



Treasury Board  
Consumer and  
Corporate Affairs Canada

Conseil du Trésor  
Consommation et  
Corporations Canada

## **Government Evaluation of Regulations: the United States Experience**

**Second in a Series of Studies on  
Government Regulatory Activity**

LKC  
HD  
3621  
.S88  
no.2  
c.2

JL111

IS

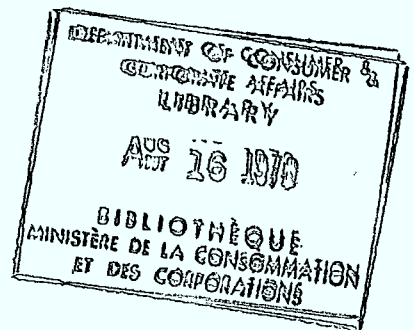
C36

no.2

C.2

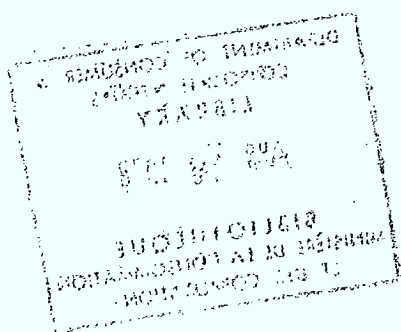
# **Government Evaluation of Regulations: the United States Experience**

**Second in a Series of Studies on  
Government Regulatory Activity**



**Lee McCabe**

Consumer Research Branch  
Consumer and Corporate Affairs



Minister of Supply and Services Canada 1978

Catalogue No. BT 36-1/2-1978  
ISBN 0-660-01820-9

## TABLE OF CONTENTS

|   |     |
|---|-----|
| FOREWORD  | i   |
| SUMMARY   | iii |
| 1. INTRODUCTION   | 1   |
| 2. THE FORD ADMINISTRATION'S REGULATORY REFORM PROGRAM    | 4   |
| 3. THE ECONOMIC IMPACT STATEMENT PROGRAM                  | 7   |
| 4. THE COUNCIL ON WAGE AND PRICE STABILITY                | 11  |
| 5. THE LIFE CYCLE OF REGULATORY CHANGE                    | 18  |
| 6. AN ASSESSMENT OF THE ECONOMIC IMPACT STATEMENT PROGRAM | 23  |

## Foreword

In recent years, increasing concern has been expressed both inside and outside government about the social and economic impact of government regulatory activity. On the one hand, the regulatory process itself has been faulted for being insensitive to public needs and opinions while, on the other hand, doubts have been expressed concerning the efficiency and effectiveness of particular regulations, standards or guidelines. More specifically, with the onslaught of serious inflationary problems, it has been argued that regulations may be unnecessarily adding to costs and prices. In fact, it was in the context of the establishment of the Anti-Inflation Board and the resulting debate on controls and post-controls policies that the Cabinet directed the Department of Consumer and Corporate Affairs and the Treasury Board Secretariat to assess the feasibility of applying cost-benefit and related methods of analysis to government social regulations, and to suggest modifications to the regulatory process which might encourage greater public participation.

In response to this mandate, a Working Group on Social Regulations, chaired by François Lacasse of the Treasury Board Secretariat, was established. In the Department of Consumer and Corporate Affairs, the project was originally directed by Lawson Hunter and subsequently by Dale Orr. Other members of the Working Group included Harry Baumann (Project Manager), Bruce Montador, Michel Proulx, André Morin and Joan Huntley (Treasury Board Secretariat) and Lee McCabe and Ron Hirshhorn (Consumer and Corporate Affairs). As well, the Working Group received advice on legal matters from Allan Rosenzweig (seconded to CCA from the Department of Justice). The Federal-Provincial Relations Office made available the services of Richard Schultz as a consultant on jurisdictional problems between levels of government in the regulatory area. In addition, the Working Group received considerable help on technical matters from the Departments of Transport, Environment, Health and Welfare, Energy Mines & Resources as well as the National Research Council and the Atomic Energy Control Board.

Because of the nature of the mandate and the limited resources, the Working Group pursued the following operational strategy. First, it concentrated on health, safety and fairness regulations leaving aside economic or rate-setting regulations. This decision proved to be fortuitous since little research on social regulations has been carried out in Canada, and more extensive provisions exist for public participation in the rate-setting process. Second, the Working Group decided to study both the allocative and non-allocative effects of regulations. In other words, the Working Group was concerned not only with the impact of regulations on economic (market) efficiency, but also their impact on (a) the distribution of income - who pays, who benefits (b) technical progress (c) international competitiveness (d) regional balance (e) market structure (f) inflation. Third, the Working Group decided to prepare two types of background papers. The first type were general studies on the reasons for social regulation, the US experience with regulatory reform, the regulatory process in Canada and techniques for the evaluation of regulations. The second group of papers consisted of case studies of representative regulations of recent vintage in the health, safety and fairness area.

Since a major purpose of this project was the examination of various mechanisms for encouraging greater public input into the regulation-making process, we have decided that selected background papers and case studies prepared by the Working Group should be published in order to increase public awareness of this very important aspect of government activity.

Sylvia Ostry  
Deputy Minister-CCA

Maurice LeClair  
Secretary-TBS

## SUMMARY

To assess the feasibility and usefulness of applying cost-benefit and other evaluative techniques to government social regulation, the current Regulatory Reform Program in the United States is examined, with particular emphasis on the Economic Impact Statement Program. This program requires that all major new legislation, regulations and rules be accompanied by a statement which certifies that the economic impact of the proposals has been evaluated. The Council on Wage and Price Stability plays a major role in the program by reviewing the evaluation studies that have been performed, suggesting (when necessary) ways in which the studies might be improved, and appearing as expert witnesses at the formal and informal hearings in the regulatory development process.

From the U.S. experience with the socio-economic analysis of social regulatory proposals, a number of conclusions are drawn:

1. The analysis is technically feasible. Methodologies now used in Canadian expenditure program evaluation can be transferred, with appropriate modifications, to the evaluation of regulations.
2. In evaluating the effectiveness of the Economic Impact Statement Program, the Office of Management and Budget and the Council on Wage and Price Stability have relied upon the qualitative assessment made by their professional and executive officers. The final verdict has been positive, with suggestions for giving the program greater powers.
3. Quantitative indicators of the program's achievements have not been developed due to the very general nature of the objectives (e.g. to increase the use of economic analysis in decision making) and the technically complex and politically intricate nature of the regulatory process, which in effect prevents the identification of what contribution a program makes to changes in the development of regulations.
4. A major effect of the program has been a change in emphasis, in some regulatory agencies, from the technical effectiveness of regulatory design to the overall socio-economic impact of regulatory proposals.

