Abstract

Volume III, Section 1 of a six-volume final report (which covers the findings of a research project on policy and technology related to rehabilitation of disabled individuals) presents five papers which examine important rehabilitation-oriented issues. In the first paper, "Policymaking Process," J. Clotfelter reviews how policy is made (including the initiation and codification of federal legislation), how policy is implemented (including the time lag between national and state adoption of social policies and diffusion among states), and the role of state and local governments (including general revenue sharing and state-local support for social health, and rehabilitation programs). A paper on "Legal Status of the Disabled" (C. Bubany) outlines the findings of a survey of federal and state legislation and judicial activity relating to the disabled. A third paper, "Some Economic Considerations of Disability" by J. Worrall, considers such topics as programs and costs, income and earnings of the disabled, and the benefits and costs of vocational rehabilitation. E. Boggs in a paper titled "The Changing Role of Income Maintenance Systems and Their Potential Impact on the Future of the Disabled in the United States" projects certain trends and issues related to that particular set of technologies usually referred to as "income maintenance" or "income security" programs and considers the consequences of changing life style of the handicapped on society. A final paper, "The Futures of Public Education for the Handicapped" by R. Wiegerink and V. Feudo, is designed to assess the current status of public education of the handicapped and through a review of recent developments in the field to suggest possible future trends. (SBH)
HUMAN REHABILITATION TECHNIQUES

A Technology Assessment

Contract Paper Authors

Policy Working Process
Legal Status
Economic Considerations
Income Maintenance
Public Education

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TEXAS TECH UNIVERSITY

Volume III
Part A

Supplemental Report: Contract Papers
FOREWORD

This document is the third volume of the final report Technology Assessment: Human Rehabilitation Techniques, a project conducted at Texas Tech University by the Department of Industrial Engineering, the Research and Training Center in Mental Retardation, the Department of Systems, and the Technical and Professional Writing Program. The research has been conducted with the support of National Science Foundation grants ERP 75-10594 and ERP 75-10594 A01, monitored by the Directorate for Research Applications, Division of Exploratory Research and Systems Analysis.

Richard A. Dudek, Horn Professor and Chairman of the Department of Industrial Engineering has been a co-principal investigator and director of the project. Gerard J. Bensberg, Director of the Research and Training Center in Mental Retardation; and M. M. Ayoub, Professor of Industrial Engineering, have been co-principal investigators. Carol M. Sigelman and Andrew S. Martin of the Research and Training Center in Mental Retardation and Robert F. Powers of the Department of Industrial Engineering have been program managers for the project. James R. Burns and William M. Marcy of the Department of Systems have been in charge of the modeling used in the project. Technical writing has been performed by Charles W. Brewer and Cynthia E. Lyle of the Technical and Professional Writing Program. In addition, several research assistants and support personnel, as listed in the individual volumes of the study, have contributed to the project.

The project team wishes to acknowledge the efforts of individuals who have served on the Oversight Committee; Elizabeth Boggs, Kan Chen, Beatrix Cobb, Ronald Conley, Richard Herman, John Noble, Jr., Evan Vlachos, and Lester Wolcott; of Lee-Phillips who served effectively as a program manager for a short time before leaving Texas Tech; of Brian Lambert who served as Work Session Conference Coordinator; of those who participated in the work-sessions chaired by Ted Hartman, David Malone, Blair Rowley, Evan Vlachos and John Wittman; and of Anne Seitz, the Secretary of the Project.

Although the National Science Foundation has supported this project, the findings, conclusions and recommendations expressed are those of the research team and do not necessarily reflect the views of NSF.
During the various stages of data-gathering and analysis underlying Technology Assessment: Human Rehabilitation Technologies, project-team members and work-session conference participants required much information which was not available in useful form in published literature. In order to be of use, this information was required to be not only of a specialized nature but also to be compiled and integrated by persons expert in various fields. Persons whose expertise and fields of specialties permitted them to compile the information were identified by members of the project team; and they were contracted with for the writing of topical papers examining important rehabilitation-oriented issues. The papers in this volume supplemental to the final report are a result of these contracts.
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POLICYMAKING PROCESS
POLICY MAKING PROCESS

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HOW POLICY IS MADE

CONCEPTUALIZATIONS OF THE PROCESS
OF POLICY FORMULATION

The policy process usually is conceptualized in terms broader than "decision-making" (Bauer) and broader than law-making. In fact, it has not yet proved amenable to development into a fully elaborated theory which is both intellectually manageable and empirically useful. What exists now is a set of partial conceptualizations which are widely accepted for parts of the policy process, and limited empirical studies which (due to the researchers' varying theoretical interests) take policy themselves as sometimes an independent and sometimes dependent variable.

One text summarizes the basic elements of the policy process framework in this way, with several bracketed additions of my own:

- public problems exist in society as a result of the perception of needs by people. [Problems are defined either by the people with the problems or by people in government, or in some instances are never clearly
defined at all], some people have problems in common, some of these organize and make demands or demands are made by those who seek to represent people, demands are perceived and judged by those with authority to make decisions, decisions are made [and legitimated usually by the legislative body] and enforced, public problems [may be] affected by these decisions [although not necessarily the problems which originally stimulated interest], people react to the decisions, some people have common reactions, demands [for modification or expansion] are made, and so forth. (Jones)

The efforts at conceptualization have been of three types: (1) those which deal primarily with the governmental intellectual processes of policy formulation, "decision-making"; (2) those which emphasize the structure and environment of policy formulation; and (3) those which attempt to relate the structure of policy formation with substantive characteristics of policies. Potentially useful efforts of each type will be discussed briefly.

Much of the policy literature in political science (and even more so in economics, for that matter) uses an implicit model of the rational man (Allison; Dye, 1975; Wade and Curry). The public choice literature (see, for example, any issue of the journal Public Choice, or Downs) assumes that actors in the policy process behave as rationally as limited information will permit; in seeking to maximize gains of various types of values. Riker and others

*In the case of policy regarding disability, definition of the problem and its extent apparently have posed severe difficulties (Haber).*
have demonstrated that maximizing assumptions are questionable, but their models still are based on rationality assumptions.

Assumptions that rational, synoptic decision-making is possible and desirable underlie one of the most discussed tools for public policy decision-making, the Planning, Programming, Budgeting Systems (PPBS) adopted by the Defense Department and other federal agencies in the mid-1960s and by state and local governments more recently. (System advocates urged policy makers to follow these steps: define your problem; make a clear statement of all objectives being sought; establish criteria whereby the achievement of objectives can be measured; generate as many alternative ways of achieving objectives as possible; analyze alternatives to determine the most effective means of achieving objectives for the least cost: [You can either seek to maximize objectives for given costs, or seek reduced costs for given objectives], which is accomplished by identifying per-unit costs and benefits of the alternatives, including all opportunity costs, indirect social costs, and costs over the entire life of programs; formulate a policy and implement it; gather information on the extent to which the implemented policy matches analytical predictions, with attention to unanticipated consequences; and reevaluate policy).

Despite its failure to revolutionize decision-making in government, PPBS-style analysis I believe, has been instrumental in building comparison and costs into federal
government decision-making. It is more difficult now, for a variety of reasons, to imagine a President promising to "bear any burden, pay any price" for a national program.

Beginning in the late 1950's, and with broader acceptance in political science (if not yet in economics) by the late 1960's, came the critiques of rationality-based conceptualizations. Several alternative models were suggested (Allison; Dye, 1975), but the most persuasive one is incrementalism (Lindblom; Cyer and March; and Wildavsky), or "muddling through."

Building from what is known of the information-processing abilities and limitations of individuals, the characteristics of organizations, and the situation (including time constraints) in which decisions about policies must be made, the incrementalist approach suggests (among other things) that: decision-makers begin with the current situation; they do not try to separate values (ends) from analysis of alternative means because they "do not know what they want until they know what they can get"; they rely on limited successive comparisons of alternatives; and the best policy is the one which achieves consensus among actors, who need not agree on goals to agree on a policy. In budgetary terms, Wildavsky and others suggest that policies change only at the margins from year to year. More comprehensive strategies (such as the one implied by zero-based budgeting, currently being adopted in a number of cities and states, theoretically
requiring decision-makers to reevaluate all of a jurisdiction's efforts each year) are seen as not only impossible but undesirable.

Recent objections to the incrementalist model have come from Natchez and Bupp and from Schulman. However, their data was from studies of the Atomic Energy Commission and the Space program, where nonincremental policy-making may be more likely than in social policy.

Within social policy, Foley's account of the development of community mental health centers, for example, suggests a comprehensive rather than an incremental approach. On the other hand, public assistance programs commonly have been incremental in development. And, as suggested by incrementalist models, liberals and conservatives have seemed to embrace vocational rehabilitation for quite different reasons—liberals for its humanitarian purposes, conservatives for its non-welfare and fiscal soundness appeals. The policy, or means, has been agreed upon by groups which might not agree on the ultimate goals.

The incrementalists go beyond conceptualization of the first type, relating to decision making, to examine structure and environment as well. The incremental model does not question that actors in the policy process are attempting to behave rationally, in terms of their own values, but suggests that rational behavior has no meaning at the level of nation, state, or city. "Rational" efforts
to advance subgroup values are seen as occurring at all levels, including bureaus and below. (Steinbruner presents an even stronger challenge to the rational behavior model, but the empirical utility of his cybernetic model has not been demonstrated convincingly.)

Widely accepted as the most useful of the third type of conceptualizations is the policy typology of Lowi, which classes policies as distributive, redistributive, constituent, and regulatory, depending upon the substantive characteristics of the policy and the structure of policy formation. Distributive policies (examples: nineteenth century land policies, twentieth century farm subsidies and rivers and harbors projects) involve the parceling out of public goods, creating stable alliances of diverse groups seeking their share of "pork barrel." In a four-cell typology, distributive policies are those where government sanctions are indirect (that is, burdens are displaced upon the general revenue system), where programs are composed of a multitude of relatively isolated actions, and where local interests, party organizations, and Congressmen tend to play important parts. Regulatory policies (examples: many but not all actions of federal regulatory agencies) restrict private alternatives. As with distributive policies, regulatory policies tend to be made in terms of interests rather than ideologies, but unlike distributive policies, regulatory policies are more likely to grow out of national interest group bargaining and involve more direct application of government sanctions.
In Lowi's schema redistributive policies (examples: the progressive income tax, Social Security, and Medicare) shift resources from one broad socioeconomic group to another by reallocating burdens and/or benefits. Redistributive policies tend to grow out of and to foster polarized and enduring conflicts between large national group coalitions (one side centered in the national executive), and the tone of debate surrounding such policies is more ideological than in the two previous types.

**ROLE OF FEDERAL LAWS**

Unsurprisingly, there can be policy impact without laws, and laws without impact. The extent to which federal legislation determines what is actually done in regard to a public problem is affected by factors such as nature of public support and resources of regulated as compared with regulating bodies. In policy areas where public and Congressional attention is sporadic or slight, the federal bureaucracy has wide latitude in implementation of laws. In some policy areas (including some traditionally within the domain of state and local governments), federal court decisions have been as important as federal laws. And sometimes there is major unintended impact (e.g., upon development of urban core cities) from other federal laws and government actions long before a consciously-crafted policy or law exists.

There is a growing policy impact and evaluation literature, with major contributions from the Brookings Institution and
the American Enterprise Institute for Public Policy Research.  
(See, for example, the Brookings series on regulation and 
the AEI's evaluative studies series.)

INITIATION AND MODIFICATION 
OF FEDERAL LEGISLATION

It would make no sense to say that "policy-makers are 
faced with a given problem" (Lindblom). So how do problems 
come to be defined as public problems? As suggested earlier, 
there often is public demand for efforts to deal with a 
problem—or more often, for efforts to modify the way the 
government already is dealing with a problem. As the 
incrementalists emphasize, most of what government does 
involves minor alteration of existing policies.

In traditional democratic theory one looks to the 
general public as the initiator of proposals for new or 
revised policies. Since the 1930's national and state opinion 
surveys have existed to provide measures of general public 
opinion. Three kinds of opinion data could be of use: (1) 
attitudes toward government institutions and decision-making 
procedures (which suggest the extent of public trust in various 
insitutions and therefore the extent to which people would 
be likely to submit to them their proposals for policy change); 
(2) attitudes toward broad classes of policies or problems; 
and (3) opinions about specific policies or problems. The 
first type of data shows a major increase in alienation from 
national government (that is, rising disaffection and 
sense of powerlessness) over the past 20 years. Voting
remains the only political activity of most Americans, and even the proportion of the eligible population voting has remained low by historic standards.

Using the second type of opinion data, studies (for example, Cantril and Free) have found that at least since the New Deal period Americans have tended to be ideologically conservative and operationally liberal. That is, they are likely (and becoming more likely) to say that they oppose "big government" as a general principle, but pragmatically many of the same people support expansion of government programs which assist them or others perceived as worthy. Government spending for crime control, assistance to the elderly (and Social Security in particular), and better health have been among the most universally supported, even though Social Security for one has become the most rapidly growing large sector of the federal budget (and revenue structure).

Since the 1930's the Democratic party, which tends to be more supportive of domestic spending programs, has had the largest number of subjective "party identifiers" among the general public. However, in the past several years the number of self-identified "independents" has risen substantially.

Using the third type of opinion data, some (Miller- Stokes; Sullivan; Luttbeg) have sought to determine the circumstances under which there is a linkage between mass opinion (or subsets of mass opinion) and Congressional behavior. Others (Munger; Weber) have demonstrated how
Public opinion can be compared with state legislative action. This type of opinion data is of the greatest potential use in determining the public's role in initiating demands for new or revised policies. Great progress has been made in regard to access to this data. However, relatively little of the data collected by "public" (that is, Harris and Gallup) or private organizations can be utilized in policy analysis. Public survey organizations rarely pose a question until after it has been defined as a public problem by interest groups or government officials, so the initiating stage is past. Trend data is difficult to gather. Another drawback is that questions (for a variety of reasons which will not be explored here) are posed in broad terms (and thus cannot be used to demonstrate support, for example, for one of the dozens of national health insurance proposals). Also, even when overwhelming public support for a specific piece of legislation exists over a long period of time (e.g., for Universal Military Training, 1940's-1950's), survey data sheds no light on intensity of feelings, which may account for the frequent failure of the public "mandate" to be translated into law.

**IMPACT OF INTEREST GROUPS**

Two-thirds of interest groups with registered lobbyists in Washington, and a majority of those with the largest lobbying budgets represent business interests. Most students of interest groups describe this part of the policy process
as biased toward the interests of higher-income, conservative groups. Interest groups most commonly seen as influential are those with relative homogeneity of membership, lack of overlapping group memberships, common stake of group members in economic benefits being sought by the group, and skillful group leaders/lobbyists. Large groups (e.g., the American Legion, the Chamber of Commerce, the League of Women Voters) are not seen as influential on most issues if that large size is accompanied by great heterogeneity. (See, for example, Wilson.)

The days of the three-B's (Blondes, Booze, and Beefsteak) supposedly the medium of exchange between lobbyists and legislators some years ago in Texas) are now ever in most states as well as in Washington. Lobbyists probably work most effectively on legislators in two ways: (a) by providing them expert information in an understandable way (although known to come from an interested source, most Congressmen and state legislators say this information can be useful); and (b) by contacting their constituents and suggesting that they urge their legislators to take the desired action.

Interest groups now spend as much or more time attempting to influence bureaucratic behavior as they do on the more publicized legislative lobbying. (Also see the implementation section below.) All bureaucracies have clientele groups which they serve as well as regulate, and whose "pressure" often is encouraged by the bureaucracies.
themselves. Studies have demonstrated that the success of interest groups in altering bureaucratic actions varies by the substantive policy area. For example, Friedman, et al. showed that administrative officials tend to resist non-professional outside pressure if their agencies are characterized by a high level of professionalization, or (in the case of public education) their agencies are permeated by an anti-political ideology. In this study, public health officials described their responsibilities in terms of needs as defined by outside providers of services, and often were found going to professional groups outside the agency for information. Administrators of mental institutions characterized themselves as often unresponsive to demands from nonprofessional groups. Agencies such as recreation or corrections, which provide a relatively intangible product with unclear economic consequences, also tended to be less responsive to nonprofessional interest groups.

**CONGRESSIONAL DECISION-MAKING**

Congressmen respond to the expressed wishes and perceived needs of several "publics." The President usually has been found to exercise significant influence over the behavior of Congressmen of his own party, especially those without important committee chairmanships. Federal agencies usually have close working relationships with the Congressional committees charged with overseeing their activities and
recommending authorizations for their budgets. The social welfare agencies at times have had tempestuous relationships with their committees. The relationship between the Department of Defense and the armed services authorizing and appropriating committees in both houses has been quite close, on the other hand, with ranking committee members receiving material (e.g., bases in their districts) as well as symbolic/psychic rewards for their support of DOD (Clotfelter).

It has been suggested that certain interest groups, together with Congressional and bureaucratic allies, have constituted "subgovernments." Examples usually are the sugar, oil, tobacco, and defense lobbies (Cater; Engler; Fritschler; Allison). In recent years, however, these alleged subgovernments have become more heterogeneous in composition and more open to influence from outside the subsystem. No such relatively closed subgovernments have existed on a large scale in the social welfare sectors (Bailey; Wolman).

In social welfare there is variation in extent of interest group organization. The physically handicapped apparently have not been organized into interest groups in large numbers, but have had their case made by professionals. On the other hand, organizations of the elderly have played important roles at the state (especially California) and national level since the 1930's (Binstock).
The influence of interest groups likely will vary depending upon the characteristics cited previously, as well as the concentration of interest group activists within a Congressman’s district. Case studies have suggested that campaign contributions from financially strong interest groups such as the American Medical Association’s political arm, the National Rifle Association, and the trucking and banking lobbies have been decisive in some Congressional elections, and this may color the behavior of incumbents.

One of the most extensive studies of Congressional decision-making involved foreign trade legislation (Bauer, Pool, and Dexter). The researchers found, among other things, that letters from constituents and interest groups did not appear to affect the direction (that is, pro or con) of a Congressman’s voting. Instead, such letters influenced the salience of a given issue, with Congressmen receiving more constituent communications being more likely to develop an active interest in the issue.

Various studies have examined the linkage between public opinion and Congressional behavior. One 1963 study surveyed Congressmen and sampled their constituents in regard to three policy areas, civil rights, foreign policy, and social welfare (Miller and Stokes). Congressmen were found to have a ‘reasonable’ accurate perception of how their constituents felt on the then highly-salient issue of civil rights; there also was reasonably close agreement between
Congressmen's self-identified attitudes, their voting records, and constituent attitudes. On foreign policy the relationships between these variables were virtually random, with congressmen apparently free to "vote their conscience." Social welfare issues fell between these two extremes; there was a moderate, but not strong, relationship between constituents' opinions and Congressmen's perceptions of those opinions, between constituent opinions and the Congressmen's own opinions, and between constituent opinions and Congressional roll call voting.

Party leaders outside Congress have virtually no influence over Congressional behavior because of the decentralized party system. Wilbur Mills, for example, dominated national policy-making regarding taxes and Medicare not because the national Democratic party leadership wished him to do so, but because the voters of Little Rock, Arkansas continued to return him to office.

One "public" to which Congressmen are quite responsive, and which often is ignored in analyzing Congressional behavior, is a Congressman's colleagues. Researchers suggest that Congressmen often are guided by institutional and collegial values, rather than the views of outside interests. This is especially true for those with more seniority, who usually come from less competitive (and thus electorally less dangerous) districts. To the extent that a Congressman does not have to fear the wrath of his constituents, he is
able—and indeed is expected by his colleagues—to work toward the goals shared by senior members of a particular Congressional committee. Within the House Appropriations Committee, for example, there is a consensus that all agency budgets can and should be cut (Fenno, 1962). Congressmen, and particularly Senators, are influenced by the "folkways," or mores, of the house (Matthews, 1960). Senators are widely expected to abide by the rules of the "club" (which, for example, discourage ideological and uncompromising positions), even when these rules work to undermine efforts to secure legislation desired by other publics.

Most models of the policy process deal with Congress primarily as a legitimating institution, making legal and binding what has been formulated elsewhere.

SHIFTS IN POWER—IN PROGRESS OR PREDICTED

Power is sufficiently fragmented in Washington that it is inaccurate to describe Congress in completely passive terms. Congressional leadership sporadically has attempted (through legislation dealing with war powers, the budget, and other areas) to assert a more active role, but in the 1975-76 session it conspicuously failed to use the large Democratic majorities to enact into law major new initiatives in regard to energy, the economy, and health. American government always has been characterized by decentralization, with many powers at state and local government division of
levels; and national powers in almost any functional area divided between at least two branches. Periods of domestic innovation have been relatively rare, with the periods of Democratic initiatives in the 1930's (New Deal) and 1963-66 (Great Society) the most recent examples. In each instance landslide elections had given a party self-conceived as activist and progressive, the White House and large majorities in the Senate and House to be followed shortly by erosion of that overwhelming support. (See Riker's minimum winning coalition and size principle, for a possible explanation.) A stalemate has emerged, and there is no indication that it will be replaced soon by an innovative period, even if a member of the majority Democratic party wins the presidency in 1976.

This section is largely speculative, and in this vein we can suggest the following as likely:

(a) The growth in power of the Office of Management and Budget, associated with the much heralded growth in power of the President himself, probably will not continue. The departments and agencies now have stronger technical staff capabilities, and are being supported at least temporarily by Congressional committees in their efforts to avoid domination by OMB.

The major departments and agencies, under immediately foreseeable types of administrations, should be able to exercise some independence in policy formulation and in
maintaining independent channels to Congress. Great discretion always has rested at the bureau level within the departments and agencies, and there is reason (Natchez and Bupp, 1973) to believe that substantial opportunity still exists for the bureau-level policy entrepreneur.

(b) Expert policy evaluation capabilities have played a modest role in policy formulation in the past, but these capabilities may be more important in the future. Development of the Nixon Administrations' Family Assistance Plan was an example of the role that such a technical staff can play in the social welfare area (Storey, 1973; Rivlin).

(c) Interest groups will not be hamstrung successfully as part of post-Watergate efforts to "clean up" government.

HOW POLICY IS IMPLEMENTED

ROLE OF BUREAUCRACY

The federal bureaucracy (meaning the administrative branch employees below the level of the Presidentially appointed, and political, assistant secretaries and immediate staff of the secretary) is involved in policy formulation, of course, as implementation. In recent years the OMB has started the budget process some 18 months before appropriations requests will be acted upon by Congress, by circulating guidelines for the coming fiscal year's budget. The agencies respond by preparing preview budgets, which in effect begin the process of negotiation with OMB and begin the process of
competition within the departments and agencies. Much of the struggle over funds occurs at this stage, before a budget proposal goes to the President or Congress, and before a formal proposal reaches OMB. No collegial loyalty exists within an agency or department, and each division struggles for the largest possible share. Resourceful division and bureau heads sometimes go outside the agency to seek support for their budgetary requests from legislative and clientele supporters. Once budgetary proposals are accepted and made part of the President’s package, bureaucratic actors play a role in testifying before Congress. This also happens in some cases, most conspicuously in regard to defense appropriations, in which a proposal has not been incorporated into the President’s program and legislative allies of the bureau are attempting to overturn that decision.

Within the health and social policy areas, there is intense competition between programs at the bureau, division, and institute (in NIH) levels. Programs in health, as in any other area, are packaged to elicit Congressional and clientele support. General programs usually have less political appeal than specific programs. Thus, in 1955 the National Microbiological Institute was renamed the National Institute of Allergy and Infectious Diseases. It was explained that “no one ever died of microbiology” (Seidman, 1975). More recently, the National Institute of Aging was broken off from the National Institute of Child Health and Human
Development for a similar reason, to develop clientele and Congressional support behind a focused and understandable goal.

Turning to implementation, the capacity of the bureaucracy to expand or narrow the meaning of legislation (once it has been passed) is considerable. Some laws are passed in intentionally general form, leaving the details to a department or an agency. More commonly, Congress passes what is hoped to be a clear law, but inevitably ambiguities in intent or standards appear in the process of implementation. And even if the ambiguities were not there to require administration discretion in interpretation, bureaucrats, interest groups, and Congressional factions which had failed in building passages into (or keeping them out of) a law will attempt to gain the same end through administrative guidelines.

All federal agencies have the capacity for delay (recall Franklin Roosevelt’s famous comparison of the Navy to a feather bed) in implementation of a policy, and there will be some policy implications even in the most mundane agency guidelines. However, agencies vary in their positive and negative powers, and Congress traditionally has permitted some agencies (e.g., Defense) more discretion than others (e.g., HEW’s Office of Education).

The possibility of expansion of Congressional intent is illustrated by the anti-poverty program of 1964. The act was drafted in large part in the executive branch. Congress
played the passive legitimating role commonly accorded to it in models, and passed legislation with phrases such as "maximum feasible participation" of the poor, which soon were to become notorious among local government officials. The objectives of Community Action were never explored fully by Congress, and those Congressmen who did found their intent circumvented by the bureaucracy. The executive's task force, which interpreted the law's provisions, and issued guidelines to the communities, went far beyond what had been discussed in Congressional hearings. Yet 1964 was an atypical year; and the Community Action Program provides an unusually clear example of expansion of Congressional intent. More commonly, the bureaucracy interprets legislation so as to minimize disruptions to administrative agencies and to attempt to absorb new programs into existing structural and behavioral patterns.

The intent of a law may be altered through implementation by (a) the writing of guidelines to be distributed to agency/department offices around the country*, and (b) the pattern of agency actions on individual cases. Desire of bureaucrats to maintain professional standards within the bureaucracy, and the possibility that individuals will go to court if agency guidelines are not abided by in their

*In the area of disability, the bureaucracy apparently has had some discretion under various legislation in classifying groups as handicapped and thus eligible for services.
cases, suggests that the most significant alterations are of the first type.

Guidelines commonly are drafted by staff within the division of an agency to be responsible for implementation. The rough draft is distributed to major interest groups which have a stake, and to regional administrators, and a certain period of time (say six weeks) is permitted for comments. Then the revised draft is published and distributed around the country, in the federal code of regulations. The Community Action case was an example of bureaucrats themselves attempting to alter the apparent intent of Congress. Nursing home regulation is an example of bureaucrats responding to intense interest group pressure. Social Security amendments in 1967 charged the Department of Health, Education, and Welfare with setting new standards for nursing homes receiving Medicare/Medicaid funds. The final standards were not issued in this case until April 1970, 28 months later, shortly after the chairman of the Senate Select Committee on Aging's subcommittee on long-term care announced intentions to hold oversight hearings to determine why HEW had not complied with the law. The American Nursing Home Association had persuaded top HEW officials to block earlier drafts of the regulations, because they set higher per-patient professional staff ratios and other standards which the industry felt were too costly. The 1970 standards were written with ANHA assistance.
This is an area which has not proved susceptible to rigorous analysis in part because of the difficulty of determining in an objective sense the intent of Congress (against which administrative deviations could be compared).

**TIME LAG BETWEEN NATIONAL AND STATE ADOPTION OF SOCIAL POLICIES, AND DIFFUSION AMONG STATES**

The time permitted for adoption of non-discretionary policies is established by law or agency guideline. Obviously, what is perceived as punitive national policy (e.g., school desegregation in the South) is adopted by the affected states more slowly, and sometimes only in response to court involvement, whereas provisions for flow through federal monies tend to be adopted quickly (in a matter of months). Where local action also is required (e.g., in establishment of PSRO's and HSA's), provider opposition can help to delay implementation for some time.

Where the federal government participates with the states in a program, usually it sets standards and permits the states substantial discretion within those standards. (Stevens and Stevens, on Medicaid, for example).

The most common pattern in social policy is for federal bureaucrats to goad state officials, especially those of less wealthy states, to expand programs in ways encouraged by recent federal legislation. The initiative, however, is sometimes taken by the states. With social services grants,
under the public assistance titles of the Social Security Act, California and Illinois led the way in exploitation of what Representative Mills called "the worst loophole that has ever been written into the law on the financing of government." Between 1969-72 spending for these services jumped from $354 million to nearly $1.7 billion until Congress closed the loophole by setting a ceiling on appropriations. (Previously, social services grants, like Social Security insurance and Medicaid, had been virtually open, restricted only by program and not by appropriation limits.) Derthick found that (a) social work specialists in HEW, accustomed to thinking of social services in traditional terms such as casework, lost jurisdiction over the program; and (b) policy-level appointive officials, through a series of steps (e.g., permitting contracting for services with more than one state agency), made possible the subsequent exploitation. Grantsmen and budget officials in the larger states, looking for fiscal relief, then seized upon the loose provisions, and with political support from their Washington representatives, turned the program into a conspicuously "uncontrollable" one. In this instance it took five to eight years for the states to begin full exploitation of the provisions, and several years more for Congress to close the loophole.

A traditional defense of the states has been that they permit experimentation in policy, with states such as Wisconsin under the Progressives serving as "laboratories"
for the nation. Walker studied the rate at which states adopted innovations (that is, changes in policy, with no distinction attempted between "good" or "bad" change), dealing with 88 programs enacted by at least 20 state legislatures. Composite innovation scores showed that the states which tended to be the first to adopt programs were New York, Massachusetts, California, New Jersey, Michigan, Connecticut, and Pennsylvania, followed by several Western states. Overall Walker found these correlates of innovation: (a) the larger, wealthier, more industrialized states, where decision-makers have "free floating" or "slack" resources and presumably can afford the luxury of experimentation and can more easily risk the possibility of failure, adopt new programs somewhat more rapidly; (b) states which have higher levels of party competition and more turnover in office innovate somewhat more rapidly; and (c) states with more nearly proportional representation of urban areas in the legislature (the study was conducted in the late 1960's) adopt innovations sooner.

Walker and others have suggested that to understand choices made by state officials, one needs to search for the rules of thumb which guide their behavior. It is assumed, with Cyert and March, Simon, and Lindblom, that individuals in complex organizations attempt to create highly simplified worlds containing only a few major variables. The decision-maker adopts standard, criteria for judgement which remain fairly stable over time and which help him to choose among.
sources of information. Walker characterizes the rule of thumb of many state officials as "Look for an analogy between the situation you are dealing with and some other situation, perhaps in some other state, where the problem has been successfully resolved."

The average elapsed time of diffusion for innovations, Walker found, decreased between 1870-1900 and 1900-1930 and again between 1900-1930 and 1930-1966, primarily because it now took less time for the laggard states to adopt an innovation. Here the role of specialized organizational communication channels (e.g., the Council of State Governments) and federal assistance probably have been important. Also in recent years an increasingly energetic role has been played by federal judges in directing that innovations be made, e.g., the role of Judge Johnson in regard to the mental institutions and prison systems in Alabama.

