



Guidelines for Preparing Economic Analyses



WHAT ARE THE GUIDELINES?

EPA's *Guidelines for Preparing Economic Analyses* establish a sound scientific framework for performing economic analyses of environmental regulations and policies. They incorporate recent advances in theoretical and applied work in the field of environmental economics. The *Guidelines* provide guidance on analyzing the economic impacts of regulations and policies, and assessing the distribution of costs and benefits among various segments of the population, with a particular focus on disadvantaged and vulnerable groups.

WHY ARE THE GUIDELINES IMPORTANT?

The *Guidelines* contain several important advances: (1) they assist policy makers in developing regulations that achieve the highest environmental quality and human health standards at the lowest costs; (2) provide analysts with information needed to prepare high quality economic analyses; (3) develop an overarching framework for economic analyses throughout the Agency and across EPA Program Offices; and (4) ensure that important subjects such as uncertainty, sensitivity analysis, timing, and valuation of costs and benefits, described below, are treated consistently in all economic analyses at EPA. EPA will use the *Guidelines* to evaluate the economic consequences of its regulations and policies to insure that they contribute to a safe environment and a healthy economy.

KEY TOPICS & FEATURES

The *Guidelines* address seven major analytical issues:

- Estimating the value of benefits not easily quantified (e.g., valuing how changes in intelligence from lead exposures result in lower lifetime incomes, or how the protection of wetlands can reduce the risks of flooding and enhance property values).
- Estimating the value of reducing fatal risks (e.g. measuring the economic benefits from reducing the number of pollution-induced cancer fatalities).
- Defining baseline conditions (i.e., contrasting the state of the economy and environment with and without a proposed regulatory policy).
- Examining environmental justice concerns in economic analyses (e.g., displaying economic data on the risks, benefits and costs to households located adjacent to hazardous waste sites).
- Comparing differences in the timing of benefits and costs (e.g., investing in CFC control strategies today reduces future generations' UV radiation risks).

- Acknowledging uncertainties in the calculation of costs and benefits (e.g., presenting range of costs an industry might face when choosing among strategies to reduce environmental discharges).
- Measuring who pays the costs and receives the benefits of regulations (e.g., showing how different groups; such as children, small businesses, or persons more susceptible to environmental hazards; receive differing levels of protection or costs).

WHO ARE THE GUIDELINES FOR?

The main audiences for the *Guidelines* are those performing or using economic analysis, including policy makers, the Agency's Program and Regional Offices, and contractors providing economic reports to the EPA. In addition, college and university professors have also expressed an interest in using the *Guidelines* for their environmental economics and policy analysis classes.

WHO WAS INVOLVED?

EPA's Regulatory Policy Council, consisting of top-level program managers, and the Agency's program economists oversaw the development of the *Guidelines* by the EPA's National Center for Environmental Economics (NCEE). EPA's Science Advisory Board, composed of leading environmental economists from major universities and research institutions, reviewed the *Guidelines* throughout their development for accuracy in both economic theory and practice. In their final report to Administrator Carol Browner, the Board gave the *Guidelines* an overall rating of "excellent," saying, they "succeed in reflecting methods and practices that enjoy widespread acceptance in the environmental economics profession."

THE NATIONAL CENTER FOR ENVIRONMENTAL ECONOMICS

EPA's National Center for Environmental Economics was created to be a federal source of cutting-edge work in environmental economics and assist EPA Program Offices, Agency economists, and regulatory policy makers with high quality economic analyses. It carries out original theoretical and empirical research and is staffed by economists, other scientists, and policy analysts.

WHAT'S ON THE WEB?

A copy of the *Guidelines* can be downloaded from the Internet through the website <http://www.epa.gov/economics>.

CONTACT INFORMATION

Chris Dockins (*Guidelines* Project Leader): 202-260-5728
 Brett Snyder (BAMDD, Division Director): 202-260-5610
 Al McGartland (NCEE, Director): 202-260-5500
 Office fax numbers: 202-260-2685 & 260-5732
 E-mail addresses: snyder.brett@epa.gov and dockins.chris@epa.gov