5. The U.S. tradition of public notice and comment, and the Freedom of Information Act, have worked to promote socio-economically sound regulations and have reinforced the activities of the program. It is also clear that giving responsibility for the program to a central agency was the key to the limited success that has been enjoyed.
6. The regulatory process is clearly influenced by the political realities of the day; but by the analysis of the societal costs and benefits of alternative proposals decisions can be made more systematically.



## 1. INTRODUCTION

Following the Cabinet directive to assess the feasibility and usefulness of applying cost-benefit and related methods of analysis to government social regulation, this paper examines the current regulatory reform initiatives in the United States. The most relevant of the reform activities, for our purposes, is the participation of the Council on Wage and Price Stability in the Economic Impact Statement Program. This program requires regulatory bodies to assess the overall socio-economic impact of their proposals for new or modified regulations. In addition to scrutinizing the Economic Impact Statement Program, this paper attempts to provide some insight into the advantages and disadvantages of introducing a similar, appropriately modified, program in Canada.

As one might expect, the sectoral distribution of regulations in the United States is largely similar to that in Canada. While many administrative bureaus and government department divisions exercise regulatory powers, the United States has shown a historical preference for independent regulatory agencies. The early regulatory bodies were created to implement economic policies; they entered sectors of the economy that had substantial economies of scale or natural monopolies. The areas covered by the major early regulatory agencies illustrate this: Interstate Commerce Commission (1887), Federal Power Commission (1930), Federal Communications Commission (1934), Federal Maritime Commission (1936), Civil Aeronautics Board (1938). As in Canada, there has been a trend in the United States during the last decade towards the use of regulations to achieve social objectives. This new network of regulations, concerning health, safety, fairness, and information is enforced by such agencies as the Environmental Protection Agency (1970), Occupational Safety and Health Administration (1970) and the Consumer Product Safety Commission (1972).<sup>1</sup>

The idea of regulatory reform is not new to the United States. The need for reform has been recognized by every president since Harry Truman who, after vetoing legislation that excluded surface transportation carriers from antitrust laws, established the first Hoover Commission (which included the independent regulatory commissions in its studies). President Eisenhower convened the first Administrative Conference, whose purpose it was to design ways and means of improving regulatory

---

<sup>1</sup> Alfred E. Kahn: The Economics of Regulation: Principles and Institutions (John Wiley, 1970), vol. 1, pp. 16-18

proceedings and reducing delays. In 1955, the Attorney General's National Committee to study the Antitrust Laws reaffirmed the importance of antitrust law for maintaining a competitive American economy. That committee also recommended the repeal of the federal law that allowed states to enact the so-called fair trade laws. President Kennedy was especially concerned with transportation regulation and in his 1962 Special Message to Congress on Transportation said: "This Administration's study of long-range transportation needs and policies convinces me that current federal policies must be reshaped in the most fundamental and far-reaching fashion". In 1964, President Johnson established the Administrative Conference as a permanent government agency to reform the regulatory process. In 1968, he formed the Neal Task Force on Antitrust Law, whose report stressed the need for greater competition in regulated industries. President Nixon appointed the Stigler Task Force on Productivity and Competition, which criticized the regulatory process as rigid, overly concerned with trivial details and unable to achieve important results. The Ash Council on Executive Organization recommended to President Nixon that a number of structural and administrative changes be made in federal regulatory agencies.

In 1974, President Ford launched his Program of Regulatory Reform in an October 8 address to the Congress. When he met with the ten independent regulatory agencies on July 10, 1975, President Ford said:

"I have a strong belief that the costs which regulation imposes on private citizens should be faced very squarely. Every citizen should be aware that in some cases the costs (of regulation)... mean higher prices, reduced efficiency, less consumer choice and fewer imaginative ideas".

In his speech to the 1975 Chamber of Commerce Annual Meeting, Mr. Ford summarized his feelings about the effect of regulation on consumers: "In short, while the intention of regulation is to protect consumers, it sometimes does just the opposite". At the White House Conference on Domestic and Economic Affairs, April 18, 1976, he said "We must reassess, as I see it, the archaic and often-times very rigid, regulations which hamper the economy of the United States and directly affect the American consumer".

It is clear, then, that the need for regulatory reform has been perceived by every Administration in the postwar period. It is equally apparent that the actions taken have had no significant impact on the problem. This may have been because previous reform initiatives were focused on a single industry or a single aspect of

economic performance, and the vested interest in these areas were able to mount counter-attacks strong enough to blunt the impact of the reform measures. The Ford Administration's more general and longer term approach to regulatory reform appears to have recognized this weakness of previous efforts and for this reason may be more successful.

## 2. THE FORD ADMINISTRATION'S REGULATORY REFORM PROGRAM

President Ford announced his Regulatory Reform Program in an October 8, 1974 address to Congress. The program is not one of total deregulation of the economy but an attempt to find the best combination of constructive competition and responsible government regulation. The reform of economic regulation represents an effort to restore competition to areas of the economy wherever possible; the reform of social regulation is an attempt to achieve national environmental, health and safety goals at minimum cost. The program has four principal objectives:

- to benefit consumers by encouraging increased competition,
- to increase understanding of the costs of regulation,
- to improve methods of achieving the objectives of regulation,
- to substitute increased antitrust enforcement for administrative regulation.<sup>2</sup>

When President Ford introduced the Reform Program, he asked Congress to sponsor jointly a National Commission on Regulatory Reform. Congress has not yet taken action on that request and the Administration has chosen to pursue a number of specific reform initiatives:

- economic impact analysis
- the Council on Wage and Price Stability
- expanded antitrust activity
- meetings with the Commissioners of the ten major independent regulatory commissions
- Commission on Federal Paperwork<sup>3</sup>

- 
2. White House Press Secretary, Fact Sheet, Administration's Regulatory Reform Program, (White House, November 13, 1975), pp. 1-2.
  3. On July 23, 1976, OMB Director James T. Lynn announced that the number of forms used to collect information from the American people has been reduced by 12.5 percent.

