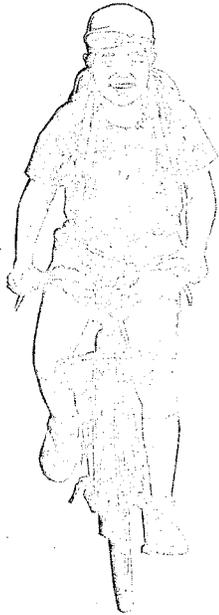
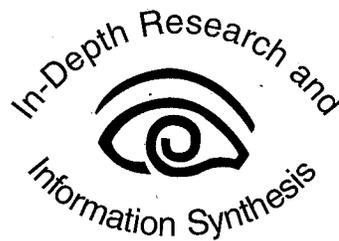


PB2000-102813



# Bicycle Commuting In Three North American Cities: Madison, Boulder, Toronto

**IRIS**



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Springfield, Virginia 22161









# **BICYCLE COMMUTING IN THREE NORTH AMERICAN CITIES: Madison, Boulder, Toronto**

## **Final Report**

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**April 1999**

*Published by:*

Minnesota Department of Transportation  
Office of Research & Strategic Services  
Mail Stop 330  
395 John Ireland Boulevard  
St. Paul, MN 55155

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## EXECUTIVE SUMMARY

The Minnesota Department of Transportation (Mn/DOT) Sustainable Transportation Initiative works to promote alternative transportation modes. This paper will profile bicycle transportation, particularly bicycle commuting, in three North American cities that have extensive bicycling activity and programs: Madison, Wisconsin; Boulder, Colorado; and Toronto, Ontario, Canada. The purpose of the study is to describe bicycle transportation in these cities so that we can learn from them and gain ideas for further improvements in Minnesota bicycle transportation.

Madison, Boulder, and Toronto are among cities in North America with reputations for high levels of bicycling activity. All three have an extensive system of bike paths and bike lanes, with more being planned and built. Madison has approximately 100 miles of bike paths, bike lanes, and shared-use streets assigned as designated bike routes. Boulder has about 80 miles of bicycle/pedestrian and multi-use routes. Toronto has 72 km of bicycle lanes, 40 km of signed bicycle routes, 16km of "share the road" routes, and 150km of bicycle trails.

All three also have winter weather as an added challenge to bicycle commuting. Madison has an average annual precipitation level of 32 inches, with average annual snowfall of about 44 inches. Boulder's average annual precipitation is only 19 inches, but that includes an average 80 inches of snow per year. Toronto gets about the same precipitation per year as Madison, 32 inches, but averages 53 inches of snow.

Madison has a Bicycle/Pedestrian Coordinator in the city's Office of Traffic Engineering. The city bicycle plan was written in 1990, but the state just produced a *Wisconsin Bicycle Transportation Plan* in 1998. The state plan calls for an interconnected transportation system across government boundaries and jurisdictions. The City of Boulder completed a Bicycle System Plan in 1996 that is part of the *Transportation Master Plan Update for the Boulder Valley*. It, too, addresses the need to develop a continuous and well-connected bicycle system, which extends through the city and the region. The provincial government of Ontario recently amalgamated the six municipal governments in the Toronto metro area to form The New City of Toronto, and the new city is now working on a new bicycle plan. There is a Pedestrian and Cycling Infrastructure section in the city's Transportation Department, and a Bicycle Planner in the city's Planning Department. The city also has a City Cycling Committee, which is a committee of the City Council and is charged with initiating programs to increase the quantity and quality of bicycle trips in Toronto.

Programs in Madison to aid and encourage bicycle commuting include the Madison Bicycle Commute Project, a one-year pilot project in 1998. An outcome of that project will be a published handbook for bicycle commuting. Their bike to work event has expanded into Bike to Work Week and had participation by about 1,500 people and 100 businesses in 1998. The free bike program has been operating since 1996. Bicyclists can find extensive information about programs, projects, issues and organizations on the *Bicycling Community Page* on the Internet.

The City of Boulder established a group called GO Boulder in 1989 to foster greater use of alternative modes of transportation. Their annual bike to work event expanded in 1998 to become part of a larger program called Walk & Roll, which runs from May through September and includes the Walk & Roll Business Challenge. Boulder businesses compete for the most walking, biking and transit participants. GO Boulder also publishes the *Alternative Transportation Newsletter*. Boulder has a free bike program, which they say is the longest-running in the country. They have special bike parking racks at downtown parking meters, and allow bikes on buses and light rail trains.

