



## CHAPTER 5 OUTLINE:

Overview  
 Becoming a Bicycle Friendly Community  
 Bicycle and Pedestrian Advisory Commission  
 Program Recommendations and Resources  
 Education  
 Encouragement  
 Enforcement

# CHAPTER 5: PROGRAM RECOMMENDATIONS

## OVERVIEW

Meeting the goals of the City of Raleigh Bicycle Transportation Plan will require more than construction and installation of recommended bicycle facilities. It will also require the initiation and continued support of bicycle-related programs from local officials, local residents, and community organizations. In addition, the implementation of these facilities and programs will require the adoption of new bicycle-related policies. This chapter outlines recommended programs, policies, and in some cases, policy changes for the City of Raleigh to meet the needs of bicyclists that cannot be met through facility construction alone.

## BECOMING A BICYCLE FRIENDLY COMMUNITY

The League of American Bicyclists (LAB) promotes the national Bicycle Friendly Communities (BFC) Program. Awards are given twice a year to Bronze, Silver, Gold and Platinum level BFC's (with applications due every March and August). The program application includes a detailed review of all aspects of a comprehensive bicycling program: engineering, education, enforcement and encouragement. The application can be used as a set of benchmarks for measuring Raleigh's program against the most successful communities in the U.S. This has proven to be a powerful tool for communities such as Portland, OR – which formed a Mayor's "GO PLATINUM" committee after it was designated as a Gold BFC, with a goal of improving all required program areas in order to achieve Platinum status within two years. If Raleigh wants to become a great place for bicycling, it should strive to implement programs that other BFC communities have completed.

## BICYCLE AND PEDESTRIAN ADVISORY COMMISSION (BPAC)

Due to the significant interest in this planning process at the City staff level and resident level and the tremendous amount of implementation necessary within Raleigh as part of this Plan, a permanent Bicycle and Pedestrian Advisory Commission (BPAC) should be formed on the citizen level. The BPAC would be a beneficial resource for promoting both bicycle and pedestrian safety, providing feedback on opportunities and obstacles within the City, educating bicyclists and motorists about sharing the road, mobilizing support for bicycle and pedestrian issues, and assisting in the coordination of events and outreach campaigns. BPAC subcommittees could take on specific tasks (for example, BPAC's outreach and education could be led through an 'Ambassador' program, as described on page 5-4). The group should meet quarterly to encourage and evaluate the progress of overall plan implementation.





The City of Raleigh is fortunate to have the active involvement of the Parks, Recreation, and Greenway Advisory Board and the CAMPO Bicycle and Pedestrian Stakeholders Group (BPSG) with tremendous interest in expanding the greenway system, supporting bicycle improvements and programs, and supporting this Plan. The BPSG meets once a month and focuses on Triangle bicycle planning and programming. The BPAC should work in close communication with the BPSG and the Greenway Advisory Board to ensure regional connectivity and overall connectivity between the greenway and on-road network. There should be liaisons between all groups.

## **PROGRAM RECOMMENDATIONS AND RESOURCES**

Bicycle-related programs fall into three main categories: education, encouragement, and enforcement. The programs listed in this chapter are provided to demonstrate the variety of opportunities available for promoting bicycling and active lifestyles in Raleigh. The City should work closely with local volunteers and community organizations to implement events and activities, research new program ideas, and improve upon existing programs.

### **EDUCATION**

#### *Public Education and Educational Devices*

Raleigh should build on its existing programs by continuing to develop a variety of safety materials and distribute them widely throughout the community. Educational materials focus on safe behaviors, rules, and responsibilities. Information may include important bicycle laws, bulleted keys for safe bicycle travel, helmet requirements, safe motor vehicle operation around bicycles, and general facility rules and regulations. This safety information is often available for download from national pedestrian advocacy organizations, such as the Pedestrian and Bicycle Information Center website, [www.pedbikeinfo.org](http://www.pedbikeinfo.org). The BPSG, in cooperation with other agencies, developed a Triangle Motorist Guide to Bicycle Safety Brochure. This brochure is an excellent example of an educational brochure. Information can be distributed through brochures, newsletters, newspapers, bumper stickers, and other print media that can be inserted into routine mailings. It can also be posted on municipal websites and shown on local cable access television.

Local programs such as earn-a-bike programs, bicycle commuter mentoring, and summer camps can be organized by the City and the newly formed BPAC and can be utilized to distribute information using a booth to display related print media (these programs could be modeled after existing programs, such as Raleigh's Bicycle Rodeos). Brown-bag events and clinics are also excellent means to provide education, especially for adults. Local events, such as ArtExplosion, should be utilized to distribute information using a booth to display related print media. A representative from the newly formed BPAC could volunteer at the booth to answer questions related to bicycling in Raleigh.





### Motorist Education

Equally important as bicyclist education is motorist education. Many motorists do not recognize the simple fact that a bicycle is a vehicle by North Carolina state law. Several examples of safety materials have already been developed. As previously mentioned, the BPSG in cooperation with other Triangle agencies, has drafted a Triangle Motorist Guide to Bicycle Safety Brochure which is available for download on the CAMPO website: [http://www.camponc.us/BPSG/BPSG\\_Home.htm](http://www.camponc.us/BPSG/BPSG_Home.htm).

