

Making Communities "Bicycle Friendly"

by Bill Wilkinson

I got my first bike in 1953 when I was six years old. We lived in central New Jersey and the front door of our house was about 25 feet from the edge of U.S. 1. Fortunately for me, the house was part of a farm with a long, dirt road leading from the barn to a "country road" — my path to the world of independent travel. By the time I was eight I was riding to visit schoolmates in the small village two miles away. While the roads were narrow, they tended to be straight; easy for a motorist to see and slow for a little kid on a bike ... and that's what they did. Actually, people didn't seem to be in as much of a hurry then and there wasn't much traffic to begin with.

When I started exploring on my bike, I was riding on roads that dated back to the Revolutionary War. In the early 1950s the mobility provided by the automobile was just beginning to reshape this country.

Now, forty years later, bicyclists — whether children or adults — face a very different world. Almost anywhere they go, they are confronted by large volumes of cars and trucks moving at high speeds. Our communities and our whole way of life have come to revolve around the automobile. This move to auto-dependence has brought with it some troublesome "costs": polluted air and water; a huge transportation infrastructure that demands tremendous resources just to maintain it; fragmentation of neighborhoods and isolation of individuals; and an annual death toll from motor vehicle crashes of about 45,000 — nearly 20 percent of whom were bicyclists or pedestrians.

But this article is not about the so-called "evils of the automobile." Like most of you, my wife and I have a car and use it fairly regularly. Still, we're fortunate in that where we live there are a full range of transportation choices: we can walk, bike, take transit, or drive our car. As a result, less


than half of our trips are by car.

Consider for a minute what your town or city would be like if this were true for most households. What if your community

"THE LOCAL COMPREHENSIVE PLAN SHOULD INCLUDE A SET OF BICYCLE POLICIES, AND IDENTIFY SPECIFIC ROADWAY AND GREENWAY IMPROVEMENTS, THAT WILL HELP ACCOMMODATE BICYCLISTS."

had a balanced, sustainable transportation system that provided people with a range of transportation modes to choose from?

WHAT DOES IT TAKE TO MAKE A COMMUNITY BICYCLE-FRIENDLY?

It helps to begin with some knowledge of who ride bikes and what they want and need. Nearly 100 million Americans of all ages have and ride bicycles.  *Bicycling: For Kids Only?*, p. 13 It is interesting to note, though, that only a very small percentage currently use their bikes for commuting to work. Still, even this figure has been increasing, growing from 1.5 million in 1983 to 4 million in 1991.

Bicyclists obviously need a place to ride their bikes. There are essentially two broad categories of places to bike: roadways and greenways. Most bicyclists depend on the existing system of roadways. The use of multi-use trails on greenways, however, has been growing and can complement the roadway system. Greenways can include right-of-ways

within parks, along stream valleys, rivers, and lakes, on abandoned railroad corridors, and even alongside some highways. *[Editor's Note: For more on greenways, see the article by Anne Lusk, also in this issue].*

Roadways can be designed to accommodate bicyclists. There are four basic design approaches:

Shared Lane: Shared motor vehicle/bicycle use of a "standard" width roadway lane — possible on low volume, low speed neighborhood streets.


Wide Outside or Curb Lane: An outside travel lane with a width of at least 14 feet, providing space for cars and bikes.

Bike Lane: A portion of the roadway designated for exclusive bicycle use, marked by striping and/or signage.

Shoulder: A portion of the roadway to the right of the edge stripe designed for bicyclists.




Bike parking at Metro station, Ballston, Virginia

Bicyclists also need places to park their bikes.  *Bicycle Parking*, p. 14. This is especially important if a community wants to encourage bicycle commuting. Many communities have adopted local ordinances which seek to ensure that new developments provide adequate bike parking. Similarly, communities are integrating bicycle parking into the planning and design of transportation facilities.

PLANNING FOR BICYCLES

Planning is essential to integrating bicycles into a community's fabric — and the key to successful planning is strong public involvement. This helps both to ensure that people's needs are understood and to sustain a base of public support for the kinds of changes and commitment of resources required to get the job done.


Planning for bicycles should begin by articulating the community's vision of what it would like to see. For example, a community might have as its vision that "children and adults of average bicycling ability feel comfortable riding in neighborhoods, to school and work, to visit friends, and to shopping, park and recreation facilities."

