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94th Congress
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COMMITTEE PRINT

# TECHNIQUES AND PROCEDURES FOR ANALYSIS AND EVALUATION

## A COMPILATION OF PAPERS

PREPARED FOR THE

## COMMISSION ON THE OPERATION OF THE SENATE

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## NOTE

The conclusions and recommendations of the Commission on the Operation of the Senate are contained in the report *Toward a Modern Senate* (94th Congress, Sen. Doc. No. 94–278). The views and suggestions contained in the papers in this volume are those of the authors or the Commission staff, and are not necessarily those of the Commission or any member.

# PREFACE

In this and companion volumes, the Commission on the Operation of the Senate is publishing studies prepared for the use of its members by a variety of specialists drawn from universities, congressional support agencies, Federal agencies, State government, and the Senate itself.

We extend thanks to these individual authors for the many contributions they have made to the Commission's work.

In addition, the Commission wishes to thank those members of its own staff who provided special assistance in this endeavor.

Samuel V. Merrick, a professional staff member on loan from the Joint Committee on Congressional Operations, coordinated the work of specialists who looked at techniques and procedures for policy analysis and program evaluation.

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# INTRODUCTION

As it extends or revises existing laws and designs new ones, the Congress is often seeking to guess what the future will bring, and to meet or offset circumstances that will arise. Either that, or it is operating on the assumption that the future will be like the present.

Elsewhere the Congress watches over the actions of executive branch agencies to see how the laws are being administered and what new problems are developing, either with regard to methods and procedures, to the laws themselves, or to the conditions they were intended to affect.

In both cases the Congress must make use of research and analysis, whether it be weak or strong, casual assumption or careful examination. Whatever other uses Senators and Representatives may make of analysis—given limitations on their time and scope of interest—they have an essential need for futures research and for analyses to be used in oversight.

The papers in this volume discuss the techniques, procedures, and sources for these forms of analysis which are available to the Senate.

In the first, Louis Fisher, specialist in American national government with the Congressional Research Service, Library of Congress, discusses the Senate's legislative powers, providing a context for the studies that follow. His is not a discussion of policy analysis, but rather of the Senate's legislative authorities and practices.

Fisher explains that the Congress must delegate authority for some degree of specific program regulation to administrative agencies, and he shows why. In doing so, he sets the scene for the congressional oversight activities that Congress must subsequently carry out if it is to follow up on the laws it has enacted, the programs it has funded.

Fisher also explains that—

> Part of Congress' hesitancy in writing explicit statutory language reflects the dilemma of trying to legislate for future events. Courts for more than a century have recognized that it is essential to phrase statutes in general terms when events are "future and impossible to be fully known."

The next three papers discuss the application of the techniques and tools of futures research to the operations of the Senate. Marvin Kornbluh, Dennis Little, and William Renfro, all analysts in the Science Policy Division of the Congressional Research Service, provide a useful primer of futures methods, explaining the nature and uses of trend extrapolation, simulation modeling, cross impact and trend impact analyses, scenarios, and the Delphi study. Clement Bezold, assistant director of the Center for Governmental Responsibility at the University of Florida Law School, advances specific proposals for the use of futures studies by Senate committees. Imaginative, yet practical, his paper considers the futures research capabilities of the congressional support agencies, as well as the utility of executive branch resources. Then, Renfro, in an additional paper, looks at committee

use of forecasting techniques from a different perspective, and also cites the relevance of foresight to oversight.

Congressional oversight is the subject of the two papers that follow, the first by Joel Aberbach, associate professor at the Institute of Public Policy Studies at the University of Michigan, and the second by Susan Hammond, Harrison Fox, Jr., Richard Moraski, and Jeanne B. Nicholson. Hammond is on the faculty of the School of Government at American University, Fox is an experienced Senate staff professional, Moraski is a graduate student at American University, and Nicholson is visiting professor at the University of Maryland in Baltimore.

Both oversight studies review the factors that stimulate this type of activity in the Senate and those that are likely to increase the quality of oversight in the future. The separate conclusions of the two papers are similar but not identical.

Professor Aberbach also analyzes trends in congressional oversight behavior, reporting that the number of committee oversight hearings and meetings have increased significantly since 1969, except that House activity was greater than that of the Senate until the 94th Congress. He examines the reasons for these increases and suggests how they might be further stimulated.

Hammond, Fox, et al. report in detail on current practices and attitudes toward oversight on the part of Senators and staff, using data obtained from interviews, a questionnaire sent to committees, surveys of committee reports, proposed legislation relating to oversight, and committee briefs justifying budget requests for investigations. They conclude that a number of specified changes would result in better planned and more systematic oversight by the Senate.

Next, Keith Marvin of the Program Analysis Division of the General Accounting Office explains that support agency's work in program evaluation, with attention to its usefulness to the Congress for oversight. What is program evaluation, how is it done, and in what fields? Marvin gives examples of past and ongoing studies, and states that the major problem to be addressed is that congressional policymakers do not make full use of the evaluations available.

The last paper in this volume is by Richard Long, a staff analyst with the Commission, who examines the related question of how computers can serve Senate needs in the policy analysis area. His study picks up on a point raised in earlier papers—that is, that computers have a basic function in various types of analysis. Long finds no clear need for a major expansion of the existing computer capacity of the Senate. While logic suggests that more and better information cannot help but improve decisions, he says, new uses of computers should be begun only when costs and benefits have been scrutinized and found to be reasonable and practical in terms of Senators' real needs.

# THE SENATE'S LEGISLATIVE POWER

## By Louis Fisher

The Constitution grants to Congress the basic responsibility and power over legislation, giving the President only a qualified veto and the right to make recommendations. Yet in the minds of many it is the President, particularly in the 20th century, who carries out the duties of "Chief Legislator." In part this reflects a real shift of power. In many ways, however, the notion of the President's influence in legislative affairs is an illusion nourished by academics, the news media, and Congress itself. This paper explores the principal issues that presently confront the Senate in its exercise of legislative power.

### Specificity of Statutory Language

Not since 1935 has the Supreme Court struck down a delegation of power to the executive branch because legislative guidelines were inadequate. There were two such decisions in that year, both involving the National Industrial Recovery Act, which placed upon industrial and trade associations the responsibility for drawing up codes to minimize competition, raise prices, and restrict production. If the President regarded the codes as unacceptable he could prescribe codes and enforce them by law. The Court concluded that Congress had failed to provide adequate standards and guidelines for administrative action. In the *Schechter* case Justice Cardozo exclaimed, "This is delegation running riot." [1]

What the Court found intolerable was not delegation per se but the lack of statutory guidelines. The Court has repeatedly recognized that the nature of Government requires Congress to pass general legislation and leave to other branches the responsibility for "filling in the details." [2] While Congress cannot surrender the legislative power entrusted to it by the Constitution, neither is it possible for Congress to avoid delegating major powers and discretionary authority to the President. The tension between these two conflicting values was resolved by one author in the following syllogism: (1) Major premise: Legislative power cannot be constitutionally delegated by Congress; (2) Minor premise: It is essential that certain powers be delegated to administrative officers and regulatory commissions; (3) Conclusion: Therefore the powers thus delegated are not legislative powers.[3]

This kind of circular reasoning is evident in many Court decisions on delegation. The Court declares that it would be a breach of the

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[1] *Panama Refining Co.* v. *Ryan,* 293 U.S. 388 (1935); *Schechter Corp.* v. *United States,* 295 U.S. 495, 553 (1935).

[2] *Wayman* v. *Southard,* 10 Wheat. 1, 46 (1825). Congress may also legislate contingently, leaving to others the task of ascertaining the facts which bring its declared policy into operation; e.g., *Brig Aurora* v. *United States,* 11 U.S. (7 Cr.) 382, 386 (1813). See Louis Fisher, President and Congress 55–84 (1972).

[3] Robert E. Cushman, "The Independent Regulatory Commissions" 429 (1941).

Constitution for Congress to transfer its legislative power to the President, and yet in the very same decision the Justices will uphold the delegation in question.[4]

Why does the Court sanction such legislation? Often the statutory language is vague and ill-defined, such as general guidelines of "excessive profits," "reasonable rates," "unjust discrimination," and "in the public interest." Often the legislation is saved not because of specificity in the language but because Congress has supplied standards of due process to guide administrative officials. Such standards include the giving of notice and hearing by an agency prior to issuing a ruling or regulation. Also, findings of fact are supplied for the record and procedures exist for appeal. The Administrative Procedure Act of 1946 established various standards for agency rulemaking in order to guarantee fairness and equitable treatment. Through such standards Congress tries to eliminate or minimize the opportunity for executive caprice and arbitrariness.

Yet there is still a profound concern that Congress has handed over to executive officials too much of its legislative power. This is illustrated by the Economic Stabilization Act of 1970, which authorized the President to "issue such orders and regulations as he may deem appropriate to stabilize prices, rents, wages, and salaries at levels not less than those prevailing on May 25, 1970." Several parties took this statute to court to test its constitutionality. In one of the principal decisions, Circuit Judge Leventhal upheld the delegation by noting that some of the congressional guidelines had been included in the committee reports and legislative history: "Whether legislative purposes are to be obtained from committee reports, or are set forth in a separate section of the text of the law, is largely a matter of drafting style." It is more than that, however, for agencies are bound by law but not necessarily by nonstatutory controls (a point pursued in the next section). As for the 1970 act, it was subsequently amended to provide for more explicit standards and guidelines.[5]

In 1974 two members of the Supreme Court objected to excessive delegation of legislative power to the Executive.[6] The issue was raised more prominently when President Ford imposed a fee on imported oil on January 23, 1975. The plan called for an initial fee of $1 a barrel, followed by increases to $2 on March 1 and to $3 on April 1. The Ford administration contended that there were three types of measures: Taxes, tariffs, and fees. The first two had to be authorized by Congress while a fee on imported material "may be set for nonrevenue purposes and need not be legislated."[7]

An appeal was made to the courts to have the fee declared illegal. Congressman Robert Drinan, joining with other parties, argued that the imposition of "license fees" was a circumvention of the duty system established by the Constitution. U.S. District Court Judge John

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[4] For example, *Field* v. *Clark*, 143 U.S. 649, 692 (1891), and *Hampton & Co.* v. *United States*, 276 U.S. 394, 406 (1928).

[5] *Amalgamated Meat Cutters & Butcher Work* v. *Connally*, 337 F. Supp. 737, 750 (D.D.C. 1971). The 1970 Act (84 Stat. 799) was extended by 84 Stat. 1468, 85 Stat. 13, and 85 Stat. 38, before being fundamentally rewritten by an act of December 22, 1971 (85 Stat. 743) which provided for more specific standards, procedural safeguards, and judicial review.

[6] *California Bankers Assn.* v. *Shultz*, 416 U.S. 21, 90–93 (1974) (Justice Douglas and Brennan dissenting).

[7] *Algonquin Sng., Inc.* v. *Federal Energy Admin.*, 518 F.2d 1051, 1060 (D.C. Cir. 1975).

Pratt decided that the fee program was one of several actions covered by the Trade Expansion Act, which permitted the President "to adjust imports." In answer to those who regarded the section as an undue delegation of legislative authority, Judge Pratt remarked that the "nondelegation doctrine is almost a complete failure." [8]

Judge Pratt was reversed by the U.S. Court of Appeals for the District of Columbia. Circuit Judge Tamm, writing for a 2–1 majority, concluded that the Trade Expansion Act did not authorize the fees imposed by President Ford. A review of previous trade legislation convinced him that congressional delegations had been "narrow and explicit in order to effectuate well-defined goals." He also rejected the Administration's interpretation of a fee on imported materials. He cited a Tariff Commission report that called the license fee mechanism "substantially a duty system." Moreover, the fee imposed by President Ford would generate an estimated $4.8 billion a year, which was more than the total amount of revenue derived from customs in 1974.[9]

The fee-duty distinction was not addressed by the Supreme Court, in 1976, when it upheld the license fees. Justice Marshall, writing for a unanimous Court, stated that the fees were within the scope of the Trade Expansion Act. That the act itself delegated broadly—authorizing the President to "take such action, and for such time, as he deems necessary to adjust the imports of [the] article and its derivatives so that . . . imports [of the article] will not threaten to impair the national security"—did not disturb the Court. Justice Marshall was satisfied that the President's action was authorized by the language of the Trade Expansion Act and its legislative history. He maintained that the legislative standards were clearly sufficient to meet any delegation doctrine attack.[10]

It is evident from these examples that the impulse for more explicit standards for administrative action must come from Congress itself, not the courts. But a number of practical hurdles discourage specificity.

## Reasons For Broad Delegation

Vague and general grants of legislative power have been criticized from various points of view. There are those who believe that political accountability depends on the establishment of clear guidelines for administrators.[11] A more contemporary concern is the stress on program evaluation. How can Congress, assisted by the General Accounting Office and other staff support, determine whether programs are being carried out effectively unless the original legislative goals are stated in clear terms?

Part of Congress' hesitancy in writing explicit statutory language reflects the dilemma of trying to legislate for future events. Courts for more than a century have recognized that it is essential to phrase statutes in general terms when events are future and impossible to be

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[8] *Commonwealth of Massachusetts* v. *Simon,* Civil Action No. 74–0129, and *Algonquin Sng., Inc.* v. *Simon,* Civil Action No. 75–0130 (D.D.C. 1975), reprinted at 518 F.2d 1064 (1975).

[9] *Algonquin Sng., Inc.* v. *Federal Energy Admin.,* 518 F.2d 1051, 1056, 1061 (D.C. Cir. 1975).

[10] *FEA* v. *Algonquin Sng. Inc.,* 49 L Ed 2d 49, 57 (1976).

[11] Theodore J. Lowi, "The End of Liberalism" 298 (1969).

fully known. There are many subjects of government upon which wise and useful legislation must depend, which cannot be known to the law-making power, and must, therefore, be a subject of inquiry and determination outside of the halls of legislation.[12]

Toward the end of the 19th century and the first part of the 20th, administrative discretion was broadened because the conditions in the economy to be regulated were increasingly complex, interrelated, and in process of constant change. Courts repeatedly held that broadness and generality in statutes are unavoidable. Because of the unique circumstances existing in different regions and localities, Congress could only declare a general policy and leave to administrative officers the duty of applying the statute to particular cases.[13]

Kenneth Culp Davis, a prominent authority on administrative law, has identified a number of other reasons for broad delegation. Legislators and staff generally lack the expertise to draft specific language for highly specialized subjects. Even experts in the agencies and in the private sector find it difficult to suggest strict standards that will be practical and workable. These circumstances, faced by legislators and administrators alike, invite vague formulations of objectives. Furthermore, specificity of language may jeopardize the consensus needed to pass legislation and attract agency and interest group support. Under such conditions, Davis concludes, vague or meaningless standards may be preferable to precise and meaningful ones.[14]

This does not mean that administrators are free to work in an environment without guidelines. Instead of relying on more stringent legislative standards, Davis would rather have guides furnished by the administrators who have to implement the program. If Congress fails to provide adequate standards, agency officials have to use their rulemaking authority to establish criteria for further action. Congress may also control administrative action by changing authorization language or even by placing limitations in an appropriation act.[15] In the event that the President issues Executive orders pursuant to delegated authority, and Congress wants to revoke the orders, such action is well within its power.[16] Congress may also include in a statute a requirement for review at stipulated periods, and may provide for a termination date for delegated authority (so-called sunset or self-destruct provisions).

### Nonstatutory Controls

Vagueness in legislation is often remedied, to some extent, by details that appear in the legislative history: committee reports, committee hearings, floor debates, correspondence from review committees, and other sources. This narrows considerably the range of agency discretion. For example, the Public Works Appropriations Act for fiscal 1976 contained a lump sum of $1.2 billion for construction by the

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[12] Locke's Appeal, 72 Pa. St. 491, 498–499 (1873).

[13] E.g., *Buttfield* v. *Stranahan,* 192 U.S. 470, 496 (1904); *Union Bridge Co.* v. *United States,* 294 U.S. 364, 386 (1907); *Monongahela Bridge Co.* v. *United States,* 216 U.S. 177 (1910); and *United States* v. *Grimaud,* 220 U.S. 506, 516 (1911).

[14] Kenneth Culp Davis, "Discretionary Justice" (1969) and his article, "A New Approach to Delegation," 36 U. Chi. L. Rev. 713 (1969).

[15] *Eisenberg* v. *Corning,* 179 F. 2d. 275 (D.C. Cir. 1949).

[16] *Feliciano* v. *United States,* 297 F. Supp. 1356, 1358 (D. Puerto Rico 1969), aff'd, 422 F. 2d 943 cert. denied, 400 U.S. 823 (1970).

Corps of Engineers. But the two Houses of Congress had quite specific projects in mind in arriving at that sum. The projects are listed in the conference report, grouped together State-by-State so that each Member knows the projects to be carried out.

Nonstatutory controls serve the purposes of both branches. Neither Congress nor the agencies are always certain of the specifics to be included in a statute. If judgments and predictions are wrong, the statute has to be rewritten. Putting the guidelines in nonstatutory sources introduces valuable flexibility to the legislative process. If adjustments are necessary after passage of the law, committee and agencies can depart from the nonstatutory scheme without having to write a new statute.

The nonstatutory system of legislative control is fragile; much depends on a "keep the faith" attitude among agency officials. They must want to maintain the integrity of their budget presentations and preserve a relationship of trust and confidence with congressional committees. If they ever violate that trust and abuse their discretionary power, they have to face the prospect of budget cutbacks, restrictive language in statutes, and line-item appropriations.

Part of this evolution can be illustrated by the history of reprograming of funds by the Defense Department. Reprograming consists of the shift of funds within an appropriation account (for example, aircraft procurement, Navy), in contrast to the shift of funds from one account to another (for example, from aircraft procurement, Navy to weapons procurement, Navy). The latter transactions are called transfers and require statutory authority. Reprograming is basically a nonstatutory development; controls are exercised for the most part through committee reports, agency directives, and a complicated set of understandings between the two branches.

Several decades ago the technique of legislative control relied basically on review by two members from each of the Appropriations Committees: the chairman of the defense appropriations subcommittee and the ranking minority member from that subcommittee. Gradually the subcommittee began to place restrictions in the committee report on the defense appropriations bill. Those restrictions, in turn, were incorporated in the Defense Department directives and instructions. Review extended to a greater number of committee members—from the chairman and ranking member to the full subcommittee, and sometimes to the full committee. The authorization committees (Armed Services) became involved. At times the committees would agree that the decision was so crucial that it should be made on the floor of Congress rather than worked out as an agency-subcommittee agreement.[17]

Although the procedure has worked well, occasionally there have been what Congress regards as bad-faith efforts to circumvent the understandings. Particularly serious to Congress was the practice of some defense agencies to request funds for a program, be turned down, and then reprogram other funds to that very program. This completely frustrated the congressional review and nullified legislative action. After warnings were issued by the committees having jurisdiction—both Appropriations and Armed Services—it was decided to

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[17] For the development of defense reprograming, see Louis Fisher, "Presidential Spending Power" 80–98 (1975).

place a restriction in statutory form. For a number of years now it has been the practice of Congress to insert this language in the Defense Appropriations Act: "No part of the funds in this act shall be available to prepare or present a request to the Committees on Appropriations for the reprograming of funds, unless for higher priority items, based on unforeseen military requirements, than those for which originally appropriated and in no case where the item for which reprograming is requested has been denied by the Congress."[18] The clause on "higher priority items" is intended to discourage agencies from trying to use extra funds that become available on marginal and low-priority programs.

The tenuous nature of nonstatutory controls is evident from an incident in 1975. The conference report on the defense appropriations bill for fiscal 1975 had directed the Navy to produce, as its air combat fighter, a derivative of the plane selected by the Air Force.[19] Instead, the Navy picked an aircraft that was not a derivative. A contractor, who had bid on the expectation that the Navy would follow the understanding in the conference report, lodged a formal protest with the General Accounting Office to the effect that the action was null and void. Among the arguments presented by the contractor was the claim that directives placed in a conference report were binding on an agency.

The GAO disagreed. The Comptroller General ruled that such directives had legal force only when some ambiguity in the language of the public law required recourse to the legislative history; otherwise, agencies followed nonstatutory controls for practical, not for legal, reasons. Agencies may ignore nonstatutory controls, said the Comptroller General, but only "at the peril of strained relations with the Congress." To be legally binding the directive on the Navy aircraft had to appear in the public law.[20]

If there is litigation, the legislative history of a statute may be controlling. But Congress and the public cannot enter the courts to resolve every grievance. Generally the nonstatutory controls depend on good-faith efforts and a spirit of cooperation by agency officials.

Do agencies regard nonstatutory controls as less binding than in prior decades? If so, is that because of politicization at the top ranks of agencies and less influence by careerists? The experience during the Nixon years may be largely an aberration, yet similar breakdowns in executive-legislative understandings have marred the records of other recent administrations. If some type of fundamental shift is underway, producing a heightened sense of agency independence and White House autonomy, Congress may have to depend more heavily on statutory provisions and sharper legislative guidelines.

## Legislative Vetoes

Another technique used by Congress to retain control over delegated authority is to attach strings, or conditions, to a statute. One of the more controversial conditions is to subject Presidential action to some

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[18] As an example, see sec. 741 of the Defense Appropriations Act for fiscal 1977, Public Law 94–419, 90 Stat. 1298.

[19] H. Rep. 1363, 93d Cong., 2d sess. 27 (1974).

[20] General Accounting Office, "LTV Aerospace Corp.," B–183851 (Oct. 1, 1975), at 21–22.

type of legislative veto by both Houses, by either House, or even by congressional committees.

An early use of this approach involved the delegation of reorganization authority to the President in 1938. President Roosevelt asked for authority to reorganize the executive branch, subject to disapproval by a joint resolution of Congress. The latter would have to be presented to the President for his signature. If a joint resolution were to be vetoed, legislators doubted that they could muster the necessary two-thirds majority in each House to override the President. In effect, they would have delegated an authority by majority vote but could not regain control without a two-thirds majority. Partly because of that misgiving, the proposed reorganization bill was not enacted in 1938.

The next year some Members proposed that reorganization plans be subject to disapproval by a concurrent resolution, which requires passage by each House but is not presented to the President. This raised the question of whether a concurrent resolution would be "legislative in effect," for the Constitution provides that "every order, resolution, or vote to which the concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President. . . ." That language has not been strictly adhered to. For example, Congress adopted constitutional amendments by passing resolutions and referred them not to the President, but directly to the States for ratification. That procedure was upheld in *Hollingsworth* v. *Virginia* (1798).[21]

Also, Congress early developed the practice of passing simple resolutions (adopted by either House) and concurrent resolutions (by both Houses) for internal, housekeeping matters. Since they were not regarded as "legislative in effect," there was no need to present them to the President. A Senate report in 1897 concluded that "legislative in effect" depended on the substance, not the mere form, of a resolution. If it contained matter that was "legislative in its character and effect, it must be presented to the President." [22]

Nevertheless, concurrent resolutions gradually became a vehicle to control executive actions. Congress relied on that procedure in 1906 to direct the Secretary of War to make investigations in river and harbor matters. A 1903 act provided that even simple resolutions were sufficient to direct the Secretary of Commerce to make investigations.[23]

It was against this background that Congress extended the use of concurrent resolutions to protect its legislative prerogatives. During the 1939 debate on the reorganization bill, Congressman Cox argued that the concurrent resolution feature was not legislative in effect. Instead, it was a condition attached to reorganization authority delegated to the President. If he disagreed with the condition he could exercise his veto power. Otherwise, the signing of the bill would indicate his willingness to abide by the condition. The House Select Committee on Government Organization defended the concurrent resolution procedure by pointing to a recent Supreme Court decision that upheld a delegation of authority to the Secretary of Agriculture. That

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[21] 3 Dall. 378.
[22] *Hinds' Precedents*, IV, § 3483.
[23] Id., II, §§ 1593–94.

authority was contingent upon the votes of farmers during a referendum. To the committee it seemed absurd "to believe that the effectiveness of action legislative in character may be conditional upon a vote of farmers but may not be conditioned on a vote of the two legislative bodies of the Congress." [24]

As enacted in 1939, the Reorganization Act authorized the President to submit plans for executive reorganization. The plans would take effect after 60 days unless Congress, within that time, disapproved them by concurrent resolution. Extension of the authority in 1949 permitted disapproval by a single House. Presidents, whatever constitutional reservations they may have had over the legislative veto procedure, acquiesced in this type of conditional legislation. They realized that Congress would not delegate such authority without attaching strings to it.

That the legislative veto parts company with the procedures set forth by the Constitution is obvious. But so do many executive practices. Legislative recommendations by the executive branch do not always come to Congress for review and action; often they are accomplished unilaterally by Executive order, proclamation, or agency rulemaking. In the words of Justice White, in a 1976 decision, legislative veto—even by a single House—"no more invades the President's powers than does a regulation not required to be laid before Congress." [25]

The legislative veto procedure is of special concern when used by Congress not for the purpose of retaining control over its own powers, which it may temporarily delegate, but to control actions and responsibilities that are executive in nature. In this type of situation Congress does not attach conditions to delegated authority; it attempts to control what the President claims belongs to him under the Constitution.

For example, suppose that the President enters into an armistice with a foreign country. Could Congress veto that action by passing a concurrent resolution, or simple resolution, as contemplated by pending legislation on executive agreements? Can Congress, under the War Powers Resolution, pass a concurrent resolution to order the President to withdraw troops when he determines that their presence is needed to protect American lives? While Congress is at liberty to pass such resolutions, the President may conclude that his obligations under the Constitution cannot be circumscribed by one-House or two-House vetoes. However obscure and ill-defined the realm of foreign affairs and national security, it is far different from reorganization authority, which is congressionally based and may be granted and withdrawn as Congress decides.

A different type of controversy is involved in the present effort of Congress to control administrative rulemaking. On September 21, 1976, the House of Representatives voted 265–135 in favor of H.R. 12048, which included a legislative veto over agency rules and regulations. The vote fell short of the two-thirds majority needed under suspension of the rules. Agency rulemaking cannot be categorized neatly as legislative or executive. It can be looked at as a fusion of both: Legislative in the sense that agency regulations have the force

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[24] H. Rep. 120, 76th Cong., 1st sess. 6 (1939). See *Currin* v. *Wallace*, 306 U.S. 1 (1939).
[25] *Buckley* v. *Valeo*, 46 L. Ed. 2d 659, 839 (1976).

of law, executive in the sense that agencies are carrying out the purposes enacted by Congress.[26]

The debate on the Administrative Rulemaking Reform Act of 1976 includes a variety of complex points made by proponents and opponents. Practical, as well as constitutional, issues are at stake.[27] For the purpose of this paper it is enough to discuss the potential impact of the legislation on delegated power. While the reform would permit Congress to review—and reject—regulations issued by agencies, it might also encourage Congress to legislate with even fewer guidelines. Advocates of vague delegations could always argue that Congress would be in a position to review regulations to make sure that they square with congressional intent. But if the statute is vague, and if the legislative history supplies inadequate or conflicting directives, it becomes impossible to know whether the agency is departing from the legislative purpose. Nor would courts, through their review of agency rules, be any better prepared to determine the appropriateness of a regulation.

A second question concerns the scope of the Administrative Rulemaking Reform Act. With few exceptions, all agency regulations would be subject to legislative review and legislative veto. Is agency abuse so widespread that all regulations should be scrutinized by Congress? Is there, in fact, abuse, or does the problem originate because of a lack of clear and understandable legislative standards? If the latter, Congress could devote more time and thought to clarifying statutory objectives instead of injecting itself so deeply in the administrative process. Congress could exercise its policymaking prerogative directly through legislation, as was the original intent of the Constitution, rather than placing upon agencies the responsibility for articulating national standards. Alternatively, Congress (as has been the practice), can apply the legislative veto more selectively to agencies that require special attention.

A third issue relates to the purpose of the doctrine of separated powers. In part it was adopted by the framers to provide a system of checks and balances in the National Government. But the creation of a separate executive was also meant to impart efficiency and accountability to administration. The actions of the Continental Congress, from 1774 to 1787, provided the framers with evidence of the limitations and frailties of a legislative body that had to both pass laws and administer them.[28]

Perhaps the goals of unity and responsibility in the Executive are impossible to achieve in the 20th century, particularly with the growth of the Federal Government, the dozens of quasi-independent regulatory agencies, and the large number of off-budget agencies. No doubt the executive branch is splintered in ways never anticipated by the Founding Fathers. But before abandoning the scheme of separated powers, and the division of labor between Congress and the President,

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[26] For the debate and vote, see 122 Congressional Record H10666–10719 (daily ed. Sept. 21, 1976).

[27] Several cases are currently pending before the courts which raise the question of the constitutionality of the legislative veto: *Clark* v. *Valeo* (C.A.D.C. No. 76–1825), concerning congressional veto of regulations issued by the Federal Election Commission, and *Atkins* v. *United States* (Ct. Cl. No. 41–76), involving congressional veto of Federal salaries (2 U.S.C. 359).

[28] Louis Fisher, "President and Congress," 1–27 (1972).

we ought to consider individual reform efforts in the broader context of fundamental principles. The demarcation between legislative and executive, though not precisely delineated in the Constitution, was done for a purpose and it has yet to be demonstrated that the purpose belongs to a day gone by.

## Legislative Initiative

For a number of decades it has been the practice of scholars to characterize the President as "Chief Legislator." This image, which appears to satisfy some yearning for simplicity and idolatry, gives the executive branch undue credit. Every statute, Woodrow Wilson noted long ago, "may be said to have a long lineage of statutes behind it. * * * "[29] An executive agency, or the President, often puts into motion an idea already conceived and nurtured by legislators and private groups. Congressional staff assistants, who play a major role in initiating a bill, may prefer to conceal that fact out of deference to a Member of Congress. Private organizations, responsible for drafting a bill and mobilizing support, may deliberately obscure their contribution in order to enhance prospects for passage.

After a Presidential proposal reaches Congress, it is usually reworked considerably in committee and on the floor. Yet upon passage it may retain the designation "the President's bill." Even in cases where the President's proposal emerges unscathed from the legislative mill, that may demonstrate not his power to impose so much as his accurate assessment of what Congress and its Members are willing to accept. Still, the President dominates the media, hands out the pens upon signing a bill, and manages to retain the largely fictitious title of Chief Legislator.

The responsibility for this misconception cannot be laid solely at the feet of academics and the media. Members of Congress often prefer to wait for an executive request for legislation rather than take the initiative. Even when they do initiate legislation, they submit to a lengthy review process by the administration. A negative response by the Office of Management and Budget, stating that the proposal is "not in accord with the program of the President," is regarded as a near-fatal announcement. Only in a few cases, such as the War Powers Resolution and anti-impoundment legislation, will Congress persevere in the face of determined executive opposition.

And whereas Congress is expected to tolerate executive indifference or disdain regarding its proposals, there is strong pressure on Congress to act with alacrity on what the President wants. Failure to do so reinforces the image of Congress as a slothful and nay-saying institution, even when the executive proposal is lacking in merit or of low priority. Why is a legislative "no" resented by the public, and the media, while a Presidential veto has the aura of a heroic act? Congress is consistently at a disadvantage when compared to the executive branch. If a Member of Congress travels to a foreign country his activity is condemned as a "junket." A similar journey by an executive official is praised as a high mission of statecraft. If the Presi-

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[29] "Congressional Government" 297 (1887).

dent sends up a supplemental request for funds not contemplated in his budget, it appears to meet a new and pressing need. An effort by Congress to add to his budget, and reshape it along legislative priorities, is castigated as irresponsible and profligate.

This is not simply the fault of a biased or ill-informed press. Congress and the President behave differently when their institutions are under attack. It is characteristic of members of the executive branch to join ranks and present a solid front, defending the President's program and record. Frequent shifts of 180° are made without apology or embarrassment. In contrast, Members of Congress have a facility for demeaning their own institution. "I am frugal but Congress is spendthrift," is the message sent to constituents at home. In the words of Richard D. Fenno, Jr.—

> Members run for Congress by running against Congress.

The Senate could take steps to foster a more accurate image of Congress—to show the actual role of legislators in initiating policy, incubating ideas, and reshaping Presidential proposals. Press announcements from Congress might be an effective means of claiming credit. This would require Congress to vest in some central agency—either for Congress as a whole or for each House—the authority and responsibility for preparing releases for the press.[30]

The difficulties in creating such a central office are not hard to imagine. The majority and minority parties will differ on the accomplishments of Congress. Individual Senators will prefer to handle their own media contacts without interference from a central office. Yet after a bill has emerged from conference, the very process that made accommodation possible between the House and the Senate, and between the majority and minority parties, should create a climate in which the legislative record can be set straight.

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[30] Assistance could be provided by the Congressional Research Service, which, upon request by any committee or Member, will prepare a memorandum with respect to 1 or more legislative measures "upon which hearings by any committee of the Congress have been announced, which memorandum shall contain a statement of the purpose and effect of each such measure, a description of other relevant measures of similar purpose or effect previously introduced in the Congress, and a recitation of all action taken theretofore by or within the Congress with respect to each such other measure." 2 U.S.C. 166(d)(7).

# THE TOOLS OF FUTURES RESEARCH: SOME QUESTIONS AND ANSWERS

By Marvin Kornbluh, Dennis L. Little, and William L. Renfro

## Introduction

Futures research is an emerging discipline which emphasizes serious thinking about, and planning for, the future. It utilizes studies covering the longer term, that is, 5 years or more. Typically, the discipline attempts to identify alternative future states and conditions. Sometimes, it also tries to estimate the likelihood that each alternative will occur. In addition, such research may speculate on the impacts of anticipated changes and the issues they could raise. Finally, futures research may explore ways to monitor and control likely future changes.

Futures studies can range from thinking about the future of some particular area of human activity such as education, health, or the environment to the future of world society. These studies utilize various forecasting, planning, and thinking methods and diverse quantitative and qualitative approaches to extrapolate from the past and present into the future and to discover trends which might modify these projections. Properly done, futures studies can be explicit about the values and assumptions that lead to specific alternative futures. Not infrequently, futures analysts review, evaluate, and attempt to improve the methodologies used to describe, explore, and prescribe the future.

Futures research can have utility for policy analysis and policy formulation in the legislative context. Some possibilities here include:[1]

1. To detect emerging and longer term trends, issues, conditions, and interrelationships (early warning system).
2. To signal the need for wholly new legislation.
3. To prepare major policy speeches and position papers looking toward the future.
4. To identify future implications of present and proposed legislation.
5. To facilitate hearings by identifying possible themes, critical questions, and appropriate participants.
6. To assist in the preparation of futures-oriented bills.
7. To provide a systematic, replicable framework for gathering information about the future relevant to current policy decisions.

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[1] Adapted from U.S. Congress. House. Committee on House Administration. Ad Hoc Subcommittee on Computers. Library of Congress Information Resources and Services for the House of Representatives. Washington, U.S. Gov't. Print. Off., 1976. At head of title: 94th Congress, 2nd session. p. 43.

8. To check on the accuracy and reliability of futures information arrived at through less formal means.

There are numerous tools used in futures research as well as a number of ways to organize and array them. For example, a 1975 Stanford Research Institute study identified 100 reasonably distinct tools from the futures research literature.[2] They were eventually grouped into three principal categories.

The present report analyzes two of the more commonly used tools in each of the three categories. The tools and their respective categories are:

1. Tools based on historical trends and projections:
   (*a*) Trend extrapolation.
   (*b*) Trend impact analysis.
2. Tools based on models and simulations:
   (*a*) Computer simulation modeling.
   (*b*) Cross-impact analysis.
3. Tools based on qualitative and holistic approaches:
   (*a*) Delphi.
   (*b*) Scenarios.

In the succeeding pages these tools are examined in terms of five guiding questions. This question and answer format is intended to facilitate the direct comparison of the tools, and to aid in distinguishing the chief attributes of each. The questions are the following:

1. What is it and what are its chief characteristics?
2. What are the capabilities which may make it useful in the policymaking process?
3. What are the limitations which may inhibit its usefulness in the policymaking process?
4. What are some examples of its application to public policymaking?
5. What resources are needed to obtain its advantages?

In addition some useful references for each tool are listed.