- transportation regulatory reform
  - a) the Railroad Revitalization Act (passed Feb. 5, 1976)
  - b) the Aviation Act
  - c) the Motor Carrier Reform Act
- repeal of federal legislation permitting states to have fair trade laws (passed December 12, 1975)
- Financial Institutions Act
- Securities Act Amendments (passed June, 1975)
- legislation proposals to deregulate the price of new natural gas
- simplification and modernization of regulatory activities.<sup>4</sup>

The latest initiative in the reform program is President Ford's Agenda for Government Reform Act, which would establish a timetable for the President and Congress to make comprehensive and fundamental changes in Government regulatory activities. This was presented to Congress on May 13, 1976. The Agenda consists of a four-year program of fundamental reform involving an annual assessment by the President of the cumulative effects of government regulatory activities on major economic sectors and the development of appropriate legislative and administrative proposals for change in the regulatory agencies concerned. The Agenda divides the economy into four major sectors and proposes that each be examined during one of the four years from 1977-1980:

- transportation and agriculture - 1977
- mining, heavy manufacturing, public utilities - 1978
- light manufacturing, construction - 1979
- communication, finance, insurance, real estate trade, services. - 1980

For each sector the White House would identify the original purposes of the regulatory activity under review, assess the effectiveness of the regulation, and make specific recommendations for reform, elimination or continuation of a particular regulatory activity. This work would be analogous to the zero-based budget analysis of expenditure programs. In the words of the White House Press Secretary, "the

---

4. White House Press Secretary, *op. cit.*; pp. 2-3 and Edward C. Schmults and Paul MacAvoy; Memorandum for Department and Agency Officials, (White House, February 25, 1976), p.4

purpose of the legislation is to achieve positive and lasting reform of Federal regulatory activities with increased public participation, more effective Congressional oversight and systematic Presidential action".<sup>5</sup>

All of these wide-ranging regulatory reform efforts are being coordinated by the Domestic Council Review Group for Regulatory Reform, which was established in June of 1975 and is composed of agency and White House representatives. The Executive Directors of the CDRG are Paul Leach and Stan Morris.

Although the potential of the latest developments in President Ford's regulatory reform program is substantial, the political realities of the day make their realization uncertain. The remainder of this paper will therefore deal with those parts of the program that are now operational and are having some impact on the regulatory activity of the U.S. government. The most comprehensive and systematic of these specific reform initiatives are the Economic Impact Statement Program and the Council on Wage and Price Stability.

5. White House Press Secretary, Fact Sheet, Agenda for Government Reform Act, (White House, May 13, 1976) p.4

### 3. THE ECONOMIC IMPACT STATEMENT PROGRAM

On October 8, 1974, President Ford announced to Congress that:

"all major legislative proposals, regulations and rules emanating from the executive branch of the Government include a statement certifying that the inflationary impact of such actions on the nation be considered. I have determined that this objective can best be achieved in coordination with the budget preparation, legislative clearance and management evaluation functions of the Director of the Office of Management and Budget".<sup>6</sup>

This Executive Order was extended for one year by President Ford on December 31, 1976. Included in the orders are instructions to develop criteria for the identification of proposals which may have a major economic impact and to set out procedures for their evaluation. The director of the OMB is also given permission to delegate functions to other department or agency heads (specific reference is made to the Chairman of the Council on Wage and Price Stability).

The executive order further stipulates that in developing criteria for identifying proposals subject to the program, the following macroeconomic impact variables be considered:

- cost impact on consumers, businesses, markets, or federal, state or local government
- effect on productivity of wage earners, businesses or government at any level
- effect on competition
- effect on supplies of important products or services.<sup>7</sup>

In implementing the Inflation Impact Statement (IIS) Program, Mr. Roy L. Ash, Director of the OMB, confirmed to the heads of Executive Departments and

---

6. White House Press Secretary, Executive Order 11821, Inflation Impact Statements, (White House, November 27, 1974), p.2. The program was originally named the Inflation Impact Statement Program, but was named the Economic Impact Statement Program on December 31, 1976.

7. Ibid., pp. 1-2.

Agencies that the Council on Wage and Price Stability had been asked to play a major role. He indicated that the Council was to receive summaries of the inflation impact statements and might request further information in connection with these evaluative analyses. In addition, the Council would assist in selecting criteria to be used in identifying proposals with a major economic impact and would be available to provide assistance in complying with the program.

OMB Circular No. A-107, which was issued with Mr. Ash's memorandum, provides general guidelines for the identification and evaluation of major proposals for legislation and for the promulgation of regulations or rules. The circular adds two more variables to the criteria to be utilized in identifying major proposals:

- effect on employment
- effect on energy supply or demand.<sup>8</sup>

The OMB further required that each department or agency submit its identification criteria for "review and approval by OMB in consultation with the Council on Wage and Price Stability".<sup>9</sup>

The second major requirement of the circular concerns the type of economic evaluation that should be done to meet the objectives of the Inflation Impact Analysis Program. It is intended that the Economic Impact Statements (EIS) be benefit-cost or cost-effectiveness evaluations of the proposed actions. The technical aspects of these evaluative techniques have been comprehensively treated in Study No.3.<sup>10</sup> Nonetheless, it bears repeating that this kind of a priori analysis does not always lead to firm conclusions upon which policy decisions can be made. This is because difficulties with the data are sometimes substantial enough to produce inconclusive technical results. These problems notwithstanding, the circular leaves no ambiguity about the kind of analysis to be produced:

---

8. Office of Management and Budget, Circular No. A-107, (White House, January 28, 1975), p.2

9. Ibid

10. Michel Proulx, Evaluation Methodologies for Social Regulation (Ottawa, 1978)



"The evaluation should include, where applicable,

(1) an analysis of the principal cost or other inflationary effects of the action on markets, consumers, businesses, etc., and, where practical, an analysis of secondary cost and price effects. These analyses should have as much quantitative precision as necessary and should focus on a time period sufficient to determine economic and inflationary impacts.

