Growing Demand
for Safe Walking and Bicycling

The Perspective of the Pedestrian and Bicycle Information Center

A Four Year Report

January 2003
Evidence of Growing

This report looks at the demand for bicycling and walking from 1999 to 2002 through the eyes of the Pedestrian and Bicycle Information Center (PBIC). The Center was established in 1999 as a national clearinghouse on walking and bicycling for the US Department of Transportation through funding by the US Congress in the Transportation Equity Act for the 21st Century. Over the four years of our existence, we have been able to track interest in walking and bicycling through the demand we are seeing for information and through our coordination of a rapidly-growing community event called International Walk to School Day.

The conclusion: walking and bicycling clearly are at the heart of what many Americans want.

More than 40,000 people come to our web sites each month looking for information and resources.

Walking and Bicycling Timeline

Events and reports that fueled demand for safe walking and bicycling are listed in the lower half of the timeline. The top half shows the activity of the PBIC to support this demand.

1996
- Surgeon General’s Report on Physical Activity and Health declares that 75% of Americans are at risk due to inactive lifestyles

1997
- UNC Highway Safety Research Center (HSRC) initiates Partnership for a Walkable America (PWA)
- PWA launches Walk to School Day

1998
- Surface Transportation Policy Project ranks worst places in the nation for pedestrians and bicyclists
- HSRC develops Walkability Checklist

1999
- TEA 21 Authorization confirms federal funding for pedestrian and bicycle issues
- Lance Armstrong wins his first Tour de France
- Pedestrian and Bicycle Information Center is established within HSRC
- Comprehensive web sites established: walkinginfo.org and bicyclinginfo.org
- PBIC technical assistance network established

2000
- Lance Armstrong wins his first Tour de France
Demand

Diverse groups are viewing walking and bicycling as a solution to an array of problems. The demand for communities that encourage safe walking and bicycling is being fueled by:
- the health community alarmed by the obesity epidemic caused by our sedentary lifestyles,
- the public and their desire to return to neighborhoods and neighborhood schools,
- cities who want to revitalize downtown areas, stem sprawl and promote smart growth,
- those concerned with the environment, and
- the transportation professionals who understand the importance of transportation choices.

Demand for information is growing rapidly.
In 2002, almost half a million people came to the PBIC looking for answers. More than 40,000 people a month arrived via the various PBIC web sites, e-mail, and telephone. The majority of requests come from the public (35%) who are seeking to change their communities and from the transportation professionals (38.5%) who need quality information for deciding what changes to make.

Information needs are changing.
General questions are being replaced by sophisticated requests for specific information. The general public and professionals are showing an increasing knowledge and technical understanding of many of these issues. Requests for tools, guidelines and engineering treatments top the list.

More and more, communities are viewing the ability of a child to safely walk or bike to school as a barometer for community wellness.
In 2002, 2,800 schools from all 50 states and the District of Columbia celebrated International Walk to School Day. This event started in only 2 schools as a one-day walk. Many events have gone on to become comprehensive initiatives such as Safe Routes to School programs that transform the way communities and states think about transportation.

About this report
This report documents what the PBIC has done over the last four years. It looks at what communities are saying they need and how we are responding with technical assistance, web-based tools and training. It examines the amazing growth of walk to school initiatives and the role we play. Throughout the document the questions people are asking from all across the USA are highlighted.

PBIC launches on-line registration for Walk to School events:
www.walktoschool.org
Interactive web tools developed
Walkability courses taught

2001

California passes first Safe Routes to School state legislation
USDOT funds Arlington, MA and Marin County, CA Safe Routes to School projects

2002

Surgeon General’s report decries physical inactivity among kids
First National Congress of Pedestrian Advocates
First National Bike Summit

The CDC lists improved conditions for walking and bicycling as a national health priority

Image Library is released, making more than 2,600 free images available on the web: www.pedbikeimages.org
PBIC serves nearly a half million inquiries per year through web sites, e-mail, telephone, and personal contact
Communities all across the US are asking for safe places to bicycle

One only needs to read the front page of the morning newspaper to realize that our nation is becoming increasingly concerned with our ability to safely walk and bicycle. Major initiatives in public health, environmental protection and transportation, as well as popular national movements such as New Urbanism and Smart Growth, are focused on this issue. Why have walking and bicycling become so important? Because they are central to the quality of life issues communities are facing.