## Trend Extrapolation

### *What Is Trend Extrapolation and What Are Its Chief Characteristics?*

A trend can be regarded as any information which shows historic developments of some factor, indicator, or set of events. All that is needed is for the factor to be measured at periodic intervals of time and the results to be shown in tables, charts, graphs, or a chronology of events. Based on the historical data a trend can be extended into the future to generate an extrapolation or forecasted trend. For example, funds provided for aid to dependent children can be plotted for past years and the trend extended into future years. Normally, extrapolations are not carried further into the future than the time period for which we have historical data.

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[2] Mitchell, A., and others. Handbook of Forecasting Techniques. Menlo, Park, Calif., Stanford Research Institute. (Prepared for the Institute for Water Resources, U.S. Army Corps of Engineers, Fort Belvoir, Va.)

In constructing a historical trend, data should be available for regular time intervals—1 year, 5 years, etc. In addition, the data should reflect a consistent measurement—the same thing is to be measured at each interval. For example, if a trend showing production of compact cars is being developed, data on compact trucks should not be included for one time period and be excluded at another. In graphic terms, the historical trend is the line obtained by connecting the data points manifesting the time periods.

The extrapolations of historical trend lines can be generated by judgmental or by mathematical methods. Judgmental methods use the opinion or judgment of one or more forecasters who may be researchers, policymakers, or simply interested citizens, to extend a historical trend line. These forecasters might review historic growth rates, external developments, and personal forecasts, and integrate all of these to produce an educated opinion or guess of a future path of a particular trend. There are also sophisticated trend extrapolation methods which use mathematical and statistical means to "fit" a curve to historical data. Then a fitted curve is extended forward in time to make the extrapolation.

*What Are the Capabilities of Trend Extrapolation Which May Make It Useful in the Policymaking Process?*

Perhaps the key advantage of trend extrapolation is its broad range of applicability. Any data or information that has been measured regularly over some reasonable time period is naturally considered a trend that can be extrapolated. Trends have been formulated for many areas of social, economic, technological, and physical behavior. Trends in related areas can be laid side by side and previously perceived relationships uncovered.

For many important trends, a precise understanding of the governing cause-and-effect relationships is not known or can only be approximated by lengthy complex techniques such as simulation modeling. Without some understanding of these relationships, useful forecasting is extremely difficult. However, by assuming that the causal relationships, whatever they are, will continue essentially intact—an assumption that is usually correct initially and incorrect eventually—it is often possible to make reasonably reliable forecasts.

Also, since trend extrapolation assumes that things continue as they have been, extrapolated trends provide a view of the future without any policy changes. This view of the future can be used to evaluate the need for and role of many types of policy changes.

*What Are the Limitations of Trend Extrapolation Which May Inhibit Its Usefulness in the Policymaking Process?*

The basic assumption that makes trend extrapolation easy to use—the assumption that whatever forces directed the path of the trend in the past will continue in the future—is perhaps its greatest weakness. Forces that shaped the past will likely change, so that eventually a trend will vary from its historic path. In addition, surprise developments can dramatically shift a trend, at least for a time. These include wars, assassinations, riots, fads, as well as policy decisions.

Trend extrapolation can only be used for those factors and indicators for which historic trend data is, in fact, available. If regular, reliable measurements have not been made for a sufficient length of

time in the past, then a trend line cannot be extrapolated. Trend extrapolation also provides virtually no means for experimentation. The technique by itself, does not provide an analytical structure for linking trends and logically deriving implications from them.

*What Are Some Examples of Applying Trend Extrapolation to Public Policymaking?*

Trend extrapolation is probably the most widely used method of forecasting. In the Department of Commerce, the Bureau of the Census regularly publishes projections of the population based on different birth rate assumptions.[3] The Social and Economic Statistics Administration in the Commerce Department has also used population projections to prepare trends for personal income and employment.[4] Utilizing these population extrapolations many of the executive agencies have developed their own projections using trend extrapolation. The U.S. Department of Health, Education, and Welfare has developed trend extrapolations for health manpower including physicians, dentists, nurses, et cetera. These extrapolations are used in establishing and implementing agency policy, as well as in setting goals and objectives for the future of health care in the United States.

The National Space and Aeronautics Administration also developed a large number of trends for their "Outlook for Space" study which examined the future of civilian space activities from 1980–2000. Some of these trends included the speed and capabilities of communications equipment on Earth and in space and on space power and propulsion systems.

*What Resources Are Needed to Obtain the Advantages of Trend Extrapolation?*

Trend extrapolation can be an easy method for senatorial staffs and committees to use, provided that reliable historical data is available and judgmental methods are employed. The historical data points can be placed on graph paper and likely future data points scanned, set down and connected by a line. If sophisticated statistical methods are to be used, perhaps as a check on the subjective approach, assistance from congressional support agencies may be requested. The use of the computer can be a valuable aid in the preparation of mathematically based trend projections.

Though there is no formal analytical structure for comparing and linking trends and logically deriving implications from them, senatorial staff and committees can judgmentally review and relate multiple trends. Such investigation may suggest emerging legislative issues. In addition, a collection of trends may be used to identify areas where congressional attention is indicated and where, without new policies or legislation, developments can be expected to remain on an acceptable course.

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## Trend Impact Analysis

*What Is Trend Impact Analysis and What Are Its Chief Characteristics?*

Trend impact analysis (TIA) is a means of evaluating the effect of events not initially included in the extrapolation of a trend. In extrapolating a trend, it is initially necessary to assume that whatever factors, forces and events shaped historical developments will continue in the future. Since the world is in a constant state of dynamic change, this assumption will eventually prove incorrect. TIA provides a method for evaluating and analyzing the effects of hypothesized events.

There are two major aspects to TIA. First, a trend must be selected and extrapolated according to the procedure outline in the section on trend extrapolation. Second, events or surprise developments which might change the trend line must be studied. Briefly, events must be selected; an evaluation of their impact on the trend must be made; an estimate of the chances (probability) that each event will happen must be made; and finally, the estimates of impact and probability are combined through a series of mathematical calculations. When a large enough number of events are considered, a new projection is produced showing the expected path of the trend in the presence of the events postulated.

*What Are the Capabilities of Trend Impact Analysis Which Make it Useful in the Policymaking Process?*

Trend impact analysis provides a means of including change in the forecasting process. By allowing the forecaster to include change, TIA encourages the consideration of possible ideas, events, and developments which, while unlikely, may be important if they do materialize. This can facilitate contingency planning or aid in developing priorities for public policy issues. The results of TIA calculations provide a view of expected impact of future developments and can thus serve as the basis of other forecasting work or as input assumptions in the legislative process.

TIA can serve another more direct function in the policymaking process. In addition to evaluating the possible effects of external developments over which we have little or no control, we can develop and evaluate candidate policies that might be implemented. This allows us to ask "what if" questions. The most effective policies can be identified and the trade-off between cost and benefit becomes clearer.

*What Are the Limitations of Trend Impact Analysis Which May Inhibit its Usefulness in the Policymaking Process?*

Trend impact analysis relies on other research methods such as literature searches, brainstorming, and Delphi to identify key events and

to determine their interactions. If important events are overlooked or omitted, TIA offers no internal means of checking for completeness or accuracy. Even with a thorough search, some events thought too unlikely to be considered may actually occur and upset the trend.

TIA leans heavily on judgmental estimates and reasoned opinions to evaluate events. Thus, consistency and accuracy in evaluating the impacts of events, especially surprises, cannot be guaranteed. In addition, the approach becomes more complicated if time dependent impacts are to be estimated. For example, the impact of an event, should it occur in 1990, may be different than its impact should it occur today. Yet, TIA will handle these impacts equally.

*What Are Some Examples of Applying Trend Impact Analysis to Public Policymaking?*

Trend impact analysis (TIA) is a more recent development than most of the other methods, and hence has been applied to only a few public policy issues. The Department of Agriculture used TIA in a workshop environment to study the future of agricultural indicators—farm size, acreage, production, et cetera. A panel of experts selected from within the Department used a Delphi-like process to select and evaluate the trends and events. Based on these evaluations, TIA projections were prepared and presented to the panel for use in preparing scenarios.

The Federal Aviation Administration used TIA in studying five alternative futures to determine the possible consequences for U.S. travel needs and the aviation industry. The FAA study focused on social trends which have historically indicated passenger load. The TIA projections were used to test the logic and consistency of the five alternative futures. Based on this work, the FAA is developing monitoring capabilities to track developments which the study indicated might be important to passenger use and the aviation industry.

*What Resources Are Needed to Obtain the Advantages of Trend Impact Analysis?*

The application of trend impact analysis is frequently cumbersome. A typical trend impact analysis usually calls for organizing a considerable number of impact statements and statistically correlating associated event estimates. Thus, the use of a computer is required in all but the most limited applications of this tool. TIA computer programs are being developed but we know of only one that is available at the present time. This program is not interactive in the sense that a user can sit at a terminal and continuously change judgments and estimates. Rather, trend impacts must be assessed, run by run. This makes the cost relatively high. Senators and their staff might therefore utilize their support agencies or their own information services to obtain and run the program.

On the other hand, TIA's heavy reliance on judgmental estimates and opinions offers a major role to senatorial staffs and committees. They can significantly assist in extrapolating a trend from historical data utilizing the judgmental approach. They can help identify possible events which might change the path of a trend. Finally, they can provide estimates of the chances that each event will happen, as well as its timing.

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## Computer Simulation Modeling

### *What Is Computer Simulation Modeling and What Are Its Chief Characteristics?*

Computer simulation modeling explores the various components and interactions that have occurred or can occur within a system. As used here, a system means a grouping of parts that interact consciously or unconsciously to produce a composite result. Thus, such diverse entities as a factory, a human being, a society, the U.S. economy, General Motors Corp., and intersecting highways can all be regarded as systems. A model is a representation of a system in an explicit manner and is a means of studying a system. A simulation model may be conceived as a detailed mathematical description of the major components, processes and interrelationships that exist within a system and their changes over time. If the simulation model is programmed to run on a digital computer, a great many system operations and events can be replicated and made to run at an accelerated speed.

Many approaches have been employed to construct computer simulation models. One approach, frequently called econometrics, is based on statistical analysis of the way various units of an economy have interacted in the past. To simulate with this type of model it is necessary to assume values for variables that are not determined within the model, and to assume that the structure of the system will not change over the simulation period. Another approach to economic modeling is input-output analysis. Input-output models are based on an analysis of the relationships, usually in dollar terms, between the inputs and outputs of each sector of the economy at a given point in time. Also shown are ultimate demand, inventory accumulation, exports, government and private purchases, capital formation and inputs in the form of payments from such sources. A third approach, the systems dynamics approach, utilizes the analyst's knowledge of the structure of the system to construct two types of equations (the model) based on assumed relationships, without necessarily investigating past operation of the system. Level equations are constructed to represent diverse types of item accumulations within a system (such as savings, loans, inventory, shipments, and people). Rate equations are also built to represent flows of items from one part of a system to another.

### *What Are the Capabilities of Computer Simulation Modeling Which May Make It Useful in the Policymaking Process?*

A number of benefits to the policymaker can stem from the development and application of computer simulation models. The process of such model-building forces precise statements of the causes and effects

of component interactions. The policymaker may then be able to identify system components and relationships not previously apparent. Further, simulation modeling allows the policymaker to experiment with a system. Its sensitivity to changes in the nature and magnitudes of its components and relationships can be observed. Thus, the impact of current policies and the influence of potential policies on future system behavior can be tested, based on the assumptions implicit in the model. The likely nature of various risks may be clarified and the likely effects of uncontrollable and external forces on the system may be determined. The approach facilitates very rapid generation of large amounts of data useful in the policymaking process. For example, experimentation with a computer simulation model can assist in examining the effects of various appropriation requests on different programs. Finally, simulations can be used as educational and communications tools. Different policy options can be identified, tested and compared.

*What Are the Limitations of Computer Simulation Modeling Which May Inhibit Its Usefulness in the Policymaking Process?*

Every computer simulation model is a simplification of the real system it represents. Because the mathematical equations comprising the model cannot duplicate every system component and interrelationship, simplified assumptions must be made. There is the possibility that oversimplification or inaccurate simplification can occur. Further, all systems contain intangibles which are difficult, if not impossible, to represent mathematically. These include political opinions, motivation, and other human attitudes and values. Even if the equations are complete and accurate, reliable data still have to be inserted. For futures-oriented simulations, these data are estimates which are not always based on past results. Because of these limitations, the policymaker has to interpret the simulation results very carefully and in the light of the assumptions made in constructing the model.

*What Are Some Examples of Applying Computer Simulation Models to Public Policemaking?*

A number of computer simulation models have been developed and their use in public policymaking has been diverse. One model, called the National Interregional Agricultural Projections (NIRAP), has been used to generate agricultural projections on the production, consumption, distribution, and processing of food and fibers.[5] These projections have helped the U.S. Water Resources Council to evaluate the need for future land and water resources. They were also used by the U.S. Army Corps of Engineers and the U.S. Department of Transportation to evaluate potential costs and benefits of longterm capital investments such as facilities for transportation, storage, and manufacturing.

Another simulation model, entitled the Strategic Environmental Assessment System (SEAS), has assisted the U.S. Environmental Protection Agency in developing the 1975 cost of clean air and clean

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[5] U.S. Congress. House. Committee on Merchant Marine and Fisheries. Subcommittee on Fisheries and Wildlife Conservation and the Environment. Computer Simulation Methods to Aid National Growth Policy. Washington, U.S. Government Printing Office, 1975. At head of title; 94th Cong., 1st sess. Serial No. 94–B. pp. 116–119.

water.[6] In addition, it has been used by the National Commission on Water Quality to estimate water pollution costs.

Still another model, the macroeconomic growth model, developed by Data Research, Inc., has been used by the U.S. Treasury Department to assess the impact of tariffs and the impact of price regulation on energy use.[7]

*What Resources Are Needed to Obtain the Advantages of Computer Simulation Models?*

In general, the creation of a computer simulation model is the most costly and time-consuming of all of the methodologies described in this report. In a survey performed for the National Science Foundation, it was found that while a majority of the models surveyed required less than $50,000 for development, for some the price tag was over $3 million. The median manpower effort was around 3 man-years.[8] For these reasons it is not likely that many committees would develop their own computer simulation model. However, the committee or staff may utilize one or more of the available commercial simulation models, or the support agencies may develop a model to deal with a particular question raised by an office or committee.

The Senate Subcommittee on National Penitentiaries and the Senate Judiciary Committee have used a computerized simulation model developed by the Congressional Research Service to predict prison populations.[9] The House Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce has also used a number of energy and econometric models (for example, a coal model, the Project Independence Energy System model, the Data Resources Inc., Wharton Econometric Forecasting Associates, and Chase Econometric models). The Senate Banking Committee, the Joint Economic Committee, the Senate Finance Committee, and the Senate Budget Committee have requested information from the Congressional Research Service that necessitated the use of various econometric models, including the Data Resources, Chase, and Wharton econometrics models.

The use of simulation models is facilitated by a computer terminal. To interact with a model—that is, ask questions of it and receive responses from it—calls for the user to learn a specific set of computer commands or instructions, to exercise some manual dexterity in entering these commands and to possess some patience in correcting input errors. However, not all simulation models are interactive as just described. In this latter situation, computer operators usually enter the appropriate information, values, into the model. Senatorial offices and committees should take time to understand a simulation model—especially its major assumptions, key interrelationships, and types and ranges of possible values for its variables. In addition, they should allow themselves sufficient time to interpret and compare model re-

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[6] Ibid., pp. 103–107.
[7] Committee on Merchant Marine Fisheries, op. cit., pp. 100–103.
[8] From Gary, William L. Hamilton and Diane E. Hamilton. "Federally Supported Mathematical Models: Survey and Analysis," Washington, D.C., National Science Foundation, 1974.
[9] Robinson, William H., Phyllis Smith and Jean Wolf. "Prison Population and Costs—Illustrative Projections to 1980." Congressional Research Service, Library of Congress, Washington, D.C. HV 8442 74–95 ED, Apr. 24, 1974.

sults and assist in formulating additional experimental values and assumptions.

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## Cross-Impact Analysis

*What Is Cross-Impact Analysis and What Are Its Chief Characteristics?*

Cross-impact analysis tries to identify the various impacts of specific events or well-defined policy actions on other events. It explores whether the occurrence of one event or implementation of one policy is likely to inhibit, enhance, or have no effect on the occurrence of another event at some future time period. The consequences may be expressed in a qualitative narrative manner or by using quantitative expressions reflecting probabilities or likelihoods. For example, if gas rationing is imposed by 1980, the price of gas is likely to be increased and U.S. car sales are likely to be proportionately inhibited. Likelihood estimates may be attached to the previous statement.

The structure used to perform a cross-impact analysis is called a cross-impact matrix. Here, specific events and policies are listed as row headings, and other events are shown as column headings of a table. Then, when the quantitative approach is employed, estimates of the likelihood of the events occurring by a specified time are made, and estimates of the impacts that any two events or a policy and an event can have on each other are derived. All these estimates are placed in the squares of the matrix or table.

Events may be of any type—social, technological, political, environmental, economic, or religious. Selection of the development for study and derivation of the associated estimates may be performed by some survey measurement (for example, a Delphi study), a systematic review of the literature, or through other, perhaps more arbitrary, methods.

*What Are the Capabilities of Cross-Impact Analysis Which Make It Useful in the Policymaking Process?*

Cross-impact analysis is very explicit and systematic in depicting interrelationships between pairs of events or a policy and an event. Results which appear to be inconsistent or contrary to initial expectations can be easily discerned by retracing the effects of the initial

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estimates. Thus, policymakers can clearly see the influence that the occurrence of one event or policy can have on the likelihood of occurrence of other events. This understanding, in turn, facilitates experimentation with alternative actions and policy options. Such experimentation can lead to overall assessments of the interrelationships between developments and formulation of desirable policy trade-offs. New events can easily be added to the cross-impact matrix and additional impact estimates derived.

*What Are the Limitations of Cross-Impact Analysis Which May Inhibit Its Usefulness in the Policymaking Process?*

Cross-impact analysis focuses on the interaction between only two events at a time or a policy and an event. In policy analysis and policy formulation, events are inevitably interrelated in a more overlapping and integrative manner. Further, the types and the number of events as well as the initial estimates of their occurrence by some time period are subjectively determined. Validity of these estimates depends on the expertise of the policymakers or others involved in their formulation. Finally, while the consequences of event interactions are logically and systematically deduced, possible mechanisms causing these consequences are not similarly arrived at. They have to be determined within another framework.

*What Are Some Examples of Applying Cross-Impact Analysis to Public Policymaking?*

The technique of cross-impact analysis has been applied to a limited number of public policy issues. In one application, the U.S. Army Corps of Engineers, Omaha district, studied the impacts of external developments on the internal policies of the South Platte River Basin.[10] Some of the external developments considered were inadequate energy resources, various levels of food and fiber production, unemployment, the state of the economy. Some of the policies investigated dealt with dispersal of employment, urban services, water supply and demand, residential density, environmental control, and social satisfaction. The planning horizon was taken as 50 years. The final results were used to formulate realistic scenarios for planning land use and water resource development for the basin.

In another application, the Department of Transportation planning of the State of California used cross-impact analysis to help prepare a statewide multimodel transportation plan for the year 2000 and beyond.[11] The events and initial likelihood estimates were obtained from a Delphi study. Thirty-six developments were explored including oil and gas rationing, air pollution, free rapid transit, and encouragement of mass transit use. By concentrating on those developments which appeared to have a strong impact on transportation and could be subject to some control by the California Transit System, the effectiveness of suggested policies was explored.

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[10] "Uncertainties Associated with Water and Related Land Resources Planning." Menlo Park, Calif., Center for the Study of Social Policy. April 1975. (Prepared for the U.S. Army Corps of Engineers, Omaha district).

[11] Gray, Paul and Olaf Helmer. Summary report, California Futures Study—Analysis of Impacts for Transportation Planning. Los Angeles, Calif., Center for Futures Research, Graduate School of Business Administration, University of Southern California, Nov. 30, 1974.

*What Resources Are Needed to Obtain the Advantages of Cross-Impact Analysis?*

Computerized assistance appears to be necessary for analysis with a cross-impact matrix of realistic size. The number of interactions to be tested and the number of calculations to be made can be time-consuming without the use of a computer. Cross-impact analysis computer programs may be purchased or utilized on a time-sharing basis.[12] This tool also requires the active participation of persons familiar with the area being investigated. They should assist in formulating relevant events and policies, formulating and revising estimates, and interpreting the meaning of the experimental results. In addition, the elements in this analysis are generally the output of an earlier piece of analysis such as a literature search or a Delphi investigation.

Because a cross-impact study may be rather costly and time-consuming, senatorial offices and committee may wish to use their support agencies for special analyses of this type.

If a cross-impact analysis is developed by an external source or a congressional support arm, the senatorial office or committee may wish to evaluate it in terms of—

1. Completeness of the list of events;
2. Clarity of statements of the individual events (that is, events can be verified as to their occurrence or nonoccurrence);
3. Plausibility of the initial estimates of the likelihood of events; and
4. Plausibility of the event interactions (that is, if a change in the likelihood of one event is made, do the remaining events change in a plausible direction and proportion?).

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## Delphi

*What Is Delphi and What Are Its Chief Characteristics?*

The Delphi study is an attempt to improve the utilization of experts for analysis, evaluation, and forecasting by employing a structure other than committee meetings. It consists of carefully designed series of individual interrogations, usually conducted by questionnaires, interspersed with information and opinion feedback, usually from a group of experts, in a particular field. The approach is designed to

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[12] The Futures Group, Glastonbury, Conn., and the Institute for the Future, Washington, D.C., have such programs.

permit the exchange of expert opinions, focusing attention directly on the issues, and minimizing personal interactions which might affect group behavior.

Typically, an initial "round 1" questionnaire is prepared which lists questions calling for either qualitative or quantitative responses about the future or both. For example, the participants may be asked the year by which they feel a certain technological change might take place or to forecast the future direction of an existing trend, such as the average length of a work week. The participants may also be asked to provide reasons for their estimates.

A second "round 2" questionnaire is then prepared and distributed. It may include some new and revised questions, a statistical summary of the answers from the previous round as well as the basis for divergent opinions. After studying the range of opinions and associated reasons, the participants may be asked to reestimate and to assess the consequences of certain events should they occur. In the third round, the experts might be asked to develop policies for dealing with the implications of the consequences that were defined in the earlier rounds. A fourth and final round might ask the respondents to assess the efficacy of particular policy proposals.

While there are a number of variations to this basic Delphi method, all share three characteristics—use of controlled feedback, use of sequential questionnaires, and the preservation of the anonymity of the responses of each individual.

A Delphi exercise is usually conducted by a written questionnaire. However, oral interviews and computer conferencing have also been used. The computerized approach eliminates the delay caused in summarizing each round. The use of Delphi has evolved extensively over the last few years and has been applied to any situation to which values may be assigned.

*What Are the Capabilities of Delphi Which May Make It Useful in the Policymaking Process?*

The Delphi approach has the advantage of avoiding the psychological problems that arise during direct group interaction such as the bandwagon effect, specious persuasion, unwillingness to abandon publicly expressed opinions, and domination by personality or by authority. Similarly, it can expose real agreements and disagreements among widely dispersed experts. Further, because it lends itself well to both quantitative and qualitative analysis, it can focus very sharply on policy issues. Focus is also achieved in making the underlying assumptions and causal relationships very clear.

*What Are the Limitations of Delphi Which May Limit Its Usefulness in the Policymaking Process?*

The very advantage of Delphi—that of avoiding face-to-face confrontation—may also be a disadvantage in the sense that mutual stimulation of the participants is not present. In addition, the method is inherently slow and time-consuming, frequently taking months to complete.

With respect to its participants, defining and selecting experts is, and probably has always been, a poorly understood and undefined process. It is possible that their motivation may be reduced in the

last rounds. Thus, it may happen that results presented as the work of experts may simply be the casual opinions of inexperienced persons with insufficient credentials in the area being investigated.

*What Are Some Examples of Applying Delphi to Public Policymaking?*

It is estimated that well over 2,000 Delphi studies have been conducted with numerous applications to public agencies. The Offices of New Communities Administration and the Assistant Secretary for Policy Development and Research of the Department of Housing and Urban Development, utilizing the Center for Futures Research of the University of Southern California, conducted a Delphi investigation on the future of new communities.[13] The purpose of this study was to identify realistic policy options for the new communities program of HUD in light of the program's recent problems—an economic recession, inflation, short money supply, difficulties in getting local approvals, and consistent overruns in costs.

Another policy-oriented Delphi study [14] and related planning conference [15] were in part funded by the National Institute for Drug Abuse. The objectives of the Delphi study were: (1) determine or develop a range of possible alternatives in drug abuse policy; (2) correlate informed judgments on subjects which relate a wide range of disciplines to drug abuse; (3) develop insights with respect to the current state-of-the-art in the field of drug abuse. This Delphi formed the base for a national drug policy meeting in June 1975.

The policy research group of the Canadian Government's Department of Public Works utilized a Delphi involving 46 respondents to forecast Federal employment to the year 1985, in terms of distribution by two regional areas of Canada and by government function.[16] This study was intended to provide not only a secondary confirmation of gross parameters forecasted by standard statistical methods but also to project finer detail than historically available. In addition, the Delphi was used to capture the assumptions underlying such forecasts.

In developing its statewide multimodal transportation plan, the California Department of Transportation sponsored a Delphi study by the Center for Futures Research at the University of Southern California.[17] The participants identified developments in 17 societal categories that might have a high degree of relevance for transportation planning. Developments were to include 10 events which (1) have a reasonable chance of occurring within the next 30 years and that would have a major impact on transportation planning if they occurred; (2) trends which were likely to deviate from commonly

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[13] Nanus, Burt, Richard Berry, and David Mars. "The Future of the Federal New Communities Program." Los Angeles, Calif., Center for Futures Research, Graduate School of Business Administration, University of Southern California, 1975.

[14] The preliminary results of this study are described by Irene Jillson, the director of the study. See Linstone, op. cit., pp. 124–159.

[15] Further information on the planning conference may be obtained from Richard Bucher, National Institute for Drug Abuse, Washington, D.C.

[16] While this study has been completed and documented, the report has not yet been released to the general public.

[17] Gray, Paul and Olaf Helmer. Summary report, California Futures Study—Analysis of Impacts for Transportation Planning. Los Angeles, Calif., Center for Futures Research, Graduate School of Business Administration, University of Southern California, Nov. 30, 1974.

accepted values where such deviations would have an impact on transportation planning.

In the second part of this Delphi inquiry, the panelists were asked to make quantitative forecasts about these developments. In the case of events, they were asked to estimate the earliest, most likely, and latest time at which each event would occur, if ever. In the case of trends, forecasts of trend values in 1985, 1995, and 2005, were requested.

*What Resources Are Needed to Obtain the Advantages of Delphi?*

To successfully carry out a Delphi study, experts in the substantive issues being investigated are needed; and at least one person familiar with the process itself. The former group has to formulate the relevant and representative questions in the language of the participants. The latter person is necessary to insure that the questionnaire does, in fact, elicit the desired information and that the information received is always properly summarized, integrated, and interpreted.

The conduct of the necessary repetitive rounds of the Delphi is inevitably time-consuming. Typically, 1 calendar month or more is needed to process each round, although participant time may be only a small fraction of that. However, a Delphi structured question usually takes longer to answer than a question on a more conventional questionnaire—often because other answers and information are considered as well as the opinion of the respondent.

Finally, if personal interviews are used instead of mailed questionnaires, extensive travel costs may be unavoidable.

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## Scenario

*What Is a Scenario and What Are Its Chief Characteristics?*

A scenario is a "history" of a possible future. Typically, a scenario traces a logical, consistent, and plausible set for circumstances from the present into the future. The span of the scenario might range from 5 to 50 years. All future events felt to be important and likely are incorporated. Further, likely cause and effect relationships may be suggested and described.

There are a large number of realistic scenarios that can be written about any subject. To explore possible alternative future developments, several scenarios are often written. Usually, there is a standard or baseline scenario followed by alternative scenarios, each reflecting different assumptions and their multiple implications. For example, scenarios about environmental protection might be written to reflect alternative public policies. They could range from one in which new regulations are enacted to others which emphasize active enforcement of present regulations, reduced regulations, et cetera. The consequences of each alternative policy are normally detailed and explored in the scenarios.

A policy-oriented scenario is a product of an ongoing dynamic process that leads to an alternative future. It is like a story with actors who, when confronted by events, make choices which shape the future.

*What Are the Capabilities of a Scenario Which May Make It Useful in the Policymaking Process?*

Multiple scenarios provide alternative, structured paths for future developments and expected ranges in specific trends. Relationships among policies and events that might not otherwise be noted may be highlighted by using this method. Consequences of alternative policy options, laws, and regulations, can be explored, compared, and evaluated in a systematic manner. The effects of hypothetical surprise events can be explored. All of these attributes of scenarios can be used to define and detail policy options under consideration as well as to identify new options and formulate contingency plans.

Scenarios, unlike some more quantitative approaches to describing the future, can clearly illuminate the interaction of psychological, social, political, and military factors. In addition, when quantitative analysis is completed, results can be most clearly presented to the public or other audiences with a scenario format.

*What Are the Limitations of a Scenario Which May Inhibit Its Usefulness in the Policymaking Process?*

Scenarios are only a structure for speculation. They may provide excellent means for explaining policy issues and relationships, but their credibility will depend upon the writing and forecasting capability of persons preparing the scenarios. One scenario may be seen as surprise-free by one audience, yet shocking and illogical by another. One scenario may appear to present a sufficient amount of data while another may appear incomplete. One scenario may be written with too broad a scope and another written with too narrow a perspective. Because a scenario is essentially qualitative in nature, it is highly susceptible to different interpretations and misinterpretations.

*What Are Some Examples of Applying Scenarios to Public Policymaking?*

The scenario is perhaps the most common method of forecasting, and has been applied at many levels of policymaking. At its broadest level, the book "The Next 200 Years" is a scenario for America and the world.[18]

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[18] Kahn, Herman, William Brown and Leon Martel. "The Next 200 Years: A Scenario for America and the World." New York, William Morrow and Co., Inc., 1976.

On a less comprehensive scale, scenarios have been used in forecasting studies for the Departments of Commerce, Agriculture, and Housing and Urban Development and the Environmental Protection Agency. HUD has used scenarios in studying the possible responses of cities to new telecommunication technologies. Commerce has used scenarios to describe possible effects on lifestyles in the United States of high- and low-energy use. The Department of Agriculture has used scenarios to explore the consequences of policy options relating to minimum tillage and mechanization. EPA developed 10 scenarios in preparing policy guidelines for regulating pesticides. These scenarios were variations on three central themes: Continued long-term industrial success, industrial stagnation, and industrial transformation to emphasize individual growth.

*What Resources Are Needed to Obtain the Advantage of Scenarios?*

No special equipment or mathematical skill is required to develop a scenario. Members of the Senate or their staffs may and frequently do create one or more scenarios relative to their areas of legislative interest. If several different forms of legislation on a subject are being considered, the Senator might develop a scenario describing the consequences that might result from each of the different proposals.

This process of analyzing public policy and legislative issues often requires an ability to imagine a credible alternative view of the future based on a logical sequence of events. It also requires an ability to devise stories that dramatize the key events and assumptions of the scenario and suggest reasonable linkages and interactions among them.

While computers are not essential to scenario development, they can be employed to generate a large number of scenarios, each slightly different from the other in one or two details.

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# SENATE COMMITTEE FORESIGHT

## By Clement Bezold

> . . . The sense of the future is behind all good policies. Unless we have it, we can give nothing either wise or decent to the world.[1]
>
> —C. P. Snow

This paper deals with ways of improving the sense of the future in Senate policymaking. More specifically, it will consider the foresight capacity of Senate committees.

The meaning of legislative foresight is discussed. The contention that Senators are interested in foresight is expressed and supported. Developments in State legislatures and in the House of Representatives are considered. Finally, Senate committee foresight options are presented, as are the implications and recommendations for congressional support organizations and other sources of future information.

### Legislative Foresight

Foresight is a call for a wider, longer-range view of problems. Crowded legislative calendars, fragmented committee jurisdictions and operating procedures which discourage long-term considerations often result in short-term, narrow-gauge solutions. The call for legislative foresight is an explicit statement that legislators take a longer-term and hopefully more systematic and integrated view of their policy areas.

This paper will focus on foresight activity by Senate committees. As the principal centers for congressional policy formulation, committees have the responsibility to give some collective forethought to the nature and major directions of their policy areas, and to where the committees' legislative proposals fit within those major directions.[2]

Futures information involved in foresight activities is often thought of in terms of specific techniques of futures research developed in recent years. Examples include computer simulation, scenario generation, cross impact analysis, the Delphi technique, trend extrapolation,

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[1] Quoted in Franklin Tugwell, ed. *Search for Alternatives: Public Policy and the Study of the Future* (Winthrop Publishers, 1973). From C. P. Snow, "What is the World's Greatest Need?" New York Times Magazine (Apr. 2, 1961).

[2] The focus of this paper is on committee foresight. This should not be taken to mean that the lack of anticipation and resulting problems of crisis decisionmaking can be resolved solely at that level. Future information, as discussed below, can perform three functions in policymaking: (1) Provide an early warning of emerging issues which merit greater attention; (2) inform current decisions of the impact of likely trends, events, or conditions on the objectives of the policy under consideration as well as the potential side effects of the current decision; and, (3) force the conscious interrelationship of decisions made at different locations within Congress. This third function is the task of the budget process, the leadership or policy committees, or some intercommittee effort to provide crosscutting policy analysis. Thus much of the discussion and recommendations noted in this paper should be considered in the context of other analysis and recommendations prepared for the Commission on the Operation of the Senate.

and trend impact analysis. The specific uses of these techniques vary,[3] but their purposes are similar. If the future is conceived of as a large set of alternatives, these futures research techniques are means of discovering and articulating the more important of the alternative futures and estimating the trajectories likely to be produced by contemplated policies.[4]

Experts in the field warn against regarding the results of futures research as definitive indicators of what will happen. Joseph Coates, for example, notes that the purposes of the Delphi technique, an iterative polling of expert opinion, is not to produce scientifically accurate predictions but rather to supply assistance in confronting decisions wisely.[5] William Swager points out that the value of forecasts in strategic planning [one aspect of Senate foresight] is not the clarity, precision, and accuracy of predictions, but rather the creative insights gained in helping to define options today. To the extent that forecasting is to be used to define new options, Swager adds that forecasting cannot be limited to only those trends and events for which objective data are available.[6]

A similar orientation has led Franklin Tugwell to describe the role of "futurist thinking" in policymaking as one which:

> * * * emphasizes the role of imagination and conjectural skill and relies more heavily on forms of "tacit knowledge" such as intuition. Its specialty is taking the building blocks provided by other forms of thinking and utilizing them to provide both greater variety and more structure to the field of the future as it appears to the policymaker. Thus futures research should be viewed primarily as a catalyst, facilitating the tying of analytical thought about values and human behavior to conscious policy choices, a necessary intermediary in the process of collective goal-seeking.[7]

Thus, whichever resources and processes are developed to facilitate committee foresight, the need for imagination must not be forgotten.

Futures information and the imagination that should accompany it can be used for at least three functions:

(1) Providing an early warning of emerging issues which merit greater attention;

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[3] Another paper being prepared for the Commission on the Operation of the Senate by the Futures Research Group of the Congressional Research Service will consider the specific uses of each of these techniques in legislative policymaking. See also, "Futures Research and Forecasting," pp. 381–487 in Congressional Research Service, Long Range Planning (printed for the use of the House Committee on Science and Technology, Government Printing Office, 1976.)

[4] Theodore Gordon, "Current Methods of Futures Research" in Albert Somit, ed., Political Science and the Study of the Future (Dryden Press, 1974), p. 90.

[5] Joseph Coates, "In Defense of Delphi," Technological Forecasting and Social Change 7, (1975) pp. 193–194.

[6] William L. Swager, "Strategic Planning I: The Roles of Technological Forecasting," Technological Forecasting and Social Change 4, (1972) p. 87.

[7] Franklin A. Tugwell, op. cit., p. ix. Tugwell distinguishes four intellectual tasks necessary for rational, action-oriented choices to be consciously made: (1) Normative thinking. The clarification and specification of values and goals. (What is good?) (2) Scientific thinking. The explanation of behavior, both static and dynamic, with predictive intent. (How do things work?) (3) Futurist thinking. The elaboration of possibilities and alternatives. (What is possible and what is probable?) (4) Strategic thinking. The specification of action paths or sets designed to attain desired outcomes at estimated cost. (How can I get what I want?) The futures information developed as part of a foresight capacity would be used in each of these intellectual tasks though predominantly in futuristic and strategic thinking.

