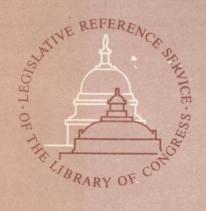
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PPBS IN 1970: METHODOLOGY AND IMPLEMENTATION

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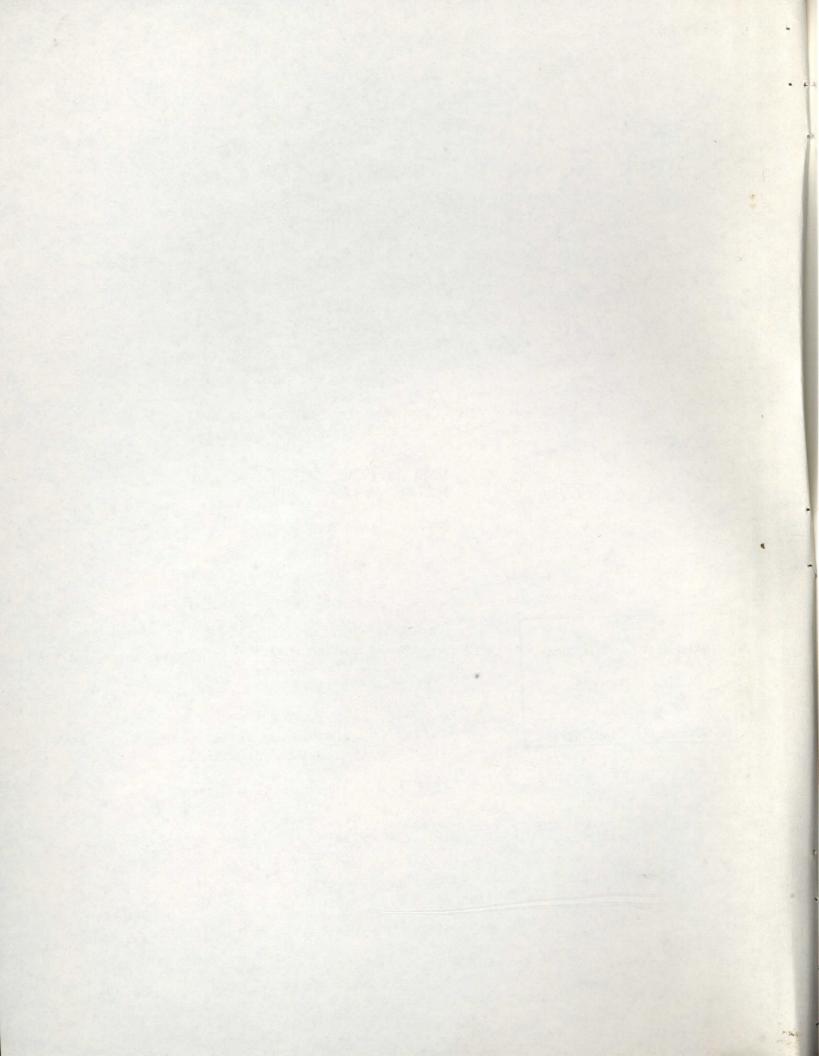
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April 16, 1970



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#### INTRODUCTION

As the Federal Planning-Programming-Budgeting System—now generally acknowledged as "PPBS"—evolved during the 1960's, awareness of its potential benefits and limitations grew apace. In this age of communication, the result could be easily anticipated: a surge of writings by government decision—makers, econometricians, professors, and those charged with devising and implementing the "new" systems. This bibliography, initially with more modest contents, first was prepared in 1966 (and revised the following year). In its present form, emphasis is placed on featuring those sources which set forth the methodology of PPBS and illustrative material on systems in testing or operational. Included are governmental directives, congressional hearings, symposia proceedings, reports on Federal agency and State—county—city experience, and other useful background material.

The concept of PPBS, as developed early in the administration of President Kennedy, was to integrate planning, programming, and budgeting functions within an organization's decision-making process. Goals must be translated into specific objectives, with alternative methods for achieving these objectives identified and programs delineated for each method. Program costs covering a period of years must be determined, based on determinations arrived at in the planning, programming, and budgeting phases.

The essential elements of information are then placed before the decision-maker who must measure predicted performance against anticipated costs.

Thus, a system of sustained appraisal is created.

Implicit in any planning-programming-budgeting system is the use of analytical tools and techniques. Although its origins may be found in American industry, major progress was achieved in "operations research" just prior to and during World War II by Anglo-American interdisciplinary teams. More effective performance was attained in such military programs as anti-submarine warfare and aerial bombardment. Emerging at the end of this period were new approaches and methods known as "systems analysis," "systems engineering," and "cost-effectiveness (or cost-benefit) analysis," which proved valuable to government and private sector groups alike.

Systems analysis and PPBS are closely related, but important distinctions can be made. Systems analysis usually is performed within a research environment while PPBS operates within a management environment. In a historical sense it could be said that the successes of systems analysis led to its adaptation in a series of management applications. Thus, a system of management was established that operates and is sustained by the use of the techniques and tools of systems analysis.

Following the initial successes in the Department of Defense, President Johnson issued a statement on August 25, 1965 expanding PPBS to numerous civil agencies within the Federal Government. Since that time, a chain of events designed to encourage and channel implementation has occurred, including the issuance of Bureau of the Budget and agency directives, congressional reviews of the PPBS approach, and commentary by advocates and critics.

This annotated bibliography contains 20 entries considered worthy of discussion, and a listing of 26 additional selections which are not annotated.

These reflect the rapidly expanding literature on program budgeting and feature the following categories of source materials:

- 1. the basic concepts and development of PPBS;
- 2. Bureau of the Budget and agency directives on PPBS;
- 3. the operation of PPBS at the State, county, and city levels;
- 4. an explanation of the analytical tools associated with PPBS;
- 5. Congressional documentation on PPBS; and
- 6. a summary of congressional interest in the systems approach

2. System and organization models

3. Cost models

4. Cost-effectiveness models

The remainder of the paper describes these four types of models

flow charts and other graphs provide additional agentiacation

Fi. Chartrand, Robert L. 'The Origins and Evolution of the Federal

Planning-Programming-Rusgeting System (PPRS), " Legislative Reference

Service, Library of Congress, October 14, 1968, 15 p. This study als

appeared in the extension of remarks of the Honorable Richard Bolling

Congressional Record, Vol. 115, February 25, 1969. pp. £1378-£1381

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This annotated hibliography contains 20 entries considered worthy of discussion, and a listing of 26 additional selections which are an annotated.

