Planning Background

Planning for pedestrian needs is very different than planning for bicycle needs, yet the WAMPO Regional Pathways Plan was intended as a planning effort for both modes.

This plan addresses multi-use pathways in detail, as this facility type benefits both cyclists and a variety of pedestrians - walkers, runners, joggers, in-line skaters, people in wheelchairs, people taking the dog for a walk, people taking the baby for a stroll, etc.

However, only a select type of walking occurs on recreational paths, with the majority of daily activity occurring on sidewalks throughout communities in the region. Thus the following supplemental pedestrian planning guidance is provided for the local jurisdictions. It is important to note that pedestrian planning, in general, takes the form of policy guidance. No pedestrian plan map therefore accompanies the suggested implementation strategies.

Types of Walking

The WAMPO Regional Pathways Plan recognizes that people walk for a variety of reasons, including:

- **Utilitarian Walking** - People walk for specific purposes to get to destinations such as work, school or shopping. Almost all auto and transit trips involve utilitarian walking to reach the final trip destination.

- **Rambling** - People ramble as a recreational activity. They walk the dog or push a baby carriage. They jog or speed walk for exercise. They go for a walk just for the sake of going for a walk.

- **Strolling/Lingering** - In certain settings, people stroll and linger. They stand on the sidewalk and talk with others they meet. They sit on a bench and eat ice cream while watching people.

- **Promenade** - People walk to be seen and interact with other members of the community. A good example of this type of walking is high school students who promenade in groups in commercial areas.

- **Special Events** - These include farmer's markets, public concerts, parades, arts festivals and other community events.

Types of Pedestrian Environments

There are different types of pedestrian environments just as there are different reasons people walk. Therefore, walking environments should be thought of as arrayed along a continuum of pedestrian friendliness with four classifications:

Pedestrian Intolerant Environments

These are areas where walking is unsafe and unattractive. Examples include freeway corridors, certain industrial or extraction land uses, landfills, and major streets and roadways lacking continuous sidewalks.

A major characteristic of Pedestrian Intolerant environments is that they lack pedestrians, either due to a lack of pedestrian accommodations and/or dominance by auto traffic and auto-oriented land uses.

Pedestrian Tolerant Environments

These environments provide pedestrian facilities, but at a minimal level of accommodation. These are areas and corridors where walking is technically safe (there are continuous sidewalks and reasonably safe street crossings), but land use patterns generate little walking activity.

Arterial street corridors, remote or rural streets, and certain light industrial or warehousing areas will only attract limited amounts of utilitarian walking, and will not appeal to recreational walkers or strollers.

Pedestrian Supportive Environments

These are well-designed residential and commercial neighborhoods, employment centers, parks and recreational areas. Sidewalks are continuous and buffered from streets, and wide enough for passing and walking side by side. Land uses are dense enough to either attract utilitarian walking trips of reasonably short lengths (half mile or less), or attract recreational walkers and joggers. Buildings, not parking lots, face streets and good street crossings are provided.

A good test to determine a Pedestrian Supportive environment is whether or not a parent is comfortable letting his or her 8-year old child walk ahead of them with minimal supervision.

Pedestrian Places

These limited extent districts have mixed-use land developments, moderate to high densities, good transit service, and extensive pedestrian amenities. Here people will stroll and linger past store fronts and urban landscape features, walking for both utilitarian and recreational purposes.

Pedestrian Places have people of all ages moving about between multiple activities. At least three unique, highly identifiable areas such as outdoor seating, a water feature, public art, or pedestrian-oriented shopping will be located in close proximity to each other.

Street System Components That Impact Walking

Three distinct components of the street system, as depicted at right and summarized below, are crucial elements in the design of pedestrian environments in all place types.

1 The Roadway Corridor

Creating good pedestrian environments requires careful attention to the design of streets, the allocation of space within street rights-of-way, the spacing, length and treatment of street crossings, and allocation of time at signalized intersections. In general, higher adjacent traffic volumes moving at faster speeds on wider roadways create less pedestrian-friendly conditions.

2 The Pedestrian Realm

Also called the roadside zone, this area includes the sidewalk as well as the buffer zones on either side that separate the walkway from motor vehicle traffic and link the walkway to adjacent properties. In general, greater separation from the street is provided where higher vehicular travel speeds are present, and additional walkway width is provided where more pedestrians use the system.