(2) Providing estimates of the impact of likely trends, events, or conditions on the objectives of the legislation under consideration as well as the potential side effects the legislation might produce; and,

(3) Forcing the conscious interrelationship of decisions made at different locations within Congress.

Committee foresight will primarily involve the first and second functions. Senate-wide or intercommittee mechanisms will more likely perform the third.

The demand for futures information will vary with the stage in committee operations. Take for example a committee staff person in three different situations:

(1) The chairman has instructed him to prepare a general scanning of the future with respect to matters within the committee's jurisdiction.

(2) The chairman or committee is interested in the future of a particular issue, such as health care delivery, energy consumption, or secondary education.

(3) A bill has been proposed which contains a particular option or approach to the problem and the staff person must gather futures research and forecasts relevant to that option.

An important aspect of these situations is the degree to which a problem is defined and the degree to which specific options have been chosen. Allen Schick has noted that in legislative activities of Congress "analysis will be most welcomed . . . when alternatives are wanted, when decisionmaking is open to a diversity of views and interests." [8] In a similar vein the demand for futures information and analysis will be affected by the openness of proponents to a range of options and to assessment of their particular option, or the willingness of critics of particular legislative proposals to use futures research to raise and evaluate alternatives.

In the third situation, assuming the sponsor is open to an evaluation of his proposal, the futures information will be at a more tactical or operational level, aimed at discerning the impact of likely trends on the effectiveness of the legislative proposal and on its potential side effects. The early warning of emerging issues would more likely be accomplished in the first two situations. The sections below on foresight options and information sources refer to these varying situations.

## A Critical Assumption: Senators Are Concerned With Foresight

This paper operates on the assumption that Senators are interested in more systematic consideration of the future in their policymaking. Much of the literature on Congress argues against the validity of this assumption. These arguments focus on the reelection needs of members of Congress, the pluralism of goals pursued by 100 Senators and 435 Representatives, the lack of policy leadership, the structural fragmentation accompanying the committee system, the complexity of the

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[8] Allen Schick, "The Supply and Demand for Analysis on Capitol Hill," Congressional Research Service, Washington (mimeo June 1975), p. 23.

House and Senate procedural rules, and the crowded committee and chamber agendas.[9]

Also, the incentives for foresight activity are often few. There is as yet little constituent reinforcement for a Senator's foresight activity, although it appears to be developing. Yet, where a Senator, particularly a committee chairman, accepts the fact that foresight is an important aid to responsible policymaking, these disincentives can be overcome. Where a Senator wants to take a longer and broader look into the policy areas in which he operates, this will be accomplished. Senators have traditionally had the reputation of being innovative, often seizing on a problem and proposing a solution long before the rest of Congress and the President are moved to act. Foresight activities can aid this traditional innovativeness by providing a more systematic look at the context of problems and by raising the visibility of emerging issues. There are several indications that the interest of members of Congress in foresight activities, in committee and elsewhere, is increasing. One form of this interest is hearings on the future either in terms of substantive policy or the processes by which the Federal Government acts on the future. For example, Senator John Culver has conducted hearings within the Public Works Committee on "Choosing Our Environment: Can We Anticipate the Future?"[10] Senator John Glenn held a Government Operations Committee symposium on "Our Third Century: Directions." Senator Hubert Humphrey had hearings in the Joint Economic Committee on the future of U.S. economic growth.[11] On the House side, Congressman Robert Leggett and George Brown have held joint hearings for the Merchant Marine and Fisheries Committee and the Science and Technology Committee on "Long Range Planning in the Federal Government."[12]

The Advisory Committee on National Growth Policy Processes, a creation of the Congress (particularly the Senate), is examining the possible mechanisms by which Congress and the executive branch can set national growth policy.[13]

Congressional action in establishing the Office of Technology Assessment and the Congressional budget process, the establishment of the House foresight provision and the committee response to it (described below), the mandate of the Commission on the Operation of the Senate—all reflect this growing concern for a more systematic consideration of the future in policymaking.

On an informal level, though equally important, is the interest on the part of over 200 members of Congress in taking advantage of the services of the Congressional Clearinghouse on the Future, run by Congressman Charlie Rose, which provides presentations by futurists such as Alvin Toffler and Margaret Mead to members of Congress, as well as assistance and training in futures research for staff members. It also disseminates information on foresight activities by

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[9] These disincentives are described in "Congress Strategic Policy Assessment," Chapter 1 in Clement Bezold's Strategic Policy Assessment and Congressional Reform: The Future in Committee, Ph.D. Dissertation (University Microfilm, 1976).

[10] U.S. Senate, 94th Cong., 1st sess., Committee on Public Works, Hearings—Choosing Our Environment: Can We Anticipate the Future?, Serial No. 94–H31.

[11] See, "Challenging Views on Future U.S. Economic Growth," 120 Congressional Record S19915 (Nov. 13, 1975).

[12] Long Range Planning, op. cit.

[13] The Advisory Committee is part of the National Commission on Supplies and Shortages created by Public Law 93–426.

members and committees.[14] One of the services this Clearinghouse performs is developing materials on how members of Congress can elicit their constituents' views of the future. This reflects a growing realization that a visible concern for the future can be good politics as well as good policy.

These activities lend support to the assumption that Senators are interested in foresight activities. While all Senators are concerned about the future in a general way, these activities show a sensitivity to the complexity of emerging issues. Concomitantly, there is a need for an explicit discussion of the foresight responsibility of committees. That discussion will be preceded by a brief consideration of foresight activity in State legislatures and in the House.

## Foresight in State Legislatures

In recent years there have been a variety of reforms in State legislatures. While there is some research available on these, none is directed explicitly toward foresight of futures research. However, there are some specific examples. For instance, in 1975, the State legislative leadership in Massachusetts announced a new emphasis on foresight as a complement to legislative oversight. The leadership felt that "as legislators oversee how well executive agencies carry out old mandates, they should also foresee what new mandates should be given and what old mandates should be discontinued."[15] Massachusetts is one of a number of States which have used science and technology as the basis for reforms to provide futures information.[16] In Massachusetts, a number of dialogs between legislators and experts on scientific and technical aspects of emerging issues were developed around the topics of energy, manpower, the environment, and the economy.

Other States, most notably California and Hawaii, have developed a capability to assess the major consequences of important bills after they have been introduced but before they are considered by a committee.

Sometimes the foresight activities of State legislatures are linked to citizen involvement efforts. For example, in Minnesota at the beginning of the 1975 session, the State planning office and the Commission on Minnesota's Future, an effort to encourage citizen involvement in long-range policymaking, presented a "Minnesota horizons" project. For 3 consecutive days the legislature was presented with "an integrated view of the State's past, current status, developing trends, and imminent policy questions."[17] In addition, constituent support for

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[14] See, "Toffler Calls Anticipatory Democracy," 121 Congressional Record E848 (Feb. 25, 1976).

[15] "Networking," Quarterly Newsletter of the Science Resource Network, Science Resource Committee, Massachusetts State House, Boston, Mass.

[16] The science and technology concerns of State legislatures are being aided by grants from the Office of Intergovernmental Science and Research Utilization of the National Science Foundation. The results of some of the comparative research funded by this office is given in Irwin Feller, et al., Sources and Uses of Scientific and Technological Information in State Legislatures (Pennsylvania State University Institute for Research on Human Resources, 1975), Donald C. Menzel, et al., Development of a Science and Technology Capability in State Legislatures (Center for the Study of Science Policy, 1973), and Peter Wissel, "The Hunting of the Legislative Snark: Information Searches and Reforms in U.S. State Legislatures" 1 Legislative Studies Quarterly (May 1976), pp. 251–267. Other States reported to have some foresight activity include California, New York, Hawaii, Utah, Illinois, Minnesota, Florida, and Kentucky.

[17] Keith Bea, Dennis Little, and Sandra Osbourn, "The States Look to the Future: A Survey of Tomorrow/2000/Goals Organizations," Congressional Research Service (Sept. 9, 1975).

legislative foresight has been shown by efforts of citizen groups in New York and Florida to have their State legislatures adopt foresight provisions similar to that adopted by the U.S. House in 1974.

## The Foresight Provision of the House

In 1974 the House made the first explicit statement that committees have a responsibility for the systematic consideration of the future. The foresight provision was the product of the House Select Committee on Committees, generally known as the Bolling committee. The Bolling committee had received testimony from several members of the House who expressed the need for "resources to anticipate the legislative needs of the future" and "the need for legislation which is preventive rather than curative." One Representative put it this way:[18]

> The future will never be completely determinable. But if we become more familiar with the probability, we can perhaps do a better job of shaping it in the way we think it should be. Indeed, it is incumbent upon us to do so if we do not wish to bestow a deteriorating world on posterity.

The Bolling committee, particularly then Congressman John Culver, was concerned that this ability to anticipate problems "be instilled as a responsibility within any committee jurisdictional inquiry."[19] This was supported by the recommendations of several expert witnesses. The Bolling committee proposed a strengthened oversight and new foresight responsibility for each standing committee of the House, other than budget and appropriations.

The Hansen committee proposal, which amended the Bolling committee plan, retained the same mandate. Thus committees were required to

> . . . review and study conditions or circumstances which may indicate the necessity or desirability of enacting new or additional legislation within the jurisdiction of that committee (whether or not any bill or resolution has been introduced with respect thereto), and shall on a continuing basis undertake futures research and forecasting on matters within the jurisdiction of that committee.[20]

Several committees have moved to implement the foresight provision, developing a variety of approaches in the process. Before these are described, it should be noted that foresight is analogous to oversight in that both are covered by House rules which mandate committee activity. Oversight has not become, except in certain particular active investigatory subcommittees, a normal practice until recent years. The rules requiring oversight took 25 to 30 years to become widely implemented. The response to the foresight provision has been more heartening.

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[18] John W. Davis (D., Ga.) in U.S. 93d Cong., 1st sess., House Select Committee on Committees, Hearings on Committee Organization in the House, p. 219. For the complete legislative history of the development of the foresight provision, see Clement Bezold, op. cit., Chapter 3.

[19] John Culver (D., Iowa) in Hearings on Committee Organization in the House, p. 509.

[20] House rules, rule X, sec. 2(b)(1), 94th Cong.

The placement of the foresight provision in the oversight section of the House rules and the option of forming a separate subcommittee have resulted in a variety of responses. These include:

(1) An oversight subcommittee also responsible for foresight. This approach has been taken by the Ways and Means Committee. Thus the subcommittee staff has sought futures research experts in the areas of health, social services, and taxation as they prepare for oversight.

(2) A foresight subcommittee. The International Relations Committee established the Future Foreign Policy Research and Development Subcommittee. This subcommittee has undertaken a series of reassessment hearings which attempted to have major figures in U.S. foreign policy address themselves to new directions in U.S. foreign policy.[21] The subcommittee also considered the future of U.S. relations with Asia after Vietnam and the likely developments in the relationships within the Great Power Triangle.

(3) Foresight activity by the full committee staff. The chairman of the House Interior Committee has assigned a staff member to organize oversight and foresight activities for the committee. A statement of the oversight responsibilities, including foresight and a description of specific issues involved in each of the major aspects of the committee's jurisdiction, was prepared.[22] Oversight meetings were arranged for committee members at the executive agencies. At these sessions the committee staff raised questions on likely trends, conditions, and emerging issues as they related to the agencies' activity.

(4) Staff briefings. The House Small Business Committee had a briefing for subcommittee staff directors on the major trends affecting small business and the implications of the committee's legislative activity.

(5) A number of subcommittees have undertaken foresight activities. For instance, the Subcommittee on Transportation and Commerce of the Commerce Committee has the staff gather futures research in the field of solid waste.

(6) Also, subcommittees have been examining the broader questions of how foresight is done by Congress and the Executive. For example, Congressmen George Brown (D., Calif.) and Robert Leggett (D., Calif.) have used their subcommittees to hold

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[21] U.S. House, 94th Cong., 1st sess., Committee on International Relations, Hearings on Reassessment of U.S. Foreign Policy. These hearings quote from the Murphy Commission on the organization of the Government for foreign policy: "The entire process of conducting foreign policy can be said to be directed at fulfilling the requirements of identifying future trends and defining comprehensively and yet with precision the long-term purposes and worldwide priorities of the United States." P. 2. The hearings contain an interesting exchange between noted experts and former officials, such as Averill Harriman, Hans Morgenthau, General Maxwell Taylor, and Dean Rusk, and members of the subcommittee. However it points out that expert witnesses, especially ones of such notoriety, are not likely to produce comprehensive statements of trends and options. Thus committees interested in the general scanning of the future in their policy area should make special efforts to have a fairly inclusive statement of trends and options prepared for their hearing record.

[22] "Memorandum on Oversight," prepared for the use of the Committee on Interior and Insular Affairs, 94th Cong., 1st sess., Aug. 1, 1975.

joint hearings on long-range planning and have prepared reports on the subject.[23]

As yet, there have been no systematic surveys of foresight activities or evaluations of their impact on committee operations.[24] However, the House committees are increasingly turning to the Congressional Clearinghouse on the Future, the Committee for Anticipatory Democracy,[25] and the Futures Research Group in the Congressional Research Service for assistance in implementing the foresight provision. There has been reluctance on the part of some committees, but most have moved to implement the provision. The implications of the House experience will be raised as the options for the Senate are considered.

## Senate Committee Foresight Options

How do you encourage more imaginative committee work? How do you bring about more systematic consideration of emerging issues, and of the long-term effects of current decisions? The frantic press of day-to-day legislative business often contributes to the reactive nature of committee activity by precluding this longer term view. One step in overcoming this difficulty is a specific statement of the foresight responsibility of committees.

A possible statement of this foresight responsibility would read as follows:

> In order to assist Congress in its formulation of new legislation and in its evaluation and modification of existing legislation, each committee of the Senate shall make use of futures research and forecasting to consider trends, events, and conditions which would affect matters within the jurisdiction of the committee. In carrying out this foresight responsibility, committees shall (1) identify emerging issues that will merit legislative attention, whether or not action is expected in the current Congress; and (2) to the greatest extent possible with available information consider the effects of future trends on legislative goals and objectives under consideration and the primary and secondary effects likely to result from proposed legislation.[26]

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[23] Congressman George Brown chairs the Subcommittee on the Environment and the Atmosphere of the Committee on Science and Technology. Congressman Robert Leggett chairs the Subcommittee on Fisheries, Wildlife Conservation, and the Environment of the Merchant Marine and Fisheries Committee. The committee print is entitled "Long Range Planning," op. cit.

[24] In this regard the lack of evaluation of the impact of foresight provision activities is not alone among analysis activities of Congress. There is little systematic description, much less evaluation of the analysis done by or for congressional committees. There are useful conceptual articles, for example, Nelson Polsby, "Policy Analysis and Congress," Public Policy (1969), pp. 67–74; Allen Schick, op. cit.; and Daniel A. Dreyfus, "The Limitations of Policy Research in Congressional Decisionmaking," Policy Studies Journal (1974), pp. 269–274. There are also treatments of specific types of analysis, for example, case studies of the use of technical information in 13 legislative decisions is given in Technical Information for Congress, Report to the Subcommittee on Science, Research, and Development, serial A, revised, 92nd Cong., 2d sess. (1971). An understanding of the role of futures analysis in congressional policymaking will develop in conjunction with our understanding of the normal patterns of use of analysis by committees.

[25] The Committee for Anticipatory Democracy is a group of future-oriented citizens and experts formed by Alvin Toffler to aid Congress in developing procedures for dealing with long-range issues, and to encourage greater citizen involvment in defining alternative futures.

[26] This is patterned after the oversight language, termed "legislative review." This requirement for committees, first established by the Legislative Reorganization Act of 1946 (2 U.S.C. 190d), now requires that:

One method of forcing committees to make better use of available futures information and to develop new sources is to make their foresight responsibility explicit. Two arguments have been raised against the House provision: first, committees will ignore it, so it will only clutter up the rules; and, second, why should a committee announce that an emerging issue deserves greater attention even when the committee is not going to be able to deal with it.

In response to the first point, the House experience suggests that most committees will not ignore the provision. Moreover, there is no harm in having it in the rules as a statement of policy—that committees have the responsibility for a systematic concern for the future. In regard to the second point, it is true that committees may not be able to control what issues are fully considered. Yet, there are numerous cases where members' work has provided policy leadership and created the necessary demand for new legislation—cases of "the echo creating the yell." [27] The fact that there is a statement of emerging issues might help raise their visibility and allow them to be dealt with sooner than if they received no such attention.

## The Terms "Futures Research" and "Forecasting"

It has also been suggested that the terms "futures research" and "forecasting" are strangers to the legislative environment and other language should be considered. The Bolling committee chose "futures research" and "forecasting" as terms of art to make more explicit what was expected of committees. This does not mean that committees are expected to do Delphi surveys, computer simulation, or cross-impact analysis, though some already do. Futures research and forecasting, like other forms of research, are techniques which committees may consider, but they will seldom employ them in-house. The task then is to provide the insights that can be gained from this research on the future.

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In order to assist the Congress in—

(1) its analysis, appraisal, and evaluation of the application, administration, and execution of the laws enacted by the Congress, and

(2) its formulation, consideration, and enactment of such modifications of or changes in those laws, and of such additional legislation, as may be necessary or appropriate, each standing committee of the Senate and the House of Representatives shall review and study, on a continuing basis, the application, administration, and execution of those laws, or parts of laws, the subject matter of which is within the jurisdiction of that committee. Such committees may carry out the required analysis, appraisals, and evaluation themselves, or by contract, or may require a Government agency to do so and furnish a report thereon to the Congress. Such committees may rely on such techniques as pilot testing, analysis of costs in comparison with benefits, or provision for evaluation after a defined period of time.

(*b*) Reports to the Senate and House of Representatives

In each odd-numbered year beginning on or after January 1, 1973, each standing committee of the Senate shall submit, not later than March 31, to the Senate, and each standing committee of the House shall submit, not later than January 2, to the House, a report on the activities of that committee under this section during the Congress ending at noon on January of such year.

(*c*) Exceptions

The preceding provisions of this section do not apply to the Committees on Appropriations and the Budget of the Senate and the Committees on Appropriations, the Budget, House Administration, Rules, and Standards of Official Conduct of the House.

The Budget and Appropriations Committee are exempted from the oversight provision because their specialized functions bring them in contact with agencies and programs through the funding decisions they must make, hence they evaluate effectiveness and their decisions reflect these evaluations. Also, they review all programs that are funded. Therefore, explicit oversight activities and reports are left to the authorizing committees. A similar exemption for foresight is not appropriate since the major trends affecting appropriations and the budget deserve consideration by those committees.

[27] David Price, "Who Makes the Laws" (Cambridge: Schenkman 1972), p. 229.

There are two basic foci where futures information will have its impact: first, in the legislative alternatives the committee proposes and the justifications used to support them—written material often generated by the staff; and second, in the minds of the Senators themselves—the richness of information and wisdom they bring to bear in making their decisions.

To say that a Senator should have a rich view of the future and its implications on his policy decisions is not to say that a Senator will use this information when making most decisions.[28] Yet, there are occasions when timely, brief, and evaluative futures information would be sought by Senators.

Likewise, the committee reports will continue to justify the option chosen by the committee. Foresight activities could aid both in clarifying the committee objectives in relation to its policy environment and in providing the committee and those who use their reports with a longer time horizon.[29]

## Committee Foresight Techniques

There are a variety of techniques a committee can use to include more foresight in its policymaking. These include:

*System models.*—Committees can develop models of their jurisdiction or of the particular subjects within their jurisdiction. These may be conceptual models developed from a cross-impact analysis of the various factors involved or may be more analytical and mathematical computer models. These models can show where the committee has effective control over the subjects within its jurisdiction and where it does not. Computer forecasting models can be used to determine points of sensitivity within a system—those points where change has the greatest impact on the committee's goals.

*Presentations.*—A committee may also choose to arrange for presentations which would synthesize available forecasts and other futures information, possibly in terms of the committee's model or models, in a succinct and graphic way. The Minnesota Legislature had its State planning office prepare such a presentation for the first 3 days of this year's legislative session. Most of the members of the legislature found it a useful introduction to the policy issues for the session.

*Advisory panels.*—More indepth analyses and projections relating to a committee's policy areas can be provided by advisory panels of experts. During the 93d Congress, the public works committee used such a group in the form of a science advisory panel to examine the feasibility and desirability of forming a national public works investment policy. Advisory panels can also be used in an ongoing way to suggest the technological, scientific, or environmental effect of a particular bill. The Hawaii Legislature uses a science advisory panel to suggest the scientific impact of each bill introduced.

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[28] Given the normal decision overload and information overload which face Members of Congress, most have devised a number of specific ways to simplify their voting decisions. Two of the most common are reliance on a member of the staff to review the aspects of the votes in terms of the Congressman's or the Senator's positions, and the other is to take cues from fellow members who are more familiar with the issue and share similar views. See Clement Bezold, "Voting on the House floor: Information Seeking and Congressional Decisionmaking," (Center for Governmental Responsibility, May 1974).

[29] For an example of the types of information on policy goals and relevant conditions and their projections, see Katherine A. Riley, "Forecasting in the House Reports," (Center for Governmental Responsibility, Feb. 23, 1976).

*Training staff members.*—Staff members play a central role in gathering information and structuring options, often drafting legislation for committees. It is therefore essential that they become familiar with the forecasts in their policy areas as well as with forecasting and futures research techniques.

*Policy exercises for committee members.*—The foresight provision can allow committee members to stretch their imagination in considering what is possible and clarifying what is desirable and how to obtain it. Thus, an ultimate test of the effectiveness of the foresight provision is the degree to which it enriches the understanding that committee members have of the decisions they make. There are a variety of policy exercises which members of any committee can perform. In the process, they would examine projections and do their own cross-impact analysis of the elements with their policy systems, generate scenarios, choose their preferred alternative futures and relate these to choices in the current legislative session. These policy exercises might most profitably be undertaken early in a session, apart from any specific legislation. It should then be easier during the session to put a particular bill into the context of the projected need, and the member's and committee's goals.

## Foresight Reports/Foresight Hearings

Another possibility is foresight hearings. These would explore the likely directions of the policy environment of a particular committee and consider the implications for the committee's legislative activity. Ideally, these should be held when there is little other committee business and early enough to inform Senators in their committee work during that session of Congress.

These hearings would be aided by a staff "Trends and Emerging Issues" report. This report would (1) identify the major elements within the policy system(s) of the committee; (2) give the trends in these major elements—where they are likely to go under certain given assumptions; (3) state what emerging issues this picture of the future suggests for the committee; and (4) discuss the implications of the trends on the various options the committee may consider adopting for current problems—the implications on pending legislation and on that which will probably be considered during that session of Congress.

This should be a brief report. Its purpose would not be to provide definitive predictions, but to suggest likely developments and their implications on committee activities. An additional purpose is to provide an explicit statement of both emerging issues and legislative options. The form of a staff report rather than a committee report allows discussion to take place without necessitating that committee members agree completely with the vision of the future that is presented.

The report would then be made available to the interested public, particularly those groups with which the committee normally interacts. They would be invited to testify or present statements on their vision(s) of the future and their preferred options.[30]

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[30] A process whereby private and public interest groups responded to a particular statement of likely trends and their implications took place in conjunction with the President's 1976 National Growth Report. Draft versions of the report were released and comments solicited. This forced groups to evaluate the Government's goals and projections in relation to their own. A similar process could take place at the committee level. This would give members interested in anticipating issues a reading of the positions of relevant groups. It would also publicize the need to deal with emerging problems.

## Citizen Input

In addition to constituent input through Senators, committees can solicit citizen opinion directly. When the Senate Government Operations Committee tried this, one of their findings was that citizens wanted to participate more:[31]

> The people also want to see themselves and the citizen groups they feel could represent them have a much more important place in the governmental process. The public feels deeply that it can and would participate much more than now in a more open and inviting process.

In addition to the use of a "Trends and Emerging Issues" report and foresight hearings to gain citizen input, a biennial survey of citizens on emerging issues would be useful. A list of emerging technological, social and political issues could be developed.[32] Citizens could then be polled on which should receive the most attention. The polling could be both of a national sample, and of selected groups of citizens who have been involved in attempts to look ahead and formulate the long-range goals for their city or State.[33] The political effect of these activities could be to enlarge the constituency for anticipating issues, while suggesting to committees which issues should be considered next.

## Foresight Resources

There are several places a committee or subcommittee staff person could turn in search of futures information to aid either in a general scanning of the committee's policy area or in formulating specific legislative options. There follows a brief consideration of the relevance of several sources for foresight activities. These comments and recommendations should be considered with other changes or recommendations made by the Commission on the Operation of the Senate.

*Senate leadership and policy committees.*—One aspect of foresight is the degree to which decisions are made in conscious relationship to each other. It is generally not the inclination of Senate committees to do that. The exception is the Budget Committee, and there interrelationships are considered primarily in terms of competing uses for Federal funds. The leadership and its staff could prepare the coordinated policy analysis and recommendations regarding interrelated decisions by separate committees. The policy committees could also perform this function if they became more assertive. A committee

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[31] Confidence and Concern: Citizens View American Government, A Survey of public attitudes by the Subcommittee on Intergovernmental Relations (printed for the use of the Senate Committee on Government Operations, Government Printing Office, 1973), p. 153.

[32] The list of potential "emerging issues" could be developed from a number of sources including: (1) Surveys of candidates and priorities for technology assessment: Technology Assessment, vol. 2 (February 1974); Craig Decker, "Candidates and Priorities for Technology Assessment," staff report 100 (Office of Technology Assessment. Nov. 23, 1974); (2) Theodore J. Gordon, Crisis Forecasting, e.g., "Some Crisis That Will Determine the World of 1994," The Futurist (June 1974); (3) Political and social issues, which might find difficulty being put on the agenda—from sources such as the public opinion poll and other work of the Peoples Bicentennial Commission, see Common Sense, vol. 3, No. 3, pp. 11–17; (4) Programs designed to monitor trends on a continuing basis, for example, Trend Report of the trend analysis program of the Institute of Life Insurance of New York, the work of Willis Harmon at the Stanford Research Institute, and Herman Kahn at the Hudson Institute.

[33] For example, see Keith Bea. op. cit.

staffer, particularly one whose chairman agreed with the policy leadership implied in this coordinated policy analysis, could get relevant futures information from this source. We turn now to a discussion of the role congressional support agencies can play in the process.

*The Congressional Research Service—Emerging issues.*—The "emerging issues" service, more appropriately termed the "Subject and Policy Analysis Service," performs a function mandated by the Legislative Reorganization Act of 1970. That act directs CRS to provide each committee with a list of "subject and policy areas the committee might profitably pursue" at the beginning of each Congress. There are two somewhat competing visions of this service: First, it should be a way for CRS to maintain good relationships with committees and to determine the likely research agenda the committee will want CRS to work on during the next 2 years; and second, it should be an exercise to search out emerging issues and inform committees of their presence. CRS personnel do devote some effort to speculating on the substantive questions involved in the emerging issues aspect, despite the lack of interest on the part of most committees.

In addition to an ambiguous legislative history, a central problem underlying the conflicting interpretations is the fact that statements of emerging issues touch on the political function of agenda setting. It is inappropriate for CRS to tell committees what they should consider, and some of the hostility from committees stems from this type of perception. Also, committee staffers interpret the service as basically determining the committee's demand for CRS research. They feel that they, rather than CRS personnel, can best judge what issues the political context will allow to be treated in the coming Congress, and therefore what issues CRS should research.

Yet, the "early warning" function is one in which the committees should be actively involved. In some cases this is already done. The Senate Aeronautics and Space Sciences Committee has traditionally prepared its own list of emerging issues. And there was argument among staff members interviewed in this report that committees should be forced to consider emerging issues. One suggestion is to have the committee staff prepare its own report, with the assistance of the support organizations. This could be done as part of the "Trends and Emerging Issues" report mentioned above, or as a separate function. Either way, it would be useful to have each committee produce a list of emerging issues which would then be sent to a central organization—either the policy committees, CRS, or OTA—for compilation and publication.

*CRS futures research group.*—In response to the requirement that House committees do "futures research and forecasting" and to other related developments, CRS has established a futures research group. The group's purpose is to provide consultative service to members, committees, congressional staffs, and CRS analysts on futures research and forecasting matters. The major products of the group thus far include a committee print on Computer Simulation Methods to Aid National Growth Policy,[34] a description of state attempts to have

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[34] "Computer Simulation Methods to Aid National Growth Policy" Committee Print, Subcommittee on Fisheries and Wildlife Conservation and the Environment of the Committee on Merchant Marine and Fisheries, 94th Cong., 1st sess., serial No. 94–B.

citizens involved in long-range goal setting,[35] and a description of the major futures research techniques for a committee print on long-range planning.[36] The group answers short- and long-term requests for information related to futures research methodologies, and they are designing a futures information system for Congress. The futures information system is expected to contain bibliographical material, forecasts, trends (including their graphic display) and directory type information on individuals and groups in the futures research field.

These bibliographic services are important, especially when there is greater familiarity with forecasts and their uses. In the meantime, a committee staffer who wants suggestions on futures research and forecasting will have to find a substantive expert, either in the CRS divisions or in OTA if it is engaged in a relevant project, to interpret the implications of the futures information.

Also, there is increasing interest on the part of members in information on future-oriented citizen participation. Citizen participation is a difficult subject to master, especially from the futurist perspective. While the futures research group has expertise in futures research methodology, they should, if they continue to receive requests dealing with citizen involvement, augment their expertise in that area.

*The Congressional Budget Office.*—If a staff person is responsible for doing strategic planning or for scanning the relevant future for a committee whose programs require substantial funding, one of the major constraints he or she will encounter is the Federal budget. As expenditures are increasingly compared against each other, the likely future magnitudes of competing programs or functional areas, as well as the general budget outlook, could affect a committee's plans. Hence, there is a need to consider alternative future budgets.

Both the Office of Management and Budget and the Congressional Budget Office are required by the Congressional Budget and Impoundment Control Act of 1974 to produce 5 year projections of the current budget. These are basically extrapolations of the present distribution.[37] A more interesting service for the committee staffer trying to piece together the larger context is the alternative 5-year budget presented at the end of the CBO's annual report. In these alternative budgets, the distribution among programs is based on one of three dominant spending emphases: (1) increased national security; (2) concentrating Federal resources on social programs; and (3) returning control to State and local government and the private sector.[38] These budgets also identify the major budgetary and tax implications of each alternative. This allows a committee to put its program's future in the context of a variety of assumptions and makes the committee more aware of the overall strategy a committee might adopt to pursue certain options. The CBO was uncertain about how many alternative

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[35] Keith Bea, op. cit.

[36] "Futures Research and Forecasting" in "Long Range Planning," op. cit., pp. 381–467.

[37] The OMB projections are contained in U.S. Government, "The Budget of the United States Government Fiscal Year 1977," pp. 23–39. These are "mechanical projections" assuming that real GNP growth of 6.5 percent a year from 1978 through 1980. The more detailed projections of the current budget distribution are contained in U.S. Congress, 94th Cong., 1st sess., Congressional Budget Office "5-Year Budget Projections Fiscal Years 1977–1981"( Jan. 26, 1976).

[38] U.S. Congress, 94th Cong., 2d sess., Congressional Budget Office, "Budget Options for Fiscal Year 1977 : A Report to the Senate and House Committees on the Budget" (Mar. 15, 1975), pp. 369–379.

5-year budgets they should generate and is undecided as to whether to repeat the exercise next year. The Senate should require CBO to continue and expand its alternative budget analysis. It is a valuable source of futures information for an interested committee.

*The Office of Technology Assessment.*—In terms of committees interested in futures information, OTA is an example of the "warm body" approach to policy information transfer. OTA is the only one of the four support organizations which is extensively involved in conducting futures research rather than compiling that done elsewhere. The ability to identify, phone and/or meet with someone who can answer your foresight questions is a valuable asset. For example, the oceans policy project has been consulted by several committees which are not requestors of the study but whose policy area has been considered by the OTA project. This has been true both of committees and Members of Congress, even to the point where both sides in a floor debate were using the project's information.

OTA is likely to continue to be a source of high quality futures information where there is a compatibility of interests between the committee and a particular OTA project.

There was some discussion of OTA playing an overall "early warning" role for Congress, and it has done some work in this area.[39] While OTA could aid in providing expertise, or in compiling committee lists, the responsibility for developing them should rest with each committee.

*Informal sources within Congress.*—Some of the best assistance for committee staff and members can be provided by informal sources, such as the congressional clearinghouse on the future started by Congressman Charlie Rose to provide contact with futurists and spread the word within Congress about foresight activities. Another source is the ad hoc congressional modeling group. This is a group of professional staffers concerned with futures research techniques who have provided worthwhile services to committees interested in contact with futures research experts.

*Sources of foresight information within the Executive Branch.*—Various agencies within the executive branch regularly produce forecasts on a range of issues—for example, the Industrial Outlook to 1985 [40] and the Structure of the Economy in 1980 and 1985.[41] These are presumably the types of forecasts which will eventually be available on the CRS futures information system.

More elaborate statements of alternative futures are being developed for EPA. One, entitled "Alternative Futures for Environmental Policy Planning 1975–2000" contains 10 scenarios for the next 25 years.[42] It also contains suggestions for agencies on how to develop a futures staff.

*Environmental impact statements.*—A potentially useful source of forecasts and very detailed treatment of their policy implications is environmental impact statements (EIS). The Senate Public Works

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[39] Craig Decker, op. cit.

[40] U.S. Department of Commerce U.S., "Industrial Outlook 1976 With Projections to 1985" (1975).

[41] U.S. Department of Labor, "The Structure of the U.S. Economy in 1980 and 1985" (1975), Bulletin 1831.

[42] U.S. Environmental Protection Agency, "Alternative Futures for Environmental Policy Planning": 1975–2000 (Oct. 1975), EPA–540/9–75–027.

Committee requires that an environmental impact statement be filed before it will consider any executive proposal. The committee staff then uses the EIS as another of its inputs and gives particular attention to it when the issue is contested.

The major limitation on EIS's is their project specific nature. Taken as a group they might usefully indicate patterns. If this were shown to be the case it would be a useful foresight resource to have someone in CRS or the Council of Environmental Quality who could alert interested committees to their implications.

*Executive agency 5-year plans.*—The products of the various planning offices in the executive branch are another source of forecasts and futures research potentially relevant to committee work. These may become particularly important if a Democratic Congress becomes more compatible with the executive branch under a Democratic President.

The quality and level of planning activity varies across the executive branch with the Department of Health, Education, and Welfare, and the Department of Defense being the most developed. Most other agencies are thorough in their analysis and planning, but on a more *ad hoc* basis.

Committee staff looking for futures information from HEW, for instance, could refer to the HEW planning guidance memorandum which outlines what might be available.[43] While some planning documents are "interagency memorandums" and therefore not public, committees can usually obtain copies of them. HEW also does policy assessments of specific issues [44] and makes use of a policy analysis source book.[45]

While an initial review of these policy analysis materials did not reveal the use of forecasting, other planning documents employ forecasting to a greater extent.

## Conclusion

There are a variety of indications of an increasing demand for more systematic consideration of the future in Senate policymaking. The responsibility for committees in this area should be made explicit, and committees should experiment with a variety of approaches to foresight. The purpose of this activity is to increase the imagination and forethought brought to bear on Senate policymaking. At the same time, the activity, by raising the visibility of emerging issues, can generate citizen and group support for anticipating these issues and dealing with them before they reach a crisis stage.

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[43] U.S. Department of Health, Education, and Welfare, Planning Guidance Memorandum—1976 (Apr. 8, 1976).

[44] U.S. Department of Health, Education, and Welfare. "The Measure of Poverty: A Report to Congress as Mandated by the Education Amendments of 1974" (April 1976).

[45] U.S. National Science Foundation, "The Policy Analysis Source Book for Social Programs" (March 1976).