Toronto has an annual Bike Week which includes Bicycle Friendly Business Awards for businesses and organizations that help make Toronto bike friendly. They also have special bike parking devices in the city and allow bikes in city buses, streetcars and subway trains during nonpeak hours. The Bicycle User Group Program is a network of workplace groups that promote bicycle commuting. Transportation Management Associations also promote alternative transportation options including bicycling, in the workplace. The Cycling Ambassadors Program works to reduce bicycle accidents, increase compliance with traffic laws by all road users, foster cooperation on the roads, and promote safe and responsible trail use in environmentally sensitive areas.

Snow plowing is a priority in all three cities. The dedicated bike paths in Madison are cleared by the Parks Division, and their goal is to have them clear by 8:00 in the morning after a snowfall. In Boulder, the Dept. of Public Works clears off-street paths as soon as possible, and incorporates streets with on-street bike lanes into either Primary or Secondary snow routes. In

Toronto, the bike lanes are plowed within 48 hours of a snowfall, and when regular street plowing is completed, bike lanes are monitored for additional plowing or salting as needed.

All three cities have extensive information on bicycling programs and issues available on the Internet. Internet sites include official city sites, sites put up by independent organizations and individual bike activists, and electronic newsletters. They also have numerous links to other bicycle sites from across the country. What comes through loud and clear is that these cities have large, active bicycling communities and have involvement from government, advocacy organizations, and individuals.

## Chapter 1: INTRODUCTION

Madison, Wisconsin; Boulder, Colorado; and Toronto, Ontario, Canada are among North American cities that have reputations for being good cities for bicycling. When *Bicycling* magazine did its first ranking of the best cities for bicycling in April 1990, Boulder was No. 4 and Madison was No. 9. When *Bicycling* did their second ranking in November 1995, they limited it to cities with populations of 100,000 or more, so Boulder no longer qualified. Boulder's population is currently 95,622. Madison, however, with a population of 161,262 at that time, was No. 4. Toronto, with a population of 635,395, was No. 1. Toronto was also featured as a city where bicycling is a way of life in the September/October 1998 issue of the Sierra Club's magazine *Sierra*.

*Bicycling* has upped the population minimum to 200,000 for their latest ranking, which appears in the March 1999 issue. Madison's current population is just barely under 200,000, but they were eliminated this time. *Bicycling* set that minimum in order to focus their rankings on true urban, big-city cycling. Toronto is now No. 5, due to the extensive change that occurred when Ontario amalgamated the six surrounding cities to form a New City of Toronto with a population of 2.3 million and a much more spread-out territory.

The Minnesota Department of Transportation (Mn/DOT) Sustainable Transportation Initiative is currently working to promote alternative transportation modes including bicycling, and to identify barriers, costs and benefits of alternative mode transportation. This paper will profile bicycle commuting programs in Madison, Boulder, and Toronto, and examine what makes them good bicycling cities, what programs/amenities support

bicycle commuting, what organizations are involved and how bicycle transportation fits into the cities' planning and policymaking activities. It will focus on bicycling as a transportation mode, particularly bicycle commuting, as opposed to recreational bicycling. The intent is not to compare and rank these cities, as they are different in population, climate, area, and governmental structure. Rather, the purpose of the study is to describe bicycle transportation in these cities so that we can learn from each of them and gain ideas for further improvements in Minnesota bicycle transportation (Minneapolis received an honorable mention in the 1999 *Bicycling Magazine* rankings.)

The information that was gathered for this study came only in small part from published documents. The primary sources of information were Internet World Wide Web sites (including government sites, bicycle organization sites, electronic newsletters, and personal sites) and telephone interviews and electronic mail correspondence with bicycle planners, government officials and members of bicycle committees and advocacy organizations. There is a tremendous amount of pro-bike activity going on in these cities, and the fact that state government, local government, advocacy organizations and individual activists are all in the mix is important in maintaining the vitality of biking in Madison, Boulder and Toronto.

## Chapter 2: MADISON

The city of Madison wraps around two large lakes, Lake Mendota and Lake Monona. The center of the city, where the State Capitol is located, is on a narrow strip, or isthmus, between the lakes. The University of Wisconsin, Madison, is along the south shore of Lake Mendota, just off the isthmus. Government workers and university students and staff form a large pool of actual and potential bicycle commuters. There are approximately 100 miles of bike paths, bike lanes, and shared-use streets assigned as designated bike routes in the city.