(2) a comparison of the benefits to be derived from the proposed action with the estimated costs and inflationary impacts. These benefits should be quantified to the extent practical, and

(3) a review of alternatives to the proposed action that were considered, their probable costs, benefits, risks and inflationary impacts compared with those of the proposed action."<sup>11</sup>

In order to encourage the efficient and non-inflationary production of IIS the OMB indicated that no additional resources would be provided for their preparation.

The third major requirement of the circular requires the provision of background data and analyses to the Congress and the provision of them, as well as other information, to the Council on Wage and Price Stability. The day-to-day management of the Inflation Impact Statement Program was assigned to the Associate Director for Economics and Government (OMB), currently Stan Morris.

The overriding responsibility of the program is to induce agency decision makers to be more sensitive to the range of direct and indirect effects of potential government action.

The specific objectives established for the program are:

make agencies, in their rulemaking processes, and in developing legislative proposals, more accountable for their actions' economic effects,

---

11. Office of Management and Budget, op. cit.

provide a management tool to the agency (and the OMB) for use in assessing the costs and benefits to society of a particular action and the costs and benefits associated with alternative government action,

reduce federal government-induced inflationary pressures on the economy by prevailing upon agencies to make more effective use of economic analysis in their decision making.

The EIS program, for many agencies concerned with economic objectives, is a new overlay on a long-established set of institutionalized practices and procedures. For many of the agencies with social objectives, on the other hand, the EIS program represents an entirely new way of looking at their activities.

#### 4. THE COUNCIL ON WAGE AND PRICE STABILITY

The Council on Wage and Price Stability was created on August 24, 1974 and is the bureaucratic progeny of the U.S. Wage and Price Controls Program. The Council consists of the Chairman, Mr. William E. Simon (Secretary of the Treasury) eight members and four adviser members, all of whom are appointed by the President and are currently members of his Administration. One member of the Council is its Director, William Lilley III, who supervises the work of its full-time staff. Obviously, personnel changes are now taking place under the Carter Administration.

The primary responsibility of the council is to monitor and analyze inflationary activities through the economy. Its Office of Wage and Price Monitoring is responsible for examining private sector wage and price developments for their inflationary potential. Its Office of Government Operations and Research examines the activities and programs of the public sector for their inflationary contributions. The public sector is monitored in two ways. For Executive Branch agencies, the council carries out its special reviewing and advising role in the Inflation Impact Analysis Program. For both independent regulatory agencies and Executive Branch agencies, the council scrutinizes their programs, policies and activities for inflationary contributions and participates in the normal regulatory proceedings in order to comment on the inflationary impact that might result from the possible outcomes of such proceedings.

The council has no power to impose economic controls on any sector of the economy, nor has it the legal authority to prevent or delay any federal agency action. However, it does carry the power and prestige of the Executive Office of the President and the very senior positions of its members. The Council's legal authority was extended on September 30, 1977 for a two-year period by Public Law 95-121. No comprehensive statement on regulatory reform has been issued by the Carter Administration at the time of writing this document, but knowledgeable persons in Washington feel that the reform efforts will continue. There is uncertainty about whether, or how, the Ford reform program will be changed.

##### 4.1 THE COUNCIL AND THE ECONOMIC IMPACT STATEMENT PROGRAM

It will probably come as no surprise to observers of bureaucracies that government plans for their systematic self-evaluation do not always produce precisely

the kinds of results that were originally envisaged. Such a generalization cannot be rejected on the basis of the Economic Impact Statement Program. This is partly because of the difficulties in applying accepted evaluative techniques in the regulatory area and partly because the departments and agencies developing regulations frequently do not have personnel with an expertise in socio-economic analysis and evaluation.

The first responsibility of the council under the Economic Impact Statement Program was to assist departments and agencies in developing criteria for identifying proposals subject to the program. Initial proposals of criteria submitted by agencies varied widely and it was decided that the OMB, in consultation with the council, should establish minimum threshold levels for each criterion. The council spent from the fall of 1974 to the late summer of 1975 in getting the criteria approved. In practice, almost complete reliance has been placed on the national cost criterion (increased costs of \$100M in any one year or \$150M over two years). This is because the cost criteria are the least difficult to address and, if comprehensively calculated, make the other criteria redundant. In any case the remaining criteria are being used, when appropriate, as indicators in the macroeconomic analysis that is required as a supplement to the benefit-cost analysis. This probably does no damage to the final results of the analysis but may lead to some marginal proposals being overlooked in the identification exercise.

While the independent regulatory agencies are not legally bound by the requirements of executive orders and OMB circulars, they have been preparing economic impact reports for their regulatory proposals in recent years.<sup>12</sup> Some of the agencies

- 
12. In the field of social regulations, for example, the Environment Protection Agency has produced economic impact reports for Medium - and Heavy - Duty Truck Noise Emission Standards (April 1975), Evaporative Emission Regulations for 1978 and Later Model Year Vehicles (January 12, 1976), Regulations for 1978 and Later Model Year Light Duty Trucks (February 1976), Effluent Guidelines: Integrated Iron and Steel Industry (March 1976); the Occupational Safety and Health Administration has produced an Inflation Impact and Analysis of the Proposed Standard for Coke Oven Emissions (February 27, 1975) and commissioned Bolt, Beranek and Newman, Inc. to prepare Impact of Noise Control at the Workplace (1975); the Consumer Product Safety Commission has produced Analysis of the Book Match Industry and the Potential Impact of a Proposed Standard on Book Matches (March 1975), Economic Impact Statement, Safety Standard for Glazing Materials used in Certain Architectural Products (September 1975) and 35 Product Profiles on selected consumer products (October 17, 1976).

responsible for social regulations appear to be moving to a more systematic approach in carrying out their mandate. The Consumer Product Safety Commission has introduced the product profiles approach to the agency's operating plan and budget. They summarize in one document the data available on injuries and deaths, hazard patterns, exposure and causality, vulnerability of special population groups; analysis of the projected effectiveness of alternative remedies; and preliminary assessment of economic impact. The profiles have four main purposes:

- indicate the kind of analysis being initiated to help support CPSC priority setting,
- serve as a focal point for organizing and summarizing staff development of remedial program strategies and thus aid as an input to the Commission decision-making process,
- identify areas where further information, collection, research or consultation is necessary,
- serve as a vehicle for encouraging consumers, industry and other government agencies to provide comment and analysis that can assist the commission in determining appropriate remedial action.<sup>13</sup>

Dealing with consumer product safety issues in a systematized fashion has led the CPSC to the application of what once was a rather abstract theoretical area, welfare economics, to the non-theoretical nature of the work and the concrete problems of day-to-day economic decision-making. They have clearly moved beyond what would be commonly thought of as an inflation impact statement and are providing, for certain product areas, a much more exhaustive socio-economic evaluation. For other product areas the work is at a less developed stage.