How can Americans get more routine physical activity so that they can live longer, healthier lives?

How do we tackle the obesity and diabetes epidemics head on?

How do communities encourage smart growth, stem sprawl, and reduce the consumption of open space?

How do we reduce the negative environmental effects and reduced air quality associated with excess traffic congestion?

How do we create more livable communities, where neighborhoods are connected and safe for everyone, especially our children and the elderly?

One answer to all of these questions is more walking and bicycling.

I’m looking for good examples of municipal codes on sidewalks, covering issues such as street furniture, width of curb, and monitoring programs.
-Transportation Professional, Oregon

I live in a rural village and received a mini grant from the state DOT to teach the children about pedestrian safety. Can you recommend any resources?
-Educator, Alaska

Our community is comparing the relative safety and merits of a possible bike lane vs. a dedicated path which would require a street crossing. Do you have such data?
-Safe Routes to School Coordinator, California

Are there bike racks that would conform to requirements of an historic district?
-Transportation Professional, Hawaii

The questions people ask
Listed above are a sample of the more than 6,000 questions that the PBIC receives annually by phone and e-mail.

Examining the need for information
The PBIC provides technical assistance to communities through a toll-free number and e-mail, as well as several comprehensive web sites. In this capacity we have been able to catalog requests for information. Several trends are emerging:
- volume is increasing (we receive more than 6,000 direct queries annually),
- geographic distribution is expanding (questions come from communities in all 50 states and D.C.) and
- the sophistication of the requests is rising.
I work with the Michigan Governor’s Council on Physical Fitness and Health on helping communities assess their opportunities for physical activity. I would like a copy of your Bike Lane Design Guide and Bicycle Facility Selection Guide for use in creating our surveys for community self-assessment.

-Health Professional, Michigan

Where can I find funds to build a trail on tribal land?

-Citizen, Maine

My brother wants to take my 3 year old nephew out for bike rides but he’s hesitant to do so because he’s not sure what the safest way to transport his son is. Can you help us?

-Citizen, Massachusetts

We have a high-speed, four-lane state road being crossed by up to 70 children a day walking to school, with only one warning sign and stop light. We are worried about a possible crash. Any suggestions?

-Citizen, Illinois

We are looking into putting in a pedestrian bridge as part of a Safe Routes to School funding opportunity. Do you have data we can use in filing the application?

-Citizen, Texas

I am looking for studies on the effectiveness of flashing yellow lights or similar active warning methods at mid-block uncontrolled pedestrian crosswalks.

-Transportation Professional, Minnesota

I am looking for information about the financial benefits of commuting to work via bike vs. by automobile.

-Citizen, Georgia

We are in the process of working on a policy level Bicycle and Pedestrian Plan for our MPO area. What are the best resources to look at when developing guidelines for bike lanes, sidewalks etc.?

-Transportation Professional, New York

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<tr>
<th>Who is asking for help?</th>
<th>38.5% Transportation professional</th>
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<tr>
<td>35.0% Citizen</td>
<td>9.0% Public Health professional</td>
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<tr>
<td>17.5% Other (police, educator, student)</td>
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<table>
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<th>What do they need?</th>
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<tr>
<td>29.0% Tools and guidelines</td>
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<tr>
<td>16.5% General information</td>
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<tr>
<td>13.5% Design and engineering</td>
</tr>
<tr>
<td>11.5% Safety</td>
</tr>
<tr>
<td>9.5% Law and regulation</td>
</tr>
<tr>
<td>7.0% Environment and community</td>
</tr>
<tr>
<td>6.5% Advocacy</td>
</tr>
<tr>
<td>3.5% Planning and Policy</td>
</tr>
<tr>
<td>2.5% Health and fitness</td>
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</tbody>
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Source: An analysis of a sample of direct requests from the PBIC 800# and e-mail request system.
Resources for changing communities
Connecting people to information, tools, technical experts and training

