

**BUILDING BLOCKS FOR SUSTAINABLE
TRANSPORT: OBSTACLES, TRENDS,
SOLUTIONS**

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INVESTOR IN PEOPLE

Acknowledgement

The foundation for this volume was laid during the project STELLA (Sustainable Transport in Europe and Links and Liaisons with America) funded by the European Commission (Contract GTC2-33019-2000). One of the so-called Focus Groups (no. 4) dealt with Environment, Safety, Health, Land Use and Congestion, in short: the external effects of transport. The Focus Group staged three seminars for which participants submitted papers. From the first two seminars papers selections were made, which — after review and revision — were published in special issues in scientific journals, being the European Journal of Transport and Infrastructure Research (2002, Vol. 2 No. 2/3) and the Journal of Transport Geography (2005, Vol. 13. No. 1). In addition the Focus Group co-chairs, Veli Himanen and Martin Lee-Gosselin, and the scientific secretary, Adriaan Perrels, produced a few overview papers, which were published in Transport Reviews (2004, Vol. 24, No. 6) and in the European Journal of Transport and Infrastructure Research (2006, Vol. 6, No. 1). This book started from a set of contributions of the third Focus Group meeting in 2004. During the process selected papers were reviewed and updated, while along the way some other papers were added.

We like to thank all the contributors of the three Focus Group meetings. The material of over 40 papers and the interventions of other participants during the meetings were of great value to shape our views of sustainable transport and of the research still needed to further the realisation of sustainable transport.

Adriaan Perrels
Veli Himanen
Martin Lee-Gosselin
Editors

Preface

It is clear that transport is an important element for the well-being of society. We need to get to work, to travel for business and pleasure and to deliver the products that in large measure determine our lifestyles. Efficient transport systems are essential for keeping economies competitive and improving the quality of life for communities and citizens.

The transport system is a very large and complex system, with global, continental, regional, national and local needs and networks connected to each other, and many separate decisions of individual actors with different goals influencing the nature of the system and its effects. There is a challenge to meet those needs and to find a balance between the benefits and negative effects of transport.

Our increasing demand for transport has created problems that threaten our mobility. Every day thousands of kilometres of European and North American highways are blocked by traffic jams. Congestion adds an extra bill to our economies. Every year over 40,000 people are killed and more than 1.7 million are injured in road fatalities in Europe, and remarkably similar totals are experienced in North America. Important environmental issues including climate change, noise, urban sprawl and land fragmentation are closely linked to traffic volumes. Future oil prices, global climate change and population demographics pose challenges which require mobility which is environmentally, socially and economically sustainable.

Many sectors of society, administrative systems and cultural traditions as well as lifestyles affect transport demand and solutions. That is perhaps one reason why there is no single interpretation of sustainable transport, in spite of the fact that political decisions and strategies have frequently noted that transport must be a key contributor to sustainable development.

Research in transport has a long and impressive history, particularly of course in transport engineering, including design and development of technologies and materials that have provided the vehicles, craft and networks that have allowed spectacular increases in mobility of people and goods over centuries. Transport economics, while a younger discipline, has a history of at least two centuries. In this time span it attempted to understand transport behaviour in many different ways and to design institutional settings for infrastructure and services that enable viable enterprises and create sufficient benefits to justify public expenditures. Recent decades have seen an enormous expansion of transport research and an evolution

into other branches of the physical and social sciences, with major contributions to understanding behaviour of individuals and companies, interactions between land use and transport, and systems of management and governance of all aspects of transport networks and services. Researchers in many different disciplines have become involved, and interactions among them have flourished. And relationships between researchers and government agencies have evolved, as the latter have sought greater insight into policy development and integration. The results of these interactions and relationships are evidenced in the increasing attempts of governments to apply policies based on sound research evidence and advice of researchers.

Within the community of researchers, the potential is still being developed, as researchers have recognised the possibilities for collaboration and integration of results. This volume presents the results of some of this collaboration, among researchers in Europe and North American, offering insights into the future of transport systems, and policies necessary to achieve sustainable development. Europe and America have many similarities in their societies; economic prosperity, good transport networks, strong car industries, extensive transport research. But they also have important differences, in the sharing of roles between the public and private sectors, in urban structure, and the shares of public and private transport modes. These similarities and differences provide fruitful grounds to share experiences, to learn from each other and find best practices and key elements for workable solutions for sustainable transport. Learning from each other and closer contacts between researchers and policymakers were the initial impetus behind the STELLA Transatlantic Thematic Network (Sustainable Transport in Europe and Links and Liaisons with America) for which the institutional framework was created by European Union funding. This book is based on that co-operative work of European and American researchers and policymakers. The results make it clear that this kind of co-operation should be encouraged to aid the development of integrated transport systems to meet future economic and social needs.

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