Different areas of consumer product safety are unevenly covered in terms of economic analysis; this applies also to Economic Impact Statements of different regulatory agencies. The EISs accompanying proposals with economic objectives have

---

13. U.S. Consumer Product Safety Commission, Product Profiles, (Washington, October, 1976), pp. 1-2.

been less satisfactory, although very uneven analytical quality is common within both groups of regulations. Generally, the EISs produced to date have been deficient in several respects.

The shortcomings of the EISs can be grouped under four general headings:

- failure to consider macroeconomic impact variables other than costs
- microeconomic data difficulties
- problems of evaluative technique
- ignoring alternative proposals.

While copies of every EIS accompanying socially-oriented proposals have not been acquired by the Working Group, the council reviews of these documents indicate that they all suffer from at least one of the four shortcomings listed above.

#### a) Macroeconomic Impact Variables

In some cases the EISs have ignored important macroeconomic effects of the proposed actions. An example that illustrates the importance of considering these macroeconomic externalities is the Consumer Product Safety Commission's (CPSC) proposed matchbook standard, published April 1, 1976. If implemented, it would have significantly increased concentration in the matchbook industry, because the smaller firms would have found it impossible to handle the addition to capital costs necessitated by the proposal.<sup>14</sup> The resulting impact on local labour markets would be another consequence to analyze, because half the existing producers were expected to leave the industry when the standard was implemented. Consideration of these and other socio-economic variables is crucial to a comprehensive understanding of the economic impact of regulatory proposals: such hidden costs may be reduced or eliminated by appropriate modifications to the proposed action.

---

14. "Comments of the Council on Wage and Price Stability on Proposed Matchbook Standards before the Consumer Product Safety Commission," June 1, 1976, p. 16.

## b) Microeconomic Data Difficulties

There is probably not one social regulatory proposal that does not provide an example of microeconomic data difficulties. These occur particularly when the value of expected benefits is being estimated for health and safety proposals. Although it is difficult to set a dollar value on the reduction of illness, disease and accidents,<sup>15</sup> and the existing valuation techniques produced significantly different numerical results, cost-effectiveness comparisons can generally be used to rank any number of proposals having a common objective. Most agencies shrink from assigning a dollar quantitative expression for the cost of death. The Occupational Safety and Health Administration, however, has adopted a reasonable approach by using two estimates in its analyses so that the sensitivity of results to the death factor can be assessed. The first estimate is \$250,000, which represents the straightforward, somewhat simplistic, approach of using the average present value of foregone life-time earnings; the alternative estimate is \$2 million, which takes into account the many factors in addition to foregone earnings.

Even more enigmatic problems arise when the incremental benefits accruing to "improved" standards or regulations are being estimated. The new evaporative hydrocarbon emission regulations proposed by the Environmental Protection Agency (EPA) are a perfect example of this.<sup>16</sup> Not all the microeconomic data difficulties arise on the benefit side, as the same EPA emission regulations will illustrate. On the one hand, the new regulations were estimated by the EPA to impose a cost of \$3.70 per vehicle. On the other hand, one automobile manufacturer estimated that they would cause a price increase of \$42.70 per vehicle. There are similar cost estimation difficulties with other proposals.

## c) Evaluative Technique

The problem to date with evaluative techniques has been the reluctance of agencies and departments to make use of them. That is, even when adequate cost and

---

15. "Comments of the Council on Wage and Price Stability on Architectural Glazing Materials before the Consumer Safety Commission" March 12, 1976, pp. 12-16

16. "Comments of the Council on Wage and Price Stability on Proposed Evaporative Emission Regulations for Light Duty Vehicles and Trucks before the Environmental Protection Agency" March 18, 1976 pp. 16-19.

benefit data have been compiled, there have been few attempts at comparing the benefit and cost estimates. It has largely been left to the council to perform cost-benefit or cost-effectiveness analysis on whatever data are contained in the EIS. In so doing, the council analysts have been careful to point out the weaknesses of their own work wherever they exist and usually suggest ways of strengthening and extending the analysis by obtaining better (or more) data of the sort that a comprehensive understanding of the proposal demands. For example, in examining the EIS submitted by the EPA in proposing water pollution standards for the iron and steel industries, the council analysts discovered that the assembled data suggested the possibility for cost savings with relatively small sacrifices in water quality improvement, if some aspects of the proposed standards were relaxed. Accordingly, the council urged further evaluative work, using problem-specific analytical techniques, so that economically sound guidelines could be established.<sup>17</sup>

#### d) Alternative Proposals

The final, generally recurring, shortcomings of the EISs involves the failure to consider alternative proposals and compare their associated benefits and costs with those of the proposed action. The council had suggested two ways of doing this depending on the circumstances. The first requires the consideration of a totally different course of action. For example, in its analysis of the OSHA proposals on occupational noise exposure regulations, which required basic engineering changes in the industries concerned, the council suggested that a program of hearing protector usage be considered as an alternative.<sup>18</sup> The second method involved the breaking down of a proposal into its components and subjecting them to incremental cost-benefit or cost-effectiveness analysis. For both the SCPC matchbook safety design and lawn-mower safety design proposals there were a number of mutually exclusive product

---

17. "Comments of the Council on Wage and Price Stability on Effluent Guidelines and Standards for Existing and New Sources in the Iron and Steel Manufacturing Point Source Category before the Environmental Protection Agency" June 24, 1976, pp. 19-24.

18. "Comments of the Council on Wage and Price Control regarding the Proposed Occupational Noise Exposure Regulation before the Occupational Safety and Health Administration" March 21, 1975, p.8.



specifications and corresponding benefits.<sup>19</sup> In each case it appeared that, on intuitive grounds, the benefit-cost ratios of the individual product specifications varied enough to warrant separate evaluations of each.