The next step is to develop a set of policies and a plan to implement the community's vision. In some communities "bicycle advisory committees" can be created to help with this.  *Bicycle Planning in the Pacific Northwest, p. 14*

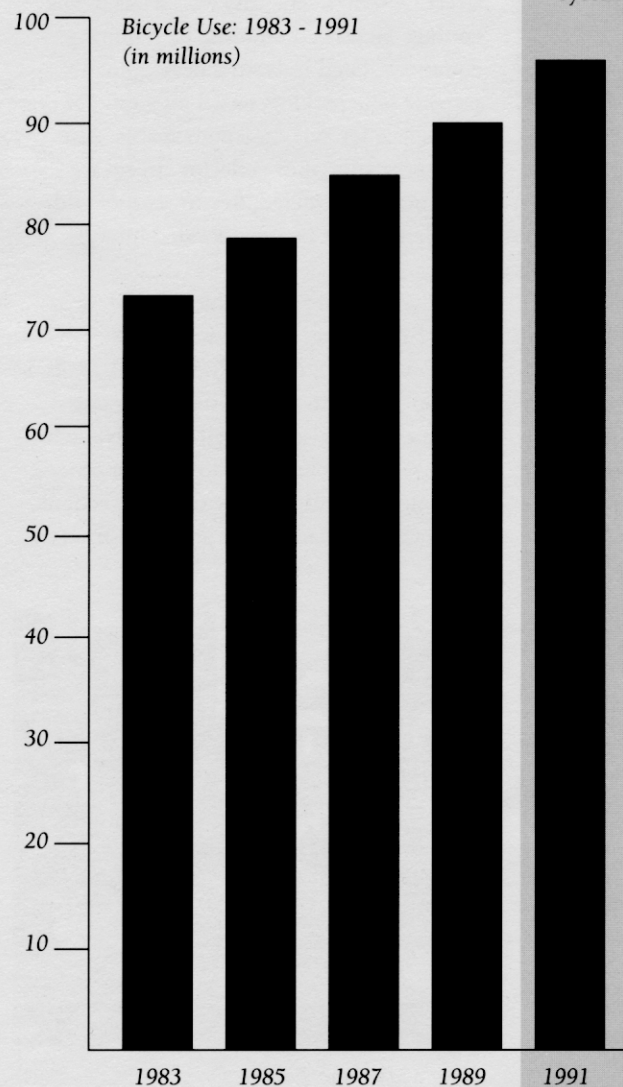
The local comprehensive plan should include a set of bicycle policies, and identify specific roadway and greenway improvements, that will help accommodate bicyclists. Related documents, such as local transportation, open space, and recreation plans, offer additional opportunities to call for improved bicycling facilities.

In many metropolitan areas, local jurisdictions also participate in a regional transportation planning process through a Metropolitan Planning Organization ("MPO"). New federal transportation legislation requires that transportation plans and programs include consideration of bicycling as a mode of transportation. Similar requirements extend to state transportation agency programs. Local planning commissions and bicycle advisory committees should work with their MPOs to ensure that policies supportive of bicycling are incorporated into regional and state transportation plans.

Another important step that planning commissions can take is to see that local ordinances, regulations, and standards help bring about the improvements needed in roadways, and the dedication and development of new greenway facilities. Site plan, subdivision and zoning ordinances all can require various types of improvements and developer dedications to help foster better bicycling opportunities.

 *Developer Dedications, p14.* A community's public facilities manual and roadway design standards should be reviewed and

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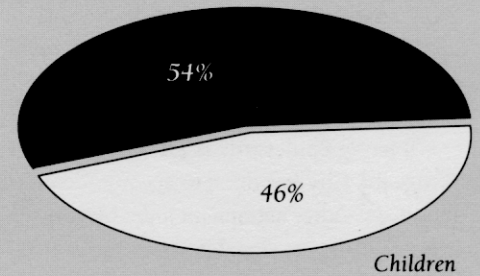


Bicycling: For Kids Only?



Today, bicycling remains an important aspect of life for most children. A bicycle is frequently their first major possession. Eventually, it becomes their first significant independent mode of transportation, giving them (as it did for me) access to a much larger part of

Adults (16+)



their community. It also represents their initial contact with the transportation system an operator of a "vehicle." [Bicycles are defined or treated as a "vehicle" in every state's vehicle code.] In many small and medium-sized towns, bicycles still play a major role as a mode of transportation for kids to get to school.

One of the most significant trends in bicycling to emerge in this century began in the early 1970s: adults started riding bikes ... again. Since the late 1880s, with the exception of during the two world wars, bicycles were seen as a "kid thing." They were things you used until you could to get driver's license. Not any more! Today, more adults own and ride bikes than do kids, and while fun and fitness are still the leading reasons people give for riding, transportation use is growing.

