Recommendations for Jurisdictions

Recommendations are policies most suited toward local governments or other regulatory entities that may result in better accommodation of pedestrians. These recommendations apply to all types of successful pedestrian areas: urban or suburban, infill or new, downtowns, campuses, office parks, shopping centers, schools, hospitals and everywhere people walk.

Recommendation Categories

The recommendations are organized into the following categories:

- *Administration*
- *Security and Safety*
- *Quality of Life*
- *Priority of Implementation*
- *Community Participation*
- *Pedestrian Education*

Administration

Identify a staff person who is responsible for reviewing all planning and construction projects to confirm that pedestrians are included.

In an era when trip reduction and alternative modes of transportation are advocated to reduce air pollution, the pedestrian needs the same type of support as the Bicycle Coordinator gives to the recreational and commuter bicyclist, in terms of route finding, access, safety programs, funding, and general advocacy.

Although local jurisdictions have staff with specific responsibilities for bicycles and vehicles, few have designated staff responsible for the interests of the pedestrian. The designation of a Pedestrian Coordinator, at the local government level, would address pedestrian needs and fill this gap.

The Coordinator's responsibilities should include: gathering data on pedestrian needs within the community; providing planners with data on the number and type of pedestrians in a particular area; reviewing plans to ensure the pedestrian is adequately considered in them; identifying areas which should better serve the pedestrian; and generally advocating for pedestrian safety, security, access, comfort, and destinations.

Require development proposals to include pedestrian circulation plans.

For many jurisdictions, a circulation plan is a typical requirement of development review. Pedestrian circulation should be included as a part of the development plan whether the new development proposal is for a site, subdivision or a master planned community. Depending on the size of the proposed development, the pedestrian plan should address direct and walkable access to pedestrian destinations, pass-throughs to reduce the distance between destinations, and an overall plan that considers walking distances. The pedestrian circulation plan should identify pedestrian accommodations throughout the site and pay particular attention to intersections, and access to transit and community destinations such as schools, parks, shopping, and adjacent developments.

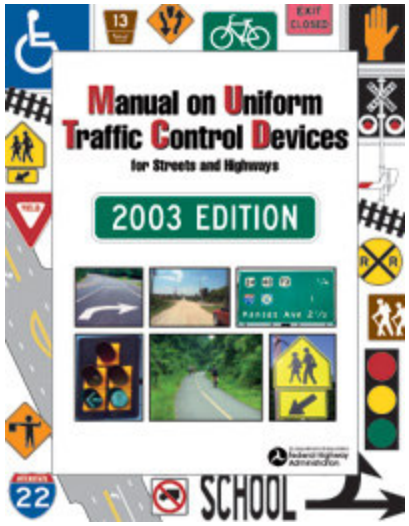
Use the American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Planning, Design, and Operation of Pedestrian Facilities* in combination with the *Manual on Uniform Traffic Control Devices* (MUTCD) Pedestrian Warrant system to help determine the need for traffic signals.

The AASHTO *Guide for the Planning, Design and Operation of Pedestrian Facilities* was recently re-written and focuses on identifying effective measures for accommodating pedestrians on public rights-of-way. The MUTCD manual is commonly used to set speed limits and identify appropriate traffic control devices. Both publications include guidance on pedestrian warrants. A pedestrian warrant system is a process for determining when and where traffic devices such as traffic signals, stop signs, pedestrian bridges, and yields, are "warranted".

These manuals describe how to set the timing of traffic lights based on the travel speed of the average pedestrian. According to a study conducted by FHWA using the 4 feet per second average pedestrian walking speed, 78 percent of pedestrians would have to increase their normal speed to cross the street before the signal changes. **Because these guidelines advocate universal design, the low end of the average pedestrian walking speed, 2.8 feet per second, should be the measure for setting signal timing.**

In places that have sufficient latent demand to be considered a destination, or in school zones, consideration may also be given to walking speeds of even slower than 2.8 feet per second. For example, studies have shown that while 4 feet (1.2m) per second is the median speed of pedestrians, at crosswalks where people are crossing in a group, this speed slows.

