

FREIGHT TRANSPORT MODELLING

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INVESTOR IN PEOPLE

In Memory of Prof. Marvin L. Manheim

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INTRODUCTION

Chapter 1

Recent Developments in Freight Transport Modelling

Moshe Ben-Akiva, Hilde Meersman and Eddy Van de Voorde

There can be no doubt that the economic globalization of the last decades and the growing need for flexibility in modern enterprises have transformed freight transport and turned it into a major public policy and corporate domain. Freight transportation research has reflected this evolution and is quite justifiably attracting ever closer attention.

Transportation is not just the product of social and economic activity. Good and reliable transport remains a *sine qua non* for sustained economic growth. Since production and consumption of goods and services are usually physically separated, the distance between the two needs to be bridged by means of at least one mode of transportation.

Similarly, relocating production activities, often from high-cost to low-cost countries, can only be achieved through better, cheaper and more extensive transportation services. The other side of the picture is that an unrestrained expansion of passenger and freight transport will create substantial negative externalities such as air pollution, congestion, accidents and damage to infrastructure. Consequently, if the relevant policies remain absent, the social costs of mobility may exceed the benefits.

Quite a number of international organizations, including the World Bank, IMF, UNCTAD, OECD and many others, have acknowledged the need for effective transport policy. However, implementing and, as the case may be, adjusting such transport policy is not a straightforward proposition. Continuous monitoring and effective insights are required to afford decision-makers the ability to successfully design and pursue transport policies while responding adequately to new challenges. Despite prolific research on passenger transport in the 1970s and 1980s, the pace of economic globalization since the 1990s has caused researchers and policymakers to shift their primary focus to freight transport.

As the late Professor Marvin Manheim emphasized in quite a few of his publications and in his opening address to the 8th World Conference on Transport Research (Antwerp, 12–16 July, 1998), effective and sound resolutions for such issues require a new and broader transport analysis. This book aims to contribute to such