Both charts from: Bicycle Institute of America Reference Book

EDITOR'S NOTES



"Bicycle Boulevard"

PALO ALTO, CALIFORNIA

Bicycles have priority over motor vehicles along "Bicycle Boulevard," a 3-1/2 mile section of Bryant Avenue, a residential street that parallels Palo Alto's principal north-south arterial routes. This has been accomplished, in part, by installing mid-block vehicle barriers. Bicycle Boulevard, which links the downtown, a middle school, and several other bike routes, is used by more than 600 bicyclists a day.

"Bicycle Boulevard" is just one of many things the City has done to accommodate bicyclists. Other actions include: bicycle-responsive traffic signal detector loops that



"Bicycle Boulevard", Palo Alto, California

enable bicyclists to trip the lights; bicycle and pedestrian-only bridges over major highways; strict street repair policies; and the installation of rubberized railway crossing pads. To encourage bike commuting, the City requires major employers to provide not just bike parking, but shower facilities as well!

For more information, contact Gail Likens of the Palo Alto Planning Department: (415) 329-2679.



Bicycle Planning in the Pacific Northwest

EUGENE, OREGON
SEATTLE, WASHINGTON

Communities in the Pacific Northwest are among the leaders in effective planning for bicycles. Two good examples are Eugene, Oregon, and Seattle, Washington. Both cities have strong bicycle advisory committees, composed of citizens interested in biking

issues and staff members representing key city departments. Both also have bicycle coordinators who help ensure that bicycle planning is integrated into transportation, parks, and open space planning.



Sheltered bike parking in Eugene, Oregon

Eugene's Bicycle & Alternative Modes Coordinator, the trails avoid the need for many street crossings. The City also seeks to encourage bicycle commuting by requiring commercial and industrial developments to provide bike parking, based on a ratio of one bike space for every ten auto spaces. Also, whenever arterial or collector streets are built or reconstructed, five to six foot wide bike lanes must be incorporated into the design.

The heart of Seattle's bicycle system is the 12-mile-long, 10-foot-wide Burke-Gilman Trail. (See also "Recreational Trails & Crime," at page 6 of this issue.) Over one million people use this trail annually, including 800 daily commuters to work or school. In some especially heavily traveled sections, the trail has separate bike and pedestrian paths.



Using a bike lane. Eugene, Oregon

Eugene's bike facilities include a well-connected network of streets with bicycle lanes and 23 miles of off-street trails — much of it running along the Willamette River. According to Diane Bishop,

Bicycle planning in Seattle is also reflected in the hundred or so separate street improvements made each year for bicyclists. These range from the installation of traffic islands in the middle of major street crossings to striping bike lanes.

For more information on Eugene's bicycle programs, contact Diane Bishop, City of Eugene, 858 Pearl St., Eugene, OR 97401; (503) 687-5298. For Seattle information, contact Peter Lagerwey, Bicycle/Pedestrian Coordinator, 708 Municipal Bldg., 600 4th Ave., Seattle, WA 98104; (206) 684-7583 (if you send Peter a blank videotape, he will copy a tape describing Seattle's bicycle programs for you).



Developer Dedications

One important way by which communities can develop bike and pedestrian paths is by requiring developers to dedicate land for these purposes when they seek subdivision approval. Over time, this can result in a substantial trail system, especially in newly developing communities. It is essential, however, that the need for such paths be specifically addressed in the local comprehensive plan, and that design requirements be included in the public facilities manual. Communities can also use "impact fees" to fund a portion of the cost of new transportation facilities — including those designed for bicyclists. See "An Introduction to Subdivision Regulations, Part II" in Issue 6 of the Journal for more on impact fees. An informative article by Bruce Epperson in the June 1991 issue of Bicycle Forum discusses how to use dedication requirements for bicycle facilities. See the Resources sidebar for information on Bicycle Forum.



Bicycle Parking

One key part of planning for bicycles is ensuring that adequate bicycle parking is available. A number of communities have adopted bicycle parking requirements, as part of their zoning codes, so that new developments will provide sufficient — and properly located and designed — bicycle parking racks. Excellent information on bicycle parking is available from Bikecentennial. See the Resources sidebar for ordering information.

...Bicycle Friendly

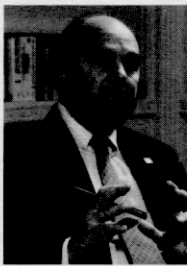
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revised, as needed, to ensure that they reflect the latest thinking in the design of streets, highways, and multi-use trails to accommodate bicycles.

The final step is to allocate the resources necessary to bring about the improvements required to implement the community's plan. The key to success at this stage gets back to step one: public participation. Without a broad base of public support for the proposed plan, there is little to justify the expenditure of public funds, especially when there is likely to be intense competition among various projects. Still, planning commissioners, elected officials, and transportation agencies may be surprised by the high level of public interest and support that implementing a community bicycle plan can create.