In interviews conducted during the course of the 1995 study, many pedestrians complained that they could not get across the street before the "Don't Walk" signal flashed. While it is the intent of the flashing signal to merely warn pedestrians that they should not start across the street, the pedestrians interviewed exhibited a clear misunderstanding of this intent. Better education



The Manual on Uniform Traffic Control Devices (MUTCD)

or modification of the system needs to be done to more closely align the intent of the signal, with the understanding of the pedestrian.

Identify and update the inconsistencies within municipal and county ordinances and policies, which are barriers to developing pedestrian areas.

Zoning ordinances focus on ensuring that a site is developed with adequate parking, landscaping, lighting, and other amenities. However, because zoning focuses on sites, and not how to connect, connections between sites are often overlooked in the review process. Additionally, many ordinances require buffers and separations between uses (especially commercial and residential uses), perimeter fencing, setbacks, and rear yard deliveries that become barriers to pedestrian activity. These barriers to pedestrian activity should be identified and rectified by planning staff or the pedestrian coordinator within each jurisdiction.

Replace any pedestrian facility with like or better facility with all roadway projects. If no pedestrian facility exists, provide facilities in accordance with these guidelines.

Pedestrian routes frequently follow roadways. Historically, roadway design is oriented towards moving automobiles, and merely accommodates other forms of transportation, such as bicycling and walking. As a result, some roadway design minimum standards do not meet the standards of this document for safety and comfort. These guidelines recommend that the pedestrian environment be considered just as critical an element as the vehicular environment in designing transportation infrastructure. Depending on the intensity of the pedestrian use within any given area, the pedestrian should be given a range of considerations. In all cases, minimum safety and security issues should be addressed, including signs. In pedestrian areas where comfort and destination are considerations, the pedestrian should be given preference over, or at least parity with, the vehicle.

The greatest obstacle to providing adequate pedestrian space is competition for the same space by the automobile. In addressing traffic congestion, the first area to be impacted is usually the pedestrian space - narrowing the sidewalk and landscaping or removing a median and pedestrian refuge to accommodate an extra lane or a new interchange. This is frequently done without adequate consideration of the importance of the pedestrian to the land uses in the area, or to their actual or potential numbers, which could dictate the type and extent of pedestrian facilities such as the width of the sidewalk or amount of area available for planting shade trees.

Incorporate design details from this document into the MAG *Uniform Standard Details for Public Works Construction*.

Many jurisdictions throughout the MAG region rely on the MAG *2004 ENGLISH Uniform Standard Details for Public Works Construction* (Standard Details) book for roadway facility design. While the Standard Details book is regularly reviewed and updated, it is deficient in providing details that enhance the quality of the pedestrian environment. The MAG Pedestrian Working Group should work with the MAG Standard Specifications and Details Committee to update the Standard Details to include these specific design guidelines in the MAG *2004 ENGLISH Uniform Standard Details for Public Works Construction* by the end of 2005.

Sponsor periodic training courses and other activities, such as participation in national walking conferences and events, to enhance professional staff and community knowledge of good pedestrian facility design.

Periodic training will help to keep professionals and others up-to-date on the latest techniques

to improve the design and safety of pedestrian facilities. The FHWA offers, through the Pedestrian and Bicycle Information Center (PBIC)[14], a variety of courses on pedestrian safety and design. Each year, the PBIC sponsors PROBIKE/PROWALK to bring walking and bicycling professionals together to discuss the latest findings and technologies.

Develop pedestrian overlay districts for downtown areas and other pedestrian destinations.

Recognizing the importance of pedestrians to its environment, the cities of Charlotte, North Carolina[15] and Seattle, Washington[16], among others, have provisions for a pedestrian overlay zone in their ordinances. These zones are applied around transit stops, in downtowns, and other areas where pedestrian activity is desired and expected. The ordinances address setbacks, landscaping, walls, parking standards, lighting, and other elements that directly impact the safety and comfort of pedestrians.

SECURITY AND SAFETY

This category represents steps that should be taken to foster either an intrinsic sense of personal security, or to enhance actions that may increase pedestrian security. These steps, when undertaken by a private management company, chamber of commerce, downtown association, blockwatch or homeowners association, can also promote a more secure environment in private residential areas and business districts.

