



Improving Conditions for Bicycling and Walking

A Best Practices Report

January 1998

Prepared for the Federal Highway Administration

**by Rails-to-Trails Conservancy
and the Association of Pedestrian
and Bicycle Professionals**

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By John C. Fegan



foreword

ENCOURAGING MORE PEOPLE TO WALK AND BICYCLE, AND TO DO SO SAFELY, INVOLVES ACTIONS AT FEDERAL, STATE, AND LOCAL LEVELS. THE INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA) PROVIDED BROAD ELIGIBILITY TO USE FEDERAL FUNDS FOR THESE PROJECTS.

However, ISTEA did not guarantee Federal funding. Instead, pedestrian and bicycle projects have had to compete with all other transportation projects for limited amounts of available funding. Decisions on which projects are funded are made at State and metropolitan levels of government. In addition, State and local funding sources are also used to provide projects for walking and bicycling. Therefore, providing funding for these projects is a concrete illustration of the value of walking and bicycling to these communities.

This “best practices” report provides information on some outstanding pedestrian and bicycle projects that have been recognized for increasing walking and bicycling and improving user safety in communities across the United States. We have certainly overlooked other “best practices” in other places. Our intent was to highlight exemplary projects and to show what has been done that can be replicated in other places. We hope that by seeing what others have done, you will be inspired to create your own programs to encourage more and safer walking and bicycling in your own community.

JOHN C. FEGAN

BICYCLE AND PEDESTRIAN PROGRAM MANAGER
UNITED STATES DEPARTMENT OF TRANSPORTATION



additional resources

(Not including references included in Best Practices reports themselves)

General

National Bicycling and Walking Study Final Report, FHWA, 1993

National Bicycling and Walking Study Case Studies (24), FHWA, 1993

Bicycle and Pedestrian Safety and Accommodations, a three-day training course available through the National Highway Institute, FHWA, 1996

A Synthesis of Bicycle Safety-related Research, FHWA, 1994

Pedestrian Crash Types: A 1990s Informational Guide, FHWA, 1997

Bicycle Crash Types: A 1990s Informational Guide, FHWA, 1997

Planning

Bicycle and Pedestrian Planning Under ISTEA: A Synthesis of the State of the Practice, FHWA, 1997

Bicycle and Pedestrian Planning Under ISTEA: A Training Manual, FHWA, 1994

Selecting Roadway Design Treatments to Accommodate Bicyclists, FHWA, 1992

Bicycle Facility Planning: APA Planning Advisory Service Report 459, APA, 1995

Making the Connection: Integrating Land-use and Transportation Planning for Livable Communities, 1000 Friends of Oregon, 1997

A Bicycle-friendly City (video), Bicycle Federation of America, 1995. (\$20)

Off-road Facilities

Guide to the Development of Bicycle Facilities, AASHTO, 1991

Trails for the 21st Century: A Planning, Design and Management Manual for Multi-use Trails, Rails to Trails Conservancy, 1993

Greenways, Flink and Searns, Conservation Foundation, 1993

Trail Intersection Design Guidelines (Draft) prepared for Florida DOT by the University of North Carolina Highway Safety Research Center in 1996.

Rails with Trails: Sharing Corridors for Transportation and Recreation. Rails to Trails Conservancy, 1998.

On-road Facilities

Guide to the Development of Bicycle Facilities, AASHTO, 1991

A Policy on Geometric Design of Streets and Highways, AASHTO, 1995

Making Streets that Work, City of Seattle, 1996 (video and workbook)

Design of Pedestrian Facilities, Report of Recommended Practice. Institute of Transportation Engineers (ITE).

Residential Street Design and Traffic Control, ITE

Traffic Calming. APA Planning Advisory Service Report Number 456, 1995.

The Pedestrian Environment, 1000 Friends of Oregon, 1993.

Education, Encouragement and Enforcement

Mean Streets: Pedestrian Safety and Reform of the Nation's Transportation Law. Environmental Working Group, 1997

Share the Road: Let's Make America Bicycle-friendly. Environmental Working Group, 1997

The Complete Guide to Police Cycling (\$20), IPMBA.

