similar visibility campaign is recommended for Chittenden County. This multi-pronged outreach effort should take place every September, as the days are getting shorter and as kids and university students are returning to school.

The Chittenden County Be Safe Be Seen campaign should include the following elements:

- Well-designed **graphic ads**, to be placed on transit benches, transit vehicles, and local newspapers, as well as around UVM. Ad space may be purchased or donated. Small-format ads can be placed on bike handlebars as well if desired.

- **Police enforcement of bike light laws.** This enforcement will be most likely to result in behavior change if the cyclist is able to avoid penalty if they obtain a bike light. Ideally, the police would give a warning, explain the law, and then install a bike light on the spot. If this is not possible, the cyclist should receive a “fix it ticket” along with a coupon for a free or discounted light at a local bike shop; once the cyclist shows proof that they have purchased a bike light, their fine will be waived.
- **Partnership with local cycling and walking groups** to get the word out to their members and partners. These groups can be counted as campaign partners at no cost to them, enhancing the campaign’s credibility and community exposure. Groups should be supplied with key campaign messages to distribute with their constituents along with coupons for free or discounted bike lights and other reflective materials.
- **Earned media outreach:** CCMPO should distribute media releases with statistics about the importance of using bike lights, relevant legal statutes, and the campaign’s goal, timing, activities, and partners. If possible, a meeting with local media editorial boards should be sought.

Depending on partners, volunteer capacity and interest, the Chittenden County Visibility campaign may also include the following:

- **In-school presentations** about “being seen,” including giveaways of reflective material and bike lights
- A **community bike light parade** with prizes
- **Discounts on bike lights** and reflective gear at local bike shops during September (publicized through the campaign outreach)
- Volunteers stationed at key intersections, trails, and on the UVM campus **who thank bicyclists using bike lights** and reward them with a small gift



This poster from Portland, OR uses simple graphics to communicate the importance of using bicycle lights



Every fall, Dutch cyclists receive many messages to use lights, including these bike hangers

Share the Path Campaign

Target	All path users (especially cyclists)
Primary agency	CCMPO, local Parks and Recreation Departments/Recreation Path Committees
Partners	Local cycling clubs and groups, Local Motion
Key elements	Bell giveaway; maps and information; media outreach
Time frame	May/June 2009, or annually
Cost	\$\$
Potential funding sources	Local bike shops (in-kind donations); volunteer time contributions by local cycling groups; in-kind or time contributions by BPD
Sample programs	Portland Office of Transportation Share the Path brochure: http://www.portlandonline.com/shared/cfm/image.cfm?id=161457 Coalition for the Capital Crescent Trail, Montgomery County, MD http://www.cctrail.org

Many cities around the country are implementing “share the path” programs in response to concerns about conflicts between pedestrians and cyclists on shared-use paths. Since Chittenden County is home to numerous popular paths, a Share the Path program will encourage responsible path usage and creates community goodwill around bicycling.

It is recommended that CCMPO partner with Burlington Parks and Recreation to implement a Share the Path campaign. The campaign should include the following steps:

- Develop a simple, clear **Share the Path brochure**; distribute through local bike shops and wherever bike maps are distributed.
- Host at least one **bicycle bell giveaway** event on a popular shared-use path. A table should be set up with maps and brochures, and knowledgeable staff should be present to answer questions.



Photo courtesy Jonathan Maus

Volunteers mount free bells on bikes in this Share the Path event

Volunteers and CCMPO/Local Motion staff can partner to hand out bells to cyclists. Signs (e.g., “burma shave” style signs), pavement chalk, and banners should be used to explain the event and give cyclists warning so they can stop and receive a bell. Volunteers should mount the bells on handlebars (BBB EasyFit bells are recommended because installation requires no tools:

<http://www.bbbparts.com/products/accessories/others/bbb12.htm>).

CCMPO should do **media outreach** before the event; the bell giveaway will be a positive story about bicycling, and will provide good visual opportunities.

UVM Bike Orientation

Target	UVM students, especially incoming freshmen
Primary agency	CCMPO and UVM
Partners	UVM Cycling Team and Local Motion
Key elements	Bicycle safety & promotion orientation for incoming freshmen and returning students. Classes & clinics, materials, social events and rides.
Time frame	September, annually
Cost	\$\$
Potential funding sources	UVM parking fees, TDM funding sources
Sample programs	Stanford University Bike Program: http://transportation.stanford.edu/alt_transportation/BikingAtStanford.shtml

University students are ideal candidates for bicycling outreach programs; many students live near campus and may not own a car or choose to drive. CCMPO should partner with The University of Vermont to promote bicycling to students at the beginning of the school year.