Establish security patrols, either municipal or private.

The concept of neighborhood policing relies on getting police out of their cars and into the neighborhood. By working with local police, regular patrols by police or sheriff can be established. While not all of these patrols need to be on foot (many police departments use bicycle patrols or mounted police), citizens can work with local law enforcement to ensure that patrols are most visible during times when pedestrian are most vulnerable (for example, at night). For pedestrian areas that are active 24 hours and/or seven days a week, a small police storefront or mobile station in the pedestrian area provides a strong security presence. These can be funded through self-taxation districts, grants, or reallocation of general funds.

Block watch is an established format for increasing community safety. Information on organizing a block watch program is available from police departments and at a variety of Internet sites such as http://www.chandlerpd.com/cpd_site/fight_crime/block_watch.htm.

Another way to make areas safer for pedestrians is to work with local merchant organizations or campus police to establish security measures that account for pedestrian use at night such as escorts to parking lots and emergency phones.

Enforce traffic laws.

Speeding and red light running are epidemic in this region. Many communities have implemented 'slow down' campaigns and installed cameras at stop light to prevent red light running. Another way to reduce speeding is through stepped up enforcement.

Education can also help to reduce speeding. Placing electronic speed monitors near crosswalks helps remind a driver that their speed may be higher

[14] *(http://www.pedbikeinfo.org/training.htm)*

[15] *(http://library8.municode.com/gateway.dll/NC/north%20carolina/9880?f=templates&fn=dfault.htm&npusername=19770&nppassword=MCC&npac_credentialspresent=true&vid=default)*

[16] *(http://www.ci.seattle.wa/transportation/SAP/UDistrict_LU_pack.pdf)*

than the legal limit. Public education campaigns also help alert drivers to the dangers of speeding.

Establish a "Safe Routes to School" program in the community.

The June 2003 *Traffic Safety for School Areas* outlined by ADOT provides methods for selecting and identifying school sites, for providing safety for off-site facilities (such as logical routes from residences and street crossings), and for establishing a School Safety Program. However, they should not replace field observation of actual pedestrian routes, and the provision of additional safe and secure support systems, including traffic control devices.

Bear in mind that school crossings are governed by A.R.S. 28-797. Refer to the "How-To" pages in this document to see how-to organize a Safe Route to School program in a community.

In addition to the guidance offered by ADOT, www.walktoschool-usa.org offers classes, technical assistance and free downloads that can help parent organizations, schools and neighborhoods organize a safe route to school program.[17]

Establish a Crime Prevention Through Environmental Design (CPTED) program and plan review process.

The CPTED program is a review process that evaluates whether proposed improvements within any given project will create security concerns for project users. The CPTED review looks mainly at visibility issues, and "provides minimum standards to safeguard property and public welfare by regulating and controlling the design, construction quality of material, ...location and maintenance of all buildings and structures." CPTED included four strategies: natural surveillance, territorial reinforcement, natural access control, and target hardening. Each of these strategies is relevant to creating a safe pedestrian environment.

Natural surveillance is promoted by features that maximize visibility of people, parking areas and building entrances; pedestrian friendly sidewalks and streets; front porches; and adequate nighttime lighting.

Territorial reinforcement is related to the principle of scale and discussed in the previous section. It is promoted by features that distinguish private from public spaces which include and are not limited to landscape plantings, pavement designs, and gateway treatments.

Natural access control is gained by designing streets, sidewalks, building entrances, and neighborhood gateways to clearly indicate public routes and discourage access to private areas.

Target hardening is focused on features that prohibit entry or access relevant to pedestrian facilities such as restrooms, where creating a secure environment is important to personal safety.[18]

CPTED considerations are important to designing pedestrian areas, and for areas considered for potential pedestrian use because pedestrians must not only be safe, they must feel safe or they will not walk.

Establish a regular maintenance schedule for facilities adjacent to pedestrian areas.