The North Carolina Driver's Handbook has an entire section devoted to bicycles, bicyclists' rights and responsibilities, and how motorists should behave. Programs to promote bicycle and pedestrian safety should be included in high school driver education classes. (Resource: [http://www.ncdot.org/transit/bicycle/safety/programs\\_initiatives/share.html](http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/share.html)). The Town of Cary, NC has produced a digital bicycling video that can be used as a model. Resource <http://www.townofcary.org/depts/dsdept/PEZ/bicycleplan/bicycleplanoverview.htm>.



Above: The educational brochure available at the CAMPO website which educates motorists on the rights of bicyclists.

The StreetSmart public awareness campaign in the Washington, DC region is another example of a Public Service Agency educating residents about pedestrian and bicycle safety.

Raleigh should also build on programs that distribute safety devices throughout the community. For example, nearby Guilford County is involved in the distribution of safety materials and devises through the Helmet Promotion Program. This program is funded by NCDOT's federal safety funds, which were used to purchase bicycle helmets for distribution at local bicycle safety events in communities across the state. (Resource: [http://www.ncdot.org/transit/bicycle/safety/programs\\_initiatives/helmets\\_promotions.html](http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/helmets_promotions.html))

### Internal Training

'Internal' education refers to the training of all people who are involved in the actual implementation of the Bicycle Transportation Plan. Internal training will be essential to institutionalizing bicycle issues into the everyday operations of public works, planning, and parks and recreation departments. In addition to relevant City staff, members of the local planning commission, NCDOT Division 5 staff, and Wake County staff should also be included in training sessions whenever possible. This training should cover all aspects of the transportation and development process, including planning, design, development review, construction, and maintenance. This type of 'inreach' can be in the form of brown bag lunches, professional certification programs and special sessions or conferences. Even simple meetings to go over the Bicycle Plan and communicate its strategies and objectives can prove useful for staff and newly elected officials that may not have otherwise learned about the plan. Bicycle planning and design issues are complex, and state-of-the-art research and guidelines continue to evolve. Therefore, training





sessions need to be updated and repeated on a regular basis.

The NCDOT Division of Bicycle and Pedestrian Transportation hosts bicycle planning and design workshops quite often in Raleigh and Charlotte. The City of Raleigh should send City staff including engineers, planners, and transportation professionals regularly to both bicycle workshops and also pedestrian workshops to integrate a more multi-modal and Complete Streets approach.

Local law enforcement should be trained in accurate reporting of bicycle crashes involving automobiles. In many communities, police do not always adequately understand the rights of bicyclists. Proper interpretation of individual circumstances and events is critical for proper enforcement and respect between motorists and bicyclists. Special training sessions should be instituted and occur annually for new employees within the Police Department that focus on laws relating to bicycle travel. Every effort should be made for representation from the Police Department on the BPAC.

### ***LCI Training / Bike ED***

The League of American Bicyclists (LAB) has a national bicycle education program (Bike ED) that includes training to become certified League Cycling Instructors (LCI's). LCI's are trained to teach local bicycle skills training courses. Ideally, all BPAC members and key City staff would take LCI courses, or even become LCI instructors themselves. The Capital Area Metropolitan Planning Organization (CAMPO) Bicycle and Pedestrian Stakeholders Group (BPSG) is currently working with the LAB to conduct LCI courses for transportation professionals. This effort should continue with expansion to other state, federal and municipal agencies.

### ***Bicycle Ambassador Program***

The newly formed BPAC should begin this program as an early initiative. The Bicycle Ambassadors Program would be the bicycle outreach and education component of the BPAC, promoting bicycle safety and awareness. Programs around the country promote safety for all road users, bicyclists, motorists, and pedestrians. Members of the BPAC may volunteer to be ambassadors as well as recruiting community members to be ambassadors. Ambassadors host and attend programs, demonstrations, and activities at events, summer camps, and schools. One very successful model program is Mayor Daley's Bicycling Ambassadors in Chicago (<http://www.bicyclingambassadors.org/>) where the group includes adult and junior ambassadors, hosts a number of educational events, and gives presentations that promote bicycling. Local bicycle shops and groups in Raleigh should be involved.

### ***Bicycle Helmets Program***

The City of Raleigh and the BPAC should form a charity program aimed to ensure young cyclists are educated and equipped to take part in bicycling. The main objective would be to increase helmet wearing among children.





Strategies should start by expanding this component of Raleigh's existing Bicycle Rodeo Program.

### ***North Carolina School Crossing Guard Training Program***

As traffic continues to increase on North Carolina's streets and highways, concern has grown over the safety of our children as they walk and bike to and from school. At the same time, health agencies, alarmed at the increase in obesity and inactivity among children, are encouraging parents and communities to get their children walking and biking to school. In response, the Division of Bicycle and Pedestrian Transportation funded a study on pedestrian issues, including school zone safety, and decided to establish a consistent training program for law enforcement officers responsible for school crossing guards. According to the office of the North Carolina Attorney General, school crossing guards may be considered traffic control officers when proper training is provided as specified in GS 20-114.1.