The PBIC has several methods to provide assistance to communities

Our web sites are designed to quickly route people to the latest information, resources, research findings, and interactive tools. They are tailored to help communities plan and design facilities, encourage more walking and bicycling, conduct safety programs, change local priorities, accommodate special needs, learn about new technologies and integrate pedestrians and bicyclists with rail and transit. For difficult or technical issues, the PBIC has developed a network of technical professionals and experts throughout the US available through e-mail and phone to answer questions and link people to others who have dealt with similar problems. We also develop tools and sponsor training courses to address gaps in available resources. Below are some of the resources developed by the PBIC to address the questions that communities are asking.

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I’m looking for a survey so we can assess the bikeability of an area of Indianapolis, Indiana. Do you know of any?

Indianapolis, Indiana

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Bikeability Checklist
Ideal for communities who are just getting started, the checklist is an easy-to-use assessment tool that quickly identifies major problems and opportunities for bicycling. This resource was modeled on the Walkability Checklist, a successful tool that has been used in hundreds of communities and translated into 16 languages. The checklist is now being used in conjunction with National Bike Month and as input into local bicycle plans.

Partner: National Highway Traffic Safety Administration
Target user: community activist, non-transportation professional

Community Walking Audits
The PBIC funded 50 walking audits in six metropolitan areas to demonstrate how a week-long series of half-day workshops can initiate long-term walking improvements in specific locations and throughout a community. The walking audits took an existing program - USDOT’s Pedestrian Roadshow - and gave it more focus and immediate applicability. A new round of workshops are being held by the National Center for Bicycling and Walking with funding from the Robert Wood Johnson Foundation.

Partners: APBP and Walkable Communities Inc.
Target user: community planner, public health professional

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I’m looking for a survey so we can assess the bikeability of an area of Indianapolis, Indiana. Do you know of any?

Indianapolis, Indiana

Do you have any information on how to audit a city for walking and bicycling?

San Antonio, Texas

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PBIC tools and resources that build on previous research

PBIC team members have conducted bicycling and walking research for more than 30 years. Many of the products of that research, along with the work of PBIC partners, have been turned into interactive tools and resources available on the PBIC web sites:

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The Pedestrian and Bicycle Crash Analysis Tool (PBCAT)
PBCAT is a crash-typing software that assists states and communities analyze crashes between motor vehicles and pedestrians and bicyclists.

Partner: FHWA and NHTSA

Pedestrian Facilities User Guide
This guide provides detailed information for 47 different pedestrian-related engineering treatments.

Partner: FHWA
Bicycle Lane Design Manual

Once communities make commitments to become more bicycle friendly, they typically want to know how to do so and what other cities have done. The Bicycle Lane Design Manual contains 35 full-page technical drawings of street layouts, striping patterns, signs and street markings that show how the City of Chicago installs bike lanes. By answering frequently asked questions and providing detailed real-world examples of bike lane installation, the PBIC is making available best practice information to a wide audience.

Partner: Chicagoland Bicycle Federation, City of Chicago
Target user: traffic engineer, bicycle advocate

Pedestrian Expert System

In 2003, the PBIC will unveil the next generation of technical assistance tools: a web-based, interactive information system that provides guidance on appropriate pedestrian improvements based on specific site conditions. The system builds on original research by PBIC staff and the Pedestrian Facilities User Guide - featuring 47 engineering solutions to common safety and mobility problems. A bicycling expert system is also under development.