I. Bryk, Oliver. "Models in Cost Effectiveness Analysis: An Example."
Research Analysis Corporation, AD 622109, June 1965. 29 p.

The author discusses the role of modeling in a cost-effectiveness approach to problem solving. Models, representing sets of mathematical or logical relationships among objects, alternatives, environments and resources distort the real world somewhat, but often are quite useful for the purpose of:

- 1. Reducing the problem to manageable proportions; and
- Identifying those variables and parameters that are significant to the decision process.

Models of cost-effectiveness analysis are reduced to four principal types:

- 1. Effectiveness models
- 2. System and organization models
- 3. Cost models
- 4. Cost-effectiveness models

The remainder of the paper describes these four types of models; flow charts and other graphs provide additional clarification.

III. Chartrand, Robert L. sukenneth

This volume contains the pro\*e\*a\*n\*s\*of a two-day seminar sponsored

II. Chartrand, Robert L. "The Origins and Evolution of the Federal Planning-Programming-Buegeting System (PPBS)," Legislative Reference Service, Library of Congress, October 14, 1968, 15 p. This study also appeared in the extension of remarks of the Honorable Richard Bolling, Congressional Record, Vol. 115, February 26, 1969. pp. E1378-E1381.

This general study, prepared initially as an orientation instrument for congressional personnel, relates the beginnings of "scientific management" in industry and the adaptation and modification of the new techniques and procedures by military analysis and planners. Developments in automatic data processing, after the war, paralleled refinement of many of the problem-solving approaches, such as those developed at the RAND Corporation.

The formalization of many of the analytical methods into the present Federal Planning-Programming-Budgeting System is described, including the expansion of PPBS from the Department of Defense into virtually all Federal departments and agencies. A discussion of the congressional reactions to PPBS, in the form of hearings and reports, is featured in the final section of this study.

\* \* \* \* \*

III. Chartrand, Robert L., Kenneth Janda and Michael Hugo, ed. <u>Information Support</u>, <u>Program Budgeting</u>, and the <u>Congress</u>. New York, Spartan Books, 1968. 231 p.

This volume contains the proceedings of a two-day seminar sponsored by the American Enterprise Institute for Public Policy Research. The emphasis was two-fold: to examine the potential of automatic data processing and systems analysis for the Federal legislator, and to discuss the present and projected impact of the Federal Planning-Programming-Budgeting System (PPBS) on the congressional authorization-appropriations activity.

The participants in the seminar--university scholars, business computer technologists, and government systems personnel--focussed upon several aspects of PPBS, looking at the effect of this "system" in terms of the balance of power between the executive and legislative branches, and also within the context of information management, exchange, and utilization. Program budgeting and cost effectiveness were scrutinized in five separate presentations:

- o "Development of Cost-Effectiveness Systems in the Federal Government" by William Capron, The Brookings Institution.
- o "Cost-Effectiveness as a Tool for Decision Makers in the Executive Branch by Robert N. Grosse, Department of HEW.
- o "The Impact of PPBS on the Congressional Appropriations Process" by Richard F. Fenno, University of Rochester.
- o "Congress and Program Budgeting: Problems and Potentials" by
  Werner Z. Hirsch, University of California at Los Angeles.
  - o "The Present and Future of PPBS: Status and Plans" by Peter Szanton, The RAND Corporation.

\* \* \* \* \*

IV. Harper, Edwin L., Fred A. Kramer and Andrew M. Rouse. "Implementation and Use of PPB in Sixteen Federal Agencies." In Public Administration

Review, Vol. 29, No. 6, November/December 1969. pp. 623-632.

This article discusses the study of PPB utilization in certain Federal civil agencies which was undertaken by the Bureau of the Budget in mid-1968. Five groups of agencies were studied:

Group One--USDA, HEW, and OEO
Group Two--Corps of Engineers-Civil Works and the Atomic
Energy Commission
Group Three--Veterans Administration and General Services
Administration
Group Four--Departments of Interior, Labor, and Treasury
Group Five Departments of Comments of Group Five

Group Four--Departments of Interior, Labor, and Treasury
Group Five--Departments of Commerce, Justice, Transportation,
Housing and Urban Development, NASA, and the Post
Office

The PPB efforts of these 16 agencies were looked at through the mechanisms of direct open-ended interviews, mailed questionnaires, analysis of the agencies' formal organizational arrangements and procedures, and analysi of data on personnel functioning as PPB analysts.

The study offered two major conclusions: first, the planning, programming, and budgeting functions have been little affected in most agencies by the introduction of PPBS. Most agencies, however, have made some progress towards developing a decision-making process that systematizes these function Second, the agencies that did make substantial progress toward implementing systematic planning and analysis were characterized by such factors as: well qualified and numerically sufficient analysts, good support by program manage of the analytic effort, strong support by agency heads of the development and use of analytic outputs, and so forth.

Several excellent graphics depict various aspects of agency personnel's attitudes toward and uses of PPB, and other factors affecting agency acceptance and utilization of the new procedures.

\* \* \* \* \*

V. Mushkin, Selma J. <u>Planning</u>, <u>Programming</u>, <u>Budgeting for City</u>, <u>State</u>, <u>County Objectives</u>. State-Local Finances Project, The George Washington University, June 1968, four documents (organized as PPB Notes 1-8, 9, 10, 11), totalling 187 p.

The State-Local Finances Project of The George Washington University has prepared a series of 11 "notes" dealing with various aspects of applying PPB techniques and systems to the operations of State and local governments. This topic is discussed with the following framework:

PPB Note 1--Discussed how a government might go about answering the question: is an integrated Planning-Programming-Budgeting system useful for our jurisdiction?

<u>PPB Note 2</u>--Discusses some alternative administrative frameworks for establishing Planning-Programming-Budgeting systems in states.

counties, and cities.