Walker also found regional innovation groupings, suggesting that states tended to look to more innovative states within their region for guidance. Grupp and Richards used 1971-72 data to suggest differences in subjective assessments by state administrators of the innovativeness of state programs within various policy areas. California and New York were mentioned more often than other states, and in a number of policy areas. The states cited by Grupp and Richards' respondents as having the best social policy agencies were: in health New York, California, and Michigan; in
education in California, New York, Texas, and Ohio; in human relations New York and Utah; and in welfare Minnesota and Wisconsin. It was in the areas of education, welfare, and human relations that there was the least agreement on which states had the best programs. These areas are characterized by class-based conflict, direct dealings with the larger public, and less clearly defined standards for evaluating program effectiveness. Grupp and Richards offer modest support for the hypothesis that state administrators in fields with the least agreement on which states have the best programs (thus less likely to be able to offer other policy makers "proven solutions") perceive themselves to be less influential than administrators in fields where such agreement exists.

ROLE OF STATE AND LOCAL GOVERNMENTS

TRENDS REGARDING CONTROL OF FEDERALLY LEGISLATED PROGRAMS

Beginning late in the Johnson Administration, and accelerating under Nixon and Ford, there has been a shift away from federal categorical grant programs toward programs which allow state and local governments greater discretion. There is no evidence yet of a reaction.

Many of the federal programs introduced in the thirty years between and including the New Deal and the Great Society were categorical grant programs: state, regional, or local
jurisdictions, or nongovernmental bodies, applied for and were granted funds to be spent on projects under moderately-to-highly specific federal guidelines. Most state and local governments suffered the federal "strings" in order to get the funds, although some programs (e.g., Urban Renewal) were not pursued by some jurisdictions. Between 1964-66 the number of formula grant programs (providing greater leeway for states and localities) increased from 64 to 91, while the number of more restrictive project programs increased from 126 to 226.

Regional interstate and regional intrastate organizations came into being largely because of federal legislation, and the intrastate regional councils came to play a more important role through such federal requirements as A-95 review of applications for federal grants.

Many of the Great Society programs sought to promote activities which by their nature were community-oriented, e.g., the Community Mental Health Centers and the Community Action Programs. Federal strings were retained, however, for several reasons: (1) it was argued that responsibility for spending money should properly lie at that level of government responsible for levying taxes; (2) more specifically, Democratic Congressmen who were supporting Great Society programs felt that the programs would prove popular with the voters, and wanted to maintain control for that reason; (3) interest groups which had developed successful working relationships in Washington often felt (with good reason)
that they lacked comparable influence at the state and local levels, and thus opposed shifting responsibility to those levels; and (4) many in Washington feared that if programs were turned over to the states and localities without federal strings, there would be widespread racial/ethnic discrimination in program administration.

In the late 1960's and early 1970's, however, states and localities hurt by the recession became increasingly insistent on fiscal relief from the federal government. For reasons to be discussed below, states and localities lacked the tax base of the federal government. At the same time some Great Society programs were seen as less popularity-inducing, there was a change in administrations, and concern about the likelihood of racial discrimination in the South decreased.

General Revenue Sharing was enacted, and the Nixon Administration proposed with mixed success a number of special revenue-sharing programs to incorporate existing federal categorical grant programs. The 1974 Community Development act folded in existing federal CD programs such as Urban Renewal and Model Cities. GRS funds were distributed to states and localities with minimum restrictions, and so far there has been minimum interference from Washington in administration. The CD act, the comprehensive Employment Training Act of 1973, Title XX social services grants under the Social Security Act, and Law Enforcement Assistance
Administration funds, were part of the middle ground between GRS (maximum local discretion) and categorical grants (minimum local discretion). The CD act and others in this group provide block grants to states and localities, in given population categories, with funds to be spent within broad categories of programs. Like GRS there are equal opportunity restrictions, but in addition with the CD program there are tighter reporting and other requirements.

The substate regional level will continue to be important. The new regional Health Systems Agencies established by the 1974 health planning act will have review and approval power over federal health funds going into the region—a more powerful tool than those given to health planning or regional councils in the past.

In welfare there has been a shift in the opposite direction. Categories of public assistance other than AFDC (that is, aid to the blind and disabled, and old age assistance programs) were federalized under Supplemental Security Income beginning January 1974. In regard to the disabled, this culminated a series of actions over a half century leading toward greater federal support for rehabilitation. The states still have considerable control, for example, over the extent of vocational services provided within their borders. SSI has had administrative problems, but it has increased the number of persons covered under the adult categories. AFDC is still a cooperative federal-state-local program.
At the local level two modest trends (among others) are greater use of intergovernmental contracting and greater use of private firms to provide local services (the latter growing out of the increasing concern for government productivity). The increasing proportion of the total government work force covered by collective bargaining agreements is an important trend.

It appears likely at present that GRS will be continued beyond its current expiration date. Concerns about inadequate spending on social programs and undesired distributional effects are not likely to outweigh the desire of states and localities for continued fiscal relief. Liberal political groups which formerly had looked to Washington are beginning--and this is speculative--to look to the local level as well to accomplish their goals; witness the recent Madison and Austin Conferences on Alternative State and Local Policies. The decentralization thrust of GRS, again in incrementalist fashion, is attractive to political groups seeking a variety of goals.

GRS AND STATE-LOCAL SUPPORT FOR SOCIAL, HEALTH AND REHABILITATION PROGRAMS

The GRS legislation specified that priority expenditures would be maintenance and operating expenses for public safety, environmental protection, public transportation, health, recreation, libraries, social services for the poor or aged, and financial administration. States and localities
are required to report what funds are being spent for, and
to class expenditures under one of the acceptable categories.
The problem with this reporting system is that it is
impossible to determine whether the GRS funds actually
produced new spending for public safety or health or whether
the GRS funds were substituted for funds which otherwise
would have been spent on those programs (thus permitting a
locality, for example, to avoid borrowing that otherwise
would have been necessary). Once the funds reach a state
or local government precise earmarking is impossible; this
is usually called the fungibility problem. The Brookings
study found that 42.5 percent of local GRS funds and 64.3
percent of state GRS funds went to substitution uses rather
than to new spending (Nathan, et al., 1975).

Official reports of uses of GRS funds suggest that
health and social services for the poor and aged are receiving
a small share; only a few percent for the latter. Because
of the fungibility problem, however, it is likely that some-
what more of GRS funds are finding their way to social programs,
and somewhat less than reported is actually going to public
safety (the leading use of GRS funds, according to
official data). This is because (a) public safety currently
is politically more popular, thus elected officials want to
seem to be spending more on it; and (b) initially some state
and local officials were concerned as to what was an allowable
social service expenditure, whereas public safety posed fewer
problems of ambiguity. Even given qualifications, however, it is probable that health and social programs are not receiving as much as a third of GRS funds. No precise estimates have been developed nationally although monitoring or sample jurisdictions by the National Clearinghouse for Revenue Sharing and by the Southern Regional Council are aimed at developing such estimates.

The future of GRS and the special revenue-sharing programs such as Community Development, CETA, and perhaps later health revenue-sharing, clearly is of interest to those concerned with rehabilitation and other social policy areas. Without revenue-sharing, state and local governments, because of the nature of their tax bases, would be unlikely to try to take on new social policy responsibilities. Second, continuance of GRS and special revenue-sharing almost assures relatively lower levels of federal categorical grant spending. Certainly this second assertion would accurately characterize the efforts of the Nixon-Ford administrations.

The methods through which states and localities raise taxes affect their willingness to take on new responsibilities. State sales taxes which apply to food and drugs are widely criticized for their regressivity. Local property taxes are even less popular. And sales and property taxes are the two major forms of state and local revenue. The federal income tax is not popular either, but the complexity and progressivity of the federal revenue system so far have prevented the kind
of taxpayer's revolt that is occurring at the local level. It is difficult to imagine how localities could raise appreciably more revenue from existing sources. States could employ income taxes more extensively than is done now, but interstate competition is likely to limit this. States too, lack the federal government's revenue producing strengths, and are likely to remain dependent on federal assistance.

Studies (Dawson and Robinson; Dye, 1966) have shown that per-capita wealth and education levels are consistently correlated with level of state government spending and service. These economic development variables have been found generally to be more important than characteristics of the political system in determining which states will spend the most in various policy areas, although in welfare and education Sharkansky and Hofferbert found that political factors were as important in determining levels of expenditures. (Recently Alford and Friedland have suggested how these economic development characteristics may be influenced by political choices.) These studies could be examined to determine more specifically which kinds of states are likely to be more receptive to increased social policy spending.

The perceived consequences of generous state and local spending in New York, however, are likely to have a dampening effect on spending even by the more affluent jurisdictions. It can be speculated that revenue-sharing funds, general and special, will (a) permit states and localities to avoid
curtailing their own existing programs; (b) permit states and localities to take over some, but not all, of the programs funded under federal categorical grants which have been and may be phased out with the passage of special revenue sharing measures; and (c) be spent (in terms of official reports, to be treated with caution as indicated earlier) in greater amounts on health and social services, as interest groups with those concerns become more expert at dealing with local instead of national agencies, and as federal citizen participation requirements are taken more seriously. The latter suggests that, over time, there will be modest subjective impact of GRS: local policy-makers will come to accept increased responsibilities for health and social services to go along with the GRS funds, rather than bucking all requests to Washington.

BROAD TRENDS

It is too early to suggest whether significant opposition will arise to special revenue sharing; it may lack the strong state-local government support GRS has, and already the CD Act is unpopular with cities below the entitlement (50,000 population) level. A guess would be that GRS will exist for some time, special revenue sharing will be judged only a moderate success, most special revenue sharing measures will not be permitted to expire but rather will be funded later at low levels, and it will be several
years before there will be a resurgence of categorical grant programs. Overall federal spending is unlikely to increase dramatically in the current political environment (in which the federal government has the lowest levels of trust and support of any major institution, even below state and local systems). The increasing proportion of the voters identifying as independents makes political prediction riskier than usual; clearly, election of a Democratic President would make higher levels of federal spending, and particularly higher levels of categorical project spending, likely.

In social policy there almost surely will be efforts to set controls on the currently "uncontrollable," of open-ended, programs such as the Social Security Act programs. If this is accomplished without major political damage to the administration attempting it, more funds could be made available for other social programs. On the other hand, if the federal government embarked on national health insurance (NHI), it is likely that the enormous costs would make other social or health policy initiatives unlikely.

NHI is the only health/social legislation currently feasible which could have major redistributive consequences, in Lowi's sense of the term. And given the extent to which the redistributive Medicare legislation (Marmor, 1973) benefitted providers, even the consequences of NHI are difficult to predict. Additional federal and state regulatory efforts in the health sector are likely, although the fate of PSRO's and HSA's is still in question.
Substantial possibilities for state and local policy innovation exist (see Naylor and Clotfelter for examples), and the federal government will have growing inflation-aided tax revenues if the economy remains healthy. The value-added tax, if objections to its lack of progressivity were overcome and it was enacted would provide the federal government with a new and less visible revenue producer. New or expanded programs, however, may have to survive in a populist mood, where all large institutions are suspect, and discussions of what specialists say is needed in the public sector will have to be balanced against (a) what the general public wants for the private sector, and (b) a Jacksonian suspicion of expertise per se, affecting even health professionals.
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LEGAL STATUS OF THE DISABLED.
LEGAL STATUS OF THE DISABLED
Outline Summary of Research

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I. General Objective of Research. The objective of the research is to determine the current legal status of the disabled by a survey of federal and state legislation and judicial activity relating to the disabled. For purposes of the project, "disabled" is used to include any person with a mental or physical defect of a permanent nature which deprives him of a normal faculty or power.

II. Observations and Findings.

A. Legislation. A mass of legislation exists at both the State and Federal level relating to the disabled. At the state level, there is a great diversity among states in terms of the extent and scope of such legislation. The law relating to the disabled may be categorized roughly into three general areas: (1) special protective legislation and programs provided by law to compensate persons for disability; (2) restrictions imposed either directly or indirectly by law which discourage participation of the disabled in normal community life; and (3) affirmative action to provide the opportunity or
encouragement for full participation in community life. A summary of the more significant federal legislation and an index of relevant legislation in one state, California, is attached as Appendix A and B respectively.

1. The sheer mass of legislation indicates a basic problem in the law relating to the disabled. There exists no comprehensive code of law for the disabled. Hence, there are gaps and overlapping provisions.

2. There is no consistent definition of "disability" in the law. The "disabled" are not an homogenous group, and in fact, the difficulty of defining them as a class has hampered efforts by persons attempting to represent disabled persons in court actions seeking to achieve equal status with other citizens.

3. Legislation has been adopted in a piecemeal fashion and programs for the disabled have grown up in response to unique problems of discrete segments of the disabled population. As a result, it is nearly impossible to catalog the legislation other than programmatically. For example, only veterans may qualify for certain disability benefits from the VA. On the other hand, workmen's compensation applies only to job-connected disabilities, whereas the social security system provides benefits for only total disability.

4. The tendency in legislation has been to reflect a protective/custodial approach to the disabled.
However, the federal law has expressed a national policy in favor of integration of the disabled into community life in the Rehabilitation Act of 1973.

5. The protective/isolation tendency reflected in the law has resulted in over-inclusive classification of the disabled. This results from the law's need for administrative simplification and convenience. The effect is lost program quality and effectiveness in public assistance programs. Another effect is to foster dependence. For example, the vague definitions of competency in guardianship and conservatorship statutes offers little guidance to judges who may, as a result tend to make the low-risk determination in favor of declaration of incompetency.

6. The protective tendency also may result in overclassification—something a research project of this kind must be careful to avoid. Defining a class in terms of a negative common denominator has the effect of lumping the group together as a group of abnormal persons.

B. The Disabled Movement. An increasingly vocal disabled minority are beginning to coordinate their efforts for removal of legal and social barriers to normal community life. Analogies exist between the so-called "Crip Lib" Movement and the Civil Rights Movement by ethnic and religious minorities. The handicaps of the disabled, as
with other minorities, are in large part the result of individual and collective hostility toward the disabled and a long-cultivated feeling of inferiority among the disabled themselves. Equal rights cannot be simply legislated. The real cash value of legislation is in its administration and enforcement. The disabled minority has been forced to seek enforcement action in courts for measures such as removal of architectural barriers and accessible mass transportation notwithstanding federal legislative mandates to the states to take such steps.

1. Advocates for the disabled agree that the basic obstacle to equality is attitudinal. It is impossible to measure the extent to which prejudicial community attitudes toward the disabled have been reinforced by the laws which single them out for either differential or preferential treatment. But it is clear that the movement on behalf of the disabled is toward programs and forms of assistance that are incentives, not disincentives, to participation in community life.

2. A promising trend is reflected in a new program for the disabled included in the Developmentally Disabled Assistance and Bill of Rights Act which mandates states to set up, by September 30, 1977, programs for the protection and advocacy of legal rights of persons with developmental disabilities.
3. Because federal agencies such as the United States Department of Transportation and the Architectural Barriers Compliance Board have been slow to implement the federal legislation requiring affirmative action, the major thrust of advocacy efforts on behalf of the disabled is being directed toward judicial enforcement of the national policy of anti-discrimination and integration of the disabled in the community. Rights to vote or to secure employment cannot be exercised effectively unless physical barriers are removed, and affirmative action is taken consistently with legislative directives to construct accessible buildings and to provide accessible mass transportation.

III. Conclusions.

A. Probably the greatest single defect revealed by a survey of federal and state legislation relating to the disabled is not there are not enough laws, but the lack of a comprehensive and effective means of administering those laws. A need exists for centralization of compensation plans for the disabled to eliminate waste and to insure maximization of resources. Means should be sought to ensure effective enforcement of existing legislation, which has its purpose the increase of mobility of the disabled through removal of barriers to physical movement and obstacles to opportunity within the social and economic spheres of society.
C. More specific definitions in the law and definite guidelines should be established for administrators to remove civil disabilities and restrictions from all but the severely disabled.

D. Laws and programs that are potentially disincentives to integration of the disabled into participation in community life should be re-examined to determine whether they are either too broad in their coverage or fairly administered.
APPENDIX A
SIGNIFICANT FEDERAL LEGISLATION

I. Education

A. Formula for determining basic educational grants for state and Local educational agency. 20 USC 241C

B. National Technical Institute for the Deaf. 20 USC 681-5
   1. Definitions. 20 USC 682
   2. Terms & Conditions for Establishing Institute. 20 USC 684
   3. National Advisory Board.

C. Chapter 33 Education of the Handicapped. 20 USC 1401 et seq.

D. Submission of State Plans for Grants. 20 USC 1803 (describing requirements of state plans)

E. Cancellation of certain educational loans for persons performing services for handicapped. 20 USC 1087ee

F. "Academic facilities" defined requiring that they be accessible to handicapped persons. 20 USC 1132e-1

G. Operation Headstart for handicapped children. 42 USC 2702a

H. Vista programs for handicapped. 42 USC 4954

I. Vocational Rehabilitation Act of 1973

J. Educational Media for Handicapped provided by the Library of Congress. Books & records 2 USC 135a. Regional Centers 2 USC 135b

K. National Advisory Committee on the Education of the Deaf. 42 USC 2495

L. School Lunch Program. 42 USC 1761

II. Services & Facilities for the Mentally Retarded & Persons w/other Developmental Disabilities. 42 USC 2661 et seq.

III. Mailing Privileges for Blind & other handicapped persons. 39 USC 3403-34

IV. Design & Construction of Public Buildings to Accommodate the physically handicapped. 42 USC 4151-56
Y. Mass Transportation for the elderly & the handicapped. 49 § 1612
   A. Reduced fares. 49 § 22

VI. Labor
   A. Federal Employment Service providing placement for handicapped. 29 § 49b
      1. State Plans for Carrying out law. 29 § 49g
      2. Revocation of Certificate. 29 § 49h
   B. Secretary of Labor's responsibility to handicapped. 29 § 785
   C. Employment of the handicapped. 29 § 791
   D. Architectural & Transportation Barriers Compliance Board. 29 § 792
   E. Employment of Handicapped under federal contracts. 29 § 793
   F. Nondiscrimination under Federal Grants. 29 § 794
   G. Employment of handicapped, to the extent necessary in order to prevent curtailment of employment, at lower pay rates. 29 § 214
   H. Employment of readers for blind employees. 5 § 3102

VII. Housing
   A. Low-rent housing
      1. Elderly families. 42 § 1402
      2. Income exclusion for families with handicapped persons. 42 § 1437(a)
      3. Design standards for low-income housing to accommodate the handicapped. 42 § 1438
      4. Disabled Veterans Preference. 42 § 1410
   B. Loans for housing and facilities for the elderly and the handicapped. 12 § 1701q
   C. Rent supplement payments for lower income families who are elderly & handicapped. 42 § 1701s
   D. Insurance of mortgages for housing for elderly persons. 12 § 1715v
E. Percentage of rental & cooperative housing contracts, required to be dedicated to dwellings for elderly & handicapped. 42 § 1715z-1.

VIII. Elderly

A. Social Security Programs for the old & the handicapped

B. Programs for the Older Americans

C. Model Project for Older Americans. 42 § 3028

D. Grants to States for Aid to Permanently & Totally Disabled. 42 § 1351

   1. State Plans. 42 § 1352
   2. Computation of amounts paid to states. 42 § 1353
   3. Revocation of Payment. 42 § 1354

IX. Income Taxes

A. Deduction for expenses of caring for handicapped necessary for gainful employment. 28 § 214

B. Employment taxes exclusion for services performed in a facility conducted for rehabilitation of handicapped. 26 § 3309

X. Rehabilitation Services

A. Federal Grants. 29 § 720

B. State Plans. 29 § 721

C. Individualized Program. 29 § 722

D. Scope of Services Offered. 29 § 723

E. Federal Responsibilities. 29 § 770

F. Construction Grants for Rehabilitation Facilities. 29 § 771

G. National Center for Deaf-Blind Persons. 29 § 775

H. General Grant & Contract Requirements. 29 § 776

I. Vending-Stands for the Blind. 20 § 107-107f
XI. Miscellaneous

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B. Automobiles w/adaptive equipment for disabled veteran. 38 §§ 1901 et seq.

C. Immigration Restrictions

1. Excludable Aliens. 8 §§ 1182
2. Deportable Aliens. 8 §§ 1251
3. Importing Aliens. 8 §§ 1322

D. Prisoners Release. 18 §§ 4247-48
APPENDIX B

INDEX OF CALIFORNIA LAW
RELATING TO THE DISABLED

KEY TO ABBREVIATIONS

B-P Business and Professions Code
CC Civil Code
Const Constitution
Ed Education Code
El Elections Code
Ev Evidence Code
F-G Fish and Game Code
Gov Government Code
H-S Health and Safety Code
Ins Insurance Code
La Labor Code
M-V Military and Veterans Code
Pen Penal Code
Pro Probate Code
P-R Public Resources Code
P-U Public Utilities Code
R-T Revenue and Taxation Code
U-I Unemployment Insurance Code
Veh Vehicle Code
W-I Welfare and Institutions Code
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Chiropractors, right to become. B-P 1000-8
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Nonmedical care facilities. W-I 13900-13911
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19200, 19400-19402, 19450, 19451, 19500-19506, 19550-19611
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Vocational rehabilitation appeals board. W-I 19700-19710
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SOME ECONOMIC CONSIDERATIONS IN DISABILITY
SOME ECONOMIC CONSIDERATIONS IN DISABILITY

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INTRODUCTION

Disability imposes costs on our society. These costs include: the output of goods and services which is lost when the disabled are required to stop or limit their labor market activity; the output which is forgone when the disabled are required to stop or limit their nonlabor market activity, e.g., lost homemaking activity; the direct resource cost of dealing with disability; and the psychic costs of disability which fall on us as individuals and as a people. Psychic costs are generally unmeasurable, but they may be of greater magnitude than forgone output.

If one can visualize the costs of disability as being negative entries in a ledger of those things which contribute to the satisfaction of mankind, then it would be manifest that in a constraint-free world action would be taken to eliminate the disability burden entirely. However, we live in a world with limited resources. We are constrained not only by the scarcity of physical and human resources, but also by the state of the art, technology, at any point in
time. Technology includes both the delivery systems and the current socio-political climate. The socio-political climate generates a set of additional constraints, equity constraints, which may be explicit or implicit.

Economics is a discipline which is concerned with the problem of maximizing social well-being with a limited amount of resources and a given technology. This maximizing process implies that we cannot simply produce unlimited amounts of goods and services. Similarly, we cannot completely solve every social problem which confronts us. We must make choices: What shall we produce? How will resources be allocated? What social problems shall we attempt to solve?

The choices we make give rise to costs. When we utilize resources to produce a good or to solve a social problem, we must forego any benefits which would have resulted from an alternative use of the resources. These foregone benefits represent the opportunity cost of our resource use. In a quest for the maximum social well-being, these costs, together with the benefits derived from our resource use, serve as yardsticks to gauge success in reaching our goal.

The private marketplace is an arena where many of our allocation and production decisions are made. The market utilizes prices as signals to indicate the relative value placed on various goods and services. The prices that people are willing to pay for goods and services are a reflection of the utility they expect to derive from their purchases.
Analogously, the prices at which suppliers are willing to sell goods and services are a reflection of the opportunity cost of the resources used to produce those goods and services.

Occasionally, the price signals sent out by the private market may be distorted. When this happens, the market can fail to insure that optimal choices are made and government may intervene to improve market efficiency. The intervention could take the form of simple facilitation of market operations, supervision, or outright government takeover of the market.

The system of markets, both public and private, that constitute our economy is a simultaneous system. Disability will influence the level of economic activity, in both the micro and macro sense, and the general level of economic activity will influence disability. This paper is an attempt to focus attention on the relationship of disability and the economy, the scope of the economic burden of disability and the cost and nature of the programs we have devised to combat the problem.

DEFINITIONS

Disability may be defined as the inability to perform any of the major life functions (Berkowitz, Worrall, and Rubin, 1976). One concern of this paper will be with work disability. A primary social role for males who are 40 to 64 years old, for example, is to participate in the labor
force. A process of work disability could begin with a disease, pathological condition or an accident. Any of these, in turn, could give rise to an impairment. An impairment is defined as "a physiological or anatomical loss or other abnormality, or both" (Nagi, 1969). The loss of a limb is an example of an impairment. An impairment can lead to a functional limitation, which is a state which arises when there is some limitation in physical or mental functioning. For instance, the loss of a limb could lead to the inability to lift heavy weights. A functional limitation could lead to disability. In the work disability sense the inability to lift heavy weights might disable a laborer.

It is clear from the example above that disability does not result simply from a health condition, impairment or functional limitation. Some links in this chain are necessary but not sufficient to produce disability. Disability is a state which is produced by the interaction of a person with the environment. A physicist who loses a limb is not likely to be disabled. A person's age, race, sex, education will affect his or her likelihood of becoming disabled, or severely disabled (Worrall and Berkowitz, 1975). The way in which others perceive an impaired or functionally limited individual will affect the probability of that individual's becoming disabled.

Disability, then, is an elastic state. Technology changes and so will the numbers and severity levels of the
disabled. Engineering breakthroughs have reduced the number of disabled by minimizing the residual loss associated with an impairment (The Urban Institute, 1975). Similarly, the population can be educated and the effect might be the same. A case in point might be that as the myths about epilepsy diminish, fewer people with this condition will suffer work disability. Although the epileptics may not change, the change in their environment can diminish or eliminate their work disability. Obviously, a change in the economic environment would affect the numbers and severity levels of the disabled. In a strong economy the success of rehabilitation programs might also be expected to improve as well (Worrall and Berkowitz, 1975).

THE NUMBERS OF DISABLED

In order to appreciate the potential magnitude of the psychic costs of disability one should know the size of the disabled population. There is some controversy over the size of this population, but no disagreement with the fact that it is substantial. Part of the confusion over the actual number of disabled is due to differing methodologies and questions in sample surveys. Some surveys count people with secondary work limitations as being disabled and others do not.

The 1966 Social Security Survey of Disabled Adults, in a national sample of the noninstitutional population,
estimated that 17.2 percent of 18 to 64 year olds were disabled. This figure represented 17.8 million people who had been disabled for six months or more (Haber, 1968).

The SDA had three categories of work disability:

- **severely disabled** - unable to work altogether or unable to work regularly.

- **occupationally disabled** - able to work regularly; but unable to do the same work as before [the] onset of disability or unable to work full-time.

- **secondary work limitations** - able to work full-time, regularly, and at the same occupation, but with limitations in the kind or amount of work they could perform in their jobs. Women with limitations in keeping house, but not in work, were also classified as having secondary work limitations (Haber, 1968).

The 1966 SDA survey has served as one of the most important sources of information on the disabled. In an attempt to estimate the number of disabled in the United States for 1975, The Urban Institute used the 1966 SDA prevalence rate. The Institute adjusted the SDA rate by using the growth in rates shown in the Health Interview Survey. This procedure resulted in an estimate that 23.3 million people between the ages of 18 and 64 were disabled in 1975, a prevalence rate estimate of 18.7 percent. This may have been an overestimate. In 1972 the Social Security Administration conducted a Followup Survey of Disabled Adults. The follow-up was limited to people 20 to 64 years of age in 1972. The results of this national survey can

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*The respondents were 18 to 64 in the census year of 1970.*
be summarized as follows: among the 106,268,000 people who composed the noninstitutionalized population 20 to 64 years old, 14.6 percent were disabled. The distribution of disabled according to SDA categories was: 7.3 percent severely disabled, 3.3 percent occupationally disabled, and 4.1 percent with secondary work limitations. The survey also revealed that 8.7 percent of the population had been disabled at one time but had recovered. The remaining 76.7 percent were nondisabled.*

TABLE 1
SOCIAL SECURITY SURVEY OF NONINSTITUTIONALIZED ADULTS: PREVALENCE RATES 1966 AND 1972

<table>
<thead>
<tr>
<th></th>
<th>1972</th>
<th>1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>20-64</td>
<td>18-64</td>
</tr>
<tr>
<td>Severely Disabled</td>
<td>7.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Occupationally Disabled</td>
<td>3.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Secondary Work Limitations</td>
<td>4.1%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Total Prevalence</td>
<td>14.6%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

It is important to note both the decline in prevalence from 17.2 percent in 1966 to 14.6 percent in 1972, and the change in the composition of the disabled. The prevalence of severe

*I am grateful to Mrs. Mildred Cinsky of the Social Security Administration for providing me with these unpublished figures from the 1972 Followup Survey of Disabled Adults.
disability increased from 5.9 percent in 1966 to 7.3 percent in 1972, and the rate fell for both the occupationally disabled and the secondary work limitations categories.

The combined rate for severe disability and occupational disability barely changed. From a 10.8 percent rate in 1966, it declined to 10.6 percent in 1972. It is quite possible that people who would have considered themselves as occupationally disabled in 1966 considered themselves severely disabled in 1972. Unemployment in 1966 was only 3.8 percent for the noninstitutional population, but in 1972 it had climbed to 5.9 percent. Less favorable labor market conditions would make it more difficult for an impaired person to find and hold employment.

Other surveys which have reported rates of prevalence for categories similar to the SDA severely disabled and occupationally disabled include the 1970 Census with a combined severe and occupational rate of 11.2 percent; and a national random sample conducted by Prof. Saad Z. Nagi who reported a combined severe and occupational rate of 10.7 percent for 1971 (Nagi, 1973; Bureau of Economic Research [BER], Rutgers University, 1975).

PROGRAMS AND COSTS

There are programs, public and private, which deal with the problems of disability. These programs have different rationales: risk aversion, status, social insurance,
indemnity, income support (Berkowitz and Johnson, 1970), and direct service (BER, Rutgers, 1975). The programs also can be classified according to type: transfer programs, medical care and assistance, direct service programs, and indirect service programs (BER, Rutgers, 1975).

Some transfer programs are geared to replacing lost earnings, others to providing income which acts as a barrier to entry into poverty. Those programs which replace lost earnings provide some information on the productivity losses due to disability. As these programs only replace a part of lost earnings, they represent an understatement of productivity losses (Berkowitz, Rubin, Worrall, 1975). Transfer programs have the effect of spreading the cost burden of disability more evenly. Those who become disabled are not forced to bear the entire cost of their condition. The effects on the distribution of income will vary depending upon the distribution of benefits and the way in which the program is financed. For example, a federal program which is financed from general revenues would take a progressive bite of taxable income. The same program financed with a payroll tax might be regressive with respect to taxable income. The Social Security Administration's Disability Insurance Program and the Supplemental Security Income Program are two of the

*In addition, there are many whose "lost productivity" is not even partially replaced. Some disabled homemakers fall in this category.
many possible examples of transfer programs. The DI program, financed from a payroll tax, is a social insurance program. The SSI program, financed from general revenues, is an income support program.