# FORESIGHT IN THE SENATE

## By William L. Renfro

The question of how to encourage Senate committees to study the future can be viewed as involving two major issues. One is centered around the kind of activity—forecasting, futures research, et cetera—that is needed in the work of committees; the other, around the institutional means or mechanism which would best encourage that activity. Many secondary issues can be expected to emerge as those major issues are analyzed. The analysis also yields a series of options which can be evaluated according to one's own criteria.

The role of forecasting and related activities in the legislative process is only now beginning to be identified. Experience in this area, including work with House committees attempting to implement the House 'foresight provision', suggests at least three different roles of forecasting: first, identification of potential legislative issues, opportunities and problems at an earlier point in time; second, research and analysis based on forecasting and other activities designed to support bill drafting as well as the preparation of committee reports; and third, studies outlining the expected or desired effects that a bill is designed to achieve. These roles are related, but each may entail different activities suggesting different institutional responses.

### Early Identification of Potential Legislation

The early identification of potential legislative issues, opportunities and problems could be achieved if each committee periodically reviewed the future of matters within its jurisdiction. A committee might begin this process by assembling and reviewing the forecasts available from congressional and public sources. A committee might request that CRS or other organizations assist it. A compendium of forecasts could be prepared. When this process identifies an area warranting further attention, the committee could commission special studies. Where a committee finds that issues are of sufficient importance, it may decide to hold 'foresight' hearings—hearings focused on future problems and opportunities as well as possible congressional responses. The foresight hearing might also be used as a forum for identifying goals through citizen participation. Hearings focused on goals might be held in the regions of the country most directly affected by the issues or, for issues of national interest, throughout the country. The witnesses at these hearings might be interested citizens selected to provide a good cross-section of the values and priorities of the public at large.

The method of implementation of this aspect of foresight is far from clear. The Senate might ask CRS or another support agency to assemble a set of forecasts in the form of reports for each standing

committee and to work with the committees in their analysis of the forecasts. These reports might be analogous to CRS's annual emerging issues reports, but focused on issues which might appear in emerging issues reports several years in the future.

It does not seem practical to require committees to use these forecasts by specifying some motions that they must go through such as writing and filing reports. Committees can only be expected to direct their efforts in this direction when they find it useful and feasible to do so. Preparation of reports containing relevant forecasts can make this aspect of foresight more feasible and time will eventually determine its usefulness.

## Foresight in Committees

The second role of forecasting—its use in drafting and analysis of bills as well as the preparation of committee reports—has easily understandable applications.[1] The Senate might require that each bill presented to the floor contain estimates describing the forecasts and assumptions about the future used in preparing the bill as well as estimates of the expected and desired impact of the bill.

The need for explicitly presenting relevant forecasts and assumptions is based on the recognition that all too often the future has held surprises affecting legislation. All proposed legislation involves some assumptions about the future—even if these assumptions are not formally addressed in the development of the legislation or presented in the committee reports.[2] Often relevant factors have a long, recognized history of stability so that it is natural to assume that the future will be like the past. In these cases assumptions about the future may not even be discussed.

The study and analysis of the issues addressed by a bill is usually, in the end, an analysis of history. As an historical analysis is used in drafting and developing a bill, the assumption is gradually made that the future will be like the past. This assumption is in reality a forecast; for many bills, this implicit forecast is of sufficient accuracy to be acceptable. For a growing number of issues, however, circumstances are in such a dynamic state of change that the future should not be assumed to be like the past; if anything, it can be assumed that the future will be unlike the past. For these issues, the assumptions about the future (forecasts) need to be examined carefully and developed as fully as possible.

For purposes of committee work on bills already referred to it, the process of developing assumptions can be described by the following sequential questions:

1. What assumptions about the future are implicit in the bill?
2. What measures, variables, indicators or other objective descriptors could be used to describe these assumptions? (For example, birth rate, Consumer Price Index (CPI), GNP, steel pro-

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[1] The Legislative Reorganization Act of 1970 requires, in part, that cost estimates accompany the report on "each bill or joint resolution of a public character . . ." It may be that a Senate foresight provision should likewise apply to joint resolutions as well as bills. Leg. Reorg. Act of 1970, as amended, sec. 252 (a)(1); (2 U.S.C. 190j).

[2] See generally Committees, Reports, Standing Rules of the United States Senate. Also, Committees, Reports of; certain contents required in reports, Rules of the House of Representatives.

duction, housing starts, disposable personal income (DPI), computer sales, oil imports, average weight or mileage of new cars, et cetera.)

3. What forecasts of these descriptors are available from—Government sources? Industry sources? Trade associations? Think tanks? Others?

4. How do differing or conflicting forecasts affect the proposed bill? What changes in the bill are indicated when different assumptions are made about the future?

5. Which forecast will be used and why? Can contingencies for alternative forecasts be incorporated into the bill?

6. What effect or impact is the bill expected to have on the key descriptors? This is really a matter of forecasting the future in which the bill is operating and comparing it with the forecasts without the bill (question 3). The forecasts of the impact of a bill can become the mandate for the subsequent oversight of the bill by specifying, in terms of objective measures of output, the intent of Congress.

To encourage its committees to address these questions, the Senate might require committees to include "impact forecast" in their reports. Impact forecasts might include three major parts: First, a review of the input assumptions, indicators, forecasts and other information about the future implied or used in the drafting and development of the bills; second, forecasts of events, indicators and trends as they are expected to evolve in the absence of the bill's enactment; and third, forecasts assuming the bill is enacted. The difference between the forecasts in the second and third parts amounts to a forecast of the impacts of the bill—hence, the name impact forecasts.

By requiring its committees to present the results of forecasting in their reports, the Senate might avoid one of the problems encountered by the House foresight provision—implementation. Among other things, the House foresight provision requires standing committees (except for Budget and Appropriations) to undertake forecasting and futures research.[3] Since it is not clear how House committees are to go about this process or what they are to do with its results, this provision has proved difficult to implement. If the Senate were to require a product rather than a process, the implementation problem might be mitigated.

One means of encouraging this aspect of the foresight process would be for the Senate to require through its procedural rules that reports of the committees include the results of the process—that is, impact forecasts, lists of the key measures or descriptors of the issues addressed by the bill, and their forecasts.[4] These forecasts might be analogous to the 5 year budget forecasts required for each bill

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[3] Rules of the House of Representatives, (cl. 2(b)(1), rule X), Jefferson's Manual section 692(a), General Oversight Responsibilities.

[4] This might be similar to the House rule on inflation impact statements, Rules of the House of Representatives (cl. 2(1)(4), rule XI), Jefferson's manual section 713(f), which provides: "Each report of a committee on each bill or joint resolution of a public character reported by such committee shall contain a detailed analytical statement as to whether the enactment of such bill or joint resolution into law may have an inflationary impact on prices and costs in the operation of the national economy."

reported to the floor.[5] In practical operation a committee may report that there are no known or measurable indicators and/or forecasts. Also, any Government agency might be allowed to present its "impact forecasts" for comparison and inclusion in the committee report. As with the budget forecasts, the Senate might provide that its legislation be subject to a point of order if it were reported to the floor without "impact forecasts." [6]

The development of impact forecasts is not necessarily a complex task; some elements of it are frequently addressed by committees. For example, statements on the purpose and background of a bill often include information about the future of issues associated with the bill. As with foresight activities associated with early identification of new legislative issues, committees might use forecasts assembled by CRS or other organizations. CRS could, for example, compile existing forecasts from primary sources such as the literature; public studies; executive agencies; Congressional Budget Office, GAO, OTA; private "think-tanks"; business, industry and trade associations; and CRS reports and documents.

The organization of the compiled forecasts suggests itself: a single set of forecasts of major, macroscopic indicators could be prepared for all standing committees and supplemented by specific sets focused on each committee. The macroscopic indicators might include GNP by sector, size/composition of the labor force, inflation, population by age cohort, energy consumption, birth rate, family formation, housing starts, for example. Forecasts for more specific indicators might be developed in cooperation with the staff of the individual committees to focus on the particular substantive jurisdiction of the committee and on its current legislative agenda.

Forecasts which are available from several sources can be grouped into three categories: first, average or expected forecasts; second, higher or above average forecasts, and third, below average forecasts. The staff might review the methods and assumptions of the three forecasts in selecting or making forecasts for use in preparing legislation. The forecasts might also be divided into long- and short-range forecasts to be used respectively in the analysis of legislation expected to have slowly evolving, long-term impacts, such as national health insurance, as well as legislation expected to focus on near-term impacts, such as economic assistance for an area devastated by a hurricane. The assumptions, methods, and three alternative forecasts might be presented and analyzed by CRS or another support agency in some detail to facilitate their use by committee staff.

These forecasts might be continuously reviewed throughout the year and modified as the need arose. Review could perform an early warning function, identifying possible surprises necessitating changes in the forecasts. The entire set of forecasts could be updated and reissued for each new session of Congress. At that juncture, changes in forecasts could be identified and analyzed. As another year of history

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[5] Standing Rules of the United States Senate, 2 U.S.C. 190j; Leg. Reorg. Act of 1970, as amended, section 252. Rules and Manual, U.S. Senate, sec. 347.3, and Rules of the House of Representatives (cl. 7(a)(1), rule XIII, Jefferson's Manual section 748(b), Estimate of cost.

[6] Rules of the House of Representatives (cl. 7(b), rule XIII; Jefferson's Manual, section 748(b), Estimate of Cost.

became available, these updates might be used as measures of the actual impact of previously enacted legislation and thereby help committees discharge their continuing responsibility for oversight of that legislation.

## Foresight In Oversight

Through its forecasts and other descriptive statements of the future, a committee report can outline the expected or desired effects that a bill was designed to achieve. Once a bill is enacted, this information can supply performance standards for the committee in its subsequent oversight of the legislation. The agency or agencies responsible for the implementation and administration of the legislation could use the impact forecasts as guidelines in achieving the intent of Congress.

The use of impact forecasts in oversight might provide early warning of developments not consistent with the expectations and forecasts of Congress. Oversight activities could be focused on these areas to identify the needed remedial steps. These oversight activities might be supportive of the general policies reflected in the various sunset proposals.[7]

The implementation of this aspect of foresight depends on the availability of impact forecasts. Since the forecasts of expected or intended impacts could be used by the executive branch to justify a broader mandate than Congress intended, the Senate may prefer to limit their use, at least initially. These forecasts are, at best, estimates and are subject to substantial error. Since current congressional estimates of this nature are not treated as commitments binding on future action, it seems unlikely that other estimates about the future would be thus regarded. Impact forecasts might best be used as a basis for subsequent oversight activities, recognizing that through the language of a particular bill, Congress can expand their use and role as it desires. If the Senate adopts a foresight provision requiring the preparation of impact statements, then it may want to include them in describing the general oversight responsibilities of its committees. This relationship between foresight and oversight suggests that a link between the two could be formally recognized and established in the rules.

## Committees Responsible for Foresight

A final question concerns which committees should be responsible for foresight. While it may seem that all Senate committees should have foresight responsibilities, the House did not opt for across-the-board application of its foresight provision. A review of the application of the House provision might be useful.

The House foresight provision is part of the General Oversight Responsibilities.[8] These responsibilities apply to all standing committees except for Budget and Appropriations. The limitation to standing committees seems plausible enough. The exception of the Budget Committee appears to stem from the formation of this com-

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[7] See Government Economy and Spending Reform Act of 1976, S. 2925, and companion bills H.R. 12055, H.R. 13305, H.R. 13370, and H.R. 13541, all from the 94th Congress.

[8] Rules of the House of Representatives (cl. 2, rule X), General Oversight Responsibilities; Jefferson's Manual, section 692(a), General Oversight.

mittee after the first proposed foresight provision. Also, the substantial forecasting and oversight efforts of the Congressional Budget Office and the Government Accounting Office may have been viewed as sufficient. The record appears to be silent on this exception. The exception of Appropriations arose "because that committee's subcommittees already function to review and examine agency requests for funds." [9]

The Senate may want to review the oversight and foresight activities of its committees and its support agencies such as CBO and GAO to determine its needs for additional oversight and foresight activities. If Senate Appropriations and Budget Committees were required to address oversight and foresight issues and the House committees were not, some substantive differences might arise.

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[9] Committee Reform Amendments of 1974, Report of Select Committee on Committees, U.S. House of Representatives, Rept. 93–916, part II, Mar. 21, 1974, p. 63.

# THE DEVELOPMENT OF OVERSIGHT IN THE UNITED STATES CONGRESS: CONCEPTS AND ANALYSIS

By Joel D. Aberbach

## Part I: Varieties of Congressional Oversight

Congress has shown increasing interest in oversight as the Federal bureaucracy has expanded in size and much program initiation has passed to the executive branch. In 1946, following the New Deal and the Second World War, a provision of the Legislative Reorganization Act prescribed "continuous watchfulness" over the actions of executive agencies in carrying out the laws. In the 1970 amendments to that act Congress required most committees to issue periodic reports on their oversight endeavors—an obvious attempt to spur them to action. Data gathered on congressional oversight in 1973 for the House Select Committee on Committees (the "Bolling committee") staff and comments by Congressmen before the committee indicated that the 1970 requirement had not produced the desired effect, and the House amended its rules in an attempt to stimulate more activity and provide some coordination. There is sentiment in the Senate for similar action, as indicated by the Interim Report of the Commission on the Operation of the Senate (1976) and by the establishment of the Temporary Select Committee to Study the Senate Committee System.

When it comes to performance, Bibby's comment that oversight is "Congress' neglected function" is still the standard introductory observation in papers on the subject.[1] Thus, the second definition of oversight in "Webster's New Collegiate Dictionary" may be unintentionally appropriate: "an overlooking or something overlooked; (an) omission or error due to inadvertence." Yet, the first definition, "watchful care or supervision," is obvously what we have in mind when we speak about congressional oversight.

There is debate over how to define oversight. Harris proposes a very narrow definition: oversight "strictly speaking, refers to review after the fact. It includes inquiries about policies that are or have been in effect, investigations of past administrative actions, and the calling of executive officers to account for their financial transactions." [2] Ogul takes a much broader approach and defines legislative oversight as "behavior by legislators and their staffs, individually or collectively, which results in an impact, intended or not, on bureaucratic behavior." [3] The Ogul definition is useful in that it directs attention to the fact that oversight is a latent as well as a manifest function of Congress and that many of the things done by Representatives and

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[1] See John F. Bibby, "Congress' Neglected Function," in Melvin Laird (ed.), "Republican Papers" (New York: Praeger, 1975).

[2] See Joseph Harris, Congressional Control of Administration (Washington: Brookings Institution, 1964).

[3] See Morris Ogul, Congress Oversees the Bureaucracy (Pittsburgh: University of Pittsburgh Press, 1976).

Senators contribute to oversight. Ogul's definition is so broad, however, that it excludes very few congressional activities.

I define oversight as congressional review of the actions of the executive branch, particularly congressional assessment of the impact and effectiveness of policy as it is or has been administered. This, of course, includes an active concern with the administration of policy but excludes much of what Congress does when it considers proposals for new programs or expansion of current ones.

As noted above, it is often asserted that Congress neglects oversight. What does occur (with a few exceptions) is said to be neither continuing, comprehensive, nor systematic. Agencies or programs are rarely overseen persistently, the focus of the oversight effort is often very narrow, and systematic oversight efforts (those involving a methodical approach governed by some rational principles) are almost impossible to uncover.

My basic assumption is that promoting congressional oversight is desirable because it provides one mechanism by which those who administer public policies can be held accountable and their programs evaluated. I also assume that more oversight is better than less.[4] The idea behind this is quite simple: even oversight performed sporadically, focused on fairly narrow subjects and utilizing an unsystemmatic approach, will at least hold down flagrant abuses of power by administrators, make them more responsive to the wishes of Congress, and provide Representatives and Senators with better knowledge to use in making judgments about the effectiveness of programs. Persistent oversight of programs or agencies is, I assume, more likely to yield these benefits than random reviews, but the benefits of regular efforts may not be commensurate with the time and effort involved unless the quality of oversight is improved.[5] And quality can only be significantly improved through efforts to evaluate programs in a comprehensive and systematic manner. Great difficulties are suggested by the latter point, since our political system diffuses authority and promotes legislation which often contains unclear or contradictory goals.

The issue, then, is how to promote more and better oversight. Separating quantity from quality is one simplifying device. Another involves a division of the factors often thought to promote oversight into those whose effect is mainly to increase the quantity (incidence) of oversight and those which are likely to improve its quality. A further distinction, given our interest in change, will be drawn between factors which are subject to planned manipulation (i.e., can be affected through policy changes) and those which are beyond anyone's control.

### *Factors Promoting a Greater Incidence of Oversight*

The literature is filled with propositions about factors which promote oversight.[6] Many of these propositions, discussed below, seem mainly to affect the quantity of oversight done.

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[4] There are, of course, limits. Oversight can be performed in a destructive manner. The prime example of this was the McCarthy "investigation" of government personnel practices in the 1950's.

[5] There are certainly benefits to be gained from reviewing a program in a persistent yet unsystematic manner. However, the major payoff from either sporadic or regular unsystematic oversight probably comes from the anticipation of administrators that the overseers might uncover something embarrassing.

[6] See especially Bibby, *op. cit.*, Ogul, *op. cit.*, and Seymour Scher, "Conditions for Legislative Control," Journal of Politics, August 1963.

1. *Split partisan control of the Presidency and Congress.*—If different parties control the Presidency and Congress the majority in Congress has an incentive to harass and embarrass the executive for partisan gain. This is not a factor which is conducive to persistent oversight of a policy or agency, and it is not something which can be controlled. However, there is one reform which has been suggested that would produce much the same stimulus to oversight and be almost as effective as split control; that is to give the minority party in Congress (if it does not also control the Presidency) control of the Senate and House Government Operations Committees and of the oversight subcommittees of the authorization committees.

2. *Casework problems.*—If the bureaucracy is unresponsive to requests for assistance to the constituents of a strategically placed Senator or Representative (that is, a committee or subcommittee chairman, ranking member et cetera), oversight may be used as a means to set things aright. One would not expect this kind of unresponsiveness to happen very often, however, or to require persistent oversight to correct.

Casework problems are not something that can be manipulated in the interest of increased oversight, but there may be a way to use casework information to stimulate more oversight activity and perhaps improve its quality. This would be for Congress to establish a central office to collect and analyze information on constituent requests and agency responses to them. A periodic report which highlighted recurrent problems might create pressure for a review of the agencies or programs involved.

3. *Attempts to satisfy group interests.*—This is a broader category than the preceding but shares much in common with it. Most established interests are influential in the bureaucracy, and administrators are usually responsive to them, in large part because they carry weight in Congress. Every once in a while, however, dissatisfied groups stimulate spurts of oversight activities, as has happened in the case of the Occupational Safety and Health Administration.

4. *Desire to protect favored agencies.*—This factor is related to the preceding one, except that here Senators and Representatives are mobilized by bureaucrats as well as interest groups to protect a program which is threatened by the administration or which needs a boost for some other reason. The purpose of the oversight then becomes to show how effective or essential the program is and to demonstrate the depth of its support. Such efforts are especially common when there is split partisan control of the Congress and the Presidency, but probably occur at all times. Sunset laws of the type now under consideration in Congress would unintentionally stimulate this type of oversight on a regular schedule. While protective oversight is likely to be very superficial, it occasionally will expose flaws in a program which even its most ardent supporters will want to see corrected.

5. *Efforts to preempt opponents.*—Preemptive oversight is a special kind of the protective oversight just discussed. As Scher says, some oversight (which he terms preventive) "results from an unenthusiastic determination that a limited examination of an agency by its friends may cost less than an uncontrolled one by its enemies." [7] Such

[7] See Scher, *op. cit.*

oversight is likely to be superficial and brief, but the incentive to perform it is subject to some manipulation. A restructuring of committee jurisdictions which encouraged "unfriendly" committees to take a look at the program or agency in question would stimulate this type of oversight. The new congressional budget process may be a particularly important stimulus to preemptive oversight, since authorization committees will want to present what looks like a strong case to the Budget Committees. It is likely that superficial oversight efforts will be at a disadvantage in competition with more systematic efforts if the budgeting process works as planned.

6. *Committee structure.*—A factor very much subject to planned manipulation is the committee structure. The more decentralized the committee, the greater the likelihood of oversight activity. As Ogul notes—

> * * * A decentralized committee—one in which power over money, staff, and program is largely in the hands of subcommittee chairmen or others—enhances the opportunity for oversight simply because decisionmaking is dispersed.[8]

An additional factor which ought to lead to a greater incidence of oversight is the establishment of oversight subcommittees. Once established, many members of these subcommittees and their staffs will want to make something of their assignments. Greater oversight activity is a likely result.

7. *Increasing staff resources.*—One would expect that increases in the number of staff members assigned to committees and subcommittees or to individual Members both in their offices and through their committee assignments would lead to more oversight activity. There would probably not be a 1-to-1 relationship between the increase in staff and oversight, but one would expect some impact if only because of the greater number of people available to do things. However, when authority over staff is dispersed, increases in the number of staff are more likely to lead to increases in the amount of oversight activity than to increases in systematic oversight. The problems of lack of coordination and lack of an orderly, methodical approach to oversight are probably exacerbated by increases in the number of staff aides.

8. *Corruption, crisis, and publicity.*—Evidence of corruption, the breakdown of a program , or the subversion of accepted governmental processes (as revealed, for example, by Watergate) make oversight attractive to Members of Congress because the overseers are almost sure to make a favorable public impression. Most such oversight is not planned in advance and is likely to be shortlived and somewhat superficial. But both Watergate and the widespread belief that the Great Society programs of the 1960's were ineffective appear to have had a profound impact on both the public and the Congress, alerting them to the need for continuous watchfulness.

A related factor which may bring publicity to Members of Congress who oversee the executive branch is the rise of citizens' lobbies with wide memberships or favorable public recognition. These groups place oversight of target agencies and programs on their agendas and publicize congressional response. They also are sources of information

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[8] See Ogul, *op. cit.*

previously unavailable. They seem to be a stimulus to more oversight, but whether they will sustain themselves through time or maintain a steady enough interest in an area to reward persistent congressional attention is not yet clear.

*Factors Likely To Increase the Quality of Oversight*

The analysis in the preceding section is based on academic studies (especially Scher, 1963 and Ogul, 1976) which approach oversight from the perspective of its incentives to Senators and Representatives. While more traditional scholars spend much time examining the techniques of oversight (hearings, investigations, etc.) and the resources available (staff, money, etc.), Scher and Ogul ask what net gains accrue to Senators and Representatives from their oversight activity. Investigations, to take one example, can yield great publicity dividends if they expose corruption or are critical of unpopular agencies, but they may prove politically useless or even damaging if they turn up nothing newsworthy or threaten powerful interests. Persistent oversight of an agency or program is even more time-consuming than intermittent investigation, and the publicity rewards are likely to be fewer. In brief, when the disadvantages outweigh the advantages, one assumes that Representatives and Senators shy away from oversight, even though they may believe it ought to be done.

In view of all this, it is not surprising that congressional performance of oversight has been spotty at best, with persistent oversight a rarity and thorough systematic oversight almost nonexistent. Over the last few years, however, there have been changes which ought to make improvements in the quality of oversight more attractive to many in Congress. These changes do not guarantee that oversight improvements will occur, but they make discussion of certain factors likely to increase the quality of oversight more than an academic exercise.

1. *Relative Resource Scarcity.*—Most Americans are accustomed to the vision of an ever-growing national economy, with rapidly increasing resources available to the Federal Government for the expansion of old programs and the establishment of new ones. Such a vision discourages careful oversight of ongoing programs which have the support of entrenched constituencies; there seems to be no pressing reason for Congress to worry much about efficiency or effectiveness.

The United States, however, is now in a period of relative resource scarcity. The recent recession placed severe stress on the national economy, and many of the programs of the 1960's have proved much more expensive than originally estimated. These factors, together with the belief that many Government programs are not working very well, have stirred growing public interest in efforts to determine the effectiveness of Federal programs and to weigh them against possible alternative uses of the resources they consume. There is a growing constituency which supports such efforts and growing public acclaim to be gained by backing them. Furthermore, the political costs of making hard choices can be reduced by fixing the blame on carefully conducted, technically respectable analyses. In short, relative resource scarcity has created a political climate in which high-quality, systematic oversight has become much more attractive than it was before.

2. *Influx of skeptical Senators and Representatives.*—Contributing to this climate is the influx into Congress of people described by the

National Journal as a "new breed of politicians coming to the fore with a limited, often skeptical view of what Government can accomplish." Their electoral success reinforces their belief that a skeptical view is popular with the public and may advance the notion that thorough, systematic oversight can yield political rewards.

3. *Widespread program evaluation.*—In part as a consequence of the relative scarcity of resources, in part as a reflection of new analytic techniques, and in part as a function of new mandates given to executive agencies, congressional support agencies, and congressional committees themselves, program evaluation is being carried on throughout the Federal Government today. It is not always well done and it is often self-serving, but it does put pressure on Congress to consider the results.

A major problem is that low-quality evaluation is encouraged by the types of programs Congress passes. In order to build a coalition large enough to pass a bill—and to offend as few people as possible—Congress often establishes programs which lack clear, noncontradictory goals.

Allen Schick, however, notes that:

> When Congress muddles through without a clear specification of purpose, the process of evaluation is not aborted. Rather, it must begin with executive implementation rather than with textbook clarity about objectives. Congress, in fact, has two legitimate tasks to get the Executive to produce relevant evaluations. First, Congress can write into law a mandate for the agency to evaluate its program; second, Congress can demand that the evaluative measures used by the agency reflect congressional interest and perspectives, not merely the orientation of the implementing agency. . . . What is required is the prescription in law of a process that agencies must adhere to in evaluating their activities, including milestones for the crucial events in the process, and a reporting schedule.[9]

Schick's proposals would improve the prospects for intelligent use by Congress of program evaluations. They suggest a general point, which is that congressional committees should work closely with any agency (for example, the Government Accounting Office) doing evaluations for them or the products are unlikely to have much impact. The process Schick proposes will not eliminate all muddled program objectives and the problems they create (it does, after all, involve continuous bargaining between Congress and the agencies), and it will not result in high-quality program evaluations as measured by absolute professional standards. But it will increase the usefulness of the evaluations.

Effective congressional utilization of evaluation requires the active interest of Senators and Representatives, staff members who can skillfully direct the work of technical experts, and a congressional willingness to bite the bullet at times when evaluation is likely to cause political difficulties. No one can mandate such things, but recent

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[9] See Allen Schick "Evaluating Evaluation: A Congressional Perspection," in Legislative Oversight and Program Evaluation (Washington: Government Printing Office, 1970).

changes in the political climate and in the composition of Congress suggest that they can happen.

It would be helpful, in this regard, to develop courses in evaluation for politically skilled but analytically untrained staff. This would help to improve communication between Congress and evaluators from the support agencies or the executive departments.

4. *Reforms in the budget process.*—The most important potential stimulus to systematic oversight by the Congress is the new budget process. As Schick notes:

> There is some possibility that the new congressional budget process might bolster the incentives for evaluation at [the authorization and appropriations] stages, if only because of the pressure to consider particular spending demands in the light of overall national priorities and other claims on the budget. Moreover, the new congressional process might contribute to a narrowing of the authorizations-appropriations gap, the proclivity to authorize one level of expenditure but to appropriate at a much lower level. More realistic authorizations might encourage committees to take more careful looks at the programs subject to their oversight.[10]

A possible scenario is that some presentations to the Budget Committees by the authorization committees of their views and recommendations on matters to be covered in the budget resolutions will be based on evaluations designed to make favored agencies and programs look good. ("Preemptive oversight" may also take hold here—a desire to evaluate programs before the Congressional Budget Office or the Budget Committee staffs get to them.) With any luck, some authorization committees will seek to influence the Budget Committees by presenting more systematic evaluations than those of the competition in order to back up their claims to available funds. The Budget Committees, if they reward such efforts, can thereby stimulate improvements in oversight.

5. *Rotation of committee memberships.*—Another factor which might increase the quality of oversight would be regular rotation of committee assignments. Such a procedure could have several benefits. First, it would loosen the ties which Senators and Representatives develop with the agencies whose programs their committees authorize or fund. This, in itself, would be a stimulus to more objective evaluation of programs and the agencies which administer them. Second, by moving from committee to committee, each Member would develop a better overall view. Third, because of the need for quick comprehension of agencies and programs as they pass in review, Senators and Representatives might be more interested in thorough studies of relevant policies, especially studies which compared benefits across programs or agencies.

The difficulties with this proposal are many, but two (leaving aside resistance to change) stand out. First, unless the staff attached to the committees had low turnover, committees would be even more reliant on the executive branch for information and expertise than they are now. Second, even if committee staffs remained intact the perspectives

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[10] See Schick, op. cit.

of program clienteles and administrative agencies might still dominate the process. Reserving some staff positions for people whose professional training is in policy analysis might help here.

6. *Unified political parties.*—Perhaps the least likely but most effective stimulus to better oversight would be responsible, unified political parties capable of defining coherent programs and establishing clear, noncontradictory goals. If such were the case, Congress would make firm decisions about programs and not leave the definition of goals or the reconciliation of contradictory goals to be worked out by administrators. It would then have standards against which to judge the relative success of programs and the effectiveness of their administration.

A responsible party system would also be centralized and avoid the pitfalls of decentralization which currently face the Congress. The current decline in the influence of the committee chairmen in Congress and the growing power of the subcommittees and the rank and file promise an increase in activity (including oversight activity), much of it uncoordinated. Centralized leadership coupled with party discipline and a well-defined party program might curtail some of this activity while making the rest more effective.

While the quantity of oversight is thought to increase when there is split partisan control of the Presidency and the Congress, the quality as well as the quantity might well go up where the same party controlled both institutions in a responsible party system. President and Congress might then heed Richard Neustadt's suggestion for controlling the bureaucracy: "Politicians at the two ends of the Avenue unite! You have nothing to lose but your pieces of power—and even these may be slipping out of reach." [11]

## Part II: An Analysis of Data on Congressional Oversight

As I indicated in part I, the notion that oversight is Congress's neglected function is widespread, shared alike by scholars and legislators. The survey of oversight activity by House committees done by the Congressional Research Service for the Bolling committee, for example, showed that 11 percent of all hearing and meeting days in the first 8 months of the 93d Congress were devoted to oversight.[12] The prevailing inference drawn from these data was that 11 percent was too little. Thus, the committee's report expressed a belief that the oversight responsibilities of the House committees are important and too often shunted aside by the press of other business and endorsed the view that oversight of programs and agencies should be a principal function of the Congress.[13]

This part of the paper provides some preliminary analysis of trends in congressional oversight behavior. The analysis is longitudinal, covering the 91st, 92d, 93d, and 94th Congresses, and comparative, contrasting the House and the Senate. The analysis has two major purposes:

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[11] See Richard E. Neustadt, "Politicians and Bureaucrats," in David B. Truman (ed.), "The Congress and America's Future" (Englewood Cliffs, N.J.: Prentice-Hall, 1965).

[12] The data are presented in appendix G of the report, pp. 267–275. The percentage of all hearing and meeting days devoted to oversight, in what must be a typographical error, is erroneously presented as 1.1 percent rather than 11 percent. The numbers show 231 days devoted to oversight out of a total of 2,095.

[13] See U.S. Congress. House. Select Committee on Committees. House Report 93–916, Part II. (Report to accompany H. Res. 988, 93d Cong., 2d sess. 1974).

1. To document the amount of oversight activity in committee hearings and meetings for each of the last four Congresses;
2. To determine the impact of some of the factors identified in part I in promoting a greater incidence of oversight.

The nature of the data requires major emphasis on the quantity of oversight, but I will also briefly consider the implications of the evidence in regard to quality.

The data source is the Daily Digest appended to the Congressional Record. The Daily Digest lists and summarizes the meetings and hearings held by congressional committees. The time period coded for each Congress was January 1 to July 4 of the first year of each session, i.e., 1969, 1971, 1973, and 1975. The unit of analysis is a hearing and/or meeting series dealing with what I call a "matter," i.e., a subject, theme, or topic. The coders were instructed to code as a unit a series of hearings and/or meetings on one subject that was a single concern or closely related set of concerns. The number of days of hearings and/or meetings per matter was also recorded so that the total amount of time spent on each matter could be recovered from the data when that was desirable.

All hearings or meetings listed in the Daily Digest were coded so that effort spent on oversight could be compared to activities devoted to other purposes, such as authorizations, nominations, et cetera. Oversight is defined here conceptually as congressional review of the actions of the executive branch and operationally as hearings or meetings held for any of the following purposes, either singly or in combination: (1) To review and/or control unacceptable forms of bureaucratic behavior; (2) to ensure that the bureaucracy implements the policy objectives of Congress; and (3) to determine the effectiveness of programs and policies. In addition, committee hearings or meetings described in less precise terms than those above—i.e., simply as efforts to review or oversee the activities of an agency—were coded as oversight. The numbered elements of the operational definition were drawn from the CRS study for the Bolling committee. The difference between that study and mine is that I did not code as oversight hearings or meetings designed, in their words, "to analyze national and international problems requiring Federal action" unless they were part of an effort to review government actions in the area.

The data have some shortcomings. First of all, they understate the amount of committee activity because the descriptions in the Daily Digest were inserted by the committees themselves. If for any reason a committee failed to report a meeting or a hearing to the Record, there was no entry. Second, the descriptions submitted were not always clear. We guarded against error by double coding any questionable entries in the Digest. Third, the data are records of hearings and meetings, not other activities of the committees, and, therefore do not necessarily include staff investigations, which can be important aspects of oversight. Finally, oversight may occur as a byproduct of hearings and meetings held by congressional committees for other purposes. Accordingly, the data analyzed in this paper underestimate the amount of oversight because they consider only the primary purpose of each hearing or meeting as described in the Daily Digest.

TABLE 1.—FREQUENCY OF COMMITTEE OR SUBCOMMITTEE HEARINGS AND MEETINGS IN THE HOUSE AND SENATE, BY CONGRESS [1]

| Congress | Total number of series [2] | Total number of days [3] | Mean days per series |
|---|---|---|---|
| House: | | | |
| 91st | 341 | 1,090 | 3.19 |
| 92d | 398 | 1,228 | 3.08 |
| 93d | 465 | 1,442 | 3.10 |
| 94th | 566 | 1,489 | 2.63 |
| Percent change from 91st to 94th | +65.9 | +36.6 | −17.5 |
| Senate: | | | |
| 91st | 278 | 717 | 2.57 |
| 92d | 328 | 857 | 2.61 |
| 93d | 406 | 1,071 | 2.63 |
| 94th | 409 | 938 | 2.29 |
| Percent change from 91st to 94th | +47.1 | +30.8 | −10.8 |

[1] Entries are for the Jan. 1 to July 4 period of the 1st year of each session of the 91st, 92d, 93d, and 94th Cong. Hearings and meetings held by the Appropriations, Rules and, Administration Committees in each chamber have been excluded.
[2] A series is defined as a set of hearings and/or meetings on 1 subject, topic, or theme.
[3] The total number of days was determined by adding the number of days of hearings and/or meetings in each series.

1. *Changes in committee oversight activity.*—The evidence indicates that the number of oversight hearings and meetings held by committees has increased significantly since 1969. Table 1 presents the number of hearings and/or meetings series coded in each of the four Congresses, the total number of days spent in hearings and meetings, and the mean days per series for all House and Senate committees except Appropriations, Rules, and Administration.[14] The committees dealing with rules and administration were excluded because of their preoccupation with internal chamber business. The Appropriations Committees were excluded because the House Appropriations Committee listed very few of its hearings in the Daily Digest during the 91st and 92d Congresses.

While the total number of hearings and meetings series increased even more rapidly in the House than in the Senate between 1969–75, the increases in total days were quite similar because the mean days per series were less in the House than in the Senate. The Senate workload showed some signs of leveling off in the 94th Congress, perhaps indicating a rough saturation point of 1,000 hearings or meetings in a 6-month period. What is clear is that committees in both bodies meet even more often than they did a few years ago, and that more and more matters are taken up in each session.[15]

[14] Joint Committees were also excluded from the analysis.
[15] I have not yet had the time to analyze these data fully, but one would certainly want to look at such factors as increasing staff resources, larger numbers of liberal Democrats, and changing patterns in committee and subcommittee chairmanships for explanations of the pattern presented in the table.