PPB Note 3--Discusses the development of initial instructions to inaugurate a Planning-Programming-Budgeting system, and presents an illustrative set of administrative recommendations on instituting a PPB system. The Note also contains an illustrative "program structure."

PPB Note 4--Explores the problems of staffing and training for a PPB

system in state and local governments.

PPB Note 5--Deals with the development of output oriented categories -- the "program structure," one of the key components of a PPB system.

PPB Note 6-Discusses the role and nature of cost analysis in a PPB

system.

PPB Note 7--Discusses the nature of the "output measures" that are useful for a PPB system Multi-Year Program and Financial Plan.

A number of illustrations are provided.

PPB Note 8--Discusses the Multi-Year Program and Financial Plan, its purpose and role in a PPB system and makes some suggestions as to its content. The emphasis in this Note is upon the financial part of the plan; PPB Note 7 discusses the output measures for such a plan.

PPB Note 9-Discusses the preparation of a set of economic and demographic data guidelines useful in a PPB system. This Note was

developed by Gabrielle C. Lupo.

PPB Note 10--Presents examples of program objectives, effectiveness criteria, and a selected program structure for a state highway safety program area. This Note was developed by John Cotton.

PPB Note 11--Describes the purpose, content, and scope of the "Issue Paper," a first step to useful program analysis. Contains an illustrative outline plus actual examples.

\* \* \* \* \* \*

VI. Mushkin, Selma J. and John F. Cotton. <u>Functional Federalism: Grants-in-Aid and PPB Systems</u>. State-Local Finances Project, The George Washington University, November 1968. 208 p.

This study treats the fiscal interdependence of the national government, the states, and local communities through the instrumentality of grants-in-aid, and is complementary to the "5-5-5 Project" conducted in 1967-68 by the State-Local Finances Project of The George Washington University. The two purposes of the study: first, to explore methods of equating city needs and revenue sources, and second, to examine the potential consequences of introducing PPBS into the partnership of governments.

A summary of the chapter contents will indicate the breadth of this study.

Chapter 1--Intergovernmental fiscal trends and prospects.

Chapter 2-- The Federal view of a grant-in-aid system.

Chapter 3--Grant-in-aid design.

Chapter 4--Structure of major Health, Education, and Welfare grants to states and localities.

Chapter 5--Measuring need and fiscal capacity.

Chapter 6--Priorities: national, state, local.

Chapter 7--Grant packaging: a partial step toware a system of grants-in-aid.

Chapter 8--Consolidated and target grants.

Chapter 9-General support or overhead grants.

Chapter 10 -- Strengthening state and local taxes.

Chapter 11 -- Summary.

Appendix----Studies on determinants of public expenditures: a review.

It should be noted that some of the topics for analysis were included at the request of the Bureau of the Budget; for example, detailed information is presented to illuminate the specific problems of unused Federal grant offerings. In other instances, the concerns of the National Governors'

Conference caused the authors to draw upon the findings of the study entitled "New Directions in Federal Aid Policy."

\* \* \* \* \*

VII. Mushkin, Selma J., Harry P. Hatry, and Marjorie C. Willcox. Encouraging Improved Planning in State and Local Governments (The Federal Role). State-Local Finances Project, The George Washington University, September 1968.

54 p. plus appendix.

This paper, another in the excellent series prepared by Dr. Mushkin and her staff of the State-Local Finances Project, reviews the present Federal aids to States and localities for planning and recommends ways in which the Federal Government could encourage better quality and more useful planning at the sub-Federal levels of government. First, the "desirable" characteristics of planning—scope, technical quality, linkage to decision making—are discussed, followed by a treatment of five major problem areas and recommendations for coping with them:

Problem Area 1. Planning grants (and legislation requiring planning) do not give sufficient support to across-the-board government planning.

Problem Area 2. The assignment of planning grants for individual categorical programs to one specific agency of the government tends to create "independent," and perhaps isolated, planning activities.

Problem Area 3. Planning grants and planning requirements have tended to emphasize the preparation of "plans," not the development of a full planning process.

Problem Area 4. The quality and quantity of in-house personnel available to state and local governments appears to be quite limited.

Problem Area 5. There does not seem to be sufficient attention to encouraging a continuous planning process in state and local governments.

Five lesser problems areas, with recommendations, also are included.

Illustrative specifications for legislation to carry out the various recommendations for (a) a new general planning grant (Area 1) and (b) revision of functional planning grants to tie in with central planning units (Areas 1 and 2) are presented, with detailed commentary on administrative responsibility at the Federal level, central staffing and coordinating considerations, and a statement in explanation of options considered as possibilities for revision of functional planning grants.

The appendix (56 p.) contains summaries of selected aspects of the major Federal legislation considered most relevant to affecting State and local government planning processes.

Federal Government could encourage better quality and more useful planning

VIII. Mushkin, Selma J. and others. Implementing PPB in State, City, and County. A Report on the 5-5-5 Project. State-L $\infty$ al Finances Project. George Washington University, June 1969. 160 p.

This book is the report of The George Washington University's State-Local Finances Project on the initial phase of implementing PPB in State and local governments. An account of the experiences of the 5 states, 5 counties, and 5 cities selected for this pioneer undertaking approach in adapting the PPB is highlighted.

The governmental elements participating in the demonstration project provided the framework which would allow a more complete understanding of the potential for ulitizing PPB techniques and procedures. The interrelationships of legislatures, budget and planning offices as well as the internal functioning of each organizational element were considered to be critical to the acceptance and effective use of PPB.

The report is subdivided into four parts. The first section ("Introductory") reviews intergovernmental PPB project design and the confrontation of PPB by governmental elements. Part II, "PPB System Outputs and Inputs," gives the formal structure of the role of program analysis, organization and staffing, and the training experience of the project. A survey of PPB implementation with a summary of the questionnaire used and responses received from both State and select local governments comprises Part III. In Part IV ("Appendices"), the report lists other project publications and related articles, and includes a graphic showing the flow of suggested activities necessary to initiate a PPB system.

\* \* \* \* \*

IX. Novick, David, ed. Program Budgeting, Program Analysis and the Fed eral Budget. Cambridge, Harvard University Press, 1965. 382 p. An abridged paperback version, 236 p., was published by the U. S. Government Printing Office with the permission of The RAND Corporation in 1965.