---

19. Comment on Matchbook Standards, op. cit., pp. 18-20

## 5. THE LIFE CYCLE OF REGULATORY CHANGE

This section summarizes briefly, with a few illustrations, the procedural steps which must be followed for a new or revised regulation to become part of the regulatory framework of the United States. The legislation creating each regulatory agency also includes the procedures that will be followed so that while there are some major features common to all agencies, each tends to have its own procedural idiosyncracies. The emphasis here will be on these major procedural elements. A technical and legal analysis of the U.S. regulatory process is presented in another study.

### 5.1 Initiating Regulatory Change

A petition to assess the need for new or extended regulations can be presented to a regulatory body by any person or group of persons, as well as by government departments or business corporations. The agency spokesmen indicated that the predominant source of petitions varies with the nature of the proposed regulation. The CPSC has found that product-specific petitions often originate from concerned citizens: for example, the Missouri Public Interest Research Group requested that the safety aspects of electric fans be investigated; a Washington schoolteacher suggested that poorly designed playground equipment was causing an inordinate number of injuries to schoolchildren. On the other hand, changes of a more general nature, such as the architectural glazing materials, were initiated by the industry in co-operation with the CPSC, while the proposed book-match safety standards originated within the CPSC itself. There are also cases where one regulatory agency petitions another for regulation or standards changes; the OSHA Occupational Noise Exposure regulations were developed at the request of the EPA, which believed the existing regulations were inadequate.

In theory, then, the first step in the creation of a regulation can be taken by any person in the country; in fact, it appears that product-specific regulations and standards are frequently suggested by persons or groups outside the government and more general social regulatory changes are initiated from within the public sector itself. There are no requirements with respect to the form of the petitions, although the agencies find scientifically-documented, analytical petitions easier to deal with. Internal government or agency petitions are often initiated on the basis of accident or health statistics. (While business firms do petition regulatory agencies for

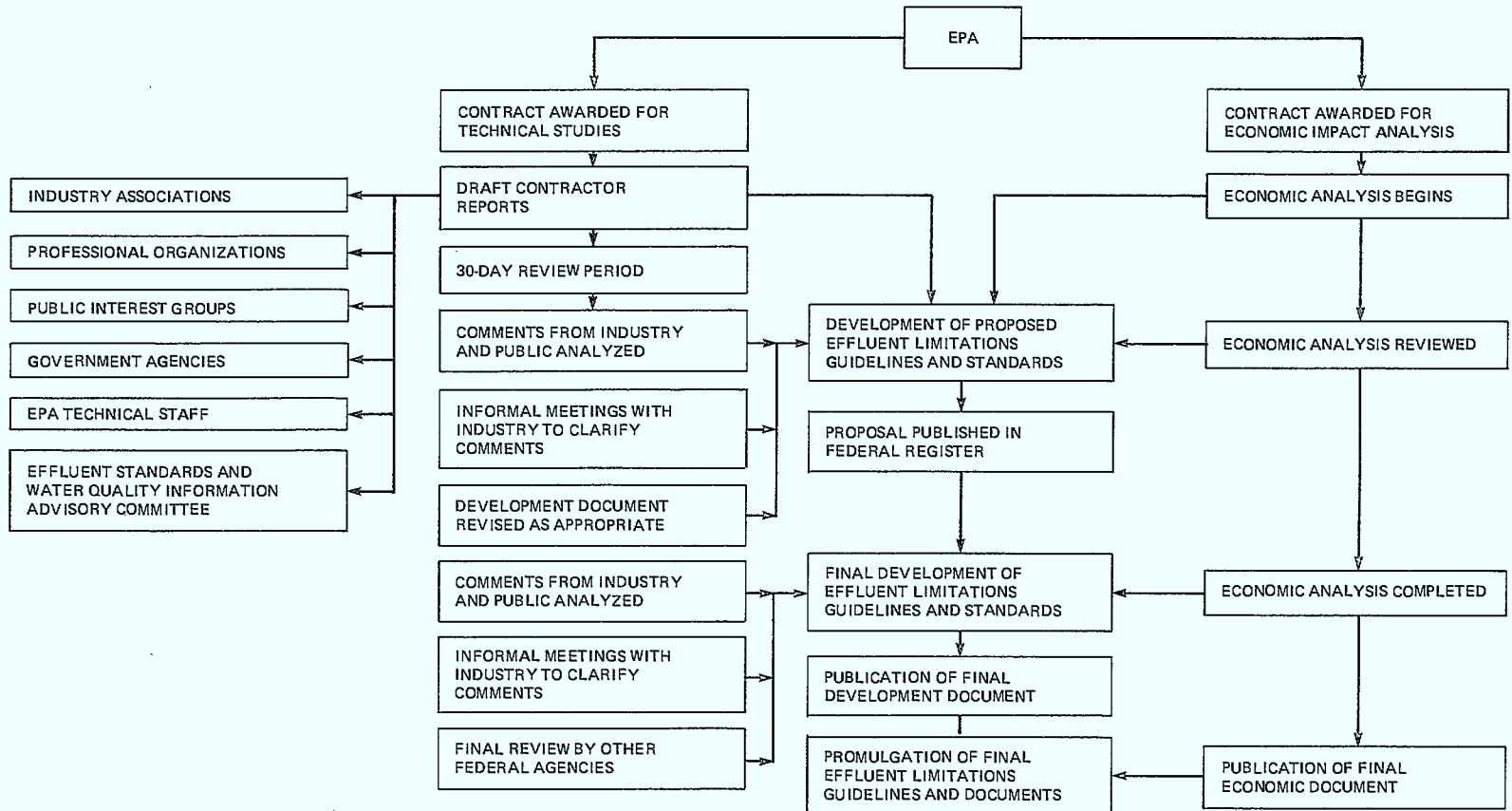
rules, regulations and standards changes, it is just as common for industries to establish voluntary regulations for their member companies. Such cases of self-regulation often eliminate the need for mandatory government regulations, although in some instances the self-regulation is more a matter of form than substance.)