TABLE 2.—OVERSIGHT HEARINGS AND MEETINGS BY HOUSE AND SENATE COMMITTEES OR SUBCOMMITTEES, BY CONGRESS [1]

| Congress | Number of oversight series | Oversight series as a percentage of total series [2] | Number of days of oversight hearings and meetings | Number of days oversight as a percentage of total number of days [3] | Mean days oversight | Standard deviation days oversight |
|---|---|---|---|---|---|---|
| House: | | | | | | |
| 91st | 31 | 9.1 | 122 | 11.2 | 3.93 | 5.84 |
| 92d | 29 | 7.3 | 80 | 6.5 | 2.75 | 2.46 |
| 93d | 66 | 14.2 | 156 | 10.8 | 2.36 | 2.26 |
| 94th | 114 | 20.2 | 282 | 18.9 | 2.47 | 2.17 |
| Senate: | | | | | | |
| 91st | 26 | 9.4 | 81 | 11.3 | 3.12 | 2.74 |
| 92d | 33 | 10.2 | 94 | 11.0 | 2.85 | 3.26 |
| 93d | 38 | 9.4 | 126 | 11.8 | 3.31 | 3.27 |
| 94th | 66 | 16.2 | 171 | 18.2 | 2.59 | 2.35 |

[1] Entries are for the Jan. 1 to July 4 period of the 1st year of each session of the 91st, 92d, 93d, and 94th Congs. Hearings and meetings held by the Appropriations, Rules and, Administration Committees in each chamber have been excluded.
[2] See table 1 for a count of the total number of series.
[3] See table 1 for a count of the total number of days.

Table 2, which displays data on oversight hearings and meetings, shows a fairly consistent pattern of increases both in the number of series and in the total days devoted to oversight. The one exception is found in the House, where the number of oversight series dropped slightly in the 92d as opposed to the 91st Congress and the total number of oversight days declined precipitously. This steep drop in the number of days devoted to oversight is a function of a drop in the mean number of days spent on oversight per series. As the change from a standard deviation of 5.84 to 2.46 indicates, there were fewer extreme cases in the 92d Congress. In fact, one oversight series of 33 days of hearings and meetings in the 91st Congress was the culprit. This was the longest series by far, the next longest being 16 days. At any rate, with the one exception described, oversight not only increased in absolute terms from Congress to Congress but held its own as a percentage of a rapidly increasing committee workload. It began to rise in the House in the 93d Congress as a percentage of total series of hearings and meetings and in the 94th Congress exploded into prominence in both Chambers as a major percentage both of series and of hearings and meetings days.

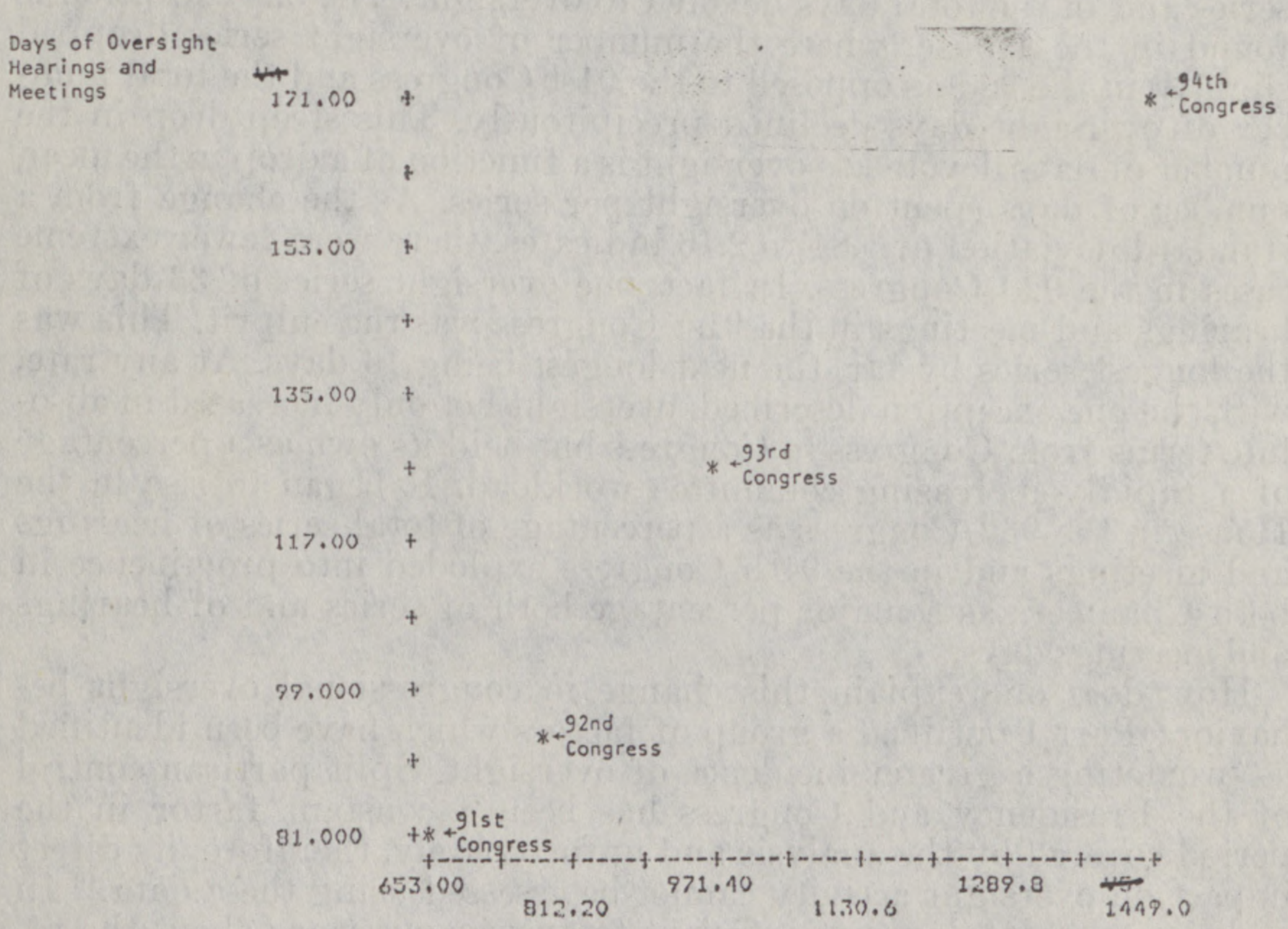
How does one explain this change in congressional oversight behavior? Part I outlined a group of factors which have been identified as promoting a greater incidence of oversight. Split partisan control of the Presidency and Congress has been a constant factor in the period covered by the analysis and unfortunately, therefore, its direct impact on oversight activity cannot be assessed using these data.[16] In addition, the data are not sufficient to answer questions about the relationship between oversight activity and such things as casework problems, attempts to satisfy group interests, or the desire to protect favored agencies. Additional analytic work in these areas could be done by evaluating hearings, transcript, and interviewing participants.

[16] Split partisan control might also be very important as a contextual factor influencing the relationship between other variables and oversight, but data from a period in which the same party controlled the two institutions would be required in order to establish this.

The data collection problem, however, would be a difficult one since the investigator would ideally like to know not only what motivated a given instance of oversight activity but also when similar conditions existed and no oversight resulted.

Fortunately, there are some data which can help in probing the relationship between the remainder of the factors identified in part I and oversight activity. It was hypothesized that oversight would increase as the number of staff available to committees and subcommittees increased. Information collected by the Temporary Select Committee to Study the Senate Committee System on numbers of staff members available to House and Senate committees is the basis of figure 1. The horizontal axis is the total number of permanent, inquiries, and investigation staff available in 1969, 1971, 1973, and 1975 to all Senate committees, and the vertical axis is the total number of days Senate committees spent on oversight in those years. The total number of days Senate committees spent on oversight during this period bears a simple linear relationship to the total staff available.

FIGURE 1.—Staff size versus days of oversight hearings and meetings, Senate. (Oversight entries are for the Jan. 1 to July 4 period of the first year of each session of the 91st, 92d, 93d, and 94th Congresses).




This does not mean, however, that increases in staff are the definitive factor promoting more oversight. First of all, figure 1 covers a very short timespan. The data might not be quite so neat if a longer series could be examined.[17] Second, while complete data on staff growth in

[17] It is food for thought that on the plane of general activity staff increases were quite pronounced in the Senate committees between 1973 and 1975 yet overall committee hearings and meetings days actually declined.

the House are not available, the data for 1969 and 1971 present a problem. Staff in the House grew from 688 to 799 in this period, while total days of oversight in the House fell during the same period. It could be that the relationship between staff and oversight only exists in the Senate, but that could only be verified by analysis of more comprehensive data. Third, correlation does not signify causation and in the case of these variables the direction of causality is not absolutely clear. More staff may be promoting oversight, but the reverse may also be true—the desire of Senators to oversee the bureaucracy may be leading them to hire more staff. If the latter is correct, when and if the desire abates, staff increases may be associated with constant or even decreasing levels of oversight.[18] My own feeling on this point is that the system is a complex one in which additional people are slack resources, some of whom find their way into oversight activity regardless of the priorities of their employers. At any rate, one should be cautious in interpreting these data.

Next, let us examine committee structure. This factor is an extremely important one for those interested in reform because, like the staff factor, it is very much subject to planned manipulation.

Two propositions were outlined in part 1. The first was that the more decentralized the committee the greater the likelihood of oversight. In order to make a satisfactory test of this proposition one would want to develop good measures of the dispersal of power over money, staff, and the agenda in each committee and then relate them to the level of oversight activity. Such measures are not currently available, but our crude indicator of decentralization—the number of subcommittees on the full committee—did not show very promising results.[19] The average correlation between the number of subcommittees and the amount of oversight conducted (the oversight indicator was coded here as a dummy variable, that is, one equals oversight and zero equals other) was 0.06 in the House and 0.07 in the Senate. In addition, the correlations in the House for the 93d and 94th Congresses (that is, after the passage of the so-called "subcommittee bill of rights") (see Ornstein, 1975) were 0.02 and 0.08, respectively.

The second proposition on committee structure, namely that the establishment of oversight committees or subcommittees is likely to lead to an increase in oversight activity, seems very promising. These units have oversight as a major mandate, and the assumption is that if they are active at all they will be more likely than other units to devote their efforts to overseeing the executive. Fortunately, it is fairly easy to identify existing oversight committees and subcommittees (which we will call oversight units) and to compare their behavior to that of nonoversight units.

In table 3 the percentages of hearings and meetings series devoted to oversight are presented both for oversight units and for the remainder of the committees and subcommittees. The data are further divided by chamber and Congress. Oversight units are defined as the

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[18] Staff size has been on the increase for quite some time, although not quite at the recent rate. A longer timeframe for the analysis would provide some additional evidence from which to determine the ways in which these variables operate in the Congress.

[19] The assumption here is that the larger the number of subcommittees, the more dispersed power is likely to be. This assumption is probably a reasonable one in most cases, but there are some potential pitfalls. For example, in a committee with many subcommittees the chairman and a small clique might control the key subcommittees which have jurisdiction over the crucial programs within the committee's jurisdiction.

Government Operations Committees in both chambers and subcommittees of other committees which have such identifying labels as oversight or department operations in their titles.

TABLE 3.—PERCENTAGES OF HOUSE AND SENATE HEARINGS AND MEETINGS SERIES DEVOTED TO OVERSIGHT BY COMMITTEE UNIT AND CONGRESS [1]

| Congress | Oversight series as a percentge of total series held by— | |
|---|---|---|
| | Oversight units [2] | Nonoversight units |
| House: | | |
| 91st | [3] 40.0 (30) | 6.1 (309) |
| 92d | 30.6 (36) | 5.0 (358) |
| 93d | 39.1 (46) | 11.5 (417) |
| 94th | 54.7 (64) | 15.8 (501) |
| Senate: | | |
| 91st | 6.7 (15) | 9.5 (263) |
| 92d | 14.3 (14) | 10.0 (309) |
| 93d | 5.3 (19) | 9.0 (386) |
| 94th | 34.3 (35) | 14.5 (373) |

[1] Entries are for the Jan. 1 to July 4 period of the 1st year of each session of the 91st, 92d, 93d, and 94th Cong.
[2] Oversight committee units are defined as the Government Operations Committees in both chanbers and subcommittees of other committees which have such identifying labels as oversight and department operations in their titles. Hearings and meetings held by the Appropriations, Rules, and Administration Committees in each chamber have been excluded.
[3] Numbers in parentheses are the bases upon which percentages are calculated.

Table 3 shows some clear findings in the House. Oversight units did indeed devote more series of hearings and meetings to oversight than other committee units. The differences are quite pronounced. Indeed, the average correlation (r) between dummy variables for the oversight and committee units indicators is 0.29.[20]

Both oversight and nonoversight units have increased their oversight percentages since the 91st Congress. However, the oversight units' share of the total oversight series, that is, the percentage of the total oversight series in each Congress which they conducted, dropped from 38.7 percent in the January 1 to July 4 period of 1969 (the 91st Congress) to 30.7 percent in the comparable period of 1975 (the 94th Congress).[21] This drop resulted from the fact that the percentages of series devoted to oversight rose more steeply for the nonoversight than for the oversight units. The difference in oversight percentage growth rates was enough to overcome the greater percentage increase in the number of series held by the oversight units.

In the end, then, one must conclude both that the oversight units of the House committees do spend a higher proportion of their time on oversight series than the nonoversight units and that the large increase in oversight found in the House cannot be accounted for simply by the increase in activities of the oversight units. What has happened is that most Members are increasing their oversight activity. Before discussing a factor which may have contributed to this substantial increase in oversight effort, let me say a few words about the data on oversight units in the Senate.

The Senate data on the percentages of series devoted to oversight by oversight committee units resembles that found in the House (that is,

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[20] The oversight activity indicator was coded as oversight equals one, other equals zero.
[21] The percentages for the 92d and 93d Congresses were 37.9 percent and 27.3 percent, respectively.

much higher percentages) only in the 94th Congress. One wonders why there are virtually no differences for any of the other Congresses. The main reason is that in the 91st, 92d, and 93d Congresses the Senate Government Operations Committee was the *only* oversight unit which held any hearings or meetings at all. (In fact, it was the only one in existence in the Senate.) This is important because the Government Operations Committee, unlike most of the oversight subcommittee units, has a firm legislative mandate and therefore is more likely to be occupied with tasks other than oversight.[22] The committee, for instance, was very busy during much of the period before the 94th Congress shaping such complex legislation as the Budget and Impoundment Control Act. Only in the 94th Congress do oversight units from Senate committees other than Government Operations begin to appear in the data. I am reluctant, therefore, to reach any firm conclusions about the effectiveness or ineffectiveness of Senate oversight units in producing actual oversight activity. Before reaching such conclusions, I would wait until there are a few more oversight subcommittees on regular Senate authorization committees and then examine their behavior.

There is one final factor which is said to make oversight more attractive to legislators. The relationship between that factor, labeled "corruption, crisis, and publicity," and increases in oversight is not the easiest to establish, but Watergate, which was a mixture of all three, seems to have had a clear impact. As table 2 demonstrates, the absolute number of oversight series and days generally increased during the period from the 91st to the 93d Congress but really vaulted into prominence as a major percentage of the daily activities of House and Senate committees in the 94th (post-Watergate) Congress. While other factors are important, it seems highly unlikely that the figurative explosion of oversight that followed Watergate was mere coincidence.

*Concluding comments and a note on oversight quality*

The recent rapid growth in oversight may well be a temporary phenomenon, a fad inspired by the political currents flowing from Watergate. However, there are reasons to think that a fairly solid foundation for substantial oversight activity does exist, and the data developed in this study indicate some factors which can be manipulated in any effort to maintain a high incidence of oversight activity.

As the data show, congressional activity increased dramatically from the 91st to the 93d Congresses. Yet during this time oversight held its own as a percentage of this growing activity, dipping only in the House in the 92d Congress and recovering quickly in the 93d Congress, a time when oversight reforms were an important item on the Bolling committee agenda. Watergate may well have been the chief factor leading to the dramatic increase in oversight recorded in the 94th Congress, but there was already a substantial and growing base of oversight activity prior to that time. I suspect that the pre-Watergate increase in oversight activity derived from suspicions of Presidential power which developed during the Johnson administration, mainly as a result of the Vietnam war and widespread disillusionment

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[22] The House Government Operations Committee was below the average of oversight units, although not as low as in the Senate.

with many of the Federal programs of the 1960's. Even during Nixon's first term Congress attempted to place limits on Presidential war and spending powers and initiated serious debate on program priorities. Oversight tended to increase as a natural concomitant of these efforts—and related changes in congressional rules and resources—and as a response to public interest in congressional efforts to control the executive branch. My argument, in essence, is that Watergate stimulated oversight activity, but that it occurred in a context of related stimuli and reinforced them. If this is so, one would expect the observed increases in oversight activity to persist—although perhaps not at quite such high levels—even as memories of Watergate recede.

As to the factors which the data suggest might be manipulated to encourage oversight, two stand out: increased committee staffs, and the establishment of more oversight units. The evidence does at least suggest that increasing the size of committee staffs has an impact on oversight activity. As noted, the impact is probably less dramatic than a glance at figure 1 might suggest. However, even if one believes merely that some new staff people will haphazardly find their way into oversight, then further increases in staff will help maintain or even increase oversight activity. Staff earmarked for oversight duty are even more likely to have this effect, although some slippage between the duties they are supposed to perform and their actual assignments can be expected.

The second factor, oversight units, is potentially important not because it is likely to increase oversight activity greatly but because of its potential as a backstop. The data indicate that oversight units, particularly oversight subcommittees without major legislative authority, spend a much higher proportion of their time in oversight activities than nonoversight units. They were by no means the major factor responsible for increases in oversight activity, but the empaneling of more oversight subcommittees should establish a base for a higher minimum level of oversight in the Congress.

While the data do not indicate much about the quality of oversight, many of the factors cited in the section on quality—relative resource scarcity, the influx of skeptical Senators and Representatives, widespread program evaluation, and reforms in the budget process—ought to have some effect.[23] One hint of this is found in the way in which oversight hearings and meetings are described in the Daily Digest. The coders were asked to classify the purposes of oversight in each oversight series. This was not an easy task because of the oftentimes vague descriptions in the Digest. Thus, in the 91st Congress only 17.6 percent of the oversight series in the House and 20.7 percent in the Senate were described exclusively as efforts to determine the effectiveness of programs and policies. In the 94th Congress, however, such series represented 51.7 percent of the oversight cases in the House and 54.4 percent of those in the Senate. While this does not prove anything about changes in the quality of oversight during this period, it does at least tell us something about changes in committees' notions about how they ought to describe their activities. Program evaluation is something congressional committees now want people to believe they are doing, and actual behavior may well reflect this fact, even if the reflection often is pale and distorted.

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[23] All of these factors also led to the increased frequency of oversight described above.

In closing, let me say a few words about some priorities for future research.

First, research of the type reported here would benefit from a longer time-frame, particularly in terms of establishing a norm for oversight in the pre-Nixon years, testing the import of split partisan control, and gaining a better understanding of the relationship between committee staff size and oversight behavior.

Second, oversight sometimes occurs in hearings and meetings held primarily for some other purposes, such as authorizing or appropriating money for ongoing programs. A more comprehensive study design would take this fact into account through such means as content analysis of hearing and meeting transcripts and interviews with participants. It would also consider oversight which occurred outside of the formal hearing or meeting framework.

Third, much more work needs to be done on the quality of oversight. Case studies of various types of oversight efforts probably would be the best way to begin to understand the conditions that would lead to more comprehensive and systematic oversight.

Finally, not enough is known about the impact of oversight on the actions of administrators. An assumption was made at the beginning of this paper that more oversight, even if not comprehensive or systematic, is better than less because of its likely impact on administrators' behavior. This assumption, while plausible, is so central to making decisions about reforms aimed at increasing the quality of oversight that we should find out all we possibly can about its validity.

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# SENATE OVERSIGHT ACTIVITIES

**By Susan Webb Hammond, Harrison W. Fox, Jr., Richard Moraski, and Jeanne B. Nicholson**

Oversight is a major concern of Senators and their aides. As one of its first acts, this commission solicited the view of Senators as to the major problem areas that should be given priority attention. Sixty-eight Senators singled out oversight—specifically "improving access to and the usability of information available to the Senate in its oversight of the executive branch"—as the second highest priority item on a list of nine problem areas. Senators also listed oversight in answer to a separate question that asked for "three or four highest priority problems that the commission should look into." One Senator, articulating the sentiment of many of his fellow members, observed: "The lack of congressional oversight of Federal agencies is an area of major concern. Congress has delegated a tremendous number of duties to agencies and commissions. The agencies' mandates have been necessarily broad, but the Senate has not lived up to its correlative responsibility to monitor effectively important agency activities."

In addition to the problems engendered by the growth of administrative activities, there is an implicit dissatisfaction in the repeated observation made by Senators and by staff that too often their approach to oversight is ad hoc. As a staff member noted: "We never act: we react . . . the press exposes it and we pick up their banner and yes, we create headlines then. But the initial action, I can't see anything that has started with our committee."

But these observations do not tell the whole story. Both interviews and Senate publications indicate that a good deal of oversight activity is accomplished and reported. It is clear that there is an increasing concern that the Senate carry out effective oversight of the executive branch, but it is also apparent that much oversight activity is already taking place.[1]

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[1] Studies which have been focused on congressional oversight include: John F. Bibby, "Oversight—Congress' Neglected Function: Will Watergate Make a Difference?", prepared for delivery at the annual meeting of the Western Political Science Association, Apr. 4, 1974, Denver Hilton Hotel, Denver, Colo.; Cornelius P. Cotter, "Legislative Oversight," in Congress: The First Branch of Government, Alfred de Grazia (ed.) (Anchor Books: Garden City, N.Y., 1967); John F. Bibby, "Committee Characteristics and Legislative Oversight," Midwest Journal of Political Science (February 1966), pp. 78–98; Dale Vinyard, "Congressional Checking on Executive Agencies," Business and Government Review (September–October 1970), 11: 14–18; Thomas Jahnige, "The Congressional Committee System and Oversight: Congress and NASA," Western Political Quarterly (June 1968), pp. 227–39; William L. Morrow, "Legislative Control of Administrative Discretion," Journal of Politics (November 1968), pp. 985–1011; Three Papers Prepared for the Select Committee on Committees, The House of Representatives (1973), Elmer B. Staats, "General Accounting Office Report of Committee Oversight"; Morris S. Ogul, "Legislative Oversight of Bureaucracy"; and Walter Oleszek, "Congressional Oversight: Methods and Reform Proposals" in Committee Organization in the House, printed for the use of the Select Committee on Committees, Volume 2, pp. 692–723 (hereafter referred to as Bolling, volume-page); a full length treatment by Joseph P. Harris, Congressional Control of Administration (Anchor Books: Garden City, N.Y., 1965); Allan L. Otten, "Politics and People: Oversight," The Wall Street Journal, Sept. 6, 1973; "Not High on Capitol Hill Investigations," Nation's Business, November 1973, p. 16; Mark J. Green, James M. Fallows, David R. Zwick, Who Runs Congress? (Bantam-Grossman: New York, 1972), pp. 119–122; and Morris S. Ogul, Congress Oversees the Bureaucracy; Studies in Legislative Supervision (University of Pittsburgh Press, Pittsburgh, 1976).

The premise of this paper is that consideration of what *ought* to be done, the normative approach, is best served if based on empirical information about what *is* done. What follows is a report on present oversight activity from the points of view of the Senate actors: their perceptions of oversight objectives, techniques, initiatives, and effectiveness.[2]

## A Framework for Oversight

In developing a framework for an overview of the oversight process, the following questions must be posed: What are the important or recurring factors in the oversight process? How do these variables interact or fit together? A framework of oversight consisting of four major types of variables—actors' attributes, interpersonal factors, environmental, and activity—and the direction of their linkage is presented in Chart 1.

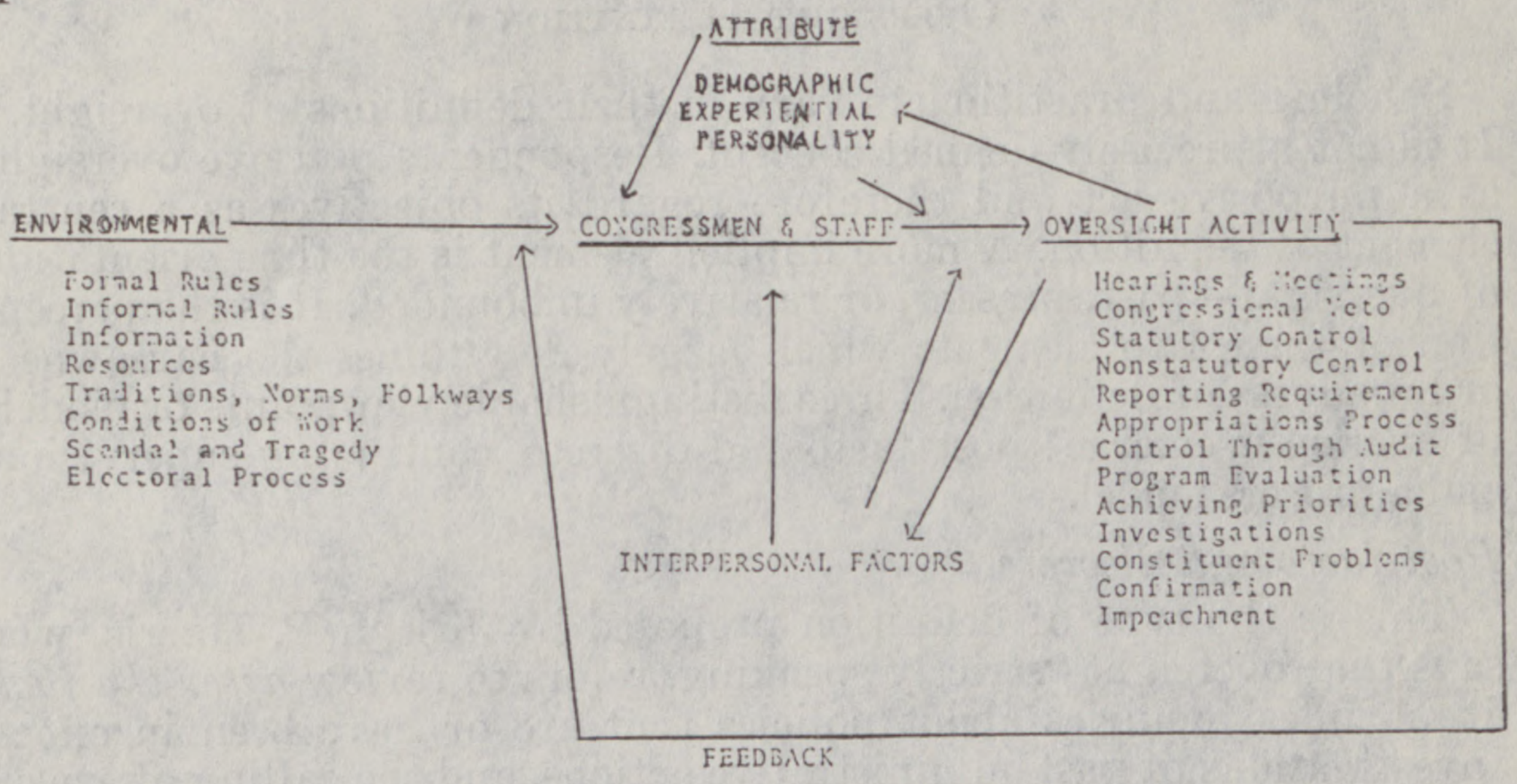


Chart 1.—A Framework for Oversight.

We know that the enduring attributes of legislative branch personnel have an effect on the quality and quantity of oversight.[3] Attributes are "all those variables which describe the propensity of an individual to behave in certain ways—his motives and values, his sensitivities and fears."[4] They include demographic, experimental, and personality properties. More attention needs to be paid to these classes of variables by students of oversight.[5]

Interpersonal factors figure into the actual process of oversight. Properties of the relationships between a legislative person and those with whom he works have a qualitative, interpretive, and reinforcing effect on actual performance. The importance of these factors should not be underestimated for both intra- and intercommittee oversight activity.

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[2] See Appendix for a discussion of research sources.
[3] Bolling, 2–20, 22.
[4] Daniel Katz and Robert L. Kahn, The Social Psychology of Organizations (Wiley: New York, 1966), pp. 187–88 also see Harrison W. Fox, Jr., "Personal Professional Staffs of U.S. Senators," unpublished doctoral dissertation, The American University, 1972.
[5] For discussion of staff attributes see Harrison W. Fox, Jr., and Susan Webb Hammond, Congressional Staffs (New York: Free Press, forthcoming 1977).

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Environmental variables characterize the legislative branch as a whole as well as its various parts.[6] Clusters of environmental variables that affect oversight are: formal and informal rules of authority;[7] information,[8] resources, traditions, norms, folkways,[9] and conditions of work.[10] All of these variables have been mentioned as being important by both observers and participants in congressional oversight activities.

Activity variables include the main techniques utilized by Senate actors engaged in the oversight process. A major focus of this study is on these techniques and activities.

While the scope of the present study does not encompass the articulation of a complete theory of oversight, it does propose the foregoing framework as a point of departure and as a guideline for further theoretical development.

## Oversight Definition

Scholars and practitioners vary in their definitions of oversight.[11] It is not a precisely defined concept. Respondents perceive oversight as a purposive act and therefore regard its objectives as a central element of definition. A more implicit element is the time orientation of oversight—past, present, or relatively unbounded. It is the perception of these two elements which largely determines the narrowness or broadness of definition. Three distinguishable viewpoints or models of oversight emerge: post facto and discrete, continuing supervision, and a process model.

### *Post facto and discrete*

This is the type of definition proposed by Joseph P. Harris, who says that oversight "strictly speaking, refers to review *after the fact.* It includes inquiries about policies that are or have been in effect, investigations of past administrative actions, and the calling of executive officers to account for their financial transactions."[12] By and large those who have a post facto view of oversight see it: (1) as a review or investigation of past actions; and (2) as focused upon rather discrete acts or specific instances of wrongdoing, inefficiency, or failure to act as Congress has mandated.

A committee staff member provides a succinct summary of this view:

> Oversight hearings have taken place where malfeasance, misfeasance, or nonfeasance, or questionable feasance have appeared to occur.

Virtually all respondents in our inquiry would subscribe to the post facto model of oversight. Most, however, define oversight to encompass other purposes as well.

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[6] Katz and Kahn, p. 187.
[7] Ibid.
[8] See the Legislative Reorganization Act of 1970.
[9] See Donald Matthews, "U.S. Senators and Their World" (Vintage: New York 1960); Fox (1972); and Susan Hammond, "The Office Staff of the Members of the House of Representatives," unpublished doctoral dissertation, The Johns Hopkins University, 1973.
[10] See Norman J. Ornstein, "Causes and Consequences of Congressional Change: Subcommittee Reforms in the House of Representatives 1970–1973," Paper presented at the American Political Association Annual Meeting, New Orleans, August 1973.
[11] Interesting recent works that treat the definition of oversight include: Harris (1965), Bibby (1968), Cotter (1967), Otten (1973), and Bolling (1974), Ogul (1976).
[12] Harris, p. 9.

*Continuing supervision*

A former Senator, Joseph S. Clark, has noted that oversight is "making certain legislative programs are properly administered by the Executive." [13] In other words, it is a monitoring and examination of present ongoing administrative activity. A staff aide interviewed reflected this view in his definition: "Oversight implies, in a sense, looking over someone's shoulder and sort of making sure it (a program) is administered properly."

Another defined oversight as "any and all activities normally cranked up to review how programs are being implemented. A major concern is to ascertain whether legislative intent is being implemented and followed." In answer to the question, "How do you define oversight?", an experienced staff member responded: "We spend a great deal of time trying to correct what we perceive to be maladministration—at least from our perception, a number of statutes . . . have turned out to be administered in a way that is at great variance from the legislative intent."

Still another committee staffer, when asked to define oversight, replied: "The purpose of oversight is to prod them (administrative agencies) to implement the program, or to determine whether there is something wrong with the administration of the program." He then added "or with the program itself, which may mean . . . revamping of the program." It is this additional element to the definition which is related to a third model of oversight definition.

*Process*

Definitions of oversight—whether by researchers or practitioners—have traditionally conformed to the post facto or monitoring types. And indeed, our respondents often defined oversight or described experiences which conform to these more constrained models. But increasingly, oversight is viewed in terms of a much broader perspective. Morris S. Ogul's definition illustrates this point of view.

> Oversight is defined as the behavior of legislators, individually or collectively, formally or informally, which results in an impact on bureaucratic behavior or in relation to the structures and processes of policy implementation.[14]

While it encompasses the previous definitions this orientation goes beyond them. For example, one respondent first defined oversight in terms of monitoring to insure proper administration but added: "Well, that's only part of it, it seems to me. A program can be administered properly and still be a lousy program . . . there may be something wrong with the legislation." Or as another actor stated, one of the things to be gained from oversight activities is "to see a problem in the underlying statute and propose an implemental change in that statute."

This viewpoint looks beyond negative actions; oversight efforts may be preventive as well as corrective. A staff member spoke of "pre-legislative hearings" in this regard: "You don't want to introduce a bill to say the agency, is going to do this—you want to find out, from

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[13] Joseph S. Clark, Congress: The Sapless Branch (Harper and Row: New York, 1964), pp. 82–83.
[14] Bolling 2–701.

the agency, in the oversight hearings what it thinks it can do and what it thinks the nature of the problem is."

Unlike the post facto and containing monitoring approaches which concentrate primarily on the procedures and operations of an executive agency, this orientation may also shift the focus of oversight to the legislative product and its impact. A leading staff person acknowledged that "a part of it, oversight, is looking at what the executive branch is doing in terms of carrying out a law or policy of Congress." But, he added: "I think too much oversight is directed at the question of 'Is this function being performed the way Congress intended it to be with reasonable economy, et cetera?' . . . More often the question ought to be asked, you know, 'Is this worth doing at all?'"

Another committee aide gave this definition:

> Well, I think in a broad sense oversight is simply the activity the Congress undertakes to determine . . . broadly what kind of impact the legislation it has passed is having on the outside world.

The definition given by an experienced staff aide is characteristic of those who view oversight from this perspective:

> I think the working definition is seeing that the affected department is doing its job . . . that legislation is continuing to be applied in the thrust which Congress intended, . . . and to change the focus of it when the times and pressures of the political forces want it moved. Then that to me is the proper role of the legislative committee on oversight.

This definition, then, is an open-ended approach and both includes, and goes beyond, the post facto and supervision models.

*This Study's Approach*

As researchers, we were discomfited somewhat by the absence of a precise and standarized definition of oversight. However, our approach has been to examine oversight from the perspective of those engaged in its exercise. Their definitions are working definitions derived from their own experience. At present the context of oversight is undergoing numerous changes and, as a result, the definition of oversight appears to be in a state of flux.

Congressional reorganization and procedural changes, as well as the refinement of various budget, evaluation, information-processing, and analytical techniques, offer an expanding range of means for initiating oversight and carrying it out.

Other proposals, such as sunset legislation, further combine legislative and oversight activities. In cumulative effect, these changes seem likely to lead to wider adoption of a broad and open-ended definition of oversight by both Senate actors and scholars.

## Authority for Oversight

Formal authority for congressional oversight comes from the Constitution, public laws, and the rules of each House of Congress. The Constitution is an important source, as the appropriations process, impeachment, confirmation, and the congressional veto rest on constitutional provisions.

It is also generally recognized that the Legislative Reorganization Acts of 1946 and 1970 are important sources of formal oversight authority.[15] The present exercise of oversight rests to some degree on these two acts, although it depends on other formal and informal authority as well. Other legislative acts, such as the Congressional Budget Act and the Technology Assessment Act of 1972, are also important.