The exact level of current bicycle commuting is difficult to pin down. In the 1990 census, 3.3% of all residents in the City of Madison commuted to work by bike during census week, which was the last week of March. Since Madison has a northern climate, levels would logically be higher during the warmer months. April through October are considered peak biking months, and the Bicycle/Pedestrian Coordinator for the city estimates that during the November-March season they retain 20% of their peak biking activity, so that 3.3% may be much less than what the level would be during the summer.

Various estimates from other sources are that 13% of Madison residents either bike or walk to work, and that citywide, 6-10% commute by bike. The University of Wisconsin-Madison annually surveys students and employees and has consistently found that about 10% of all employees and about 25% of off-campus students commute to the university by bicycle during good weather months.

Bicycle-related laws are covered in the *Wisconsin Statutes*, which can be searched by topic on the Internet at <http://www.legis.state.wi.us/rsb/stats.html>.

## **Bicycle Planning**

A *Wisconsin Bicycle Transportation Plan* was completed in 1998. The summary is currently available; the full report is due to be printed for distribution in May, 1999. The summary indicates that bicycle commuting has strong support at the state level. The vision statement for the plan is, "To establish bicycling as a viable, convenient and safe transportation choice throughout Wisconsin."<sup>1</sup> It recognizes that an interconnected transportation system across government boundaries and highway jurisdictions that can work safely for bicyclists is vital to achieving the goals of the plan, and addresses the state and local roles and responsibilities for making that happen. It states that development of a supportive environment for bicycling is key, and that a comprehensive effort involving state, cities, counties and even the private sector is necessary to reach the goals of the plan. The state plan encourages the implementation of local bicycling plans in the state's metropolitan areas, but the success of that depends on the local plans. The local plan for the Madison metropolitan area was described by one bicycle activist with whom I spoke as old and very general. It was written in 1990.

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<sup>1</sup> Wisconsin Department of Transportation. *Wisconsin Bicycle Transportation Plan Summary*. September 1998.

The City of Madison has a Bicycle Coordinator, the Wisconsin Department of Transportation has a Bicycle Coordinator, and the DOT District that includes Madison also has a full-time staff member working on alternative transportation programs, bicycle/pedestrian/Rideshare. The state government focuses on working through the regional Metropolitan Planning Organizations (MPOs), which in turn work with the cities. For example, when Madison did their bicycle plan, they worked with the MPO in Dane County to roll it into a city/county plan. The state's district offices also work directly with the cities in their districts. State Statute requires that the state DOT also provide direct technical assistance to local governments in the development of bicycle facilities. And a state-funded TDM program for demonstration projects does include bicycle transportation projects. (Tom Huber, Wisconsin Bicycle Coordinator, personal communication, March 25, 1999.)

### **Bicycle Commuting Programs**

Madison has a number of projects and programs to aid and encourage bicycle commuting. The Madison Bicycle Commute Project was a one-year pilot project for 1998 funded by a state TDM grant, a Dane County Bicycle Association grant, and participating corporations, and operated by the Bicycle Federation of Wisconsin. The program worked with four downtown area businesses to help them design and implement employee bicycling programs, in order to encourage and facilitate bike commuting. One outcome of the project is a bicycle commuter handbook, just being completed, which will be published by the Bicycle Federation of Wisconsin. It will include information on incentives that employers

can provide to encourage bike commuting, and information for employees to help them successfully commute by bike. The handbook will also include the results of a survey of the four businesses that participated in the pilot project. There was interest in the program outside Madison, too, so they may try for a statewide grant in the next round of TDM grants. (Marcia Miquelon, Madison Bicycle Commute Project Coordinator, personal communication, January 13, 1999 and Jeanne Hoffman, Bicycle Federation of Wisconsin Executive Director, personal communication, January 12, 1999.)

Bike to Work Week is an annual event that began as Bike to Work Day and expanded to a full week of activities in 1998. The 1998 event, May 23-29, was the 17<sup>th</sup> annual Bike to Work event in Madison. Participation has grown tremendously. In 1996, about 275 people participated; in 1997 it grew to over 800; and in 1998, with expansion to a week, about 1500 people participated. The 100 businesses that participated were surveyed, and the results of that survey are currently being compiled. (Marcia Miquelon, personal communication, January 13, 1999.)

The Red Bike program has been operating since 1996, and offers hundreds of used bicycles for free use each spring. They are maintained through the fall using donated materials and labor, and then retrieved and stored for the winter. Information about the Red Bikes is on the Bicycling Community Page serving Madison and Dane County, at <http://danenet.wicip.org/bcp/redbikes>.

