



Modelling goods city distribution in the Netherlands

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Abstract

The interest in data collection and modeling of urban freight transport is rising. This paper describes a recently developed method for data collection, analysis and modeling that has been applied in several Dutch cities. By treating urban freight transport in an integral way, important relations between transport demand, traffic, economic-, social- and environmental variables are uncovered. The paper is interesting for local policy-makers and researchers in the field, by improving their understanding about urban freight transport and its specific research requirements.

Keywords: Urban freight transport; Data collection; Modelling; The Netherlands.

Introduction

Urban freight transport is “the delivery of consumer goods (not only by retail, but also by other sectors such as manufacturing) in city and suburban areas, including the reverse flow of used goods in terms of clean waste” (OECD, 2003). Optimization of urban freight transport is a key issue in city logistics. City logistics has been defined as (Taniguchi et al., 2004, p. 1) “the process of totally optimizing the logistics and transport activities by private companies in urban areas while considering the traffic environment, the traffic congestion and energy consumption within the framework of a market economy”.

For delivery and pick-up in urban areas either trucks, vans or passenger cars are used. In rare cases small vessels or trains are used. In most cities, there is hardly any local manufacturing or warehousing of goods, which means that freight has to be transported over considerable distances.

Urban freight transport contributes to the economic functioning of a city. It also creates externalities, like congestion, noise and hazardous situations. These problems

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