C&RP 763 — Consequence Analysis in City and Regional Planning

Credit Hours: 4 hours  
Sequence No.: 04033–5  
Meeting: Tuesday, Thursday 12:30–2:30 pm; 247 Brown Hall

This course is not open to graduating students not in the MCRP program.

Prerequisites: C&RP 770, 781 or permission of the instructor.

Required Work: Midterm and final examinations.

Instructor’s Office: 278B Brown Hall; office hours: Tuesdays, 3–5 pm.

Course Description and Objectives

This course is a theoretical and practical synthesis of methodologies for evaluating large-scale public projects, such as transportation, water resources, urban infrastructure, or environmental projects. The major concern of the course is cost-benefit analysis under conditions of certainty, and its application to socio-economic project evaluation.

Some of you may wish to see a real example of a cost-benefit analysis. I shall place on reserve in the Engineering Library copies of the Philadelphia Center City Commuter Connection (CCCC) Environmental Impact Statement, which is a reasonable — though not perfect — illustration.

Course Organization

Lectures.

There will be a mid-term examination on October 28 in class, which will count for 40% of your final grade. This is a closed-book examination; you should be sure to bring a calculator.

The final examination will be given at the regularly scheduled time, December 6 at 1:30pm. It will count for 60% of the final grade. This is also a closed-book examination, and you should also be sure to bring a calculator. The final examination will cover all material in the course (not just the material covered since the mid-term).

You are responsible for all required material on the reading list, as well as for everything covered in lectures.
Texts

I have been unable to find a really satisfactory text; so I have decided to use none. Packets containing most of the required material on the reading list below will be available for purchase in the Brown Hall Copy Center. The Commerce library is a good source of materials on cost-benefit analysis.

In addition, a collection of problems and answers in cost-benefit analysis will be available for purchase in the print facility. I strongly recommend that you work through the problems on your own.

Useful Sources

Some readings you may wish to consult are listed below. Most are available in the Commerce Library. Note that chapters from many of these are included in the readings packets described in the next section.

General Intermediate Treatments


General Advanced Treatments


Specialized Topics


Course Outline and Reading List

*: required reading; **: optional

Packets of the readings will be available for purchase in the Brown Hall copy center. There are separate packets for the required and optional readings in each section. The packets will be identified by section number, and an “A” for the required readings, and “B” for the optional ones. Thus, for example, the required readings for section 1 will be available from the copy center as “C&RP 763 Readings, 1A”, while the optional readings will be known in there as “C&RP 763 Readings, 1B”.

1 Introduction: Market Failure; Role of Government


2 Introduction to Cost-Benefit Analysis


3 Discounting and The Problem of Time


4 Consumer Benefits and Their Measurement


5 Shadow Prices and Unmarketed Goods


### 6 Project Costs and their Finance

* Robert W. Hartman. “One thousand points of light seeking a number: A case study of CBO’s search for a discount rate policy”. Mimeo, delivered at the winter meeting of the American Economic Association, 1968. Read Appendix, pp 1–7; other parts of the Appendix optional. The paper is included in the readings for section 3.


### 7 Income Distribution