The Bicycling Community Page on the Internet World Wide Web at <http://danenet.wicip.org/bcp> is itself a service to bicycle commuters. It is a product of the

Bicycle Transportation Alliance of Dane County, an advocacy group for bicycle commuters and recreational bicyclists. It includes news about proposed road projects that impact bicycling, a link to the magazine *Wisconsin Bicyclist*, and sections on all aspects of bicycling. The "Commuting" section includes "Bicycle Commuting in Madison: A Guide," by Arthur Ross, the city's Pedestrian/Bicycle Coordinator, tips on winter riding, links to other bike commuting information, and commentary on the state of bike commuting issues in Madison.

One issue is Madison Metro's lack of effort to date to obtain matching funds for a Bikes-on-Buses grant. The Bicycle Transportation Alliance's online newsletter, *Spoke'n Word*, reported in their Spring 1998 issue that the Madison Transit Commission was going to direct Madison Metro to apply for Bikes-on-Buses funding in the 1999 funding cycle. The "Advocacy" section of the Bicycling Community Page also has information about that issue. Bikes-on-Buses is one commuting amenity that Madison does not yet have, but for which bike advocates are pushing.

### **Snow Plowing**

Bike advocates in Madison have had an impact on improved snow removal on bicycle paths in recent years. As winter biking increased, bicyclists demanded better plowing and communicated their priorities for plowing to the city. The Madison Parks Division is responsible for plowing the bike paths. A series of downtown bicycle paths run through the isthmus, and a lot of downtown workers use those paths to bike to work. The Parks Division has reassigned plowing to give those paths a high priority; their goal is to have

them clear by 7:30 or 8:00 in the morning after a snowfall the previous night. The bike paths are usually clear before the streets are cleared. The on-street bicycle lanes, on the other hand, get clogged when snow from the auto lanes is pushed to the curb, so the dedicated bike paths are important to winter commuters. Pedestrian use of the dedicated bike paths in winter has also increased, often resulting in a certain amount of bike-pedestrian conflict. (Jon Sundby, Madison Parks Division, personal communication, February 12, 1999.)

## Chapter 3: BOULDER

The City of Boulder, Colorado has about 80 miles of bicycle/pedestrian and multi-use routes, lanes and paths. Again, statistics on the extent of bicycle commuting vary and are not easy to pin down. A recent Travel Behavior Inventory for the entire Denver region shows bicycle travel as 1% of total trips in the region. In the 1980 census, 3.8% of journeys to work in Boulder were by bike. A 1990 study of travel patterns in the Boulder valley by the Boulder Citizens Transportation Advisory Committee showed cyclists accounting for 9.3% of journeys to work.

The bicycle-related laws from the *Boulder Revised Code*, August 1991, have been compiled and posted on the Internet at <http://bcn.boulder.co.us/boulder/gettingthere/bike/bikelaw.html>. The bicycle laws are also reprinted in the city's *Bicycle System Plan*. In addition, there is a web site posted by an individual bike activist that has a summary and commentary on the *1998 Colorado Bicycle Law* (House Bill 1246) at <http://www.verinet.com/~pedal/laws.htm>.

### **Bicycle Planning**

Boulder has a bicycle system plan dated June, 1996 that is a component of the *Transportation Master Plan Update for the Boulder Valley*. The purpose of the bike plan is to help the city achieve the stated goals of the *Transportation Master Plan*, which include increasing the bicycle mode share by 4% from the 1994 level by 2020. That translates into

doubling the total number of bicycle trips per year from 80,000 to 160,000. The bicycle plan policy states that "The City and County shall make bicycling safer and more convenient as a means of everyday transportation."<sup>2</sup> It addresses the need to develop a complete bicycle system based on the corridor concept in order to realize the potential for bicycling as a mode of travel. It states that a continuous and well-connected bicycle system, which extends through the City of Boulder and the region, is fundamental in order to maintain a healthy future for bicycling in Boulder.

The plan is very extensive and detailed. Priority projects for funding were decided through a public process that included roundtable meetings and responses to questionnaire worksheets. High-priority corridors were identified and a six-year project focus list was developed. The city budgeted \$4.8 million over six years for functional capacity and travel safety projects for new bicycle lanes and bikeways, another \$1.8 million for capacity improvements for the Greenways System, and funding each year for a spot improvement fund, for signing and lighting improvements and bike parking.

