

Book Selection

solution, it contains much of interest to the cost effectiveness practitioner in this country whether he is involved with road safety or not. The book is in two parts; the first, entitled "Structure and Elements of the Process", consists of a rather elementary introduction to the road safety problem in the United States and to cost effectiveness and includes a rather facile review of some of the problems involved. Some operational research workers may find the descriptions of data and the painstaking discussion of traffic safety a bit tedious. The second part, entitled "Methods and Applications", contains an interesting pilot study on the reduction of cross-median (a median is the strip of land between two sides of a dual carriageway) accidents on limited access highways; this consists of an evaluation of crash barriers installed on medians of various widths.

Unfortunately, accident costs, perhaps the most important item in a cost effectiveness study in the field of traffic safety, are considered in the shortest chapter in the book; the discussion, although brief, is excellent. I should also have liked a more extended chapter on optimization techniques. The remainder of this second part is made up of a review of available data and information gained from traffic safety studies together with recommendations for future studies.

The cost of this book is a little over 6*d.* per page—which might cause the prospective purchaser to carry out his own cost effectiveness study before proceeding to buy it.

P. D. SAALMANS

An Introduction to Dynamic Programming: The Theory of Multi-stage Decision Processes.

O. L. R. JACOBS.

Chapman & Hall, London, 1967. x+126 pp. 30s.

Introductions to dynamic programming appear not infrequently. Despite this, the WRAP ratio† for the technique is still disappointingly high. Most introductions are of the form: "DP for . . .". This one sets out to be more general, though the author at the time of writing was in the Department of Electrical Engineering at Edinburgh and the book is best on control processes.

Most of the relevant topics are mentioned; there is, however, no discussion of the fact that a dynamic program can be formulated either forwards or backwards. This may be obvious and mathematically trivial but it is useful (and can be overlooked).

Unusually, perhaps, the structure of the book is better than the treatment of individual topics, which tends to be brief. In my opinion the book is suitable as an *aide-mémoire* or as a framework on which to base a series of lectures.

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† Defined as the ratio of Writings to Applications.