1.	Record Nr.	UNINA9910484075803321
	Autore	Schiewe Philine
	Titolo	Integrated Optimization in Public Transport Planning / / by Philine Schiewe
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
	ISBN	3-030-46270-6
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (195 pages)
	Collana	Springer Optimization and Its Applications, , 1931-6828 ; ; 160
	Disciplina	380.5068 388.15118
	Soggetti	Mathematical optimization Transportation engineering Traffic engineering Algorithms Mathematical models Optimization Transportation Technology and Traffic Engineering Mathematical Modeling and Industrial Mathematics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	1. Introduction -- 2. Integrating Timetabling and Passenger Routing -- 3. Integrating Line Planning, Timetabling and Passenger Routing -- 4. Integrating Timetabling and Vehicle Scheduling -- 5. Integrating Line Planning, Timetabling, Passenger Routing and Vehicle Scheduling -- 6. Two Heuristic Approaches for Integrating Public Transport Problems -- General Multi-Stage Problems -- 8. Discussion and Conclusion -- Outlook.-A. Supplementary Material.-B. Frequently Used Notation -- Bibliography.
	Sommario/riassunto	This book is one of the first to include an extensive discussion of integrated public transport planning. In times of growing urban populations and increasing environmental awareness, the importance of optimizing public transport systems is ever-developing. Three different aspects are presented: line planning, timetabling, and vehicle scheduling. Classically, challenges concerning these three aspects of

planning are solved sequentially. Due to their high interdependence, the author presents a clear and detailed analysis of innovative, integrated models with accompanied numerical experiments performed to assess, and often support, the benefits of integration. The book will appeal to a wide readership ranging from graduate students to researchers.