At the state level, a recent reorganization within the Colorado Department of Transportation has placed the modal programs, including bicycle/pedestrian programs, within the Planning Branch of the Division of Transportation Development, putting a stronger focus on planning. In July 1999, the results of a research study will be issued, in which 40,000 households were surveyed regarding bicycle/pedestrian issues and priorities. There is not currently a state bicycle plan, but intermodal policy statements are included in the overall

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<sup>2</sup> Charlier Associates, Inc. *Transportation Master Plan Update for the Boulder Valley: Bicycle System Plan: Final*. Boulder: City of Boulder, June 1996.

state transportation plan. (Gay Page, State Bicycle/Pedestrian Coordinator, personal communication, April 2, 1999.)

The state Department of Transportation works with the transportation planning regions in Colorado to help them develop a bike/pedestrian advisory committee. In the Boulder region, the Metropolitan Planning Organization (MPO) is the Denver Regional Council of Governments. That group has membership from cities and counties, and has developed priorities for major regional bicycle corridors.

### **Bicycle Commuting Programs**

Most of the programs designed to promote and encourage bicycle transportation in Boulder are coordinated by GO Boulder. GO Boulder was established after the Transportation Master Plan of 1989 was adopted, with the mission of fostering greater use of alternative modes by providing programs, products and facilities which encourage the use of alternative transportation. GO Boulder publishes the *Alternative Transportation Newsletter*, which is available on the web at [http://www.go.boulder.co.us/news/newsletter\\_menu.html](http://www.go.boulder.co.us/news/newsletter_menu.html), and sponsors programs that involve transit, bicycles and pedestrians. One of GO Boulder's programs is the annual bike to work event.

Like Madison, Boulder has built on and expanded its annual bike to work event. It began as Bike Week, but was expanded to include pedestrians in 1997 and became Walk & Bike

Week, with a Walk & Bike to Work Day during the week. In 1998 it became part of a larger community outreach and educational program called Walk & Roll, which runs from May through September. The Walk & Roll Business Challenge is a friendly competition in which Boulder companies compete for the most walking, biking and transit participants. Originally it was only held during Walk & Bike Week, but beginning in 1998 businesses were given the option to compete in the challenge for one week or for three months, June through August.

Boulder's Green Bike program is called "Spokes for Folks," and is sponsored by the Downtown Management Commission and the City of Boulder. Bicycles are donated and made available for free use, and are restored and maintained by local high school students. Information is available on the Getting There By Bike web site at [http://bcn.boulder.co.us/boulder/gettingthere/bike/bike\\_index.html](http://bcn.boulder.co.us/boulder/gettingthere/bike/bike_index.html).

Getting There By Bike also describes a parking scheme developed in Boulder which uses recycled automobile steering wheels attached to parking meters for bicycle parking. The steering wheels aid in keeping bikes upright and out of the pedestrian right-of-way when they are locked at parking meters. About 50 of them have been placed in the downtown area; funding for the program comes from parking meter revenues.

Boulder is ahead of Madison in allowing bikes on buses and rail; all Boulder local city buses have bike racks. Buses are limited to two bikes per vehicle. An average of 2,500 cyclists per month use the racks in summer and 1,600 per month in the winter. Regional buses have luggage bays and allow bikes in the luggage compartment. There are also bike

lockers at Park-n-Ride lots and Light Rail Transit stations throughout the district that can be leased for six months at a time free of charge with a refundable deposit. Bikes are allowed on light rail vehicles during off peak hours and in the reverse peak direction during peak hours. A free permit is required.

The City of Boulder has policies on bicycle-related TDM Programs that are detailed in the *Bicycle System Plan* and that are intended to make bicycle commuting easier. An Employee Transportation Coordinator Network was established in 1993 to disseminate information on alternative modes, including biking, within workplaces. The city will encourage or assist employers to provide secure bicycle parking, showers and changing facilities for bike commuters. The city will collaborate with manufacturers, retailers and employers to offer discounts on bicycling gear for employees who bike to work, and will involve bike shops and organizations in community education. In 1994, the city established a Downtown Access Monitoring Committee to prioritize and encourage TDM programs targeted specifically toward downtown employees.

### **Snow Plowing**

The City of Boulder Department of Public Works brochure "Snow Removal Routes and Information" as reprinted in the *Bicycle System Plan* has a section on Bikeways/Pedestrian Paths. Off-street bike and pedestrian paths are cleared of snow and ice as soon as possible. There is a priority specified for the order in which paths are cleared. All streets with on-street bike lanes are incorporated into either Primary or Secondary street snow routes.