Resource:[http://www.ncdot.org/transit/bicycle/safety/programs\\_initiatives/crossing.html](http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/crossing.html)

### ***Environmental, Cultural and Historic Education/Interpretation***

Educational programs and interpretative signage could be developed along greenways. Greenways provide opportunities for learning outside the classroom. Specific programs that focus on water quality and animal habitat are popular examples. Simple educational signage would offer interactive learning opportunities for people who use the trails. Brochures can be used to supplement signage with more detailed information and a map of the interpretive system.

#### *Interactive Tours*

An educational component to Raleigh's bicycle network could be added by developing historical, cultural, and environmental themes for the facilities, particularly on the off-road trails. The Reedy Creek Greenway, for example, could elaborate more on its history through enhanced interpretive signage. This idea can be adapted to create biking tours throughout the City, using signage, to identify the events, architecture, and habitats that make Raleigh unique. These tours should be simple to navigate and should stand alone as an amenity. However, brochures can be used to supplement signage with more detailed information and a map of the tour. Other ideas to supplement the signage could be organized "talks" or lectures by local experts.

### ***Bicycle Map Education***

The City of Raleigh should develop an updated bicycle map that includes new bicycle facilities and updated bicycle routes. This map is an opportunity for the City of Raleigh to present education and safety materials in a foldable map.





## Events

### *Bike Rodeos / Safety Town*

The City of Raleigh and the BPAC should continue to work with local bicycle clubs, groups, and law enforcement agencies to provide bicycle safety training to area children. Bicycling rodeos, training sessions, summer camps, and other educational activities should be created and promoted (and in the case of bicycle rodeos, continued) so that safety skills can be taught on an ongoing basis.



*Above and left: Images from 'bicycle rodeo' events.*

## Teaching

### *Basics of Bicycling Curriculum*

This elementary school-level course was developed in 1990 by the North Carolina Department of Transportation Division of Bicycle and Pedestrian Transportation and the Bicycle Federation of America (now the National Center for Bicycling and Walking). More than half of the 120 school systems across North Carolina have used the program, which currently reaches approximately 60,000 fourth and fifth graders annually. This complete curriculum package includes a clearly written and easy-to-use Instructor's Guide. A video provides an overview and tips on teaching the program as well as two instructional modules for the students. The Guide offers step-by-step instructions so that interested adults of differing cycling abilities can teach the course, using outside resources where necessary to augment their own skills. (Resource: [http://www.ncdot.org/transit/bicycle/safety/programs\\_initiatives/curriculum.html](http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/curriculum.html))

### *Bike Repair Video*





Having a bicycle in good repair is an important part of bike safety. Yet every year, a large percentage of bike crashes are caused by mechanical problems and poor maintenance. For this reason, the NCDOT funded the production of a bicycle repair video in collaboration with the North Carolina 4-H program. The video, which can function as a stand-alone education tool, coordinates with the 4-H Cooperative Curriculum entitled Bicycle Adventures for children aged 11 to 15. Don't Get Stuck: FIX IT! Bike Repair Video. Common problems, such as a flat tire, brakes that don't work, or a missing or broken part, make a bike unrideable and unsafe. This 38-minute video is designed to stand alone or be used by an adult to help a child learn to make 10 basic bicycle repairs. All the tools, parts, and equipment needed to make the repairs are listed in each section. Information on properly fitting a helmet and sizing a bike are also included. Most importantly, the repairs that are best left to an experienced mechanic are discussed. (Resource: [http://www.ncdot.org/transit/bicycle/safety/programs\\_initiatives/video.html](http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/video.html))

### *Top Education Actions for the City of Raleigh*

- Create Citizens Bicycle and Pedestrian Advisory Commission to meet on a regular basis.
- With support of the Bicycle and Pedestrian Advisory Commission, focus on education strategies for both motorists and bicyclists.
- City staff and the new BPAC should work in collaboration with the Parks, Recreation, and Greenway Advisory Board and CAMPO BPSG.
- Sponsor and/or participate in annual training sessions for bicycle design/review.
- Sponsor and/or participate in a session for law enforcement focusing on bicycle issues.
- Create a self-guided bicycling tour of Raleigh's environmental/historical/cultural sites, featuring interpretive signage in open space, parks, greenways, and downtown areas.
- Produce and/or obtain a variety of safety materials for distribution to various age groups and at various events/locations.
- Encourage members of the BPAC, City staff, and/or local bicycle club members to become League Cycling Instructors.
- Begin Bicycle Ambassador Program.





- Implement Bicycle Helmets Program.
- Develop bicycle rodeos and summer camps for children.
- Create bicycle maps that provide educational and safety information. Bicycle maps should include basic safety information, commuting information, trail etiquette, transit information, and a list of local resources on the back side of the map.
- Launch traffic calming public education campaigns with brochures and involving media, accompanied with increased enforcement.
- Begin monthly brown-bag events and clinics for adult education, involving local bicycle clubs and shops.