Partner: Federal Highway Administration
Target user: traffic engineer, safety expert

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Are bike lanes a good idea next to on-street parking situations or will a wide outside lane serve the needs of bicyclists better?
Charlotte, North Carolina

We are considering reducing a stretch of road from 4 lanes to 3. Do you have any case studies to illustrate to the public and city council how such a reduction would improve livability and not reduce traffic volume?
Concord, New Hampshire

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Walkability Checklist
The checklist helps to identify specific walking problems and potential solutions. It is a popular element of Walk to School programs.

Partner: NHTSA and the Partnership for a Walkable America

Bicycle Facility Selection Guide
The guide provides parameters for bicycle facility types.

Partner: Developed by Michael King as a consultant to the PBIC

Bicycle Safety Education Resource Center
A web-based resource which includes a searchable database of training materials and guides to help identify training needs and good practices.

Partner: Developed by PerformTech Inc. for FHWA; web center created by the PBIC

Pedestrian Research Studies
Reports of evaluations of traditional and innovative pedestrian treatments, such as sidewalks, walkways and crosswalks, automated pedestrian detectors and innovative signs with recommended national guidelines and priorities for use.

Partners: FHWA and NHTSA

Bicycle Research Studies
Reports of evaluations of bicycle facilities, such as bike lane vs. wide curb lanes, colored bike lanes, intersection "Bike Boxes" and a Bike Compatibility Index to rate roads for bike riding.

Partners: FHWA and NHTSA

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www.bicyclinginfo.org  www.walkinginfo.org  www.pedbikeimages.org
Walk to School Day and Safe Routes to School
A dynamic duo that is transforming communities

Why is Walk to School so popular?

The events are . . .

Universal. No one can say no to safer and healthier children.

Flexible. Missions are locally chosen (health, safety, the environment, fun), and leadership is diverse, from parents and teachers, to police and health departments.

Inexpensive to start. Limited funding or material is needed to launch an event — simply a desire to encourage and help children and parents find a better way to school!

Walk to School Day may be the most promising starting point for improving conditions for walking and bicycling.

Walk to School Day is an event held every October in which children, parents, teachers and community leaders walk to school together to promote being active and making the streets more friendly for walking and bicycling. Begun in 1997 with two schools in two cities, the event has grown to more than 2,800 schools in all fifty states and more than 3 million walkers in 28 countries worldwide. The rapid growth of Walk to School makes it clear that communities are ready for change.

Walk to School Day has become much more than a one-day event.

Communities across the country are successfully using Walk to School to increase awareness, build vital community coalitions, identify barriers and solutions and generate support for permanent change. Walk to School Day is credited with playing a critical role in getting model legislation passed in California that directs significant transportation funding to Safe Routes to School programs at the local level.

Safe Routes to School Programs are the logical next step: turning events into permanent community change.

Safe Routes to School programs use a comprehensive approach (encouragement, education, engineering and/or enforcement) to make school routes safer for kids to walk and bicycle. The programs use policies and dedicated transportation funding to create permanent change and normalize walking. Many states are working for legislation like that in California that dedicates funding to create safe walking and bicycling routes to school.
A Path for Progress

Walk to School Day events
Events build awareness, create demand for more walkable neighborhoods and bring partnerships together. Some communities keep the momentum going by initiating health promotions, such as Walking Wednesdays, and safety programs, such as walking school buses.

Safe Routes to School and other long-term programs
Communities move to permanent change by creating new policies and improving facilities. Sidewalks are repaired or built, street crossings improved, trails and pathways built and car drop-off areas relocated. Dedicated transportation funding becomes available for bicycle and pedestrian improvements.

Community wide change
The coalitions that organize Walk to School events and Safe Routes programs make broader improvements in the community, such as improving safety for seniors, getting trails built, or launching bike-to-work campaigns.

Ultimately safe walking and bicycling are part of all transportation planning.

