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Kodras, Janet Elaine

THE GEOGRAPHIC PERSPECTIVE IN SOCIAL POLICY EVALUATION: A CONCEPTUAL APPROACH WITH APPLICATION TO THE U.S. FOOD STAMP PROGRAM

The Ohio State University

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THE GEOGRAPHIC PERSPECTIVE IN SOCIAL POLICY EVALUATION:
A CONCEPTUAL APPROACH WITH APPLICATION TO
THE U. S. FOOD STAMP PROGRAM

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By

Janet Elaine Kodras, B.A., M.A.

* * * * *

The Ohio State University
1982

Reading Committee:
Dr. Lawrence A. Brown
Dr. Kevin R. Cox
Dr. George J. Demko
Dr. W. Randy Smith

Approved By

Adviser

Department of Geography
DEDICATION

This dissertation is dedicated to my parents. Their wide ranging interests, from gold mining in Nevada to Amish quilt making in Pennsylvania, first awakened in me a love for geography, an appreciation for the diversity of cultures and landscapes throughout the world.
ACKNOWLEDGEMENTS

I wish to acknowledge those who contributed to this research. First, I would like to thank my adviser, Professor Lawrence A. Brown, for the guidance he has provided to the dissertation, specifically, and to my graduate career, in general. Larry instills in his students not only the formal, intellectual foundations of the disciple but also, and perhaps more importantly, an appreciation for life complexities which academicians attempt to model and abstract. His exuberance is infectious.

I would also like to thank the reading committee. Professor Kevin Cox offered important, contrasting perspectives to my research; Professor George Demko stressed the need to emphasize the policy implications of the findings; and Professor Randy Smith, at very short notice, provided a thorough critique of the work. Each gave generously of his time.

I especially wish to thank Professor James E. Prather, of Georgia State University, for first encouraging my return to graduate work and for following my progress through the degree. Professor Prather offered many suggestions for the dissertation from his perspective as a political scientist and policy analyst.

- iii -
In formulating my ideas for the dissertation and in collecting the data, I drew upon the resources of several agencies and universities. The Food and Nutrition Service of the Department of Agriculture generously provided unpublished data on participation in the food stamp program. John Czaka, of Mathematica Policy Research, Inc., spent many hours discussing methodological problems of participation rate estimates. Maurice MacDonald, of the Institute for Research on Poverty at the University of Wisconsin, provided substantial insight into the complexities of the food stamp program. The Ohio Bureau of the food stamp program, headed by Otis Fulmer, explained the manner by which a federal policy such as the food stamp program is translated and administered at the state and local levels. I wish to thank all of these people for openly discussing the strengths and weaknesses of the food stamp program.

I appreciate the financial support provided by the Department of Geography during the first three years of my graduate work. I thank the University Presidential Fellowship committee for providing the final year's support so that I could concentrate solely on the dissertation.

Friends and family have offered much encouragement. The spirit among the graduate students in the Department of Geography is one of comraderie rather than rivalry. It has
been a pleasure to work in an environment so free of competitiveness. Two friends offered far more than general support. E. Helen Berry retyped a 60 page chapter which I had inadvertently deleted from the word processor. John Paul Jones critiqued every chapter and helped to clarify and structure my ideas. I also appreciate the support of my family, who never questioned my decision to pursue a doctoral degree in a discipline as esoteric as geography.

Finally, I thank my two, tired index fingers for typing the many drafts of the dissertation without the assistance of neighboring thumbs or fingers.
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Chapter I
INTRODUCTION

National social programs, such as Medicaid, AFDC, and the food stamp program, are entitlement policies, such that eligible recipients should be able to participate wherever and whenever they are in need of assistance. Given the political and economic realities in which these policies operate, however, it is unreasonable to assume that participation in social programs will reflect only the level of need for assistance. It is the thesis of this dissertation that national social programs exhibit distinct spatial and temporal variations in their utilization, beyond variations in need, because they are implemented in differing political and social contexts which influence the extent to which they are effectively provided and demanded. To test this premise, a conceptual model, which incorporates spatially and temporally varying influences upon program use, is formulated and applied to the analysis of one national social policy, the U. S. food stamp program.

The objective of the dissertation is to illustrate how geographers, utilizing theoretical concepts and perspectives of the discipline, can contribute to the evaluation of
national social programs. It is the contention here that theoretical, academic research and applied policy analysis are complimentary, each benefitting from the extension and development of the other. To the extent that national social policies vary in their effectiveness spatially and change in their impact through time, analysis of the program is enhanced when studied in the frameworks of such geographic perspectives as diffusion theory and location-allocation models, which directly address time and space dimensions. In turn, theory benefits from testing in a policy setting. Thus, the dissertation is intended to serve as a medium for demonstrating the intersection between the theoretical and the applied.

The remainder of this chapter sketches the broad outlines for the study. As a general introduction, the first section summarizes the manner by which federal government funds are allocated throughout society, and are often spatially biased toward certain areas of the country. The second section is more specific, describing the historical development and present system of social program provision. The third section introduces the U. S. food stamp program as the subject for analysis. Temporal and spatial variations in program use, beyond such variations in need for the program, are described and used to justify examination of this program. A fourth section presents a conceptual model of influences upon program use.
1.1 THE SPATIAL DIMENSIONS OF GOVERNMENT ALLOCATION

One of the major functions of the U.S. government is the allocation of funds among programs which confront domestic problems. Due to the limitations set by political priorities and scarcity of funds, this distributive process generally produces American losers, "those who must bear the costs of adjustment," and American winners, "those who reap the gains" (Ransom, 1981, p. 11). One researcher has gone so far as to use the metaphor of a zero-sum game to describe the allocative process (Thurow, 1981).

