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 4.9 Public Transportation Costs4.9.1 Construction Costs; 4.9.2 Rolling Stock; 4.9.3 Operating and Maintenance Costs; 4.10 Closing Comments; References; Illustrations of Complex Economic Analyses; Part II Financing of Transportation Infrastructure; History of Transportation Finance in the U.S.; 6.1 The Early Toll Roads [1-3]; 6.2 The National Road [4-6]; 6.3 The Good Roads Movement [8, 9]; 6.4 The Lincoln Highway [10]; 6.5 The Federal-Aid Highway Program, 1916 to 1955; 6.5.1 Federal-Aid Highway Act of 1916 [11]; 6.5.2 Federal-Aid Highway Act of 1921
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 6.11.3 The Safe, Accountable, Flexible and EfficientTransportation Equity Act - A Legacy for Users(SAFETEA-LU, 2005) [22]

Sommario/riassunto

Transportation infrastructure is often referred to as society's bloodstream. It allows for the movement of people and goods to provide the ability to optimize the production and distribution of goods in an effective and efficient manner, and to provide personal opportunities for employment, recreation, education, health care, and other vital activities. At the same time, the costs to provide, maintain, and operate this complex infrastructure are enormous. Because so much of the economic resources to be invested come from public funds, it is critical that expenditures are made in a manner that provides society with the best possible return on the investment. Further, it is important that sufficient investment is made available, and the costs of the investment are equitably borne by taxpayers. This textbook provides a fundamental overview of the application of engineering economic principles to transportation infrastructure investments. Basic theory is presented and illustrated with examples specific to the transportation field. It also reviews the history of transportation finance, as well as current methods for funding transportation investments in the U.S. Future problems and potential solutions are also discussed and illustrated.