PBIC was in position to recognize the potential of Walk to School and help it grow.

PBIC staff helped launch Walk to School Day in 1997 and the international event in 2000. PBIC’s ongoing Walk to School support includes:

- Promoting the event through news releases and other materials
- Maintaining the national and international walk to school web sites www.walktoschool.org and www.iwalktoschool.org
- Managing on-line registration and feedback surveys
- Providing technical assistance to schools and communities through e-mail and phone requests

www.iwalktoschool.org
www.walktoschool.org
About the PBIC

Mission
The mission of the Pedestrian and Bicycle Information Center is to improve the quality of life in communities through the increase of safe walking and bicycling as a means of transportation and physical activity. The PBIC focuses its efforts in four areas: serve as an information clearinghouse; conduct pedestrian and bicycle research; translate research and knowledge into practice and promote national awareness of pedestrian and bicycle issues.

Organizational History
PBIC was established in 1999 as a project of the University of North Carolina Highway Safety Research Center (HSRC) with funding from the USDOT. HSRC/PBIC team members have been involved in research related to bicycling and walking for more than 30 years. This includes being selected by the USDOT to write "The National Bicycling and Walking Study - Transportation Choices for a Changing America" and conducting the 7-year, $5.7 million research study on bicycling and walking for USDOT in the 1990's. In 2001, the PBIC became a Center within the HSRC. The Association of Pedestrian and Bicycle Professionals (APBP) is a partner of the PBIC. In addition to providing a staff person, APBP members have contributed time and expertise to PBIC products and services.

Funding Agencies
Centers for Disease Control and Prevention (CDC)
Federal Highway Administration (FHWA)
National Cooperative Highway Research Program (NCHRP)
National Highway Traffic Safety Administration (NHTSA)
NCDOT Pedestrian Bicycle Transportation Division
NC Governor’s Highway Safety Program (GHSP)
The Robert Wood Johnson Foundation (RWJF)
US Department of Transportation (USDOT)
UNC General Administration

Staff

Charlie Zegeer, Director
30 years conducting pedestrian and bicycle research; lead author of "The National Bicycling and Walking Study;" led $5.7 million USDOT research study on bicycling and walking; author, FHWA research studies on crosswalks, sidewalks and innovative pedestrian treatments; former Chair of ITE Committee on Design of Pedestrian Facilities, TRB Emeritus Member.

Lauren Marchetti, Deputy Director
30 years conducting programs to reduce motor-vehicle-related deaths and injuries; led 1990’s USDOT project to raise national awareness of pedestrian issues; led development of walkability checklist; helped launch the Partnership for a Walkable America and International Walk to School Day.

Christian Valiulis, Associate Director
9 years designing technical information systems; led development of web sites, interactive tools, image library.

Mark Fenton, Physical Activity Program Manager
20 years health and fitness promotion; host of PBS series "America’s Walking;" author of several books including "The Complete Guide to Walking for Health Weight Loss and Fitness;" former Editor Walking Magazine.

Andy Clarke, Executive Director APBP, PBIC Technical Advisor
17 years experience championing walking and bicycling in the U.S and Europe as a public policy analyst, planning and design consultant, technical trainer and community organizer; former Chair TRB Bicycle Committee.

Donna Suttles, Communications Coordinator
20 years providing technical assistance for consumer questions; staffed child passenger safety hotline; coordinates response system for pedestrian and bicycle questions.

David Harkey, Researcher and Associate Director, HSRC
17 years leading pedestrian and bicycle research: Accessible Pedestrian Signals Study; Pedsmart: Enhancing the Pedestrian Travel Environment through ITS Technologies; Pedestrian and Bicycle Crash Analysis Tool; Bicycle Compatibility Index.

The PBIC also draws upon the knowledge of other HSRC staff members with backgrounds in epidemiology, planning, statistics, public relations, and software and web site design.

