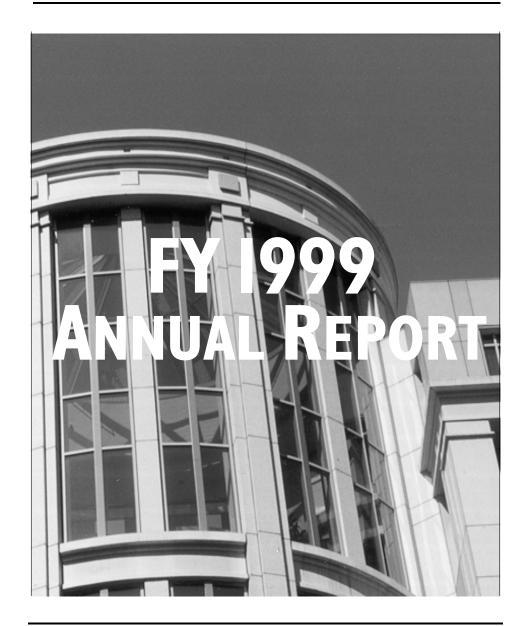
The Access Board

A Federal Agency Committed to Accessible Design



January 2000

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About the Access Board -

The Access Board is an independent Federal agency devoted to accessibility for people with disabilities. It operates with about 30 staff and a governing board of representatives from Federal departments and public members appointed by the President. Key missions of the Board include:

- developing and maintaining accessibility guidelines for the built environment, transit vehicles, telecommunications equipment, and standards for electronic and information technology
- providing technical assistance and training on these guidelines and standards
- enforcing design standards for federally funded facilities

Several different laws are key to understanding the work of the Board. These laws include:

THE ARCHITECTURAL BARRIERS ACT OF 1968

The ABA requires access to facilities designed, built, altered, or leased with Federal funds. The Board develops minimum accessibility guidelines under this law. Through the investigation of complaints, the Board also enforces the design standards based on its guidelines, the Uniform Federal Accessibility Standards (UFAS).

THE AMERICANS WITH DISABILITIES ACT OF 1990

The ADA is a major civil rights law prohibiting discrimination on the basis of disability in the private and public sectors. Under the ADA, the Board develops and maintains accessibility guidelines for buildings, facilities, and transit vehicles and provides technical assistance and training on these guidelines. The ADA Accessibility Guidelines (ADAAG) serve as the basis of standards issued by the departments of Justice and Transportation to enforce the law. The building guidelines cover places of public accommodation, commercial facilities, and State and local government facilities. The vehicle guidelines address buses, vans, a variety of rail vehicles, trams, and other modes of public transportation.

THE TELECOMMUNICATIONS ACT OF 1996

Section 255 of this law requires that new telecommunications and customer premises equipment be accessible where "readily achievable." The Board develops and maintains accessibility guidelines for such equipment, which is enforced by the Federal Communications Commission.

THE REHABILITATION ACT AMENDMENTS OF 1998

This law expands and strengthens section 508 of the Rehabilitation Act, which covers access to electronic and information technology purchased or used by the Federal government. The Board is responsible for developing accessibility standards for such technology. These standards will become part of the regulations governing Federal procurement practices.

Accessibility Guidelines and Standards

The Board develops its accessibility guidelines and standards through a process common to most Federal regulations that invites public comment through publication in the Federal Register. Proposed guidelines and standards are revised as necessary according to the comments received and republished in final form. The Board completed work on two extensive proposed rules in 1999. One addressed new guidelines for recreation facilities, the other served to update facility guidelines under the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA). In addition, the Board worked to finalize guidelines for play areas and issued a final notice concerning detectable warnings. Several advisory committees established by the Board developed information upon which future guidelines and standards will be based.

Published Rules and Notices

RECREATION FACILITIES

On July 9, 1999, the Board proposed accessibility guidelines for recreation facilities under the ADA for public comment. Once finalized, these guidelines will add a new chapter on recreation facilities to the ADA Accessibility Guidelines (ADAAG), which do not specifically address many recreation facilities in particular detail. The proposed rule covered a variety of recreation facilities, including amusement rides, boating facilities, fishing piers and platforms, golf courses, miniature golf, sports facilities, and swimming pools and spas. The requirements are largely based on recommendations prepared by the Recreation Access Advisory Committee, which the Board had established for this purpose. The proposed rule was available for comment until December 8, 1999. During the comment period, the Board held public hearings on the rule in Dallas, Teaxas (August 26, 1999) and Boston, Massachusetts (November 17, 1999). Over 275 comments were received in response to the proposed rule.

