

PEDESTRIAN NEEDS: INSIGHTS FROM A PILOT SURVEY OF BLIND AND DEAF INDIVIDUALS

Diane Chrzanowski Roberts, Federal Highway Administration

ABRIDGMENT

•THIS exploratory study focuses on discovering outdoor pedestrian needs within the total transportation system. Specific consideration is given to special pedestrians—blind and deaf individuals—with the assumption that those persons would be more sensitive to general pedestrian needs because of their particular disability-associated mobility problems. Approximately 8,500,000 Americans sustain serious visual impairments, and about 20,000,000 Americans support substantial hearing difficulties.

Based essentially on 70 interviews and self-administered questionnaires, collected in the Washington, D. C., area, this investigation is primarily a case study rather than a statistical analysis of pedestrian needs. The blind totaled 10 subjects (6 males, 4 females); and the deaf included 60 subjects (45 males, 15 females). The subjects' ages ranged from 18 to 62 years. The entire sample lived within a metropolitan area; most of the subjects resided in the suburbs, although a few lived within the central city limits. The subjects were well educated, all having college experience.

Walking was evaluated as a pleasant activity by all groups; they emphasized the desire to do more walking to additional destinations if pedestrian conditions were improved. The most important walking trip of the blind was made daily to and from work. Those who lived in the central city indicated that shopping trips rated second in importance to work trips. Suburban dwellers, on the other hand, walked for recreation more frequently than for shopping because of inadequate pedestrian facilities to shopping malls. The deaf sample walked less than the blind groups because of their driving ability and, hence, they were less dependent on central-city living to maintain their independence.

The blind group generally voiced concern for expanding the physical design features of streets and pavements. Major recommendations included construction of more and wider pavements and crosswalks; greater segregation of pedestrian facilities as overpasses and underpasses; textured pavements; angular, instead of rounded corners (better for directional orientation); and braille maps at strategic points in the pedestrian way.

The deaf sample specified the visual dimension: better, clearer signs at more appropriate site locations. They also strongly supported installation of audible crossing signals at various frequencies; better and more lighting facilities on pedestrian routes; and support structures such as handrails at vital locations, for example, in queuing for and boarding a bus or on traffic circles.

Although the sample represents a limited number of individuals, we are able, nevertheless, to note definite patterns. The blind and deaf individuals showed sensitivity to various pedestrian issues that might have been neglected or totally unrealized. This analysis indicates the need for more in-depth pedestrian examination. The pedestrian mode needs to be interrelated with the other transportation modes within the transportation planning process. In this manner, optimal solutions for pedestrian difficulties would be more readily forthcoming.

ACKNOWLEDGMENTS

The author was assisted in this study by Elizabeth Samson, Federal Highway Administration, and Jacques Girard, Ministry of Roads, Quebec.

A full report of this study was published in *Public Roads*, Vol. 37, No. 1, June 1972, pp. 29-31.