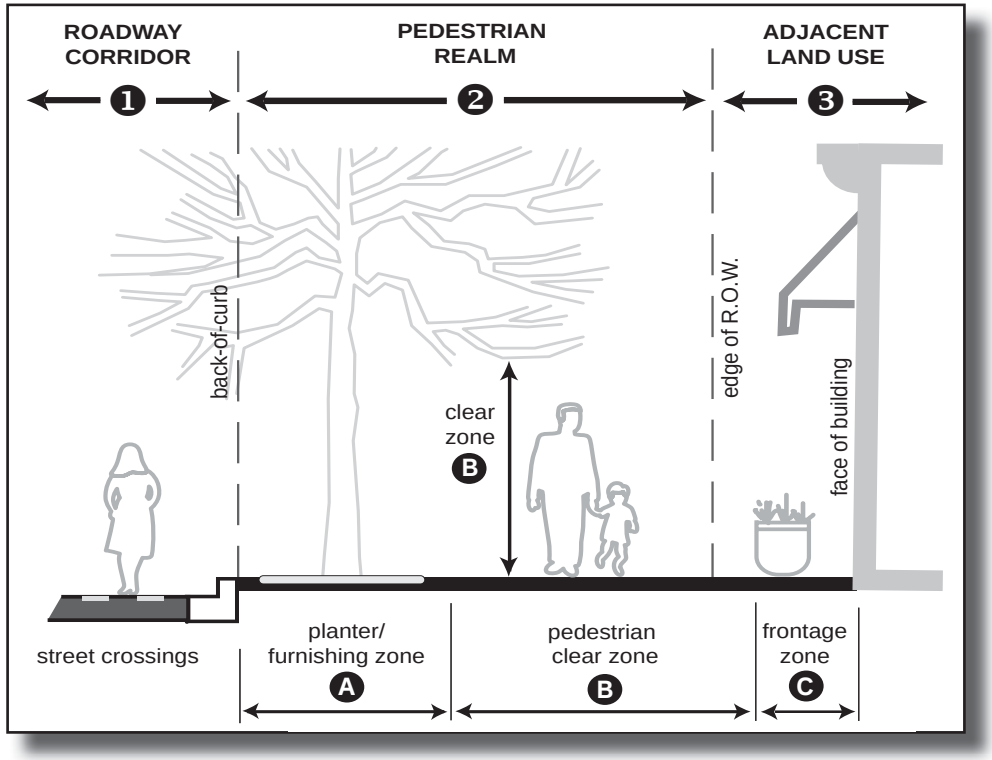
3 Adjacent Land Use

Sidewalks alone do not make a place into a pedestrian destination. To generate pedestrian presence, land uses must be highly mixed and reasonably dense. Some combination of residential, lodging, retail, restaurant, civic and employment uses must be present within a contiguous area. Buildings with numerous doors and windows frame the street, the street grid is fine-grained, and parking is located on-street or internal to the block.

Recommendations from the
WAMPO 2030 Long-Range Transportation Plan
August 25, 2005

SIDEWALKS ON BOTH SIDES OF STREETS

"Many comments were received from the public and transportation stakeholders regarding the need to provide sidewalks on both sides of all streets. Providing sidewalks that complement the public transportation system were believed to be a high priority."



Supplemental Pedestrian Guidelines for the WAMPO Region

There are numerous ways that communities within the region can create a more pedestrian-friendly environment. Large-scale policy changes should be made to better address pedestrian needs, as well as small-scale spot improvements completed in numerous locations. Key implementation strategies include the following:

STRATEGY #1: Create no new Pedestrian Intolerant Environments

1-A. All streets should have sidewalks to accommodate basic utilitarian walking needs. Local jurisdictions should require new developments to provide sidewalks and the Cities should work to complete missing sidewalk links in previously developed areas.

- **Urban collectors and arterial streets** are the primary location for businesses and other attractions, and should thus have sidewalks located on both sides of the street. Sidewalks should be at least 5 feet wide. Since most major streets in the WAMPO region do not have on-street parking, a buffer strip at least 6 feet wide should be required between the street and sidewalk.
- **Local streets** can receive moderate levels of pedestrian activity and should be encouraged to provide sidewalks on both sides of the street. Sidewalks should be at least 4 feet wide with a buffer strip separating the street from the walkway. Curb-attached sidewalks should be discouraged, but should be at least 6 feet wide if permitted.
- **Rural roadways** typically experience low levels of pedestrian activity and need no accommodation. Exceptions include corridors leading to ex-urban school locations where sidewalks, paved roadway shoulders, or multi-paths should be provided.