ADA and ABA Accessibility Guidelines

In March, the Board unanimously approved a rule to completely revise and update its guidelines issued under the ADA and the ABA. The ADA Accessibility Guidelines (ADAAG) cover the construction and alteration of facilities in private sector (places of public accommodation and commercial facilities) and the public sector (state and local government facilities). The accessibility guidelines issued under the ABA primarily address facilities in the Federal sector and others designed, built, or altered with Federal funds. The guidelines under both laws are being updated together in one rule that contains three parts: a scoping document for ADA facilities, a scoping document for ABA facilities, and a common set of technical criteria that the scoping sections will reference. As a result, the requirements for both ADA and ABA facilities will be made more consistent. The key goal of this rulemaking is to substantively update the requirements to reflect technological developments so that they continue to meet the needs of persons with disabilities. Also, this update is designed to make the guidelines more consistent with model building codes and industry standards in order to facilitate compliance. In addition to updated provisions, the proposed rule contains new figures and advisory material developed by the Board. (The rule was published on November 16, 1999 and made available for public comment until March 15, 2000).

PLAY AREAS

In September, the Board approved final guidelines for play areas that were published for public comment in 1998. Developed under the ADA, these guidelines are responsive to the need for greater guidance in providing access to playgrounds and play equipment. The guidelines cover the number of play components required to be accessible, accessible surfacing in play areas, ramp access and transfer system access to elevated structures, and access to soft contained play structures. The final guidelines will be published in FY 2000.

DETECTABLE WARNINGS

The Board issued a final notice on November 23, 1998, extending the suspension of requirements for detectable warnings to July 26, 2001. This notice was published jointly with the departments of Justice and Transportation. ADAAG originally contained a requirement for warnings detectable by cane or underfoot at curb ramps and other locations to alert people with vision impairments of vehicular areas. This requirement was suspended in 1994 pending further research on the need for such warnings. The Board published a notice to extend this suspension so that it could substantively revisit the issue of detectable warnings in the revision of ADAAG.

Advisory Committees

It has become standard practice for the Board to establish advisory or regulatory negotiation committees as a first step in the rulemaking process. Through such committees, interested groups, including those representing designers, industry, and people with disabilities, play a substantive role in recommending to the Board the substance of the guidelines or standards to be developed. These committees provide significant sources of expertise while enhancing the level of consensus among stakeholders in advance of proposing a rule for public comment. Regulatory negotiation is a supplement to the traditional rulemaking process that allows for face-to-face negotiations among representatives of affected interests, including the agency, with a goal of arriving at a consensus decision on the text of a proposed rule.

Three such committees were hard at work during FY 1999. The Electronic and Information Technology Access Advisory Committee and the Outdoor Developed Areas Regulatory Negotiation Committee submitted reports to the Board upon which proposed rules are to be based. The Passenger Vessel Access Advisory Committee met regularly throughout the year to develop guidelines to be presented in 2000. In addition, the Board began work on creating a new advisory committee on access to public rights-of-way and published a notice requesting applications for people to serve on this committee in late FY 1999. (The Public Rights-of-Way Access Advisory Committee was established in October 1999).

ELECTRONIC AND INFORMATION TECHNOLOGY ACCESS ADVISORY COMMITTEE

Under the Rehabilitation Act Amendments of 1998, the Federal government will be on the forefront in ensuring access to electronic and information technology. Section 508 of the act requires access to the Federal government's electronic and information technology. It applies to all Federal agencies when they develop,

procure, maintain, or use electronic and information technology. Federal agencies must ensure that this technology is accessible to employees and members of the public with disabilities to the extent it does not pose an "undue burden." Section 508 speaks to various means for disseminating information, including computers, software, and electronic office equipment. It applies to, but is not solely focused on, Federal pages on the Internet or the World Wide Web. It does not apply to web pages of private industry.

