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Nota di contenuto	Introduction -- Geological and Geotechnical Parameters Affecting Tunneling Methods -- A Review of the Conventional Tunneling Methods -- A Review of Mechanized Tunneling Methods -- A Unique Example from Kozyata-Kadköy Metro Tunnel: Comparison of the Performance of Drill and Blast, Roadheader, Impact Hammer, and TBM -- The Cost of the Initial Investment Affecting the Selection of Tunneling Methods -- The Length of the Tunnel Affecting the Selection of Tunneling Methods -- Time for Mobilization Affecting the Selection of Tunneling Methods -- Benchmarking Metrics as an Aid for Rational Planning of Conventional and Mechanized Tunneling -- Some Examples of Changing Tunnelling Method from Conventional to Mechanized Tunneling or Vice Versa -- Using TBM and Conventional Tunneling Methods in the Same Project—the Hybrid solution -- Selected Extreme Cases -- Emerging New Technologies/Innovations in Conventional and Mechanized Tunneling Methods.
Sommario/riassunto	This book discusses the critical issues in selecting conventional and mechanized tunneling methods and lessons learned from the past. It covers the following main topics: geological and geotechnical

parameters affecting tunneling methods, summarizing conventional tunneling and mechanized tunneling methods, the factors affecting the choice of tunneling methods such as the cost of the initial investment, the length of the tunnel, project scheduling, time for mobilization, emerging new technologies. Some examples of changing the tunneling method from conventional to mechanized tunneling or vice versa during the same ongoing project and hybrid tunneling methods in the same project are also given. The last chapter resumes the innovations made for the tunneling industry, summarizing advancements in safety, non-circular TBMs, robotics, new instrumentation, new materials and methodologies to decrease carbon footprint. This book is aimed at graduate students, professionals and researchers in tunneling, civil and mining engineering and geology.