Where to Obtain these Resources

FHWA PUBLICATIONS

NATIONAL BICYCLE AND PEDESTRIAN CLEARINGHOUSE
1506 21ST STREET NW, SUITE 210
WASHINGTON, DC 20036
(800) 760-6272

RAILS-TO-TRAILS CONSERVANCY

1100 17TH STREET, NW; 10TH FLOOR
WASHINGTON, DC 20036
(202) 331-9696

BICYCLE FEDERATION OF AMERICA

1506 21ST STREET, NW; SUITE 200
WASHINGTON, DC 20036
(202) 463-6622

LEAGUE OF AMERICAN BICYCLISTS

1612 K STREET, NW; SUITE 401
WASHINGTON, DC 20006
(202) 822-1333

ENVIRONMENTAL WORKING GROUP

1718 CONNECTICUT AVE., NW;
SUITE 600
WASHINGTON, DC 20009
(202) 667-6982

INSTITUTE OF TRANSPORTATION ENGINEERS
525 SCHOOL STREET, SW; SUITE 410
WASHINGTON, DC 20024

AMERICAN PLANNING ASSOCIATION

122 S. MICHIGAN AVENUE, SUITE 1600
CHICAGO, IL 60603

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

444 NORTH CAPITOL STREET, NW;
SUITE 225
WASHINGTON, DC 20001
(202) 624-5800

1000 FRIENDS OF OREGON

534 SW 3RD AVENUE, SUITE 300
PORTLAND, OR 97204
(503) 497-1000

FLORIDA DEPARTMENT OF TRANSPORTATION

BICYCLE AND PEDESTRIAN PROGRAM
605 SUWANNEE STREET, MS-82
TALLAHASSEE, FL 32399
(850) 487-1200

CONSERVATION FUND

1800 NORTH KENT STREET, SUITE 1120
ARLINGTON, VA 22209
(703) 525-6300

CITY OF SEATTLE

BICYCLE AND PEDESTRIAN PROGRAM
SEATTLE ENGINEERING DEPARTMENT
600 4TH AVENUE, ROOM 708
SEATTLE, WA 98104



acronyms and credits

Acronyms

AASHTO.....American Association of State Highway and Transportation Officials

APBP.....Association of Pedestrian and Bicycle Professionals

CIP.....Capital Improvement Program

CMAQ.....Congestion Mitigation and Air Quality Improvement Program

DNR.....Department of Natural Resources

DOT.....Department of Transportation

FHWA.....Federal Highway Administration

FRA.....Federal Railroad Administration

FTA.....Federal Transit Administration

ISTEA.....Intermodal Surface Transportation Efficiency Act of 1991

MUTCD.....Manual of Uniform Traffic Control Devices

MPO.....Metropolitan Planning Organization

NHTSA.....National Highway Traffic Safety Administration

NRTF.....National Recreational Trail Fund

RTC.....Rails-to-Trails Conservancy

TE(P).....Transportation Enhancement (Program)

TIP.....Transportation Improvement Program

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by Randy Neufeld and Ben Gomberg

chicago plan

PLANNING TO MAKE CHICAGO BICYCLE-FRIENDLY

At seven pages, Chicago's Bike 2000 Plan, looks extremely thin next to the many weightier bike plans produced under the Intermodal Surface Transportation Efficiency Act (ISTEA). Yet the impact of the plan is a model for other cities.

Chicago's post-auto bicycle program began in the mid 1950s with significant development of bike paths in parks including Chicago's crown jewel, the 29-km (18-mile) Lakefront Path. The most recent bicycle program renaissance began in 1990 with Mayor Richard M. Daley establishing a bicycle council. The Mayor's Bicycle Advisory Council became a showcase for the cooperative efforts of the City's Department of Transportation and the local bicycle advocacy group, the Chicagoland Bicycle Federation. The Council went right to work, starting projects while simultaneously writing a planning framework. This approach of developing the blueprints while building continues to energize Chicago's bicycle program.

The first projects of the Council included long-discussed Lakefront Path improvements; signed, named connecting street routes between trails; a bike map; and a parking rack demonstration at 13 municipal buildings. In the midst of these projects the Bike 2000 Plan was written. The purpose of the Plan therefore was not to figure out what to do first, but what to do next. In the middle of the drafting of the Bike 2000 Plan, Congress passed ISTEA, just in time to provide new funding opportunities for the proposed projects.

Mayor Daley announced the Bike 2000 Plan during Bike to Work Week in May 1992. In his speech, he was able to introduce not only the plan but also the bike racks and routes that had already been achieved. This set a pattern for annual progress reports. Every year at the Bike Week rally the Mayor reports on what has been accomplished in the past year.