The Board, which is responsible for issuing access standards for such technology under this law, created an advisory committee to develop recommendations on the standards. In May, the Electronic and Information Technology Access Advisory Committee (EITAAC) completed its work and presented its recommendations to the Board. The committee consisted of 27 representatives from industry, various disability organizations, and other groups with an interest in the issues to be addressed. The EITAAC report provides a balance of performance criteria, which focus on the capabilities of covered technologies, and technical criteria specific to certain types of technology. This dual approach recognizes the dynamic and continually evolving nature of the technology involved as well as the need for clear and specific standards to facilitate compliance. Access is addressed for people with physical, sensory, and cognitive disabilities.

EITAAC Members

American Council of the Blind American Foundation for the Blind Arkenstone, Inc. **Association of Access Engineering Specialists Association of Tech Act Projects Compaq Computer Corporation** Easter Seals **Electronic Industries Alliance FutureForms** Georgia Institute of Technology **IBM Special Needs Center** Information Technology Industry Council Meeting the Challenge, Inc. **Microsoft Corporation NCR** Corporation National Association of the Deaf National Federation of the Blind National Industries for the Blind **National Science Foundation Pitney Bowes** Self Help for Hard of Hearing People **Sun Microsystems** Trace Research and Development Center **United Cerebral Palsy Associations** WGBH National Center for Accessible Media WebABLE! Solutions World Wide Web Consortium

The recommendations establish criteria that would allow people with disabilities to locate, identify, and operate all of the input, control and mechanical functions, and to access available information. The report also addresses compatibility with adaptive equipment people with disabilities commonly use for access. The Board will propose standards in FY 2000 based on the committee's report. These standards will help Federal agencies comply with the law and will become part of Federal procurement regulations.

OUTDOOR DEVELOPED AREAS REGULATORY NEGOTIATION COMMITTEE

In September, the Outdoor Developed Areas Regulatory Negotiation Committee presented its report to the Board on access to trails, picnic and camping areas, and beaches. Established by the Board in June 1997, this committee was charged with developing proposed accessibility guidelines for outdoor developed areas under the ADA. Committee members represented the diverse interests of those affected by this rulemaking, including people with disabilities, owners and operators of outdoor developed areas, Federal, state, and local land management agencies, designers,

and trails groups. The meetings were held in different locations across the country and were attended by over 250 members of the public.

The committee's report provides proposed guidelines for trails, beaches, and campgrounds in new construction and alterations. Technical provisions for trails, outdoor access routes, and beaches address route surfacing, clear width, protruding objects, passing space, running and cross slopes, and edge protection. The report provides exceptions that address necessary departures from these criteria since the outdoor environment is very different from a constructed indoor environment. Factors which influence construction such as soil, surrounding vegetation, hydrology, terrain, and surface characteristics are fundamental to outdoor areas. Where difficult conditions exist, departures would be permitted under the recommended guidelines. The Board will publish a proposed rule based on the committee's report in FY 2000.

Outdoor Developed Areas Regulatory Negotiation Committee Members

American Society of Landscape Architects

American Camping Association

American Trails

Appalachian Trail Conference Association for Blind Athletes

Hawaii Commission on Persons with Disabilities

KOA. Inc.

National Association of State Park Directors
National Association of State Trail Administrators

National Center on Accessibility
National Council on Independent Living
National Recreation and Park Association
National Spinal Cord Injury Association

New York State Dept. of Environmental Conservation

Paralyzed Veterans of America Partners for Access to the Woods Rails to Trails Conservancy

State of Washington, Interagency Committee for

Outdoor Recreation

HZAT

U.S. Access Board

U.S. Army Corps of Engineers

U.S. Forest Service
U.S. National Park Service

U.S. Federal Highway Administration

Whole Access

PASSENGER VESSEL ACCESS ADVISORY COMMITTEE

This committee is exploring ways to provide access to passenger vessels in view of various design considerations and will make recommendations that the Board will use in developing guidelines. The committee met regularly throughout the year and held one of its meetings in Seattle to tour different kinds of vessels, including an excursion boat, ferry, and cruise ship. The committee plans to submit its report to the Board in late 2000.

