

A STUDY OF PEDESTRIAN'S WALKING RATE
AND ACCEPTABLE GAP INTERVAL WHEN CROSSING THE STREET

by 1050 710

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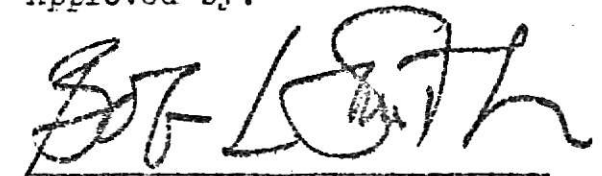
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INTRODUCTION

What is a pedestrian? A pedestrian is anyone afoot. In the context of transportation rather than recreational walking, we give most attention to the person afoot in relation to the motor vehicle. Frequently this is exemplified by the pedestrian-vehicle conflict because an average man of 160 pounds cannot compete with the typical motor vehicle weighing about two tons. There must be separation. Then, too, our greatest concern is with the pedestrian in urban areas; and hopefully, in the years to come, cities will be built with the pedestrian considered as a significant element in all planning and construction. (1)

NEED FOR THE STUDY

As part of an investigation of the behavior of pedestrians at crossings, a Swedish study (2) found that the average adult and elderly person moved at the rate of about 1.4 meters per second, or 4.5 feet per second which is about 3 miles per hour, as shown in Figure 1. However, many elderly walked more rapidly or more slowly than did typical adults. For men walking across street alone, Weiner (3) found an average rate of 4.22 feet per second; for women the rate was 3.70. When walking with others, the rate for men was reduced to 3.83 and for women to 3.63.

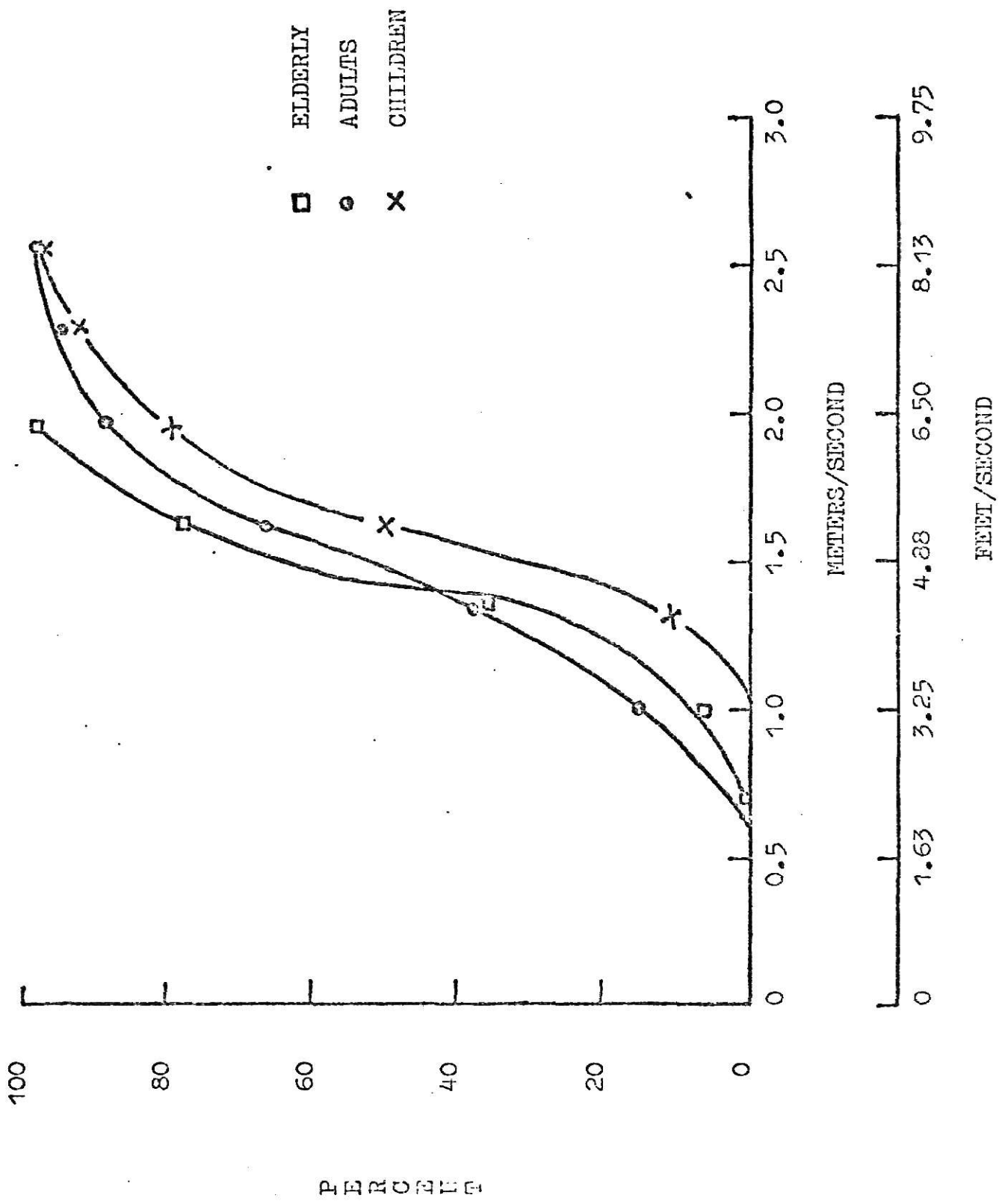


FIGURE 1. TYPICAL SPEED OF PEDESTRIAN MOVEMENT AT CROSSING (1)