1-B. All intersections should have delineated crosswalks to meet minimum Pedestrian Tolerant design guidelines.

1-C. Legal pedestrian crossings should be provided at distances no greater than 1,320 feet (1/4 mile) apart.

1-D. All projects should meet minimum requirements of the Americans with Disabilities Act (ADA).

STRATEGY #2: Strategically work to improve existing Pedestrian Tolerant Environments to Pedestrian Supportive standards.

2-A. Future intersection improvements should not be made to accommodate vehicular throughput at the expense of pedestrian safety or convenience. All new intersection retrofit projects should include crossing treatments that follow Pedestrian Supportive guidelines, as outlined in the chart on page 64.

2-B. Throughout the region, the following geographical areas should be designed to be Pedestrian Supportive:

- All primary pathway corridors where bicycles will be accommodated on-street, as identified in the WAMPO Regional Pathway System Plan.
- Designated school walking routes.
- Bus routes.
- Throughout future mixed-use and transit oriented developments.
- Within arterial street corridors near destinations such as parks, trail crossings/pathway system access points and commercial activity centers.

2-C. In Pedestrian Supportive environments, the roadway corridor should serve multiple modes of transportation, including walking and transit. Maximum distance between pedestrian crossing opportunities should be 528 feet (1/10 of a mile). Street crossing distances should be shortened through use of smaller curb radii, curb extensions, medians, refuge islands and/or right-turn slip lanes.

2-D. In Pedestrian Supportive environments, the pedestrian realm should include 6' to 8' wide sidewalks, with walkways separated from the street by buffers, street tree planters, or furnishing zones at least 5' in width.

2-E. Additional measures such as pedestrian-friendly site development, school site planning and design, neighborhood traffic calming, and traffic management programs should be considered within identified Pedestrian Supportive areas. Land use guidelines should include mixed uses, reduced building setbacks, smaller parking areas and improved pedestrian access.

Guidelines for Improving Pedestrian Tolerant Environments to Pedestrian Supportive Standards

Crossing Treatment Guidelines

	Pedestrian Tolerant Design	Pedestrian Supportive Design
Marked Crossings	Crossings are typically marked, but legal crossing also exist at unmarked intersections.	Marked crosswalks should be required, particularly in the following locations: ➢ at all open legs of signalized intersections with adjoining sidewalks ➢ at all arterial intersections in Downtown and mixed-use centers, or when connecting to significant retail activity ➢ at multi-use trail crossings ➢ along school walking routes ➢ at or near important transit connections ➢ near housing for the elderly
Spacing	Crossings shall be spaced a max. of 1320' apart. (1/4 mile)	Crossings shall be spaced a max. of 528' apart (1/10 mile) and a min. of 330' (traditional city block length)
Crosswalk Pattern	Standard crosswalks (two parallel, horizontal lines)	Highly-visible Ladder Bar or Piano Bar crosswalks (with perpendicular bars spaced so that wheels of motor vehicles pass on either side of the markings to minimize maintenance). Or use colored and textured surfaces to improve aesthetics in mixed-use areas, potentially in conjunction with raised speed table crossing treatments.
Signalization Timing	Use average walking speed of 3.5 - 4.0 feet/second	Use a slower walking speed of 2.5 - 3.0 feet/second to accommodate older pedestrians and people with disabilities
Curb Radius	25' curb radius standard 30' curb radius on major streets with truck/bus traffic	5'-15' max. curb radius Smaller curb radii (up to 5' min.) may be used if on-street parking or bike lanes
Curb Ramps	Diagonal curb ramps may be permitted in the following locations if curb radii are >20' and a landing at the bottom of the ramp is positioned within the crosswalk area for both directions of travel: ➢ Where utilities prevent the installation of paired curb ramps ➢ At intersections that are not signalized ➢ In some residential areas where traffic volumes are very low	Paired curb ramps recommended Diagonal ramps to be avoided whenever curb radii are <20' since moving traffic can encroach upon the landing area
Medians and Refuge Islands	Recommended for use: ➢ In intersections when the length of the pedestrian crossing exceeds 60 feet ➢ At intersections with complex vehicle movements or long signal phases ➢ In conjunction with uncontrolled midblock crossings	➢ Provide a median island when the length of the pedestrian crossing exceeds 48 feet ➢ Consider narrowing traffic lanes (potentially down to 10 feet) to have the added effect of slowing motor vehicle speeds at the crossing location, and shortening pedestrian crossing distances
Slip Lanes	Provide a triangular "pork chop" refuge island within the intersection when: ➢ Curb radii >30' are unavoidable ➢ Slip lanes can be designed based upon a compound curve design to discourage high-speed turns, while accommodating large trucks and buses	No slip lanes allowed or needed
Curb Extensions	Typically not provided	Consider installing on streets with: ➢ On-street parking, especially diagonal parking ➢ Limited left-turning traffic by buses and large vehicles ➢ One-way traffic ➢ On minor streets in residential areas
Mid-Block Crossings	Use in high-activity areas only Locations being considered need to be studied carefully	Consider installing unless crossing is: ➢ < 300 feet from another crossing point ➢ On streets with speeds > 45 mph