The rules of each House of Congress supplement the foregoing examples of formal authority. Sources of authority are noted in chart 2, which also indicates the general type of oversight and characteris-

CHART 2.—FORMAL AND INFORMAL AUTHORITY FOR THE TECHNIQUES OF OVERSIGHT

| Types of oversight | Techniques (classes of activity) | General authority |
|---|---|---|
| Legislative | Hearings and meetings | Legislative Reorganization Act of 1946. House and Senate rules. |
| | Congressional veto | Constitution and various legislative acts. |
| | Statutory control | Various legislative acts. |
| | Nonstatutory control | Rules of House and Senate. Informal relationships. |
| | Reporting requirements | Legislative Reorganization Act of 1970. Various legislative acts. Informal agreements. |
| Fiscal and analytical | The appropriations process | Constitution. |
| | Control through audit | Budget and Accounting Act of 1921. Legislative Reorganization Acts of 1946 and 1970. |
| | Program evaluation | Legislative Reorganization Acts of 1946 and 1970. The Congressional Budget and Impoundment Control Act of 1974. |
| | Achieving priorities | The Congressional Budget and Impoundment Control Act of 1974. |
| Investigative | Investigations | Legislative Reorganization Acts of 1946 and 1970. Various legislative acts. Rules of House and Senate. |
| | Handling constituent problems | Informal relationships. |
| Authoritative | Confirmation | Constitution. |
| | Impeachment | Do. |

tic techniques of oversight to which the authority is related. (Types and techniques of oversight will be discussed more fully in the following section.)

Informal authority for oversight is less easy to identify. The Appropriations, House Ways and Means, Senate Finance, Government Operations, and Armed Services Committees all perform oversight based on nonstatutory agreements and friendships.[16] Generally, no public record of these agreements is available, but a great deal of present-day oversight is based on such informal authority.

## Types and Techniques of Oversight

Four major types of oversight can be identified[17]: legislative, fiscal and analytical, investigative, and authoritative. Various techniques are used by the Congress in performing legislative oversight. Chart 2 (see preceding section) lists the four types of oversight and the techniques customarily associated with each type. Oversight types

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[15] Bibby (1968), p. 481; Report, p. 62; Bolling, 2–692, 693, 701, 710, 797; Fisher, "Delegating," p. 281; and also see U.S. Congress. Joint Committee on the Organization of Congress. S. Rept. 1414, 89th Cong., 2d sess. (1966), pp. 23–25.

See chart 2 for a listing of the general authority for the techniques of oversight.

[16] Fisher, "Reprograming" (1974); and personal observations and participation in staff discussions.

[17] Bolling, 1–316, 317; 2–235, 258, 701; 710; 3–148–9, 224. For an expanded treatment of oversight techniques, see Harrison W. (Bill) Fox, Jr., "Oversight; Is Congress Doing Its Job?" prepared for delivery at the 1974 annual meeting of the American Political Science Association, Palmer House, Chicago, Ill., Aug. 29–Sept. 2.

differ but may employ similar techniques. For instance, both authoritative and legislative oversight may employ hearings and meetings.

The legislative oversight techniques include hearings and meetings, the congressional veto—including committee veto and concurrent and simple resolutions (legislative veto)—statutory control, nonstatutory control, and reporting requirements. Fiscal and analytical oversight, the most rapidly developing areas of oversight as well as the most established, occur through the appropriations process. With passage of the Budget Act in 1974, Congress established a means by which to formulate, and hopefully, to achieve priorities.

Investigative oversight may be accomplished through committee investigations, or formal investigations by Senators which are generally known as casework or Federal projects. Authoritative oversight includes treaty approval, confirmation, and impeachment procedures stipulated by constitutional provisions.

Committees vary both in the emphasis they place on different types of oversight and the techniques they use. These differences are due, in part, to the different types of committees.

Authorizing, appropriating, and nonlegislative—special and select—committees usually view oversight from different perspectives. The authorizing committees tend to see oversight as part of the cycle of legislative activity which begins with formulation of proposals, runs through hearings and bill drafting and reporting, and continues with review and evaluation of ongoing programs. Appropriations Committee staff focus on oversight as a budgetary tool—as a vital component of the appropriations process—whereas the nonlegislating committees view oversight as their major tool for reviewing subjects and policies within their jurisdiction. An authorizing committee staff person described his view of oversight in the following manner:

> I think the major issue that isn't taken care of by the committee is the oversight function—looking not at the creation of new legislation, which we do very well, but the only criticism I'd have is that we don't look at those laws which we passed 5, 10, 15, and 20 years ago to determine whether or not they need updating, to determine whether or not they are antiquated and aren't necessary at all.

By focusing on the authorization process, legislating committee personnel tend to utilize a broad range of oversight techniques based on a complex incentive structure. These points will be touched on below.

"What do you mean by oversight? We review their budget," noted a Senate Appropriations Committee staff member. His focus on the budgetary aspect of oversight was typical of other Appropriations Committee personnel. This is a more limited view of oversight than is found among the authorizing committees. This perspective is partly explained by the appropriation process, which limits the range of committee activities by time constraints, standard practices, and comprehensiveness of the bills being considered.

Special and select committees rarely have an opportunity to report legislation directly. Oversight is viewed as the major tool for focusing the public and congressional eye on subject matter within the

committee's jurisdiction. Through overlapping senatorial membership of select and special committees and the authorizing committees, legislation can be funneled for consideration. Special and select committee staff may handle legislation for a standing committee when the background study and analysis has been conducted by the special or select committee; they set up legislative hearings, draft statutory language, and manage other activities related to the legislative process. But the role of the special or select committee is to focus attention on subject matter and thus, hopefully, gain the support of its legislative sister committee for some particular programmatic action. Select and joint committee aides perceive some difficulty with a nonlegislative role, but also emphasize the advantages of a major focus on oversight. Some of the perceived advantages mentioned by nonlegislative committee aides are—

Freedom from the crisis-oriented tension of constant legislative activity; and

The opportunity to focus on general crosscutting issues which tend to be given less attention by standing committees because of the press of other business.

What are the major oversight techniques? How are they viewed by Senate actors? The following brief descriptions of users' perceptions of various techniques, as well as suggestive data on their effectiveness and frequency of use, should be helpful in giving an overview of oversight activities.

*Oversight hearings*

All committees report oversight hearings as a major method of conducting oversight; many publish statistical summaries of such hearings. Witnesses may be drawn primarily from executive branch agencies (in the case of agency oversight) or include a broad range of witnesses from the private sector and the general public (in the case of program impact hearings). Hearings may be held to review the impact and administration of programs and policies, to examine the operation of particular statutes, or to review agency decisions. Committees regularly report on oversight hearings and on general policy areas in which oversight hearings occurred.

For example, the Senate Committee on Banking, Housing and Urban Affairs reported "three sets of hearings on oversight of the HUD programs" during the 93d Congress. "The primary purpose of the hearings was to review and evaluate existing programs, but the members wanted to hear testimony from the public and from users of the programs on the impact of the President's 18-month moratorium on housing funds. These hearings were part of an overall study by the subcommittee on the value, effectiveness, and efficiency of HUD subsidy programs . . ."

The Antitrust and Monopolies Subcommittee of the Judiciary Committee reports that hearings on the natural gas industry "also presented an in-depth view of how a major regulatory agency carries out its responsibility for monitoring and regulating an industry of critical importance to the nation." [18]

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[18] Activities Report of the Antitrust and Monopolies Subcommittee, Judiciary Committee. U.S. Senate, 1973, p. 4.

Aeronautical and Space Sciences held oversight hearings to—
Review programs (skylab missions, space shuttle programs);
Receive an investigative report on a program problem (Skylab I mishap); and
Review agency procedures (EEOP).

During 1975, Senate committees and subcommittees held 356 hearings and meetings related to oversight, 13 percent of the total meetings held. In addition, 129 meetings were related to investigation. Table 1 indicates the oversight and investigatory meetings held by each committee and its subcommittees during 1975. For many committees, much of the formal oversight activity occurs at the subcommittee level.

*Table 1.—Oversight and investigation meetings (includes hearings) held during 1975, by committee*

| *Committee* | *Number of meetings* |
|---|---|
| Aeronautical and Space Sciences: | |
| Full | 3 |
| Sub | 1 |
| Total | 4 |
| Agriculture and Forestry: | |
| Full | 4 |
| Sub | 6 |
| Total | 10 |
| Appropriations: | |
| Full | 1 |
| Sub | 15 |
| Total | 16 |
| Armed Services: | |
| Full | 20 |
| Sub | 61 |
| Total | 81 |
| Banking, Housing and Urban Affairs: | |
| Full | 5 |
| Sub | 2 |
| Total | 7 |
| Budget: | |
| Full | 9 |
| Sub | 3 |
| Total | 12 |
| Commerce: | |
| Full | 2 |
| Sub | 20 |
| Total | 22 |
| District of Columbia | 4 |

| | |
|---|---|
| Finance: | |
| Full | 3 |
| Sub | 8 |
| Sub | 11 |
| Foreign Relations: | |
| Full | 29 |
| Sub | 11 |
| Total | 40 |
| Government Operations: | |
| Full | 4 |
| Sub | 38 |
| Total | 42 |
| Interior and Insular Affairs: | |
| Full | 8 |
| Sub | 12 |
| Total | 20 |
| Judiciary: | |
| Full | 4 |
| Sub | 27 |
| Total | 31 |
| Labor and Public Welfare: | |
| Full | 1 |
| Sub | 15 |
| Total | 16 |
| Post Office and Civil Service: | |
| Full | — |
| Sub | — |
| Total | — |
| Public Works: | |
| Full | 7 |
| Sub | 12 |
| Total | 19 |
| Rules and Administration: | |
| Full | 38 |
| Sub | 1 |
| Total | 39 |
| Veterans' Affairs: | |
| Full | — |
| Sub | — |
| Total | — |

| | |
|---|---|
| Special Committee on Aging: | |
| Full | 1 |
| Sub | 2 |
| Total | 3 |
| Select Committee on Intelligence | 66 |
| Select Committee on Nutrition and Human Needs | — |
| Select Committee on Small Business: | |
| Full | 7 |
| Sub | 3 |
| Total | 10 |
| Joint Committee on Atomic Energy: | |
| Full | 6 |
| Sub | 3 |
| Total | 9 |
| Joint Committee on Defense Production | 1 |
| Joint Economic Committee: | |
| Full | 6 |
| Sub | 3 |
| Total | 9 |

NOTE.—Oversight meetings were those designated as such by a committee or subcommittee, and/or meetings where existing programs were examined. Investigative meetings are those when the authority of the committee was purely investigatory, or the meeting was called specifically for investigative purposes. Data on meetings is from the material developed by the Commission, and reported in part in *Legislative Activity Sourcebook: United States Senate*, committee print, 1976.

The subject matter of oversight and investigative committee meetings is indicated in table 2.

*Table 2.—Subject of Oversight and Investigative Committee Meetings, 1975*

| *Subject matter* | *Percent of total meetings* |
|---|---|
| Social benefits | 13 |
| Natural resources | 14 |
| Economic matters | 19 |
| Civil rights, civil liberties, crime | 5 |
| International matters | 28 |
| Functioning of Government | 15 |
| Science and technology | 17 |
| Appropriations | 1 |
| Nominations and promotions | 1 |
| Other | 3 |

Nearly half the oversight meetings were held during the first months of the session: 46.4 percent from January through April, 25.4 percent from May through August, and 28.2 percent from September to December.

Committees report oversight hearings as effective. Judiciary's Administrative Practice and Procedure Subcommittee, for example, states:

> From each oversight hearing the subcommittee has undertaken to develop specific recommendations for administrative response and has followed these recommendations through with the responsible agency officials.[19]

A staff member of another subcommittee said of a recent oversight hearing:

> I think the purpose was to build a record. I think there was widespread feeling among committee staff and several personal members of the staff of other Senators on the committee that the program was not working very well.

Of the hearings' effectiveness, he said:

> I think the hearings, because they were reasonably conclusive as to the nature of the program administration, will probably have an impact on the way agency *x* runs that program. They were really pilloried all over the place.

Occasionally, however, Senate aides question the usefulness of formal oversight hearings. "Hearings are neither necessarily the most normal nor the most effective, depending on the situation," said one committee staff member. "If an agency is determined to go another way on a policy basis—we're experiencing this now with Department X—a hearing doesn't do anything except air differences we already know exist, and in that sense, it is not very terribly productive, although it may lay the groundwork for statutory changes which are designed to get rid of the particular problem."

Oversight hearings do, in fact, often lead to legislative hearings and to new or modifying legislation. Oversight and legislation are closely intertwined.

*Legislative hearings*

Committees also report significant oversight activity pursuant to legislative hearings, particularly during authorization and appropriations work. Hearings on bills which would extend and modify existing statutes offer an opportunity for overview of the program and of the administering agency. This type of oversight activity generally results in specific statutory changes, embodied in the law extending and modifying a program.

Asked what kind of techniques his committee used, one staffer replied:

> It's principally a legislative committee . . . thus much of the oversight function takes place as part of the legislative function. A bill may be introduced to change, improve, strengthen, modify the powers of a particular agency. And, in the process of holding the hearings on the legislation the chairman or members of the committee strive to find out—and ask questions both of the agency and outside witnesses—about the agency's performance in that area. . . . If the

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[19] Senate report, 94–559, p. 2.

> agency isn't performing well, that is the support for the legislation.

Although many committees conduct oversight through legislation dealing with appropriations, a top aide indicated that his committee chose to focus oversight at the point of original legislation:

> This committee does not use its authorizing function over the X Department in the same way as some other committees do. And even though the authority is there, we don't draw all the bureaucrats up from downtown and then have them go over the budgets and justify their programs. We fight out the philosophical battles on the programs on the ground of the program itself, philosophically, at the point of legislating the new program.

Congress creates entirely new agencies as well as new programs, and bills proposing new agencies also offer opportunities for oversight of existing programs and the operations of executive agencies. Legislative and oversight activity often overlap.

*Authorization hearings*

The Senate Armed Services Committee reports the following:

> The principal method by which the Senate Armed Services Committee reviews our national defense program is through authorization of Department of Defense appropriations. Authority in this area has developed increasingly since 1959.
>
> In the process of examining defense programs during authorization hearings, the legislative and investigative functions of Congress are, in effect, combined. To determine manpower ceilings, for example, the committee will review the manpower requirements and objectives set by the Defense Department in light of the perceived threat, planning, and capabilities. In the course of this review, the committee evaluates the manpower objectives and whether they are being met. That review often reveals basic problems in manpower composition, such as an imbalance between combat and support personnel . . . and results in legislation.

And the Senate Foreign Relations Committee notes that:

> . . . the annual authorization bills for (various agencies) and the many elements of the foreign aid program cannot be considered without reviewing the operations under existing law.
>
> The authorizing measures, therefore, constitute a principal vehicle for the committee's exercise of legislative oversight and for the adoption of legislative remedies by way of amendments.

Oversight through appropriations and authorization hearings occurs regularly and hence forces committee consideration of at least some aspects of Federal programs.

Some committees which use the budget process as a vehicle for oversight feel that although it is effective, formal oversight hearings and investigations should be used more frequently.

On the other hand, the budget process "imposes a certain discipline," so that some oversight activity is regularly calendared. A staff member contrasted oversight of programs without reauthorization requirements to the review of one which did: "Those programs which have periodic authorization expirations tend to automatically get oversight review as part of that process."

He named a program which received a yearly oversight review because of reauthorization requirements and contrasted it to another program "that doesn't get as much oversight because it doesn't have a regular reauthorization. I think we've held one set of hearings since that was enacted. We held those in 1973."

Realizing that frequent reauthorizations are a method of control, committees are more frequently writing annual authorization requirements into laws.

All of the questionnaire respondents indicated some use of hearings as an oversight technique. Frequency of use is not uniform, however, and ranges from once a day (15 percent) to once a year (5 percent). All respondents believed hearings to be at least moderately effective; 40 percent view this technique as very effective.

*Confirmation hearings*

Confirmation hearings on nominations to executive branch positions are regarded as offering opportunities for oversight. Promotions of high-ranking officials provide similar opportunities for review. A number of committee activity reports list confirmation hearings held, and several committees describe in some detail the use of confirmation hearings in the oversight process and the effectiveness of this technique. The Armed Services Committee reported, "A . . . method of review exercised by the committee lies in evaluation of nominations." (S. Rept. 94–94, p. 4.)

The Finance Committee noted:

> The committee found through experience that its legislative review of social security laws can be pursued effectively through confirmation hearings held to consider appointments to the Secretary of H.E.W., (etc.) . . . . During such hearings the committee can bring up matters concerning the execution of the social security laws and seek the cooperation of the nominee to remedy the administrative actions which the committee believes are inconsistent with congressional intent. (S. Rept. 94–60, p. 13)

The committee further notes:

> The effectiveness of legislative review through confirmation hearings on proposed Treasury appointees has been proven many times through the subsequent actions of the confirmed appointees with respect to specific problems and general approaches relevant to the implementation of laws in areas under the jurisdiction of the committee. (Ibid., p. 16)

A Senate committee staff member interviewed for this study pointed out several advantages of confirmation as an oversight technique. Unlike the difficulty in getting Senators with crowded schedules to focus or hold hearings on matters of general daily oversight at the

staff level, confirmation hearings provide incentives directing the energies of Senators to that issue at that time. They also enhanced the prospect of agency response:

> When you have a confirmation hearing you have the attention of the national media, which focuses the general public and the newspapers on the issues that the Senators are pursuing; so, in a sense, the confirmation hearings are your best chance to perform oversight.

A staff member of a subcommittee gave this view of the importance of confirmation technique:

> I might add that another very fruitful area of oversight activity that this committee has engaged in is a great deal of increased attention to the nomination process. As a result of our oversight activities, one comes increasingly to the conviction that however simplistic it sounds, that good people tend to run better programs and that poor people tend to run bad programs. We can criticize bad people all you want, but programs aren't going to improve very much, and hence, we have given a great deal of increased attention over the past several years to the nomination process, more properly speaking to the confirmation process which is one of the functions of the committee. That tends to provide a focus for us of oversight and program review and in the context of trying to evaluate and increase the quality of nominees. In my opinion that's one of the single most important things the Senate can do, is to change the nature of the oversight programs in conjunction with the nomination process to assure that the highest quality nominees are confirmed. That will tend to raise the standards of the White House as well for sending people up.

A leading staff member of a committee with frequent confirmation activities discussed somewhat different aspects of confirmation as an oversight technique. Asked to describe an instance of successful or effective oversight, he responded:

> Well, I suppose that the classical case would be one in which during the confirmation process the committee so impressed the nominee that he then followed a policy the committee advocated which he wouldn't otherwise have done. And in this sense, I can't think of a case, I'm sure there are some cases where degrees of emphasis have shifted somewhat. . . . The cases that come most readily to mind are those in which the committee has either not acted on a nomination or has flatly rejected it.

When asked: "Does the confirmation power sometimes shape the nominations you get?", he responded: "Well, up to a point. It would be more accurate to say that the confirmation process shapes the nominations you don't get, or that it has a more negative than a positive influence."

Judging from transcripts of committee hearings, a number of committees use confirmation hearings for oversight. However, relatively few committees make this linkage in public reports on oversight activity.

Committee staff aides rarely mentioned confirmation hearings spontaneously when discussing committee oversight efforts, and it appears that committee use of this technique varies considerably. Although 65 percent of the respondents said their committee used confirmation as oversight, the frequency varies. Thirty-five percent did not use it at all; 40 percent used it between once a week to once a month.

In regard to effectiveness, 40 percent had no opinion; 35 percent rated the effectiveness of confirmation from moderately to very successful.

*Treaties*

Committees also view the consideration of treaties as an opportunity for oversight. The chairman of Foreign Relations, in his introduction to the committee's Legislative History report for the 93d Congress, notes: "While treaties, strictly speaking, do not fall under the legislative oversight provisions, they too offer opportunities for legislative reviews."

This view is reiterated by a leading member of the committee's staff who observed: "The whole treatymaking process, as well as confirmations, in a sense is one of oversight."

*Field hearings, investigations and study missions*

A number of committees report using field trips to investigate and oversee executive branch agencies and programs. The activities reports of committees, particularly, stress the importance of field trips as an oversight technique. An example of committee use of this technique is reported by the Finance Committee:

> . . . Committee staff members visited a number of H.E.W. regional offices in order to informally assess the degree of implementation of the 1972 Medicare and Medicaid amendments.
>
> Following this survey the staff submitted a memorandum to the chairman which discussed the problem of slow and uneven implementation of the health care amendments. A meeting was subsequently held by members of the committee and the Secretary of HEW at which the committee concern with timely and effective implementation was once again emphasized. During the remainder of 1974 implementation of the health care provisions was greatly accelerated and, by the end of 1974, regulations had been issued to implement the majority of the important health care provisions in Public Law 92–603.

The Foreign Relations Committee reported:

> . . . members of the committee and its staff undertook a number of study missions abroad to see how the laws are executed overseas, and to gather information for the committee.

The committee lists the written reports and recommendations resulting from these trips to "exercise legislative oversight."

Staff members of a major Senate committee said of their field hearings, "I suppose more of our field hearings are oversight hearings than anything else in nature, not legislative."

Field investigations have several advantages pointed out by practitioners. As one staff member explained, field investigation and hearings may enhance senatorial attention and participation: "The kind of thing that perks them up is when you can show that the complaints have come from their State or that their State has some involvement at the local level."

Another staffer recounted a recent experience illustrating several additional advantages:

> It was a situation where we felt we couldn't provide the resources to bring all of the people involved to Washington so we conducted field investigations and hearings . . . primarily to save funds. But, it turned out to be a very, very worthwhile experience because we found out by doing field investigations and by doing field hearings we were able to involve perhaps a lot more people than we would have involved had we just gotten a witness list and transported all the people up here.
>
> And to a large extent, we were able to deal more directly with the people in the industry on a more personal basis and I guess the people not being in Washington were a little less intimidated by the official structure and that kind of thing.

The field hearings were a means of effectively utilizing the subcommittee's resources. "We didn't have the resources to do it nationwide, but we had the resources to do a case study which would indicate that some of the problems that we found in our field investigations had nationwide implications." As hoped, other committees have taken their lead from these findings and have gotten into nationwide studies and reform.

Field investigations are often a preliminary step to hearings and legislation. In describing one subcommittee's oversight activities during the last session, a staff member commented:

> I traveled with (another staff member of this committee) and the majority and minority staff of the House committee to six or eight different States. Just sitting down with State (education) officials and spending all day sessions on how do you administer your program? How do you make your decisions? Who do you involve?—this sort of thing. So, it's staff oversight. It did not involve any Senators or Congressmen. But again, this sort of thing went into how we approach the hearings.

Field investigation preliminary to hearings and legislation may extend over a long period, explained an experienced staff investigator:

> There was a tremendous amount of time, over a dozen investigators on the staff, and they were working on various projects. But, in the case of (a problem under review by the subcommittee) over a period of 4 years or so there was a tremendous amount of depositions, feeding information, holding executive sessions to receive sworn information, working with Federal authorities, local and State law enforcement authorities.

The senior staff member of a subcommittee related an incident in which a single spot check in the field led to a widespread field investigation and culminated in a "comprehensive reform package." An individual had received negative treatment from an agency. The individual did not protest his treatment; his complaint was that others were similarly situated but their products were not rejected.

A field trip and independent check by a committee staffer confirmed the allegations of agency laxity. Informed of the results by staff members, the subcommittee directed that another spot check be done elsewhere.

"Sure enough," the staff member stated, "the same problem popped up, at which point we had to take the next step." A team was assembled for a nationwide investigative study: "We found the evidence, now we have to find the causes and effects." Reform efforts resulted both in the form of changes by the agency in its operations and the new legislative formulations.

The staff director concluded: "I think there's maybe a general message in all of that. I'm hoping to encourage oversight committees to be inclined to do it themselves rather than writing a letter to somebody, particularly the bureaucracy."

The findings of the questionnaire show that 40 percent use field hearings only once a year. In fact, only one respondent used the technique more than once a month. However, some satisfaction with effectiveness was reported. Forty-five percent felt field hearings were moderately to very effective. Only 5 percent believed field hearings lacked any effectiveness as an oversight technique. It is interesting to observe that 20 percent had no opinion on the matter.

*Reporting requirements*

Committees also use reporting requirements as an oversight technique, often writing into law the frequency and content of required reports. The Armed Services Committee notes its use of this technique:

> A second means of reviewing the "application, administration, and execution of laws" as provided by the Legislative Reorganization Act of 1970 is through reporting requirements. The Secretary of Defense, the Secretaries of the military departments and the Comptroller General report to the committee on subject matters which are appropriate for continuing congressional attention. The process of acquisition of selected major weapon systems, for example, is monitored through a quarterly reporting system established by the committee in 1969. In the last available reporting period of the 93rd Congress, the committee received 42 reports on major systems with projected funding requirements of $147.8 billion.
>
> . . . In many cases, new legislative authority is accompanied by a reporting requirement to facilitate review and control by Congress. This was the case in a number of laws passed during the 93rd Congress. (S. Rept. 94–94).

Several committees point out, both in their published reports and during interviews, that both informal and formal reporting requirements and mechanisms are important to oversight. One committee aide noted that regular, required, progress reports on specific items were significant to ongoing oversight of an agency, and that the reporting requirements had been carefully developed over a period of time to give pertinent information to the committee. Another aide noted that:

> Quite frequently in our legislation we require a report from them to come back. In that sense it is oversight to meet their reaction to their reports, but it's not really done on too formal a plan; it's a more informal thing as it progresses.

An aide of a major Senate committee observed:

> You might say oversight is being exercised in the many small provisions written into the law. All the defining necessary, all the reports they must make to the Congress—all the committees do that to a limited degree. You'll find more and more control is exercised through the law, not just through investigative reports, but through reporting requirements.

He regarded this as an effective technique in that if you require reports, you get them—"the law is the law." But their policy effect was problematic: "I think the idea is initially that they will be used in a policy sense. I think that eventually some of them are used, but some of them are never used." Nevertheless, he concluded that the mere recording "has a restraining effect. I think there's no doubt about that. The fact that somebody has to sign a piece of paper saying, 'this is what we propose' requires thought be given it."

For the Appropriations and Budget Committees, of course, action on reported deferrals and rescissions constitutes a significant portion of their oversight activity.

In general, there was a mixed reaction in terms of the perceived effectiveness of this technique—40 percent found it to be moderately to very effective, yet 35 percent believed agency reporting requirements to be either not very or not at all effective, and 25 percent had no opinion as to the effectiveness of reporting requirements. Forty percent used it once a month or more. Ninety percent used it at least once a year.

*Program evaluation*

A technique which is being used increasingly is program evaluation. Other papers prepared for the Commission and the Temporary Select Committee to Study the Senate Committee System describe the elements of program evaluation more fully. Here, it should be noted that program evaluation offers opportunity for measurement of program objectives and impact (results). Evaluation is conducted primarily by executive agencies, by GAO, and on occasion by congressional committees. Evaluation can be assisted by a clear statement of program objectives in authorizing legislation, although this is not always easily achieved, given the nature of the congressional decisionmaking process.

GAO's Program Analysis Division is developing material which will assist legislators in requiring program evaluation as a part of oversight. Additionally, Harrison Fox and Bill Foskett developed a manual for aides and legislators drafting legislation with program evaluation requirements.[20] This manual is an example of the type of document that can be developed for all oversight techniques.

Eighty-five percent of those responding to the questionnaire thought that the evaluation of agency programs was moderately to very effective. Its frequency of use was varied—20 percent of the respondents used it once a week or more; 75 percent used evaluation of agency programs between once a year and once a month.

The new congressional budget process is providing an incentive for committees to review program evaluations that have been completed or are underway within the executive branch, to mandate evaluations of newly enacted programs, and to ask congressional support agencies, such as GAO, to undertake evaluations because of the need to justify programs to the Budget Committee and finally, the Senate as a whole.

*Committee staff-agency communication, "informal" investigations, and studies*

Ongoing informal communication between agency and committee staff constitutes an essential source of oversight activity. An aide voiced the sentiments of many other participants in the importance he gave to this factor in finding out about and examining areas needing oversight. "Without a doubt, it would be the first thing I would name—close regular contact with . . . experts in the field," he said, and added the names of the various agencies under his committee's jurisdiction.

Similar comments were made by others:

> Well, the staff of the subcommittee is always in some kind of informal communication with (Department X) and is a focal point as well for communications from the outside world as to how the program is going.

Such ongoing exchange can anticipate, and to some extent prevent, the need for oversight. This common occurrence is described by a staff member's description of his involvement in oversight: "I think you can call it constant staff contact with the agencies themselves and with outside public interest groups and other lobbying groups . . . that are doing kind of day to day contact with the agencies. It has also gotten to the point of fairly detailed comment on proposed regulations and detailed comment on proposed reorganization and organization . . . within the department."

Another aide described the process in some detail:

> Routinely your most effective means of oversight is to find out—to use an example of a bill—that a piece of legislation is coming up from the department for approval. . . . We can see it when we get the first draft on it up here; you get word of it and you hear from (agency) staff.
>
> The professional staff here may think it's horrendous. We talk among ourselves and the majority and the minority staffs agree that this is a bad idea. . . . You get on your phone

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[20] William Foskett and Harrison W. Fox, Jr., "Program Evaluation: A Manual for Legislators and Legislative Staffs," January 1975, mimeo.

> and you call down to the (agency) substantive staff guys who are working on it. The committee staff calls and says. . . . "This is our problem with it." And so, you have this constant interaction and effectively it is good oversight because you are finding out the basic thinking while it's still formative.

Other staffers concur. "I call it healthy cooperation between the executive and the legislature," asserted one respondent, "so I think we avoid a lot of misunderstanding when the congressional staffs and the agencies' staffs work closely together."

An aide of long experience described what he felt were ineffective and effective styles. He recited an experience where a committee staff had approached such a relationship "as an adversary proceeding, and immediately hackles went up downtown (at the agency)." The committee staff acted as though they were "the prosecuting attorney. It created all sorts of problems . . . and spinning of wheels which was thoroughly unnecessary." He commented that "It's important to have a staff that is disciplined and moves into a situation with politeness and directness. If a crunch is needed, the crunch should come at the senatorial level, not at the staff level."

Eighty percent of the questionnaire respondents said committee (or subcommittee) staff communicate with agency personnel on oversight matters once a day. Staff communications with agency personnel were rated moderately to very effective by 90 percent.

Committee staff also conduct "informal" investigations as well as studies of various types. These sometimes involve field research and onsite inspection.

A committee aide remarked:

> There's nothing like going through the docket of a case, or going through the agency files to find out what is going on and what is not going on in an agency, interviewing the people at the agency.

Some committees do not seem to perceive "informal investigation" as oversight, although they conduct such investigations. Others, however, clearly perceive it as an important tool. In fact, 85 percent of the respondents to the questionnaire found investigation of this sort to be moderately to very effective. Fifty percent reported using the technique once a week or more.

## Congressional Support Agencies

Of the four congressional support agencies, the General Accounting Office (GAO) and the Congressional Research Service (CRS) were most often cited as useful resources in conducting legislative oversight. Committees make a distinction between GAO and CRS, primarily on the basis of the type of information needed and the turnaround time required for effective use of this information. The result is that the support agencies are viewed as being very useful within specific roles and constraints.

CRS was repeatedly referred to as an important ally when concise information was needed on quick demand. The general background information of the basic CRS issue briefs, and specific statistical information by request, were cited as prime examples of this.

GAO, on the other hand, was considered extremely helpful when the information needed is of the broad analytical and investigative variety, and when there is enough leadtime to collect this data. GAO's assistance is most sought in the preliminary stages of oversight activity and is used as a basis for the detailed investigatory stage of the oversight process. The following describes GAO's usual role in oversight activity:

> Now one step further on exactly the same thing. General Accounting Office has done a study of [agency] and filed its report either late July or early August and the ranking Republican, the chairman, the subcommittee chairman, have introduced a bill to aid in enforcement of the act, which General Accounting Office had found faulty because of A, B, C and D, and this bill would give the agency the powers which General Accounting Office said it should have in order to accomplish certain objectives—in order to better enforce the law. So here we've got the bill introduced based on the General Accounting Office recommendation. We'll undoubtedly go through the hearing process and get everyone else to say yes and no, they need the power, they don't need the power, and we'll be able to move. That's an example, I guess you'd say, of General Accounting Office leading us, rather than us asking General Accounting to do something. That's very worthwhile. Something that would probably not be scrutinized except in a very small way if you were having a general oversight hearing on an agency's performance of priorities. If there were four days of hearings of about four hours each, then probably about two hours of the total would be spent on "enforcement." The GAO has just done a study on enforcement that will be very useful.
>
> Also, General Accounting Office in looking at what it was planning to undertake over this session, proposed some self-initiated studies and came to me and to the other people and said, how can we be useful to you and so General Accounting Office came out with a report in December of the year before we started our hearings in January, so we were able to use their findings as a springboard to get at least a dialog going with the people who had been criticized, an [agency] whose administration had been found to be lax at best, and we were able then to run our hearings sort of as a panel discussion with everybody commenting on each other's position.

The Congressional Budget Office (CBO) in the oversight process was not mentioned as often as CRS and GAO. This may partially be attributed to its newness and to the need to get acclimated to the new budgetary process. It appears that CBO's informational role is tied to the budgetary process and thus its use will be most applicable when fiscal oversight is undertaken.

Various support agencies, particularly GAO, may be detailed to conduct in-depth investigations. A staff member, whose committee used both GAO and CRS in its oversight efforts, said that preplanning and "significant lag time" were required:

> It is very helpful to have the problem well defined prior to giving it to one of those two entities. We have generally had a little better luck with GAO in terms of the work product,

but that may be a function of the fact of defining the question better. I think, if the question is properly defined and if sufficient lag time is given, that we find them to be a fairly useful augmentation of our own abilities.

Sometimes congressional oversight is initiated as well as augmented by support agencies such as GAO.

Several characteristics of the congressional system which serve as constraints on the full utilization of the congressional support agencies are apparent:

(1) Congress relies heavily on verbal communication; (2) Congress' time perspective is tied to the timetables of legislation and thus is more ad hoc oriented than long-range; and (3) there exists an uneven distribution of skills in utilizing the various congressional support agencies.

How does the verbal nature of congressional interchange serve as a constraint on utilizing the support agencies? The following exchange is a good example:

Answer. In fact, I just saw a huge compendium [agency] put out which is five or six inches thick which are abstracts of evaluations of public policy programs. I just don't think the Congress makes enough use of that material. Partly it is because it's complicated and it's complex and it's heavily involved in methodological concerns and most congressmen and staff are not expert in, and it is difficult to understand; and at the same time most of the people conducting this research are not skilled at presenting it to Congress the way in which we can make sense out of it. Yet I think we really ought to make much better use of it.

*Question.* What about using your resource people to take the studies, boil them down, and put them in congressional language?

Answer. I think that would be very useful. But again, there would have to be ultimately someone up there testifying . . .

*Question.* It's a verbal committee, that's what you're telling me?

Answer. Verbal communication, exactly.

A gap between the timetables of Congress and the support agencies was noted by one staff member, who stated that the committee used the support agencies but "it usually takes as much time to educate and to get them on board for help." Instead, this committee finds it more useful, in terms of time utilization, to do the information gathering itself. The agency time perspective conflicts with the "ad hoc fire-fighting orientation" of much legislative oversight. However, this constraint can be overcome if the staffer has skill in planning the use of the support agencies. One aide explained the importance of having the "problem well defined."

This particular skill is directly related to the third constraint on the use of the congressional support agencies. The "expertise" that is necessary to make full use of the support system comes only with repeated use. One staff member described the needed skill as follows:

> GAO does a great job but you've got to tune them a lot. He [a staff member] could tune them. This is what I want, this narrow area, don't go all over the place, go down here and he now has left the staff and so we don't have the technical thing, which is the luxury of time, to go down and go through it, cull the material to find out where the grist is.

The constraints on utilizing the support agencies can be overcome by clearer understanding of the strengths and limits of the support

system and the widespread promulgation of this information to all those concerned.

*Other techniques*

Committees engage in a number of other oversight activities, listing them both in published reports and in interview responses. Examples of other oversight techniques are—

Directing a specific complaint concerning administration of a law to an agency head, with the requirement that he investigate and report back to the committee. One committee notes "fine cooperation" with this method;

Staff studies, including conference inquiry or more detailed study;

Observation of agency personnel in action;

Briefings;

Conferences with agency personnel;

Formal meetings with agency personnel and committee staff and members;

Drafting "resolutions tendering advice to the executive branch" as an oversight technique, noting that this is considered a "complementary function of Congress" (a technique particularly used by Foreign Relations);

The kind of "systematization" of oversight of an agency which, in one particular case evolved after considerable attention from a committee. Elements of this technique, which necessitates developing a system for a particular agency, include—

1. Identifying the functions of the agency;
2. Knowing how the agency operates;
3. Knowing the obligations of the agency;
4. Asking key questions;
5. Obtaining periodic reports;
6. Regularly updated questionnaire responses (on specific data);
7. Computerizing selected data;
8. Building in some "flags, checks" which serve as a warning system for the committee.