## 5.2 Assessing the Petition

Having received a petition, the agency then proceeds to evaluate the case with respect to its legislative mandate and the criteria that have been established to carry it out. At this point in the assessment, global criteria developed to assess the health and welfare effects of the regulatory change are applied to determine whether a more detailed and more thorough evaluation should be undertaken. A preliminary technical possibility study is also carried out at this stage. If the regulatory proposal passes the general criteria and seems technically feasible, the decision is then made whether the agency can perform the work required with its own personnel or whether outside expertise is necessary. If external consultants are needed, a notice is published to invite study proposals, giving a submission period of 30 to 90 days. Where the problem is substantial, committees are established to ensure that the interests of all concerned parties are respected and that the evaluative analysis is objective and comprehensive. Two recent examples are the Standards Advisory Committee on Coke Oven Emissions and the Consumer Safety Glazing Committee. A schematic presentation of the development process for EPA effluent limitations guidelines and standards is given in the figure on the following page.

Unfortunately, the process does not always function as efficiently and effectively in practice. For example, the Consumer Product Safety Act constrains the ability of the CPSC to develop its own standards by requiring that it seek out other offerers to develop safety standards that deal with the problem it has identified. However, the CPSC has a policy of reimbursing only part of the offerers' costs. This effectively excludes consumer groups as a major source of input to the standards development process because they generally operate on very tight budgets and standards development is an expensive proposition; as a result, the industry ends up writing its own standards. The above-mentioned safety-glass standard is a case where the National Consumers League, in association with the American Society for Testing and Materials, competed with the trade association for the offerer contract. The proposal of the NCL/ASTM was unanimously selected as superior by the CPSC, but the contract was awarded

# DEVELOPMENT PROCESS FOR EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS



to the trade association when the NCL/ASTM demanded full reimbursement. The trade association requested only \$14,175 (to obtain consumer representation) although it initially requested a reimbursement of \$451,500. The major disadvantage in allowing outside groups to develop regulations is not that they will necessarily produce an inferior product but that the regulatory body is left with insufficient analytical capability to critically assess the resulting standards.<sup>20</sup>

It should not be forgotten that each regulatory agency has its own policies and procedures, so that the CPSC situation is not typical of all agencies.

### 5.3 Public Notice of the Proposed Regulation

The decision to undertake an in-depth study of an area ostensibly in need of regulatory change usually indicates that the agency will give public notice of the proposed new rules, standards or regulations in the Federal Register. This notice includes a history of the proposed change, a description of the new proposal and its rationale, an economic analysis, an environmental impact study, and studies of any other relevant considerations. The exposition of the proposed rules, standards or regulations must also include a description of the test used to check for conformity with the new rules and such tests must be capable of reproduction under enforcement circumstances. That is, the test must prove to be an efficient enforcement tool. When the technical details have been finalized a draft regulation is drawn up by the agency's legal staff. The analysis of the technical aspects of the regulatory problem is usually quite sophisticated, as can be seen by examining any of the proposed regulations and standards in the Federal Register. Consideration is given to a variety of details found in the situation judged to be in need of regulatory change. However, the analysis of the economic impact of the proposed regulations is usually much less sophisticated than that of the technical features of the regulations. The details of these shortcomings were covered in section 4 of this study.

An important feature of the public notice is the invitation to interested parties to submit their comments on the proposal to the regulatory commission. To

---

20. Nina W. Cornell, Roger G. Noll and Barry Weingast, "Safety Regulation," pp. 489-494 in H. Owens and C.L. Schultze, eds., Setting National Priorities The Next Ten Years (Brookings Institution, 1976).

ensure that such comments are received, agencies sometimes have the notice appear in other publications as well as the Federal Register, and directly advise parties who have previously expressed an interest in the case or who are likely to be interested. From 30 to 90 days from publication in the Federal Register is allowed for receipt of written submissions. In addition, oral presentations of data, views, or arguments on any aspect of the proposals can be made at informal or formal public hearings.

#### 5.4 Evaluation of Comments and Consequent Action

Having received the submissions, the agency evaluates their relevance to the case at hand. It may be that there are no substantive submissions and the rules or regulations are published in their final form with effective dates in the Federal Register. Yet substantive comments are often received and the agency finds it necessary to alter its proposals as a result. If the modifications are minor, then the regulations will be published in final form with the changes included. If there are major changes, the regulations must go through the proposal stage once again. In some cases, the criticism is so devastating that the regulations are abandoned altogether or re-classified as a low priority future development project. The evaluation of comments is an exhausting procedure because replies must be prepared to all submissions, and complex technical submissions must be answered in kind. Thus it is possible for this stage to extend for a considerable period of time; for example the Architectural Glazing Materials proposed safety standard, published in the February 11, 1976 Federal Register, with a proposed effective date of September, 1976, was petitioned for on June 30, 1973. (That effective date has been delayed, due in part to the Council on Wage and Price Stability's criticism of the CSPC's Economic Impact Analysis.)

#### 5.5 Promulgation of the Regulation

The final act in the development of a regulation is its promulgation as an addition to the regulatory framework. As indicated above, the effective promulgation date can be extended by the procedural steps that must be followed. In addition, the effective date is sometimes postponed in order to minimize the burden of compliance. This decision is made after weighing the benefits lost by delaying implementation against the costs imposed by effecting it earlier.

## 6. AN ASSESSMENT OF THE ECONOMIC IMPACT ANALYSIS PROGRAM

It is difficult to assess precisely the effectiveness of the Economic Impact Analysis Program because the program is not being implemented in an environment that allows exact observation and measurement. More specifically, the program has been appended to a process that is so technically complex and so politically intricate that only the naive could expect a cut and dried answer to the assessment question. Nonetheless, certain observations can be made on the basis of analyses produced by regulatory agencies and the council, as well as from interviews conducted with officials in Washington.

In certain agencies, such as the Consumer Product Safety Commission, the level of socio-economic analysis exceeds that required by the program. In fact, the product-profiles approach of the CPSC uses socio-economic analysis for planning and evaluating its activities, so that the Economic Impact Statement can frequently be derived from an existing body of analysis. In other cases, the program imposes a major cost on the regulatory agency, in terms of both resources and reorientation of approach to regulation development. In the majority of agencies concerned with social regulation, the requirements of the program represent a more rigorous and comprehensive way of evaluating the impact of their regulations on society.

### 6.1

The standard effectiveness evaluation technique for public expenditure programs is to develop indicators which measure the degree to which the program's objectives are achieved. For the Economic Impact Analysis Program, the objectives are:

- to make agencies, in their rulemaking processes, and in developing legislative proposals, more accountable for their actions' economic effects;
- to provide a management tool to the agency (and the OMB) for use in assessing the costs and benefits to society of a particular action and the costs and benefits associated with alternative government action;
- to reduce federal government-induced inflationary pressures on the economy by prevailing upon agencies to make more effective use of economic analysis in their decision making.

