

Executive Summary

Sustainable Mobility as a Service

Jenson Easo

In the economy and society, passenger mobility has a significant and evolving role to play. Due to the widespread adoption of new technologies, there are four main trends in passenger mobility that are not mutually exclusive: individual point-to-point trips in privately owned connected and automated vehicles; shared and individual on-demand and mass transportation modes with network optimization and integration; lifestyle based on mass transit, flexible and active transport; and travel reduction because of the widespread adoption of remote activities. To construct an updated state-of-the-art of the key disaggregated and aggregated variables related to travel demand in the presence of MaaS, this article set out to do so. This paper discusses techniques and case studies for analysing passengers' behaviour in the presence of MaaS in accordance with the purpose.

The first section provides a brief overview of Transport System Models (TSMs), which are frequently regarded as the reference modelling framework that supports transportation planning activity decision-making. The second lists the fundamental traits of MaaS travel demand model. The third section lists the many types of surveys and technology resources that assist the data collection required for travel demand analysis. The transport supply model mimics the costs (disutilities) that customers incur when using the infrastructure and services associated with transportation. The supply-demand interaction model enables the simulation of the relationship between user preferences and infrastructure and service performance. Identification of the sampling unit, extraction sampling method, and sample size are necessary for a survey.

The author claims that TSMs should be used to assist quantitative estimates of the potential consequences of a Sustainable MaaS (S-MaaS) to confirm that sustainability goals are pursued. The three modelling elements that make up TSMs are the supply-demand interaction model, the travel demand model, and the transport supply model. Since they define demand management activities through the three primary classes of measures—information, strategy, and incentives—travel demand models, as part of TSMs, are very important for S-MaaS planning. Models of travel demand may be used to predict MaaS travelers' travel preferences and to pinpoint the underlying factors—along with their weights—that affect travellers' decisions.

Source: [Information](#)

KEYWORDS

Mobility as a Service (MaaS); sustainability; transport system models; demand analysis; case studies

