

chapter One Introduction to Infrastructure and Careers in Civil and Environmental Engineering

Chapter Outline

Introduction

Introductory Case Study: I-35 W
Bridge Collapse

The Prevalence of Infrastructure

Infrastructure Systems

Funding Infrastructure

Sustainability

The Civil and Environmental
Engineering Professions

Integration with Other Professions

Integration with the Public

Professional Issues

The Future of Civil and Environmental
Engineering

Employment Opportunities

About This Book

Outro

Learning Objectives

After reading this chapter, you should be able to:

1. Define infrastructure and explain how it affects nearly all aspects of your life.
2. Describe the “infrastructure crisis.”
3. Describe the role of civil and environmental engineers in infrastructure management and design.
4. Describe the role of each of the subdisciplines of civil engineering.
5. Discuss professional issues as they relate to the success of your future career.

Introduction

Infrastructure is defined by Merriam Webster as the underlying foundation or basic framework of an organization or system. As it relates to the work of civil and environmental engineers, infrastructure is the system of **public works** of a country, state, region, or municipality.