Some community leaders have found that not only does investment in better bicycle facilities help address transportation and air quality problems, but it also serves to develop public goodwill. After all, there are few issues where the public can see and enjoy such an immediate improvement for such a relatively modest cost. And, perhaps even more significantly, bicycling is something that directly involves most households — from families with kids to older citizens seeking to stay fit. These days, it's nice to find something that the public and public officials can all agree on and feel good about. ♦

Bill Wilkinson has served as the Executive Director of the Bicycle Federation of America since 1986. The Bicycle Federation is actively involved in assisting local agencies to develop bicycle programs throughout the country, as well as helping bicycle advocates increase support for biking improvements. Bill got his start in this field in the mid-1970s as Bicycle Program Planner/Coordinator for Fairfax County, Virginia, where he directed the development and adoption of a countywide bicycling plan. Bill went on to serve as the U.S. Department of Transportation's Bicycle Program Coordinator, and later as Director of Programs for the Bicycle Manufacturers Association, before joining the Bicycle Federation in 1983.



EDITOR'S NOTES



Rails-to-Trails

One of the most successful approaches to developing biking and recreational trails is through the use of abandoned railroad right-of-ways. According to Philippe Crist of the Rails-to-Trails Conservancy — a national organization that works with communities across the country on rail-to-trail conversions — over 500 rail-trail projects totaling 6,400 miles of trails have already been completed. Moreover, the pace is accelerating: in the 15 months since Congress passed the ISTEA legislation, 54 rail-trail projects in 13 states have received over \$36 million in federal and local matching funds.

In addition to providing recreational opportunities for bicyclists and walkers, rail conversions can yield economic benefits. A 1991 study by Penn State University and the National Park Service, *The Impacts of Rail-Trails*, closely examined three such trails in Iowa, Florida and California. The study found that "use of the sample trails generated significant levels of economic activity ... the amount of 'new money' brought into the local trail county was \$630,000, \$400,000, and \$294,000 annually for the Heritage, St. Marks, and Lafayette/Moraga Trails, respectively." See also "Business Sprouts Along the Minuteman Trail," below.

For more information on rails-to-trails conversions, contact Philippe Crist, Community Affairs Coordinator, RTC, 1400 Sixteenth St., N.W., Washington, D.C. 20036; (202) 797-5410.



Business Sprouts Along the Minuteman Trail

Dedicated this past October, the 11-mile-long Minuteman Trail — which makes use of an abandoned railroad right-of-way running parallel to the route of Paul Revere's famous ride — has already generated unanticipated spin-off benefits for the Massachusetts towns of Arlington, Lexington and Bedford.

According to Alan McClennen, Arlington's Planning Director, soon after the trail opened a local fuel oil dealer owning a small industrial building along the

trail converted part of his building into a small store — selling fruit, candy bars, soft drinks, and even Minuteman Trail caps, on weekends. A bike mechanic was also on duty. 1,800 people stopped in the store on a single Saturday last November! And this season, Ben & Jerry's will open an ice cream stand in the store.

But this is just the beginning: a small sit down restaurant; a sandwich shop; and a bike shop are also opening along the trail — and 18 area restaurants have paid to advertise in a brochure describing the trail.

For more information, contact Alan McClennen, Planning Dept., Arlington, MA. 02174; (617) 646-1000.



Resources

The Bicycle Federation of America has available a number of excellent publications dealing with different aspects of planning for bicycles. A good starting point is the *Bicycle Advocate's Action Kit*, a highly informative 18 page overview of how communities can get started in improving their bicycle policies and programs. The *Kit* — which is free — also contains well-organized listings of additional resources. Also available from the Bicycle Federation is *Community-Based Planning Under ISTEA: A Handbook for Citizens and Agencies* (\$20 cost). To order, write to: The Bicycle Federation, 1818 R Street NW, Washington, DC 20009, or call: (202) 332-6986.

Another organization that can be very helpful with planning-related questions is Bikecentennial. Of particular note is their quarterly publication, *Bicycle Forum*, and a series of *Bicycle Forum Technical Notes*, which include detailed information on several bicycle planning issues (i.e., bicycle parking ordinances). You can reach Bikecentennial at: P.O. Box 8308, Missoula, MT 59807; (406) 721-1776.

Finally, the Federal Highway Administration has available several useful publications, including a summary of the bicycle and pedestrian provisions of ISTEA (no charge), and a new report titled *Selecting Roadway Design Treatments to Accommodate Bicycles*. For information, write the FHA, Bicycle Program Office, HEP-50, 400 Seventh St. SW, Washington, DC 20590.