



URBAN TRAFFIC SYSTEM

ABDUL AZEEZ KADAR HAMSA



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The urban traffic system constitutes a group of interdependent and interrelated traffic, and related components which are intended to form a unified entity to accomplish smooth, orderly and safe movement of vehicles in an urban area. Trip attractions at urban areas are normally very high due to high density commercial and business land uses. As a result, the increasing number of vehicles especially private cars traveling towards city areas has caused tremendous pressure on the limited road and related infrastructure, especially in urban areas. Increase in traffic congestion, environmental pollution, travel time, discomfort and inconveniences, and decrease in speed are the common and regular effects resulting from increased traffic volume and limited road infrastructure. Understanding the effects of increase in traffic trends on road and related infrastructure is, thus, important. This book emphasizes on the characteristics of traffic components which include traffic volume, speed, road intersection, road capacity, level of service, parking, traffic control devices, road safety, traffic management measures and traffic calming. The literature background, analysis procedures and findings based on data related to each of these traffic elements are discussed in this book. This book is expected to further strengthen the literature on each of the selected traffic components, especially in the local context. It is also expected to benefit students, especially in higher learning institutions and professionals in the field of urban traffic system, traffic planning and engineering, to understand the methodology involved in collecting and analyzing traffic data to arrive at important decisions for a smooth, orderly and safe traffic movement.



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