2-F. Safe Routes to Schools should be created that meet Pedestrian Supportive standards and should include the following:

- **Roadway Corridors** with speed limits 25mph or less should be in force when students are arriving at and leaving school. Design features should be used to manage speeds and provide positive control at crossing locations.
- **School walking routes** should be planned to take advantage of existing traffic controls.
- **Crosswalks** should be marked at signalized and stop-controlled intersections. At non-intersection locations, crosswalk markings legally establish the crosswalk. Transverse crosswalk lines may be used where a Pedestrian Tolerant condition is acceptable. Otherwise, crosswalks should be marked with ladder or piano bar style markings.
- **Traffic controls** for school areas should be in conformance with Part 7 of the MUTCD.
- **Traffic calming devices** such as raised crossings, refuge islands, bulb-outs, neighborhood traffic circles, landscaping, etc. should be installed in the vicinity to slow vehicles.
- **Multi-use pathways** that provide for bicycling and walking to school should receive priority for funding, whether part of the regional system or a local community pathways plan.
- **Land Use** design elements at school sites should give paramount emphasis to the safety of pedestrians near motor vehicle traffic. School bus loading and unloading should take place on school property, off the surrounding street system. Bus drop-off zones should be separated from auto drop-off zones to minimize confusion and conflicts. Parking should be minimized. Buildings should be accessible to pedestrians from all sides..

STRATEGY #3: Make walking the priority travel mode in select Pedestrian Places within the region.

3-A. Throughout the region, the following select geographical areas should be designed as Pedestrian Places:

- Delano, Old Town, and the WaterWalk/Arena neighborhoods within the City of Wichita.
- Downtown main streets of smaller communities.
- The central core of future mixed-use developments.

3-B. Incentives should be provided to guide development patterns to create distinct Pedestrian Places that attract significant numbers of people and provide opportunities for socialization, strolling and lingering.

3-C. Within Downtown Wichita, the future mobility study should consider pedestrian needs in the retrofit of one-way streets to two-way traffic movements. The study should not only look at vehicular traffic flows, but also pedestrian crossing treatments, opportunities for on-street parking, sidewalk improvements, enhanced pedestrian connections to public parking and public transit service, and the pedestrian-friendliness of existing land use and proposed developments.

3-D. Pedestrian Places should not be bisected with high-speed, multiple-lane arterial streets. Street right-of-way allocations should be balanced and roadway design should give priority to pedestrians.

- **Roadway Corridors** through Pedestrian Places should be designed to carry moderate traffic volumes (<15,000 ADT) at slower travel speeds (25-30 mph). On-street parking and/or bicycle lanes should be provided.
- **Crosswalks** should be of a high-visibility design, with texture, pattern, color and/or traffic calming measures such as raised speed tables or curb extensions. Crossing distances should be kept short by limiting pavement width (4 lanes max.) and using small curb radii (25' max.). Paired curb ramps should be provided perpendicular to the curb face, aligning directly with the crosswalk.
- **Block sizes** should be small, with frequent pedestrian crossings (every 330' feet or less) using pedestrian activated traffic signals.
- **Parallel on-street parking** should be encouraged as a means of traffic calming and a generator of additional pedestrian traffic. Where diagonal parking is provided, consideration should be given to back-in angle parking to improve safety by having doors and trunks open to sidewalks and drivers pull out head-first into traffic.