In the preface Novick emphasizes the need for program budgeting due to the complexities of resource allocation decisions. Program budgeting is designed to perfect or sharpen decision-making by improving the methods of framing problems and increasing the quantity, quality and organization of information available.

In view of limited resources, the central problem is to assure that a program's resource requirements can be met in the future as well as the present. While the allocation process is primarily a political one, new methods and techniques can illuminate the implications and ramifications of decisions to be made. Program budgeting provides such an approach.

The book is divided into three sections. Part I discusses the government's decision-making process and the role of budgeting in that process.

Part II describes the development of the program budgeting techniques in the Department of Defense and presents possible approaches to other government functions. Part III deals with the implementation and operation of the program budget. The twelve articles and essays contained in the book are summarized below.

Part I: Government Decision-Making and the Program Budget.

- 1. Anshen, Melvin. "The Federal Budget as an Instrument for Management and Analysis." p. 3-23. The lead-off article is a summary of the actual budgetary process with associated problems and a potential program budgetary process with its strengths and weaknesses.
- Budget." p. 24-60. Smithies declares that society benefits in a direct proportion to the amount of information available on the implications of political decisions and believes that a government can determine its policies most effectively if it chooses rationally—by using a mechanism such as PPBS—among alternative courses of action, with as full a knowledge as possible of the implications of those alternatives. Several factors are cited which increase the difficulties of program designing and include: (1) a problem of highly complex or vague objectives; (2) the possibility of a multi-agency program as opposed to a single agency program; (3) a contradiction

- over functional versus some other method of programming, e.g.,
  regional programming as the State Department might desire; and
  (4) the necessity for considering both public and private interests in programs aimed at economic development.
- 3. Fisher, Gene H. "The Role of Cost-Utility Analysis in Program Budgeting." p. 61-80. Fisher divides program budgeting into three segments: (1) structural aspects which are concerned with establishing a set of categories oriented primarily toward outputs; (2) the analytical process which requires using various analytic tools systematically; (3) information systems which will support the first two items. Fisher's primary concern is for one particular analytic approach of the second segment—cost utility analysis.
- Part II. Actual and Potential Applications of the Program Budget Idea.
  - 4. Novick, David. "The Department of Defense." p. 81-119. The author paints in the historical background to program budgeting by discussing its introduction in the Department of Defense.
  - 5. Margolis, Milton A. and Stephen M. Barro. "The Space Program."
    p. 120-145. The applicability of the space program to program
    budgeting is discussed. The present system orientation and a
    long planning horizon of the space program facilitate the
    budgetary changeover.

- 6. Meyer, John R. "Transportation in the Program Budget."
  p. 146-177. The Federal transport expenditures are grouped and discussed by function.
- 7. Hirsch, Werner Z. "Education in the Program Budget." p. 178-207. The article suggests more effective ways of dealing with the Federal support of education presently originating in 42 departments, agencies and bureaus.
  - 8. Frankel, Marvin. "Federal Health Expenditures in a Program Budget." p. 208-247. The author outlines methods of program budgeting for health that will force to the surface answers on how much improved health is worth.
  - 9. Hirsch, Werner Z. "Program Budget for Natural Resource Activities." p. 248-284. There are many demands on Federal funds, and since we have limited natural resources that must be put to a variety of uses, the Federal government faces some difficult choices. The author stresses the need for improved tools to articulate these choices and to facilitate judicious decisions, and emphasizes the need for a carefully defined national resources policy, which cannot be readily found.

# Part III. Implementation and Operation.

10. McKean, Roland N. and Melvin Anshen. "Limitations, Risks and Problems." p. 285-307. The problems that are likely to occur when program budgeting is introduced are discussed within the context of three broad categories—conceptual, operational and institutional.

- 11. Steiner, George A. "Problems in Implementing Program Budgeting."
  p. 308-352. The broader problems arising from the implementation
  of program budgeting are discussed. The article addresses the
  question, "How fast and in what depth shall program budgeting be
  further used in the Federal government?"
  - 12. Anshen, Melvin. "The Program Budget in Operation." p. 353-370.

    The author discusses the implications of a fully implemented program budget within, the framework of the potential impact on Federal-State-local government groups and industry.

\* \* \* \* \*

X. "Planning-Programming-Budgeting System Reexamined: Development, Analysis, and Criticism." A symposium in the <u>Public Administration Review</u>, Vol. 29, No. 2, March/April 1969. pp. 111-204.

In recognition of the fact that "PPBS is probably the 'happening' of the decade," the editors of the <u>Public Administration Review</u> decided that this subject merited reexamination. The December 1966 treatment, entitled "Planning-Programming-Budgeting System: A Symposium" was widely read, and has served as a standard reference work. The second symposium offers new information on the development and applications—together with a critical evaluation—of the topic. This collection of thoughtful articles now will take its place as a <u>sine qua non</u> for the PPB policy decisionmaker, practitioner, and professor.

The major elements of the symposium, considering PPBS at the three major levels of government, what PPBS is and is not from the vantage point

of two more years of endeavor, and the problems involved in implementing the "new" system while not succumbing to it, are organized thusly:

- o "The New Systems Budgeting" by Bertram M. Gross, Center for Urban Studies at Wayne State University.
- o "Systems Politics and Systems Budgeting" by Allen Schick, The Brookings Institution.
- o "PPB and the Public Policy-Making System: Some Reflections on the Papers by Bertram M. Gross and Allen Schick" by Yehezkel Dror, The RAND Corporation.
- o "PPB and State Budgeting" by William M. Capron, The Brookings Institution.
- "Limitations and Problems of PPBS in the States" by Frederick C.

  Mosher, Center for Advanced Studies at the University of Virginia.
  - o "PPB in Cities" by Selma J. Mushkin, The Urban Institute.
  - o "PPB: How Can It Be Implemented?" by C. W. Churchman, University of California, Berkeley and A. H. Schainblatt, General Electric's Center for Advanced Studies (TEMPO).
  - o "Rescuing Policy Analysis from PPBS" by Aaron Wildavsky, University of California, Berkeley.
    - o "The Law of Bureaucratic Assimilation" by Ronald B. Lee, Center for Urban Affairs at Michigan State University.

will take its place as a size que x x x x x the PPB policy decisionmaker,

XI. State of New York, Executive Department, Office of Planning Coordination, Division of the Budget. "Guidelines for Integrated Planning, Brogramming, Budgeting." 1966. 40 p.