The medical care and assistance programs provide medical payments and assistance to the disabled. The Veterans Administration Hospital Program, which has the status of the service recipient as its rationale, is one example.

Direct service programs provide nonmedical services to the disabled. The basic support component of the Federal-State Vocational Rehabilitation Program is a direct service program. This example and those given above for transfer programs and medical programs are examples of public programs. There are private programs designed to assist the disabled as well.

Although there are programs which devote all of their resources to the disabled, there are others which devote a portion of their funds to the disabled. This portion may represent funds earmarked for the disabled, or the funds may be allocated because the beneficiary is disabled. It is difficult to isolate the component which should be attributed to disability in the latter case. For example, a person may receive public assistance because of low earned income induced by disability.

Estimates have been made of the programmatic cost of disability (Berkowitz, Rubin, and Worrall, 1975). These
cost estimates are not the same as estimates of the economic
costs of disability. This is because a transfer of money
from a nondisabled taxpayer to a disabled taxpayer, for example,
does not constitute a true cost to society as described in
the introduction to this paper.

Before we consider our estimates of the programmatic
cost of disability, we shall consider an estimate of the
economic cost of a single disabling condition, impaired
vision, and a recent estimate of the economic cost of all
illness. Westat, Inc., has estimated that the direct costs
of impaired vision were $3.6 billion in 1972. The indirect
costs—lost workdays, homemaking, etc.—were estimated at
$1.5 billion. This estimate of $5.1 billion as the economic
cost of impaired vision did not include a component for the
psychic costs of visual impairment (DHEW 76-1098, 1976).

Similar estimates of the economic costs of continued
individual impairments would be a valuable addition to our
store of knowledge. We do have an estimate of the economic
cost of illness by diagnosis for 1963 and 1972. Barbara S.
Cooper and Dorothy P. Rice (Social Security Bulletin, Feb.
1976, pp. 21-36) estimate that the economic costs of illness
have grown from $93.5 billion in 1963 to $188.8 in 1972.
Their table of cost by diagnosis is reproduced below.
TABLE 2

COMPARISON OF THE ECONOMIC COST OF ILLNESS
FOR 1963 AND 1972, BY DIAGNOSIS

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Amount (in millions)</th>
<th>Percentage Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1963</td>
<td>1972</td>
</tr>
<tr>
<td>Total</td>
<td>$93,500</td>
<td>$188,789</td>
</tr>
<tr>
<td>Infective and parasitic diseases.</td>
<td>2,135</td>
<td>3,443</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>10,590</td>
<td>17,367</td>
</tr>
<tr>
<td>Endocrine, nutritional, and metabolic diseases</td>
<td>2,623</td>
<td>5,930</td>
</tr>
<tr>
<td>Diseases of the blood and blood-forming organs</td>
<td>373</td>
<td>921</td>
</tr>
<tr>
<td>Mental disorders</td>
<td>7,277</td>
<td>13,917</td>
</tr>
<tr>
<td>Diseases of the nervous system and sense organs</td>
<td>6,795</td>
<td>10,951</td>
</tr>
<tr>
<td>Diseases of the circulatory system</td>
<td>20,948</td>
<td>40,060</td>
</tr>
<tr>
<td>Diseases of the respiratory system</td>
<td>7,413</td>
<td>16,454</td>
</tr>
<tr>
<td>Diseases of the digestive system</td>
<td>7,837</td>
<td>17,487</td>
</tr>
<tr>
<td>Diseases of the genitourinary system</td>
<td>2,560</td>
<td>6,456</td>
</tr>
<tr>
<td>Complications of pregnancy, childbirth, and the puerperium</td>
<td>1,517</td>
<td>2,932</td>
</tr>
<tr>
<td>Diseases of the skin and subcutaneous tissue</td>
<td>450</td>
<td>2,052</td>
</tr>
<tr>
<td>Diseases of the musculoskeletal system and connective tissue</td>
<td>2,783</td>
<td>8,948</td>
</tr>
<tr>
<td>Congenital anomalies</td>
<td>1,243</td>
<td>1,903</td>
</tr>
<tr>
<td>Accidents, poisonings, and violence</td>
<td>11,811</td>
<td>26,678</td>
</tr>
<tr>
<td>Other</td>
<td>7,146</td>
<td>13,294</td>
</tr>
</tbody>
</table>

*Present value of future earnings is calculated at a 4-per cent discount rate.


As with the Westat estimate, the Cooper and Rice estimate does not include a component for the psychic cost of illness. We shall present some estimates of the programmatic costs of disability below. These estimates should be helpful in understanding the magnitude of our response to
disability, but they should be used cautiously for the following reasons:

1. As noted above, some programs provide benefits to both the disabled and nondisabled. Decision rules were adopted for each of the programs to allocate that portion which should go to the disabled in an accounting of expenditures. The strength of the decision rule varied across programs.

2. The definition of disability used varied across programs. We were forced to use each program's definition in an estimate of costs. Our estimates include the costs for over 90 programs.

3. Our estimates include the programmatic costs for both long-term disability and short-term disability. The major component of short-term disability is short-term hospital stays. By definition, a person who is hospitalized cannot perform his or her normal social role. This short-term disability can lead to long-term disability, but often does not. The reader should be aware that our estimates include these short-term expenditures in order to use the figures fruitfully (Berkowitz, Rubin, and Worrall, 1975).

Our preliminary estimate of all disability expenditures in 1973 is $83.1 billion, an amount that represented 6.5 percent of GNP in that year. Federal, state and local expenditures were 63 percent, and private program expenditures,
If we turn to type of expenditure we find transfers totaling $34.2 billion (41.1 percent); medical payments, $46.6 billion (56.1 percent); and direct-service programs, $2.3 billion (2.8 percent). The public sector provided approximately 71 percent of transfers and 56 percent of medical payments.

Between 1967 and 1973, some important changes occurred in the structure of support for the disabled. Limiting ourselves to the two major types of expenditures, transfers and medical care, we find their total expenditures over the six-year period more than doubled, from $38.7 billion to $80.8 billion. Also, as a share of GNP, these disability expenditures grew from 4.9 percent to 6.3 percent. Transfer payments nearly doubled as a result of increasing levels of payments, expanded eligibility criteria and the introduction of new programs. Medical payments grew faster, increasing by 120 percent over the 1967-1973 period. The

We have not included direct consumer payments for medical care, except that which is reimbursed through public and private programs. We have also chosen, for the time being, to exclude survivor payments. It should also be noted that no age breakdown is attempted and thus the disability and labor force participation question requires separate consideration. Finally, state and local matching for federal programs in under the federal figure. Because of our emphasis on public-private this is not a problem in the analysis.

The service comparison is left out because of the difficulty one faces in attempting to determine private-service expenditures.
total. (transfer and medical) public support grew from $23 billion in 1967 to $50 billion in 1973 while the private support went from $15.7 billion to $30.8 billion. Thus while in 1967 the public sector accounted for 59 percent of the total, by 1973 the figure had grown to 63 percent. Finally, if we account for price level changes between 1967 and 1973, we find that in real terms transfer payments went up 47 percent; medical payments, 59 percent; and total expenditures for the disabled, 54 percent.

The results presented above suggest the likelihood of an increasing role for the public sector in the support of the disabled. This assistance will probably continue for the most part to take the form of transfer and medical payments. How might these trends affect (or be affected by) public policy? In truth, these trends and public policy are interrelated. Since a large portion of disability expenditures originate with government and since the demand for private disability protection surely is affected by public policy, it is obvious that governmental decisions regarding disability will be significant in determining the total structure of disability programs.

LEGISLATION AND PROGRAM CHANGE

The current structure of disability programs could be radically changed by the passage of any one of a host of legislative proposals. Some of the more prominent of these proposals would include: a national health insurance, a
negative income tax, a national no-fault accident insurance system patterned after the New Zealand law, and national temporary disability insurance. If any of these were passed singly, or in combination, the effect on programs could prove profound. In addition, each could affect both the level and distribution of income, of taxes, of transfers, and of services.

The national health insurance program, for example, could radically alter the delivery of medical services, eliminate some programs like medicaid, and make pre-disability status moot as a determinant of receipt of services. A negative income tax program could eliminate some income support programs and augment current income maintenance programs. A nationwide no-fault accident plan could eliminate workers' compensation programs, current no-fault automobile accident plans, and those portions of public assistance programs which provide payment for medical treatment for non-wage earning accident victims. Temporary disability insurance with income maintenance and medical payments would augment current programs and could lower an individual's probability of incurring long-term disability (Berkowitz, Worrall, and Rubin, 1976).

INCOME AND EARNINGS OF THE DISABLED

We have seen that some disability programs attempt to provide income for the disabled. We shall now consider
the income and earnings of the disabled, as well as their labor market behavior.

The disabled are over-represented in the low income groups in our society. We suspect that some of the disabled have low incomes and earnings because of their work disabilities, and also that some people find themselves disabled because they are poverty stricken.

In 1965, the median income of disability units was $3,923. Thirty-three percent of all of the disabled units found themselves below the poverty level. The impact was stronger for the severely disabled units. These families had a median income of $2,124 and fifty percent were below the poverty line. Earnings is generally the main component of income. In 1965, 58 percent of severely disabled men and 72.9 percent of severely disabled women had no earnings, and 75.3 percent and 88.7 percent, respectively, earned less than $500 (HEW, 1971).

The impact of disability on the labor market is staggering. In 1965, 58.1 percent of the 2.9 million men between the ages of 16 and 64 who did not work at all were disabled, and 46.8 percent of the 4.6 million men who were not in the labor force were disabled (Stanley, 1971).

The findings on labor force behavior are similar for 1971. Over 71 percent of all males who were not in the labor force in 1971 were disabled and 64.7 percent of all males not in the labor force were severely disabled (Levitan and Taggart, 1976).
People who have been disabled for longer periods of time generally have the lowest levels of earnings. However, even the recently disabled show the effects of their disabilities. In a survey conducted in the summer of 1971, the Social Security Administration found that for persons reporting themselves as becoming disabled from October 1869 to March 1971 earnings were substantially lower than those of the general population. The mean 1970 earnings of the general population was $5,113. The mean 1970 earnings for the recently severely disabled and the recently occupationally disabled were $3,166 and $3,763, respectively. Fifty percent of the severe group earned less than $2,325 for the year (Frohlich, 1975).

The receipt of transfer payments and the substitution of other household members' labor in the labor market are two major sources of replacement income for the low income disabled (Johnson and Murphy, 1975). The disabled do work, however, and we shall consider their distribution in the labor market.

THE DISABLED IN THE LABOR MARKET

The percentage of disabled who do work varies inversely with severity of disability (Stanley, 1971). In 1972 the distribution of employed disabled and nondisabled workers by job category was (Levitin and Taggart, 1976):
In 1965, 59.1 percent of the 17.7 million disabled were employed (German and Collins, 1974). In 1971, 54.1 percent of the 15.5 million disabled worked. The figure for 1971 can be broken down as follows: 30.3 percent of the 7.7 million severely disabled, 78.9 percent of the 3.5 million occupationally disabled, and 76.5 percent of the 4.3 million with secondary work-limitations worked during the year (Levitan and Taggart, 1976).

**THE REHABILITATION PROGRAM AND OCCUPATIONAL DISTRIBUTION**

The Federal-State Vocational Rehabilitation Program places many clients in the competitive labor market, and a smaller percentage—approximately 15 percent—in non-wage endeavors. During the last decade, 1966 to 1975, the Federal State Vocational Program has rehabilitated over 2,700,000 people. These clients have taken their places in all sectors.
of the economy and in a wide range of occupations. We have used the RSA-300 tapes, which contain the clients' case service records, to determine what occupational fields the rehabilitant enters at closure (see Table 3).

We know that a client who is accepted for services by the Federal-State Vocational Rehabilitation Program has an excellent chance of being rehabilitated. Roughly 3 of every 4 accepted clients are successfully closed. As stated earlier, most of these clients become wage earners.

The level of wages earned by the rehabilitated client are influenced by general economic conditions, but they are also influenced by a client's age, race, sex, education and type of disability. Clients are more likely to find a job in a tight labor market, and they are probably more likely to perceive their disability as less severe in tight labor markets.

We have provided data on the levels of earned income for the disabled. We have also computed the expected value of the weekly wage at closure for a client accepted into the rehabilitation program. These expected wages for accepted clients are lower than the wages actually received by the rehabilitants because the expected wages includes the zero wages of accepted clients who were not rehabilitated. These figures are presented in Table 4.

The information provided in Tables 3 and 4 presents a picture of what happened to an accepted client of the rehabilitation program who was closed in 1974.
TABLE 3

OCCUPATION AT TIME OF CLOSURE
SELECTED YEARS
(RSA 300 DATA)

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>Prof., Tech., Managerial</td>
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<td>33485</td>
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<td>9.50</td>
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<td>15.09</td>
<td>48753</td>
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<td>15.61</td>
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<td>69744</td>
<td>20.91</td>
<td>22.46</td>
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<td>10562</td>
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<tr>
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<td>6.29</td>
<td>21130</td>
<td>6.34</td>
<td>6.06</td>
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</tr>
<tr>
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<td>5772</td>
<td>1.73</td>
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<td>21663</td>
<td>6.49</td>
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<tr>
<td>Unpaid Family Worker</td>
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<td>5424</td>
<td>1.62</td>
<td>2.14</td>
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<tr>
<td>Structural</td>
<td>31432</td>
<td>9.41</td>
<td>31664</td>
<td>9.49</td>
<td>7.94</td>
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<tr>
<td>Vending Stand Clerk</td>
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<td>0.02</td>
<td>135</td>
<td>0.04</td>
<td>0.02</td>
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</tr>
<tr>
<td>Vending Stand Operator</td>
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<td>0.16</td>
<td>500</td>
<td>0.15</td>
<td>0.23</td>
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<td>7.85</td>
<td>26476</td>
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<td>7.72</td>
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*Based on a random sample of 10,000 cases.
### Table 4

**Median Wage at Closure for Accepted Clients**

*(1974 RSA 300 Tapes)*

#### White Males

**0-8 Years Education**

<table>
<thead>
<tr>
<th>AGE</th>
<th>Under 25</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55+</th>
</tr>
</thead>
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<tr>
<td><strong>DISABILITY</strong></td>
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<tr>
<td>Visual</td>
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<td>74</td>
<td>64</td>
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<td>Hearing</td>
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<td>93</td>
<td>90</td>
<td>90</td>
<td>40</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>74</td>
<td>80</td>
<td>70</td>
<td>40</td>
<td>30</td>
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</tr>
<tr>
<td>Mental</td>
<td>80</td>
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<td>80</td>
<td>70</td>
<td>40</td>
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<tr>
<td>Other</td>
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**9-11 Years Education**

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<tr>
<th>VISUAL</th>
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<th>85</th>
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<td>108</td>
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<td>Orthopedic</td>
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<td>86</td>
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**12 or More Years Education**

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<tr>
<td>Orthopedic</td>
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<td>101</td>
<td>100</td>
<td>83</td>
<td>60</td>
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</table>

**Mental Retardation**

| M.R. | 70 | 34 | 24 | 16 | 14 |
TABLE 4 (Continued)
MEDIAN WAGE AT CLOSURE FOR ACCEPTED CLIENTS
(1974 RSA 300, Tapes)

NONWHITE MALES
0-8 Years Education

<table>
<thead>
<tr>
<th>AGE</th>
<th>Under 25</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55+</th>
</tr>
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<tr>
<td>DISABILITY</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Visual</td>
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<td>82</td>
<td>74</td>
<td>75</td>
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<tr>
<td>Orthopedic</td>
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<td>55</td>
<td>35</td>
<td>16</td>
</tr>
<tr>
<td>Amputations</td>
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<td>15</td>
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</tr>
<tr>
<td>Other</td>
<td>65</td>
<td>74</td>
<td>56</td>
<td>50</td>
<td>40</td>
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</table>

9-11 Years Education

| VISUAL | 80 | 80 | 64 | 60 | 0  |
| HEARING| 90 | 90 | 86 | 81 | 63 |
| ORTHOPEDIC | 75 | 80 | 80 | 55 | 25 |
| AMPUTATIONS | 80 | 81 | 80 | 45 | 45 |
| MENTAL | 80 | 90 | 85 | 50 | 35 |
| OTHER  | 80 | 75 | 70 | 50 | 35 |

12 or More Years Education

| VISUAL | 90 | 90 | 80 | 80 | 42 |
| HEARING| 100| 101| 101| 82 | 30 |
| ORTHOPEDIC | 90 | 100| 80 | 70 | 35 |
| AMPUTATIONS | 80 | 101| 100| 75 | 45 |
| MENTAL | 90 | 95 | 90 | 81 | 51 |
| OTHER  | 90 | 100 | 80 | 70 | 52 |

Mental Retardation

| M.R. | 74 | 64 | 66 | 40 | 25 |

93
TABLE 4 (Continued)

MEDIAN WAGE AT CLOSURE
FOR ACCEPTED CLIENTS
(1974 RSA 300 Tapes)

WHITE FEMALES
9-8 Years Education

<table>
<thead>
<tr>
<th>AGE</th>
<th>Under 25</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55+</th>
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<tbody>
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<td></td>
</tr>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
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<td>14</td>
<td>13</td>
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<tr>
<td>Orthopedic</td>
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</tr>
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</table>

9-11 Years Education

| DISABILITY |          |       |       |       |     |
| Visual      | 64       | 32    | 30    | 0     | 0   |
| Hearing     | 76       | 50    | 50    | 60    | 0   |
| Orthopedic  | 75       | 30    | 26    | 6     | 0   |
| Amputations | 68       | 0     | 0     | 0     | 0   |
| Mental      | 60       | 45    | 44    | 20    | 0   |
| Other       | 65       | 40    | 40    | 25    | 3   |

12 or More Years Education

| DISABILITY |          |       |       |       |     |
| Visual      | 80       | 64    | 50    | 25    | 0   |
| Hearing     | 81       | 72    | 75    | 68    | 30  |
| Orthopedic  | 85       | 70    | 51    | 30    | 0   |
| Amputations | 80       | 60    | 30    | 0     | 0   |
| Mental      | 75       | 72    | 64    | 43    | 13  |
| Other       | 80       | 64    | 60    | 50    | 15  |

Mental Retardation

| M.R. | 30 | 15 | 12 | 12 | 14 |
### TABLE 4 (Continued)

**MEDIAN WAGE AT CLOSURE**
**FOR ACCEPTED CLIENTS**
*(1974 RSA 300 Tapes)*

**NONWHITE FEMALES**
*9-11 Years Education*

<table>
<thead>
<tr>
<th>AGE</th>
<th>Under 25</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55+</th>
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<td></td>
</tr>
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**9-11 Years Education**

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<th>35-44</th>
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**12 or More Years Education**

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<th>35-44</th>
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**Mental Retardation**

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BENEFITS AND COSTS OF VOCATIONAL REHABILITATION

We have indicated that the use of resources to solve a social problem gives rise to costs. We must forgo the benefits which could be derived by applying the resources to an alternative use. Ideally, we would want to maximize the net return on the use of society's resources, regardless of the use.

It is often difficult to determine what type of return we are getting on our social investments; however, some social investments do lend themselves more readily to measurement than others. The vocational rehabilitation program is one such program.

The increased productivity accruing to society as the result of the program represents a crude measure of social benefits of the program. Increased wages serve as a proxy for productivity increases. These can be extrapolated over a client's life and adjusted for the likelihood of unemployment, death, re-injury, and discounted by the appropriate rate to give a current value to the lifetime social benefits of the program. The costs of the program are composed of the direct case service costs and the indirect costs. The overhead costs of the program are largely fixed costs.

One technique which has been used by policymakers in the evaluation of social investment projects is benefit-cost...
analysis. This technique basically compares the ratios of all benefits to all costs for alternative uses of funds. Those projects with a benefit-cost ratio greater than one are candidates for social investment.

Theoretically, the technique of benefit-cost analysis is an ideal tool to assist policymakers in the selection of social projects (Singer, 1972) or in the evaluation of completed ones. However, serious problems arise when one attempts to utilize the technique. Not all benefits and costs can be easily quantified, especially those which are external. Often we do not know the time flow of benefits or the appropriate social rate of discount. Other problems can arise because of the inadequate data or lack of a control group. Finally, results are quite sensitive to the assumptions employed.

Benefit-cost studies of the Federal-State Vocational Rehabilitation Program are becoming commonplace. There have been at least 18 of these studies published since 1965 (Noble).

One difficult problem which has not been solved in benefit-cost studies of the rehabilitation program is how to allocate indirect costs. Although aggregate figures are available for indirect cost, we do not know the true indirect cost of rehabilitating individual clients. Consequently, benefit-cost studies which focus on individual clients or stratified groups of clients must allocate overhead by a
second-best technique. The usual choice has been to assume that the allocation should be on a percentage basis of direct cost. Although the benefit-cost technique should be used cautiously and only as one input in the decision-making process, it can be a useful tool.

Table 5 presents benefit-cost ratios for selected sets of male clients. There is controversy in the literature over both the magnitude of benefit-cost ratios for the program and the relative magnitudes among different client groups (Worrall, 1976).

THE ECONOMY AND THE DISABLED

This paper has briefly considered the number of disabled, their labor force participation, employment rates, occupational distribution, earnings and income and the probabilities for rehabilitation. Each of these is affected by economic conditions. This has been implicit in our discussion, but we shall turn explicit attention to some of these points.

The state of the economy will be a causal agent in determining how many people have work disability. A person with an impairment may consider himself to be nondisabled when economic conditions are good and labor markets are tight. That same person may perceive himself as being disabled when labor demand is weak. One could expect that the reported levels of severity of work disability would rise...
### TABLE 5

**BENEFIT-COST RATIOS**  
**MALES (1970 R-300 RANDOM SAMPLE)**

#### 0 - 7 YEARS EDUCATION

<table>
<thead>
<tr>
<th>DISABILITY/AGE</th>
<th>WHITE under 25</th>
<th>WHITE 35-44</th>
<th>WHITE over 54</th>
<th>NONWHITE under 25</th>
<th>NONWHITE 35-44</th>
<th>NONWHITE over 54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>6.0</td>
<td>2.3</td>
<td>1.1</td>
<td>6.7</td>
<td>3.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Speech &amp; Hearing</td>
<td>6.8</td>
<td>2.4</td>
<td>0.8</td>
<td>8.0</td>
<td>3.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Ortho</td>
<td>6.1</td>
<td>3.5</td>
<td>2.7</td>
<td>6.7</td>
<td>4.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Amputations</td>
<td>6.2</td>
<td>2.7</td>
<td>1.6</td>
<td>6.9</td>
<td>3.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Mental Disability</td>
<td>5.2</td>
<td>0.5</td>
<td>0.9</td>
<td>6.0</td>
<td>1.2</td>
<td>-0.6</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>7.3</td>
<td>2.6</td>
<td>0.7</td>
<td>8.5</td>
<td>4.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Neopl</td>
<td>5.9</td>
<td>2.7</td>
<td>1.7</td>
<td>6.6</td>
<td>3.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Blood &amp; Respir</td>
<td>4.6</td>
<td>1.6</td>
<td>0.8</td>
<td>5.1</td>
<td>2.1</td>
<td>1.2</td>
</tr>
<tr>
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<td>2.0</td>
<td>8.4</td>
<td>4.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Genito-urinary</td>
<td>7.3</td>
<td>4.1</td>
<td>3.1</td>
<td>8.1</td>
<td>4.9</td>
<td>3.8</td>
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#### 9 - 11 YEARS EDUCATION

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<th>NONWHITE under 25</th>
<th>NONWHITE 35-44</th>
<th>NONWHITE over 54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>7.6</td>
<td>4.2</td>
<td>2.7</td>
<td>8.7</td>
<td>5.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Speech &amp; Hearing</td>
<td>8.1</td>
<td>4.9</td>
<td>2.8</td>
<td>10.4</td>
<td>7.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Ortho</td>
<td>7.4</td>
<td>4.9</td>
<td>4.0</td>
<td>8.1</td>
<td>5.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Amputations</td>
<td>7.6</td>
<td>4.4</td>
<td>3.1</td>
<td>8.6</td>
<td>5.6</td>
<td>4.1</td>
</tr>
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<td>0.5</td>
<td>8.4</td>
<td>4.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>9.7</td>
<td>6.2</td>
<td>3.4</td>
<td>11.8</td>
<td>11.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Neopl</td>
<td>7.2</td>
<td>4.2</td>
<td>3.0</td>
<td>8.1</td>
<td>5.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Blood &amp; Respir</td>
<td>5.8</td>
<td>2.8</td>
<td>1.8</td>
<td>6.4</td>
<td>3.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Digestive</td>
<td>9.3</td>
<td>5.8</td>
<td>4.1</td>
<td>10.7</td>
<td>7.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Genito-urinary</td>
<td>8.8</td>
<td>5.9</td>
<td>4.7</td>
<td>9.8</td>
<td>7.2</td>
<td>5.8</td>
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</tbody>
</table>
### TABLE 5*
(Continued)

**12 YEARS EDUCATION**

<table>
<thead>
<tr>
<th>DISABILITY/AGE</th>
<th>WHITE under 25</th>
<th>WHITE 35-44</th>
<th>WHITE over 54</th>
<th>NONWHITE under 25</th>
<th>NONWHITE 35-44</th>
<th>NONWHITE over 54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>6.9</td>
<td>3.6</td>
<td>2.3</td>
<td>7.8</td>
<td>4.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Speech &amp; Hearing</td>
<td>7.8</td>
<td>4.0</td>
<td>2.3</td>
<td>9.0</td>
<td>5.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Ortho</td>
<td>6.9</td>
<td>4.4</td>
<td>3.6</td>
<td>7.5</td>
<td>5.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Amputations</td>
<td>6.9</td>
<td>3.8</td>
<td>2.8</td>
<td>7.8</td>
<td>4.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Mental Disability</td>
<td>6.3</td>
<td>2.0</td>
<td>0.5</td>
<td>7.3</td>
<td>3.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>8.4</td>
<td>4.6</td>
<td>2.6</td>
<td>10.0</td>
<td>6.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Neopl</td>
<td>6.7</td>
<td>3.7</td>
<td>2.7</td>
<td>7.4</td>
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<td>3.4</td>
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<tr>
<td>Blood &amp; Respir</td>
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<td>2.5</td>
<td>1.7</td>
<td>5.9</td>
<td>3.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Digestive</td>
<td>8.4</td>
<td>4.9</td>
<td>3.5</td>
<td>9.5</td>
<td>6.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Genito-urinary</td>
<td>8.1</td>
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<td>4.2</td>
<td>9.0</td>
<td>6.2</td>
<td>5.1</td>
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</tbody>
</table>

*Productivity Rate of 2.5% and Social Rate of Discount of 10% were assumed in this model.*
with deteriorating economic conditions. An example would be that people who previously reported that they were occupationally disabled now consider themselves to be severely disabled.

One might hypothesize that when economic conditions are bad for an extended period of time, the disabled who are unable to find jobs withdraw from the labor market. The disabled tend to be people who have other socio-economic and demographic characteristics which are associated with less labor market participation and lower wages. A physical or mental handicap is often an additional impediment to their successful labor force participation.

For those disabled who do participate in the labor force, slack labor markets result in higher unemployment rates than for the nondisabled population. These rates may run twice as high or more among some groups.

The disabled who do work for lower wages than the general population, and they are more likely than their nondisabled peers to work part-time.

Slack economic conditions also result in underemployment of the disabled. The disabled may be employed in positions which do not fully utilize their skills. Harbridge House has estimated that 10 percent of the disabled find themselves in this position, but the percentage probably rises and falls with general economic conditions.
The disabled who seek rehabilitation services are less likely to be successfully rehabilitated when unemployment rates are higher. The psychic costs of disability also rise as economic conditions deteriorate. Forced idleness has both short-term and long-term costs for both the disabled and the nondisabled population.

One would expect to find increased burdens placed on programs for the disabled in a slack economy. The demand for transfer payments will rise. For example, Disability Insurance applications will increase (Hambo2). The demand for food stamps, counseling and training, medicaid, etc. will all rise.

We are uncertain of the long-term effects of a slack economy on the disabled but we do know that many disability programs have built-in disincentives to return to work. People who leave the labor market may develop a taste for transfer payments. Benefit levels in most programs are not lavish, but there are instances where they can offer an attractive alternative to work, particularly when multiple program support is available.

The forced idleness of the disabled, and their underemployment result in lost output to society. This loss is greatest when economic conditions are bad.

A strong economy with low unemployment rates would be an effective "program" in the fight against work disability. We have devoted resources to the alleviation of disability.
Programs offer benefits to both the disabled individual and society. The existence of programs offers us implicit insurance in case we become disabled. The programs spread the cost of disability more equitably over society and protect us against what is largely a random event, disability.

Disability programs are geared to adding to social well-being and some, such as the rehabilitation program, attempt to increase society's potential to produce physical output directly. As programs such as the rehabilitation program can demonstrate that they return to society more than they cost, it is likely that they will continue to expand in the future.

As the economy grows over time, the amount of funds devoted to programs for the disabled will depend, in part, on the path the economy takes. It is likely that the growing percentage of GNP being devoted to disability expenditures in the past decade will slow down in the near future. However, the disabled have a vital stake in a strong economy. For many, their very lives will depend upon it.
REFERENCES


Nagi, Saad Z., R & D in Disability Policies and Programs: An Analysis of Organizations, Clients, and Decision Making, Mershon Center, The Ohio State University, Columbus, Ohio, 1973.


THE CHANGING ROLE OF INCOME MAINTENANCE SYSTEMS AND THEIR POTENTIAL IMPACT ON THE FUTURE OF THE DISABLED IN THE UNITED STATES
Elizabeth M. Boggs, Ph.D.

The purpose of this paper is to project certain trends and issues related to that particular set of technologies usually referred to as "income maintenance" or "income security" programs. Current trends in this area are seen as compatible with and supporting other emerging social technologies (some of them made possible by advances in electronic data processing) such as "the individual program plan" (see Appendix A). Consequences for the life style of the handicapped, and conversely the possible effects of these changing life styles of the handicapped on society at large, will be considered.