*Effectiveness and utilization of techniques*

How often are various oversight techniques used and how effective are these techniques. Our questionnaire asked respondents to indicate how frequently a given technique was used—once per day, week, month, or not at all. To determine perceptions of effectiveness, a range of responses was offered: very, moderately, not very, and no opinion. Table 3 summarizes the questionnaire response.

TABLE 3.—RANKING OF AVERAGE SCORES OF FREQUENCY AND EFFECTIVENESS OF OVERSIGHT TECHNIQUES

| | Frequency | | Effectiveness | |
|---|---|---|---|---|
| | Rank | Mean | Rank | Mean |
| Staff communication with agency personnel | 1 | 8.95 | 2 | 7.25 |
| Casework | 2 | 6.85 | 11 | 5.30 |
| Hearings and meetings | 3 | 6.50 | 1 | 8.30 |
| Senator's personal communication with agency officials | 4 | 6.32 | 6 | 6.65 |
| Staff investigations | 5 | 6.20 | 3 | 6.90 |
| Evaluation of agency programs | 6 | 5.10 | 5 | 6.70 |
| Congressional veto | 7 | 4.35 | 7 | 6.05 |
| Issuance of studies | 8 | 4.25 | 8 | 5.80 |
| Agency reporting requirements | 9 | 3.95 | 13 | 4.80 |
| Audits of agency programs | 10 | 3.74 | 4 | 6.80 |
| Statutory control | 11 | 3.65 | 10 | 5.33 |
| Authorization-reauthorization | 12 | 3.58 | 12 | 5.20 |
| Appropriations (review of agency or program accounts) | 13 | 3.40 | 14 | 4.50 |
| Field hearings | 14 | 3.15 | 9 | 5.55 |
| Setting congressional priorities through the new budget process | 15 | 3.11 | 16 | 4.15 |
| Confirmation of nominees | 16 | 2.85 | 15 | 4.45 |

Overall, there is a high correlation between the frequency of a particular activity and the perception of its effectiveness by all the respondents. In other words, there is often a direct relationship between how often a technique is used and how effective it is perceived to be. For example, on the average, staff communication with an agency is used most often and it is considered to be the most effective technique. Hearings and meetings held in Washington, D.C., are ranked third in frequency of use and first in effectiveness.

On the other hand, high frequency of use does not guarantee that a technique will be regarded as effective. For instance, casework is used on the average of once a week or more by the respondents, yet is considered to be not very effective.

In some instances, still another interesting imbalance appeared in the relative use and perception of effectiveness of a technique. The oversight techniques of agency contacts by Senators, staff investigations, and Washington-based hearings and meetings for example, were used once a week or more by 50 percent of the committee staff that responded. More committee staff members thought these techniques were effective than used them. The percentages of respondents attesting to moderate to very effective results were 75 for Senators' personal agency contacts, 85 for staff investigations and 100 for Washington-based hearings and meetings. In other words, a general perception of these three techniques as being moderately to very effective did not result in a high frequency of their usage by the respondents.

There are other cases that show an even greater imbalance between usage and perceived effectiveness. Forty-five percent of the committee staffs responding used audits of agency programs only once a year or not at all. Nevertheless, 40 percent found it very effective; in fact, 70 percent found it moderately to very effective.

A similar pattern occurs with the authorization-reauthorization process. Forty-five percent used this technique only once a year or not at all, yet 60 percent found this to be a moderately to very effective oversight strategy. The review of agency or program accounts is considered a once-a-year process (50 percent agreeing to this) and it is perceived as being moderately to very effective.

When we consider this last point we find a possible explanation for the apparent imbalance between frequency and effectiveness. Various oversight techniques may only give high yield when used selectively for strategic purposes. The appropriations process (the "power of the purse") has always been conceptualized in this manner.

A final, and perhaps most significant pattern, emerged. All 16 of the oversight techniques listed were perceived as effective by a majority of those who had an opinion. Eight of the techniques listed received a moderate to very effective rating by 55 percent or more of the respondents. This pattern may very well mean that oversight is so valued that any apparent result is perceived as demonstrating a moderate degree of success for the oversight technique. In all likelihood it suggests also that, despite the nearly overwhelming scope of oversight responsibilities, and despite the need for improvement, participants nevertheless believe their present efforts yield somewhat satisfactory results.

## Incentives and Sources of Oversight Initiative

The Senate's performance of oversight is affected by the way it divides jurisdiction over existing agencies, programs, and legislative policies, by its response to current issues of public concern, and by its sensitivity to crises as they develop. Many factors determine the selection and time/resource allocation for oversight activities. The following is a general listing of those items regarded as precipitators of oversight activities and determinants of specific oversight techniques:

The authorization-reauthorization process;
Issues generated by crisis or malfeasance;
Issues of particular public attention or interest;
Commitment to the review and monitoring of existing legislation, programs, and agencies for which a committee has responsibility;
Personal initiative of a chairman;
Personal initiative of a staff aide;
The activities of interest groups;
Specific complaints of individuals; and
The existence and availability of resources (staff, committee expertise, and the effectiveness of subcommittees).

These precipitating factors are related to a variety of incentives for oversight activity. The following list summarizes some of the considerations affecting incentive:

What is the public mood regarding the need for action in area?
Does this issue affect my constituents?
Can the existing committee agenda be altered? If so, will anyone be upset by the altering? What will be the effect of any upset on the oversight process?
Should the issue be dealt with by legislative activity (amendments, corrective legislation) or by interaction with the agency itself?
How much interest does it have for each actor in the issue? Will they see it through?
What about publicity?

Are the resources available to carry out the oversight function? (i.e. existing information, staff, funds, time, level of workload).

Can the resources be mobilized? Will the agency/program officials co-operate? Will the workload of the staff and the committee members permit extensive activity on the issue? How good are majority-minority relations at both the member and staff level?

In large measure oversight is reactive and non-routine. As one committee staff member pointed out "oversight for the committee is typically in response to a problem. That is, we seldom go into an area without some kind of provocation. . . ." This style of oversight emphasizes "putting out fires."

The ad hoc agenda-setting process is indicated by the comments of two committee aides:

> If there's difficulty in a certain area, we provide the oversight.
>
> We would be alert. We could claim it if we wanted to.

What is the pay-off (incentive) for this reactive style of member and staff action? One member described the effect of publicity in motivating oversight:

> What that normally means is that the press uncovers a bad situation in some agency, and then the committee holds hearings on it, and there's lots of publicity.

Publicity may be useful, as one staffer suggested, in insuring compliance of the agency:

> Oversight hearings have been held in areas where for one reason or another a Senator or staff thought that this was an area which would gain a lot of public attention and force the agency to make a decision on something it had been sitting on for a long time.

But it was also suggested that publicity in itself may be a major incentive:

> In all honesty, sometimes they have been held because it was appealing to a particular Senator or for publicity purposes, or maybe even to the staff for publicity purposes and they managed to convince a Senator that it was worthwhile for him to do it.

Certain oversight is regularized. Reauthorizations and appropriations legislation require review and oversight at stated intervals. Some of those interviewed cited the authorization-reauthorization process as a basic way of handling oversight. Since this process is "a normal turn of events," it seems to prod committees to decide priorities for the allocation of time, energy and resources. One staff member emphasized this by saying, "the one thing that does force us into things is the budget. And in that sense it facilitates oversight." Or, as another commented, "The staff review becomes easier when connected with something that has to happen anyway, like reauthorization."

That oversight need not be reactive is clear from the account of an experienced staff member who told of his committee's attempts at preventive oversight in dealing with an agency it regarded as recalci-

trant. A series of meetings involving committee and agency staff were set up to review a newly passed major bill "so that the bureaucrats would have some insight into what the Hill intended in helping them writing regulations or administering the program. . . . The point at this point is just to make sure that somebody doesn't veer off into left field and cause us problems later; because every time (the agency) does something stupid it causes me problems too and its just a lot easier, at the staff level, to point them out early."

The particular interests of the actors in the process also affect oversight. The role of committee and subcommittee chairmen is a key factor. Staff members were also quick to point to the personal initiative of other Senators on the committee in selecting and guiding specific oversight activities. A Senator may be impatient with an agency's procrastination, or particularly interested in an individual complaint.

An agency's impact in the public sector may also stimulate oversight. One committee staff member said that one agency gets more oversight "because they step on the most toes." Further investigation is necessary to see how extensive this motivating factor is and how intertwined it is with the other previously mentioned sources of initiative. But it seems clear that agencies dealing with salient issues, or with programs directly affecting individuals, are more likely to be the subject of oversight activity.

Interest groups also motivate Members and staff to undertake oversight. Although this source of oversight initiative was mentioned by a very small segment of our sample, their comments were offered independently, rather than in response to direct questioning. "Interest groups tend to criticize program features that they don't like, and that provides at least a starting point for the staff sometimes to look into potential problem areas," said one staff director. A case was reported in which a regulated interest group "brought to our attention the fact that the regulations that the (agency under committee's supervision) has proposed to implement that statute are seemingly at 180 degrees from the legislative intent in enacting it."

Interest groups may provide early warnings and also save staff time and effort, as explained by one respondent:

> A number of the consumer groups have sent us copies of their comments and criticisms to the (agency under committee jurisdiction) on their proposed rules and have made us aware of problems without having to review each proposed rule as it comes out of the Federal Register, which is a burdensome and time-consuming process given our resources.

Another staff member reported that "a press release from a New York group—which was not picked up by the papers—initiated the oversight project." In one case a special interest suggested a committee seek jurisdiction over its own area, because the interest was upset with the way authority was being exercised by the regulatory agency.

Staff resources, including staff members and level and type of expertise are important in undertaking oversight. Time too, is important. If the committee or subcommittee has the staff and the information to tackle an issue as it develops it will move into the fray. Committee members will often attempt to mobilize as many resources as they can, or if it can be shown that committing resources will pro-

duce specific results, or if resources can be committed incrementally, oversight activity will occur.

As one staffer said, "I think that is the way Congress generally gets into issues. They have to get their feet wet first through oversight type hearings and develop some feeling for the problems and expertise . . ." If any specific proposals emerge, "they generally flow from these exploratory hearings."

## Obstacles to Initiating Oversight

What prevents committees from undertaking oversight? Shortages of resources and information, political considerations, and difficulties in setting an agenda were mentioned by those interviewed.

Staff size and expertise are not always adequate, especially when time is limited. An illuminating response came from one committee staffer who said, "The only people that know are the people in the executive branch who run it and the people in the field." This comment suggests the difficulties of attempting to explore all the possible opportunities for oversight while at the same time attending to pressing legislative matters. Another said "even at 75 employees here, we are trying to do with 75 employees what the Office of Management and Budget has 400 to do."

Some of the committee staff members described a system which often has to rely on fragmented information:

> You rely on the executive agency to give you the material you request. Sometimes they do, sometimes they don't, sometimes they do it slowly, sometimes they say they can't do it when you know in your heart that they should be able to do it.

Staffers are not without counter-strategies in dealing with the information problem. A seasoned staff member described ways of dealing with slow or uncooperative agencies:

> A variety of things—sometimes embarrassment at concealing it further. Sometimes there's a decision someplace down there that it's not worth alienating the Senate anymore on this issue—"let's deal with them on something else." Sometimes we lose something they're interested in up here. There are a variety of things.

But he confessed, "sometimes we don't ever get it."

One Senator spoke of an aspect of the information problem on which other members and staffers widely agree:

> Part of the problem is a lack of readily usable information on agency programs and proceedings. The information is often available to us, but it is in such volume or in such form that it is difficult to use it in any meaningful way.

Several committee staffers commented about the often tedious and unspectacular aspects of day-to-day review and monitoring of agencies and programs. Such statements as the following are useful in understanding the nature of the problem:

> Oversight is a dull tedious job and if done properly doesn't result in a lot of headlines, therefore there may not be much interest.
>
> Oversight is very tedious. It's technical, it is not interesting from the media's perspective and until the media is interested you will not get improved oversight.

Politics may also affect oversight initiatives. A few committee staff members thought that oversight "meaningful to constituents" was more likely to be undertaken. Close policy relationships are also a factor in conducting effective oversight. One staffer talked about the "buddy-buddy system." In such a relationship "the members adopt an institutional perspective for a protection of the agencies over which they have nominal oversight. They become coopted by the agencies themselves, and therefore are reluctant to pursue a vigorous oversight program."

On the other hand, a number of staff pointed to an implicit adversary relationship with executive agencies as a factor in oversight activity. "The way the [oversight] process is conducted now, it's primarily an adversary proceeding," one staff member commented. He explained some of the limitations of an adversary approach: "Most of these agencies have well-staffed, highly paid evaluation analysis personnel who spend more time than any staff people here monitoring and evaluating those programs," he said. Yet, adversary proceedings limit the range of information received (and probably the type of information requested) from an agency: "Annual reports are just puff pieces usually." He said:

> There is probably no way of getting the "real" information. I mean information in people's heads—like attitudes, opinions, their own evaluation of what's going on and what kinds of things can be done to improve it. But you don't get that; you get mostly what is completely a defense of the existing program, rather than "Here's how we think things should be changed because here's how something's gone wrong."

The constraints of time and competing priorities also are factors in oversight. Many of those interviewed noted that time pressures occur because "we find that we don't have time (for oversight) because we have to work on this or that important bill. And that is the greatest problem." A graphic presentation of the pressures in setting a workload agenda is provided by the following statement:

> [There is activity] with a new bill, marking it up, writing it, holding hearings on it, writing committee reports, going to the floor on it, passing it, going to conference. It's [hard to] know substantively what's going on with [the] bill out in the area [after passage].

The desire to keep up with popular issues and stay in touch with current needs can hinder as well as stimulate oversight. Congress is caught up in crisis and reactive situations from day to day. The proc-

ess and its effect on the oversight function is described by a committee aide as follows:

> We're so busy putting out yesterday's fires that we haven't got time to look for the combustible materials that might explode tomorrow.

Oversight often gives way to other priorities. During hearings on a bill before one committee, for example, several witnesses complained that an agency was not enforcing violations of an act under its jurisdiction. The committee staff also received other reports of agency laxity.

> What we should have done then was have an oversight hearing on the [agency] and send people down there to comb through the files, pull out the violations that had been reported and say, "Here's violations that have been reported, why don't you do anything?" It's just that nobody on the staff has the time to go down there and pull all this information together. And I don't want to say that we're undermanned because we're not. It's just that the nature of the committee is a legislative committee, not an investigative committee; and the legislative priority comes first.

This same staffer touched on another problem, that of competing demands on the attention and time of Senators:

> Let's turn it the other way—if I had dropped what I was doing and gone down and gone through all that material and spent a week doing it and developed a series of questions in areas to be explored, our next problem is a Senator who would have the interest, and time not only to hold the hearing but time to study the materials that he could really conduct the hearing.
>
> That's a problem, that Senators just serve on so many committees. Even if they say, "Yes, we ought to investigate it," they know very well that they are not going to be able to run the show many times. That's where oversight falls down. Oversight isn't spectacular, a lot of people don't want to do it. Probably the best oversight is real dry stuff.

Another staff director put the matter more succinctly: "My question is the interest of my members, how much time they want to put in it." And another stated the problem still more forcefully:

> What keeps the Senate from performing as it really could, ought to, is a dispersion of senatorial energies and resources and time and attention and everything else. I think this staff is organized pretty well and capable of a pretty damn high level of competence, and does an awful lot of what could be termed oversight activities. But none of them amounts to a damn unless a Senator pays attention.

## Oversight Activity: The Legislator's Office

Oversight is generally considered a committee activity. Some types of oversight, such as hearings and requiring executive agency reports, must be performed by congressional committees. However, in a number

of ways individual Senators, working with the assistance of their personal office staffs, can and do perform oversight activities.

Senators may work with their personal staffs on all four types of oversight: legislative, fiscal and analytical, investigative, and authoritative. Personal staff assist in committee work in these areas, although they are least likely to become involved in audits for fiscal and analytical oversight or in far-ranging investigations.

But other techniques of oversight regularly occur in individual offices. Some, such as confirmation hearings, must actually be handled by a committee, but personal staff often assist with background research and strategy coordination. Handling constituent problems is a major activity of legislators' offices, and most casework is handled here rather than by committees. Personal staffs in most offices report significant investigative activity by several aides. House aides also describe detailed involvement in oversight activity.

Much of the casework reaching an office may be instance-specific: contacts with agencies to handle them do not technically result in oversight, even in the broadest sense. Assisting a constituent in obtaining emergency home leave is an example.

Other cases, however, reveal an agency procedure or an administrative interpretation that should be changed. When such cases are handled on a case-by-case basis by caseworkers, only specific adjustments may be made. It is possible, however, that a number of similar complaints from congressional offices may cause an executive agency to change a procedure or regulation, although there is no assurance that this indeed will be the result.

A more far-reaching form of oversight occurs when in pursuing specific cases a Senator also seeks and obtains a change in agency regulations, either by the agency itself or by changes in public law. If casework is to result in oversight, an office must be organized and staff encouraged to look beyond specific complaints to the underlying problem. Then they must determine whether a change in procedure or policy would be a proper remedy.

Oversight activity in personal offices also occurs through work on Federal projects. Occasionally, if a Senator pursues a particular interest, as Senator Kenneth Keating did in 1962 in regard to Soviet missiles in Cuba, significant oversight activity also takes place.

*Casework Procedures*

Office organization, intraoffice communication patterns, and staff training are important elements in oversight activity resulting from casework. Procedures are set up in some offices to enable senior professional staff to identify cases which represent a situation where formal changes in agency procedure would be an appropriate remedy.

When caseworkers are attuned to the casework-oversight link, they may assess the ramifications of specific cases on which they are working, identifying cases for possible general remedy and bringing them to the attention of senior staff. In some offices they participate in discussions and help prepare papers as the office works on administrative change or amending legislation. Experienced caseworkers, who participate in general policy meetings covering a particular area of activity, are most likely to make this casework-policy linkage. Initially, the legislator must consider case staffing important in a policy sense and hire accordingly.

A structure for coordination and exchange of information among the Senator or Representative and professional aides, even if informal, facilitates oversight work. The staff then know the member's areas of interest, and may look for constituent cases and other problems that are relevant.

Some routinization of office procedures for handling casework also permits more oversight activity. One office uses form letters based on agency fact sheets for immediate replies to inquiries. Standard forms which have been developed by the senior caseworker are also used for memorandums and further correspondence with agencies. Cases are handled by memos and correspondence rather than by buck slip so that a complete record can be made. (These procedures allow some of the caseload to be handled by clerical staff, and free the caseworker somewhat for participation in policy and oversight work.)

*Federal project work*

Federal project work offers similar oversight opportunities. State and district demands for dams, roads, various construction grants, impact aid, HUD and HEW grants, and other Federal agency programs often involve Congressmen who serve as a link with the Federal bureaucracy. This activity often produces detailed knowledge of agency procedures in processing applications, making grants, and implementing legislative programs. Oversight occurs in one sense as a member and his staff simply follow through the grant application procedure. Legislators can also obtain information to evaluate program impact and to assist in any action on amending agency procedures or public laws.

In some offices, junior professionals now handle the more routine aspects of Federal projects assistance, but top aides are usually involved in some phase of the work. There is, therefore, an overlapping of policy and constituent service considerations which is not present in individual casework instances.

*Legislative, fiscal and authoritative oversight*

Personal staff are also active in legislative, fiscal, and authoritative oversight work. Much of this activity occurs as staff assist a Senator with his committee work.

## Efforts to Strengthen Oversight

Congressional interest in strengthening oversight is apparent, and recent legislation has been enacted for that purpose. The congressional support agencies are working on oversight related activities. Sections of the Legislative Reorganization Act of 1970, the Congressional Budget Act, the Bolling committee reform resolution (H. Res. 988), and the Technology Assessment Act of 1972 have led, or may well lead to major improvement in congressional oversight. Reforms within the House Democratic caucus [21] and efforts by the young Senators' group [22] have also increased congressional oversight potential.

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[21] See Ornstein, Footnote 10.

[22] 43 Senators elected since 1970 have banded together, with Senators Bill Brock and Lloyd Bentsen as cochairman, in response to the need for reforms in the Senate. Various reforms have been achieved. These include increased clerk-hire allotments, mechanical equipment assignment reforms, and scheduling reforms. Other reforms include a study of the committee system, an allotment for personal committee staff, etc. Many of the changes sought and achieved bear directly on the ability of the Senators and their staff to perform oversight activities.

A number of additional proposals regarding oversight have been made by Senators, Senate staff, and outside observers, and a number of measures relating to oversight have been introduced in the present and preceding Congresses. The proposals can be grouped into four general categories:

1. Different use of present resources;
2. Changes in type and magnitude of resources;
3. Structural changes (internal to the Senate);
4. Increases, additions, and changes in structures and resources external to the Congress.

Different use of present resources would include, for example:

Greater use of the GAO ("we ought to utilize GAO more, to do good, long-term oversight");

Requiring annual authorizations ("putting things into the annual authorizing process, so they come up as a matter of course");

Performance measurement (of programs) with requirements in law;

A certain number of required investigations a year;

Scheduling changes, which might include setting aside an entire session (or perhaps, as one aide suggested, even an entire Congress) devoted to oversight work by committees and subcommittees;

More joint House-Senate hearings—although some aides feel this works well and saves time, money and energy, others consider that the coordination process, (although less for oversight than for legislation) consumes time and energy and is not a viable way to proceed;

Using a two-step legislative process, such as now occurs for Corps of Engineers projects, for example, so that a preliminary study of programs might be authorized, with further authorization, funding, and implementation later;

Including more people in the oversight process: "more than the chairman and the ranking minority member."

A number of suggestions relate also to making resources for oversight better known:

Sponsoring seminars and conferences for staff on specific oversight techniques (such as program evaluation);

Making the GAO program information system (listing all programs, expiration dates, funding levels, outlays, et cetera) available to all committee staffs and Senators' offices;

Having GAO and CRS develop outreach programs on their own oversight capabilities and services, and the availability of various techniques.

Zero based budgeting proposals and the sunset bills would calendar regular oversight, and through review and justification, in effect, focus use of present resources somewhat differently.

A number of proposals to increase oversight activity would make structural changes to add motivation and incentives. Among these are:

Establishing a separate and permanent Oversight Committee;

A refinement of this proposal suggests that oversight subcom-

mittees of standing committees should coordinate with the Oversight Committee to assure input into that committee's actions;

A further refinement would have the Oversight Committee establish subcommittees paralleling various functional areas of executive branch activity;

Reducing the large number of committees which oversee some agencies (ERDA and EPA, for example);

Establish oversight subcommittees of the standing committees;

Requiring that a new Oversight Committee (or existing Governmental Operations) coordinate oversight activities of the standing committees.

Finally, some proposals would change structure and resources external to the Senate. These include:

Charging GAO with the responsibility for conducting oversight for Congress;

Establishing a new oversight agency;

Contracting out more oversight work (now possible).

A major factor in any changes in the oversight process, at least from the perspective of Senators, is the question of who will control oversight activity, including priority-setting and coordination. Resource changes may affect individual actors. Structural changes within the Senate raise issues of resource control and power balances between the major actors. Resting oversight responsibility with groups external to the Senate may result in expert assistance, less reactive oversight activity, and depoliticalization, but raises questions regarding agenda setting and other decisions.

## Conclusion

This survey of oversight activity sets forth perceptions of the Senate actors concerning oversight techniques, initiatives and effectiveness.

Members and staff look to oversight to yield specific results, including the following:

Bringing older statutes up to date.

Expanding the basic law in a given area.

Initiating new laws.

Oversight work also is used to identify general problems. One committee noted, "hearings helped to highlight some of the economics problems being experienced by small lumber companies who depend on this program for their survival, and, . . . important legislative proposals were also generated by two long-range continuing oversight studies . . ."

The oversight activity which does occur is perceived as resulting in effective change. But some changes would result in better planned and more systematic oversight by the Senate. Among these are careful coordination, manuals on the conduct of oversight, more staff training in oversight techniques, diversity of expertise among professional staff, and scheduling of oversight activities as part of a committee's plan of action.

# APPENDIX

This paper is based on information gathered by the Commission on the Operation of the Senate and the Temporary Select Committee to Study the Senate Committee System. This includes:

(1) Committee Reports. Most committees and some subcommittees publish reports of committee activities yearly, or at the end of each session of Congress. Some committees also publish a summary of legislative review activities or of oversight activity.[1] A survey of these documents provides some insight into perceptions of oversight, oversight activities undertaken, and the effectiveness of various oversight techniques.

(2) Interviews with staff aides of Senate committees and some subcommittees, and aides in some personal offices.[2] Several questions on oversight were included in general interviews on committee jurisdiction conducted by Select Committee staff.

(3) A questionnaire on oversight techniques—including frequency of use and perceptions of effectiveness—sent to designated majority and minority staff representatives of all standing committees and appropriations subcommittees by the Select Committee.

(4) A survey of proposed bills related to oversight, compiled by the CRS.

(5) Committee justifications for investigative budgets, and committee calendars.

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[1] Senate committees are required by provisions of the 1946 Legislative Reorganization Act, as amended by the 1970 Legislative Reorganization Act and other acts, to submit a report by March 31 of each odd-numbered year on legislative review activities undertaken to examine the effectiveness of statutes and programs under their jurisdiction.

(*a*) In order to assist the Congress in—

(1) its analysis, appraisal, and evaluation of the application, administration, and execution of the laws enacted by the Congress, and

(2) its formulation, consideration, and enactment of such modifications of or changes in those laws, and of such additional legislation, as may be necessary or appropriate,

each standing committee of the Senate . . . shall review and study, on a continuing basis, the application, administration, and execution of those laws, or parts of laws, the subject matter of which is within the jurisdiction of that committee. Such committee may carry out the required analysis, appraisals, and evaluation themselves, or by contract, or may require a Government agency to do so and furnish a report thereon to the Congress. Such committees may rely on such techniques as pilot testing, analysis of costs in comparison with benefits, or provision for evaluation after a defined period of time.

(*b*) In each odd-numbered year beginning on or after January 1, 1973, each standing committee of the Senate shall submit, not later than March 31, to the Senate . . . a report on the activities of that committee under his section during the Congress ending at noon on January 3 of such year.

(*c*) The preceding provisions of this section do not apply to the Committees on Appropriations anl the Budget of the Senate.

(2 U.S.C. § 190(d).)

[2] In addition to the authors, Thomas J. Hitchner and Betsy Samuelson of the Commission staff conducted interviews.

# STATUS AND POTENTIAL OF PROGRAM EVALUATION FOR THE CONGRESS

**By Keith Marvin**

In view of the frequent observation that the Congress needs to use evaluations of Federal programs in performing its functions, this paper discusses the present condition of program evaluation, describes its limitations, and indicates its potential. The discussion is based on examples of evaluation work by the General Accounting Office (GAO) and others.

## General Purpose and Definition of Program Evaluation

### *An executive branch responsibility*

Increasing concern in recent years about the effectiveness of governmental programs has stimulated development of various analytical techniques, which have been grouped under labels such as program evaluation. There are many definitions of program evaluation, but in a general sense, it is a careful appraisal of what happened, why it happened, what choices are available for future action, and the implications of those choices. It is generally understood that the responsibility for conducting program evaluations rests first on the executive branch, from program managers to the Office of Management and Budget (OMB).

### *A legislative branch responsibility*

Congressional responsibility for establishing, funding, and modifying Federal programs requires the legislative branch to make its own appraisals and make use of executive branch appraisals. The need for evaluation studies is specifically recognized in recently enacted legislation. For example, the Congressional Budget and Impoundment Control Act of 1974 (Public Law 93–344) provides for program analysis, appraisal, and evaluation, and reemphasizes GAO's role in these activities.

Title VII of that act authorizes congressional committees to carry out evaluation studies themselves, to contract for such studies, or to direct Government agencies to prepare them. It also requires GAO, an agency of the Congress, to review and evaluate Government programs carried on under existing law, to develop and recommend methods for reviewing and evaluating those programs,[1] and to assist in developing statements of legislative goals and methods for assessing and reporting actual program performance. Title VIII directs the Comptroller General, in cooperation with the Secretary of the Treasury and the Directors of the Office of Management and Budget and

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[1] Exposure Draft: Evaluation and Analysis to Support Decisionmaking, U.S. General Accounting Office, OPA–76–9, Dec. 9, 1975.

the Congressional Budget Office, to take specific steps to improve the usefulness of fiscal, budgetary, and program-related data to meet the information needs of the committees.

## State-of-the-Art in Federal Departments and Agencies

*Joint work by GAO and OMB*

During 1975, GAO and OMB gathered information through standardized survey procedures on the status of program evaluation in 18 Federal departments and agencies. The departments and agencies were surveyed on numerous aspects of program evaluation including legislative authority for evaluation, staffing and funding; studies in process and planned; and program evaluation reports issued in fiscal years 1973, 1974, and 1975.

*Improvement in information made available to the Congress*

One of the principal results of the 1975 joint survey is the issuance by GAO of a Congressional Sourcebook (*Federal Program Evaluations*), containing citations of approximately 2,000 Federal department, agency, and GAO evaluation reports. The publication is intended to identify reports that pertain to specific Federal programs carried on under existing law. A number of unique indexes have been developed to help in selecting from this literature. These indexes include legal authority for the program, budget functional category, subject, agency, and program. Many of the citations include descriptive abstracts. Guidance is also provided to the sourcebook user to assist in obtaining copies of cited documents. In addition to the sourcebook, access to this complete body of information is possible through the SCORPIO system of the Congressional Research Service.

*Use of models for evaluation purposes*

Federal agencies use computerized mathematical models to simulate the behavior of a process, device, or concept. Models are used extensively in Government programs involving research and development work, training, science operations, and many other decisionmaking processes.[2]

Hundreds of such models have been developed and are used in nearly all Government activities and programs. GAO has found many problems in the design and management of models and has recommended improvements in its reports.

A model is an abstraction of a real system, and usually represents the essence but not necessarily the detail of the real system. "System" means a group of parts that operate together for a common purpose. A model can be used as a substitute for a real system. Investigating and experimenting with the model of the real system usually takes less time and money.

The following are examples of how models can contribute to the decisionmaking process:

The military has sponsored the development and use of a model that simulates the launching of a strategic missile. It is used to

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[2] "Improvement Needed in Documenting Computer System," Comptroller General of the United States, B–115369, Oct. 8, 1974.

evaluate the effect of a nuclear explosion on the missile and its launch support system.

The military has sponsored the development of computerized models that simulate the guidance and control of short-range, air-to-surface missiles. These models were used instead of a number of actual test flights to study whether the missile would fly properly.

A local government agency has a model that simulates the effect of population and employment on land-use planning and has used it to estimate the impact of a proposed freeway bridge system.

GAO has recently issued a report [3] to the Congress assessing a large modeling system, the 1974 Project Independence Evaluation System (PIES–74) used by the Federal Energy Administration (FEA). PIES–74 is a set of interrelated models developed by FEA to portray the U.S. energy system and assess alternative energy policies. GAO concluded that PIES–74 requires modification if it is to approach its full usefulness and provide reliable results. FEA stated that it is aware of the limitations in the initial system and is implementing a workplan for improvement.

Computer technology has made models of very complex systems technically feasible. However, policy recommendations based on such models should include a careful appraisal of the assumptions built into the model and indications of how sensitive its predictions are to alternative assumptions.[4] Models which rely too heavily on statistically determined historical relationships are incapable of responding accurately to unforeseen changes in key variables, such as the price of crude oil. Models which are too heavily based on subjective judgments may be completely insensitive to important causal factors outside the model builders' combined experience. It appears that more critical assessment is needed, not only of the validity of particular models, but also of the pros and cons of alternative approaches to model building in particular situations (for example, system dynamics versus regression).

*Special problems in evaluation of social experiments*

Recently, because of the growing need to utilize experimental results in evaluation and analysis to support public policymaking, there has been an increasing recognition that independent review of experiments and experimental results is needed to assure that requirements of various policymakers—such as Congress—are met.

The Congress needs to know that the results of experiments are credible and can be used in their decisionmaking. Consequently, quality control must be built into the design to assure the accuracy of the results. Moreover, those responsible for quality control or other independent review must recognize that any activity which directly affects the experimental environment and which is uncontrolled or unmeasured may in itself affect the validity of the experiment.

The Congress and the public need to be concerned about several issues inherent in social experimentation, such as:

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[3] "Review of the 1974 Project Independence Evaluation System," Federal Energy Administration, Comptroller General of the United States, OPA–76–20, April 21, 1976.

[4] "Models of World Food Supply, Demand and Nutrition," John Clark and Sam Cole, food policy, February 1976.

Whether the necessity for conducting a particular experiment justifies the collection and storage of confidential data.

Whether the research design minimizes any conflict between the rights of individuals' privacy and society's right to know the answers sought; and whether alternative hypotheses, questions, and designs have been considered.

GAO reviews of social experiments have emphasized the question of validity of results, as explained in the following examples:

GAO reviewed the New Jersey work incentive experiment in 1970, while the experiment was in process. A staff paper was provided to the Senate Finance Committee on June 1, 1970, and is contained in the record of hearings on the family assistance plan before the committee in August 1970.[5] GAO concluded that the data collected up to that time did not adequately support the overall conclusion of a February, 1970 report by the Office of Economic Opportunity (OEO) that "there is no evidence that work effort declined among those receiving income payments."

GAO reviewed the OEO performance incentive remedial education experiment and issued a report[6] which concluded that the question as to the merits of performance contracting versus traditional educational methods remains unanswered. Shortcomings in the experiment which caused this inconclusive result included lack of comparability in initial achievement levels and socio-economic characteristics, such as race and family income, of experimental and control groups, lack of information on the overall effects of the experiment other than student achievement tests, et cetera.

GAO reviewed the experimental housing allowance program and issued a report to the Congress in March, 1974[7] in which it concluded that because the impact of the direct cash assistance program is unknown and because of the great cost involved, the Congress, in considering future legislation authorizing a national program, should weigh the benefit of waiting until the experiment is complete and more information is available on the likely impact of the program. GAO also concluded that because the sites selected by the Department of Housing and Urban Development (HUD) for the experiment were near average or above average in terms of both housing quality and vacancy rates, that Congress should require HUD to provide assurances that the results achieved are representative of what might occur at locations which have low housing quality and low vacancy rates and which are more representative of many urban metropolitan areas. GAO is currently conducting a survey of the effectiveness of HUD's experimental housing allowance program to determine whether the experiment has been designed and is now operating in a manner which will provide HUD with the data which it and the Congress need to determine whether it is feasible and practical to implement a national housing allowance program.

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[5] "Hearings before the Committee on Finance, U.S. Senate," H.R. 16311, Family Assistance Act of 1970, pt. 2, July and August 1970.

[6] "Evaluation of the Office of Economic Opportunity's Performance Contracting Experiment," Comptroller General of the United States, B–130515, May 8, 1973.

[7] "Observations on Housing Allowances and Experimental Housing Allowance Program," Comptroller General of the United States, B–171630, Mar. 28, 1974.

The GAO reviews show that these Federal agencies have not demonstrated that it is feasible to control large, widely distributed experiments so that the expected precision in measurement of effectiveness is realized. The usefulness of social experimentation, particularly for help in decisions on whether to implement new national programs, is open to question. Various authors have written about problems in quality control; for example, in peer review [8] and utilization of experimental results.[9]

*Determining the status of Federal evaluation activities*

If evaluation information produced by the executive branch is credible, the Congress needs only to supplement and refine that information to meet its needs. GAO has begun to conduct in-depth reviews of entire agency evaluation systems to ascertain whether improvements can be made in their outputs.

