Sidewalk Recommendations

Pedestrians expect and need more than just "walking space" to feel safe and comfortable. If Jonesboro is to support and encourage walking as an attractive and viable means of transportation, our street designs should reflect that pedestrians also value features that 1) help shorten walking distances; 2) separate (or buffer) pedestrians from moving traffic; 3) create aesthetically pleasing surroundings and amenities; 4) protect pedestrians from the elements, and 5) let them walk as safely as possible.

Sidewalk Width

Studies show that pedestrians travel in the center of sidewalks for comfort and safety. The part of the sidewalk pedestrians avoid is called the "shy distance" and takes into account speeding traffic, fences, utility poles and boxes, vegetation, bus shelters, and other obstructions. The land use context is a factor because it influences the kinds of obstructions and traffic that will be present. Thus the effective width of a sidewalk, not the design width, constitutes the sidewalk area needed to accommodate anticipated levels of pedestrian traffic.

Recommendations:

1) Six feet minimum on sidewalks; up to 10 feet depending on land use, obstructions, amenities, and pedestrian traffic volume;

2) Minimum clearance width is defined as the narrowest point on a sidewalk. An inaccessible minimum clearance width is created when obstacles such as utility poles, vegetation, bus stops, overhanging portions of a vehicle, or other obstructions protrude into the sidewalk and reduce access. Inaccessible clearances should be prohibited;

3) Curb extensions should be used to accommodate potential obstructions;

4) Amenity "zones" should be added to the sidewalk width where high pedestrian volumes are likely, particularly in combination with on-street parking or where benches or other furnishings are to be located;

5) Minimum clearance height should be 8 feet above the sidewalk surface.

Buffers

Buffering pedestrians from passing cars also increases their comfort, even if they already have their own "walking space". Pedestrians generally find sidewalks with some sort of buffer safer than sidewalks built right next to moving traffic. Several design elements can help create suitable buffers between pedestrians and traffic including: planting strips, bicycle lanes, landscaping, and on-street parking. These may be used alone or in combination.

Recommendations:

1) Sidewalks should be separated from the curb by one or more buffers;

2) A landscaped buffer should be no less than 5 feet in width for local or collector streets, 5 to 7 feet for arterial streets, and 8' or more where street trees are proposed or where vehicle speeds or the percentage of heavy vehicles are high;

3) Narrower buffering can be used in combination with other forms of buffering to achieve the total requirement and increase comfort levels;

4) The "correct" combination of these elements will depend on the space available, various stakeholders' expectations, land use context, and objectives for the street;

5) Where open ditches are along the edge of the roadway, the sidewalk should be located behind the ditch (where right-of-way permits), to provide a buffer between vehicles and pedestrians.

Security

Security is an important consideration, since pedestrians will feel more vulnerable than motorists in many circumstances. A pedestrian's sense of security is improved by:

- Increasing pedestrian visibility from adjacent land uses, and
- Designing elements that allow pedestrians to only have to consider various traffic movements one at a time.

Recommendations:

1) Limit driveway access to minimize and control the locations of turning cars;

2) Provide raised refuge islands and medians (with cuts for ADAAG compliance) to break up a crossing into more manageable parts;

3) Retrofit five lane cross sections with raised medians so that pedestrians do not cross more than two lanes at a time without refuge;

4) Design smaller curb radii and safer slip lanes;

5) Provide signal timing so that pedestrians do not feel "trapped" in an intersection;

6) Allow 3.5fps walking speed for ped. signalization, 3.0fps for older and disabled;

7) Build landscaped medians in existing and new roadways in commercial and tourist zones, school zones, residential neighborhoods, and other pedestrian areas.

R (over)

Aesthetics

Aesthetics can have a major impact on enhancing pedestrian comfort and safety. These design treatments can enhance aesthetics, but are also important functional elements. For example, trees and other forms of landscaping are not just "pretty" to look at, but also provide shade and buffering. Likewise, awnings along major pedestrian routes provide shade and shelter to make the walking environment more comfortable.

1) Street lights and pedestrian-scale lighting;

2) Benches;

3) Trash receptacles;

4) Landscaping;

5) Urban design treatments for adjacent development, and

6) Walking surface texture.

Other Points:

Fourteen states have adopted guidelines based on Complete Street principles. They include: Illinois, California, South Carolina, Oregon, Vermont, Florida, Georgia, Massachusetts, and Washington. Some created their own design manuals, some have adopted the AASHTO guide (as Arizona did with its bikeway guide).

Slip lanes are generally not helpful to pedestrians due to the emphasis on easy and fast vehicle traffic; however, they can be designed to be less problematic. Design standards should be specified to provide a pedestrian crossing island within the intersection and a right-turn lane that is designed to optimize the motorist's view of the pedestrian and of vehicles to their left.

To eliminate the hazard of crashes occurring as motorists back out of parking spaces, site plans should minimize walking in spaces intended for vehicles. Side lot, on-street and pocket parking should be included in zoning regulations to eliminate opportunities for backing over walkways. To reduce conflicts between pedestrians and vehicles in parking areas, center walkways in landscaped areas, "U" pattern drop-offs, and long throat driveways lined with sidewalks should be considered. Parking garages and lots should be given special design attention to protect pedestrians as they travel from automobiles to their destinations.

Sidewalks required in multi-family and duplex developments should be required regardless of the number of units.