Passenger Vessel Access Advisory Committee Members

American Classic Voyages
American Society of Travel Agents

BB Riverboats

Boston Commission for Persons with Disabilities

Chesapeake Region Accessible Boating International Council of Cruise Lines Maine Department of Transportation

National Association of Charterboat Operators

National Tour Association Paralyzed Veterans of America Passenger Vessel Association Port of San Francisco Princess Cruises

Rhode Island Tourism Division Self Help for Hard of Hearing People

Society for the Advancement of Travel for the Handicapped

Society of Naval Architects and Marine Engineers

Southeast Alaska Independent Living

Southwest Disability and Business Technical Assistance Center

Transportation Institute

Washington State Department of Transportation

Coordination with Private Organizations

One of the Board's long-range goals is to take a leadership role in the development of codes and standards for accessibility. The Board works with model code organizations and voluntary consensus standards groups that develop and periodically revise codes and standards affecting accessibility. Such coordination has a two-fold purpose: it allows the Board to encourage or enhance the coverage of accessibility by industry standards and also advances the harmonization of Board guidelines and industry standards. Last year, the Board was particularly active in working with private industry in the areas of classroom acoustics, wheelchair lifts, recreation, and pedestrian access.

CLASSROOM ACOUSTICS

The parent of a child with a hearing loss petitioned the Board to undertake rulemaking on acoustical accessibility for individuals who are hard of hearing because the acoustical environments found in many schools today are barriers to communication and therefore to learning for children with hearing impairments. After review of comments to a published request for information, the Board undertook a plan to collaborate with an existing working group headed by the American National Standards Institute (ANSI) and the Acoustical Society of America (ASA) to develop these standards through the ANSI consensus process. At the Board's request, the working group membership was broadened to include other stakeholders, including representatives of school systems, school designers, disability organizations, and the Department of Education. The Board has provided funding from its research budget to support administrative costs of the working group.

BUILDING CODES AND STANDARDS

The Board actively participated in the revision of the International Code Council (ICC)/American National Standards Institute (ANSI) All7 Committee standard, "Accessible and Usable Buildings and Facilities." A major objective of the Board and the ANSI All7 Committee is to harmonize the ADA Accessibility Guidelines (ADAAG) and the ICC/ANSI All7. I standard. The ANSI standard will entertain revisions pursuant to publication of the Board's revised ADAAG. The Board is part of a chairman's task group that has been formed for this purpose. The Board also continued to coordinate with the ICC on its development of the International Building Code, a cooperative effort on the part of

national model codes to bring uniformity to building codes. The IBC includes numerous provisions affecting accessibility such as: scoping provisions for the ICC/ANSI AI17.1 standard, provisions for mainstreamed accessible elements, and requirements for accessible means of egress. Adoption of the IBC by state and local code authorities provides a unique opportunity for principles of accessibility to be standardized and integrated in building codes.

PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS

The American Society of Mechanical Engineers (ASME) organized a committee responsible for developing new standards for lift devices that will be separate from the elevator code. This has provided the Board with a number of opportunities to improve accessibility to lifts. The Board participated in several meetings of the committee last year. The new standards will address issues such as key requirements, use of platform lifts in courtrooms, and minimum head room for platform lifts on stairs. One notable change resulted from a Board proposal to remove a long-standing requirement that certain platform lifts be key operated.

RECREATION

The Board continued to work with private sector organizations on standards for swimming pools, aquatic attractions, and playground surfaces. The Board coordinated with the National Spa and Pool Institute (NSPI) for the inclusion of accessibility provision in the updated ANSI/NSPI-I (Standard for Public Swimming Pools) and in a new standard on water park and water attractions. As a results, these standards contain provisions that are generally consistent with the guidelines for recreation facilities the Board proposed. In addition, the Board actively supported and promoted the development of a standard to provide a more objective measurement of accessible play area surfaces. This standard (ASTM F 1951-99) was developed by the American Society for Testing and Materials and replaces a provisional standard (PS-83) which was referenced in the Board's proposed guidelines for play areas.

PEDESTRIAN ACCESS

The Board worked with a variety of entities to further coverage of access for pedestrians:

- The Board is a founding member of a joint industry/consumer group charged with developing a 'toolbox' on accessible design for intersections. The Institute of Traffic Engineers (ITE) will publish Committee recommendations as technical assistance in 2000.
- The Transportation Equity Act for the 21st Century (TEA-21) contains new requirements for pedestrian facilities. The Federal Highway Administration (FHWA) has been directed to develop policy guidance on pedestrian and cycling facilities for transportation engineers. The Board participated on the FHWA committee that developed guidance on policy issues which has been forwarded to the Secretary of Transportation.
- The Board submitted a proposal to the National Cooperative Highway Research Program (NCHRP) to recommend changes to transportation industry standards and other documents to incorporate pedestrian and accessibility criteria.