The UVM Bike Orientation should include:

- **Bike maps and information** provided to incoming and returning students at the beginning of the year through school information packets
- **Flat clinics, bike legal clinics, and guided rides**, advertised through flyers, email and bulletin boards, and campus newspaper
- **Information tabling** at campus events and prominent locations (e.g., bookstore, quad) during the first few weeks of school
- **A Bikes at UVM web page** with links and more information
- At-cost or low-cost **bike lights** sold at tabling events and through the campus bookstore
- If desired, a “bike buddy” program may be implemented to match current cycling students with interested students. This can be a simple program where bicyclists wear a sticker that says “I bike to UVM, ask me how,” or a more elaborate program that matches bike buddies with interested students who live in their neighborhood for mentoring. A bike buddy program would increase the cost of the program.

Adult Bicycling Education Classes

Target	Current and potential cyclists, UVM students
Primary agency	CCMPO and Local Motion, Vermont Bicycle and Pedestrian Coalition
Partners	UVM, local Parks and Recreation Departments/Recreation Path Committees, Police Departments, LCIs
Key elements	Bicycle education class covering safety and skills to empower people to confidently use their bikes as transportation.
Time frame	Ongoing
Cost	\$\$ - \$\$\$ (depends on scope of program)
Potential funding sources	Transportation Enhancements, Bikes Belong grants
Sample programs	Washington Area Bicyclist Association Confident City Cycling Class: http://www.waba.org/events/education.php Bike New York Savvy Cyclist Class: http://www.bikenyork.org/education/classes/index.html

Many people are unaware of the vehicle and traffic laws that apply to riding a bicycle. By simply educating riders that riding with traffic (on the right side of the road) is the legal way to ride, it is possible to eliminate a common behavior which causes a significant share of bicycle-car collisions for adult cyclists. The Savvy Cycling and Confident City Cycling Classes address not only the rules of the road and safety tips but they also include a section for on-road riding and on-bike skills practice. The class can be expanded or produced as a series of classes which also cover bicycle commuting. CCMPO should work with Local Motion, the VT Bicycle and Pedestrian Coalition and League of American Bicyclist Cycling Instructors to set up a schedule of classes available to the public throughout the course of the cycling season. The classes should cover a wide range of available time slots to encourage maximum participation. Local businesses may be interested in hosting a session specifically for their employees as part of the Way to Go! Program or Bike to Work Month.

Course Content could include:

- Commuter Training: How to Organize Yourself and Your Belongings for a Pleasant Commute
- Adjusting the bike and helmet for a comfortable fit and performing a safety inspection
- Using your gear system
- Bike handling skills
- Rules of the Road
- Avoiding the Common Causes of Crashes
- Lane Positioning and signaling
- Useful Accessory Equipment
- Basic Bike Maintenance and Repair

Bike to Work Month

Target	Current and potential cyclists
Primary agency	CCMPO, Local Motion
Partners	UVM, CCTA
Key elements	Publicize Bike to Work Month in May. Offer classes, rides and events. Promote in conjunction with the Way to Go! Commuter Challenge.
Time frame	May, annually
Cost	\$\$ - \$\$\$ (depending on scope and length of program)
Potential funding sources	Local businesses and bike shops (in-kind or cash support); hospitals and insurance companies; City of Burlington
Sample programs	Bay Area Bike to Work Day: http://www.bayareabikes.org/btwd/index.php Bike Commute Challenge (Oregon): http://www.bikecommutechallenge.com/

The Vermont Bicycle and Pedestrian Coalition hosts a *Bike to Work Week* in June and the annual Way to Go! Commuter Challenge encourages using alternative transportation. It is recommended that CCMPO work with Local Motion to support activities throughout the month of May, in recognition of National Bike to Work month. CCMPO can support Local Motion in Bike to Work Week activities by becoming an event sponsor, assisting with publicity, tabling, and providing materials (maps, brochures, and resource stickers). CCMPO should take the lead in expanding Bike to Work activities to the full month of May, offering additional commute classes, weekly rides, presentations on bicycling for employees, and raffles or other incentives.



Organizing a Bike to Work Month can encourage adults to try bicycling as a mode of transportation.

Sunday Parkways Program

Target	Current and potential cyclists, runner, walkers and rollerbladers
Primary agency	CCMPO, Local Motion
Partners	Police Departments, Local Parks & Rec. Departments
Key elements	Safe, car-free roads and good publicity
Time frame	Monthly from Spring through Fall
Cost	\$ - \$\$ (depending on the scope and regularity)
Potential funding sources	City of Burlington; hospitals and insurance companies; Local businesses and bike shops
Sample programs	Bogota's Ciclovía: http://www.bogota.gov.co/decide.php?patron=1.03020105 Guadalajara's Via RecreActiva: http://www.viarecreactiva.com.mx/

Sunday Parkways are set aside times on weekends and holidays for traffic-free biking and walking on a network of selected streets. The goal of the program is to create a safe environment to encourage healthy activity. In Bogotá, Columbia, hundreds of thousands of cyclists use Sunday Parkways during the city's Ciclovía. In Guadalajara, Mexico a similar program is called Via RecreActiva.