Regular maintenance of an area can increase the sense of security of the pedestrian. Buildings must be kept in good repair. Facade improvement should include enhancements to the pedestrian experience. Vacant lots should be weed-free, clean, and preferably put to a temporary, pedestrian oriented use. Infrastructure such as lighting, plantings, roads, and sidewalks should be in good repair and monitored regularly. Phone numbers,

[17] *(http://www.walktoschool-usa.org/srtsconcept/index.cfm.)*

[18] *(Dorinda Howe, cpted-watch.com)*

websites, and other contact information should be made available to the public so users can contribute to better maintenance by reporting problems. Graffiti should be eradicated on a consistent basis. The level of maintenance in a community reflects the level of investment being made and perceived commitment to a community.

QUALITY OF LIFE

Assist in achieving air quality standards by providing better and more functional pedestrian facilities, walkable routes to work and school, and access to transit.

Pedestrian improvements are an important air quality measure as they can reduce single occupancy vehicle trips and vehicle cold starts, two known significant causes of air pollution. The FHWA considers that "walking and bicycling (are)… part of a tripod that supports alternatives to single occupancy vehicle commuting. The other legs of the tripod are good transit, high density, and mixed use development. These three components together make it easy to get people out of their cars. Logically, it makes sense to start where one or more of these components already exist."

Over time, these components will lead to neighborhood scale services and activities that support workplace and neighborhood walking for utilitarian purposes, reducing the need for dependence on the vehicle to accomplish these errands.

Create, at a minimum, comfortable pedestrian facilities and environments that connect the pedestrian system to other transportation modes, in particular, light rail and bus.

In this region, light rail will be available by 2008. A key component of a successful light rail system is its connections with other transportation modes, in particular walking. Providing comfortable pedestrian improvements at and around light rail and bus stops, and comfortable pedestrian facilities that connect light rail and bus stops will make these types of trips more enjoyable and encourage the use of these facilities. Some of the specific types of facilities that could contribute to making pedestrian areas around light rail, bus stops, and the pedestrian connections between them comfortable include signing, shade, seating areas, lighting, and sight lines that enable the pedestrian to see the bus from the transit stop and vice-versa.

Pedestrian connections to bus and light rail are important, as are pedestrian connections between these local systems and other larger transportation systems such as interstate bus routes and other modes of transportation including train and air.

Take advantage of the inherent link between walking and economic development by creating destinations throughout the Valley that encourage pedestrian activity.

A shopping mall includes the elements of a destination pedestrian facility so it encourages walking and increases the exposure, and hence, sales opportunities to its tenants. Decorative flooring, amenities, visual corridors, and other amenities pull the shopper through the mall. The same principles can apply to outdoor pedestrian areas located throughout our region. Creating retail areas that offer similar amenities, could encourage walking and promote economic development by increasing visibility and access to them. If pedestrian facilities appeal to nearby residents, they will likely appeal to others that come from further away or from outside our region or state.

Identify and preserve or enhance the communities character to create comfortable and destination pedestrian areas.

Identify what residents, tenants, or tourists find appealing about the area. Maintain these qualities and strengthen the visual character of the area and its surroundings through preservation, new construction or renovations. Elements such as street trees, architecture, construction materials, street signs or setbacks all contribute to a sense of character and scale and, therefore, a more inviting pedestrian environment.

PRIORITY OF IMPLEMENTATION

Communities face tough decisions about the best use of limited capital improvement funds. This section includes policies to guide investment priorities.

Use these policies and guidelines to prioritize capital improvement program investment.

A basic premise of these guidelines is that all pedestrian facilities should be designed to be safe; and that these facilities should be located where ever people walk. This concept should be used to guide priorities in the capital budget process. Determining if a facility is safe and available where people walk can be accomplished through the application of the roadside conditions and latent demand analysis included in the Design Guidance section of this document.

Create public-private partnerships to plan and fund linking pedestrian/bicycle networks to a regional off-street systems.

Projects that have strong public/private support should be viewed as high priority for funding. Over the past decade, the Maricopa Trail, West Valley Rivers Recreation Corridor, Central Arizona Project Canal, Indian Bend Wash, SRP operated canals, Rio Salado, and power and gas line corridors have been identified by Maricopa County and the cities and towns within the County as well as civic organizations, such as Valley Forward Partnership, as regional assets. These entities have taken steps forward to create partnerships and coordinate and connect these and other open spaces, canals, washes, rivers, and other corridors for key regional shared use trails. A final step in the effort to make the region more pedestrian friendly is to recognize the non-recreational pedestrian destinations to these regional routes and connect them, through on-street and other systems, to regional commercial, residential and entertainment destinations.