THE BASE CASE*

Although "transfer" payments may be regarded by economists as economic events, from the point of view of the present technology assessment project, income maintenance (IM) systems are among the changing social techniques.

*Base case refers to what will happen in the future, based on present facts, if no further deliberate intervention occurs.
or institutions designed to alleviate various social problems created by disability. Although this paper will focus on those present and future IM systems specifically designed to cover persons with long term disabilities which impair economic independence, yet in this, as in other "human resources" issues, everything is related to everything else, and some other topics will also have to be touched upon.

For example, in addition to the obvious cash transfers (social security) and in-kind benefits (rent subsidies, food stamps, day-care and other social services) which are made available to many persons in the lowest quintile of income, "tax expenditures" are being increasingly recognized as a part of the total income equalization system. This subject is discussed in Appendix B. It should be noted that deductions for medical expenses presumably do beneficially affect non-indigent disabled persons who are not covered by public or private health insurance; this becomes an important factor in long term care in nursing homes and intermediate care facilities, which is not covered by medicare or by most private policies. Also extraordinary work expenses of the disabled can be deducted as such. However, legally blind taxpayers are the only disabled persons who enjoy the same double exemption as the elderly. Recurrent efforts to extend this tax rebate to blind dependents, and to other disabled tax payers and dependents, have run up against the problem of definition and verification.
The use of tax credits for social purposes is relatively new. However, beginning in 1976, low income working poor families with at least one child were allowed such credits which, if they produced a negative tax, were redeemable as refunds. It is possible that this device could be extended to persons whose disability has been established for social security or SSI purposes.

Traditionally, IM programs are those public and private programs designed to replace (usually only partially) earned income which is lost (or not available) to an individual as a result of his involuntary unemployment, retirement, or disability; in the case of dependents, IM offsets the results of unemployment, disability or death of the breadwinner. There are two main classes of income maintenance program--insurance and assistance. The first is based on the prior payment of regular premiums (frequently shared between employer and employee, based on wages earned). The second is based on financial need of a person (or family) in which income (earned or unearned) is lacking or insufficient due to circumstances presumably beyond the individual's control. Since medical care is still considered a personal expense in this country, IM must cover medical contingencies. This is usually separately programmed.

Public and private programs exist in both classes, i.e. insurance and assistance. However, in the area of assistance, organized private (charitable) support for the
basic maintenance of needy persons has, in the past half century, largely given way to public assistance programs, the most important of which are federally aided. There are still, however, considerable, albeit hard-to-calculate, charitable as well as public and employer contributions to the costs of medical and social services incurred on behalf of persons considered unable to pay for what otherwise would be a personal liability for needed personal services. Third party payments for these necessities, whether public or private, can also be seen as part of the IM system, if the individual himself or his family would have incurred and paid the fee for such service had his income not been substandard.

In the area of insurance, private sector activities include private pension and disability plans (including workmen's compensation) associated with employment, and along with the various forms of group health insurance. Individuals who do not have adequate employment-related pension and health plans can (if financially able) cover these risks to some extent through purchase of individual annuities, and individual hospital and medical policies. However, even so called catastrophic plans available in the private sector place significant limits on the nature and duration of expenses which will be reimbursed under these policies. Much of the cost of long term disability is excluded from coverage.
These limitations are especially apparent in coverage for disability other than that which is clearly work-related. The reason is fairly straightforward. Long term disability can be very costly for the individual, if loss of earnings, cost of living and medical costs over the remainder of a lifetime are summed. Insurance companies have a problem defining extraordinary risks actuarially, and their idea of a fair premium leads many persons to opt out of insurance against what is seen as "not likely to happen to me."

Once the disabling event has occurred, of course, insurability has vanished.

The extreme case is a lifetime disability originating at birth or soon thereafter. In 1972, the Secretary of Public Welfare of Pennsylvania commissioned the Wharton School of Finance and Commerce of the University of Pennsylvania to study the feasibility of providing private insurance coverage to mitigate the financial problems encountered by families caring for a developmentally disabled dependent with multiple ongoing special needs. The findings were that the private insurance mechanism is infeasible because the requisites of insurability are not met in the vital areas of definition and statistical reliability and that such insurance is not desirable because the criteria of widespread distribution, marketability, and reasonable premiums cannot be met (Gilmore et al., Vol. III). This is not to say, of course, that disabled persons, including developmentally
disabled persons, cannot be insured for some risks, e.g. the usual intercurrent illnesses. Indeed, disabled children who continue dependent beyond age 19 are being successfully insured under family group policies in many states.

Thus it is not surprising that, although private insurance for income replacement (pensions and disability benefits) and for medical coverage has been increasing (largely in the employment-related sector), the overall balance in the field of insurance has been shifting toward the public side during recent years (Skolnik, Appendix C of this paper). Social insurance in the United States includes a number of programs—railroad retirement, veteran’s benefits, etc.—of these, the most important to the disabled is social security, with its associated medical coverage, "medicare." Social security is a federal responsibility; however, supplementary security income (SSI), the corresponding public assistance program, continues to have important state components, despite "federalization" in 1974. Moreover, its complementary medical coverage, "medicaid," is still state administered with federal aid. The major federal IM programs are outlined in Appendix D, Table L of this paper.

Since Table D-L is a budget document, medical care reimbursements are not shown. However, from a social point of view it is customary to include medicare and medicaid, respectively, as components of the social insurance and public assistance programs, since they enable beneficiaries to pay
their medical bills; moreover they are entitlements which go with the basic eligibility. Social Services under Title XX (see Chart I and Appendix F of this paper) in contrast, are not entitlements, although SSI and other public assistance recipients do have some prior claim on the states' allotments. Since many persons with long term disabilities are even more in need of "social care" than of medical care, and since such "social care" (transportation, chore services, day care, etc.) is often germane to the extent to which disability is a practical handicap, the arbitrary line between medical and social services, as defined by custom, state law, and federal regulations, remains an issue whose solution can itself be the subject of detailed technology assessment, but is beyond the reach of this analysis.

Most federal components of income maintenance having general coverage are authorized under the Social Security Act, which now includes twenty titles. Only Title II addresses what most people know as the Social Security system, however. Chart I indicates the general thrust of this and the other relevant active titles. A current federal perspective on the relationship of these federal programs and the attendant current issues is contained in the following paragraphs drawn from a recent federal request for proposal (REP 74-76-HEW-OS, 4/30/76).

The major Federal social insurance programs are old-age-insurance ($52 billion in benefit payments in Fiscal Year 1977), survivors insurance ($19 billion), unemployment insurance ($16 billion),
hospital insurance ($13 billion), and disability insurance ($11 billion). Three other Federal programs are classified as social insurance by some but not all observers—civil service retirement ($10 billion), military retirement ($8 billion), and railroad retirement ($4 billion). The foregoing sum to $133 billion, which constitutes three-quarters of Federal outlays for income security and a third of Federal outlays for all purposes.

Social insurance programs, however, exist side by side with means-tested programs directed at similar populations. Eligibility for these programs depends primarily on the individual's current income and assets rather than upon prior employment. For example, assistance to the aged and disabled is provided both through old-age, survivors, and disability insurance and supplemental security income. Aid to the unemployed comes both through unemployment compensation and AFDC-UP. Medical costs are paid through Medicare and Medicaid.

Social insurance benefits have often been pictured as a right which a person earns through working and paying contributions. Means-tested benefits, on the other hand, have been stigmatized as a dole. In part because of these perceptions, social insurance benefits to which many people are entitled exceed by little or not at all the means-tested benefits to which they would be eligible if they had never worked in covered employment. More and more people are coming to feel, rightly or wrongly, that their social insurance benefits inadequately reflect their prior contributions. And some researchers have suggested that the social insurance programs discourage private saving and work effort. Developments such as these have called the basic principles of social insurance into question and have engendered proposals for major changes in the social insurance programs.

It will be noted that, in the current-cost estimates cited above, disability insurance is the least costly in total sum of the general social insurance programs. However, the figure of $11 billion should be augmented, for purposes of illustrating the cost of social insurance attributable to disability, by adding (1) the portion of medicare payments made...
on behalf of the disabled, estimated at $1.8 billion for 1977, (Federal Budget Appendix FY 77, pp. 374-5), and also the cost of social security benefits to nearly 400,000 adults disabled in childhood whose entitlements arise from the work record of the supporting parent.

The "children's" costs, now running about $0.5 billion annually, are included in the total costs ascribed to the category (retirement, survivors, etc.) of the worker on whose record their entitlement depends. Thus of the total cost of supporting disabled adult children, 54 percent is attributed to old age insurance, 60 percent to survivors insurance and only 6 percent directly to disability insurance. The last represents the fraction of all disabled adult children who are receiving benefits on the record of a parent who is a disabled worker.

It should also be pointed out, however, that the $11 billion figure represents the cost of supporting not only the disabled workers themselves but also their various dependents who are not disabled. Of the 4.6 million disability insurance "beneficiaries" cited in Table L-6 (of this paper), for example, some 2 million are dependents. On the other hand, there are 2.6 million disabled workers, and nearly 0.4 million disabled adult children and 0.1 million disabled widows and widowers over 50 interspersed in the various beneficiary populations. This explanation is included to assist the reader to decipher some of the aggregated data contained in the Tables and Appendices.
Annual data on the characteristics of these disabled persons at the time first found eligible for social security benefits are relevant. Among workers who became disabled prior to age forty, schizophrenia was the leading diagnosis; after that age, heart disease takes the lead in all age groups, with schizophrenia in second place, gradually giving way to emphysema and arthritis in those over fifty-five. By contrast, in the smaller group representing those whose disabilities originated before age eighteen, mental retardation is the major cause, followed by cerebral palsy, mental illness and epilepsy.

When the Social Security Act was first passed in 1935, it focused on "dependent children" (then orphans, now more often children who are illegitimate or abandoned by their fathers), widows and the elderly. It was not until 1957 that disability insurance and disability assistance were added to the Act. We thus have less than two decades of history on which to draw for cues and clues to future direction. Both disability programs are young and tend to be overshadowed by their older counterparts for the non-disabled, yet both disability programs have rates of present growth which make them sleepers even in the absence of further program changes. (See Table I and Chart L-2 of this paper.) Social insurance and public income support (including the state share) attributable to disability are expected to increase from $8.6 billion in 1967 to $116 billion in constant 1967 dollars.
in 1990 (Berkowitz, 1974). These figures include both transfers for basic support, and medical coverage, but do not include costs of supporting dependents of disabled persons. These increases are occurring at a rate higher than the growth of the GNP. Moreover, in the absence of further changes in the benefit structure of social security, the public assistance portion will increase relative to the social insurance portion.

TABLE I
Disabled beneficiaries under Social Security and SSI 1975-1976

<table>
<thead>
<tr>
<th>Number in current payment status - millions</th>
<th>February 1976</th>
<th>February 1975</th>
<th>percent increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disabled Workers</td>
<td>2.529</td>
<td>2.277</td>
<td>11%</td>
</tr>
<tr>
<td>Disabled adult children</td>
<td>0.350</td>
<td>0.330</td>
<td>6%</td>
</tr>
<tr>
<td>SSI (Disabled)</td>
<td>2.291</td>
<td>1.691</td>
<td>35%</td>
</tr>
</tbody>
</table>

The early architects of the Social Security Act had in mind to increase systematically the coverage of the social insurance component (under Title II) in terms both of income replaced per beneficiary and of covered proportion of the employed population—and hence ultimately of the retired population, in such a way that old age assistance (under Title I) would steadily diminish, becoming a residual program needed only by the few who, for atypical reasons, did not develop a sufficient work record to be entitled to minimum "insured" status. For a time this objective appeared to be coming nearer, but as indicated in the citation from
the RFP, has now been lost to sight. This shift is also noted in the following commentary taken from a memo addressed to HEW Secretary Mathews by Assistant Secretary William Morrill (Planning and Evaluation) in January, 1976:

Alternative Strategies to Assure Income Adequacy among the Aged and Disabled. The Social Security system (OASDI) has evolved over the past thirty years through ad hoc, incremental changes without much thought to what its overall goals or principles ought to be. The recent enactment of SSI implicitly retracted the premise of Social Security's founders that OASDI, when mature, would adequately provide for the needs of the aged, and that welfare (i.e., the old Federal-state AABD programs that SSI replaced) would wither away. In addition, the society has been expanding preferential tax treatment of the income of the aged and has increasingly enacted through (sic) tax policies that favor the formation of industrial, union and individual pensions. Most recently, the Federal government has decided to enter into direct regulation of pension programs, although for years the SEC has had some indirect regulatory authority over aspects of pension fund investment.

Over the next fifty years, the society's demographic profile will shift very substantially towards the aged. The implication of this shift are considerable, not only because of the political forces that are developing to shape government expenditures in response to that shift, but also because the accumulation of equity ownership by pension funds could alter economic relationships very profoundly. We are only beginning to perceive these issues, and we are just starting to frame the alternatives that are available to the society now that we have a mix of public mechanisms to assure income adequacy for the aged.

It will be noted that, while the title of this excerpt includes the disabled, the text addresses primarily the issues of the elderly. Private pension plans are notoriously skimpy on disability coverage, especially for persons who become disabled before age fifty from non-work-related causes,
and the issues of "disability increments" in relation to minimum benefits to be discussed later in this paper are not emergent in current global policy discussions. All kinds of internal evidence shows the disabled as having fewer resources than the aged.

Social Security is a long way from replacing aid to the elderly and disabled. The minimum basic benefit under Social Security is only just now (July, 1976) going over the $100/ a month mark. Therefore, many persons (20 percent) who are entitled to such benefits nevertheless require some supplement in order to eke out a living. This was recognized when the benefit structure was established for SSI. Since 1974, this program has provided a basic federal minimum or floor under assistance for the aged, blind and disabled in all jurisdictions except Puerto Rico and the territories. There are 3 million individuals receiving social security benefits based on their disability; approximately 1.9 million persons receive SSI on the same basis; 610,000 of the SSI recipients receive some social security and visa versa (SSB 39:3:84; March 1976).

DEFINITIONS OF DISABILITY FOR PURPOSES OF SOCIAL SECURITY, SSI, AND TECHNOLOGY ASSESSMENT

As noted earlier social security became a major factor in the lives of many disabled persons beginning in 1957, when Title II of the Social Security Act was amended to provide coverage to certain persons who were "permanently"
and totally disabled," as a result of a physical or mental impairment, to such an extent that for a period longer than twelve months they had not been able to engage in "substantial gainful employment" and were not expected to do so. The words "permanent and total" were struck in 1972. The same definition was incorporated into the SSI legislation effective in 1974. Social security, based on disability is available to disabled workers, disabled widows and widowers over fifty, and adult children who were disabled in and since childhood where the latter are dependents or survivors of insured workers who have died, retired, or become themselves disabled. SSI is available to disabled adults without reference to the earnings or income of relatives other than cohabiting spouses, except to the extent such income may actually be made available to the disabled adult. SSI is also available to children who are "comparably" disabled, but in this case, the means test applies to total family income less a small per capita reserved for non-disabled members. A person under eighteen who is living with parent(s) is subject to these rules. To date, 137,000 children have qualified.

When an individual applies for disability benefits, a determination as to whether he is disabled must be made. The term "substantial gainful activity" used to describe a level of work activity means work activity that is both substantial and gainful. Substantial work activity involves the performance
of significant physical or mental duties, or a combination of both, productive in nature. Gainful work activity is activity for remuneration or profit (or intended for profit, whether or not a profit is realized). In order for work activity to be substantial, it is not necessary that it be performed on a full-time basis; work activity performed on a part-time basis may also be substantial. Beginning in 1976 an ability to earn more than $230 a month is considered "substantially" gainful.

A "medically determinable physical or mental impairment" as the term is used in the various definitions of disability is one that "results from anatomical, physiological, or psychological abnormalities which are demonstrable by medically acceptable clinical and laboratory diagnostic techniques." A Binet or WISC or similar test is "medically acceptable."

In making a determination, the worker's impairment or impairments must be the primary reason for his inability to engage in substantial gainful activity, although his age, education, and work experience are also taken into consideration. A person is not disabled if he can perform "work which exists in the national economy." This means work in which there is a significant number of jobs either in the region where the person lives or in several regions of the country. The mere fact of unemployment does not equate to disability, nor does the lack of a suitable job in the applicant's home town.
A disability determination made under the Social Security Act must be made by or on behalf of the administering agency and must be based on all the facts in the individual case. Accordingly, a decision made by another governmental or non-governmental agency that the person is or is not disabled is not controlling for the purpose of meeting the disability requirements of the Social Security Act. Similarly, a statement by a physician that a person is disabled, or unable to work, is not controlling. The weight given to any such decision or statement depends on the extent to which it is supported by specific and complete clinical and laboratory findings and is consistent with other evidence as to the severity and probable duration of the impairment or impairments. In practice determinations are made by state "disability determination services" working under contract with SSA.

The Social Security Administration has issued manuals for their examining physicians indicating the extent of functional impairment associated with various conditions which may be considered indicative of disability. For example, severe and profound retardation, and in some instances moderate retardation, may be assumed to be disabling. A less severe form may also be disabling if accompanied by another impairment -- for example a speech defect, or seizures at a level which would not be disabling if it occurred in a person of normal intelligence.
To be useful and usable in a computerized income maintenance system, a definition must be clear cut and quantifiable. Although disability under both social security and SSI does involve an individual assessment of functional disability, the criteria do create certain problems of both vertical and horizontal equity. First is the notch problem. With state-supplementation or with earned income which is disregarded (the first $65 is totally disregarded, subsequent earnings are 50 percent disregarded) it is quite possible for a person to be receiving some SSI benefits which, combined with other income, total more than $230 a month; he is also eligible for medicaid. However, once he begins earning $230 a month he loses both SSI and medicaid and is worse off than before. The second problem is related to it; there is no recognition of partial disability, as in workmen's compensation or veteran's benefits, with the result that the go-no-go decision of the agency is very critical for the individual. Indeed it appears that a partially disabled person, i.e. one who can do some work and earn say $150 a month, is better off under either SSI or social security than a more severely disabled person, who is also likely to have greater expenses in meeting his daily living needs (Berkowitz, 1974).

In short we have a definition of disability which is functional in context since it relates to economic criteria. However, it fails in respect to equity since (1) it is least
beneficial to the most disabled, and (2) it does not take into account what we will call the disability increment, i.e. that portion of the individual's living costs which are directed to overcoming or compensating for his disability. The disability increment is an individual variable, and is somewhat dependent on external factors, e.g. the presence or absence of social or environmental barriers. Since the possible future IM technologies can be measured against these two criteria, we will spend some time elaborating them.

Thus, for purposes of discussing future options, a disability is defined as a chronic impairment of such a nature and degree that the individual, if an adult, is not able to be economically self-sufficient, that is to say he requires an on-going subsidy in order to survive at a minimum "decent" standard of living. Conceptually such a minimum is composed of two parts: (1) the basic maintenance component, equivalent to that which would be required by a non-disabled person for food, shelter, clothing and necessities in order to maintain minimum well-being, and the "disability increment," i.e. the extra cost, both medical and non-medical, occasioned by the disability itself. For example, if the rental of an accessible apartment is higher than a non-accessible apartment of the same type, the difference is a disability increment. Higher costs of transportation, special equipment, chore services and attendant care, social supervision for the mentally impaired, special
dietary requirements, and so on are examples of non-medical "disability increments," as are the more usually recognized "work related expenses" which exceed those experienced by the normal worker in the same job.

In addition we count on-going medical expenses related to the disability (apart from acute care associated with intercurrent illness or accident, or with the event which initially caused the disability) as a "disability increment" to maintenance, where this regularly exceeds 3 percent of personal or family income. This arbitrary figure is selected on deference to IRS.

Examples of a disability increment (medical) include cost of dialysis, insulin and other maintenance drugs, home health care, on-going physical therapy, extended outpatient treatment for the chronic mental patient, and the professional (medical-nursing) care components of long term inpatient care in nursing homes and similar facilities.

From the patient's point of view the distinction between medical care and social care often may have little meaning. (Adjustment of braces is "medical"; repair of wheel chairs is not.) However, it seems likely that there will be different systems of payment for these two lines for some time in the foreseeable future. This fact has T.A. significance. For purposes of this discussion we will assume that disability increments (medical) refer to the cost of recurring interventions by licensed health-care practitioners, or alternatively
those services for which health insurance coverage is widely available. However, we anticipate that, in the future the basic maintenance component of long term care will be separately identified and excluded from "medical care" for inpatient stays exceeding, say, six months. At the same time we anticipate that "social care" and "social services" covering a wide variety of professional and nonprofessional services designed to alleviate or compensate for personal dependency will become more clearly identified, and probably more generally accessible. We see low cost or occasional social services becoming "universalized" (available at no cost or nominal cost, without a means test), but foresee realistically that high per capita cost services (e.g. homemaker) will continue to be viewed as a personal liability of those considered "able to pay." The cost of such services will thus continue as a part of the "disability increment" in the near future.

FUTURE DIRECTIONS

As indicated earlier, base case projections foretell substantial increases in income maintenance expenditures for the disabled, for both medical and non-medical costs. This is in part predicated on indications that the proportionate number of disabled adults of working age is increasing. (Table II). This is probably an artifact of the age structure (i.e. relative increase in the 50-65 age group in
TABLE II
Percent of total population 18-64 severely disabled, by sex, 1966 and 1972

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>5.9</td>
<td>4.7</td>
<td>7.0</td>
</tr>
<tr>
<td>1972</td>
<td>7.1</td>
<td>5.7</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Severely disabled - unable to work or only able to work intermittently

Adapted from Table 7 in Lando, M. E. Demographic Characteristics of Disability Applicants: Relationship to Allowances, SSB 39:5:15-23, May, '76.

which prevalence is higher) and also an intrinsic phenomenon, based on increased net survivorship due to improved emergency medical facilities. Beyond the base case what changes can we expect which will further impact the lives of the disabled? There are several indicators and major influences.

1. Forward thinking in this country: The public income maintenance machinery is now quite ponderous. Changes are therefore incremental and major changes take decades from conception to partial realization. Medicare was twenty years in the political process, from Truman to Johnson. Future scenarios are, therefore, likely to be foreshadowed in the thinking and writing of people who can be expected to have an on-going impact on the evolution of legislation. Among these forces are individuals such as former HEW Secretary Wilbur Cohen and organizations such as AFL-CIO.
national commissions are also used for the dual purpose of "brain-storming" and of producing a nucleus of consensus and a basis of political action. Such a group, for example, is the SSI Study Group, established ad hoc by Secretary Weinberger in April 1975. Other groups include cabinets in exile and permanent staff groups at Brookings Institution, and the Urban Institute. The economic impact of public IM programs is now considerable (12 percent of GNP including personal health care); hence proposed changes are reviewed from the "income transfer" point of view by economists, who apply TANs to impact on the beneficiaries but to such issues as consumption of consumer goods.

2. International Trends: Social insurance is a concomittant of industrialization. In certain respects the United States is among the least progressive of the industrial democracies. The very fact that certain provisions may be in effect in Sweden or Britain, or the Netherlands or West Germany provides a laboratory from which data can be adapted for use in evaluating alternate strategies available to the United States.

3. Consumerism and the Disability Movement: There is now emerging in this country a more concerted and potentially more effective lobby based on self-determination by the handicapped. The prototype is, in some respects, the successful efforts of the blind, who now enjoy a favored position in most IM legislation. For example, a person who
is legally blind (less than 20/200 vision in the better eye with glasses) is entitled to social security and SSI without regard to whether he meets the test of "substantial gainful employment;" he also enjoys special treatment with respect to disregard of his work expenses. The emergence of such groups as the Disabled in Action, and the American Coalition of Citizens with Disabilities has two implications: first a thrust toward "rights, not charity"; second, a distrust of surrogates (professionals, parents, agencies) and an insistence that the disabled "speak for themselves."

Sophisticated adults with "severe" physical handicaps share a range of prejudices similar to those of the non-handicapped vis-a-vis persons with mental disabilities. To the extent this constituency becomes vocal on its own behalf, this second thrust thus presents some threat to the heretofore effective advocacy of such organizations as the National Association for Retarded Citizens and United Cerebral Palsy Associations, the majority of whose target constituencies are at a considerable disadvantage in unsupported self advocacy. Such primary consumers are at risk in many circumstances, including the political arena. On the positive side, the preference of the disabled themselves for entitlements based on compensation for the "disability increment" vs. "welfare" may well hasten the turn around away from public assistance and back toward social insurance as the IM mode of choice for the disabled.
4. **Structural Changes in the Service Delivery Systems:**

Several major service systems impact on the disabled. At all ages the health and mental health care system and the social services system are important. To the disabled child, education is a major resource. To the adult of working age, the rehabilitation system, and to the elderly the Older Americans Act are relevant. Each of these systems has its own premises and historical foundations. Each has its own idiosyncratic history of federal-state responsibilities and public-private issues. Current thrusts toward "integration of services," umbrella agencies, and "non-categorical" approaches in the organization of state government, and toward revenue sharing and federal divestiture, at the national level, have implications for any minority with special needs, which, like the disabled, has by and large stood to gain from federal initiatives, and federal standard setting in services as well as social insurance. On the one hand the obliteration of earmarking (as, for example, in the recent administration proposal to merge "crippled children's services" into a general health grant) can result in an actual loss of quantity or quality, as well as visibility and accountability; on the other hand, in the presence of effective advocacy at the state level, it may yield a net increase in service delivered to the disabled because it opens up a stronger claim for the disabled on the "generic" system. For example, it is estimated that about $300 million
(out of a total for all purposes of $2.4 billion) is currently flowing to developmentally disabled children and adults (i.e. disabled children and adults disabled in childhood) via Title XX, social services, a sum considerably in excess of anything that might have been appropriated for this target group on a "categorical" basis (see Appendix F of this paper).

The benefits of any service system are relevant to the IM system in several ways. First, if a service which is necessary because of disability is available either on a universal basis (e.g. special education, vocational rehabilitation training) or on a reasonably generous means-tested basis (chore services or homemaker services under Title XX), the cost is effectively removed from the disability increment. Moreover, services which actually reduce disability reduce the need for income replacement through IM. Conversely, even if the cost of service is included in the IM entitlement, e.g. through medicare, such entitlement is not realizable if the service is not accessible. For example, medicare may pay for physical therapy, but if the health system has not provided a therapist, the benefit is not realized.

The structure of the service system and its reimbursement machinery also has great bearing on use of institutions versus other forms of living arrangement. At present, a significant portion of basic maintenance of the most severely handicapped (especially the mentally ill and
5. Integrated-Participatory vs. Segregated-Autonomous Service Models: A "total institution" having both the responsibility and authority to meet all the maintenance and human service needs of individuals which it admits is administratively attractive, especially in a society whose members are willing to support care of the disabled but would rather not be confronted with or by them either in their neighborhoods or community hospitals. By extension an agency with comprehensive responsibility tends to serve the same administrative convenience. It also provides a single focal point for constituency queries and requests. The residential school for the deaf and institution for the retarded, along with state agencies for the blind follow these traditional models. Today, however, there appears to be a growing trend toward a model somewhat more difficult to conceptualize and implement (because it is less well defined as well as less visible) but socially and philosophically more acceptable to the disabled. This model is based on the assumption that each major service system should accommodate appropriately the full range of human need for its particular services. Schools should educate the most severely handicapped, health services treat, and social agencies serve. By extension, employers should employ. It also follows that IM systems should entitle. In order to make this model
effectively for individuals who are not apt at working the system, personal case coordinators or "broker managers" are needed (see Appendix A of this paper).

**IMPLICATIONS OF THESE INDICIA**

1. **Forward Thinking:** Both social security and SSI are the subject of scrutiny by public policy molders. The SSI program represents a significant philosophical as well as practical and quantitative change in the approaches to income maintenance for the disabled. It was preceded by a significant administrative and legislative separation of IM from "social services." This separation was accompanied by a significant cooption of private social service providers into public plans, and a trend to more nearly "universal" definitions of the population eligible for federally aided "social service." The full impact of existing law has not been fully felt even as further changes are being enacted.

There are a number of current "hang-ups" and administrative problems which have been the subject of study by an expert committee (SSI Study Group, Report to the Commissioner of Social Security, January 1976). The group also addressed underlying policy. It is important to recognize that "federalization" was recommended and adopted in 1972 on the premise that "each level of government will do what each can do best." The computerization of records and the issuance of checks was and is seen as an enterprise in which a single federal system can be more efficient, and in many respects
also more effective. Linkage with the social security system is also efficient. Simplicity is essential, yet simplicity does not necessarily enhance equity; simplification is not compatible with individualized ascertainment of special needs. It is possible but precarious to program SSI for different payment levels based on reason-for-eligibility (age, disability, blindness), living arrangement (alone, with spouse, in congregate care, in medicaid institution), and geographical location (zip code). These options are now allowed in federally administered state supplementation. Under state administration it was formerly customary to include also specific allowances for special diets, actual rents (versus flat grant approach to prevailing rents) and the like. Such options were excluded from the outset as "non-feasible" in a federally administered computerized system. In the interest of further simplification, the SSI Study Group recommended drastic reduction in existing options. Specifically, it recommended that in future the federal government should administer a supplemental payment as part of the total SSI payment only where a single supplement level within each state is agreed to. "Assistance payments based on special needs should be returned to the states."

A second important thrust of the SSI Study Group relates to eligibility of persons in various institutions, public, private, medical and non-medical. The Study Group summarized the present situation as follows:

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Under present law payments cannot be made to "inmates of a public institution" (P.L. 92-503, Section (1) (G) (ii)). SSI policy defines an institution as a facility which provides more than room, board, and laundry services to four or more people who are not related. A public institution is defined in SSI rules as a facility operated by a government or which has administrative or fiscal arrangements controlled by a governmental unit. An inmate is defined as a person who resides in such an institution.

As a result of this statutory provision and the regulations implementing it, SSI payments are denied to many individuals who are presently residing in homes for the aged, group homes, and residential care facilities that are established as shelter or personal care or domiciliary homes. The Study Group also heard testimony that, due to the subjective nature of these definitions and the varying characteristics of these facilities, the application of this provision may not be uniform throughout the Nation.

This problem is further complicated by Section 1616(e) which in certain cases requires a reduction in the basic Federal SSI payment if an institution is providing care that is or could be covered by a State's Medicaid plan.

... Many other SSI recipients cannot manage to live alone and need a sheltered care setting where they can have their food prepared and have assistance with personal needs. To deny these individuals SSI payments because the facility may be under the control of a governmental unit is not proper. Also, to reduce these payments because some of the services being provided are or could be provided in a Medicaid facility will do little more than force individuals into a nursing home even though in most cases this level of care is not necessary.