### Education Resources

This section of the *Pedestrian and Bicycle Information Center* website provides important messages for a range of different audiences that can be part of an educational campaign or program. It also offers links for finding more information related to bicycling education: <http://www.bicyclinginfo.org/education/>

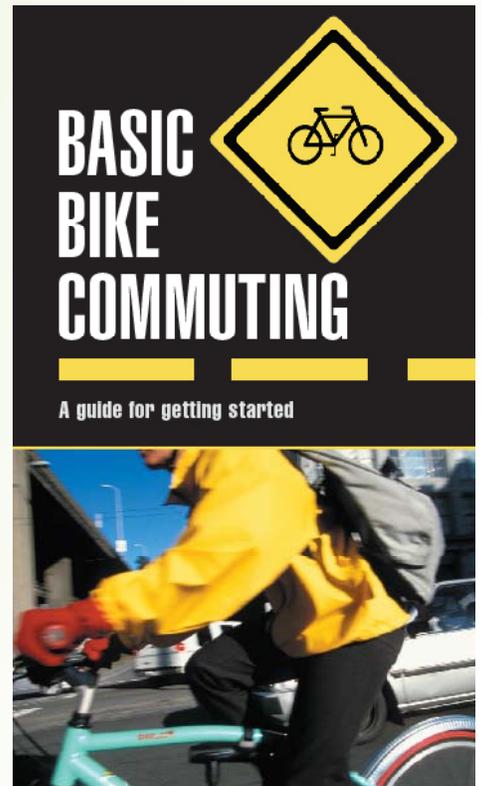
The *League of American Bicyclists* has been working for better cycling in America since 1880. They do this by promoting bicycling, educating cyclists and motorists, and advocating on behalf of cyclists on Capitol Hill and with state legislators across the United States. This web page has information on some of their programs: <http://www.bikeleague.org/programs/index.php>

The mission of the *National Center for Bicycling and Walking (NCBW)* is to help create bicycle-friendly and walkable communities across North America by encouraging and supporting the efforts of individuals, organizations, and agencies. This section of the website provides information on the workshops they offer for the general public as well as for training professionals: <http://www.bikewalk.org/workshops.php>

*NCDOT Division of Bicycle and Pedestrian Transportation* provides significant information related to bicycle programming. [http://www.ncdot.org/transit/bicycle/safety/safety\\_programs.html](http://www.ncdot.org/transit/bicycle/safety/safety_programs.html). Also, they list print material that is available for download: [http://www.ncdot.org/transit/bicycle/safety/safety\\_materials.html#posters](http://www.ncdot.org/transit/bicycle/safety/safety_materials.html#posters)

*Safe Communities* is a project of the National Highway Traffic Safety Administration (NHTSA). Nine agencies within the U.S. Department of Transportation are working together to promote and implement a safer national transportation system by combining the best injury prevention practices into the Safe Communities approach to serve as a model throughout the nation. <http://www.nhtsa.dot.gov/safecommunities>

Below: The cover of an informational brochure available through NCDOT that outlines the basics of bicycle commuting.





*Safe Kids Worldwide* is a global network of organizations whose mission is to prevent accidental childhood injury, a leading killer of children 14 and under. More than 450 coalitions in 15 countries bring together health and safety experts, educators, corporations, foundations, governments and volunteers to educate and protect families. Visit their website to receive information about programs, involving media events, device distribution and hands-on educational activities for kids and their families. <http://www.usa.safekids.org/>

*Rules of the Road for Grandchildren: Safety Tips* is an information website for grandparenting. If you are a grandparent, you can play an important role in teaching your grandchildren the “rules of the road.” AARP. <http://www.aarp.org/confacts/grandparents/rulesroad.html>

*Eat Smart, Move More* is a statewide movement that promotes increased opportunities for healthy eating and physical activity wherever people live, learn, earn, play and pray. <http://www.eatsmartmovemorenc.com/>

*American Trails* supports local, regional, and long-distance greenways and trails, whether in backcountry, rural, or urban areas. This page of the website contains studies and reports that can be referenced in educational materials related to trails and greenways: <http://www.americantrails.org/resources/>

*Worldcarfree.net* is a clearinghouse of information from around the world on how to revitalize towns and cities and create a sustainable future. In addition to serving the carfree movement, Worldcarfree.net offers resources for architects, planners, teachers/professors, students, decision-makers and engaged citizens: <http://www.worldcarfree.net/>

## **ENCOURAGEMENT**

### ***Employer Programs***

To encourage bicycling and walking to work, employers can provide programs and incentives. When bicycling is encouraged, the employer benefits from improved employee health and morale along with an enhanced community perception when protecting the environment and being active in the community. Promotions could include a Bike to Work Day or a morning Pit-Stop where employees can receive free refreshments. Employers can provide educational workshops, bicycle parking options, and employee incentives. Incentives may include prize drawings, t-shirts, free tune-ups at a local bicycle shop, and bicycle maps.

*The Smart Commute Challenge*, actively supported and encouraged in the Triangle area by Triangle Transit and CAMPO, is an excellent means of having residents pledge to commute to work by bicycle. Prizes are available and educational information on commuting to work are available at <http://www.smartcommutechallenge.org/>. This campaign should be supported during implementation of this Bicycle Plan.





The *Bicycle Commuter Act* was recently passed into law and becomes effective on January 1, 2009. This legislation, enacted as part of the Emergency Economic Stabilization Act of 2008 (HR 1424), allows employers to offer their employees a tax-exempt transportation fringe benefit of \$20 per month for purchasing, maintaining, or storing a bicycle. Based on how the employer chooses to offer the benefits, the employee may bring receipts to be reimbursed, may sign up for regular monthly payments, or devise some sort of voucher system with their employer. Employers sensitive to tax savings, employee morale, improved recruitment and reduced turnover are likely to provide this benefit. All types of employers from single person offices to large businesses with multiple locations and from every industry category in the private, public and non-profit sectors have the option to offer qualified transportation fringe benefit to their employees. BPAC members should encourage local employers to offer this benefit.