The Board provided comment on revisions to the Manual on Uniform Traffic Control Devices (MUTCD),
which includes coverage of pedestrian signals, intersection design issues, pavement markings, signage,
signalization, and other traffic control issues and was a member of a Signals Committee Task Force to
develop a draft standard for accessible pedestrian signals.

Technical Assistance and Training

TECHNICAL ASSISTANCE

The Board provides technical assistance on its guidelines and on accessible design through its toll-free telephone line, by fax, and by e-mail. In FY 1999, the Board responded to 13,350 telephone and fax inquiries. Most inquiries request clarification or interpretation of specific requirements in Board guidelines and standards covering facilities, vehicles, or telecommunications equipment.

TRAINING

The Board routinely participates in training and conferences sponsored by other organizations, which often reimburse the Board's travel expenses. Most of these training programs are focused on the ADA and accessible design. In FY 1999, the Board conducted 67 training sessions across the country and reached a collective total audience of approximately 10,944 people.

INFORMATION DISTRIBUTION AND DEVELOPMENT

About 30 publications are available from the Board, including copies of all its guidelines and standards and related guidance material, such as technical bulletins and brochures. A total of 7,344 packets of information were mailed to customers in FY 1999.

In April, the Board published an interpretative guide, the ADAAG Manual, that clarifies various provisions in addressing many of the most frequently asked questions about ADAAG. Over 15 organizations joined the Board in printing and distributing 35,000 copies of the manual. Work also was completed on a design guide on public rights-of-way. The Board developed the guide in collaboration with the Federal Highway Administration to assist public works and transportation agencies in the design and construction of accessible sidewalks and street crossings. In addition, the Board issued a new technical bulletin that provides an overview of its accessibility guidelines for telecommunications products. The Board also funded several projects to develop technical assistance materials on assistive listening systems, telephone interference, toilet and bathing facilities, and play areas.

The Board also teamed up with the American Institute of Architects (AIA) to develop training materials on the Board's guidelines for courthouses, prisons, and children's elements. As the preeminent professional association representing America's architects, the AIA maintains a vigorous information dissemination program. Materials being developed include a series of announcements and articles, a training program tailored to AIA conferences and workshops, and a web-based educational course.

www.access-board.gov

The Board provides a variety of information through its web site, including copies of its guidelines and technical assistance through the posting of frequently-asked questions. Due to the increasing use of its site, the Board has given priority to web-based dissemination of information. The number of user sessions averaged over 17,700 a month in FY 1999. The Board developed a plan to redesign the web site that will include a significant amount of additional material, a new design and organization, and enhanced access features. The new site will be unveiled in FY 2000.

Compliance and Enforcement -

The Board investigates complaints filed under the Architectural Barriers Act (ABA). In response to a complaint, the Board conducts an investigation, working with the responsible Federal agency. The first step of an investigation is to determine whether the facility is covered by the law. Generally, facilities designed, built, altered or leased with Federal money after September 1969 are covered. Where the Board has jurisdiction, the next step is to determine which standard applies and whether the facility is in compliance. If not, the Board will work with responsible entities to develop a plan of action to correct identified violations and will monitor corrective action until completion.

The Board strives for amicable resolution of complaints. The Board opened investigations of 72 complaints in FY 1999, in addition to 98 cases that were active at the beginning of the fiscal year. (A total of 144 complaints were received, but the Board referred 72 of these complaints to the appropriate enforcement agencies for action under other accessibility laws.) A total of 93 investigations were completed during the year. Where the Board had jurisdiction and there was a violation of the applicable standards, successful removal of barriers was achieved in 100% of the cases. The Board also negotiated voluntary corrective action in 54% of the cases closed where the ABA did not apply or the access issue did not technically violate the applicable standard.

Research -

The Board funds and coordinates research to develop information necessary for producing guidelines or technical assistance materials. Its research agenda encompasses a wide variety of accessibility issues. The Board completed three research projects in FY 1999. In addition, the Board conducted a study on telecommunications products.