The manual describes New York's planning-programming-budgeting system, and how the State departments may improve their long-range program projections. Procedures vital to the annual preparation of the budget have been modified to:

- 1. Include activities specifically geared to the preparation of long-range program projections;
- 2. Provide a transitional period for evaluation and coordination of long-range program projections, and to relate projections to comprehensive statewide goals and objectives; and
- 3. Prepare annual budget requests against a comprehensive projection of long-range needs.

The necessity for utilizing uniform formats in departmental program projections is stressed, and detailed guidance provided. Departmental needs and demands are examined with special planning forms depicted. Similar guidance is set forth for handling capital facility requirements, personnel requirements, fiscal requirements, and program research.

Graphic presentation to highlight and summarize key statistical information is encouraged, and numerous examples are provided. Recognition is given to the importance of developing top-level executive commitment to the planning process in each State department. Throughout the manual, emphasis is placed on concise, lucid instructions and examples, thereby heightening its value to the user.

U. S. Congress. House. Subcommittee on Research and Technical

XII. U. S. <u>Bureau of the Budget</u>. "Planning-Programming-Budgeting."

Bulletin No. 66-3, October 12, 1965. 13 p.

The bulletin describes procedural steps for establishing and implementing the planning, programming and budgeting system. The background, concepts and structure of PPBS are discussed. Agency responsibility is spelled out in broad terms. A schedule is included requiring the agencies to submit multi-year programs and plans by May 1, 1966.

\* \* \* \* \*

XIII. U.S. <u>Bureau of the Budget</u>. "Planning-Programming-Budgeting." Supplement to Bulletin No. 66-3, February 21, 1966. p. 31.

The supplement describes the procedures for filling out and submitting two of the documents central to PPBS--Program and Financial Plans (PFP) and Program Memoranda (PM). The PFP is a tabulation of program outputs, in the form of costs and other financial data. The Program Memorandum is to be prepared annually on each of the program categories shown in the PFP. The PM provides the analytic backup to the individual program. These memoranda are to serve as basic planning documents. They are periodically updated on the basis of new information, shifting objectives, or changing availability of resources. Both documents are to be submitted for the first time by May 1, 1966 and will form the basis of the spring review of the budget.

\* \* \* \* \* \*

XIV. U. S. <u>Congress</u>. <u>House</u>. <u>Subcommittee on Research and Technical</u>

<u>Programs</u> of the Committee on Government Operations. "Federal Research

and Development Programs: The Decision-Making Process." Report of the Subcommittee on Research and Technical Program. 89th Cong., 2nd Sess.,

June 27, 1966. Washington, U. S. Government Printing Office, 1966. 41 p.

The report, released in June 1966 by the Reuss Subcommittee on Research and Technical Programs, focuses on the Federal decision-making process and the achievement of national goals. Three aggressive Federal research and development programs—defense, space and atomic energy—are compared with three less aggressive programs: transportation, housing and facilities, and water pollution control. Three elements of dynamic decision-making are singled out:

- 1. Far-sighted decision-makers and far-reaching decisions;
- 2. The deliberate search for new ideas and new technology;
- 3. Use of systems analysis and systems engineering to handle complex research and development problems.

In the case of <u>less</u> aggressive decision-making, three salient factors are identified:

- 1. Too little initiative by some program directors;
- 2. Inadequate Executive Office initiatives to remedy weaknesses at program level; and
- 3. Insufficient cost-benefit comparisons made by Executive Office of competing claims to Federal R & D funds.

The report supports PPBS, with its search for alternative objectives to meet national goals, alternative ways to attain these objectives, and

with its reliance on cost-benefit analysis when selecting a particular alternative. In this context the report recommends an intensification of program budgeting efforts in the research and development programs of the Federal government.

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V. S. Congress. Senate. Subcommittee on Employment, Manpower, and Poverty of the Committee on Labor and Public Welfare. "Systems Technology Applied to Social and Community Problems." 91st Cong., 1st Sess., June 27, 1969. Washington, U. S. Government Printing Office, 1969. 473 p.

This report, prepared by the Science Policy Research Division of the Legislative Reference Service at the Library of Congress, presents an analysis of the issues involved in Federal, State, and local use of systems tools and techniques (including PPB) in dealing with such problems as environmental pollution, transportation planning, housing redevelopment, law enforcement, education, and health services. It will serve as a standard reference work for both public and private sector government managers and planners, academicians involved in research and development, and industrial specialists charged with creating, testing, and implementing innovative approaches to these nondefense, nonspace public problems.

The major sections of the documents contain information in several categories. Past public legislation reflecting encouragement of research, development, and utilization of new equipment and processes is reviewed. The activities of congressional committees and subcommittees related to the examination of the benefits and limitations of systems technology—and

this includes a section on PPBS—are discussed, as are selected programs and projects undertaken by executive branch departments and agencies. An analysis of the series of hearings conducted by the Senate Special Subcommittee on the Utilization of Scientific Manpower (chaired by Senator Gaylord Nelson) is featured, together with a study of the questionnaires sent in 1966 and 1968 to the Governors of all 50 States, the mayors of 22 large cities, and responsible officials of certain regional development commissions. Examples of State and local activities reflecting the use of systems tools and techniques are included. Appendixes to the document include exemplary case studies where planning-programming-budgeting, modeling, systems analysis and design, and computer technology are employed. A commercial version of this committee print will be available in mid-1970, published by Spartan Books.

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XVI. U. S. Congress. Senate. Subcommittee on National Security and International Operations of the Committee on Government Operations. "Planning-Programming-Budgeting." Hearings (in five parts) before the Subcommittee.

90th Cong., 1st and 2nd Sessions: Part 1, August 27, 1967; Part 2, September 27 and October 18, 1967; Part 3, March 26, 1968; Part 4, July 11, 1968. 91st Cong., 1st Session: Part 5, December 10, 1969. Washington, D. C., U. S. Government Printing Office, 1967-1969. 333 p.