3-E. In Pedestrian Places, the pedestrian realm should be built and maintained to the highest standards:

- **A paved planter/furnishing zone** should separate walkways from the street and accommodate utilities, parking meters, passenger unloading, streetscape amenities and street trees planted within tree wells.
- **Sidewalks** should be at least 8'wide to accommodate passing and pairs of pedestrians walking side-by-side. In Pedestrian Places, the overall sidewalk width may be 10'-30' wide to provide space for amenities plus an 8'-10' pedestrian clear zone.
- **The frontage zone** in downtowns and mixed-use areas should not include landscape buffers separating pedestrians from stores, but instead sidewalks should extend to building faces. At least 2' of paved "shy distance" should be provided away from the building walls to accommodate window shopping, sidewalk displays, outdoor dining, etc.
- **Amenities** should include pedestrian furniture groupings, sculpture, drinking fountains, decorative fountains, and wayfinding. Lighting should include overall street lighting, low-angle pedestrian street lamps, and additional light emitted from stores that line the street.

3-F. In Pedestrian Places, adjacent land uses must be designed around the pedestrian. First-floor retail, a vibrant mix of uses, and at least three distinct, complimentary activities that appeal to a variety of age groups and located within walking distance of each other are critical to create mixed-use settings that serve as Pedestrian Place destinations.

- **Buildings** should face the street, be placed at minimum setbacks or build-to lines, range from 3-5 stories high, and create a height to width ratio of 1:4 minimum and 1:1 maximum.
- **Architectural Design** should include porous street frontages with frequent doors and windows, and use of awnings and arcades for shade and shelter. Blank stretches of wall should not exceed 15 feet.
- **Parking** in surface lots located in front of buildings will destroy Pedestrian Supportive and Pedestrian Place Environments. On-street

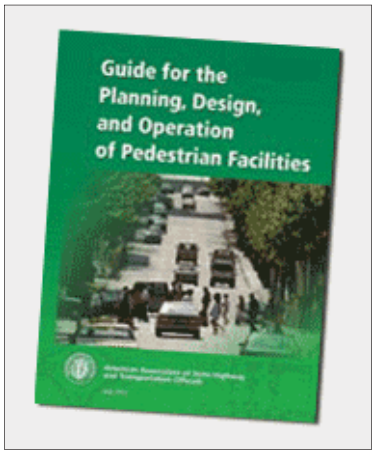
parking should be provided on all block faces, combined with parking structures or internal block parking distributed throughout the district, to maintain the quality streetscapes necessary to attract high levels of pedestrian usage.

STRATEGY #4: Pay attention to details that impact pedestrians in all public and private projects.

4-A. Individual communities should include a pedestrian accommodation checklist when reviewing development plans and proposed public infrastructure projects.

4-B. WAMPO should require enhanced pedestrian safety, accessibility and usability in all projects that seek federal and state funding.

4-C. The July 2004 AASHTO "Guide for the Planning, Design, and Operation of Pedestrian Facilities" should be used as the region's pedestrian guidelines.



AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004

Details of pedestrian accommodation that should be addressed in all public and private sector projects include:

- **Designing roadways to accommodate pedestrians** – addressing speed management, roadway widths, curbs, sight distances and sight lines, and street lighting
- **Sidewalk design** – including sidewalk and buffer widths, transit connections, driveway access management, grade and cross slope, stairs, sidewalks for highway bridges, underpasses and tunnels, surface treatments, pedestrian facility lighting, obstacles and protruding objects, ambience, shade and other enhancements, and design of off-road and shared-use paths
- **Intersection design** – including curb radii, crossing distance considerations, turning movements, crosswalks, sidewalk and curb treatments, and street and intersection lighting
- **Midblock crossings** – crossing distance considerations, traffic calming at mid-block locations and, mid-block signals
- **Grade-separated crossings** – sidewalk continuity, overpasses vs. underpasses, and lighting
- **Pedestrian signals** – including pedestrian signal phasing, signal timing, warrants, and innovative signal options
- **Pedestrian-related signing** – regulatory signs, warning signs, guide signs, and street name signs
- **Sidewalk maintenance** – including surface repairs, snow removal, vegetation, and drainage improvements
- **Construction work zones** - accommodation of pedestrian traffic during construction phases

Source: Guide for the Planning, Design, and Operation of Pedestrian Facilities American Association of State Highway and Transportation Officials, July 2004