

TABLE 5.4 Comparison of Responses from the National Association of Home Builders (NAHB) Survey

Has the implementation of reduced street widths created problems with:			
	No, %	Yes, %	No answer, %
Emergency vehicle access	82.0	8.6	8.6
Traffic congestion	81.0	14.0	5.0
Adequacy of on-street parking	63.8	29.3	6.9
Proper functioning of street	63.8	-	19.0
What specific requirements have been imposed on streets designed with reduced widths?			
	No, %	Yes, %	No answer, %
Parking on one side	79.3	19.0	1.7
No parking on street	53.4	44.8	1.7
Additional off-street parking	74.1	24.1	1.7

SOURCE: National Association of Home Builders (NAHB), "Street Standards Survey Finds Narrower Streets Perform Well," *Homebuilder*, October 1988.

Safety is the first concern of street design, and the most common and obvious means of designing safe streets has been traditionally to segregate the pedestrian and the automobile. However, experience has shown that pedestrian activities do move into the street in residential neighborhoods despite the attempt to segregate them. The street becomes a safety issue because it is used for bicycling, walking, and recreation (Fig. 5.4). Therefore, accepting that these conflicting uses will exist is a better approach to ensuring safety. Table 5.4 demonstrates that communities with more pedestrian friendly streets generally do not feel that they have sacrificed vehicular safety or access, but instead they have found ways to integrate the needs of community and vehicle (Figs. 5.5 and 5.6).

Street Layout and Engineering

Street layout and design must consider the vehicle, visual range or limitation of the operator, safety for vehicle operators and pedestrians, and the climate, as well as the geometric configuration and the character of the area in which the street will be (see Table 5.5). These factors are interrelated. Most municipalities and states have well-defined design criteria for collector roads and highways but have only general criteria for local, smaller-volume roads. In many cases the local road criteria are based on the worst-case scenario—that is, the largest anticipated vehicle. This approach has little regard for the impact of the design on the behavior of drivers or quality of neighborhood life.

As an example, one street design situation that presents quite a few of the pitfalls and possibilities just discussed is the hillside. The nature of hillside development generally constrains the standards of classic grid development.