This book is based primarily upon materials prepared between 1997 and 2010 by Carl D. Martland for 1.011 Project Evaluation, a required course within MIT’s Department of Civil & Environmental Engineering that he designed, developed, and taught for many years. It is structured to be of interest to anyone interested in infrastructure systems, especially engineers, planners and managers who design, build and operate such systems.

The material includes two categories of documents, namely essays and case studies. Those who wish to gain a broad conceptual framework for understanding project evaluation in the context of infrastructure systems can read the essays. Those who wish more detail on methodologies in the context of specific projects can concentrate on the case studies. Each essay and each case study is a stand-alone document that be read without being distracted by references to definitions or methods developed in prior or subsequent chapters. Project Evaluation: Essays and Case Studies should also be of interest to students in planning or engineering who are interested in transportation, water resources, energy, city planning, or real estate development.

Carl D. Martland retired in 2007 from MIT, after serving 35 years as a Senior Research Associate and Lecturer in the Department of Civil and Environmental Engineering. While at MIT, he taught classes and supervised research in the general areas of project evaluation, transportation systems, and engineering systems design. He has published more than 100 articles and research reports concerning rail and other infrastructure systems, including many award-winning articles.

Volume II: Comparing Economic and Financial Impacts Over the Life of Proposed Infrastructure Projects

Carl D. Martland