Public Works maintenance policies also include policies on reviewing new bike projects and considering them for inclusion in snow routes.

## Chapter 4: TORONTO

The provincial government of Ontario amalgamated the six municipal governments in the Toronto metropolitan area in January 1998 to form the New City of Toronto. That has increased the population from about 635,000 in old Toronto to 2.3 million in the new city. The new city currently has 72 km of bicycle lanes, 40 km of signed bicycle routes, 16 km of "share the road" routes, and 150 km of bicycle trails. There are not yet good ridership figures available across the new city. A figure for the central downtown streets that has remained fairly constant for the past few years is that there are about 30,000 bicycle trips to and from the central area on an average summer day. If expressway traffic is excluded from traffic count totals, bicycles represent approximately 5% of all vehicles on central area streets. On streets with bicycle lanes, bicycle traffic has increased by 23% over the past few years.

The most recent travel survey was done in the old city of Toronto in 1991. At that time, 7% of adults age 15 or older biked to work (4.6%) or to school (2.4%). The figure for bike transportation for any type of utilitarian trip (work, school, shopping, errands, etc.) was 9.2%. The bike to work trip was growing at a faster rate than other trips. Between 1985 and 1991 the number of adults biking to work increased by 50% and the number of bike to work trips increased by 77%, as people were also cycling to work more often. Of the 140,000 people who both lived and worked in the central downtown area in 1991, 8% used bicycles as their main means of transportation to work. (Dan Egan, Toronto Bicycle Planner, personal communication, March 16, 1999.)

The Ontario Highway Traffic Act (HTA) includes bicycle laws. They are summarized in a booklet, "Cycling Skills – A Guide for Teen and Adult Cyclists" which is available from the Ontario Ministry of Transportation. They are also summarized on the Internet site of a bicycle activist who has put together his own "Toronto Bicycle-Commuter's Handbook" at [http://www.sunnybrook.utoronto.ca/~macgowan/cycling/tor\\_cycle\\_laws.html](http://www.sunnybrook.utoronto.ca/~macgowan/cycling/tor_cycle_laws.html).

### **Bicycle Planning**

Now that the surrounding towns have been amalgamated, the new city is working on a new bicycle plan. A new section has been created in the city's Transportation Department called Pedestrian and Cycling Infrastructure, which is mandated to design, implement and maintain cycling facilities within road right of way. The Planning Department has maintained bicycling staff as well: a Bicycle Safety and Education Coordinator and a Bicycle Planner who does site plan review and long range planning for cycling facilities and policies. The city budget for 1999 includes \$100,000 to complete a Bicycle Route Network Plan for the new city.

The structure of Toronto's Cycling Committee is also changing. The City Council set up the Toronto Cycling Committee, a citizens' advisory panel, in 1975 as a result of public protests that occurred when the government proposed a ban on cycling on major roads. Since amalgamation, the Toronto City Cycling Committee has banded together with the Metro Cycling and Pedestrian Committee and the North York Cycling and Pedestrian

Committee to create a new Toronto Cycling Committee to represent the new city (pedestrians are now represented by a separate committee.) It is a committee of the City Council and is charged with initiating programs to increase the quantity and quality of bicycle trips in Toronto. Their newsletter, *Cyclometer*, is on the World Wide Web at <http://www.city.toronto.on.ca/cycling/cyclometer.htm>. The committee is very involved in planning and implementation issues surrounding bikeway projects.

### **Bicycle Commuting Programs**

Toronto has a great deal of information on the World Wide Web about bicycling programs and issues in general, as does Madison and Boulder. It is a little more difficult to separate out specifically commuting information on the Toronto sites. The "Toronto Bicycle Commuter's Handbook" that was cited above as having a summary of biking laws also contains tips for cyclists aimed at making it easier to commute by bicycle.

The Bicycle User Group Program is a network of workplace bike user groups, formed to promote bicycle commuting. In addition, transportation management associations within workplaces are being formed, which include bicycling as well as other transportation management techniques in their focus.

Cycling Ambassadors is a program administered by the city that sends groups of young, experienced cyclists throughout the city from May to September to do community outreach. Their goals are to reduce the number and severity of cycling injuries and fatalities; to increase compliance with traffic laws by all road users; to reduce conflict between different

road users and foster cooperation on the roads; and to promote safe and responsible trail use in parks and environmentally sensitive areas.