Under the chairmanship of Senator Henry M. Jackson of Washington, the Senate Subcommittee on National Security and International Operations commenced examining the nature and impact of PPBS early in the 90th Congress. In opening the hearings, which would continue over a three-year period, Senator Jackson emphasized that "...our Senate subcommittee has had a continuing interest in the role of budgetary process in helping plan and control national security policy." It was asserted that the subcommittee could perform a useful function by a "frank stock-taking of the benefits and costs of the planning-programming-budgeting system." To this end, witnesses were called, including Charles L. Schultze, then Director of the Bureau of the Budget, Dr. Alain C. Enthoven of the Department of Defense, and Elmer B. Staats, Comptroller General. The testimony and subsequent discussions allowed a more meaningful assessment of PPBS policy, management practices, personnel selection and performance, program evaluation procedures, and individual department and agency experience.

The subcommittee also has issued a series of committee prints, the contents of which have featured a wide range of factual and interpretive commentary on PPBS, both favorable and critical, from public and private contributors:

o "Official Documents" (1967) -- containing a selection of Presidential directives and statements, and Bureau of the Budget guidelines.

o "Selected Comment" (1967) -- featuring articles by Alain C. Enthoven, Charles J. Hitch, Klaus Knorr, Frederick C. Mosher, David Novick, Vice Admiral H. G. Rickover, Henry S. Rowen, and Aaron Wildavsky.

o "Initial Memorandum" (1967) -- containing an exposition by the subcommittee staff of the application of PPB in Defense, the lessons of this experience, and the problems encountered in the experiments with PPB in other departments and agencies concerned with national security.

o "PPBS and Foreign Affairs" (1968) -- presenting a statement by Dr. Thomas C. Schelling covering the main points on PPBS in relation to foreign affairs.

"Uses and Abuses of Analysis" (1968) -- setting forth the views of Dr. James R. Schlesinger on the major points relating to the role of analysis in the national policy process.

"Interim Observations" (1968) -- presenting observations by the subcommittee staff on what has been learned thus far through the activities of the subcommittee as it considers PPBS. These are organized into seven "observations," ranging from a brief discussion of the acceptance of modern management techniques to a greater awareness of the need for improved policy analysis in foreign affairs.

"Program Budgeting in Foreign Affairs: Some Reflections" (1968)
--containing a statement by Dr. Frederick C. Mosher covering the
main problems and implications of program budgeting in foreign

affairs organizations.

"Budget Bureau Guidelines of 1968" (1969) -- setting forth the revised PPB guidelines to the heads of Executive agencies. Charles J. Zwick, then Director of the Bureau of the Budget, explains the main differences between past and present PPB instructions, and comments on the status of PPB in the field of foreign affairs.

"Rescuing Policy Analysis form PPBS" (1969) -- presenting the issues raised by Dr. Aaron Wildavasky concerning the need for improved policy analysis in governmental decision-

making, including the limitations of PPBS.

o "Defense Analysis: Two Examples" (1969) -- containing two differing opinions, by Professor George Rathjens and Professor Albert Wohlstetter, on the efficacy of program budgeting and analysis in the area of ballistic missle defense.

Davidson County, Tennessee: \* \* \* \* \*

XVII. U. S. <u>Congress</u>. <u>Subcommittee on Economy in Government</u> of the Joint Economic Committee. "Innovations in Planning, Programming, and Budgeting in State and Local Governments." A compendium of papers submitted to the Subcommittee. 91st Cong., 1st Sess., February 9, 1970. Washington, U. S. Government Printing Office, 1969. 218 p.

The 12 papers in this compendium have been prepared by experts and specialists at the State and local level who have responsibility for the

systematic analysis and evaluation of public programs. The emphasis throughout the document is on describing the development of various PPB systems. Attention has been focussed on the structure and components of the program evaluation and budgeting systems, their current stage of development, plans for further implementation, and an appraisal of the significance of program analysis in the budgetary process.

The selections:

PPBS in City, State, and County: An Overview: Selma J. Mushkin

Federal Support for State and Local Government Planning, Programing and Budgeting:

Jack W. Carlson

California's Programing and Budgeting System: Edwin W. Beach

Development of a PPB System in the State of Michigan: Paul H. Wileden

The New York State Planning, Programing and Budgeting System: David A. Seyler

An Evaluation of PPBS Developments in Wisconsin: Paul L. Brown

PPBS in Dade County: Status of Development and Implementation: Gloria Grizzle

Changing Rules of the Budget Game: The Development of a Planning-Programing-Budgeting System for Los Angeles County:
L. S. Hollinger

Planning, Programing, and Budgeting in Metropolitan Nashville-Davidson County, Tennessee: Robert A. Horton

Planning-Programing-Budgeting System (PPBS) in Nassau County, N. Y., H. Sternberger, J. Renz, and G. Fasolina

PPBS in Wayne County, Michigan:

Louis G. Basso

Developing a Planning-Programing-Budgeting System in the City of Dayton, Ohio:

Nicholas M. Meiszer

This document is a followup to the three-volume study entitled "The Analysis and Evaluation of Public Expenditures: The PPB System," which

specialists at the State and local level who have responsibility for the

concentrated on major policy issues and analytic problems which must be solved if Federal Government programs are to be responsive to the needs of the people.

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XVIII. U. S. Congress. Subcommittee on Economy in Government of the

Joint Economic Committee, "The Analysis and Evaluation of Public Expenditures: the PPB Systems." A compendium of papers submitted to the

Subcommittee. Three volumes. 91st Cong., 1st Sess., May 29, 1969. Washington, U. S. Government Printing Office, 1969. 1241 p.

This three-volume compendium of study papers contains monographs of 57 specialists and experts who are knowledgeable on government spending policies. The papers focus on some of the major issues and problems which affect public finance, systematic analysis, and program budgeting. The Foreword by Senator William Proximire entitled "PPB, the Agencies and the Congress" discusses some of the problems that have been confronted in implementing PPB and congressional reaction to the new program budgeting approach.

The study is divided into six parts:

Part I--"The Appropriate Functions of Government in an Enterprise System."