Sunday Parkways do not impact motorized traffic flow like other special events, since all cross-traffic flows normally. Participants stop at all traffic signals, so that only the closed street is affected. Often on a divided arterial, the Sunday Parkway uses one half of the roadway and motorized traffic uses the other half. Sunday Parkways provide close-to-home recreational opportunities for all ages and all types of active travel.



A street closure in San Francisco allows bicyclists, rollerbladers, and pedestrians to enjoy the day.

It is recommended that CCMPO and Local Motion work together with interested municipal police departments or recreation departments to find one or more Sundays during the summer months when one or more streets in each participating municipality could be closed off and limited to bicycles, pedestrians, and other forms of non-motorized transportation. It could even be a culminating event of Way to Go! Week, or Bike to Work Month.

4.4.3 Long-Term Recommendations (6 or more years in future)

UVM Bike Program

Target	UVM students, faculty and staff
Primary agency	CCMPO, UVM
Partners	Student groups
Key elements	Attended bike parking; tools and stands; mechanic services; clinics.
Time frame	Ongoing
Cost	\$\$\$
Potential funding sources	UVM parking fees
Sample programs	UC Davis Bicycle Program: http://www.taps.ucdavis.edu/bicycle/

The UVM Bike Program should provide:

- Attended bicycle parking
- Bicycle registration services
- Lockers and showers
- Mechanic services
- Tools and repair stands
- The UVM Bike Program may also offer:
 - No Interest Bike Loan
 - Folding bicycle promotion
 - Bicycle message board (e.g., to post bikes for sale)
 - Cycling Links
 - Bike flea market hosted at the beginning of the school year, or other used bicycle resale opportunities

Pilot Smart Trips Program

Target	Chittenden County residents who are interested in biking, walking and transit
Primary agency	CCMPO
Partners	Local Motion, Transit agencies, community volunteers
Key elements	Outreach to a target geographic area promoting biking, walking and transit usage to residents and employers
Time frame	Program launch in late spring of selected year
Cost	\$\$\$
Potential funding sources	CMAQ (Congestion Mitigation/Air Quality) funds; federal flexible transportation; public transportation funds; hospitals and insurance companies, DOH funding sources; local, state or national health grants (e.g., Robert Wood Johnson Active Living by Design grants)
Sample programs	Portland Smart Trips program: http://www.portlandonline.com/transportation/index.cfm?c=ediab

Smart Trips programs (also known as social marketing programs) are encouragement programs based on saturating geographic area with resources to help residents reduce drive-alone trips and increase biking, walking, transit and carpool trips. It can also be used to teach employers how they can encourage their employees to reduce drive-alone trips and increase use of other transportation modes. Smart Trips programs have demonstrated a lasting reduction in drive-alone trips; for example, in Portland, OR, target areas have experienced a 10% reduction in vehicle traffic.

Programs offer residents maps, brochures and other printed materials, classes, guided rides and walks, and other tools and programs that make bicycling, walking and transit usage a more inviting travel option compared to drive-alone trips.

Compared to infrastructure improvements, these programs are scalable, flexible, inexpensive, and site-independent. Once the program has been established for a specific geographic target area, it can be run with low start-up costs in other target areas.

This model, however, is unlikely to be successful in areas that have failed to make initial infrastructure investments sufficient to provide a functional bicycling, walking and transit network. It is most effective as an approach that leverages investments in infrastructure, not one that replaces those investments.

One of the strengths of the individualized marketing model is that it reaches every resident and employer with an appealing invitation to participate, but then focuses the bulk of resources on those who identify themselves as interested. The many classes, rides, and activities continue to



Maps and materials are delivered to interested residents by bike in this Smart Trips program

be publicized and open to all, so residents have multiple opportunities to opt into the program. This focus allows for both broad reach and strategic investment.

It is recommended that CCMPO implement a pilot Smart Trips program in a limited geographic area in Chittenden County (to be selected at time of program planning).

The program may include any of the following:

- Maps and brochures
- Classes, clinics, workshops
- Guided rides and walks
- Giveaways (coupons, cyclocomputers, etc.)
- Targeted outreach (e.g., Women on Bikes, Senior Strolls)
- Route planning help (bike, walking, or transit)
- The exact program components and budget should be determined at time of program planning.