The main goal of the Bike 2000 Plan is for 10% of all short (8 km (5 miles) and under) individual vehicle (single occupant) trips to be by bicycle by the year 2000. The Bike 2000 Plan contains 29 recommendations organized into Education, Encouragement, Engineering, and Enforcement categories. As of this writing there has been significant action on 28 items and the remaining one is under discussion.

Many of the important policy and network details that are included in more comprehensive bicycle plans such as Houston's or New York City's are only now being developed in Chicago. A comprehensive survey of off-street



Lakefront Trail, IL

trail opportunities with a focus on active and abandoned rail corridors was completed in 1997. A plan identifying an on-street network of bikeways and accordant implementation of policies will be completed in 1998. The latter will draw on lessons from the 1996 installation of 40 km (25 miles) of bike lanes.

In all of Chicago's most significant accomplishments, there is a common pattern. First, a small demonstration project is attempted usually using exclusively local funds. With experience, the project is modified and the successful components are expanded, usually with State and Federal funding. Starting small helps everyone gain experience with a proposed program and feedback develops ownership in a program. It is ultimately this broad based ownership that makes Chicago's bicycle program so vital. Political leadership, the city staff, and public interest groups work together for the success of the program and understand each other's interests.

contact BEN GOMBERG

CHICAGO DEPARTMENT OF TRANSPORTATION
ROOM 400, 30 N. LA SALLE
CHICAGO, IL 60602
(312) 744-8093
E-MAIL: bgomberg@ci.chi.il.us

other examples

NEW YORK CITY BICYCLE MASTER PLAN:

JACKSON WANDRES, BICYCLE NETWORK DEVELOPMENT PROGRAM, DEPARTMENT OF PLANNING, 2 LAFAYETTE ST., SUITE 1200, NEW YORK, NY 10007, (212) 442-4640 (FAX)

COMPREHENSIVE BIKEWAY PLAN OF THE CITY OF HOUSTON:

GUS NOWAK, PE, CITY OF HOUSTON, PUBLIC WORKS AND ENGINEERING DEPARTMENT, PO BOX 1562, HOUSTON, TX 77251-1562.



By Ben Gomberg and Randy Neufeld

safe bicycling

“SAFE BICYCLING IN CHICAGO” RIDES ON

What's a good way for a city agency to promote safe cycling?

In Chicago it's by partnering with the local bicycle advocacy group to produce an award-winning booklet.

In 1994, the Chicago Department of Transportation received a \$30,000 Highway Traffic Safety (Section 402) grant to produce a booklet on safe bicycling skills. The city contracted with the Chicagoland Bicycle Federation, Chicago's bicycle advocacy group, to write the booklet. The Chicagoland Bicycle Federation had previously produced a one-page flyer for the Chicago Department of Transportation.

The result of the new collaboration is a 36-page booklet that provides basic skills for urban cycling, including how to negotiate traffic, safely cross intersections, dress for bad weather, and prevent bike theft. More than 100 illustrations and photographs complement the non-technical, concise text. Polish and Spanish language versions also were produced to make the information accessible to Chicago's major non-English speaking groups. The booklets were free of charge to the public.

The booklet has been so popular that it has been reprinted and reprinted. More than 100,000 copies have been circulated to date with the best distribution points being bike shops, bike clubs, bike messenger services, and fitness clubs.

In 1996, because of the tremendous demand from outside Chicago, the Illinois Department of Transportation contracted with the Chicagoland Bicycle Federation to produce a statewide version. "Safe Bicycling in Illinois" has become one of the Illinois Department of Transportation's most popular publications, with 100,000 copies printed. The Chicago Area Bicycle Dealers Association (CABDA) published a special version in 1996 to provide the booklet to a national audience and emphasize the value of specialty bicycle retailers.

In 1996, the Chicago Department of Transportation secured another Highway Traffic Safety grant to produce three new versions of the booklet for Chicago residents:



An abridged 12-page version featuring its main points. The considerably lower cost, 10¢/copy versus 30¢/copy for the 36-page version, enabled 100,000 copies to be printed, permitting widespread distribution (e.g. sporting goods stores, universities, public libraries).

