Winifred D. Ashton, *Theory of Road Traffic Flow*. Methuen's Monographs on Applied Probability and Statistics (John Wiley), London, 1966. vii + 178 pp. \$5.00.

Review by Peter C. C. Wang

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This book brings together in a convenient package a considerable amount of useful information which previously could be obtained only by a diligent search in a scattered literature. It will provide the framework for future work in this area; and statisticians, applied mathematicians, and traffic engineers in particular should find this book useful as a source of reference on Traffic Science. The book is relatively free from misprints and errors and the careful reader should have no trouble locating those that exist. After an introduction (Chapter 1), the main topics in Ashton's book are the following: The fundamental diagram of traffic (Chapters 2 and 5), a discussion of the simplest differential difference equations which describe the car-following model in dense traffic (Chapter 3), the application of Lighthill-Whitham kinematic theory to traffic of low to medium concentrations (Chapter 4), traffic signals and delays at a signal-controlled intersection (Chapter 6), an outline of queueing theory and its application to traffic flow problems (Chapter 7), works of Tanner and others on the stochastic approach to problems of traffic (Chapter 8), simulation of traffic problems (Chapter 9), and accident statistics including an interesting section on the concept of accident proneness (Chapter 10).