Accessible Exterior Surfaces

In April, the Board completed a 28-month project to study the characteristics of accessible surfaces in outdoor environments, including parks, playgrounds, and pedestrian paths. The ADAAG require accessible ground and floor surfaces to be "stable, firm, and slip-resistant." Since a standardized means for measuring stability and firmness does not exist, questions often arise about whether certain materials or products used for exterior surfaces meet these criteria. The project involved human subject testing and objective measures of surface firmness and stability on nine types of exterior surfaces. A new portable surface measurement device that can rate surface firmness and stability (a "rotational penetrometer") was used in the project. The study found a strong correlation between the measurements of this device and the amount of energy people with disabilities use to traverse various surfaces. The results suggest that, under dry conditions, paved surfaces, path fines (with or without stabilizer), unpaved road mix, and packed soil surfaces require the least amount of energy; wood surfaces (chipped brush, wood chips, engineered fibers) and sand were determined to require the most energy.

Interactive Transaction Machines

This project, funded by the Board through the National Institute on Disability and Rehabilitation Research, studied access to interactive transaction machines (ITMs), such as automated teller machines, point-of-sales machines, and information kiosks. The project consisted of three strategies. In the first, the researchers gathered information

which would be helpful to people interested in learning about or carrying out accessible designs for ITMs. In the second strategy, this information was synthesized and combined with input from industry, consumers and researchers to create useful reference and design materials. In the third strategy, researchers created actual design concept/Level I prototypes which show how the strategies can be incorporated into practical, effective ITM designs. The project was completed in September.

Assistive Listening Systems

This project, also funded by the Board through the National Institute on Disability and Rehabilitation Research, is designed to collect information on assistive listening systems helpful in the development of performance standards. This research included a review of the state-of-the-art with respect to assistive listening systems and a survey of consumers, service providers, dispensers and manufacturers to determine how effective assistive listening systems are at present and what the major problems, limitations, and complaints are regarding existing systems. With this information, the researchers developed objective means for specifying the overall characteristics of any assistive listening system, from sound source to listener's ear, to be able to predict how well the system will work in practice and to determine objective criteria for establishing standards or recommendations for the use of assistive listening systems in public places. A variety of technical assistance materials have been developed through this project.

MARKET MONITORING REPORT

Pursuant to the guidelines it issued under the Telecommunications Act (section 255), the Board completed a market-monitoring report. The report addresses the progress of making customer premises equipment and telecommunications equipment accessible and identifies successful access solutions. Included in the report are lists of products and their features used to provide accessibility and lists of the barriers to access that still exist. Products were measured against specific provisions in the Board's guidelines. The report provides recommendations for specific changes to the Board's guidelines. Since the Board is required to review and update these guidelines periodically, information from this report will be used to determine what provisions of the guidelines may need to be revised or whether new provisions are needed.

Special Events

SAN FRANCISCO AND OAKLAND TOWN MEETINGS

Each year the Board holds a public forum in a different city to encourage a more direct and open dialogue with members of the public about accessibility and the work of the Board. These visits outside the Washington beltway substitute for one of the Board's regular meetings, which are held every other month in the Washington, D.C. area. In October 1998, the Board held town meetings in San Francisco and Oakland, California that allowed the public a chance to raise issues or questions about accessible design and current or future Board guidelines in an informal setting. Various accessibility topics were covered in meetings, including passenger vessels, recreation, communications, electronic and information technology, multiple chemical sensitivities, and pedestrian crossing

signals, among others. The Board also uses out-of-town meetings to explore ways in which access has been achieved in various environments, particularly those that are the subject of upcoming guidelines or initiatives, such as recreation facilities, passenger vessels, and public rights-of-way. On this visit, the Board explored how access has been achieved in these environments, traveling on the ferry connecting Oakland and San Francisco, visiting China Camp State Park, and examining examples of audible signs, accessible pedestrian crossing signals, and detectable warnings.

Workshop on Roundabouts

The Board conducted a workshop on traffic roundabouts at the Transportation Research Board's annual meeting in January. The workshop, chaired by Board member Patrick Cannon, brought industry and agency experts together with pedestrian and disability professionals to explore improvements to roundabout design. While many believe that roundabouts are generally safer than signalized intersections, very preliminary and limited research suggests that roundabouts discourage pedestrian use and that roundabouts are a significant barrier for pedestrians with vision, mobility, or cognitive impairments. Roundabouts permit more continuous vehicular flow and typically require pedestrians to visually identify and select a crossing gap. One of the questions the workshop considered was how roundabout design could better accommodate pedestrians with vision and cognitive disabilities who may not be able to determine an appropriate time to cross. A number of design improvements were suggested, such as straight line travel routes for pedestrians with vision impairments and mid-block crossings.