It is recommended that:

The statutory provisions concerning SSI payments to institutionalized individuals should be amended so that payments are prohibited only in cases where an individual is jailed or imprisoned and reduced only when an individual is residing in a Medicaid facility and the facility is receiving Medicaid payments on his behalf (SSI Study Group, 1976).
The Study Group further noted that:

Full implementation of a uniform payment level would require the elimination of a reduction when a recipient is in a medical institution. Maintaining the full payment level would be consistent with the concept of entitlement to a basic income regardless of place of residence. Recipient income from this source could be applied to institutional costs (SSI Study Group, 1976).

Although the Group did not recommend including persons in Medicaid institutions in the fully entitled population under SSI, others more concerned with a longer future have done so. An important effect on the system would be to move the center of gravity from the table dance of "all in" institutional care to the à la carte approach to service in which prescriptive programming is put together for each client, with his income maintenance entitlement as one component which he controls. This has sometimes been referred to as the chronic ambulatory proposal or more aptly, the "home based care model" (see Appendix A of this paper). "Home based" refers to the concept that wherever one lives is one's home, whether it be an apartment, a house, a commune, a congregate facility or even a nursing home. Board and lodging are paid for out of one's basic income—private, social security, or SSI as the case may be—and services are delivered as needed by physicians, allied health personnel, or by providers licensed for "home Health" of "chore services," or any of the range of out-of-home day services increasingly available to disabled persons living "in the community."
This model is conceptually attractive; variants are now being proposed sufficiently frequently in different contexts to suggest incremental implementation over the next quarter century. The net effect can be greater freedom of choice for consumers, and more targeted and selective service delivery, provided the "disability increment" is consciously addressed.

There are straws in the "forward thinking" wind which may countervail. Increasingly the economists and policymakers view income maintenance, and especially that portion of it directed to the lowest income quintile, in broad generic terms. In such terms the disabled and their special needs are a minority. The influencers want to target the programs on payment levels tied to the poverty level (or some percent thereof, hopefully increasing toward 100 percent). The poverty levels are defined in terms of minimal needs of average people, not people with major disabilities. The effect of this thrust has already been made apparent in the limits of eligibility set by law in Title XX, where no one may receive free service if his gross family income exceeds 80 percent of the median for his state. This stipulation defeats the provision previously made in several states by which the cut off for families with a disabled member was set somewhat higher than for able bodied families — a recognition of the "disability increment."
While the base case projection goes toward a leveling of entitlements (elimination of categories), we anticipate that there will be intervention by organizations of and for the disabled who will protect and even expand the disability increment, at least for the next decade or so.

2. **International Trends--Implications**

A. **Social Insurance**

The Social Security Administration monitors developments in the social insurance and means tested programs in 8 countries, of which about a third have appreciable relevance for the United States in terms of comparable socio-economic conditions and duration of experience. The following developments appear to set some precedents with respect to programs for the disabled in the United States. All data are drawn from the recently issued document "Social Security Programs Throughout the World, 1975."

a) Consolidation of disability and "invalidity" benefits: The term "invalidity" is used in international reporting to refer to disability which is not work-connected. Where such a distinction is made, it has in the past often been tied to a differential favoring the person with a work-connected disability. In the United States, workmen's compensation, as distinct from disabled worker's benefits under social security, has this effect. However, the U.S. system also distinguishes between disabled beneficiaries who are the primary insureds (disabled workers) and disabled persons who
are entitled because of disability as a cause of dependency status. Thus the adult disabled child is entitled to a fraction of the benefit to which his father (or mother) is entitled, not the full benefit, even after death of the father. Related to this issue is the freezing of the disabled worker's primary benefit (except for cost-of-living adjustments) in relation to his earnings history prior to becoming disabled. Thus a worker disabled early in his career receives exceptionally low benefits for the rest of his life.

There is an international trend toward consolidating work-related and "invalidity" programs and rationalizing the benefits so as to insure more fully against the consequences of disability of early onset from whatever cause (P. xxiii, xvii).

b) Attendance allowances for the disabled: Seven countries now have "constant attendance allowances" i.e., additional stipends which are "most often 50 percent of the pension, and may be paid to those who need help 12 or 24 hours a day." One purpose is to encourage home-based care.

c) Partial disability benefits: Although this mechanism has been established vis-à-vis veterans and work-related injuries in the United States, it has not been applied under social security or SSI. The net result (when combined with the earned income disregards and the reduction of benefits for living in the household of another) is that the most disabled beneficiaries are still the most disadvantaged. A
partial disability approach would rationally lead to the specification of two or more levels within what is now defined as "total" disability in the U.S. system. Note that it is well established that present systems, in composite replace prior income least adequately for the most disabled, leaving aside the greater "disability increment" (Berkowitz, 1974).

d) Family allowances: In 66 countries regular cash payments are made to families with children. These are not means tested, although the amount per child varies with family size. Occasionally, adult dependents are included. The United States is the only industrial nation not listed as having such a program (xxv). However, the working parent income tax credit system which became effective in the United States at the time of filing 1975 returns, represents an introduction of this module into our system as well, in a form which tends to limit it to low income families who do not qualify for AFDC. The United States is not likely to institute a universal family allowance system (its European origins were related to a public policy of increasing family size): However, it is possible that the SSI system might be supplemented or superceded by a flat grant "disability increment" tax credit for families with a disabled child at home. The cost would be budgeted as a "tax expenditure" rather than a general fund outlay. Such an allowance would be more equitable than the proposed double exemption which has been
repeatedly the subject of unsuccessful bills introduced by many members of Congress, usually those with little influence in the Ways and Means or Senate Finance Committees. The logic of reimbursing families for at least the excess cost (disability increment) of home care of children as well as adults has been increasingly mentioned in relation to the "deinstitutionalization" thrust, and in fact, is being selectively implemented in New York State.

B. Health Care Costs

In a recent survey of health care patterns and characteristics in seven countries on three continents, the United States emerged as the country which still relies most heavily on "individual liability" as an underlying social assumption about responsibility for health care costs. This is correlated with a low measure of "health as a societal value" compared to European countries. However, the United States shared relatively favorable "chronicity" measures with other countries in the western hemisphere and western Europe (Kohn, 1976). The increasing interest in national health insurance is an indicator that we will be moving toward greater "collectivism" in this arena.

This will have important consequences for the disabled. However, it is quite likely that the short term consequences will be to put the disabled at a relative disadvantage. The costs of any such plan dictate that it be instituted in stages. The current debate in Congress focusses on the
issue of "catastrophic" vs. widespread coverage, i.e. do we cover a few people for calamitous costs, especially cumulative costs, without limit, or do we cover everyone for their first physician visit. The latter model is favored by the AFL-CIO and is politically attractive because many voters will be conscious of receiving some benefit, and only a few voters will be worse off, i.e. will be paying the considerable premium while remaining uncovered for the extraordinary event.

It should be pointed out that Medicare does not now cover these extraordinary events even for the elderly. In fact, Medicare covers overall only about 8 percent of medical costs. President Ford's recommendation to increase the current initial Medicare deductible for the aged and disabled in order to provide such catastrophic coverage was opposed by groups representing the vocal elderly. The disabled (a minority) would have benefitted more than the elderly under the Ford proposal but were not heard from politically.

The subject of long term care (institutional and non-institutional) under national health insurance is a matter of concern to policymakers. Many anticipate that a residual means-tested program (Medicaid) will be necessary during the first decade (more or less) of NHI. If so, some means must be found for making Medicaid coverage more uniform and equitable on a nationwide basis, since variations in present state plans leave many medically indigent and/or uninsurable people uncovered.
3. Consumerism—Implications. Even in a society which is relaxing its adherence to the "work ethic," many of the handicapped of employable age will press for opportunities to work and to earn their keep. This thrust is seen in the recent "rights" amendments to the Rehabilitation Act (Sections 503 and 504). Before issuing regulations to implement these provisions, the Office for Civil Rights commissioned a study of costs and benefits, examining effects of new mandates for education of the handicapped, along with affirmative action for their employment. The report of Dave M. O'Neill of the Public Research Institute was included in the Federal Register 41:96, May 17, 1976, Part V. It anticipates benefits of $500 million vs. costs (to employers) of "reasonable accommodations" estimated at $50 million. We may anticipate, however, that the handicapped will seek further recognition (by tax considerations and public accommodation, especially relative to transportation and housing) of the "disability increments" experienced by them personally, and that these will appear more costly to the public.

There is also a faction which will press for application of the Fair Labor Standard minimum wage to handicapped workers, even when productivity or specific cost may result in a net loss to the employer. The proponents of paying disabled (as distinct from merely handicapped) workers a standard hourly wage for whatever work is performed, as preferable to "welfare," frequently fail to project the consequences for
the disabled person of losing other income maintenance benefits. Provision can, of course, be made for offsetting such losses. It seems doubtful that this will be a popular course in the near future. However, in 1975 the AFL-CIO decided to encourage unionization of sheltered workshop employees.

Consumers will, however, press more loudly for further public accommodation to their needs in the transportation and housing fields, as well as carrying to conclusion the implications of the architectural barriers legislation. Data on these thrusts is reported under other headings in other papers commissioned by Texas Tech. The relevance here is to the future perception of the "disability increment." To the extent that the cost of disability to the individual is reduced by public accommodation (e.g. he can use public transportation rather than a cab), by so much is his individual "disability increment" reduced. From the point of view of the IM system, we can expect the handicapped to press for various forms of offset for the persisting increments, by opposing "decategorization" of the income maintenance mechanisms, particularly public assistance, as previously mentioned. They will seek a combination of "standard" increments to be incorporated in the IM payment itself, possibly including the "constant attendance allowance" used in social insurance systems in other countries. In addition, they will seek to secure entitlements to services (health,
social habilitational) which are peculiar to the "universe" of the handicapped and disabled and which are not means tested to this limited using group. Such services will not be exclusively professional but will include "social care" components which replace mutual social support services within a family, when the individual lacks this support.

4. Structure of the Service System--Desegregation

Nursing homes and intermediate care facilities will continue in the short run to be financed primarily by single fee vendor payments to "all in" institutions. There will also develop a clearer array of "alternative" arrangements ranging from supervised apartment living through foster care to various kinds of communal or congregate arrangements. Susan Roos has recently completed a Delphi Study indicating that experts in the field of mental retardation anticipate that by the mid-1980's the group home will be the modal style for the retarded, although that is not necessarily preferred. The diverse possibilities are indicated in the PCMR publication "People Live in Houses." Accommodations for the physically handicapped are also being diversified. The crucial issues are more social than architectural although more barrier free housing is still needed.

The IM system will impact on the service delivery system to the extent to which (1) basic maintenance (cash transfer) levels reach a level adequate to cover basic needs, (2) a method for disability increment is incorporated, (3) medical
care coverage is redefined to include comprehensive medical rehabilitation, home health care, and maintenance of prostheses and equipment, but to exclude board and lodging in long-term care (more than six months), and (4) social services for the disabled, especially low cost, intermittent services and transportation, are made "universal" for that universe. If these changes occur in the "non-medical" long term care sector (which includes not only ambulatory individuals but those who are "mobile non-ambulatory" after rehabilitation), we can expect, in the longer perspective, changes in the institutional scene as well, in the direction of prescriptive programming, with multiple providers converging on the same client.

Essential to this trend will be the emergence of a new breed of professional and paraprofessional, the individual case advocate or individual program coordinator, a person with professional responsibility to the individual client to assist him in securing from multiple sources the components of the good life which he specifically needs. One component of such a life for a person severely disabled will always be part or all of his basic maintenance—which the IM system can be expected increasingly to provide.

In the case of a handicapped adult who is ultimately able to operate as "not disabled" the case advocacy or broker role has traditionally been performed by the vocational rehabilitation counselor. The work is intensive and relatively
short term. Increasingly we know that the severely handicapped may require some "follow-along." Where the handicap involves significant impairment of social competence, ongoing, open ended case work will be needed. Such a professional role requires a temperament and professional tempering not found in most "generic" curricula. There are now significant models for this role and increasing support for the notion (under one name or another) among policy leaders.

**L'ENVOI**

The tension between perceived overprotection and underprotection, self-determination and societal intervention, will continue. As individuals become more definitively entitled to income maintenance in the form of cash transfers, as a result of disability, providers and families and representative payees will have interests in maintaining the flow and utilizing the proceeds. External advocates, some self-appointed, will attempt to challenge the basis for these special entitlements, perhaps calling them "dehumanizing." Thus some time early in the twenty-first century, a new round of normalization, main-streaming, decategorization and unlabeling may attenuate the disability increments achieved by consumerism in the 1980's. Once again, the vocal handicapped will survive, the moderately disabled will muddle through and the severely disabled who lack savvy will become the new disadvantaged minority, this time "in the community," but not of it.
APPENDIX A
CHANGING STRUCTURE OF HUMAN SERVICES - THE CASE MANAGER


The New Technology for Social Care

The provision of an array of human services for various levels of social dependency is one of two major aspects of the new technology for social care; the second is provision for continuity in care. We will discuss each of these in turn.

Services for the aged infirm and for the mentally ill, mentally retarded, blind or otherwise physically disabled individual are packaged from an array of community services. Individual service prescriptions should depend upon the level of support needed to sustain social functioning and to normalize the handicapped person's life.

The first level of social support comes from a person's family, friends, fellow workers, and neighbors. If they can tolerate and cope with his limitations or handicaps, he may never become a client or patient or need special help beyond that used by all citizens, i.e., health care for acute illness. If, however, they are distressed by his incapacities, they may urge him to seek professional help. If he does, it is these informal caretakers who must be involved during the
rehabilitation process so that they can aid the patient/client when he is discharged from the services network.

If the behavior which distresses the person and/or his family is also publicly visible, other kinds of people may act as "case-finders" who turn him in the direction of help. In a complex society these case-finders are doctors, ministers, nurses, social workers, policemen, teachers, bartenders, etc. (The troubled person may or may not get connected to the best source of help, however.) The person who serves as a case-finder occasionally may also provide treatment services at the level of intervention.

The second level of social support is represented by specialized treatment: rehabilitative, or rehabilitative services, which are offered on an out-patient/ambulatory care basis. They may be delivered to the person's home (meals-on-wheels) or he may go out to get them (congregate meals).

At the next higher level is the semi-protective environment. This includes supervised living arrangements such as foster homes or hostels, half-way houses, and night hospitals. It also includes special daytime facilities such as day care for handicapped children or adults, and sheltered workshops. These arrangements provide ways of dealing with social or physical inadequacies without separating a person from all of his usual or possible social interactions; they are social prosthetics for enduring disabilities.
Sometimes it is necessary to protect a disabled or ill person in the more restrictive sense of "total care" in a residential institution. This is the fourth and highest level of social sustaining. It is clear, however, that fewer people will receive total institutional care when communities begin to develop alternative sustaining services at various levels of social support. This does not imply that there is never a need for institutional care; extremely severe social and/or physical disabilities require a completely protective environment. For some this means lifetime care, while for others it means brief but recurring asylums during acute phases of illness or social breakdown. Hospitals, sanitoria, nursing homes, and enclosed communities such as Synanon provide this type of care.

The new technology of social care draws pharmacopoeia for individualized prescriptions appropriate for various levels of social functioning. Continuity in care is also provided. The latter aspect is lagging; resources have been developed but are not organized for maximum benefit. Energy, perceptivity, and imagination are given to the development of new specific services, yet there is no adequate arrangement for ensuring continuity in care. The party to whom this responsibility belongs is still to be determined. In rural society it is up to the consumer to choose his service, how much, and where. Yet anyone who looks at the health picture, and particularly at mental health, can see the pitfalls of
caveat emptor. The problem of continuity in care is not unlike what is often called the urban crisis; there are lots of bits and pieces but no discernable and acceptable pattern.

Let us consider what continuity in care means. A person in distress can count on having the right kind of treatment at the right time. There will be a process for guiding him to the appropriate source and amount of help, neither too much nor too little. One successfully tested solution is the use of case managers who have access to all levels of service interventions, and who can guide the client/patient from one service level to another. It is too much to ask a troubled person or his family to find their way along a maze of specialized services, play the role of diagnostician, and to locate the essential services.

The case manager, therefore, 1) provides entry into the service system, 2) sees that the client is moved up or down the ladder of social supports as social competencies wax or wane, and 3) serves as a "case-loser" who facilitates the exit from the services system. The goal is to keep the client at the lowest level of community support compatible with his changing needs. We should not expect that a client will always remain at a given level of dependence; the case manager monitors the situation and changes it when indicated. For example, a chronic schizophrenic should not be kept in an institution if he can function with the help of out-patient
aftercare services and a supervised living arrangement. Neither should he be forgotten in a boarding home when some new stress has precipitated a crisis that warrants a return to the mental hospital.

A case manager 1) provides information; 2) makes referrals and follows up on referrals; 3) provides means of access when there are social, psychological, economic, or bureaucratic obstacles to obtaining needed services; and 4) serves as advocate if services to which a client is entitled are withheld or denied. He should be able to write out vouchers for the purchase of those services that the client cannot afford.

Case managers can be located in a variety of public and private agencies. In neighborhood service centers, like informal neighborhood caretakers, they come to be known and trusted by the residents. Case managers who become familiar with the subculture of their clients' neighborhoods can build information bridges between potential clients and the professional world of specialized services. Generalists in their approach, they should have a cadre of backup human services specialists in community, regional, or state agencies.

In summary, the new technology for social care consists of the following:

1. An array of available community resources providing varying levels of social support to fill service prescriptions based on individual needs. Services
will not be organized on a categorical basis for the aged, blind, or disabled; rather, they will be organized around the notion that any individual or family may encounter a variety of stressors throughout the life cycle (such as the birth of a retarded child or the need to find a nursing home for one's aged and ailing parent). Of course, some services will be designed specifically for the mentally retarded, the mentally ill, or the blind, but most of these services will not be related either to the disability or to the level of income. The services will be related, instead, to the cultivation, restoration, and conservation of social competence. Service prescriptions will differ not so much in type of affliction as in the level of sustaining intervention required.

2. Continuity in care, ensued by case managers who link troubled persons with community resources through consultation, referral, access to services, and advocacy when necessary. They are responsible for matching the client's level of social functioning to the community's level of sustaining interventions.
DIFFERENT TYPES OF CASH PROGRAMS, THEIR FORMS, AND THE TRADE-OFFS IMPLICIT IN THEIR STRUCTURE

The government has available a range of programs to provide cash income transfers to members of the low-income population so that they might attain a minimum adequate level of command over goods and services. Noncash transfer programs that meet consumption needs that cannot be adequately supplied by direct cash transfers are not considered here. However, it is assumed that there will always be a need for some such programs (catastrophic health coverage, for example), even if a cash program provides fairly generous and universal coverage. The extent to which it will be possible to eliminate a multitude of noncash programs will be influenced directly by the degree of adequacy and coverage of any cash program. Accordingly, some of the examples included here use what might appear to be a rather high basic benefit level ($4,000 for the proverbial urban family of four); it should be kept in mind that this example assumes that some in-kind programs are cashed out. The greater the extent to which cash basic benefit levels are below this amount, the greater will be the pressure and need for many noncash programs for the low-income population.
It is assumed, in light of the conclusions in the first section, that the objectives of cash programs are to provide adequate benefits in an equitable way at minimum cost in an administratively simple manner without inducing undesirable behavioral responses. Given these goals, all such programs should share one common characteristic: a benefit level conditioned on family size and income. Few would quibble with these as objectives for an income transfer system. However, they do not compose an exhaustive set of concerns, for policymakers often are worried as well about who ought to receive benefits and under what conditions. Different weights placed upon different concerns have resulted in preferences for different program types.

To see how this happens, it will be useful to begin this consideration of types of programs by describing the simplest and most universal program type, and then examining how the introduction of different concerns and changes in their weighting leads to alterations in program design. Finally, an approximation of our current system, with all of its undesirable attributes, is arrived at. Along the way, most of the programs that have been suggested as possibilities for welfare reform are identified. The more universal programs are considered at some length here; the more categorical ones are considered in detail later. Adopting this approach has two distinct advantages:
It presents a broad overview of most of the different types of programs available prior to more detailed discussion.

It helps to clarify what is being relinquished in order to gain something else. An understanding of this enhances the ability of policymakers to select an appropriate balance among somewhat conflicting objectives.

These policy concerns, together with the problems raised by multiple program participation and poor program integration, go far toward defining the present dilemma.

**Positive and Negative Taxes**

The federal income tax is universally applied among the population. But within its structure, forms of tax relief or tax aids are provided that are related to the welfare concept or more broadly, to income maintenance. These structural features exclude from income tax liability persons below certain levels of income, based on size of family, and provide tax relief according to marital status, age, or disability. Moreover, certain types of income received are excluded from the tax base, and certain types of expenditures are deductible from income, resulting in a wide range of substantial tax subsidies or transfers to the nonpoor.

These tax relief features were adopted to provide equity according to the ability-to-pay principle and to create financial rewards for certain types of behavior. In a conceptual sense, the welfare principle might be the converse of the ability-to-pay principle—that is, people
should receive transfer payments according to their ability-to-receive, their need. Accordingly, income-tested transfer payments should be viewed as negative taxes and tax relief from positive taxes should also be viewed as negative taxes (or implicit transfers, also sometimes referred to as "tax expenditures").

Many of the public issues and debates that deal with relief from the income tax and with welfare are related to the public interpretation of the concepts of ability-to-pay and ability-to-receive, respectively.

The personal exemption provisions in the income tax system, in conjunction with the low-income allowance, ensure that no family incurs a federal income tax liability until its income exceeds the poverty level. This feature of the tax system could be interpreted as a public judgement that no family or person should be required to share in the support of the government until it earns at least enough to provide for its own minimum needs. A logical extension of this principle would imply that the tax system transfers funds to those whose income is below this minimum standard. As we have seen, our present welfare system does this to some extent, but not in a very satisfactory or comprehensive manner.
A Universal Refundable Tax Credit

A fully integrated universal tax-and-transfer system, more than any other program type, might achieve the goals of adequacy, simplicity, equity, and absence of undesirable behavioral response. This is accomplished by instituting a "refundable tax credit," which would work in the following way: each person in the country is credited with a yearly grant or credit (say $1,300 per adult and $700 per child in high-cost areas). This would replace the existing provisions for personal exemptions, so that all income (other than that taken out of the tax base for other reasons) excluding the grant is taxed. If the family's tax liability exceeds its credit or grant, it pays net taxes; if not, it receives a net transfer.

This program (as is true of all income-tested transfer systems) has the same basic design as the pure negative income tax (NIT), but can be administered more easily. The basic benefit level is the amount of the family's credit or grant. The tax rate or benefit reduction rate is that contained in the income tax system. Income is whatever is in the income tax base. The breakeven point is that income level where the credit and tax liability are equal.

One of the most desirable features of this program is its simplicity and objectivity. No information is required that is not presently on the income tax form, and no independent administrative structure is needed. Instituting a
universal tax credit would, of course, substantially add to the administrative burden of the Internal Revenue Service (IRS), but this burden would be insignificant in comparison to the administrative structures that are necessary to sustain the existing income-tested cash and noncash transfer programs. In addition, under a unified tax-and-transfer system, there would be no "welfare population" that could be delineated and stigmatized. Such a system might well be socially cohesive rather than divisive as is the present system.

On the other hand, such a universal tax credit is likely to require substantial changes in the positive tax system, including major alterations in the definition of taxable income and allowable deductions. Because the benefit reduction (or tax) rate related to the credit would be applicable in the tax system, it is expected that the marginal tax rate would be fairly modest. Under a system with a $4,000 credit for a family of four and a 33 percent tax rate over the lower range of income levels, families of this size with incomes up to $12,000 would still be receiving a net transfer. If the goal is general income redistribution, this result is not undesirable and may even generate additional political support. High-income families would be financing transfers to low-income and middle-income families, even though many of those low-income families were not in poverty. However, if the goal is simply to assure that only extremely low-income families are raised to a minimum adequate level of
income, the refundable tax credit should be scored for a lack of target efficiency. A program that is "target efficient" in this sense—by raising all family incomes to the minimum standard—achieves its goal with a minimum of spillover (net transfer to those whose incomes are already above the minimum standard).

Thus, financing the refundable tax credit at any substantial level would require a significant change in our present tax structure. Such changes might be welcomed by many, but as a practical matter they would have to be considered a severe obstacle to the institution of a tax credit that would permit the elimination of many present welfare programs.

A Universal Negative Income Tax

If it is felt that substantial modification of the current income tax system is impossible, or if the large size of the population that would receive net transfers under a refundable tax credit scheme is thought to be undesirable, the minimum adequacy goal can be approached via a two-part tax-and-transfer system, generally referred to as a "negative income tax." The principles underlying the universal negative income tax and the refundable tax credit are identical: (1) Each family is assured a basic benefit level related to family size and living situation; (2) the higher the income of the family, the less the net transfer benefit; and (3) at some level of income (the break-even level), the family becomes a net taxpayer instead of a transfer recipient.
A negative income tax proposal, as usually presented, differs from the refundable tax credit proposal in that under a negative income tax, net transfer recipients would be subject to a different structure of tax rates—and possible income base, filing unit, and accounting period definitions (see Appendix)—than are net taxpayers. Negative income tax proposals usually contain a high constant marginal tax rate (say, 50 percent to 67 percent). Because of this, the size of the population receiving a net transfer is much smaller than under a refundable tax credit with the same basic benefit level so that persons are not simultaneously receiving a benefit and paying taxes. Ideally, the breakeven level of income should coincide with the income that is exempted from taxation in the positive tax system. At this income level, the family leaves the negative tax system and joins the positive tax system with its lower and presumably progressive tax rates.

Thus, a universal negative income tax overcomes two of the possible objections to a refundable tax credit. It does not require major modification of the positive tax system, and it can restrict coverage to the poor and near poor while providing reasonable adequate benefits by levying a high tax rate on the earnings and other income of recipients. With a 67 percent tax rate and a $4,000 basic benefit, a family of four ceases to be eligible for any transfer when its countable income rises to $6,000. This greater target
efficiency does not come without cost, for we have kept the complexity of our existing positive tax system and added to it a tax-and-transfer scheme at the low end of the income scale. In order to limit coverage, high marginal tax rates have been imposed on those who are transfer recipients. So, relative to the refundable tax credit, target efficiency has been increased at the expense of significantly increased administrative costs and complexity, and of potentially greater work disincentives. In addition, we have now somewhat separated out and possibly facilitated the stigmatization of a particular population.44

The Inclusion of Additional Considerations

A refundable tax credit or negative income tax can be universal, as described just above, or categorical. In order to limit costs and preserve popular support, legislative proposals to date have limited negative income tax type proposals to families with children (FAP) or to the aged, blind, and disabled (SSI), thus excluding non-aged able-bodied childless couples and unrelated individuals who may be equally needy.
### APPENDIX C
**GROWTH OF PUBLIC AND PRIVATE EXPENDITURES**


#### TABLE 9
**EXPENDITURES FROM PUBLIC AND PRIVATE FUNDS FOR CASH TRANSFER PAYMENTS (EXCLUDING ADMINISTRATION), SELECTED FISCAL YEARS, 1950-75**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cash Transfer Payments</th>
<th>Public</th>
<th>Social Insurance</th>
<th>Veterans' Programs</th>
<th>Public Assistance and Supplemental Security Income</th>
<th>Private Employee Benefits</th>
<th>Public as Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>$10,112</td>
<td>$9,147</td>
<td>4,447</td>
<td>2,423</td>
<td>2,277</td>
<td>965</td>
<td>90.5</td>
</tr>
<tr>
<td>1955</td>
<td>$16,609</td>
<td>14,717</td>
<td>9,118</td>
<td>3,094</td>
<td>2,502</td>
<td>1,895</td>
<td>88.0</td>
</tr>
<tr>
<td>1965</td>
<td>$40,831</td>
<td>23,683</td>
<td>26,439</td>
<td>4,526</td>
<td>3,918</td>
<td>5,955</td>
<td>85.4</td>
</tr>
<tr>
<td>1970</td>
<td>$69,995</td>
<td>58,410</td>
<td>44,814</td>
<td>5,849</td>
<td>7,746</td>
<td>11,585</td>
<td>83.4</td>
</tr>
<tr>
<td>1972</td>
<td>$94,857</td>
<td>80,097</td>
<td>62,559</td>
<td>6,678</td>
<td>10,859</td>
<td>14,760</td>
<td>83.4</td>
</tr>
<tr>
<td>1973</td>
<td>$108,581</td>
<td>91,011</td>
<td>72,831</td>
<td>7,085</td>
<td>11,086</td>
<td>16,570</td>
<td>83.4</td>
</tr>
<tr>
<td>1974</td>
<td>$121,548</td>
<td>103,073</td>
<td>83,436</td>
<td>7,257</td>
<td>12,381</td>
<td>18,475</td>
<td>83.4</td>
</tr>
<tr>
<td>1975</td>
<td>$147,533</td>
<td>126,833</td>
<td>103,671</td>
<td>8,073</td>
<td>15,089</td>
<td>20,700</td>
<td>86.0</td>
</tr>
</tbody>
</table>

1. Preliminary estimates.
2. Includes cash benefits paid under workmen's compensation and temporary disability insurance laws by private insurance carriers and self-insurers.
3. Veterans' pensions and compensation and life insurance.
4. Under private pension plans; group life (including government, civilian employee programs), accidental death and dismemberment, and cash sickness insurance; paid sick leave; and supplemental unemployment benefit plans. Temporary disability insurance benefits under State legislation excluded here and included under "social insurance" above.
### APPENDIX C

