

Book Review

Van Geenhuizen, M., Reggiani, A. and Rietveld, P. (eds.) Policy Analysis of Transport Networks

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This book presents a selection of contributions from a series of meetings of the Network on European Communications and Transport Activities Research (NECTAR) cluster on networks. It is not meant as a book of proceedings, rather it brings together a coherent group of high quality contributions providing a picture of new important research challenges in the field of policy analysis and decision making.

This book contributes to our understanding of the state of the art and new developments in policy making for transport networks and the regional impacts of network integration. It emphasizes the central role that evaluation, including cost-benefit analysis and other tools to evaluate policy, play as a decision support instrument. Attention is also given to tools that analyze the impacts of transport policies on accessibility and spatial integration as well as to the vulnerability of the transport network both due to terrorist threats and to natural disasters. The book reviews existing studies and advances in decision support tools in transport policy and in broader evaluation studies of network integration and regional development dealing, with important and challenging issues including the impact of transport projects on regional development, equity and social acceptability, and uncertainty and risk. Understanding of these various complexities in evaluation of transport is imperative for the design of plans and policies that can be used to optimize the efficiency, performance and safety of transportation systems.

Following a good introductory chapter, by the three editors, serving also partially as a conclusion and future research that lacks in the end of the book, it is divided to two parts. The first part deals with policy analysis in the transport field while the second one deals with transport policies and regional network integration.

The first part focuses on three main forces in the development of transport solutions: equity issues, vulnerability of transport systems to terrorist attacks, and uncertainty. It contains seven contributions about new developments in the design and use of decision support tools. New insight in this part deals with the inclusion of equity issues in evaluation methods of transport policies by Rietveld, Rouwendal, and Van der Vlist (Chapter 2); a specific focus on ways to identify and map uncertainty in transport policy making by Van Geenhuizen and Thissen (Chapter 6); and the use of cost-benefit approaches to support decision-making on the closure of certain infrastructures by Brathen and Eriksen (Chapter 3), analyzing whether

each of 27 existing regional airports in Norway is economically viable and what are the consequences of their closure. Other interesting contributors include Axensten (Chapter 4) who presents the outcome of a GIS-based system designed to calculate and visualize optimal evacuation routes in the case of a serious nuclear accident; Paaswell and Berechman (Chapter 5) who set out specific policy conditions for the evaluation of promising transit projects in New York following the September 11 events in 2001, including a discussion of the formal and informal planning and decision-making process; and Givoni (Chapter 7) who estimates the substitution benefits arising from a mode shift between aircraft and high-speed train and their integration. Finally, concluding the first part of the book, Zamparini and Reggiani (Chapter 8) analyze the value of travel time savings (VTTS) for freight transport, identifying important differences between the VTTS in freight transport and the VTTS in passenger transport.

The second part of the paper focuses on the actual and potential impacts of transport infrastructures policies, including issues of accessibility impact on the economic performance of companies, cities and regions, and on the integration and convergence of regions. It starts with the contribution by Hansen (Chapter 9) reporting on the impacts of the fixed links across the great Belt and Oresund between Denmark and Sweden. Martin, Gutierrez and Roman (Chapter 10) consider the accessibility impacts of the Trans-European Transport Network (TEN-T), with special reference to railways, on European cities. They present accessibility Data Envelopment Analysis as a tool to synthesize indicators and provide a multi-criteria decision support tool. Bruinsma and Rietveld (Chapter 11) analyze the impact of traffic infrastructure on productivity at the aggregate level of regions and at the disaggregate level of individual firms. Zembri (Chapter 12) explores changes in airline strategies, following the liberalization of air transport in the EU, as well as the impacts of these changes on the accessibility of the cities in the networks involved. Van Geenhuizen (Chapter 13) addresses the integration of relatively remote regions in the national economy in the era of modern telecommunications. Nilsson (Chapter 14) identifies the dominant spatial interaction patterns between the city regions in the Baltic Sea Area. In the final Chapter Percoro, Dall'erba and Hewings (Chapter 15) present empirical results about the role of national structural changes in convergence tendencies in the EU, including an empirical analysis of changes in the production structure of five European economies and a description of the model used to evaluate the structural convergence process.

Overall, there is a focus on methodological issues and policy implications. As such, the book is a useful reference to any person doing research in the field as well as to policy makers. There is a strong focus on Europe with little attention to North America and none to other parts of the world. This book is not, and does not claim to be, a textbook. Its purpose is to provide the reader, who is familiar with policy analysis of transport networks, with convenient access to the latest thinking in the field. The wide-ranging work warrants recommendation to the innovative researcher and policy maker. The book's presentation of the frontiers of the field is likely to stimulate further inquiry which in turn should further advance the study of policy analysis of transport networks.