Toronto's annual Bike Week (1998 Bike Week was held May 30-June 7) is less of a commuter event and more of an all-around bicycle celebration. It features guided bike tours of the city, family and children's events, programs on safety and bike mechanics, and social events. It does offer Bicycle Friendly Business Awards for businesses and organizations that help make Toronto bike friendly.

Toronto, like Boulder, has designed its own parking device for bicycles, known as the "post-and-ring," and has installed several thousand of them on sidewalks in the city. Bike parking is also available at nearly half of the city's 65 subway stations. Bikes are allowed in city buses, streetcars, and subway trains during nonpeak hours.

A bicycle amenity that is somewhat unique to Toronto is the contra-flow bike lane. Toronto's first two contra-flow bike lanes were approved in 1998. These lanes enable cyclists to travel in both directions on streets that are one-way for motor vehicles. That way, there can be bike routes in neighborhoods where the one-way street pattern would ordinarily prevent convenient bicycle access. The design is used in some European cities, but is rare in North America.

## **Snow Plowing**

Bicycle lanes are plowed within 48 hours of a snowfall, with the goal of maintaining at least a one-metre-wide clear lane. After regular street plowing is completed, bicycle lane conditions are monitored and additional plowing or salting is done as needed. Winter bicycle traffic is variable, depending on snow and ice conditions. A general estimate is that bicycle counts in June would be expected to be between six and seven times as high as January counts, but that bicycling does continue throughout the winter. (Dan Egan, personal communication, March 25, 1999.)



## Chapter 5: A NOTE ON BICYCLE ADVOCACY

The three cities have in common a large and strong community of bicycle activists and advocacy organizations. All you have to do is start searching the World Wide Web for bicycling information in Madison, Boulder, or Toronto, and you are soon awash in bicycle pages, links to other bicycle pages, newsletters, and links to bicycle organizations. The information that is being disseminated comes from both government and non-government sources. The dedication of these communities to the bicycling cause is obvious and impressive.

The Bicycling Community Page, serving Madison and Dane County, Wisconsin, has a very large "Advocacy" section. The section mixes commentary on the bike scene with reports on proposed projects, hot issues, links to all kinds of biking organizations and articles, and information on the state bicycle plan and legislation.

Sometimes the information in the advocacy sites is angry and vehemently anti-automobile. The author of the *Sierra* article points this out as a possible pitfall to effectiveness. He warns that cycling activists can easily alienate would-be allies in their expressions of hatred for the automobile. They must struggle to funnel feelings of anger into more savvy and organized efforts.

A Toronto organization that appears to be doing that successfully is Advocacy for Respect for Cyclists (ARC), which works to improve safety for bicyclists. The organization was formed in 1996 after two cyclists were killed by trucks during one of the Critical Mass

rides. They were instrumental in getting the coroner's office to report on cycling death in Toronto, which led to the report *The Regional Coroner's Report on Cycling Fatalities in Toronto 1986-1996*. Now ARC is working to see that the safety recommendations in the report are acted upon. Additional bike lanes are being planned for dangerous traffic areas where bicyclists have been killed. They have a guide on how to make effective complaints against speeding and aggressive drivers, and are compiling a list of bike friendly lawyers who are interested in taking cycling cases.

An extreme example of anti-auto sentiment is an electronic zine from Toronto that advocates "A Bullet For Every Driver." The author is rightly outraged at recent traffic accidents in which bicyclists were killed or injured, but the wording assumes that bicyclists and drivers are mutually exclusive groups. A less extreme Toronto site describes the "Critical Mass" rides that take place in the city on the last Friday of each month at 5:30 P.M. It's an informal activity where groups of cyclists ride around in a big pack together. They ride slowly, block quite a bit of traffic and "from time to time cause a bit of a jam," inspiring drivers to do a lot of honking and yelling. They say that it feels good to be the dominant force on the road for a change. Critical mass is a worldwide movement that was mentioned on several sites.

Other examples of frustration show up in the (Madison) Bicycling Community Page, which opens with a "Cars Are Death" graphic. The "Local Interest" section criticizes city departments for not taking bicycle transportation seriously enough, and describes poor relations between area cyclists and the sheriff's department. The push for bikes on buses, which has so far been unsuccessful, is another sore point. But despite some anger,

frustration and setbacks, the energy of bicycle advocacy is strong. Bicycle activists are working hard for safer, better bicycling conditions.



