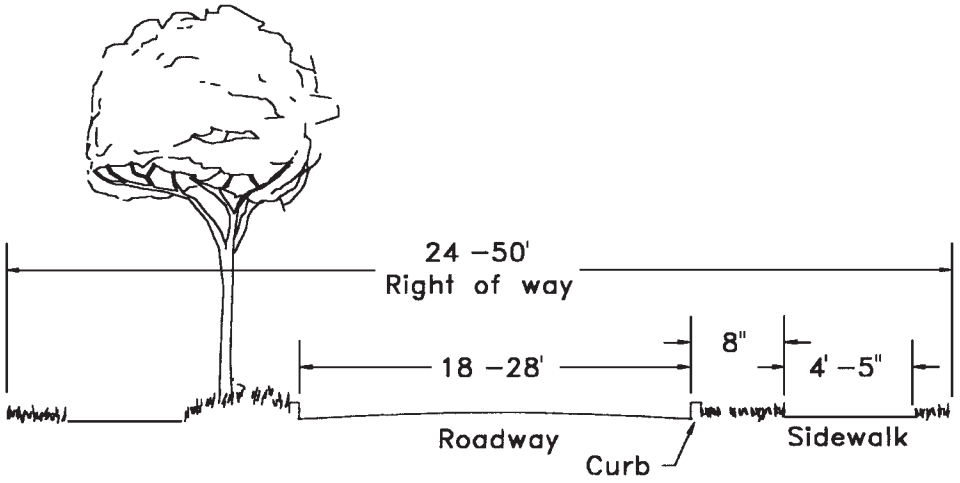

Figure 5.3 Typical street cross section.

negative correlation in residents' minds between traffic volume and values such as security, safety, neighborhood identity, comfort, privacy, and home—the greater the traffic, the less these values are perceived as being present. Simply put, on wide streets that encourage large volumes of traffic, there is less likely to be a sense of neighborhood and privacy. Interestingly, the study found that residents on all streets, regardless of actual traffic volume, are concerned with traffic and safety.

In a study published by the Institute of Traffic Engineering (1989), researchers found that the typical street design standards consist of width dimensions, grade requirements, and horizontal and vertical curves dimensions but very few, if any, performance standards. In response, the institute wrote and recommended the list of performance standards in Table 5.1. These suggestions are a good start toward developing better performance standards. However, in the study, the institute points out that street safety hazards are a result of conflicting uses of the street space. The institute suggests that the solution to these concerns is to further isolate the pedestrian from the street. Although the institute's proposal is a good strategy, it is neither the only answer nor the best answer. Observing actual neighborhood life reveals that pedestrians constantly use the streetscape for recreation and socializing. Thus imposing "design standards" that call for the segregation of pedestrians from the street will not solve the safety problems. A better solution might be to consider constructing narrower streets.

Typically the largest single-body vehicle allowed in most states is the school bus. A residential street designed for a school bus should provide for adequate turning radii and lane width. The horizontal and vertical curves should allow for adequate site distances for a school bus at an appropriate design speed. In general, it is agreed that an appropriate design speed for a residential neighborhood is about 25 mi/h. Table 5.2 compares street widths commonly used, and Table 5.3 lists street width requirements for fire vehicles.