Many of the papers in this section examine the economic factors which contribute to the decision-making process. The role of government regarding economic functions and the effective allocation of public resources is reviewed. In addition, the responsibility of government for the equitable redistribution of income and resources is presented.

Part II--"Institutional Factors Affecting Efficient Public Expenditure Policy."

Some of the factors which influence government spending programs are outlined, including the problems reflecting government organization and structural limitations, jurisdictional restrictions, obstacles affecting spending policies, and the deficiency of data for planning government spending.

Part III -- "Some Problems of Analysis in Evaluating Public Expenditure Alternatives."

The problems associated with the analytical evaluation of benefits and costs of government spending programs constitute the essential message of the papers in Part III. Discussions of the need for the government analyst to consider benefits and costs, the impact of an expenditure program, the social rate of discount, and the procedures and techniques for analyzing the effect of expenditures under specific circumstances, are supplemented with suggestions and recommendations for improving the practice of public spending.

Part IV--"The Current Status of the Planning-Programing-Budgeting System."

A comprehensive overview of PPB and a consideration of essential factors in implementing PPB is presented in this section by Dr. Jack Carlson, the Assistant Director of the Bureau of the Budget for Program Evaluation. Outlined in this part is the present Bureau of the Budget view and position in improving the organizational structuring and performance of PPB. The attachments that accompany the paper give additional background information on the role of PPB in selected government agencies.

Part V--"The Performance of Program Budgeting and Analysis in the Federal Government."

Herein the papers is an evaluation of PPB performance in government since 1965. Recommendations are made regarding organizational changes in the legislative and expecutive branches for more effective use of PPB techniques. Some of the experiences with PPB and systems analysis in the Department of Defense and the Department of Health, Education, and Welfare are reviewed.

Part VI-- "Analysis and Evaluation in Major Policy Areas: Unresolved Issues and Next Steps."

Some of the unresolved issues and future planning requirements for analysis and evaluation methodology are discussed in this last section. The papers, for the most part, present commentary on the future possibilities for developing an analytical spending policy. A series of papers then discuss the role of policy on economic analysis in such diverse areas as defense, international affairs, health, education, welfare, agriculture, transportation, housing and urban development, and the postal service.

The Joint Economic Committee also conducted a series of hearings in 1967 on PPBS (see listing in Additional Selections, Item. 23) during which witnesses from both the private and public sectors discussed the nature and scope of program budgeting. As a result of these hearings the committee chose to summarize its findings in an interim report entitled "The Planning-Programing-Budget System: Progress and Potential," in which it was noted that the interest of the Committee in improving government management was one of long standing. Senator William Proxmire, the Chairman of the Subcommittee on Economy in Government, indicated that the hearings and report were an initial inquiry and that PPB would be a continued area of interest for the Committee.

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XIX. U. S. <u>General Accounting Office</u>. "Survey of Progress in Implementing the Planning-Programming-Budgeting System in Executive Agencies."

Report to the Congress by the Comptroller General of the United States,

July 29, 1969. B-115398. Washington, U. S. General Accounting Office.

1969. 103 p.

The report reviews the progress of selected government agencies in implementing the Planning-Programing-Budgeting System (PPBS). Following

Presidential notification in 1965, all Federal Government agencies and departments were required to adopt the PPB system. The system requires that the agencies:

- --Establish long-range planning for national goals and objectives.
- --Analyze systematically and present for agency head and for presidential review and decision possible alternative objectives and alternative programs to meet these objectives.
- --Evaluate thoroughly and compare the benefits and costs of programs.
- -- Present the prospective costs and accomplishments of programs on a multiyear basis.

the agencies in utilizing PPB methodology and techniques are outlined in the report. Of the 21 agencies included in the survey and directed by the Bureau of the Budget to adopt a PPB system, 20 had developed a PPB framework. The varied approaches to implementing PPB was noted as a major obstacle in establishing a uniform Federal agency structure. In particular, there was a lack of extensive written policies within the agencies to guide analysts in the preparation of requisite PPB documents and studies. Existing governmental structure often prevented the development of adequate communication between accounting and PPB staffs.

The report includes a brief historical summary of the PPB System as well as detailing specific agency programs, methods of analysis, policies, and monetary and manpower resources. While no specific recommendations are made,

The report reviews the progress of selected government agencies in

implementing the Planning-Programing-Budgeting System (PPBS). Following

the GAO noted that firm guidelines should be established in order to obtain the maximum benefits from the PPB system and that significant advantages could be realized if planning and evaluation pertinent to problems common to one or more agencies were coordinated by a central agency.

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XX. Winchester, Edward E. "Analysis and Evaluation of Defense Expenditures: The Planning-Programming-Budgeting System." A lecture before the Senior Service School Financial Management Symposium at the U. S. Air Force Academy. Published by the Office of the Assistant Secretary of Defense (Comptroller), July 1969, 43 p. plus appendixes and graphics.

This presentation is valuable to students of PPBS because of its discussion of the need for greater emphasis on the role of analysis in support of Department of Defense investments, and because of its thorough interpretation of the evolution and impact of DoDI 7041.3, "Economic Analysis of Proposed Department of Defense Investments." The subject of financial analysis is approached through a discussion of four key terms: "economic analysis," "systems analysis," "value-engineering," and "cost-reduction program." The author later discusses analysis as an integral part of PPBS, asking whether PPB actually performs a control function over defense spending, and whether it is only a procedure or a process for allocating resources.

The work of the DOD Task Group on Economic Analysis in revising DoDI 7041.3 is reviewed, together with commentary on congressional action on economic analysis. In particular, the work of the Subcommittee on Economy in Government of the Joint Economic Committee—its identification of problem areas and recommendations—is treated in detail. These executive and legislative

endeavors contributed to the new DoDI version, which went into effect on February 26, 1969. Shortly thereafter, the Bureau of the Budget published BoB Circular No. A-94, "Discount Rates and Procedures to be Used in Evaluating Deferred Costs and Benefits" (dated June 26, 1969).

A number of useful graphics germane to the PPBS cycle, the analytical element, term definitions, and agency reactions is included.