A children's version to teach safe bicycling skills to 10 to 12-year old children, the ages considered most effective for training. Over 175,000 copies will be printed for distribution at elementary schools, bike stores, and police stations.

On-line versions. The abridged and children's versions will be posted on the City of Chicago's home page (www.ci.chi.il.us/WM/CDOT/Bikes) in early 1998, to make this information more accessible.

What's next?

Funding is being sought for a teacher's guide with classroom and on-bike exercises to accompany the children's booklet. Booklet chapters may also be spun off into flyers. For example, the chapter on preventing bike theft could be reprinted by the police department.

contact | BEN GOMBERG

BICYCLE PROGRAM COORDINATOR
CHICAGO DEPARTMENT OF TRANSPORTATION
30 N. LA SALLE ST, SUITE 400
CHICAGO, IL 60602
(312) 744-8093
E-MAIL: bgomberg@ci.chi.il.us

contact | RANDY NEUFELD

EXECUTIVE DIRECTOR
CHICAGOLAND BICYCLE FEDERATION
417 S. DEARBORN ST., SUITE 1000
CHICAGO, IL 60605
(312) 427-3325
E-MAIL: chibikefed@aol.com

By Ben Gomberg and Randy Neufeld



chicago **bike** parking

ACTION TO MAKE CHICAGO BICYCLE-FRIENDLY: THE BIKE RACK PROGRAM

One of the best examples of Chicago's successes is the City's Bike Rack Program. Bike racks were a natural beginning project given the new availability of Congestion Mitigation and Air Quality Improvement program (CMAQ) funding and the Bike 2000 Plan's emphasis on short trips. By the end of 1997, 4,250 racks were in place throughout the city. The racks have been installed as a part of three separate CMAQ grants totaling \$1.5 million. Another \$170,000 CMAQ grant has been received for 1998 rack installation.

Early in 1992 the Mayor's Bicycle Advisory Council decided to test new bike rack designs. Thirty-one wave and inverted-U racks were tested at 10 buildings: city hall, libraries, and municipal offices. The racks looked good and attracted use immediately. The test cost less than \$15,000 and was funded through an existing guardrail contract.

The city applied for \$750,000 for bike parking in the first call for CMAQ project proposals which occurred soon after this successful trial. The first 1,100 racks were sited according to suggestions from city staff and volunteer survey teams from the Chicagoland Bicycle Federation. Special attention was given to distribute available racks between government buildings, cultural institutions, parks, neighborhood retail, and the central business district.

At first the Illinois Department of Transportation wanted site plans for all 1,100 racks. Later they accepted a set of standardized installation configurations and a list of installation locations. Because of the initial quantity of rack installations, it was not feasible to contact adjacent

property owners. A letter was sent to each alderman listing installation locations in their ward. The first responses to the racks were mostly negative, but only a handful of racks were actually relocated. However, the positive response came quickly and clearly: the racks attracted use; several of those who asked that racks be removed asked to keep them; and businesses that didn't get racks wanted to know why they were overlooked.

The 1998 project will include a demonstration of higher security, longer term parking.

Some of the strategies that have made the projects successful:

- The "Inverted-U" design functions especially well. These racks do not obstruct the sidewalk, they can accommodate any type of lock, and it is easy to stand bikes against them.
- Cyclists and property owners are invited to suggest locations through postcards, newspaper articles, and the Internet.
- Consent to install a nearby rack is received from nearby property owners.
- The importance of locating racks as close as possible to the building entrance cannot be overemphasized.
- The managers of schools, parks, transit stations, museums, libraries, post offices, and other institutions are systematically asked if racks are needed.

The racks utilize high quality materials, "bombproof" coatings, and secure mountings. These make the racks more expensive initially but they look better and require less maintenance.



Chicago, IL

contact and publication

THE BIKE 2000 PLAN,

BIKE RACK PROGRAM SPECIFICATIONS, AND OTHER CHICAGO BICYCLE PROGRAM PUBLICATIONS ARE AVAILABLE FROM, BEN GOMBERG, CHICAGO DEPARTMENT OF TRANSPORTATION 30 N. LASALLE, ROOM 400, CHICAGO, IL 60602

E-MAIL: bgomberg@ci.chi.il.us

other examples

CITY OF SEATTLE, WA:
PETER LAGERWEY, (206) 684-5108

CITY OF MADISON, WI:
ARTHUR ROSS, (608) 266-6225