*On Earth Day and Every Day – RTI Cares*

Biking to Work

**RTI International's  
Bike Commuting  
Group**



**RTI support for bike commuters**

- Provides showers, lockers, bike racks
- Participates in RUP Bike-to-Workweek
- Has bike commuting group, founded by staff

**RTI bike commuting group**

- Supported by RTI Recreation & Wellness Committee
- Holds monthly meetings to promote rideship, discuss topics of interest
- Organized month-long bike Challenge

**RTI Bike Challenge results**

- 1,370 miles ridden
- 57 gallons of fuel saved
- 1,107 pounds (or 0.5 metric ton) of CO<sub>2</sub> prevented from release into air

**Bike commuting group goals for 2008**

- Conduct workshops (e.g., bike safety 101, repairing a flat tire)
- Implement buddy-system, group caravans for new riders
- Create map with rider locations
- Build intranet page for bike commuting
- Consider motivational group rides (e.g., for charity)
- Establish bike rider listserve for communications

### Showers at Work

Some employees will not consider biking to work without the assurance that they can shower when they arrive. Showers also allow employees to exercise at lunch. In buildings with 50-100 employees, one shower should be sufficient. In buildings with 100- 250 employees, one shower for each sex should be provided. Buildings housing over 250 employees should provide at least four showers with two of them being accessible to the disabled.

### Clothes Lockers

Ideally, there should be one lockable gym locker for every long-term bicycle parking space provided. The regular bicycle commuter can store work clothes. In addition to providing a locker to each regular bicycle commuter, other lockers should be available to encourage potential new bike commuters. These facilities will also encourage lunch-time fitness activities which benefit both the employee and the employer.

*Above: RTI International of Research Triangle Park is an example of an employer that actively supports bicycling.*





### **School Programs**

Many programs exist to aid communities in developing safer pedestrian facilities around schools. Programs can be adopted by parents or the schools to provide initiatives for biking. Information is available to encourage group travel, prevent bicycle-related injuries, and sponsor commuter-related events. After-school programs, summer Bike Camps, bicycle rodeos, and Family Fun Rides can be created to provide a supportive environment for children to learn how to ride a bike comfortably and safely with friends, learn how to repair and maintain a bicycle, and tour their city and its destinations.

#### *Safe Routes to School*

The City of Raleigh should seek programming and facility funding from the Safe Routes to School program, administered by the NCDOT Bicycle and Pedestrian Transportation Division. Funding is available for school workshops and action plans. The Safe Routes to School program also provides implementation and construction funding for facilities near schools.

### **Awareness Days/Events**

A specific day of the year can be devoted to a theme to raise awareness and celebrate issues relating to that theme. A greenway and its amenities can serve as a venue for events that will put the greenway on display for the community. Major holidays, such as July 4th, and popular local events serve as excellent opportunities to distribute bicycling information. The following are examples of other national events that the City of Raleigh can use to improve usage of bicycle facilities:

#### *Bike-to-Work Day (Third Friday in May)*

Bike-to-Work Day is an annual event held on the third Friday of May across the United States that promotes the bicycle as an option for commuting to work. Leading up to Bike-to-Work Day, national, regional, and local bicycle advocacy groups encourage people to try bicycle commuting as a healthy and safe alternative to driving by providing route information and tips for new bicycle commuters. On Bike-to-Work Day, these groups often organize bicycle-related events, and in some areas, pit stops along bicycle routes with snacks.

In 2008, a very successful Community Leader and Public Bicycle Ride occurred on Bike-to-Work Day through Downtown Raleigh. A Bike to Work Week Breakfast occurred as well. The City of Raleigh, with help from the newly formed BPAC, should work to make this a more significant event, increasing participation. Triangle Transit placed signs on trails reminding citizens of Bike-to-Work Week. The City should continue to work with CAMPO, Triangle Transit, and the Smart Commute Challenge to continue and improve these events.





May is also *National Bike Month*. Events can include proclamations, marketing campaigns, commuter contests and worksite events.

#### *Car-Free Day (September 22)*

Car Free Day is an international day to celebrate getting around without cars. This fall event coincides with the beginning of the school year and is the perfect way to kick-off programs that promote bicycling and raise awareness for environmental issues. Car-Free events can last for an entire week or month, featuring alternative transportation promotional activities, fitness expos, transit-use incentives, walking and jogging group activities, running and bicycling races and rides, etc.

#### *“Strive Not to Drive Day”*

This event example, from the Town of Black Mountain, North Carolina, is an annual event to celebrate and promote the Town’s pedestrian achievements for the year throughout their region. Awards for pedestrian commuters, as well as booths, contests, and other events are organized through their local MPO Bicycle and Pedestrian Task Force and the Land-of-Sky Regional Council. A similar event could be held in Raleigh to focus on bicycling issues, as the Bicycle Transportation Plan is implemented.