**GROWTH OF PUBLIC AND PRIVATE EXPENDITURES**


#### TABLE 10

**PUBLIC AND PRIVATE EXPENDITURES FOR SOCIAL WELFARE PURPOSES, SELECTED FISCAL YEARS, 1950-75**

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</thead>
<tbody>
<tr>
<td><strong>All Expenditures (In Millions)</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Total, net</td>
<td>$35,337</td>
<td>$49,957</td>
<td>$78,704</td>
<td>$117,871</td>
<td>$211,033</td>
<td>$270,486</td>
<td>$301,538</td>
<td>$333,217</td>
<td>$388,695</td>
</tr>
<tr>
<td>Public</td>
<td>23,508</td>
<td>32,640</td>
<td>52,293</td>
<td>77,175</td>
<td>145,761</td>
<td>191,414</td>
<td>214,390</td>
<td>239,303</td>
<td>286,547</td>
</tr>
<tr>
<td>Private</td>
<td>12,160</td>
<td>17,997</td>
<td>27,790</td>
<td>42,766</td>
<td>67,995</td>
<td>82,741</td>
<td>91,384</td>
<td>98,727</td>
<td>107,752</td>
</tr>
<tr>
<td>Income maintenance</td>
<td>16,723</td>
<td>17,301</td>
<td>29,827</td>
<td>42,530</td>
<td>72,399</td>
<td>98,610</td>
<td>112,244</td>
<td>126,131</td>
<td>152,794</td>
</tr>
<tr>
<td>Public</td>
<td>9,758</td>
<td>15,409</td>
<td>26,292</td>
<td>36,575</td>
<td>60,816</td>
<td>83,850</td>
<td>95,674</td>
<td>107,656</td>
<td>132,094</td>
</tr>
<tr>
<td>Private</td>
<td>965</td>
<td>1,895</td>
<td>3,535</td>
<td>5,955</td>
<td>11,595</td>
<td>14,760</td>
<td>16,570</td>
<td>18,475</td>
<td>20,700</td>
</tr>
<tr>
<td>Health</td>
<td>12,027</td>
<td>17,330</td>
<td>25,856</td>
<td>38,892</td>
<td>69,201</td>
<td>86,687</td>
<td>95,383</td>
<td>104,031</td>
<td>118,499</td>
</tr>
<tr>
<td>Public</td>
<td>3,065</td>
<td>4,421</td>
<td>6,395</td>
<td>9,535</td>
<td>25,237</td>
<td>33,289</td>
<td>36,388</td>
<td>40,879</td>
<td>49,947</td>
</tr>
<tr>
<td>Private</td>
<td>8,962</td>
<td>12,909</td>
<td>19,461</td>
<td>29,357</td>
<td>43,396</td>
<td>53,398</td>
<td>58,996</td>
<td>63,152</td>
<td>68,552</td>
</tr>
<tr>
<td>Education</td>
<td>10,914</td>
<td>14,286</td>
<td>21,742</td>
<td>34,228</td>
<td>62,368</td>
<td>73,834</td>
<td>81,246</td>
<td>87,656</td>
<td>98,359</td>
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<tr>
<td>Public</td>
<td>9,366</td>
<td>11,863</td>
<td>18,034</td>
<td>28,219</td>
<td>51,922</td>
<td>61,591</td>
<td>68,027</td>
<td>73,356</td>
<td>82,859</td>
</tr>
<tr>
<td>Private</td>
<td>1,548</td>
<td>2,343</td>
<td>3,706</td>
<td>6,049</td>
<td>10,446</td>
<td>12,283</td>
<td>13,219</td>
<td>14,300</td>
<td>15,500</td>
</tr>
<tr>
<td>Welfare and other services</td>
<td>2,004</td>
<td>1,797</td>
<td>2,658</td>
<td>4,291</td>
<td>9,988</td>
<td>15,024</td>
<td>16,901</td>
<td>20,212</td>
<td>24,647</td>
</tr>
<tr>
<td>Public</td>
<td>1,319</td>
<td>947</td>
<td>1,570</td>
<td>2,916</td>
<td>7,788</td>
<td>12,724</td>
<td>14,301</td>
<td>17,412</td>
<td>21,647</td>
</tr>
<tr>
<td>Private</td>
<td>685</td>
<td>850</td>
<td>1,088</td>
<td>1,375</td>
<td>2,000</td>
<td>2,300</td>
<td>2,600</td>
<td>2,800</td>
<td>3,600</td>
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<tr>
<td>Public Expenditures as Percent of Expenditures for Specified Purposes</td>
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<td>Total</td>
<td>65.9</td>
<td>64.5</td>
<td>65.3</td>
<td>64.3</td>
<td>68.2</td>
<td>69.8</td>
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<td>72.7</td>
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<tr>
<td>Income maintenance</td>
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<td></td>
</tr>
<tr>
<td>1950</td>
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<td>89.0</td>
<td>88.1</td>
<td>86.0</td>
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<td>24.7</td>
<td>24.5</td>
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<td>38.4</td>
<td>38.1</td>
<td>39.3</td>
<td>42.1</td>
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<td>1970</td>
<td>85.8</td>
<td>83.5</td>
<td>83.0</td>
<td>82.2</td>
<td>83.3</td>
<td>83.4</td>
<td>83.7</td>
<td>83.7</td>
<td>84.2</td>
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<tr>
<td>1975</td>
<td>65.8</td>
<td>52.7</td>
<td>59.1</td>
<td>68.0</td>
<td>78.0</td>
<td>84.7</td>
<td>74.6</td>
<td>86.1</td>
<td>87.8</td>
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<tr>
<td>Health</td>
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<td>Welfare and other services</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>13.4</td>
<td>13.2</td>
<td>15.9</td>
<td>18.0</td>
<td>22.1</td>
<td>24.6</td>
<td>24.6</td>
<td>24.7</td>
<td>27.3</td>
</tr>
</tbody>
</table>

1 Total expenditures adjusted to eliminate duplication resulting from use of cash payments received under public and private social welfare programs to purchase medical care and educational services.

2 Includes cash benefits and administrative costs under social insurance, public assistance, supplemental security income, and veterans' and emergency employment programs. Excludes cost of medical services provided in conjunction with these programs and for other welfare programs.

3 Preliminary data.

4 Before adjustment for elimination of duplication.
APPENDIX D
FEDERAL INCOME SECURITY PROGRAMS
AFFECTING THE DISABLED


SPECIAL ANALYSIS L
FEDERAL INCOME SECURITY PROGRAMS

Federal income security programs provide essential income protection for millions of Americans. A major, although not exclusive, objective of these programs is to increase the income of people at the lower end of the income scale. The programs included in this analysis are divided into two broad categories:

Cash benefits, such as social security and other income replacement programs.

In-kind benefits, such as health care and food stamps, which effectively increase real income by providing necessary goods.

In addition, tax expenditures for income security are expected to result in lost revenues of over $20 billion in 1977.

The projections shown under medicaid for 1977 assume that States will spend 97% of the total spent under the proposed Financial Assistance for Health Care Act for medical purposes (the same proportion projected for 1977 under existing law) and distribute it among target groups as estimated for 1976.
Overview

Total Federal income security benefits are estimated to exceed $177 billion in 1977. This represents an increase of over $43 billion or about 27%, from the 1975 total of $139 billion.

Several factors account for this change:

In increases in the number of beneficiaries;

2. Increases in the bases (usually, past earnings) used in computing benefits;

3. Adjustments required by law to compensate for cost of living increases; and,

Higher prices for in-kind benefits (notably, food and medical care) provided under some programs.

Target Groups

Federal income security programs maintain or supplement income of persons and families whose capacity for self-support is reduced by old age, disability, illness, unemployment, poverty, or death of the primary wage earner.

Where self-support is possible in part or in the future, income security programs provide supplementary or temporary support. Where self-support is not possible, income security programs provide basic support.

The analysis below is organized by target group, i.e., programs are discussed as they provide support to people sharing similar problems and circumstances—the aged (annuitants and others), the unemployed, mothers with small children and no breadwinner, and those low-income persons who do not earn enough to provide for basic needs. Needs-tested.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal outlays for cash benefits:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social security (OASDI)</td>
<td>62,469</td>
<td>71,386</td>
<td>19,569</td>
<td>81,340</td>
</tr>
<tr>
<td>Federal employee benefits</td>
<td>13,986</td>
<td>16,458</td>
<td>4,478</td>
<td>18,922</td>
</tr>
<tr>
<td>Veterans benefits</td>
<td>8,140</td>
<td>8,782</td>
<td>2,268</td>
<td>8,679</td>
</tr>
<tr>
<td>Public assistance</td>
<td>8,672</td>
<td>9,745</td>
<td>2,713</td>
<td>10,870</td>
</tr>
<tr>
<td>Unemployment insurance</td>
<td>12,221</td>
<td>17,902</td>
<td>3,609</td>
<td>15,428</td>
</tr>
<tr>
<td>Railroad retirement</td>
<td>3,034</td>
<td>3,422</td>
<td>893</td>
<td>3,624</td>
</tr>
<tr>
<td>Other programs</td>
<td>1,063</td>
<td>1,164</td>
<td>285</td>
<td>1,113</td>
</tr>
<tr>
<td>Proposed legislation included above</td>
<td></td>
<td></td>
<td>(-33)</td>
<td>(-906)</td>
</tr>
<tr>
<td><strong>Subtotal, cash benefit outlays</strong></td>
<td>209,385</td>
<td>128,859</td>
<td>33,815</td>
<td>140,026</td>
</tr>
<tr>
<td><strong>Federal outlays for in-kind benefits</strong></td>
<td>6,468</td>
<td>7,968</td>
<td>1,658</td>
<td>6,334</td>
</tr>
<tr>
<td>Food and nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Health care</td>
<td>21,513</td>
<td>25,341</td>
<td>6,722</td>
<td>28,162</td>
</tr>
<tr>
<td>Housing</td>
<td>2,072</td>
<td>2,295</td>
<td>559</td>
<td>2,551</td>
</tr>
<tr>
<td>Proposed legislation included above</td>
<td></td>
<td>(-447)</td>
<td>(-701)</td>
<td>(-4,449)</td>
</tr>
<tr>
<td><strong>Subtotal, in-kind benefits outlays</strong></td>
<td>30,053</td>
<td>35,604</td>
<td>8,939</td>
<td>37,047</td>
</tr>
<tr>
<td><strong>Total benefits</strong></td>
<td>139,638</td>
<td>164,463</td>
<td>42,755</td>
<td>177,073</td>
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### TABLE L-2
**INCOME SECURITY BENEFITS BY TARGET GROUPS (IN MILLIONS OF DOLLARS)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annuitants</td>
<td>39 743</td>
<td>45 921</td>
<td>52 581</td>
<td>12 838</td>
<td>33.3</td>
</tr>
<tr>
<td>Other aged</td>
<td>41 419</td>
<td>46 797</td>
<td>51 791</td>
<td>10 371</td>
<td>25.0</td>
</tr>
<tr>
<td>Disabled</td>
<td>21 297</td>
<td>25 045</td>
<td>28 478</td>
<td>7 181</td>
<td>33.7</td>
</tr>
<tr>
<td>Mothers and children</td>
<td>7 358</td>
<td>8 989</td>
<td>9 113</td>
<td>1 755</td>
<td>23.9</td>
</tr>
<tr>
<td>Temporarily unemployed</td>
<td>12 744</td>
<td>18 375</td>
<td>15 868</td>
<td>3 094</td>
<td>24.2</td>
</tr>
<tr>
<td>Other transitional low income</td>
<td>9 720</td>
<td>11 559</td>
<td>11 253</td>
<td>533</td>
<td>15.8</td>
</tr>
<tr>
<td>Other</td>
<td>7 328</td>
<td>8 476</td>
<td>7 989</td>
<td>661</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>139 638</strong></td>
<td><strong>164 463</strong></td>
<td><strong>117 073</strong></td>
<td><strong>37 435</strong></td>
<td><strong>26.8</strong></td>
</tr>
</tbody>
</table>
benefits are included in this analysis by target group and are presented in a separate summary table (L-6).

Benefits to the disabled in the uniformed services are scaled to the degree of physical impairment rather than previous levels of earnings. Disability retirement from the military, and veterans compensation and indemnities; both are provided for disabilities which are presumptively service-connected. Veterans' pensions are paid to persons with non-service-connected total disability who served in the armed services during wartime and whose income falls below minimum levels.


Beginning in 1974, 1.3 million needy disabled received assistance under the new Federal supplemental security income program enacted in 1972 to replace State administered programs of assistance to the blind and disabled. By 1977, that number will grow to 2.3 million needy disabled.

Approximately 4.6 million persons will receive disability benefits under social security in 1977. Another 302,000 individuals will receive benefits through Federal civilian employee programs. There is a substantial overlap between
TABLE L-6
BENEFIT OUTLAYS FOR THE DISABLED: BENEFITS,
BENEFICIARIES, AND AVERAGE PAYMENT

<table>
<thead>
<tr>
<th></th>
<th>BENEFIT OUTLAYS</th>
<th>NUMBER OF BENEFICIARIES</th>
<th>AVERAGE MONTHLY PAYMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in millions of dollars)</td>
<td>(thousands)</td>
<td>(in dollars)</td>
</tr>
<tr>
<td>Civilian covered employment:</td>
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</tr>
<tr>
<td>Disability insurance:</td>
<td>7.63</td>
<td>9.14</td>
<td>10.76</td>
</tr>
<tr>
<td>Federal civilian employees:</td>
<td>1.36</td>
<td>1.65</td>
<td>1.96</td>
</tr>
<tr>
<td>Railroad employees:</td>
<td>2.06</td>
<td>2.30</td>
<td>2.51</td>
</tr>
<tr>
<td>Coal miners:</td>
<td>6.12</td>
<td>6.21</td>
<td>5.57</td>
</tr>
<tr>
<td>Medicare:</td>
<td>1.36</td>
<td>1.85</td>
<td>2.13</td>
</tr>
<tr>
<td>Uniformed services:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Service-connected disability:</td>
<td>4.73</td>
<td>5.19</td>
<td>5.35</td>
</tr>
<tr>
<td>Other: Income-tested:</td>
<td>5.03</td>
<td>5.36</td>
<td>5.05</td>
</tr>
<tr>
<td>Public assistance to the disabled:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental security income:</td>
<td>2.26</td>
<td>2.70</td>
<td>3.31</td>
</tr>
<tr>
<td>AFDC (disabled male head of family):</td>
<td>5.74</td>
<td>6.50</td>
<td>7.00</td>
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<tr>
<td>Medicaid:</td>
<td>1.74</td>
<td>2.08</td>
<td>2.36</td>
</tr>
<tr>
<td>In-kind benefits to needy disabled: Food:</td>
<td>3.05</td>
<td>3.70</td>
<td>3.23</td>
</tr>
<tr>
<td>Total:</td>
<td>21.29</td>
<td>25.04</td>
<td>28.31</td>
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</tbody>
</table>

178
these two groups and those receiving disability benefits because of prior military service or employment in coal mines.
The hospital insurance program affords protection against the high costs of hospital and related care to most individuals age 65 and over, and to people under age 65 who have been entitled for at least 24 months to monthly social security or railroad retirement cash benefits because they are disabled. The program also covers treatment of chronic kidney disease for people under age 65 entitled to monthly social security benefits, for insured workers, and for spouses or dependent children of such insured or entitled individuals.

For persons on the social security and railroad retirement rolls, the cost of services covered by the hospital insurance program, and administrative costs, are financed by contributions from workers, employers, and self-employed individuals based on earnings. The maximum taxable earnings base is the same for the hospital insurance program as for the social security old-age, survivors, and disability insurance programs. Since January 1, 1974, the contribution rate applied to earnings up to this maximum has been 0.9% for employers, employees, and self-employed persons. Under present law, this rate is scheduled to remain at 0.9% through calendar year 1977. Costs for uninsured persons who attained age 65 in 1974 or earlier and who meet certain transitional
insured status requirements, are financed from general revenues of the Treasury. Uninsured persons reaching age 65 who cannot be covered under the foregoing provision of law can enroll in the program on a voluntary basis. Enrollees must pay the full cost of the protection. The monthly rate was $36 in 1975. It increased to $40 in 1976, and will rise to $45 effective July 1, 1977.

1. Benefit payments. The hospital insurance program provides protection against the cost of inpatient hospital services, post-hospital home health services, and post-hospital skilled nursing facility services, with specified deductible and coinsurance amounts. The following table shows comparative data on hospital insurance beneficiaries and on benefit payments classified by type of coverage for 1975 through 1977 (in millions).

The growth in benefit payments from 1975 to 1977 results primarily from increases in the cost of medical services and the size of the covered population.

The supplementary medical insurance program affords protection against the costs of physicians' services and certain other medical and health services. Most individuals age 65 and over are eligible for this protection, and about 95% of those eligible have elected coverage. People under age 65 who have been entitled for at least 24 months to monthly social security or railroad retirement cash benefits because they are disabled also are eligible for this protection. The program also covers treatment of chronic kidney
## Hospital Insurance Beneficiaries and Benefit Payments by Type of Coverage
### 1975 Through 1977 (In Millions)

<table>
<thead>
<tr>
<th></th>
<th>1975 Actual</th>
<th>1976 Estimate</th>
<th>1977 Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beneficiaries:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons with hospital insurance protection (average):</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>21.6</td>
<td>22.0</td>
<td>22.2</td>
</tr>
<tr>
<td>Disabled</td>
<td>2.1</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Beneficiaries receiving reimbursed services:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>4.9</td>
<td>5.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Disabled</td>
<td>6.6</td>
<td>7.2</td>
<td>.8</td>
</tr>
<tr>
<td><strong>Benefit payments:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For inpatient hospital services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>$9,033</td>
<td>$10,482</td>
<td>$2,839</td>
</tr>
<tr>
<td>Disabled</td>
<td>921</td>
<td>1,213</td>
<td>351</td>
</tr>
<tr>
<td>For skilled nursing facility services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>259</td>
<td>292</td>
<td>79</td>
</tr>
<tr>
<td>Disabled</td>
<td>8</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>For home health services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>123</td>
<td>177</td>
<td>53</td>
</tr>
<tr>
<td>Disabled</td>
<td>9</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total benefit payments:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>9,415</td>
<td>10,951</td>
<td>2,971</td>
</tr>
<tr>
<td>Disabled</td>
<td>938</td>
<td>1,233</td>
<td>358</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,353</td>
<td>12,183</td>
<td>3,329</td>
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</table>
disease for eligible people under age 65 who elect to enroll.

The costs of services covered by the program, and administrative expenses, are financed by premium payments from enrollees together with contributions from the general revenues of the Treasury. The Secretary of Health, Education, and Welfare is required by law to promulgate, by December 31 of each year, the standard monthly premium rate to be paid by enrollees in the SMI program during the fiscal year beginning the following July 1. Due to a technical deficiency in the law, however, the premium rate was frozen at $6.70 since July 1, 1974. Recently enacted corrective legislation will permit an increase to $7.20 per month effective July 1, 1976.

1. Benefit payments. Participants in the program are covered for the cost of physicians' services, home health services not covered under the hospital insurance program, outpatient services, and certain other medical costs, within specified deductible and coinsurance amounts. The following table shows comparative data on supplementary medical insurance beneficiaries and benefit payments, classified by type of coverage for 1975 through 1977 (in millions).
### SUPPLEMENTARY MEDICAL INSURANCE BENEFICIARIES AND BENEFIT PAYMENTS BY TYPE OF COVERAGE

1975 THROUGH 1977 (IN MILLIONS)

<table>
<thead>
<tr>
<th></th>
<th>1975 Actual</th>
<th>1976 Estimate</th>
<th>1977 Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beneficiaries:</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Persons enrolled (average):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>21.5</td>
<td>21.9</td>
<td>22.1</td>
</tr>
<tr>
<td>Disabled</td>
<td>1.8</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Beneficiaries receiving reimbursed services:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>11.2</td>
<td>11.7</td>
<td>11.0</td>
</tr>
<tr>
<td>Disabled</td>
<td>1.4</td>
<td>1.5</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Benefit payments:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For physician's services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>2 805</td>
<td>3 289</td>
<td>961</td>
</tr>
<tr>
<td>Disabled</td>
<td>221</td>
<td>337</td>
<td>106</td>
</tr>
<tr>
<td>For home health services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>46</td>
<td>67</td>
<td>22</td>
</tr>
<tr>
<td>Disabled</td>
<td>5</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>For outpatient services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>402</td>
<td>583</td>
<td>193</td>
</tr>
<tr>
<td>Disabled</td>
<td>198</td>
<td>299</td>
<td>101</td>
</tr>
<tr>
<td>For other medical and health services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>82</td>
<td>95</td>
<td>27</td>
</tr>
<tr>
<td>Disabled</td>
<td>6</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total benefit payments:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged</td>
<td>3 335</td>
<td>4 034</td>
<td>1 203</td>
</tr>
<tr>
<td>Disabled</td>
<td>430</td>
<td>653</td>
<td>213</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3 765</td>
<td>4 687</td>
<td>1 416</td>
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## PERSONS RECEIVING MEDICAL ASSISTANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>1975</th>
<th>1976</th>
<th>1977</th>
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</thead>
<tbody>
<tr>
<td>Aged 65 and over</td>
<td>4,170,000</td>
<td>4,232,550</td>
<td>4,296,038</td>
</tr>
<tr>
<td>Adults in AFDC families</td>
<td>5,100,000</td>
<td>5,304,000</td>
<td>5,410,080</td>
</tr>
<tr>
<td>Blind</td>
<td>127,000</td>
<td>128,905</td>
<td>130,838</td>
</tr>
<tr>
<td>Children under 21</td>
<td>10,700,000</td>
<td>11,128,000</td>
<td>11,350,500</td>
</tr>
<tr>
<td>Permanently and totally disabled</td>
<td>2,370,000</td>
<td>2,405,550</td>
<td>2,441,633</td>
</tr>
<tr>
<td><strong>Total all recipients</strong></td>
<td>22,467,000</td>
<td>23,199,005</td>
<td>23,629,149</td>
</tr>
</tbody>
</table>
3. Social services. Under Title XX of the Social Security Act, grants are made to states under a $2.5 billion ceiling limitation on Federal matching to provide social services to assist eligible persons to become or remain economically self-supporting and self-sufficient; to protect children and adults who cannot protect themselves from abuse, neglect, and exploitation, and to help families stay together; to prevent or reduce inappropriate institutional care by providing for community-based care, home-based care, or other forms of less intensive care; and to arrange for institutional placement, when appropriate, and for services to individuals in institutions.

Grants are made to States based on matching rates of 75% for all services except family planning services which are matched at 90%.

Legislation is proposed to eliminate State matching requirements and transform this program and the State and local training program into a $2.5 billion block grant of financial assistance for community services, to be distributed to the States on a population basis. This proposal will
place increased authority and responsibility as well as greater latitude and flexibility, on States and their citizenry to develop social services programs to meet the needs of people in local communities.
### SOCIAL SERVICES PROGRAM COST UNDER TITLE XX OF THE SOCIAL SECURITY ACT

**(IN THOUSANDS OF DOLLARS)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total costs</strong></td>
<td>2,622,364</td>
<td>2,950,931</td>
<td>773,000</td>
<td>3,200,000</td>
</tr>
<tr>
<td><strong>Federal share:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day care</td>
<td>486,718</td>
<td>555,492</td>
<td>143,900</td>
<td>595,200</td>
</tr>
<tr>
<td>Foster care</td>
<td>264,947</td>
<td>304,843</td>
<td>78,300</td>
<td>324,000</td>
</tr>
<tr>
<td>Services to mentally retarded</td>
<td>249,247</td>
<td>285,811</td>
<td>73,600</td>
<td>304,800</td>
</tr>
<tr>
<td>Drug abuse/alcoholism services</td>
<td>92,741</td>
<td>106,130</td>
<td>27,200</td>
<td>112,800</td>
</tr>
<tr>
<td>Family planning</td>
<td>43,177</td>
<td>49,678</td>
<td>12,800</td>
<td>52,800</td>
</tr>
<tr>
<td>All other (including homemaker, protective, and health related services)</td>
<td>826,243</td>
<td>946,142</td>
<td>244,200</td>
<td>1,014,400</td>
</tr>
<tr>
<td><strong>Total Federal share</strong></td>
<td>1,962,573</td>
<td>2,258,096</td>
<td>580,000</td>
<td>2,400,000</td>
</tr>
</tbody>
</table>
### NUMBER OF RECIPIENT MONTHS OF SERVICE UNDER TITLE XX OF THE SOCIAL SECURITY ACT

#### (IN THOUSANDS)

<table>
<thead>
<tr>
<th>Service</th>
<th>1975</th>
<th>1976</th>
<th>1977</th>
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<tbody>
<tr>
<td>Total estimated months of service</td>
<td>10,607</td>
<td>11,172</td>
<td>11,406</td>
</tr>
<tr>
<td>Selected services (nonadditive; recipients may receive more than one service):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day care</td>
<td>882</td>
<td>925</td>
<td>943</td>
</tr>
<tr>
<td>Foster care</td>
<td>791</td>
<td>838</td>
<td>846</td>
</tr>
<tr>
<td>Services to mentally retarded</td>
<td>508</td>
<td>551</td>
<td>560</td>
</tr>
<tr>
<td>Drug abuse/alcoholism services</td>
<td>168</td>
<td>176</td>
<td>180</td>
</tr>
<tr>
<td>Family planning</td>
<td>2,398</td>
<td>2,547</td>
<td>2,640</td>
</tr>
<tr>
<td>All other (including homemaker, protective, and health related services)</td>
<td>5,860</td>
<td>6,135</td>
<td>6,237</td>
</tr>
</tbody>
</table>
GLOSSARY*

Average tax rate. Net taxes paid to the government as a percentage of income. Tax rates are called "nominal" if net income is used as the base and "effective" if gross or total income is used. In a welfare program, it is the total benefit reduction as a percentage of income.

Basic benefit level. The benefit received when the recipient has no income or, in AFDC, no countable income.

Break-even level. In a welfare program, the level of earnings at which the recipient ceases to receive benefits from the government.

Cash out. Replacing an in-kind or voucher program with a roughly equivalent amount of cash benefits.

Categorical programs. Transfer programs in which eligibility is defined not only by income, but by additional factors, such as demographic characteristics (for example, age or number of parents present) or disability.

Countable income. In a welfare program, the income measure used to determine program eligibility and benefit level. It is determined by excluding certain items, such as irregular earnings or a child's earnings, from gross income. In AFDC, it specifically denotes the income measure applied against the basic benefit to determine the actual payment due. Countable income is used in its more general sense in this paper.

Cumulative tax rate. The total dollar reduction in benefits received from all transfer programs caused by a one dollar increase in recipient's earnings.

Disregard (set aside). If a transfer program has a zero benefit reduction rate until some level of earned income is reached, that level is the disregard or set aside. The disregard in the current AFDC program is $30 per month.

Horizontal equity. People in similar circumstances (for example, in similar need) should receive similar treatment.

In-kind benefits. Transfer benefits that come directly in the form of a good or service. Sometimes authors will use "in-kind" to include voucher payments in which case "in-kind" means the same as noncash.

Intact family. A family with two parents present. Most, but not all, male-headed families will be intact. As used in the paper, all working poor families are intact, but they are a subset of the total intact family population.

Marginal tax rate (benefit reduction rate). The dollar reduction in benefits that occurs when a recipient's earned income increases by one dollar.

Need Standard. The income level, set by each state, that is used to determine eligibility for AFDC. Many states do not pay the full need standard as the basic benefit level.

Notch. An extreme case of high benefit reduction (usually over a very small range) where a very small increase in earnings will cause a very large drop in benefits (for example, moving over the AFDC income ceiling and thereby losing all Medicaid benefits).

Social insurance. Transfers based in part on previous contributions of the worker and/or his employer (for example, Social Security and unemployment compensation).

Target efficiency. The extent to which benefits go to those who need them.

Transfers. Benefits received from the government not in payment for goods or services.

Vertical equity. Those in relatively greater need should receive relatively larger benefits; those who earn more should have relatively larger disposable incomes.

Vouchers. Another form of noncash benefits. Instead of receiving the good or service directly, vouchers are purchasing power that is restricted to a particular category of goods or services (food stamps, for example).

Welfare. Transfers where the benefits are based on the recipient's income. Welfare programs are sometimes referred to as "means-tested" or "income-tested" programs.
THE FUTURES OF PUBLIC EDUCATION
FOR THE HANDICAPPED
THE FUTURES OF PUBLIC EDUCATION FOR THE HANDICAPPED

Ronald Wiegerink and Vincent J. Fsudo
Division of Special Education
and
Frank Porter Graham Child Development Center
University of North Carolina

This position paper is designed to assess the current status of public education of the handicapped and through a review of recent developments in the field to suggest possible future trends. Although the review will deal primarily with the schooling of the handicapped, it is clear that new legislation and litigation will make significant impact on the education of the handicapped and, therefore, needs to be addressed. In order to deal more parsimoniously with this complex subject, the following topics will be reviewed here and summarized in appendices: statistics, litigation, legislation, research, service delivery, and manpower.

Despite the fact that education represents the greater investment of resources and perhaps is of the greatest developmental benefit for the handicapped, documentation and research from the field have been relatively sparse when compared with other areas of service affecting the handicapped, e.g., vocational rehabilitation. However, because recent
litigation and legislation are highlighting the educational needs of the handicapped, it is likely that the quantity and quality of documentation in this field will dramatically increase. This along with a national commitment to provide full educational opportunities for all handicapped children by 1980 demands more information than currently exists.

A recent survey by Metz sampled 2,000 of 81,000 U.S. public schools having enrollment of more than 300 pupils, and estimated that approximately ten percent of the children were handicapped. The survey also revealed that only 63 percent of these received one or more specialized services ranging from separate classrooms to individual instruction. For example, a 1971 estimate of education for the retarded revealed that of the school-age mentally retarded children, only slightly over 50 percent received any form of educational services.

The past 25 years have seen an over 700 percent increase in total enrollment for all types of special education, with education for the mentally retarded being one of the areas of greatest long-term growth (Dunn, 1973). Elementary schools report 146 handicapped students for every 1,000 enrolled and the secondary schools have 62 for every 1,000 (HEW Source Book). Although these figures indicate a disproportionate number of handicapped students at the elementary level, there has been a significant increase in secondary school enrollment of the handicapped. With this
greater enrollment of the handicapped in secondary schools, there has been an increase in emphasis at this level on vocational and occupational training programs in the curriculum. At this same time, considerable attention and emphasis have been placed on early education for handicapped children. For example, during the first year of the Handicapped Children's Early Education Program, established by Congress in 1969, grants were awarded to various agencies for the development and implementation of 27 model demonstration programs. This number has now increased to over 200 programs across the country. The need to deliver services to handicapped preschoolers has been reinforced by the courts in recent litigation and a number of states which have included such service delivery in their master plans.

During the last few years, educational services for the handicapped have shown an exponential increase. This has been the result of litigation, legislation, consumer activism, and improved service delivery methods and capacities. Unfortunately, the latter has lagged considerably behind the others due to lack of resources and trained personnel. In fact, the transitional period in education is now fraught with many unresolved problems.

Numerous right to education suits have made it clear that handicapped children can rightfully expect a public education with their non-handicapped peers. The landmark
Pennsylvania Association for Retarded Citizens v. Commonwealth of Pennsylvania case clarified the right of the mentally retarded to public education as close to the mainstream as possible. Some 50 other right-to-education suits across the country have demonstrated the educational needs of the handicapped and placed an overwhelming burden on public education to respond.