It is difficult to develop indicators to measure the achievement of these general goals, firstly because it is unfeasible to develop valid and reliable measures which record the achievement of these general objectives, and secondly because it is impracticable to expect to isolate the contribution of an individual program to change in such indicators because they are simultaneously being affected by a multitude of other factors. Similar problems can be expected with indicators that are more program-specific, such as change in the number of new regulations or change in the overall soundness of the regulatory framework. The program's success might be expected to be reflected, simplistically, in a reduction in the number of new regulations or, more appropriately, in an increase in the aggregate net present social value of new regulations.

Once again, the problem of identifying the variables determining such changes is almost unanswerable, particularly over the relatively brief period during which the program has been operating (many regulatory proposals which were being developed before the program existed have not yet reached the final stages in their life cycle).

## 6.2

The difficulties in producing practical and meaningful indicators of program effectiveness has led to the conclusion that, for present purposes, the qualitative assessment of the program by executive and professional officers in Washington is the most valid and reliable program evaluation technique. Accordingly, members of the study team interviewed officers from the Council on Wage and Price Stability, the Office of Management and Budget, regulatory agencies, legislative committees and private research institutes, and spoke with knowledgeable academics. It was learned that the OMB had used a similar qualitative evaluation technique in carrying out its confidential evaluation report of the program during the final months of 1976.

The first and most basic finding is that it is technically feasible to apply socio-economic analytical techniques to the assessment of social regulations. This is not to say that socio-economic evaluations are a problem-free exercise; the major shortcomings of the Economic Impact Statements have been documented earlier in this paper. Nevertheless it is clear from the U.S. experience that existing techniques can produce policy-applicable results. The quality of the analysis does tend to vary depending, among other things, upon the existence of previous theoretical work in the area, the attitude of agency managers toward socio-economic analysis, the politiciza-



tion of the market failure being corrected by the regulation, the availability of in-house socio-economic expertise to direct or monitor the analysis and the degree to which the major variables are amenable to discrete measurement. Needless to say, the analyses are of higher quality and are given greater acceptability when the cost-benefit or cost-effectiveness studies are wide-ranging and comprehensive and include the macroeconomic effects of the regulatory proposal. The use of sensitivity analysis further adds to the quality of the reports as it provides an indication of the stability of the results and the concomitant regulatory policy recommendations.

### 6.3

It is generally agreed that, in those agencies producing lower quality statements, an educational effect is taking place. That is, the scope of officials in these agencies is broadening and they are beginning to look beyond the technical effectiveness of regulatory design to the overall societal impact of their regulations. This reorienting of officials should yield continuing benefits, because the educational process they are presently undergoing should allow them to use economic analysis in their decision making in the future.

Furthermore, the council and the OMB have created a new set of criteria with which regulatory proposals are being evaluated and, in doing so, have established a mechanism that will discourage inappropriate rules or regulations. That is, the current socio-economic analysis of final regulatory proposals will likely have some deterrent effect on proposals at the petition stage of their life cycle and create pressure to abandon socio-economically unsound proposals. If this deterrent effect proves to be substantial, resources would be freed, within both the regulatory bodies and the central agencies, to be reallocated to the basic reform work outlined in the Agenda for Government Reform Act.

Finally, the benefits of a preventative program of this type seem, on average, to exceed their costs. The requirement that the expected costs and benefits to society of a new regulation be systematically assessed before its implementation is no doubt preferable to discovering, after implementation, that unforeseen market effects are imposing substantial additional costs on society. The Economic Impact Analysis Program simply requires the regulatory agencies and bureaus to look very carefully before they take the regulatory leap.

## 6.4

The U.S. procedures of public notice and comment, the environment created by the Freedom of Information Act, and the location of the Economic Impact Analysis Program in a powerful central agency are key ingredients to whatever success the program has had so far. Public participation in the process and public rights to relevant information clearly impose a cost in terms of government resources allocated to providing these services and in terms of the speed of promulgating new regulations. The optimal location on this trade-off curve cannot be determined by an economic calculus because the question ultimately requires a political answer. But it is clear that, while a certain degree of public participation is very helpful in promoting socio-economically sound regulations, there comes a point where the net effect of more participation is negative.

Moreover it is clear that, in order to have significant public participation in the regulatory process, there should be access to data and analysis that supports the regulatory proposal. It makes little sense to invite public participation if the material necessary to a complete understanding of the issues is denied them.

Finally, the decision to locate responsibility for administration of the program in an influential central agency is critical because of the evaluative nature of the function performed and the occasional need for bureaucratic arm-twisting. The Council on Wage and Price Stability finds that even the clout of the OMB and the Executive Office of the President is sometimes insufficient to influence the actions of regulatory agencies.

## 6.5

Discussions with Washington officials have led to the identification of at least four conditions necessary to the success of an Economic Impact Analysis Program:

- the governing statute(s) of regulatory agencies must allow economic analysis to have an impact on decision making (this is a problem in the U.S. with the EPA and OSHA);
- the key executives in an agency must support the program and must commit the resources necessary to carry out the analysis;

- an outside monitor and analytical critic is necessary to ensure that the program is given a high profile and thereby ensure that high quality analysis is produced and used;
- formal directives requiring agency compliance with the program are needed to reinforce the initiatives of both the internal supporters and external critics.

## 6.6

Mention was made above of the political colouring of the regulatory process and the difficulties that this creates for transforming socio-economic analysis into regulatory policy decisions. The influence of lobby groups, special interest parties and other factors on the final decisions may limit the contribution that socio-economic analysis can make to the regulation development process. It is sometimes true that regulatory policy decisions can only be made on the basis of philosophical or political positions. However, once these decisions have been made, socio-economic analysis can then be used in determining the most efficient and effective ways of achieving the major goals. In addition, the existence of a systematic analysis of regulatory proposals ensures that, when a political decision is taken at an operational level, it is taken with the knowledge of the socio-economic impact of that decision and the potential impact of alternative proposals. The level at which socio-economic analysis can be introduced into the decision-making process will vary with the regulatory agency and the issue at hand, but there are likely to be few cases where it will not be necessary for identifying the optimal strategy.