1.	Record Nr.	UNINA9910165051903321
	Titolo	Modelling intelligent multi-modal transit systems / / editors, Agostino Nuzzolo, Department of Enterprise Engineering, Tor Vergata University of Rome, Rome, Italy, William H.K. Lam, Department of Civil and Environmental Engineering, The Hong Kong
	Pubbl/distr/stampa	Boca Raton, FL:,: CRC Press,, [2017] ©2017
	ISBN	1-315-36898-6 1-315-35198-6
	Edizione	[First edition.]
	Descrizione fisica	1 online resource (339 pages) : illustrations, tables
	Disciplina	388.401
	Soggetti	Local transit - Technological innovations Local transit - Mathematical models Transportation - Technological innovations Transportation - Mathematical models
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	A Science Publishers book.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	1. Introduction to modelling multimodal transit systems in an ITS context / Agostino Nuzzolo 2. New applications of ITS to real-time transit operations / Avishai (Avi) Ceder 3. A new generation of individual real-time transit information systems / A. Comi, A. Nuzzolo, U. Crisalli and L. Rosati 4. Real-time operations management decision support systems : a conceptual framework / Oded Cats 5. Real-time modelling of normative travel strategies on unreliable dynamic transit networks : a framework analysis / A. Nuzzolo and A. Comi 6. A dynamic strategy-based path choice modelling for real-time transit simulation / A. Comi and A. Nuzzolo 7. Time-dependent shortest hyperpaths for dynamic routing on transit networks / Guido Gentile 8. Real-time reverse dynamic assignment for multiservice transit systems / Francesco Russo and Antonino Vitetta 9. Optimal schedules for multimodal transit services : an activity-based approach / William H.K. Lam and Zhi-Chun Li 10. Transit network design with stochastic demand / K. An and H.K. Lo.

Sommario/riassunto

The growing mobility needs of travellers have led the development of increasingly complex and integrated multi-modal transit networks. Hence, transport agencies and transit operators are now more urgently required to assist in the challenging task of effectively and efficiently planning, managing and governing transit networks. A pre-condition for the development of an effective intelligent multi-modal transit system is the integration of information and communication technology (ICT) tools that will support the needs of transit operators and travellers. To achieve this, reliable real-time simulation and short-term forecasting of passenger demand and service network conditions are required to provide both real-time traveller information and also successfully synchronised transit service planning and operations control. Recent developments in information technology and telematics have enabled a large amount of data to become available, thus further attracting transport researchers to set up new models outside the context of the traditional data-driven approach. The alternative demand-supply interaction or network assignment modelling approach has improved greatly in recent years, and has a crucial role to play in this new context. One of the key objectives of this work is to introduce the current trends in this newly emerging area. The book will be of interest to urban planners, public transport agency technicians, Decision Support System (DSS) tool developers, students and researchers--Provided by publisher.