Recent legislation from Congress, particularly the Education for All Handicapped Children Act of 1975 (P.L. 94-142) and legislation in 48 states reasserts the right of the handicapped to a mandatory free public education and provides funds for this purpose. Unfortunately, the funds authorized from five percent in 1970 to 40 percent in 1982 of the cost of educating the average handicapped child, even when added to the average pupil allotment, fall considerably short of the dollars needed to provide a quality basic education.

Both new litigation and legislation reflect the growing interest and advocacy of consumers, i.e., the handicapped themselves and their families. Numerous consumer organizations (NAPC, UCP, NSAC, etc.) and professional organizations (CEC, ACLD, FED, etc.) have been increasingly active in exposing the needs and rights of the handicapped to public education. While needs and rights have been visibly exposed, the services have lagged far behind, particularly quality services. The schools, teachers, and teacher training
institutions simply are not prepared to respond immediately with the necessary educational provisions.

The new expectation of education to provide all handicapped children with a public education commensurate with their needs and as close to the mainstream as possible, has called for new roles and training for professionals. In fact, these new roles are an about-face from those that have been established over the past 20 years. Regular education must once again learn to provide ready access for the students who make the necessary progress: school psychologists and other ancillary personnel must learn to focus on providing inclusion rather than grounds and support for exclusion; and administrations must assume responsibility for providing a climate and the resources to support mainstreaming rather than the development of separate services. After years of moving downstream with the support and sanction of most authorities, consumers, and university personnel; the boat must be reversed and all must paddle together to make progress at all against the current of tightening resources, negative attitudes, and lack of know-how. Running parallel to these changes is the expanding role of the schools in services to the handicapped in general. If Nicholas Hobbs' recommendation in The Futures of Children that schools should become the service advocates, centers and coordinators for all human services, we can expect both a changing and greatly enlarged role for the schools.
The crystal ball of the future is clouded by a confusion
of trends and purposes, goals and objectives, needs and
rights, and movements and countermovements. Projected
population statistics for 1980 indicate that there will be
5 million births, up 1.3 million from 1970; 17.2 million
preschool children, up 100 thousand; 38.9 grade school
children, down 2.8 million; and 15 million high school
students, up 100,000. Using an incidence estimate of ten
percent handicapped, a total of 7.1 million handicapped
children would need and have a right to publicly supported
educational services in 1980. This would be a sizeable
increase over the 7.7 million school-age handicapped children
needing special services in 1970 and a quantum leap over
the estimated 62 percent of 2.9 million who were receiving
them in 1970. If these estimates are accurate, and there
is no reason to believe they are not, our country will need
a two to threefold expansion in services and service
resources over this decade. From 1970 to 1976, we have
experienced approximately a 300 percent growth in Federal
monies for education of the handicapped. Federal legislation
now passed may add another 400 percent by 1980. This boost
should put education for all the handicapped within grasp
of each state.

A substantial area of need is in trained manpower.
A recent study of one state's needs, North Carolina, indicates
that less than 60 percent of the current teachers of the
handicapped have special training and that most need continuing education and updating. Add this to the need for 40 percent more teachers needed for the school-aged handicapped unserved and the need for special educators for the non school-aged handicapped under five and between 16 and 21 and needs for accelerated manpower development become blatantly obvious. Fortunately, new manpower roles and training strategies are being developed and utilized. The use of cross-categorically trained personnel, transdisciplinary personnel (generalists trained by specialists in a variety of fields), para-professionals, parents and volunteers, resource personnel, consulting teacher specialists, the retraining of regular classroom teachers, and broadening of roles of specialists such as school psychologists to be school mental health advocates are a few of these changes. Each new development, of course, is slowed down by the demands on resources and ideas of the past.

Research has been helpful in both adding to and lessening the load on education of the handicapped. On the one hand, the load has been added to by the findings of the educability of handicapped children previously considered of low educable potential. For example, not too long ago, it was thought that Down's Syndrome children had very limited intellectual and language potential. A host of studies from Kennedy Center at Peabody College, the Early Childhood Center for the Handicapped at the University of Washington, and the
Mailman Center in Miami have demonstrated the healthy potential of such children to profit from education. Other studies have shown the potentials of autistic, deaf-blind, cerebral palsied children, etc. Taken together, these studies demonstrate not only that the mild and moderately handicapped can profit from an education but also the severely and profoundly handicapped can do so.

Of course, these demonstrations reveal the need for new and more resources in instructional design, timing, and trained manpower. Research has also shown the faulty efficacy of special class placement for many mild and moderately handicapped youngsters. The outgrowth of such research mainstreaming may eventually result in a better education for all at less cost, but during the transition, the costs of attitude changes, retraining and legal battles present mountains to climb. Research has also been effective in uncovering and demonstrating the efficacy and the utility of early intervention for the handicapped. Increased attention is also being paid to vocation education. A recent report from BEH indicates that only 25 percent of handicapped individuals graduating from school will get adequate employment. Another 40 percent will be significantly underemployed and 35 percent will be under the care of social services without employment. Again, implementation of these findings in practice does not come without high social and economic costs.
Fortunately, changes being made in the service delivery system for handicapped individuals harken a brighter future. While they began with islands of excellence, they are now engulfing larger amounts of unchartered seas. The most important single trend is the development of more generic services to help handicapped citizens. This trend is represented by the development of the Early Period Screening Diagnosis and Treatment Program (EPD) and the many state screening programs in use or under development; early childhood programs—such as Head Start with its mandatory ten percent inclusion and the many state kindergartens and nursery school programs under development; as mentioned before, the public schools mainstreaming and zero/reject programs; the expansion of education opportunities directed toward the handicapped and their families including a variety of telecommunication programs; and the expansion of vocational education and vocational rehabilitation to include handicapped individuals previously forsaken as low risks.

These new developments do not come without economic consequences and concerns. Since 1929-30 (except for a low point during World War II years of 1943-44) there has been a steady increase in the proportion of the GNP spent for education (Chart I); during this period the GNP was also rising. Beginning with the last economic quarter of 1973 and continuing on into all four quarters of 1974; the GNP did not rise. During 1974, real and disposable income fell...
2 1/2 percent for the first time since 1947. At that time, unemployment hit a record high; and the nation suffered the worst crisis of a lack of crude oil and refined fuel products in its entire history. The outlook brightened somewhat during the third quarter of 1975 when the GNP rose dramatically. This was not repeated in the fourth quarter as the GNP slowed to about half that recorded in the third quarter. It now appears that the economic situation of the nation is becoming one to be dealt with prudence. It is reasonable to hypothesize that if the economy does not soon begin to improve or at the least stabilize, all manner of havoc could be wrought upon the existing and proposed budgets for education, especially those for the handicapped at the Federal, state, and local levels. Another factor that is surely to play an important role is the fact that the nation is now in the midst of a presidential election year. Indications are of a more conservative trend than that in recent years. Traditionally, a conservative administration is apt to cut corners in all areas of Federal spending. One well known conservative contender for the presidential post has suggested cutting Federal spending in the area of special education by $6.8 billion. This figure is broken down into $4.2 billion for elementary, secondary, and vocational education and a $2.3 billion cut in higher education. This viewpoint is also spreading to the state levels as recently
expressed by Governor Edward G. Brown, Jr., of California when he stated "... we are entering an era of limits ... It's now a question of reordering priorities and choosing one program over another, based on a rigorous standard of equity and common sense."

While these predictions and statements may appear droll, they cannot be discounted and measures must be taken to work with or in some cases counteract them. Reflecting upon Governor Brown's statement, one realizes how applicable it is to the area of special education. The one point of concern is that it not be pushed aside and scrambled in the battle for top place. This has already occurred too many times in the past than during a more secure economic climate. Ultimately, the issue of increased special educational services may be settled by attitudes of the general population. It is hoped that the increased formation and awareness of advocate and consumer groups will have a direct bearing on the policy of budgetary spending for the handicapped. The economic crunch can be viewed in a more positive style if one considers that emphasis on dollar value will most likely be placed in a very positive position. That is, there will be more concern with the overall value to the consumer in the total areas of education. The method which is most beneficial and economically feasible will be given priority whether it be mainstreaming a child or inservice education or the cost-benefit of vocation education. Other steps should
be taken in order to effectively utilize the budget and to satisfy the two important objectives of (1) assuring equal access to programs and (2) achieving maximum efficiency in the use of resources. If this is to become a reality, more data than is now available is needed.

Certainly, government policy over the next few years will play a major role in determining the future of special education. Increasingly, the Federal government is sharpening its new federalism. More Federal funds (with fewer strings) are available, creating a situation which likens the Federal government to a bank giving no repayment loans to states, increasingly focusing its attention on service rights, standards, financial accountability, human services and education. State and local governments increasingly resist the few strings attached and are growing stronger in their assertion of states' rights. If the trend continues, the Federal government's role of balancing and elevating services from one region of the country to another will be lost. In some cases, as in the more progressive states, this will not be a problem for attention to local and state needs is well demonstrated and Federal strings have only got the puppet hopelessly tangled in its efforts to free itself. In other states and localities, the needs of the disenfranchised poor and handicapped that are now making themselves clear on the horizon may sink with the sunset of Federal influence. If this occurs, the progress of Federal and state
laws and court decisions in assisting the rights, needs, and services for handicapped citizens may be in for darker days. Whether this will or will not occur may ultimately depend on the positive or negative realization of another trend— that of consumerism.

One of the most important trends in human services for the handicapped is the increase in consumerism. This movement is visible at all points of the service continuum from Federal legislation to direct services. Recognition at the Federal level is led by the Developmental Disabilities Act of 1975 which calls for the establishment of state planning advisory councils with parents of and handicapped individuals on them. At this level, consumers and their representatives will have legal, monitoring, advocacy, and planning functions.

Consumers are also gaining increasing recognition at the service delivery level. In reality, they are involved in the due process functions of educational planning for themselves and their children. The Education of All Handicapped Children Act and numerous state statutes require the involvement of parents and handicapped children at all important decision-making points: evaluation, placement, follow-up, etc. Finally, there is growing recognition of the consumers' role in providing education for themselves and their children. The Handicapped Children's Early Education Program (First Chance) and the Head Start Program
both emphasize the importance of parents helping themselves, their children, and fellow parents with support from professionals and paraprofessionals. If this trend continues at its current pace, 1975-85 may be known as the age of the consumer and may substantially challenge the roles and functions of professionals, who need challenging to progress. In fact, in the hands of consumers lies the balance between continued movement toward quality, coordinated, comprehensive services for the handicapped, and the islands of excellence of the Sixties. Professionals who wish for progress to be made must listen for the sound of another drummer and get on the bandwagon—or much of what they seek to accomplish for those they wish to serve will never be included in the parade. Consumer influence or lack of it will be the primary independent variable in the allocation and reallocation of funds and resources in the future. The success of public education in quality and quantity may be dependent on their success.

STATISTICAL INFORMATION

The statistical tables which follow provide an analysis of three types of information: (1) Tables I-III provide statistics, (2) Tables IV-IX provide financial data, and (3) Tables X and XI provide manpower statistics.

The population data indicate a number of important factors: the first is that the number of school age children
will actually drop over the next decade, thus potentially providing more space and resources for the handicapped who have hitherto been excluded. The second is the relative incidence of handicapping conditions at the elementary and secondary levels. As indicated, currently there are significantly higher incidence rates at the elementary levels. This is due primarily to three factors: (1) an amelioration of the conditions as children get older; (2) the lack of identification at the older age levels; and (3) the exclusion of handicapped children as they get older. Condition one (amelioration) is a positive indicator but probably accounts for only a small percentage of the variation. The second two conditions are negative indicators and will likely be somewhat affected by the new "Education for All Handicapped Children Act of 1975." If this is so, we could expect higher incidence levels at both the elementary and secondary levels but particularly significant increases at the secondary level.

Table III speaks to this issue. Given that incidence rates become nearer to equal at the two levels and that almost all handicapped children are provided a public education by 1980, we can expect about a 100 percent increase in the number of handicapped children to be served. Currently, schools are serving about 2.9 million; we project a 1980 school-age incidence figure of 5.2 million. It goes without saying that substantial new resources will be needed to accommodate such an increase.
Tables IV-IX give an indication of the economic situation facing education of the handicapped. Table IV indicates the rapidly growing number of dollars regular education will need over the next decade. Because of new commitments from legislature and legal decisions, special education costs will also skyrocket. As can be seen from Table V, currently the Federal share of educating the handicapped is only a small share of the total costs and these figures are inflated because much of the money currently goes for residential care and not educational programming per se.

Tables VI and VII indicate the variations in expenditures per handicapped children from one category to another, with a low $137 for the speech impaired and a high of $4,767 per year. Table VII also indicates the wide variation in expenditures from one state to another. Assuming that all handicapped children were to be served adequately by 1980, one could expect a reduction in these state-by-state variations. The additional two million or so of the handicapped to be served would significantly affect the total outlay but not necessarily in a linear fashion. For instance, two of the expensive categories, the school aged deaf and visually impaired, are already nearly fully served where as the trainable mentally retarded and the emotionally disturbed are significantly underserved. The costs for the latter two are likely to rise as more handicapped are provided service; at the same time, the more mildly handicapped
the educable mentally retarded and the speech impaired, are likely to be served with less costly mainstreamed instruction. The net effect of these changes is not known and almost unpredictable except to say that rising costs, inflation, the combination of less expensive service models and more costly individuals to be served, and the significant increase in numbers served will at least call for double our current expenditures.

Fortunately, as reflected by Tables VIII and IX the Federal share has been and is increasing rapidly. The Bureau of Education for the Handicapped has received an astounding 366 percent increase in funds since 1960 and is still climbing. In addition, the new Education for All Handicapped Children Act will significantly increase the Federal share given to state and local governments over the next decade. The Federal share will increase almost fourfold. If local and state governments keep pace, there should be no difficulty with the provision of adequate resources. However, local and state governments have for long been providing the lion's share and are about at maximum tax base for education now. It appears that the future of education for the handicapped rests primarily on the infusion of Federal dollars. Only time will tell if there will be enough of those.

Most of the funds will be needed for additional trained personnel. Fortunately, space should not be a significant
problem in that there will be a reduction in the school aged population and school space is already becoming available. Equipment and materials will be significant expenditures in the case of the more profoundly handicapped but this is a low incidence population. Equipment and materials for the more mildly and moderately handicapped should be only slightly more costly than that of regular education materials and should only have a noticeable effect initially. What is left is the need for additional trained personnel.

Fortunately, many of the teachers are already available and partially trained. This is a result of regular education teachers being available (300,000) and a surplus of newly trained educators. The bad news is that only about 60 percent are trained to certification standards and many of these are inadequately prepared currently and are not prepared for the demands of new service models. Tables X and XI indicate the primary needs will be re-education not pre-service training. Actually we are currently preparing almost enough special educators to meet current and future needs.

Given the current economic situation of tight monies, the need for doubling services and the need for trained personnel to man them, our best hope is the use of additional money for inservice and continuing education purposes. If our nation were to continue to adopt new and less costly service models which reflect the trends of mainstreaming and
<table>
<thead>
<tr>
<th>YEAR (FALL)</th>
<th>TOTAL ENROLLMENT (EXCLUDING, INDEPENDENT NURSERY SCHOOLS AND KINDERGARTENS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
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<td>1963</td>
<td>51 253</td>
</tr>
<tr>
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<td>52 996</td>
</tr>
<tr>
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<td>54 394</td>
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<td>56 803</td>
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<td>58 257</td>
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<td>1972</td>
<td>59 859</td>
</tr>
<tr>
<td>1973</td>
<td>59 812</td>
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<table>
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<th>YEAR (FALL)</th>
<th>TOTAL ENROLLMENT (PROJECTED)</th>
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<tbody>
<tr>
<td>1974</td>
<td>59 409</td>
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<td>59 103</td>
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<td>58 829</td>
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<td>56 779</td>
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<tr>
<td>1980</td>
<td>56 356</td>
</tr>
<tr>
<td>1981</td>
<td>55 991</td>
</tr>
<tr>
<td>1982</td>
<td>55 738</td>
</tr>
<tr>
<td>1983</td>
<td>55 777</td>
</tr>
</tbody>
</table>
### TABLE II

**PERCENTAGE OF PUPILS WITH HANDICAPS IN LOCAL PUBLIC SCHOOLS**

(Percent of Total Enrollment)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Elementary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech Impaired</td>
<td>6.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>3.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>2.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Hard of Hearing</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Deaf</td>
<td>0.3</td>
<td>0</td>
</tr>
<tr>
<td>Crippled</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Blind*</td>
<td>0.0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Blind are not shown; while percentage is greater than 0 and less than 0.05

Based on data from "Number of Pupils with Handicaps in Local Public Schools," Spring, 1970, DHEW, National Center for Educational Statistics.
TABLE III

PROJECTED INCIDENCE STATISTICS 1970 - 1980

<table>
<thead>
<tr>
<th>INCIDENCE RATES</th>
<th>NUMBER OF CHILDREN IN PUBLIC SCHOOL 1970 (millions)</th>
<th>NUMBER OF CHILDREN IN PUBLIC SCHOOL 1980 (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(School-age children, 5-19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>3.5%</td>
<td>1.7</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>2.0%</td>
<td>.98</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>2.3%</td>
<td>1.1</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>1.0%</td>
<td>.49</td>
</tr>
<tr>
<td>Hard-of-Hearing</td>
<td>0.5%</td>
<td>.24</td>
</tr>
<tr>
<td>Deaf</td>
<td>0.7%</td>
<td>.34</td>
</tr>
<tr>
<td>Crippled or Other</td>
<td>0.5%</td>
<td>.24</td>
</tr>
<tr>
<td>Handicapped Impaired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physically Impaired</td>
<td>0.1%</td>
<td>.04</td>
</tr>
<tr>
<td>Multi-Handicapped</td>
<td>.06%</td>
<td>.03</td>
</tr>
<tr>
<td>TOTAL HANDICAPPED</td>
<td>10.035%</td>
<td>2.9*</td>
</tr>
<tr>
<td>TOTAL CHILDREN</td>
<td>100.0%</td>
<td>5.2</td>
</tr>
</tbody>
</table>

*Approximate number enrolled in 1970
### TABLE IV

TOTAL EXPENDITURES (1973-74 DOLLARS) BY REGULAR ELEMENTARY AND SECONDARY DAY SCHOOLS: UNITED STATES

1963-64 to 1983-84

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPENSE</td>
<td>35</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>STATE AND LOCAL</th>
<th>FEDERAL</th>
<th>PERCENTAGE BY FEDERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally Retarded (f)</td>
<td>260</td>
<td>45.5</td>
<td>18</td>
</tr>
<tr>
<td>Mentally Retarded (e)</td>
<td>840</td>
<td>75.9</td>
<td>9</td>
</tr>
<tr>
<td>Hard of Hearing</td>
<td>55</td>
<td>13.6</td>
<td>25</td>
</tr>
<tr>
<td>Deaf</td>
<td>91</td>
<td>42.5</td>
<td>47</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>251</td>
<td>21.8</td>
<td>9</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>66</td>
<td>19.2</td>
<td>29</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>258</td>
<td>35.0</td>
<td>14</td>
</tr>
<tr>
<td>Crippled</td>
<td>210</td>
<td>10.0</td>
<td>5</td>
</tr>
<tr>
<td>Learning Disabilities</td>
<td>250</td>
<td>32.1</td>
<td>13</td>
</tr>
<tr>
<td>Other Health Impaired</td>
<td>84</td>
<td>19.2</td>
<td>23</td>
</tr>
</tbody>
</table>

*As is seen from this table, Federal expenditures are currently only a fraction (except in the Deaf category due to Federally supported schools) of the total amounts expended.*
### TABLE VI
TOTAL EXPENDITURES (STATE, LOCAL, AND FEDERAL) PER CHILD AND PERCENTAGE SERVED* FISCAL YEAR 1971-72

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TOTAL FUNDS—LOCAL (in millions)</th>
<th>EXPENDITURE PER CHILD</th>
<th>TOTAL NUMBER SERVED</th>
<th>PERCENT OF TOTAL SERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally Retarded (t)</td>
<td>$305.5</td>
<td>$2,064</td>
<td>148,000</td>
<td>4.9%</td>
</tr>
<tr>
<td>Mentally Retarded (e)</td>
<td>915.9</td>
<td>1,217</td>
<td>752,000</td>
<td>24.7%</td>
</tr>
<tr>
<td>Hard of Hearing</td>
<td>68.6</td>
<td>1,247</td>
<td>55,000</td>
<td>1.8%</td>
</tr>
<tr>
<td>Deaf</td>
<td>133.5</td>
<td>4,767</td>
<td>28,000</td>
<td>0.9%</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>272.8</td>
<td>197</td>
<td>1,383,000</td>
<td>45.4%</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>85.2</td>
<td>3,043</td>
<td>28,000</td>
<td>0.9%</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>293.0</td>
<td>1,472</td>
<td>199,000</td>
<td>6.5%</td>
</tr>
<tr>
<td>Crippled</td>
<td>220.0</td>
<td>1,718</td>
<td>128,000</td>
<td>4.2%</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>282.1</td>
<td>1,227</td>
<td>230,000</td>
<td>7.5%</td>
</tr>
<tr>
<td>Other Health Impaired</td>
<td>103.2</td>
<td>1,086</td>
<td>95,000</td>
<td>3.1%</td>
</tr>
<tr>
<td>TOTALS**</td>
<td>$2,678.9</td>
<td>$879</td>
<td>3,046,000</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Based on data collected from all 50 states

** The combined total of state, local, and federal funds in 1971-72 for each area of handicap represented was $2,678.9 million dollars. During this time, 3,046,000 handicapped children were served. Expenditures per child ranged from a high of $4,767 to a low of $197. $879.
**TABLE VII**  
**DISPERSION OF STATE AND LOCAL FUNDS PER DAILY AVERAGE ATTENDANCE**  
**ALL STATES COMBINED 1971**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>AVERAGE PER ADA</th>
<th>STANDARD DEVIATION</th>
<th>COEFFICIENT OF VARIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally Retarded (t)</td>
<td>$4.61</td>
<td>$.30</td>
<td>71.645%</td>
</tr>
<tr>
<td>Mentally Retarded (e)</td>
<td>14.61</td>
<td>7.78</td>
<td>53.236%</td>
</tr>
<tr>
<td>Hard of Hearing</td>
<td>1.19</td>
<td>1.55</td>
<td>131.030%</td>
</tr>
<tr>
<td>Deaf</td>
<td>1.69</td>
<td>1.75</td>
<td>103.714%</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>5.98</td>
<td>7.97</td>
<td>133.367%</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>1.20</td>
<td>1.07</td>
<td>88.599%</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>4.51</td>
<td>5.97</td>
<td>132.356%</td>
</tr>
<tr>
<td>Crippled</td>
<td>2.30</td>
<td>3.38</td>
<td>146.610%</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>4.87</td>
<td>6.20</td>
<td>127.303%</td>
</tr>
<tr>
<td>Other</td>
<td>1.58</td>
<td>2.35</td>
<td>147.822%</td>
</tr>
<tr>
<td><strong>TOTALS</strong>*</td>
<td><strong>$43.83</strong></td>
<td><strong>$24.43</strong></td>
<td><strong>55.744%</strong></td>
</tr>
</tbody>
</table>

Expenditures vary dramatically from state to state in amounts spent per child, per average daily attendance (ADA). In Table 5, the first column represents the average (mean) amount allotted per child per state (based on all data from all 50 states). The second column, Standard Deviation, is a representation of variation in actual dollars, while the coefficient of variation is a variation of proportion in relation to the actual dollars in percentages. The large coefficient of variations indicate one of two conditions: (1) either a large variation in the percentages of children served or (2) a large variation in the expenditures per child.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education improvements for the Handicapped</td>
<td>.3</td>
<td>1.2</td>
<td>5.0</td>
<td>15.4</td>
<td>50.0</td>
<td>79.1</td>
<td>85.1</td>
<td>93.1</td>
<td>105.4</td>
<td>96.1</td>
<td>120.8</td>
</tr>
<tr>
<td>Education for the Handicapped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Education and Recruitment</td>
<td>.3</td>
<td>.9</td>
<td>2.5</td>
<td>10.4</td>
<td>24.2</td>
<td>31.2</td>
<td>27.4</td>
<td>25.2</td>
<td>28.2</td>
<td>24.4</td>
<td>46.3</td>
</tr>
<tr>
<td>Research &amp; Innovation (includes deaf-blind &amp; resource centers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td>3.2</td>
<td>8.3</td>
<td>12.5</td>
<td>20.7</td>
<td>16.9</td>
<td>21.6</td>
</tr>
<tr>
<td>Captions Films &amp; Media Service</td>
<td>.07</td>
<td>.2</td>
<td>1.5</td>
<td>1.7</td>
<td>.6</td>
<td>4.3</td>
<td>5.0</td>
<td>11.7</td>
<td>9.3</td>
<td>9.9</td>
<td>12.5</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>.67</td>
<td>2.3</td>
<td>10</td>
<td>30.7</td>
<td>91</td>
<td>158.2</td>
<td>170.3</td>
<td>186.3</td>
<td>210.8</td>
<td>192.3</td>
<td>241.5</td>
</tr>
</tbody>
</table>
### TABLE IX

**PROJECTED FEDERAL EXPENDITURES FOR EDUCATION OF HANDICAPPED CHILDREN**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PERCENT OF TOTAL EXPENDITURE (LOCAL, STATE, FEDERAL)</th>
<th>FEDERAL EXPENDITURES (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>3%</td>
<td>90.8</td>
</tr>
<tr>
<td>1975</td>
<td>4%</td>
<td>241.5 +</td>
</tr>
<tr>
<td>1978*</td>
<td>5%</td>
<td>587.0 +</td>
</tr>
<tr>
<td>1980</td>
<td>20%</td>
<td>1.2 billion +</td>
</tr>
<tr>
<td>1982</td>
<td>40%</td>
<td>3.6 billion +</td>
</tr>
</tbody>
</table>

*Education for All Handicapped Children Act takes effect—authorized funding levels

### TABLE I

**LEVEL OF STATE (ONLY) EXPENDITURES IN MILLIONS OF DOLLARS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>15.0</td>
<td>19.0</td>
<td>25.0</td>
<td>66.6</td>
</tr>
<tr>
<td>California</td>
<td>171.8</td>
<td>163.0</td>
<td>188.1</td>
<td>9.4</td>
</tr>
<tr>
<td>Florida</td>
<td>42.8</td>
<td>57.2</td>
<td>85.5</td>
<td>99.7</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>18.8</td>
<td>24.2</td>
<td>31.9</td>
<td>69.7</td>
</tr>
<tr>
<td>New Jersey</td>
<td>35.4</td>
<td>44.9</td>
<td>56.5</td>
<td>59.6</td>
</tr>
<tr>
<td>New Mexico</td>
<td>4.5</td>
<td>6.0</td>
<td>8.0</td>
<td>77.8</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>73.6</td>
<td>139.6</td>
<td>152.8</td>
<td>107.6</td>
</tr>
<tr>
<td>South Carolina</td>
<td>10.0</td>
<td>12.5</td>
<td>16.5</td>
<td>65.0</td>
</tr>
<tr>
<td>Mean</td>
<td>48.6</td>
<td>63.1</td>
<td>72.8</td>
<td>66.0</td>
</tr>
<tr>
<td>TYPE OF HANDICAP</td>
<td>TOTAL</td>
<td>TEACHERS OF SEPARATE (SPECIAL)</td>
<td>REGULAR TEACHERS WHO PROVIDED SPECIAL INSTRUCTION IN REGULAR CLASSES</td>
<td>SPECIALIZED PROFESSIONAL PERSONNEL WHO PROVIDED INDIVIDUALIZED INSTRUCTION</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------</td>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TOTAL</td>
<td>500,000</td>
<td>136,000</td>
<td>300,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>96,700</td>
<td>35,100</td>
<td>31,400</td>
<td>30,200</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>123,000</td>
<td>27,900</td>
<td>81,400</td>
<td>13,700</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>102,500</td>
<td>6,300</td>
<td>41,900</td>
<td>6,200</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>74,100</td>
<td>11,300</td>
<td>48,800</td>
<td>14,000</td>
</tr>
<tr>
<td>Hard-of-Hearing</td>
<td>21,200</td>
<td>2,000</td>
<td>12,500</td>
<td>6,700</td>
</tr>
<tr>
<td>Deaf</td>
<td>6,200</td>
<td>2,300</td>
<td>3,000</td>
<td>800</td>
</tr>
<tr>
<td>Crippled</td>
<td>13,400</td>
<td>1,800</td>
<td>8,200</td>
<td>3,400</td>
</tr>
<tr>
<td>Partially Sighted</td>
<td>20,200</td>
<td>800</td>
<td>16,100</td>
<td>3,200</td>
</tr>
<tr>
<td>Blind</td>
<td>6,900</td>
<td>500</td>
<td>4,600</td>
<td>1,800</td>
</tr>
</tbody>
</table>
TABLE XI
MANPOWER IN SPECIAL EDUCATION
(ESTIMATE, 1976)

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of teachers needed</td>
<td>500,000</td>
</tr>
<tr>
<td>Number of teachers trained and employed</td>
<td>250,000</td>
</tr>
<tr>
<td>Number of teachers certified</td>
<td>150,000</td>
</tr>
<tr>
<td>Yearly attrition of teachers</td>
<td>20,000</td>
</tr>
<tr>
<td>Number trained per year</td>
<td>32,000</td>
</tr>
<tr>
<td>Number needed per year in future</td>
<td>35,000</td>
</tr>
</tbody>
</table>
normalization, we could eventually meet the needs with current and projected resources. While the new training programs would be initially more costly than current preservice training models in the long run they would cost less; this is also true for the new service models. We must be willing to make the investment now; for if we don't and we continue to proliferate current service models, e.g., self-contained class for the educable mentally retarded, we will not only suffer additional investment costs but rising costs in the future that our society will be unwilling to afford. We have the choice now to invest in a long-term quality program or to continue to expand our now less than adequate service programs.