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and recommendations- is treated in detail. These executive and legislative

### ADDITIONAL SELECTIONS

- 1. An annotated bibliography of benefits and costs in the public sector. Philadelphia, Research for Better Schools, Inc.,

  November 1968. 242 p.
- 2. Black, Guy. The applications of systems analysis to government operations. National Institute for Public Affairs. January 1966.
- 3. Brite, George. The federal budget process. Legislative Reference Service, Library of Congress, September 26, 1966. 78 p.
- 4. Budgeting for national objectives. A report of the Committee for Economic Development. January 1966. 65 p.
- Chartrand, Robert L. The Quest for certainty: PPBS and the Congress. In Planning-programing-budgeting systems. Papers presented at the 1969 ASPO National Planning Conference.

  Chicago, American Society of Planning Officials, 1969. 4-12.

  (Also published in extension of remarks of the Honorable John V. Tunney, Congressional record, [Daily ed.] (Washington) v. 115, June 18, 1969. pp. E5041-E5043.
- 6. Grosse, Robert N. An Introduction to cost-effectiveness. Research Analysis Corporation. AD 622112. July 1965. 27 p.
- 7. Hatry, Harry P. and John F. Cotton. Program planning for state, county, city. State-Local Finances Project, The George Washington University. 1967. 72 p.
- 8. Jernberg, James E. Information change and congressional behavior: a caveat for PPB reformers. <u>In</u> The Journal of politics, v. 31, 1969: 722-737.

- 9. Lauber, John G. PPBS in state government--Maryland's approach.

  <u>In State government</u>, v. 42, winter 1969, no. 1: 31-37.
- 10. Lyden, Fremont J. and Ernest G. Miller, ed. Planning, programing, budgeting: a systems approach to management. Chicago, Markham Publishing Company, 1967. 443 p.
- 11. McCullough, J. D. Cost analysis for planning-programing-budgeting cost-benefit studies. Santa Monica, The RAND Corporation. AD 643472. November 1966. 63 p.
- 12. Morse, Ellsworth H., Jr. The Planning-Programing-Budgeting System and the Congress. <u>In</u> Federal accountant, v. 18, September 1969; 22-36.
- 13. Mushkin, Selma J. and Brian Herman. The Search for alternatives: program options in a PPB system. State-Local Finances Project, The George Washington University, October 1968. 66 p.
- 14. Mushkin, Selma J. and Marjorie Willcox. An operative PPB system: a collaborative undertaking in the states. State-Local Finances Project, The George Washington University, [1969?]. 24 p.
- 15. Novick, David. Long-range planning through program budgeting.

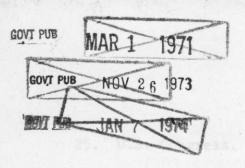
  <u>In Business horizons</u>, v. 12, February 1969: 59-65.
- 16. Office of Economic Opportunity. Establishing of the Planning-Programing-Budgeting System. OEO Instruction No. 72-2, July 16, 1966. 54 p.
- 17. Planning-Programing-Budgeting System: A symposium. <u>In Public</u>
  Administration review, v. 26, n. 4, December 1966: 243-319.
- 18. PPBS and other budget applications. <u>In</u> Municipal finance, v. 41, May 1969: whole issue

- 19. Proxmire, William. Efficiency in government and PPB: some proposals for reform of the budgetary process. Remarks in the Senate. Congressional record, [Daily ed.] (Washington) v. 115, May 23, 1969. pp. S5498-S5501.
- 20. U. S. Bureau of the Budget. Program analysis techniques: a selected bibliography (revised). Supplement II. Washington, Bureau of the Budget Library, 1969. 27 p.
- 21. U.S. Civil Service Commission. Teaching cases in planning, programing, budgeting. Washington, U.S. Civil Service Commission, Bureau of Training, Financial Management and PPBS Training Center, [no date]. 8 p. plus appendix.
- 22. U.S. Congress. Joint Committee on the Organization of the Congress. Hearings before the Joint Committee on the Organization of the Congress. 89th Cong., 1st sess. Wash., U.S. Govt. Print. Off., 1965. Part 12. p. 1775-1783. [Statement by Charles L. Schultze, Director, Bureau of the Budget.]
- 23. U. S. Congress. Joint Economic Committee. Subcommittee on Economy in Government. Hearings before the subcommittee. 91st Cong., 1st sess., May 12 and 14, 1969. Wash., U.S. Govt. Print. Off., 1969. 259 p.
- 24. U.S. Congress. Joint Economic Committee. Subcommittee on Economy in Government. Hearings before the subcommittee. 90th Cong., 1st sess., September 14, 19, 20, and 21, 1967. Wash., U.S. Govt. Print. Off., 1967. 412 p.

- 25. U.S. Congress. Senate. Committee on Government Operations. Subcommittee on Intergovernmental Relations. Criteria for evaluation in planning state and local programs. 90th Cong., lst sess., July 21, 1967. Wash., U.S. Govt. Print. Off., 1967. 42 p.
- 26. U. S. General Accouting Office. Glossary for systems analysis and planning-programing-budgeting. Wash., U. S. Govt. Print. Off., 1969. 72 p.
- 27. Wise, Harold F. Planning, programing, budgeting systems and the planning role. <u>In</u> Extension of remarkds of the Honorable Hugh Scott. Congressional record. [Daily ed.] (Washington), v. 113, February 15, 1967. p. S1975-S1978.
- 28. Wildavsky, Aaron. The Politics of the budgetary process. Boston, Little, Brown, and Company, 1964. 216 p.

23. U. S. Congress od loint Economia Committees Subcommittee on Meter-

SP 205



Subcommittee on Intergovernmental Relations. Criticals for

evaluation in planning state and local programs. With Chap

1st sess., July 21, 1967. Wash., U.S. Govt. Prist. 0

1967. 42 р.

. U. S. General Accounting Office. Glossary for systems analysis

and planning-programing-budgeting. Wash., D. S. Gavt. Pales.

Orr., 1969. 19 p.

27. Wise, Marold F. Planning, programing, budgeting systems and

the planning role, In Extension of remarkds of the Bonoralia

Hugh Scott. Congressional record. [Daily ed.] (Weshieston).

. Bildaver, saron. the rollities of the budgetary process; sos

ton, Little, Brown, and Company, 1964; 216 p.