In conjunction with a recent review of the program evaluation system in the Law Enforcement Assistance Administration (LEAA), GAO identified major problems in program evaluation. These problems were revealed by a review of the literature on program evaluation and by audit work conducted in LEAA and the States. The in-depth review of program evaluation in LEAA and the States is nearly completed. Serious difficulties associated with doing and using evaluation in the $5 billion federally assisted Crime Control Act program have been identified. Preliminary findings from this review were presented in testimony before the Subcommittee on Crime of the House Judiciary Committee in early 1976. GAO advised the subcommittee that the LEAA program may not necessarily advance our knowledge of what works best to reduce crime, and that agency initiatives in program evaluation have not improved local evaluation efforts substantially. Furthermore, GAO found that LEAA and the States have been unable to identify which program strategies have been successful under different conditions, target areas, or groups of individuals. Such knowledge is essential if the nation is to understand better how to reduce or control crime.

GAO identified significant shortcomings in the quantity and quality of evaluation efforts and results. For example, three of the four states visited had evaluated less than 15 percent of their projects. In GAO's view, the three States lacked an adequate evaluation capability, and were not in compliance with LEAA guidelines. Only three of 42 LEAA projects randomly selected for review provided for an evaluation of project outcomes.

GAO also found problems in the usefulness of those few evaluations which were done. For example, none of the four States visited had established systematic procedures for the dissemination of evaluation results. There were indications of a lack of advance consultation with decisionmakers to identify their specific evaluation information needs. Thirty percent of the State officials GAO contacted indicated they did not receive evaluation information, another 22.5 percent reported they were dissatisfied with what they received, and only 20 percent indicated it was of use "all or most of the time." Con-

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[8] "Peer Review: Quality Control of Applied Social Research," Science, vol. 185, John H. Noble, Jr., Sept. 13, 1974.

[9] "Evaluative Research in Corrections: A Practical Guide," Stuart Adams, U.S. Department of Justice, 1975.

sequently, decisions to continue projects are frequently unaffected by the results of evaluations which have been conducted.

Such major concerns are not limited to LEAA or law enforcement related activities and involve problems which cross agency lines.

## Improving Evaluation Methods and Usefulness to the Congress

*Fundamental concepts and guidance*

The foregoing discussion is discouraging, but efforts to improve the situation are underway in both the executive and legislative branches. For example, GAO is developing fundamental concepts and guidance which are becoming increasingly accepted as basic criteria for acceptable evaluation. In the audit area, GAO in 1972 issued "Standards for Audit of Governmental Organizations, Programs, Activities and Functions," which provides that such audits should determine whether desired results are effectively achieved. In December 1975, GAO issued further guidance in "Exposure Draft: Evaluation and Analysis to Support Decisionmaking." This most recent document is partially a response to one requirement of the 1974 amendments to the Legislative Reorganization Act of 1970, that "the Comptroller General shall develop and recommend to the Congress methods for review and evaluation of Government programs carried on under existing law." Development of this guidance has been aided by a number of excellent recent books and other literature, which demonstrate that hard thinking is being done to find solutions to chronic problems that have detracted from evaluation uses.

*Basic problems in improving evaluation research methods*

The purpose of program evaluation is to discover whether government programs are achieving desired goals without adverse side effects. Evaluation research employs methods such as those used in controlled experimentation for measuring and comparing what "actually happened" to "what would have happened without the program."

Three basic problems can cause evaluation research to fall short of this ideal:

Measurement techniques are almost always less adequate than desired.

No program is isolated from other social, economic, and political forces.

Absolute agreement on the precise objectives of a program is usually lacking.

Measurement techniques in program evaluation are almost always less adequate than desired. Seldom can measurements present a complete and totally valid representation of program effectiveness. Usually the measurements made in a program evaluation provide only a partial picture of the actual results of the program and do not eliminate doubts that changes in the problem are the result of factors other than the particular program under study.

The quality of the measures of effectiveness depends upon the precision with which objectives can be stated. Precise statements of legislative objectives are frequently unavailable. Perhaps the basic reason

for this lack of precision is the subtle, complex. and sometimes conflicting nature of the basic goals and values of our society. Our goals cannot be simply stated; we value individual freedom and equal opportunity, technological progress and social stability, economic growth and environmental conservation, economic efficiency and equitable income distribution, bureaucratic accountability and administrative simplicity. Such basic values will underlie the particular structure and explicit goals of any program. Consequently, an evaluation of a particular program's effectiveness in achieving its explicit goals is ambiguous to the extent that it leaves unexamined different standards or criteria to define program "success" or "failure."

When goals are stated in ambiguous terms, "goal free" studies of program results may still serve a useful feedback function. Such studies can inform policymakers of specific impacts, and uncertainties associated with impacts of new programs can be reduced.

Problems may result from overly precise objectives (i.e., objectives stated in quantitative terms). While reducing the potential for misinterpretation, precise quantitative objectives may limit flexibility for responding to changing conditions and circumstances. Also, precise quantitative goals may constrain subsequent evaluations by focusing on questions which are too narrow in scope. If the numerical goals are met, the program may be judged a "success," even though the costs and adverse side effects may grossly exceed original expectations. If the numerical goals are not met, the program is likely to be judged a "failure" even if the results of the program are effective in comparison with alternatives. Moreover, the "failure" case may be too easily explained by inadequate funding, when other factors may be important also (e.g., poor design or bad management).

*Opportunities for effective interaction of evaluators and policymakers*

Interaction of the evaluators and congressional policymakers can help assess costs and benefits of the types of evaluation desired for reauthorization, budget and oversight on a time schedule determined by the policymaker's review plans. This interaction is also necessary for identifying the kinds of information desired by the policymaker to judge the "success" of a program. The evaluator may be able also to identify potentially useful types of evaluative information that the policymaker may have overlooked.

Several approaches, not mutually exclusive, appear to offer potential, with adequate interaction of evaluation staffs with policymakers, for alleviating some of the basic problems which impede good evaluation methods:

(Committee) development of plans and criteria for congressional oversight of authorized programs;

(Committee) development of evaluation plans, criteria, and language for legislation authorizing programs;

(Agency) development and submission for congressional committee review, of evaluation research designs (consistent with committee plans, criteria, or language) prior to the initiation of data collection; and

(Agency) conduct of evaluation monitoring and studies of program operations, impacts, and effectiveness with the results of

such studies reported to Congress. (This may in some cases be done by or directly for the congressional committee.)

In addition, much valuable information that could assist the Congress exists already. The sources of the information are quite diverse (e.g., studies done by the executive agencies, industrial concerns, and universities.) The available studies may also deal with different aspects of a particular program, or may even examine the same aspect of a program and reach conflicting conclusions. Since studies and evaluations of the same program are often voluminous and scattered, "synthesizing" of such program information can assist committees. Recent efforts to do such synthesis are discussed further in a later section.

*Examples of capability for planning and conducting evaluation by GAO*

GAO has adopted improved methods of planning and designing its evaluation work in major national issue areas so that each completed review focuses on particular areas of importance in which GAO believes it can provide the most useful information to the Congress. An example of this is GAO review of programs affecting energy. In March 1975, the Comptroller General testified before the House Ways and Means Committee concerning a package of energy proposals designed to mitigate the nation's energy problems. GAO provided supporting quantitative analysis regarding the energy, economic, and budgetary impacts which would occur from implementing the proposals and compared them to other energy proposals.

Along the same lines, GAO was requested by the chairman of the Senate Finance Committee to perform a similar analysis of the first major energy legislation passed by the House (H.R. 6860). The GAO analysis was completed in September 1975.

During and since that time GAO has continued and completed extensive review work in energy areas as follows:

Issued six studies since December 1974 concerning the Federal program to develop a liquid metal fast breeder reactor (LMFBR) for use in electrical power-generating plants. The program is estimated to cost over $10 billion. Five of these studies addressed the history, status, plans, and potential problems relevant to the development of the LMFBR. A recent report identified and assessed the issues pertaining to the nation's need for the LMFBR.

Issued a report in January 1976, on "Implications of Deregulating the Price of Natural Gas," including the need to weigh this against other alternatives which would allow price increases with continued regulation.

Issued two reports dealing with the Federal Government's role in financial assistance for developing and commercializing energy technology. One report evaluated proposed assistance to private uranium enrichment groups and the other evaluated a proposed synthetic fuel commercialization program. Based on this work, GAO submitted, in April 1976, testimony on a number of bills then before the Congress. These bills included one proposed by the Committee on Banking, Housing and Urban Affairs, U.S. Senate, to create a $100 billion Energy Independence Authority. Similar

testimony was presented to the House Committee on Science and Technology.

Issued two reports dealing with Federal policies and practices for leasing of oil and natural gas resources on the Outer Continental Shelf and one report on improvements needed in the Federal coal-leasing policy.

[See also appendix 1.]

Each of the foregoing areas of work contains major issues and questions which can be evaluated. With regard to the LMFBR, for example, GAO formulated questions such as the following:

Does the United States need an LMFBR, and if so, when?

Should the Federal Government continue to develop the LMFBR?

What are the benefits, costs, and risks?

What are the options?

Furthermore, in the analysis which led to its conclusions and recommendations, GAO identified critical LMFBR uncertainties.

As a result of its reviews of the LMFBR, GAO made a number of recommendations that addressed actions that the Energy Research and Development Administration (ERDA) and other agencies might undertake.

GAO recommended also that, as better information becomes available in the years ahead and the Nation strives for a balanced energy research and development program, the Congress periodically and systematically reassess the Nation's ability and willingness to conserve energy as well as the changing status of all energy supply options.

In the energy area, GAO also has work in process which will address such things as tradeoffs involved in alternative methods of financial support for synthetic fuels and other competing energy projects, factors involved in further development of coal as an energy source, and Federal efforts to achieve energy conservation.

In order to perform the technical work required of GAO staffs by more comprehensive evaluation plans, GAO has developed a multidisciplinary staff capable of using the most advanced methods. For example, evaluation and analysis of the kind described in the energy area also requires development of a multidisciplinary staff including petroleum engineers, data specialists, physicists, and others.

In other areas of GAO work, multidisciplinary skills also include mathematical statistics, modeling and simulation, survey research, and economic analysis. Various GAO reports issued and pending on various types of programs are benefiting from the use of these methods, including the following:

A review and report of causes of student attrition at the Federal service academies,[10] including a review of both previous studies and state of the art, followed by an independent evaluation. The evaluation made extensive use of survey research methods and analysis of the data using mathematical statistics. All of the work was built on a "student attrition model" which allowed GAO

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[10] "Student Attrition at the Five Federal Service Academies," U.S. General Accounting Office, FDCD–76–12, Mar. 5, 1976.

to study the interaction of the student characteristics at entry with both academy and external environment, in student decisions to remain or resign before graduation. Factors identified as important to attrition were evaluated in terms of alternatives by which attrition might be reduced.

A report [11] which discussed variations in data sources, statistical bases, assumptions, and calculations of annual accident costs by the Department of Transportation. Because of congressional interest, GAO was requested to perform an independent evaluation. For this purpose, GAO defined program effectiveness as the relative decrease in percentage of accident-involved drivers being killed or seriously injured—by vehicle model-year—after adjustment for changes in other factors. Few States have complete accident data on a consistent basis for more than a few years. Data were obtained from North Carolina and New York State to provide some contrast as to the potential effect of differences in weather, populations, and traffic density, and less explicit socioeconomic factors. Mathematical statistics have been used in analysis of the data.

A report [12] which examined the interaction among different programs and factors affecting the Indian standard of living on one Indian reservation, considering the values and aspirations of these Indians. Several advanced methods were used, including a questionnaire administered on the reservation, using Apache interviewers trained by the GAO team. Various techniques of mathematical statistics were used to study and explain relationships between health, housing, education, employment and income, development of new business and industry, and the cultural environment. This and other GAO work on reservations supported a GAO recommendation for similar evaluation and analysis by the executive branch of Indian programs.

A review currently being conducted in one geographic area of all factors which influence the well-being of people aged 65 and over. Information was gathered on both program and nonprogram influences that could affect an older person's well-being, including services provided by family and friends as well as by 120 social service agencies funded under 26 different Federal programs administered by six Federal Departments. An interviewing technique was used to assess well-being of a random sample of older people in five areas of human functioning—social, economic, mental health, physical health, and ability to perform the activities of daily living. The sample of older people is being reinterviewed—1 year later—to identify changes in their assessed well-being over the year. Various statistical techniques are being used to analyze changes in well-being over the year and the relative influence of program and nonprogram influences in bringing

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[11] "Need to Improve Benefits—Cost Analysis in Setting Motor Vehicle Safety Standards," U.S. General Accounting Office, RED–75–251, July 22, 1974. (Also see "Effectiveness, Benefits, and Costs of Federal Safety Standards for Protection of Passenger Car Occupants." CED–76–121, July 7, 1976).

[12] "Better Overall Planning Needed To Improve the Standard of Living of White Mountain Apaches of Arizona," U.S. General Accounting Office, FGMSD–76–47, Aug. 12, 1975.

about those changes. Results are expected to show the policy implications involved.

National and congressional concern about efficacy and costs of income security programs suggest the need to take a fresh look at this broad area. A current GAO study uses existing computerized data bases and models to simulate present programs. Other model development will be done to facilitate the comparison of alternatives.

A recent report [13] contains an example of a GAO review of the usefulness of models for decisionmaking and whether models developed in one place can be used by decisionmakers in another place. In this case, the validity and predictive powers of existing models of probation systems were tested by applying them to closed cases in other places. A score was computed for each probationer based on weighing of factors in the individual case, and each case was classified as a success or failure based on a consistent definition of recidivism. Statistical tests were used to correlate scores with outcomes. This allowed the models to be tested in various places where scores and outcomes could be determined. Finally, to illustrate possible applications by probation offices, examples were developed using model scores, to decide who should be recommended for probation, what level of supervision would be needed, and who might be released early from probation.

The foregoing examples illustrate GAO's use of planning, design, and analytical approaches and methods which enable each review to focus on particular areas of importance and to allocate the necessary technical skills to the project.

*The potential for synthesizing evaluations*

Synthesis means putting together parts or elements to form a whole. Over several years, there may be hundreds of studies and evaluations performed for any major Federal program. It has become increasingly necessary to synthesize this information to render it useful to decisionmakers. Federal agencies such as the Office of Education (OE) and the National Science Foundation (NSF) have attempted the synthesis of evaluations of compensatory education and bilingual education programs, of a variety of programs impacting on municipal governments and human resources, and of a large number of research projects funded from 1965–74 under U.S. participation in the International Biological Program (IBP).

Results of a synthesis are often disappointing because of major findings of deficiencies in the individual studies such as unclear objectives and measures, gaps in coverage, et cetera.

In OE, a continuing effort has been made to search for effective projects. In the case of bilingual education,[14] criteria for effectiveness included instruction in English-language skills for children limited in those skills, instruction in the customs and cultural history of the child's home culture, and instruction in the child's home language to the extent necessary to allow him to progress effectively through

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[13] "State and County Probation: Systems in Crisis," U.S. General Accounting Office, GGD–76–87, May 27, 1976.

[14] "The Identification and Description of Exemplary Bilingual Education Programs," American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif., a study completed under contract No. OEC–0–74–9331, August 1975.

school. Furthermore, project participants had to show statistically significant gains in English-language skills, as well as in subjects taught in the home language. The project had to have clearly definable and describable instructional and management components. Finally, startup and continuation costs had to be within reasonable limits. From 175 candidate projects visited and reviewed, four were finally designated as exemplary and approved for dissemination. Next, a set of four detailed program descriptions was prepared. The synthesis of evaluations of the bilingual education projects has affected policy-making in OE. Specifically, results of the exemplary studies led to amplification of evaluation requirements for bilingual education programs (Federal Register, June 11, 1976).

GAO is performing evaluation synthesis to accumulate and review the existing information on particular topics or programs that are of interest to the Congress. It is expected that such a synthesis may result in additional analyses, in findings and conclusions, and in recommendations for additional work.

As a general practice GAO reviews the available literature, including relevant studies by the department or agency, as one of the first steps in its program evaluations. Experimental work is being conducted in the areas of housing and child nutrition to learn whether this can be done systematically to preserve the maximum amount of useful synthesized findings. Also, a GAO response to a congressional request for information on effectiveness of various gun control schemes is based in part on a synthesis of available studies and literature. An example of a GAO synthesis is contained in an enclosure accompanying one of its recent reports to the Congress.

Probably the most extensive synthesis of previous evaluation or evaluation-related research was conducted by NSF in a series of projects culminating in reports. Each project was to cover one designated area of municipal service or human resources. Each report was to include an analysis of the validity and utility of research in the field selected, a synthesis of the evidence, and a discussion of what, if any, additional research is required. NSF has not published an overall assessment of these efforts. Usefulness of the reports may vary depending upon state-of-the-art in each field of interest as well as upon quality of work. Additional literature is beginning to appear based on these efforts.[15]

In the case of the NSF biological programs (IBP) the concept of synthesis was used as one criterion for evaluation of the biomes studies programs.[16] [17] Three of five biome (large geographical areas characterized largely by vegetation type) programs were evaluated. The biome programs were unique in that their central goal was to do integrated and cooperative basic research projects and to build a comprehensive data base in order to gain a more thorough understanding of the structure and function of ecosystems and to increase

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[15] "An Evaluation of Policy-Related Rehabilitation Research," M. Berkowitz, V. Englander, J. Rubin, J. Worrall, Praeger Publishers, New York, 1975.

[16] Evaluation of Three of the Biome Studies Programs Funded Under the Foundation's International Biological Program (IBP), Battelle, Columbus Laboratories, Supported under Contract NSF–C879, November 1975.

[17] An Evaluation of Three Biome Programs, R. Mitchell, R. A. Mayer, J. Downhower, Science, vol. 192, May 28, 1976.

man's ability to manage such systems. Common problems addressed by each program are as follows:

To understand how ecological systems operate;

To investigate relationships between adjacent land and water systems within watersheds;

To improve estimates of potential plant and animal production in the major regions of the United States as a national contribution to the worldwide goals of IBP; and

To add to the scientific basis of resource management as a means of maintaining or improving the quality of the environment.

The three programs have produced about 500 open literature publications, and many more currently are in preparation. The programs have reached an intermediate stage in the type of publication produced. Future efforts are expected to produce a significant fraction of synthesis papers dealing with ecosystem function.

The biome programs have led the science of ecology to a crossroad where three avenues or directions for research are possible: individually-funded research, small-scale integrated programs, and large-scale integrated programs. To be fully effective as a science contributing to the solution of man's environmental problems, a balance must be achieved among these three kinds of research. NSF is still studying the implications of this effort on future research, specifically whether integrated research that should result in a synthesis can be accomplished best through the block grant type approach used in the biome programs.

* * * * * * *

This paper has covered broadly various aspects of program evaluation in the sense both of status and potential for Congress. The status of evaluation in the Federal departments and agencies is discussed on the basis of both examples of in-depth reviews by GAO and the open literature. Both technical problems and lack of interaction of evaluators with policymakers are shown to limit the current usefulness of evaluation for Congress. However, the paper ends in a more hopeful stance based on the evidence that substantial efforts are going into improvement in the state of the art. Examples discussed show that these improvements are being made by the intellectual community, by certain activities in the Federal departments and agencies, and by GAO and other congressional evaluation resources.

# APPENDIX I

## Coverage of Energy Issues and Program by Recent GAO Reviews

(With excerpts to indicate evaluative content)

(1) "Cost and Schedule Estimates for the Nation's First Liquid Metal Fast Breeder Reactor Demonstration Power Plant." RED–75–358, May 22, 1975.

GAO was not able to determine whether the project could be constructed and operated for $2.1, $1.5, or $1.7 billion, because it was only in an early design state and was a first-of-a-kind and sufficient useful data was not always available to develop firm estimates. Professional engineering judgment was a factor in estimating costs. Escalation for a long-term project is very speculative, and failure to meet the schedule could increase cost.

The current schedule calls for the project to achieve initial criticality by July 1982, with commerical operation to begin early in 1983. It has been estimated that early delays could cause an increase in the project cost of about $10 to $15 million for each month of delay.

(2) "The Liquid Metal Fast Breeder Reactor Program—Past, Present, and Future." RED–75–352, Apr. 28, 1975.

The Energy Research and Development Administration envisions that operations of the first large commercial breeder reactor will begin in 1987.

The Administration expects to subsidize this first commercial plant. It projects that by 2000 A.D., 186 commercial breeders will be operating, some of which also might require subsidies.

There are indications explained in the report that these projections are optimistic.

(3) "Comments on Energy Research and Development Administration's Proposed Arrangements for the Clinch River Breeder Reactor Demonstration Plant Project." RED–75–361, Apr. 4, 1975.

(4) "Fast Flux Test Facility Program." (Staff Study—To Congress) January 1975.

(5) "Problem Areas Which Could Affect the Development Schedule for the Clinch River Breeder Reactor." (Staff Study—To Congress) December 1974.

(6) "The Liquid Metal Fast Breeder Reactor: Promises and Uncertainties" (Issue Paper—To Congress) OSP–76–1, July 31, 1975. (Contains further discussion of questions, conclusions, and recommendations on p. 18 of this paper).

(7) "Implications of Deregulating the Price of Natural Gas." OSP–76–11, Jan. 14, 1976.

Even with deregulation, natural gas production would be likely to continue to decline. Deregulation, however, could slow the rate of decline.

The price of natural gas will continue to rise, under either regulation or deregulation. However, with deregulation, price rises would be more rapid except in the unlikely event that regulated prices were deliberately raised to intrastate levels and held there.

(8) "Evaluation of the Administration's Proposal for Government Assistance to Private Uranium Enrichment Groups." RED–76–36, Oct. 31, 1975.

(9) "Comments on the Administration's Proposed Synthetic Fuels Commercialization Program." RED–76–82, Mar. 19, 1976.

Before legislation is enacted authorizing a synthetic fuels commercial demonstration program, the scope and magnitude of Federal assistance needed to carry out such a program should be more clearly delineated and justified.

(10) "Outlook for Federal Goals to Accelerate Leasing of Oil and Gas Resources on the Outer Continental Shelf." RED–75–343. Mar. 19, 1975.

GAO recommended that Interior clearly define its leasing goals for developing oil and gas resources on the Outer Continental Shelf and specify how these will be met and how they relate to overall national energy goals and plans.

(11) "Outer Continental Shelf Oil and Gas Development—Improvements Needed in Determining Where to Lease and at What Dollar Value." RED–75–359. July 3, 1975.

This report, second of a series on Federal leasing policies and practices, concludes that the Government's programs (1) are hindered by inadequate data and analysis; (2) do not reasonably insure a fair market value return on lease offers of shelf oil and gas resources; and (3) are being jeopardized by an accelerated leasing pace.

GAO believes in a sound balanced approach to development of oil and gas resources on the Outer Continental Shelf. Government direction and financing are essential to insure that exploratory activities are sufficiently broad to implement a systematic plan for resource appraisal in the public interest.

(12) "Role of Federal Coal Resources in Meeting National Energy Goals Needs to be Determined and the Leasing Process Improved." RED–76–79. Apr. 1, 1976.

Fundamental attempts should be made to (1) better identify the amount of coal under lease and prospecting permit and (2) relate the amount of Federal coal required to meet national goals to any program of renewed leasing.

# APPLYING COMPUTERS TO ANALYZE DECISION INTELLIGENCE INFORMATION

By Richard W. Long

The Senate's decisionmaking process is complex and relies on a great variety of information from numerous sources. Senators are hungry for new information sources. However, their style of decisionmaking and the use now made of data should be determined in relation to new information-gathering tools before large funding is devoted to their acquisition.

This paper explores the computer's value as a tool for providing appropriate information to aid the Senate as a policymaking institution. The easy portion of the task is to identify many existing and potential data bases, often described as a logical resource for decisionmaking. Much more difficult is the question of determining precisely what information is appropriate to the style of senatorial decisionmaking that is practiced. Central to this question is the effectiveness of the present style and the impact of new information resources upon it.

## Basic Information Types

For the purpose of simplification, Senators and committees may be described as needing, gathering, and using two basic kinds of information, which are seldom neatly separable and are often confused.

The first is political information. This aids in the identification of the needs and desires of each Senator's various constituencies. What are the people concerned about? What are the preferences of the voters? The taboos? Some fairly objective measures of these concerns have been developed. Identifying many of the measures, however, proves elusive. Most professional politicians—such as Senators—are not willing to rely heavily on polls, demographic statistics, or any one-dimensional measure.

The second kind of information is much more objective in nature. What are the technical implications of a decision? How many Soviet tanks are there in Eastern Europe? How many hospital beds will be brought into existence by an expenditure of $100 million? Such information, along with political intelligence, is essential to policymaking. It is the tool that, it is hoped, helps Senators make policy producing the most desirable result.

Most Senators are aware of the interplay between politically charged and politically neutral information. They know that objective data are useful to them in making decisions, and even more in arguing their cases. Senators make their decisions, not exclusively to solve problems, but also to balance the interests of a variety of publics.

Much of the strong senatorial appetite for increased professional staffs, new sources of information, and new systems of analysis, exaggerates the value of these resources for their expressed purposes. A Senator is not a research coordinator. The ranges of choice in decisionmaking for Senators are usually narrow, constrained by political circumstances. Senators do not operate in an open decisionmaking world, where all relevant objective information is gathered, sifted, and the most promising options selected. On the contrary, Senators typically seek information that justifies previous political positions, or at most resolves limited, finite questions within a small range.

### The Style of Senate Information-Gathering and Analysis

The genius of democratic government lies in the success it awards to public officials and candidates who can correctly identify perceived public problems, and convincingly promise solutions. As information-gatherers, Senators must be, and usually are, exceedingly skillful. Their style is characterized by at least two important elements.

First, the style is eclectic. The work of a Senator puts him in contact with people with a range of backgrounds and experience. During numerous campaign and interim appearances in his State, a Senator not only speaks but listens. From its broadest point, the views of his constituents in all walks of life, a Senator's network of information narrows to several more refined sources. He is educated by his colleagues. He is also subject to the informative pleading or reinforcement of lobbyists—including those of executive agencies. He is briefed by his staff. His mail is summarized for him. Regularly, he attends hearings, reads testimony and perhaps the Congressional Record. Either directly or through reading his clippings, the Senator follows the national news and his State's press. In Washington, typically, he socializes with and learns from a community of usually well-informed people.

The caution with which he treats information coming from those who vie for his ear is a second element in his style of information-gathering. This wariness increases in proportion to the self-interest of his informant, the informant's distance from the Senator's State, and perhaps even the sophistication of the informant. Perhaps the uniformly least trusted sources of senatorial information include members of the Senate's great institutional rival, the executive branch.

These two elements of eclecticism and caution both suggest the limits on the value of a single information system. The most sophisticated systems for providing data, created at great cost, probably never will provide more than a minor fraction of a Senator's information. The rise of a set of people whose specialization creates even the appearance of a special interest will simultaneously reduce the trust of a Senator who is determined not to become a captive of any single information source.

The senatorial thirst for information is insatiable. This fact must be recognized. The quest for more and better information will never end. Resources devoted to the search must be committed with that certain knowledge.

## Specialization

The value of delivering various sophisticated kinds of information to every Senator's individual office is questionable. But the worth of particular information to individual Senators who specialize in that particular field, or to the appropriate committees in the field, is much more apparent. Many Senators choose to specialize in a particular area, such as science policy, health care or juvenile justice. In order to do this, they often assemble a staff of experts, or at least generally well-informed, energetic knowledge brokers. Such a staff's typical function is to translate Senators' policy questions into the language of the expert or the technician, and to translate the concerns of those in substantive fields into the context of political policy.

For the unique purposes of the Senator who does specialize, data needs are much more sophisticated than the general needs of 100 Senators. Analysis of the Senate's need for particular kinds of information must take this distinction into account. It must obviously also take into account the information needs of committees and subcommittees.

## Available Computer Resources

In 1975, the Committee on House Administration published Computer-Based Information Resources for the United States House of Representatives. Prepared to aid House members in the use of their individual allowances for computer services, the report contains a listing of more than 80 data bases accessible by computer. The subjects of these data bases range from agriculture to medicine to zoning. The report also describes the contents of the data files and lists their vendors—some Government agencies, but mostly private firms.

Illustrative of the type of information provided and the range of services available are the following two of the more than 80 entries appended to the House report (figs. 1 and 2).

NAME
Pollution

SUBJECT
Environment

ORGANIZATION

System Development Corporation (SDC)

TERMINAL INTERFACE

CRT and TTY 110 bps to 300 bps

DESCRIPTION

This information system corresponds to the POLLUTION ABSTRACTS bimonthly publication. It covers the spectrum of pollution control and pollution research, including:

| | |
|---|---|
| Air Pollution | Thermal Pollution |
| Water Pollution | Noise Pollution |
| Marine Pollution | Sewage and Waste Treatment |
| Land Pollution | Contracts |
| Patents | Legal Developments |
| Pesticides | |

The citations are drawn from foreign and domestic technical reports, journals, newspapers, contracts, symposia, government documents (e.g., executive actions, treaties, legislation and court decisions), and patents.

The system contains up to 9 different categories of information. Eight of these categories (shown with asterisks) are indexed for rapid and direct searching.

| | |
|---|---|
| *Accession Number | *Publication Year |
| *Title | *Descriptors |
| *Authors | *Identifiers |
| *Author Affiliation | *Update Code |
| Source | |

Service Rate Schedule

| | |
|---|---|
| Hourly Rate | $90.00 |
| On-line Printing | .15/citation |
| Hourly Communications | 11.00 |

FIGURE 1

NAME
MATRIX

SUBJECT
Communications

ORGANIZATION

System Development Corporation (SDC)

TERMINAL INTERFACE

CRT and TTY 110 bps to 300 bps

DESCRIPTION

A highly selective system of citations covering world developments in communications with sources from about 250 world newspapers, newsletters, trade publications, and general publications has been developed by ORBA Information Limited of Montreal. The system's emphasis is on material with implications for communications policy and planning. A representative set of topics include:

Global Communications
Wired-World Phenomena
Cable TV
Pay TV
Closed Circuit Video
Videocassettes
Computers & Telecommunications
Networks
Satellites
Data Banks and Privacy
Obscenity and Censorship
Security
Broadcasting
Educational Technology
Educational Media
Advertising & Marketing
Innovations
Electronic Industry Trends
Electronics in Publishing
Medical Electronics
Recorded Music Industry
Film Distribution Trends

The system contains over 15,000 citations with 5 different categories of bibliographic information indexed for rapid and direct searching.

Title
Abstract
Source
Update Code
Publication Date

Service Rate Schedule

| | |
|---|---|
| Hourly Rate | 120.00 |
| Off-line Printing | .25/citation |
| Hourly Communication | .11.00 |

FIGURE 2

## NEW TECHNIQUES

Computer uses include a means to establish conferencing. A system recently in use in Minnesota permitted the Governor of that State to develop a list of experts in each of several specific problem areas. The Governor wished to solicit the advice of a panel of these experts on particular problems, so a series of telephone connections was established through the computer program. In a predetermined way, the Governor gathered information as well as the advice of a group of respected advisors. The interconnection permitted the Governor

not only to identify the precise question he wished to be examined, but to do so quickly and with the benefit of the exchange of viewpoints of several participants.

The cost of a virtually instantaneous and sophisticated information system to supply data for senatorial decisionmaking is problematical, but it is likely to be huge. Given the significance of the congressional task, cost would be important only in relation to the potential usefulness of the system.

Important decisions are not made solely on the basis of objective information, spewed from machines. If there were, or could be, there would be no parties, no split votes, no need even to have a Senate. Senators often decry their lack of information. Often they seem to be saying, "If we had more facts, decisions would be easier." But, on the contrary, an increasing wealth of knowledge and information (with more concomitant, complex life patterns) has multiplied divisive political issues, rather than reduced them.

Logic argues that more and better information cannot help but improve decisions; certainly it cannot hinder them. But the tendency to place so much significance on improving the general level of information—for all members on all questions—probably inflates its value, relative to its costs.

Aside from cost considerations, should the Senate dabble in primary research? Traditionally, it has been assumed that most basic research, even for public policy development, will be performed by academic institutions, statisticians and Government agency personnel assigned to such a task. Presumably, these sources generate data, analyze it and identify trends. They attempt to relate cause and effect, develop theories to explain the relationship of factors, and suggest points of leverage through which change can be effected.

The legislative body, in the traditional view, is the beneficiary of research and analysis. Members apply the knowledge and the theories acquired to problems in the context of their political values. To do so, they are aided by a staff of information brokers. The staff is assumed to be knowledgeable in an area of specialization, but not themselves experts in generating new knowledge or theories. This is important because staff is expected to bridge the gap between experts and policymakers, and to be accountable to the latter.

Some data bases of special interest discussed later in this paper contain the kind of information that is the raw material of basic research. For example, in order to properly make use of the multipurpose securities information system data base for congressional purposes, a sophisticated research staff would be required. A Senator's office or a committee would require at least a staff-level analyst, well versed in several analytic techniques, with a strong background in business. Multiplying such a staff for every Senator and committee, the Senate would be well on its way to becoming an independent research institute, competing with, or parallel in function with, academic institutions and research agencies of the executive branch.

A serious concern of Senators and staff members is that most currently available information is tailored to purposes other than the Senate's legislative needs. In no case is this more true than with executive branch information. Senators and their staffs regularly express

frustration with data supplied by the executive branch; they believe it is selected and interpreted to suit the uses and purposes of the administration. They also believe the executive branch has a large body of information to which they are denied access.

Several Senators and their staffs have expressed a desire to tap the information sources of the executive branch. This would require collecting for Congress presumably objective information within the agencies. In short, this would afford Congress free access to the computers and data bases of the executive branch. On its surface, at least, such a procedure seems perfectly reasonable. Congress would have access to the factual accounting of the administration, just as it now has access to the administration's financial bookkeeping. Since most of the information sought is not necessarily used in the upper levels of administrative decisionmaking, it presumably would not fall into the category of data for which executive privilege is claimed.

Congressional access to executive branch computers, however, has some obvious limitations and poses some problems. Where the presumed data bases exist, the format of the information is not always helpful. Senate observers are correct in supposing that they are supplied data selectively; there can probably be no guarantee, therefore, that the administration would not continue to censor data made available to Congress. Finally, the new information sources might merely produce a feast of indigestible data or, alternatively, a mushrooming of staff to process the load.

The Senate now has the technical capacity to permit almost every Senate office and committee to have access to any of these administration data bases by a remote terminal through telephone hookups. On an experimental basis, some Senate offices and committees have already had access to the New York Times data file by such a connection.

The various data bases described in the House report generally consist of bibliographic listings of books and articles in a specific subject area. In some cases, they contain data summaries for entire fields such as business, finance or the economy. The entire United States Code is contained in some of the data files.

On a highly selective basis, some of these resources may be useful in special cases to specific committees or Senators. But, as already suggested, their value for general purposes is limited.

## Limits and Problems

Many staff members have heard Senators say, in effect, that in making public policy for the United States, Senators should have access to all data available and some that are not. This attitude, even if not completely reasonable, is widely accepted. A second view—that Senators should get needed information immediately—is more troublesome. Most information that is available is not immediately available. Large staffs in the General Accounting Office and more particularly the Congressional Research Office, remain on call for Senators, whose office and committee staffs can gather information from these sources on their behalf.

Can Congress justify almost all information being almost immediately available to all Senators and Congressmen? Are the information needs urgent enough for the Senate to accept the full implications of

conducting primary research? Alternative conferencing systems, using remote computer typewriter terminals, have also been developed. With such systems, the need for simultaneous participation is reduced. Participants can respond and query at their own paces and at their own convenience. Each participant can review the dialog in writing; refinement of questions can be more orderly.

Either of these approaches might be of value to the Senate. At least one Senator has long been assembling an informal panel of experts on whom he relies in various areas of special concern to him. With a computer in the picture, a more rapid and systematic approach to information-gathering could be implemented.

## Service Management

General prescriptions for the use of computers to aid the Senate in its decisionmaking are not likely to be useful. As already suggested, however, Senators and committees can use a computer to improve their access to decision intelligence information in specific ways, as is appropriate for their individual areas of concentration. Because needs are different, a flexible response, with limited emphasis on detailed planning, is justified in this area. It is important that computer policymakers respond to requests for computer services on an individual basis—stressing, of course, their impartial consideration of the merits of the request.

Beyond consideration of requests, however, lies an apparent need for a bridge between the committee or individual user and the technical resources available. The Subcommittee on Computer Services and its staff have showed that they can evaluate requests for special, external, computerized resources to aid them in policy considerations. Absent, however, has been any catalyst to motivate potential Senate computer users to examine the computerized resources available and either accept or reject them. Some individual should fill this catalytic role for the Senate.

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