LITIGATION

Among many noteworthy events, the advent of the 1970's saw an end to U.S. military involvement in Vietnam, American astronauts walking on the moon, recognition of a critical energy crisis, and the first resignation from office of a President of the United States. Within the areas of education, some important activities were also occurring. Perhaps foremost among these was the sudden proliferation of lawsuits. Predominantly class-action in nature, the litigation has focused on three major issues: the right to education, the right to treatment, and the use of inappropriate procedures for the classification and placement of children with special needs.
Although the impetus for each action has been supplied by diverse issues and concerns, the legal basis for the litigation has most often been in response to an apparent violation of the Due Process Clause of the 5th and 14th Amendments and the Equal Protection Clause of the 14th Amendment of the U.S. Constitution. Under the cloak of due process, legal proceedings must be followed in accordance with the rules established by the jurisprudence system. A generally accepted interpretation of the latter clause is that "equal protection . . . shall be given to all under the circumstances in his life, his liberty, and his property, and in the pursuit of happiness, and in the exemption from any greater burdens and charges than are equally imposed upon all others under like circumstances" (Sovereign Camp).

RIGHT TO EDUCATION

The Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (filed in January, 1971) is recognized as the landmark right to education case. It was in the PARC consent agreement that the responsibility of the public schools to comply with due process procedures was first established. The case involved fourteen mentally retarded children who had been denied a public education through state statutes. They sought free access to public educational opportunities for themselves and all mentally retarded children in Pennsylvania via this class action suit. Among the principles established by the
resultant injunction are that (1) every mentally retarded child must be provided "... access to a free program of education and training" by his public schools; (2) all due process procedural protections must be applied prior to imposing a label such as "mentally retarded" on a child; and (3) "all mentally retarded persons are capable of benefiting from a program of education and training; ... that a mentally retarded person can benefit at any point in his life (author's emphasis) and development from a program of education" (President's Committee on Mental Retardation, 1974). The decision for the plaintiffs in Mills v. Board of Education of District of Columbia (1972), expanded the holding of the PARC case to include all handicapped children. In addition, the court declared that insufficient funds were not an excuse for noncompliance when Federal Judge Joseph C. Waddy stated, "the inadequacies of the District of Columbia public school system, whether occasioned by insufficient funding or administrative inefficiency, certainly cannot be permitted to bear more heavily on the exceptional or handicapped child than on the normal child" (Mills, 1972).

Further clarification of the right to education was established in Maryland Association for Retarded Children v. State of Maryland (1974). This included the decree that the educational program provided for a child must be an appropriate (emphasis supplied) program, meeting the
individual special needs of that child. By stating that such programs must be made available to all children, "...no matter how seriously or extensively they are retarded" (MARC, 1974), the Court eliminated the severity of a child's disability as justification for nondelivery of services. Finally, the order affirmed that because Maryland statutes provide for education for each child at no expense to the child, his parents, or guardians, the practice of sending children to nonpublic schools without full funding is unlawful. To date, over 60 separate suits have been filed throughout the country, each seeking the right to equal educational opportunity.

RIGHT TO TREATMENT

A similar series of suits have been filed, primarily on behalf of institutionalized citizens, which focus on the right to receive adequate treatment. In Wyatt v. Aderholt (1971), the emphasis was on the delivery of services in the least restrictive environment. This was necessary in order that each individual committed to Bryce Hospital would have "...a realistic opportunity to be cured or to improve his or her mental condition" (Wyatt, 1971). This decision, requiring the immediate hiring of 300 additional employees at the institution, established that the right to treatment necessitates (1) an individualized treatment program; (2) a humane physical and psychological environment;
(3) adequate and qualified staff; and (4) that programs be provided in the least restrictive manner possible (PCMR, 1974). Other class action right to treatment suits, such as Davis v. Watkins (1973), incorporated many facets of the Wyatt holding. Decisions requiring the award of damages when adequate treatment is not provided and development of community alternatives (Ricci v. Greenblatt, 1972) as well as finding that confinement without treatment is probably "cruel and unusual punishment," a violation of the 8th Amendment of the U.S. Constitution (Welch v. Likens, 1974), have all utilized the Wyatt precedent.

IMPROPER CLASSIFICATION AND PLACEMENT PROCEDURES

Perhaps more basic to the question of what services are to be delivered is who shall receive these services. Dunn (1968), Mercer (1971), Gilhool (1973), Kirk (1964), and Garrison and Hammil (1971), among others, have all raised serious questions regarding the large number of children who are inappropriately classified as having a handicapped condition. This is most often evidenced in children who are ultimately different than the majority of children in the country. The studies have also shown that this mislabeling, coupled with a lack of appropriate services, results in inappropriate placement. As with two previously discussed rights, successful litigation has brought about considerable positive change. The first of these suits, Diana v. State
Board of Education (1973), was filed by nine Mexican-American school children on behalf of bilingual children in California who might have been inappropriately labelled "mentally retarded" and then placed in classes for the retarded children. The court ordered the retesting of all children already placed in classes for the mentally retarded. More importantly, the court recognized the placement of a disproportionate number of Mexican-Americans in classes for retarded children as requiring an explanation to the court.

Barely two years later in Larry P. v. Riles, the decision states that "no black student may be placed in EMR class on the basis of criteria which rely primarily on the results of I.Q. tests as they are currently administered, if the consequences of use of such criteria is racial imbalance in the composition of EMR classes" (Cole, 1972). The rationale for the decisions in these cases was compelling. The California legislature amended the education code in that state to provide a legal framework for pluralistic assessment among other criteria. The evaluator must investigate such factors as developmental history and cultural background and substantiate any findings of retarded intellectual development by individual test scores. Estimates of adaptive behavior must also be made, and may include observations made at the child's home (California Education Code, Section 6102.08).
These, and other cases (Lebanks, et al., 1973); have great impact on the rights to education and treatment for all handicapped individuals. The judgements rendered call for an individualized assessment upon which must be based an individualized program in an appropriate setting. Certainly, the fiscal implications arising from all education-oriented litigation are immense. The per pupil cost for special education is greater than for regular education in all categories of exceptionality (Table XII). Yet, as was shown in Mills (1972); a scarcity of available monies is no excuse for the denial of appropriate services. Rather, a reallocation of resources must be made. Recent state legislation (Abeson, et al., 1976) and the Education for All Handicapped Children Act of 1975 have committed state and federal governments to very substantial fiscal support for educating handicapped children. In concert with recent litigation, legislation has further refined and strengthened the rights given to all citizens by the United States Constitution.

**LEGISLATION**

The array and outcome of the various court actions have sparked an even greater response by state and Federal governmental bodies. Congress has again reaffirmed the position of the Bureau of Education for the Handicapped and expanded its resources for developing new programs, researching new strategies of education and providing additional trained
### TABLE XII

**PER PUPIL COSTS**

<table>
<thead>
<tr>
<th>CATEGORY OF EXCEPTIONALITY</th>
<th>REGULAR EDUCATION ANNUAL PER PUPIL EXPENDITURES</th>
<th>SPED ADPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMI</td>
<td>$1,316</td>
<td>$661</td>
</tr>
<tr>
<td>TMR</td>
<td>$1,627</td>
<td>972</td>
</tr>
<tr>
<td>Audible Handicapped</td>
<td>$2,103</td>
<td>1,448</td>
</tr>
<tr>
<td>Visual Handicapped</td>
<td>$2,197</td>
<td>1,542</td>
</tr>
<tr>
<td>Physically Handicapped</td>
<td>$2,143</td>
<td>1,458</td>
</tr>
<tr>
<td>Speech Handicapped</td>
<td>$779</td>
<td>144</td>
</tr>
<tr>
<td>ED</td>
<td>$1,683</td>
<td>1,028</td>
</tr>
<tr>
<td>Multi-Handicapped</td>
<td>$1,941</td>
<td>1,286</td>
</tr>
<tr>
<td>Gifted</td>
<td>$809</td>
<td>154</td>
</tr>
</tbody>
</table>
personnel. Meanwhile, almost every state legislature in the country has considered passing additional special education legislation and 21 have succeeded in passing compulsory special education legislation of one type or another. In addition, states have now passed or are in the process of passing special provisions which cover architectural barriers, additional appropriations for local reimbursement, funds for bilingual education, child advocacy programs, comprehensive educational services, expanded compulsory attendance laws, prohibition of corporal punishment and experimental program authorization, program accountability, study committees and commissions, and transportation and other educational services.

In 1971, Weintraub, Abeson, and Braddock authored a book entitled State Law and Education of Handicapped Children: Issues and Recommendations, which has become an influential source book leading to the development of new legislation. Included in this text is a model law and specific recommendations which include:

1. Provisions in compulsory school attendance laws to exclude handicapped children from public education be repealed. Statements declaring it to be the policy of the state that all handicapped children be educated should be included in the state school laws and administrative codes. Since full implementation of such policy will require changes in the present behavior of many chief state school officers, local school superintendents, etc.) should issue public statements endorsing such policy and detailing procedures for its implementation.
2. Each state carefully re-examine its present system of defining and classifying children to ascertain if the system stigmatizes children beyond that which is necessary and whether the system is related to the educational needs of the child.

3. State laws be amended to authorize the provision of educational services to handicapped children and youth from birth to age 21.

4. Every child placed in a special educational program should be thoroughly re-evaluated at least once each year.

5. Procedures be implemented to assure due process rights of all children and their families in all educational activities that may result in program adjustments, different than those provided normal children or which deny a child access to educational services he or his family feels he needs.

6. Statements expressing the mandate of the state that the public schools provide for free education of handicapped children be incorporated into state law and appropriate state administrative literature.

7. The costs of educating a handicapped child beyond that of educating a non-handicapped child should be assured by state government. However, the child's district of residence should be required to assume an expenditure for the child equal to that expended for a non-handicapped child, regardless of where the child receives an education.

8. Each state, as part of its plan for the education of handicapped children, assure availability and delivery of a full continuum of educational services ranging from the regular classroom to the residential institution.

9. States undertake the development and support of programs to recruit and train personnel needed to enable handicapped children to be educated. Such programs should encompass the wide variety of personnel required and should be conducted on a full-time, part-time, and inservice basis.
State education agencies establish policies and administrative procedures to assure that all school construction in the state comply with state architectural barriers law and/or regulations.

At the Federal level, Education of the Handicapped Act (P.L. 93-380) provides funds and requirements that will continue to have substantial influence on educational programming for the handicapped. The focus of research and training functions is shifting to handicapped children currently excluded from the public schools and concomitantly those that are more severely and substantially disabled. The legislation highlights the needs for early education, consumer involvement, and the development of state plans that will lead to services for all school-aged handicapped children. The Developmental Disabilities Act of 1975 reinforces these state planning roles calling for comprehensive services for all disabled children. Recent Federal legislation assisting children with special needs has not been limited to the area of education. During the last session of the 93rd Congress, two sets of significant amendments to the Social Security Act were enacted (P.L. 93-66 and P.L. 93-233). Social Security and SSI benefits were increased and certain restrictions were repealed. Other legislation action set vocational rehabilitation priorities to serving "those individuals with the most severe handicaps" (P.L. 93-112), and substantially increased Federal assistance to handicapped individuals wishing to

Perhaps the single most important piece of legislation for this decade and the future education for the handicapped is the Education for All Handicapped Children Act (P.L. 94-142). Phillip R. Jones hailed this act as the "Declaration of Independence of Bill of Rights for the handicapped and a most important breakthrough during our nation's bicentennial observance."

The Act establishes a formula in which the Federal government makes a commitment to pay a gradually-escalating percentage of the national average expenditure per public-school-handicapped child times the number of such children in each school district. This percentage escalates to a 40 percent level in 1982 and remains through subsequent years. The law states a priority of serving previously "unserved children" and the severely handicapped who are inadequately served. The law stipulates that services for handicapped children ages 3 to 21 are to be provided through use of funds. The Act also carries specific provisions which cover pre-school incentives, formation of state planning and advisory panels, due process, personnel development, and individualized programs.
The law has far reaching implications not only for education of the handicapped but also for shifting balances of power among Federal, state, and local levels. Such rearrangements could result in a backlog. This would leave the school district without the monies and the Federal government without impact in this much needed area. Heated debates on issues raised by this Act are likely to continue for some time to come.

RESEARCH INTO THE EFFICACY OF SPECIAL EDUCATION FOR THE HANDICAPPED

Public education for handicapped children has perhaps been debated more on the role of the special class than any other topic. Although research is fragmented and of limited availability, there is no lack of critical reviews and proposals for new models. Bruininks and Rynders (1971), in a discussion of alternatives for special class placement for the educably mentally retarded (EMR) child, stated that the special class came into being at the turn of the century and served 90 percent of retarded children receiving services by the middle Sixties. In the latter Sixties, beginning with Dunn (1968), critical reviews began to emerge regarding special class placement emphasizing possible misplacement and its sequelae for borderline, minority or disadvantaged populations. Similar positions have been taken by Lilly (1970) and Christopoulos and Renz (1969) who argued for the inclusion of the handicapped in regular classrooms to expand social
adaptations of the retarded and to enhance the attitudes of
the non-retarded. They further proposed additional research
on the effects of including a variety of exceptional children
in regular classrooms. MacMillan (1971) provided a thorough
review of research on special class placement for the mildly
retarded and concluded that special education was a complex
problem and could not be met with a dichotomy discussion
of integrated or segregated placement. He recommended exploration
of how a wider range of individual differences could
be accommodated and adapted to regular class placement.
Miller and Schoefelder (1969) and Harvey (1969) also provide
critical reviews and restate the need for public education
to meet the special needs of handicapped students through
a variety of diagnostic and prescriptive methods. In their
comprehensive review of the literature, Bruininks and
Rynders (1971) stated that the assumptions of homogeneous
grouping, unique curriculum and specially trained teachers
are factors optimizing education for retarded children have
not been adequately tested. Summarizing basic positions of
many of the earlier cited critical articles for or against
special classes, they conclude that available evidence is
equivocal and essentially uninterpretable. The authors
propose several alternatives to special class placement for
EMR children which incorporate the principles of normalization
and individualization.
From a somewhat different perspective, Valletutti (1969) deplores the integration-segregation argument in special education and suggests that aside from specific considerations of efficacy, legitimate criteria can be invoked for segregating the handicapped child to reduce negative consequences on teachers and children in regular classrooms. Valletutti feels that crucial issue is the role of teacher attitude and expectancy on the successful education placement of handicapped children. The values and attitudes of teachers would, therefore, become an important consideration both in teacher training as well as in the programs and placements of handicapped children. The reality, however, of severely and profoundly retarded children attending public schools has led Smith and Arkans (1974) to recommend the retention of the special class placement as the most effective and efficient educational setting for such students. Smith and Arkans present a list of considerations focused on the unique physical needs of severely and profoundly retarded children, the inability of a large regular classroom to meet these needs, and the lack of emphasis among regular teachers or regular classes to adequately incorporate education and training which expands the lifetime of the child. Efficacy studies for the trainable-level child are fewer and ever less definitive than for the EMR's although specific intervention studies have indicated substantial capabilities of the trainable child to respond to instruction.
In summary, it would appear that public education of the mentally retarded child presents dilemmas which have yet to be resolved. Although there has been a lack of substantive research on the issues, and that research has been open to equivocal interpretations, there has been no lack of critical debate and model building in the literature. Continued debate and model building with adequate empirical evidence can only contribute to further confusion and premature action. In approaching public education's responsibility to the retarded child, consideration must be given not only to the academic, social and personal needs of the child, but also to the interactive components of this need with physical settings, teacher qualifications, attitudes and values, as well as peer and parent involvement. Clearly, a variety of interactive permutations are possible in equations of accountability. Some alternatives elaborated by Bruniinks and Aydenders (1971) and the special education contract model proposed by Gallagher (1972) are representative of approaches which would take into account some of these interactive variables. Implementation of effective programs for the mentally retarded in public schools should be based, now more than ever, on the execution of comprehensive planned research.

In summary, Chart I presents the studies covered by Wiegerink and Simeonsson (1975). They are grouped according to an arbitrary classification system which utilizes dependent variables: academic, social acceptance, personal-social.
## CHART I
### A COMPARISON OF RECENT EFFICACY STUDIES

<table>
<thead>
<tr>
<th>Segregated</th>
<th>Integrated</th>
<th>Resource/Special Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Tilley</td>
<td>0 McKinney</td>
<td>+ Chowan</td>
</tr>
<tr>
<td>- Walker</td>
<td></td>
<td>+ Walker</td>
</tr>
<tr>
<td>- Chovan</td>
<td></td>
<td>+ Hammill</td>
</tr>
<tr>
<td>0 Gorman</td>
<td>0 Tilley</td>
<td>0 Gorman</td>
</tr>
<tr>
<td>- Brown</td>
<td>0 Gorman</td>
<td>+ Brown</td>
</tr>
<tr>
<td>0 McKinney</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Acceptance</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Academic Achievement</th>
</tr>
</thead>
</table>

| 0 Gorman            |
| 0 Flynn, Flynn      |
| - Goodman           |
| + Renz, Semens      |
| + Bruininks,        |
| - Van'OsdoI         |
| - Goodman           |
| - Gottleib,         |
| - Buddif            |

<table>
<thead>
<tr>
<th>Personal-Social</th>
</tr>
</thead>
</table>

| 0 Tilley          |
| - Mooney          |
| - McKinney        |
| + Warner, Thrapp, |
| & Walsh           |
| + Gozali          |
| + Kah.,          |
| - Trippi          |
| + Trippi          |
| + McKinnedy       |

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behavior that are indices of efficacy. In addition, they are grouped according to independent variables of educational programs, segregated programs or classrooms, predominantly integrated settings and resource and specialized programs. The study's results are reported according to a supporting (+), negative (-), or neutral (0) finding. As can be seen, segregated placements have resulted primarily in negative or neutral findings. Integrated settings produced mixed results and the resource classroom produced only positive or neutral findings. While the comparability of these studies, in terms of research design, sampling, and rigor is questionable, the results tend to indicate that programs which draw on both the individualized strength of instruction and from the advantages of normalized settings (e.g., the resource classrooms) provide the educable mentally retarded (EMR) the best opportunity for academic and social development.

SERVICE DELIVERY

For many years, handicapped children, particularly mentally retarded children, received little formal education. The more severely handicapped child was usually excluded from school altogether, and forced to stay at home, where even his existence was hidden from neighbors' prying eyes. For many, institutionalization was the only relief available to those parents who could not meet their child's special needs. Although institutions still exist, they are now
generally viewed to be a last resort, rather than the only choice available. Consciousness-raising efforts by such parent and professional organizations as the Council for Exceptional Children, the National Association for Retarded Citizens, and the Association for Children with Learning Disabilities, among others, have brought to the fore the question of the right of all children to a free public education. Such a right has been supported by the courts through litigation. As the focus for education of handicapped children has been placed on the public schools, new approaches for the delivery of appropriate services have been developed. Local, state, and Federal agencies supported public school programs for handicapped children by tripling their funding between 1966-1972, reaching the level of $2 billion by 1972 (Gallagher, 1972). State legislatures have also been active in this period. In 1972 alone, over 800 bills were introduced supporting special provisions for handicapped children, with almost 250 of them being enacted into law (Gallagher, 1972).

For the more than 9 million mentally or physically disabled children in the U.S., these have opened wide the doors of the little red schoolhouse (Kakalik, et al., 1974).

Upon entering the school, handicapped children and their parents are finding that many activities are now being oriented toward normalization, or mainstreaming. The normalization principle, as applied to handicapped children,
provides conditions for them which are as close as possible to the norms accepted by society. Translated into educational programming, the term "mainstreaming" refers to providing for handicapped children in the regular classroom and those who are given the supportive services of teacher consultation with specialists, tutoring by an itinerant teacher, resource room attendants, or a combination of these services (Kohler, 1975). Traditional self-contained classrooms continue to exist, delivering services to more severely handicapped children who would best function in such an environment. The burden of proof lies with the school to provide the least restrictive and most educational environment.

Self-contained classrooms are of two basic types, categorical and non-categorical. In each instance, the children receive their education in a single classroom. The children are in this manner segregated from any interaction with non-handicapped children. There, instruction is the responsibility of a single teacher and, occasionally, a teacher’s aide. Children are assigned to the classroom on the basis of categorization, e.g., educable mentally retarded or learning disabled, often times resulting in the age range of the students spanning several years. In the non-categorical self-contained room, the difference is that children of approximately the same age are grouped together, regardless of the label affixed to the disability,
There are some schools which utilize a team-teaching approach. Teachers and their classes are placed together in pods. Teachers are given responsibility for particular students or the instruction of certain subject areas.

Many schools, in a more overt attempt to eventually place handicapped children in regular classes, have moved to the resource-room concept. Under this system, the child leaves his class at certain specified times for a resource room where he receives assistance in a particular subject area. Resource programs may have either an ability or skill orientation or a combination of both (Jenkins and Mayhall, undated). In the former, the focus is on basic school tasks such as arithmetic or reading. The latter concentrates on central processing mechanisms related to perceptual, motor, and psycholinguistic abilities.

For various reasons some schools do not have resource rooms, opting instead for a consulting teacher program. As developed by Hugh S. McKenzie (1973), a consulting teacher program brings the specialist into the child's regular classroom. There, the child is both observed and formally evaluated. The consulting teacher then develops an individualized program of instruction for the child and works with his teacher in implementing it. If necessary, the consulting teacher will visit the child's parents, explaining the program and enlisting their assistance.
Another model being utilized is the Child Development Consultant (CDC). The National Institute of Mental Health funded five university programs to prepare these specialists in child development to work with handicapped children. The professionals are broadly trained during a two-year Master's degree program to provide consultation to teacher and inservice training. Where the model is effective, school personnel established a supportive, individualized program of instruction for every child in the school and a carefully monitored, positive mental health atmosphere.

One area that has received increasing attention from Congress and BEH is early education. Under the Handicapped Children's Early Education Assistance Program, over 200 model First Chance Centers have been developed and funded. These centers provide services for preschool children from ages 0-8 and their parents. Service delivery methods vary from center to center but all include individualized programs and parent training.

Although not proven to be highly successful, performance contracting has been utilized as a method for attaining success in the classroom. One of the most extensive experiments in this area was undertaken during the 1970-71 school year. The U.S. Office of Economic Opportunity (now the Community Service Administration) sponsored a project in which private firms operating under incentive contracts
developed educational performance contracts for several school systems and delivered to programmed instruction. Their results were compared with that of public schools operating under a traditional instructional method (Gramlich and Koshel, 1975). While enjoying, at best, only minimal success in most instances, schools have continued to place the responsibility for delivery of educational services with teachers.

Ultimately, it is hoped that all or almost all children will be served within the regular classroom. Mainstreaming of handicapped children into regular classrooms has become the watchword of the late Seventies. The success of this effort will depend on the success of inservice training and reeducation for today's teachers and new training goals, methods, and procedures for tomorrow's.

Table XIII presents cost comparison of the various models briefly described in this paper. The costs are estimated from a variety of sources and reflect current nationwide approximate average cost. Costs of courses vary widely from state to state and district to district, but the relative costs of the compared models do not. All things being equal, it is clear that the mainstreaming approaches are less costly than the specialized approaches. Of course, all things are not equal. Current models cannot accommodate all types of handicapped children. Instead, the multiply handicapped
<table>
<thead>
<tr>
<th>MODEL</th>
<th>NUMBER SERVED</th>
<th>DIRECT COSTS</th>
<th>INDIRECT COSTS</th>
<th>TOTAL COSTS</th>
<th>TRAINING COSTS</th>
<th>TRAINING COSTS PER YEAR</th>
<th>PER CHILD TRAINING COSTS</th>
<th>TOTAL COSTS (TRAINING AND SERVICE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>5</td>
<td>10,000</td>
<td>---</td>
<td>10,000</td>
<td>10,000+</td>
<td>1,000</td>
<td>200</td>
<td>10,000+</td>
</tr>
<tr>
<td>Special Class (self-contained)</td>
<td>8</td>
<td>2,300</td>
<td>400</td>
<td>2,700</td>
<td>18,000</td>
<td>1,800</td>
<td>220</td>
<td>2,920</td>
</tr>
<tr>
<td>Resource Class</td>
<td>20</td>
<td>750</td>
<td>800</td>
<td>1,550</td>
<td>22,000</td>
<td>2,200</td>
<td>110</td>
<td>1,660</td>
</tr>
<tr>
<td>Consulting Teaching Specialist</td>
<td>20</td>
<td>500</td>
<td>800</td>
<td>1,300</td>
<td>26,000</td>
<td>2,600</td>
<td>130</td>
<td>1,430</td>
</tr>
<tr>
<td>Child Development Consultant</td>
<td>40</td>
<td>250</td>
<td>800</td>
<td>1,050</td>
<td>26,000</td>
<td>2,600</td>
<td>65</td>
<td>1,115</td>
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<tr>
<td>Early Education</td>
<td>8</td>
<td>1,000</td>
<td>800</td>
<td>1,800</td>
<td>22,000</td>
<td>2,200</td>
<td>220</td>
<td>2,200</td>
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<tr>
<td>Regular Education</td>
<td>25</td>
<td>800</td>
<td>---</td>
<td>800</td>
<td>20,000</td>
<td>2,000</td>
<td>40</td>
<td>840</td>
</tr>
</tbody>
</table>

TABLE XIII
SERVICE DELIVERY COSTS
ELEMENTARY SCHOOL
(ESTIMATED PROJECTIONS)
are restricted to the more costly service methods. However, it is clear that given the willingness and the start-up costs, in the long run even the multiply handicapped would be much better off in mainstreamed classes for social, cultural, and legal, as well as economic, reasons. What remains to be acquired is the determination and resources to complete the mainstreaming effort.

MANPOWER

In the past decade the area of education for the handicapped has undergone rapid and significant changes. From these changes have emerged a number of varying trends that promise to enact profound changes within the field, particularly regarding personnel. Currently, there appears to be a great deal of flux and lack of cohesiveness within these trends. Some are viewed as being possibly detrimental to progress already made. This controversy is illustrated by such diverse examples as those calling for a loosening of the requirements for educators of the handicapped, while others are demanding a greater number of qualified specialists to deal with more and/or expanding special education programs. The expansion of special education and increased personnel allotments has been largely due to the more active involvement of Federal and state government with particular emphasis on funding. This is exemplified by the creation of the Bureau of Education for the Handicapped (BEH) in 1966, and the
subsequent support of special education training programs at the secondary education level. By 1970, there were over 400 colleges and universities (an increase from the 70 which existed less than 40 years ago) with special education programs; over 300 of these institutions were receiving federal support for teacher training. In the past fiscal year (1975), BEH awarded nearly $200 million to states and special programs. Of this, $37.7 million was allocated for training of teachers, supervisors and paraprofessionals (Education Daily, undated).

The two federal programs directed toward increasing special education personnel are (1) The Education for the Handicapped Act-Part D which provides for graduate level training fellowships to those students pursuing careers in special education and (2) programs under the Education Professions Development Act which are designed primarily for the provision of special education training for regular classroom personnel. However, even these steps do not change the fact that there still remains an urgent need for trained special educators. In fact, special education is one of the few areas in education with a major personnel shortage. This lack of personnel extends in all areas and also to the provision of ancillary and trained paraprofessionals to work with and provide assistance to the special educator. There is also a need for inservice training in special education to better enable regular educators to identify and meet the special needs of handicapped children. Although this demand is readily
acknowledged, there are many complicating factors. Throughout the United States there is a wide variation in demand verses supply of special educators. While in some states 60 percent to 70 percent of handicapped children receive special instruction, in others fewer than 15 percent are served. Wide variation also exists as to the types of educational services available. A viable relationship does not always exist between the need for special educator personnel and funding available to pay for them. Recent increases in state level expenditures may alleviate this problem. Table 1 shows the 1971-1974 expenditures for the education of the handicapped in selected states. From these representative figures, the increases for state funds for the period 1971-1974 are shown. In each case the expenditure has increased by at least 10 percent and the total increase is over 50 percent. These yearly increases give a great deal of insight into the awareness of the states to funding expenditures for handicapped children. At this point, it should be noted that the largest single state expenditure is for the delivery of instruction, particularly the salary cost for teachers and teachers' aids (Education of Exceptional Children, 1975).

Perhaps the area of special education in which there is a most urgent need is for increased numbers of skilled professionals for the early education of the handicapped child. Educator's experience and experimental data tentatively suggest that a great deal more would be accomplished
if special programs are initiated at an early age. Although complete data is nonexistent, current estimates approximate that there are about one million handicapped children (0 to 4 years) in the United States. By categories, we have the following levels of occurrence:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech</td>
<td>327,900</td>
</tr>
<tr>
<td>Visually</td>
<td>9,400</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>309,200</td>
</tr>
<tr>
<td>Emotionally Disturbed</td>
<td>180,000</td>
</tr>
<tr>
<td>Hard of Hearing</td>
<td>46,800</td>
</tr>
<tr>
<td>Crippled &amp; other Impaired</td>
<td>46,800</td>
</tr>
<tr>
<td>Deaf</td>
<td>7,000</td>
</tr>
<tr>
<td>Multi-handicapped</td>
<td>5,100</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>93,700</td>
</tr>
<tr>
<td>Total</td>
<td>1,026,700</td>
</tr>
</tbody>
</table>

Teachers of visually and aurally impaired children, in particular, have long advocated for early education. Presently more than 70 percent of the states (40-45 percent) have some type of mandatory legislation that allows for the implementation of educational programs for the handicapped child to begin before the entering school age.

The area of education of the gifted and talented is another which utmost priority needs to be given. Regular teachers without special training have been found uninterested in and in some cases hostile towards the gifted and talented (Education of Exceptional Children, 1975). There is also evidence which suggests that in some districts 20-25 percent of these children are not identified by the regular teacher.
A continuing shortage exists for minority and bilingual group special educators. This need for bilingual personnel is particularly apparent in the Spanish-origin population of the United States which continues to grow rapidly due to high birth rate and the substantial immigration of young adults.

Clearly, there is a need for additional personnel to deliver services to children with special needs at all levels and across all categories. Accurate projections of supply and demand would provide a great deal of enlightenment in this area of great concern. The general lack of data, the disagreement among professionals as to the needs of handicapped children, and the multiplicity of systems all complicate efforts for a concise national trend which would clearly indicate manpower needs.

It is reasonable to state that in the area of personnel there have been giant strides toward attaining a greater balance between need and available resources. Greater numbers of more highly qualified personnel are needed. To accomplish this, funding in the Federal, state and local budgets for personnel training and development is needed. There is a need for school districts to become aware of and implement the upgrading of qualification requirements for existing and incoming personnel. As the recent court decisions have determined, children with special needs must receive an appropriate education. This presumes staffing our schools and other service delivery systems with qualified personnel.
REFERENCES


California Education Code, Section 6102.08.


Education Daily, 8 (181).

Education of Exceptional Children. No. 73, Education Commission of the States, September, 1975.


Larry P. v. Riles, 343 F. Supp. 1306 (M.D. California, 1972)