#### *National Trails Day*

This event is held every year in June. Other events, competitions, races, and tours can be held simultaneously to promote trail use within Raleigh. For example, in Greensboro, North Carolina, the Parks and Recreation-Trails Division sponsors events for National Trails Day, and it has become a huge event for the entire city.

#### *Earth Day*

Earth Day is April 22nd every year and offers an opportunity to focus on helping the environment. Efforts can be made to encourage people to help the environment by bicycling to destinations and staying out of their automobiles. This provides an excellent opportunity to educate people of all ages in Raleigh.

### ***Use Facilities to Promote Other Causes***

Bicycle facilities could be used for events that promote other causes, such as health awareness. Not only does the event raise money/publicity for a specific cause, but it encourages and promotes healthy living and an active lifestyle, while raising awareness for bicycling activities. Non-profit organizations such as the American Cancer Society, American Heart Association, and the Red Cross sponsor events such as the Tour de Cure, a series of cycling events held in more than 80 cities nationwide to benefit the American Diabetes Association.





### ***Bicycle Activities/Promotion within Local Organizations***

The City of Raleigh has numerous organizations that could be utilized to promote bicycling activities (e.g. the local bicycle stores, North Carolina Bicycle Club, local cycling groups, local schools/PTAs, neighborhood groups, homeowners associations, etc). Education, enforcement, and encouragement programs can be advertised and discussed in local organization newsletters, seminars, and meetings. Such organizations could even organize and cross-promote their own group rides, trail clean-ups, and other activities listed in this section.

#### *Cycling Clubs/Bicycle-Commuting Groups*

Neighborhoods, local groups, or businesses could promote cycling clubs for local residents or employees to meet at a designated area and exercise on certain days before or after work (or even to work), during lunch breaks, or anytime that works for the group. This informal group could be advertised on local bulletin or information boards. These clubs could be specialized to attract different interest groups. For example, in the Durham's Research Triangle Park, several work places (Such as RTI International) have organized their own riding groups to promote cycling and active, healthy lifestyles (see example promotional poster).

Clubs and bicycle shops provide opportunities for group rides. These rides should be promoted by the City of Raleigh and the BPAC, reaching out to bicyclists of all abilities.

#### *1304Bikes*

1304Bikes is a local volunteer organization that helps repair donated bicycles and teaches local residents how to repair and earn one of the bicycles. Organizations, such as 1304Bikes play a major role in the encouragement of bicycle riding and need support.

### ***Art in the Landscape***

The inclusion of art along bikeable greenway corridors and trails would encourage use of facilities and provide a place for artwork and healthy expression to occur. An existing example is the Reedy Creek Greenway. Artwork could be displayed in a variety of ways and through an assortment of materials. Living artwork could be "painted" through the design and planting of various plant materials. Sculpture gardens could be arranged as an outdoor museum. Art through movement and expression could be displayed during certain hours during the day or during seasonal events. Artwork can be provided by local schools, special interest clubs and organizations, or donated in honor or memory of someone.

### ***Raleigh Public Bicycle Map***

The current Raleigh bicycle map should be updated and subsequently distributed widely throughout the community, through municipal governments, schools, advocacy groups, and other organizations throughout





Raleigh. Maps should be made available at parks and recreation centers, libraries, municipal buildings, the transit center, on transit buses, and at tourism information centers. The map should be updated every 3 to 5 years to reflect the bicycle and greenway improvements that will be implemented through this Plan. The map should be made available in hardcopy format and online and contain educational and safety information as well.

### ***Special University-Based Programs***

The City of Raleigh should work with local colleges and universities, such as NC State and Meredith College, to develop a comprehensive network of campus bicycle routes that are connected with bicycle facilities in the surrounding areas. Integration with colleges and universities will allow greenway and bike facilities to cater to one of the network's largest user groups.

### ***Adopt-A-Trail***

Local clubs and organizations provide great volunteer services for maintaining and patrolling trails. This idea could be extended to follow tour routes or specified streets/sidewalks. A sign to recognize the club or organization could be posted as an incentive to sustain high quality volunteer service. The Boy Scouts of America serve as a good model for participation in this type of program.

### ***Revenue Generating Programs***

The City of Raleigh should be proactive in increasing revenue from programs and events that can help fund the building, management, and maintenance of future facilities. Fees could be increased in events annually or biannually to increase revenue. Specific program and event ideas that are being used to generate revenue across the country include:

- Races/triathlons (fees and/or donations)
- Concessions
- Educational/Nature/Historic tours (fees and/or donations)
- Fund-raisers including dinners/galas
- Moonlight bike rides and walks (fees and/or donations)
- Greenway parade (fees and/or donations)
- Concerts (fees and/or donations)
- Art events along greenway (fees and/or donations)
- Events coincident with other local events such as fairs, festivals, historic/folk events, etc.
- Media events and ribbon-cuttings for new trails and bicycle facilities (donations)

### ***Top Encouragement Actions***

- Foster the creation of a Bicycle Mentor Program for new bicycle commuters to learn from experienced bicycle commuters.