COMMUNITY PARTICIPATION

This section describes events that can be sponsored by a municipality, civic or neighborhood organizations or private entity such as a hospital or health clubs to foster a greater sense of community and encourage people to get out, walk, and discover their neighborhood on a level other than the automobile.

Encourage or sponsor community and other walking events.

Encourage frequent community events co-sponsored by merchants, with pedestrian activities such as street entertainers, vendor carts and sidewalk sales. Types of events can include walking tours of the neighborhood, block parties, cuisine festivals, cultural awareness, or charity tournaments/races.

Although the Victoria, Canada International Walking Festival name is relatively new, the event itself has been in existence for seven years under its former umbrella name, Victoria International Blossom Walks. The Victoria International Walking Festival is one of 22 world-class walking festivals sanctioned by the International Walking Association (IWA), formerly known as the International Marching

League (IML). Vancover, Washington sponsors an annual Discovery Walk, now in its seventh year. These types of events, in addition to raising awareness of walking, contribute to increasing the visibility of the region and attracting tourist dollars.

Compete for and achieve peer recognition of the region's efforts to enhance the pedestrian environment.

The City of Tallahassee, Florida is in its second year of offering awards to recognize local businesses, developers, educational institutions, government agencies, and individuals for creating pedestrian- and bicycle-friendly places in Tallahassee and Leon County. Awards are offered in seven categories. Awards for pedestrian projects and facilities are also offered by the Institute of Transportation Engineers, America Walks, and some state departments of transportation.

Encourage cultural institutions such as museums, restaurants and nightclubs to locate within walking distance of one another.

Museums, art galleries, symphony halls, and theatres create a wonderful level of activity before and after performances and during intermission. Integrating these uses with destination pedestrian facilities and supporting uses such as a restaurant, boutique or coffee house can contribute to the creation of an active and vibrant pedestrian environment.

Enhance the cultural 'feel' of the area and increase the interest of the walking environment by using interpretive signs and brochures to educate visitors and tourists about buildings, history, views, and landmarks that are valuable to the area.

PEDESTRIAN EDUCATION

This category addresses ways to improve pedestrian safety, comfort, and destinations through additional knowledge.

Conduct a public education campaign.

Create a speakers bureau to educate people about the benefits of walking and safe walking habits. Use the How-To pages in these guidelines to learn how to set up a speakers bureau.

Through the "safe route to school program" create walking buses and other activities that can be used to educate school children about the preferred route and general safety. Use the How-To pages in these guidelines to learn more about organizing a "Safe Route To School" program.

Participate in regional safety forums similar to the one sponsored by the Pima Association of Governments in Arizona.

Create walking clubs that identify barriers to walking in a neighborhood and explore ways to dissolve those barriers. The barriers may include unreadable bus schedules, proper use of crosswalks, lack of maps or readable signs, and major sidewalk gaps. The International Volksport Walking Organization has clubs in Mesa and Surprise. These clubs organize events that encourage walking[19].

Enhance elected official knowledge of pedestrian issues and the need for pedestrian facilities.

Elected officials are one of the pedestrian's best allies, and community change often starts with one elected official. With their support and understanding, funding for designing and installing safe, comfortable, and destination pedestrian

[19] *(http://walking.about.com/gi/dynamic/offsite.htm?site=http://www.ava.org/)*

facilities is often quicker and easier to obtain. Educate your elected officials about the importance of facilities for pedestrians by asking them to speak at pedestrian events, featuring them in newsletters about pedestrian concerns, and meeting with the m individually.

Resources

MAG Transportation Safety Action Plan

http://www.mag.maricopa.gov/detail.cms?item=2226

Safety Conscious Planning Workshop

http://www.mag.maricopa.gov/detail.cms?item=2845

Train the Trainer Workshop for School Crossing Guards, MAG Safety Forum Reports (2000, 2002, 2003, 2004)