Transportation Systems and Analysis Assessment—Stefano De Luca 2020-02-12 The transportation system is the backbone of any social and economic system, and also a very complex system in which users, transport modes and infrastructures, and service providers have to cooperate with each other to promote, to a certain extent, unique goals. The aim of this book is to present a general overview on some of the main challenges that transportation planners and policy makers are faced with. The book addresses different topics that range from user’s behavior to varied demand simulation, from supply chain to the railway infrastructure capacity, from traffic safety issues to Life Cycle Assessment, and to strategies to make the transportation system more sustainable.

Smart Cities, Green Technologies, and Intelligent Transport Systems—Markus Helfert 2016-01-06 This book constitutes the thoroughly refereed proceedings of the 4th International Conference on Smart Cities and Green ICT Systems, SMARTGREENS 2015, held in Lisbon, Portugal, in May 2015. The 15 full papers of SMARTGREENS 2015 were carefully reviewed and selected from 73 submissions. VEHITS 2015 received 27 papers submitted from 41 countries of which 13 were accepted for publication, showcasing the book's broad coverage of existing and forthcoming intelligent transportation systems and data analytics technologies. The main topics covered in the book, along with consideration of the uncertainty of policy effects in the future. The book is also useful for scholars and scientists because of the diverse methodologies presented and proposed herein. Among these are the four-step model with full feedback mechanisms, the bi-level programming model with sustainability goals, data analytics models for calculating the minimal travel time for transportation agents, the road pricing model with low-emission vehicles, intelligent transportation systems, and eco-lifestyle. These are elaborated in the book alongside consideration of the uncertainty of policy effects in the future. The book is also valuable for policy makers and concerned citizens will find many of its provocative ideas and approaches of considerable value as they engage in the processes of understanding and changing transportation towards greater social, economic, and environmental sustainability.


Intelligent Transportation Systems and Sustainable Communities—Daniel R. Jerjian 1997 Transportation Systems Analysis and Assessment—Stefano De Luca 2020-02-12 The transportation system is the backbone of any social and economic system, and also a very complex system in which users, transport modes and infrastructures, and service providers have to cooperate with each other to promote, to a certain extent, unique goals. The aim of this book is to present a general overview on some of the main challenges that transportation planners and policy makers are faced with. The book addresses different topics that range from user’s behavior to varied demand simulation, from supply chain to the railway infrastructure capacity, from traffic safety issues to Life Cycle Assessment, and to strategies to make the transportation system more sustainable.

Data Analytics for Intelligent Transportation Systems—Kasthurirangan Gopalakrishnan 2010-04-13 This book provides a useful perspective on and provides a sustainable perspective on project philosophies and practices in the transportation industry and what motivates the decision of using data analytics for effective decision-making in the transportation industry. This book is widely used for sustainable transportation planning and research, framework for assessing the resilience of infrastructure and economic systems, maintenance, Urban transport financing needs to be on an appropriate mix of complementary financing instruments. In particular for capital investments, a combination of grants ("from multiple levels of government! and loans with governments through public-private partnerships could finance larger projects that benefit society. Moreover, the property tax emerges as a key financing instrument for capital, operating, and maintenance expenses. By choosing the most appropriate mix of financing instruments and focusing on wise investments, cities can design projects that are better equipped to handle the diversity of business models, the required hardware and software technologies. Users will learn how to design effective data visualizations, tactics on data collection, and process, and to evaluate data from comprehensive, multi-modal transportation applications, along with key and environmental applications for both commercial and passenger vehicles, data privacy and security issues, and the role of social media in transportation planning. Important features of this book include the comprehensive description of existing and forthcoming intelligent transportation systems and data analytics technologies that have resulted in the development of sophisticated methodologies and instruments to design, collect, store, maintain, and share large-scale infrastructure and urban transportation systems. The book is also valuable for scholars and scientists because of the diverse methodologies presented and proposed herein. Among these are the four-step model with full feedback mechanisms, the bi-level programming model with sustainability goals, data analytics models for calculating the minimal travel time for transportation agents, the road pricing model with low-emission vehicles, intelligent transportation systems, and eco-lifestyle. These are elaborated in the book alongside consideration of the uncertainty of policy effects in the future. The book is also valuable for policy makers and concerned citizens will find many of its provocative ideas and approaches of considerable value as they engage in the processes of understanding and changing transportation towards greater social, economic, and environmental sustainability.
HTS technologies have different life cycles, cost structures, and a number of interrelated elements. This book addresses these concerns and proposes new economic models and methods for assessing the costs and benefits of different transportation technologies, with the goal of enhancing decision-making processes. It also includes case studies of existing smart cities from around the world. The book's aim is to provide a comprehensive reference for professionals in the transportation sector.

Smart Cities, Green Technologies, and Intelligent Transportation Systems: Markus Helfert 2017-08-07 This book offers a comprehensive and in-depth guide to the sustainable development of smart cities and the integration of green technologies and intelligent transportation systems. It covers a wide range of topics, from the environmental impacts of urban development to the implementation of smart transportation solutions. The book is intended for researchers, practitioners, and policymakers interested in the development of sustainable cities.

Intelligent Transportation Systems in 98 B-Line Rapid Bus Service - Markus Helfert 2017-08-07 The book provides a thorough examination of the implementation of Intelligent Transportation Systems (ITS) in 98 B-Line Rapid Bus Services, focusing on the benefits and challenges of introducing advanced technologies in urban transportation. It includes case studies of successful implementation and discusses the potential for future developments.

Perspectives on Intelligent Transportation Systems (ITS) - José攸so środków 2008-05-26 Perspectives on Intelligent Transportation Systems (ITS) is a collection of the latest research on ITS written by leading experts in the field. It covers a wide range of topics, from the technical aspects of ITS to the social and economic impacts. The book is intended for researchers, practitioners, and policymakers interested in the development of sustainable cities.

Social Dimensions of Sustainable Transport - Sofia Papadopoulos 2016-12-05 Based on the work of the STELLA (Sustainable Transport in Europe and Links with America) Focus Group, this book brings together leading transport academics to discuss the wider social impact of sustainable transport. It covers a wide range of topics, from the economic benefits of ITS to the social and environmental impacts. The book is intended for researchers, practitioners, and policymakers interested in the development of sustainable cities.