- Encourage Raleigh employers to provide programs and incentives for their employees to bicycle to work.
- Encourage children to walk and bike to school safely, through a combination of programs including monthly family rides and bicycle rodeos.
- Apply for Safe Routes to School funding and conduct and implement Safe Routes to School workshops and action plans.
- Develop online and hardcopy bicycle maps
- Encourage the expansion of cycling clubs and bicycle-commuting groups.
  - Use bicycle facilities, particularly trails, to promote causes and hold special events for causes
- Utilize greenways for artwork and plantings
- Reach out to Spanish-speaking population with bicycle-related events
- Expand and promote awareness day activities and establish new events, such as Bike to Work Day and Bike to Work Month events

### ***Encouragement Resources***

*Safe Routes to School* is a national program with \$612 million dedicated from Congress from 2005 to 2009. Local Safe Routes to School programs are sustained by parents, community leaders, and citizens to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. Recently, the state of North Carolina has started the NC Safe Routes to School Program based off of the national program. The state has \$15 million over the next 5 years for infrastructure improvements within 2 miles of schools. This funding can also be used towards the development of school related programs to improve safety and walkability initiatives. The state requires the completion of a competitive application to apply for funding and a workshop at the school to determine what improvements are needed. <http://www.saferoutesinfo.org>

*Bikelowa* provides a good resource, the “Employer’s Bike to Work Guide,” providing ideas for encouraging bicycle commuting: <http://www.bikeiowa.com/asp/bike/EmployerGuide.asp>

This web page from the League of American Bicyclists has information on encouraging bicycle commuting: <http://www.bikeleague.org/resources/better/commuters.php>





The role of the *Active Living Resource Center (ALRC)* web site is to provide resources and tools to help make walking and bicycling part of your community's healthy lifestyle. This page of the website has encouraging success stories from other communities: [http://www.activelivingresources.org/stories\\_directory.php](http://www.activelivingresources.org/stories_directory.php)

*Bikes Belong* is sponsored by the U.S. bicycle industry with the goal of putting more people on bicycles more often. From helping create safe places to ride to promoting bicycling, they carefully select projects and partnerships that have the capacity to make a difference. Their work concentrates on four main areas: federal policy and funding, national partnerships, community grants, and promoting bicycling. In addition, they operate the Bikes Belong Foundation to focus on kids and bicycle safety. <http://www.bikesbelong.org/>

*1304Bikes* repairs donated bicycles. More information can be found at their website: <http://www.1304bikes.org>.

## **ENFORCEMENT**

### ***Motorist Enforcement***

Based on crash data analysis and observed patterns of behavior, law enforcement can use targeted enforcement to focus on key issues such as motorists speeding, passing too closely to cyclists, parking in bicycle lanes, etc. These issues should be targeted and enforced consistently. The goal is for bicyclists and motorists to recognize and respect each other's rights on the roadway.

As traffic continues to increase on North Carolina's streets and highways, concern has grown over the safety of children as they walk or bike to and from school. At the same time, health agencies, alarmed at the increase in obesity and inactivity among children, are encouraging parents and communities to get their children walking and biking to school. In response, the Division of Bicycle and Pedestrian Transportation funded a study on school zone safety and decided to establish a consistent training program for law enforcement officers responsible for school crossing guards. According to the office of the North Carolina Attorney General, school crossing guards may be considered traffic control officers when proper training is provided as specified in GS 20-114.1.

### ***Bicyclist Enforcement***

Observations made by local trail and bicycle facility users can be utilized to identify any conflicts or issues that require attention (see online public comment form results). To maintain proper use of trail facilities, volunteers could be used to patrol the trails, particularly on the most popular trails and on days of heavy use. The volunteer patrol can report any suspicious or unlawful activity, as well as answer any questions a trail user may have.





## ***Bicycle Laws of North Carolina (NCDOT, 2008)***

In North Carolina, **the bicycle has the legal status of a vehicle**. This means that bicyclists have full rights and responsibilities on the roadway and are subject to the regulations governing the operation of a motor vehicle. North Carolina traffic laws require bicyclists to:

- **Ride on the right in the same direction as other traffic**
- **Obey all traffic signs and signals**
- **Use hand signals to communicate intended movements**
- **Equip their bicycles with a front lamp visible from 300 feet and a rear reflector that is visible from a distance of 200 feet when riding at night.**

In addition, the *Child Bicycle Safety Act of 2001* requires that:

- **All bicycle operators under 16 years of age must wear a bicycle helmet on public roads, public paths and public rights-of-way**
- **All child passengers under 40 pounds or 40 inches must be seated and secured in a child seat or a bicycle trailer.**

Although the new law does not require adult bicyclists to wear helmets, they are strongly encouraged to do so. Some localities within the state have enacted ordinances requiring cyclists to wear helmets.

*Legal Issues Related to Bicycling:* Laws pertaining to the operation of a bicycle vary from state to state. Below are three areas of North Carolina law that need clarification.

- **Bicycling on Interstate or fully controlled limited access highways, such as beltlines, is prohibited by policy, unless otherwise specified by action of the Board of Transportation. Currently, the only exception to the policy is the US 17 bridge over the Chowan River between Chowan and Bertie Counties.**
- **There is no law that requires bicyclists to ride single file, nor is there a law that gives cyclists the right to ride two or more abreast. It is important to ride responsibly and courteously, so that cars may pass safely.**
- **There is no law that prohibits wearing headphones when riding a bicycle; however, it is not recommended. It is important to use all your senses to ensure your safety when riding in traffic.**

Retrieved on 9/4/2008, from [http://ncdot.org/transit/bicycle/laws/laws\\_bikelaws.html](http://ncdot.org/transit/bicycle/laws/laws_bikelaws.html)





When users of the bicycle network witness unlawful activities, they should have a simple way of reporting the issue to police. A hot line should be created, which would compliment trail patrol programs. People could call in and talk to a live operator or to leave a voice mail message about the activity they witnessed. Accidents could also be reported to this hot line. Accident locations could then be mapped to prioritize and support necessary facility improvements.