## Chapter 6: SOURCES FOR ONGOING INFORMATION

The primary sources for current and ongoing information about bicycle commuting are the Internet Web sites. As new bicycle plans or documents are produced, they are announced on the web sites or in the electronic newsletters posted on the web sites. News of programs, events, contact people, road projects involving bicycle facilities, and current issues can all be found on the web sites and newsletters. The following sites will be useful for following the bike scene in Madison, Boulder and Toronto:

### Madison:

- The Bicycling Community Page serving Madison and Dane County, Wisconsin, <http://danenet.wicip.org/bcp/>.
- Wisconsin Bicyclist, published by the Bicycle Federation of Wisconsin, <http://danenet.wicip.org/bcp/bfw/index.html#wb>.
- Bicycle Transportation Alliance of Dane County (includes *Spoke'n Word* newsletter), <http://danenet.wicip.org/bcp/bta/>.

### Boulder:

- Getting There By Bike, [http://bcn.boulder.co.us/boulder/gettingthere/bike/bike\\_index.html](http://bcn.boulder.co.us/boulder/gettingthere/bike/bike_index.html).
- GO Boulder, <http://go.boulder.co.us/default2.htm>.

- Boulder Community Network Bicycle Page,  
<http://bcn.boulder.co.us/transportation/bike.page.html>.

**Toronto:**

- Cycling in Toronto (includes *Cyclometer* newsletter),  
<http://www.city.toronto.on.ca/cycling/>.
- Advocacy for Respect for Cyclists (ARC), <http://www.web.net/~detour/arc/>.

## Chapter 7: REFERENCES

1. Advocacy for Respect for Cyclists (ARC) Home Page.  
<http://www.web.net/~detour/arc> (March 1999.)
2. Bicycle Federation of Wisconsin. Wisconsin Bicyclist.  
<http://danenet.wicip.org/bcp/bfw/index.html#wb>.
3. Bicycle Transportation Alliance of Dane County. Spoke'n Word.  
<http://danenet.wicip.org/bcp/bta>.
4. Bicycling Community Page (Madison and Dane County, Wisconsin) Home Page.  
<http://danenet.wicip.org/bcp> (March 1999.)
5. Bielski, Vince. (1998, September/October). Two-wheeled revolution. Sierra, 84.  
<http://www.sierraclub.com/sierra/199809/bikes.frame.html> (March 1999.)
6. Boulder Community Network Bicycle Page.  
<http://bcn.boulder.co.us/transportation/bike.page.html>.
7. Charlier Associates, Inc. (1996, June). Transportation Master Plan Update for the Boulder Valley: Bicycle System Plan: Final. Boulder: City of Boulder.
8. Cote, Alan. (1999, March). The best cycling cities. Bicycling, 53-59.

9. Cycling in Toronto Home Page. <http://www.city.toronto.on.ca/cycling>.
10. Egan, Dan. (1998, November). Toronto's first contra-flow bike lanes. Cyclometer.  
<http://www.city.toronto.on.ca/cycling/cyclometer.htm> (March 1999.)
11. Getting There By Bike (Boulder, Colorado) Home Page.  
[http://bcn.boulder.co.us/boulder/gettingthere/bike/bike\\_index.html](http://bcn.boulder.co.us/boulder/gettingthere/bike/bike_index.html) (March 1999.)
12. GO Boulder (1998, May 4). GO Boulder announces its 1998 Walk & Roll Business Challenge. News Release. <http://go.boulder.co.us/default2.htm> (March 1999.)
13. Graf, Angela. (1998, Summertime). Madison businesses encourage employees to commute by bike. Wisconsin Bicyclist. [http://danenet.wiclip.org/bcp/bfw/wb4\\_2.html](http://danenet.wiclip.org/bcp/bfw/wb4_2.html) (March 1999.)
14. MacGowan, Chris. Toronto Bicycle-Commuter's Handbook.  
[http://www.sunnybrook.utoronto.ca/~macgowan/cycling/cycle\\_main.html](http://www.sunnybrook.utoronto.ca/~macgowan/cycling/cycle_main.html) (March 1999.)
15. Martin, Scott. (1995, November/December). The best cities for cycling. Bicycling, 45-49, 102-103.

16. McClintock, Hugh, editor (1992). The Bicycle and City Traffic: Principles and Practice. London: Belhaven Press, 199-200.

17. Wisconsin Department of Transportation (1998, September). Wisconsin Bicycle Transportation Plan Summary.