Awards
ITE Traffic Engineering Council Outstanding 2000 Paper Award
TRB Committee on Pedestrians 2000 Outstanding Paper
Stockholm Partnerships Award for Sustainable Cities presented to International Walk to School Day
America Walks 2000 Honor Award presented to the Partners from the Partnership for a Walkable America for establishing National Walk Our Children to School Day
SciLink Award - The National Science Teachers Association selected the Bicycle Safety Education Resource Center as an outstanding resource.
Partnerships and Collaborations

As interest in walking and bicycling grows, so does the opportunity for new partnerships and collaborations. The PBIC has worked with numerous organizations by sharing information, providing technical assistance, developing and conducting programs and sponsoring conferences and events. The PBIC supported the National Bike Summit, the Pro Bike Pro Walk conference series, the National Congress of Pedestrian Advocates, the National Bicycle Safety Network, the Partnership for a Walkable America, International Walk to School Day, and many state and local bicycle and pedestrian conferences. We are pleased to be a partner of the League of American Bicyclists in their development of a Bicycle Friendly Communities Award Program. Below is a list of organizations with which we have partnered over the last four years.

America Walks
Association of Pedestrian and Bicycle Professionals
Centers for Disease Control and Prevention
Chicagoland Bicycle Federation
Institute of Transportation Engineers
Federal Highway Administration
League of American Bicyclists
National Bicycle Safety Network
National Center for Bicycling and Walking
National Highway Traffic Safety Administration
National SAFE KIDS Campaign
National Safety Council
NC Governor’s Highway Safety Association
Partnership for a Walkable America
Robert Wood Johnson Foundation
Shape Up America!
Thunderhead Alliance
Walkable Communities, Inc.
UNC Active Living by Design National Program Office
UNC School of Public Health Department of Nutrition
Velo-Mondiale

National Review Group

The PBIC established a National Review Group, comprising more than 30 transportation, health, and advocacy leaders, to provide advice and feedback on the goals and objectives of the Center.

Lisa Aultman-Hall
University of Connecticut

Tom Brahms
Institute of Transportation Engineers

Lois Chaplin
Cornell University

John Ciccarelli
Bicycle Solutions

Amy Coggin
American Public Transit Association

James Corless
Surface Transportation Policy Project

Lars Ekman
Lund University, Sweden

Sally Flocks
Pedestrians Educating Drivers on Safety

Olly Hatch
European Cyclist Federation

Rich Killingsworth
UNC Active Living by Design National Program Office

Ken Kobetsky
AASHTO

Scott Leonard
National Association of Railroad Passengers

Elissa Margolin
League of American Bicyclists

Dale Marsico
Community Transportation Association of America

Julie Mercer Matlick
Washington DOT

Mary Paul Meletiou
North Carolina DOT

Phil Miller
APBP, Alta Transportation Consulting

Peter Moe
National Center for Bicycling & Walking

John M. Moffat
Washington Traffic Safety Commission

Randy Neufeld
Chicagoland Bicycle Federation Thunderhead Alliance

Gay Page
Colorado DOT

Nelson Pena
Bicycling Magazine

Jean-Francois
Velo Quebec

Kyran Quinlan
National Centers for Injury Prevention & Control

Kevin St. Jacques
Wilbur Smith Associates (representing ASCE HPT Committee)

Lois Thibault
US Access Board

Harold Thompson
National Safety Council

JoAnne Pruitt
Wisconsin DOT

Ellen Vanderslice
America Walks

Dorothy Verkerk
University of North Carolina

Diane Winn
University of California - Irvine Pediatric Injury Prevention Research Group
A bicyclist traverses a park in Washington, D.C.
More than 2,600 photos like this one are available online at www.pedbikeimages.org.

Front cover photos (clockwise from upper left): Bicyclist in traffic; Pedestrians in crosswalk; Congressman James L. Oberstar (right) and Congressman Edward J. Markey (left) participating in WalkBoston’s Safe Routes to School Program.