Additionally, unsafecycling (e.g. riding on the wrong side of the street, without lights at night, or children riding without helmets) should be addressed by local law enforcement through warnings, with an understanding that there may be a learning curve for new or inexperienced cyclists. Again, the goal is for bicyclists and motorists to recognize and respect each other's rights on the roadway.

### **Police on Bikes**

Raleigh already has Police Bike Patrols in the Downtown area. Increased use of police on bikes is a significant benefit for community policing and quality of life. This idea should be coordinated with and extended to include enforcement within the college campuses. Police on bicycles should be models for other cyclists by wearing helmets and riding accordingly.

### **Local Police Input**

An appointed member of the Raleigh Police Department should serve on the BPAC if possible to understand issues in the Raleigh area and contribute to the process. The Police Department speaks with local bicycling enthusiasts and the general public and participated in the development of this Plan.

### **Mandatory Helmet Law**

The City of Raleigh should consider enacting a new mandatory helmet law for City residents. The State of North Carolina law already requires children under the age of 16 to wear helmets. The City should consider options such as mandatory helmet laws for all ages or possibly increasing to ages above 16. The National Highway Traffic Safety Administration (NHTSA) supports the enactment of bicycle helmet usage laws by states and municipalities. This is due to statistics that prove bicycle helmets provide protection (Example: Helmets are 85 to 88% effective in mitigating head and brain injuries). Over 20 states, including North Carolina, have laws requiring helmet usage for persons under age 16. A number of communities throughout the country have made helmet usage mandatory for all ages especially in the states of Missouri and Washington. In North Carolina, the towns of Black Mountain and Boone require helmets for all ages. For more information, visit <http://helmets.org/mandator.htm> and <http://www.bikeleague.org/media/facts/pdf/BicycleHelmetUseLaws.pdf>



*Above: A police officer patrols a trail by bicycle.*





As an enforcement/education measure, a partnership between the City of Raleigh, local shops and groups, and the BPAC could distribute prizes to children seen wearing a helmet. Enforcement should not be heavy-handed but rather an opportunity to educate and encourage helmet usage.

### Top Enforcement Actions

- Work with the Raleigh Police Department to establish an easy-to-use and well publicized bike and pedestrian enforcement hot line. Complaints that include license numbers should result in a letter to the owner of the vehicle that includes the complaint as well as a handout that outlines the rules of the road and rights for both cyclists and motorists. Reportable incidents include:

- Collisions with motorists, other cyclists, or pedestrians
- Getting “doored”
- Being side swiped or having a close call with a vehicle
- Road rage and harassment property damage
- Bike lane obstructions such as parked cars, yard waste, or trash cans

Below: An example wallet-sized plastic card that could be handed out to cyclists and motorists that explains the rules of the road.



- Target and enforce all illegal motorist and bicyclist behavior that may jeopardize the success of the Bicycle Network. Base targeted enforcement areas on reported incidents from the hotline.

- Require all crossing guards to complete an NCDOT Crossing Guard Training Program

- Establish a crossing guard program for peak school hours

- Establish a local “Trail Patrol”

- Include a representative from Raleigh’s police department on the BPAC

- Create bicycle patrol positions for the department to increase bike presence and enforcement

- Increase speed enforcement along common bicycle recreational routes and Downtown.

- Provide officers with a handout to be used during bicycle-related citations and warnings (see example hand-out card at right; the opposite side of the card has rules for motorists).

- Consider expanding bicycle helmet law for City of Raleigh (beyond current State law of under 16). This could be an early action item for the Bicycle and Pedestrian Advisory Commission and City Council.





### **Enforcement Resources**

The *National Highway Traffic Safety Administration (NHTSA)* awarded a grant to *MassBike* to develop a national program to educate police departments about laws relating to bicyclists. The program is intended to be taught by law enforcement officers to law enforcement officers as a stand-alone resource. The link contains downloads for presentations, videos, and other resources that are useful for police officers and everyday cyclists alike: <http://www.massbike.org/police/>

This webpage of the *Pedestrian and Bicycle Information Center* has a wealth of resources regarding enforcement issues, ranging from training for local law enforcement to procedures for handling violators, to enforcement example case studies: <http://www.bicyclinginfo.org/enforcement/>

#### *NCDOT School Crossing Guard Program*

[http://www.ncdot.org/transit/bicycle/safety/programs\\_initiatives/crossing.html](http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/crossing.html)

*NCDOT's A Guide to North Carolina Bicycle and Pedestrian Laws*. For an online resource guide on laws related to pedestrian and bicycle safety (provided by the National Highway Traffic Safety Administration), visit [www.nhtsa.dot.gov/people/injury/pedbimot/bike/resourceguide/index.html](http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/resourceguide/index.html)