Although winnings do not exactly match losses in government allocation, many examples exist which demonstrate that seemingly aspatial policy decisions made by the national government often assist some areas of the country relative to others. For instance, the Reagan administration's emphasis upon national defense has bolstered regional economies in the Southwest and Southeast where military bases and industries are spatially clustered. The Carter administration's decision to revitalize urban areas impacted primarily upon the deteriorating older cities of the Northeast industrial core. President Johnson's decision to relocate the national space program to his home state of Texas is another, more explicit, example of the spatial consequences of national policy decisions. When NASA relocated to Texas, much of the related electronics and computer industry followed, thus rearranging the spatial economy.
These examples illustrate that policy decisions made by the national government with regard to certain sectors of the economy can have varying spatial impacts, often because those sectors are concentrated in certain areas of the country. Policy decisions made by the national government with regard to social programs, which are aimed at the well-being of the population rather than sectors of the economy, often have spatial consequences as well. The uneven distribution of federal public assistance funds allocated to the states serves as illustration (Figure 1). Note, for example, that per capita public assistance funds in interior agricultural states such as Colorado, North Dakota, and Kansas were less than one-half the amount provided to states such as Mississippi, New York, and Massachusetts. Prior to a discussion of the factors which create spatial disparities in social programs, it is instructive to review the process by which the government provides social assistance and the historical development of such provision.
federal expenditures in millions of dollars

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Figure 1: Federal Allocations for Public Assistance, 1979
1.2 **THE ALLOCATION OF SOCIAL WELFARE**

The U. S. government plays a major role in distributing well-being within society. In making such allocative decisions, the government provides for the wealthy and middle classes as well as the poor. Provision of direct and in-kind transfer payments assist the poor; creation of many mid-level public service jobs benefits primarily the middle class; and the tax structure, designed to encourage savings and investment, certainly does not discriminate against the wealthy (Thurow, 1981, pp. 155-190). Further, society in general benefits from government provision of social security and subsidization of such services as roads and schools.

Despite the fact that American political ideology is founded on the notion of individual responsibility for personal welfare, the government has historically expanded its role to provide security for the population against fluctuations of the market system (Ransom, 1981). The most notable instances of this growth in government social welfare activity occurred with the New Deal legislation of the 1930's and the Great Society program of the 1960's.¹ The present welfare system, including the food stamp program, contains many

¹ For historical accounts of government expansion in the 1930's, see Chandler, 1970; Conklin, 1967; Lubove, 1968; Mitchell, 1947; and Rosenhof, 1975. For similar discussions concerning the 1960's expansion, see Cantebury, 1968; Heller, 1966; Levitan, 1969; and Okun, 1970.
remnants of the New Deal and is a direct descendent of the Great Society era.

The underlying philosophy of the Kennedy and Johnson administrations in the 1960's was to stimulate economic growth. The resulting "social dividend" was to be allocated by the government, through a series of comprehensive programs, to provide for the general well-being of the population, thus producing the visionary "Great Society" (Ransom, 1981, p. 141). Particular emphasis was placed upon assuring previously disadvantaged groups of more access to social benefits. The poverty, civil rights, black and women's movements which gained momentum during this time may all be seen as attempts by groups, which had traditionally absorbed economic costs, to claim a share of the benefits (Thurow, 1981, p. 12).

During the strong economic years of the 1960's, the government had little difficulty making such distributive decisions because general prosperity allowed the great majority of Americans to improve their status. Since the early 1970's, however, as growth of the economy has slowed, the role of the government has become much more contentious, as it has attempted to allocate scarcity rather than prosperity. As a result, competition between various groups in society has become more visible, as each strives to claim its piece of a shrinking national pie.
Competition between regions of the country is clearly visible, reflecting the tensions of variable economic growth and decline in different areas of the nation. Perhaps the clearest example of regional disparities in well-being has been the recent economic decline of the Northeast industrial core relative to other sections of the country. This shift in prosperity fostered among other things, the much publicized Snowbelt to Sunbelt migration flow (Beyers, 1979; Bees, 1979; and Weinstein and Firestone, 1978).

Regional leaders are currently very sensitive to the issue of how the national government allocates funds to the various areas of the country. As federal expenditures have become an increasingly significant proportion of the funds which flow into an area, there have been charges of regional favoritism in federal programs and even declarations of a "Second War between the States" (Business Week, 1976). A major White House study, "Patterns of Regional Change" (1978), recently emphasized the need to evaluate the spatial ramifications of national government spending:

Virtually every activity of the federal government has some regional impact. However, little is known about the extent to which national economic policies affect the economies of regions and areas within regions. Calls for systematic assessment of such impact have come from various sectors. William Gorham, head of the Urban League, has written, 'The time has come for more meticulous consideration of the way Federal Government spending affects regional growth and well-being. What currently guides such spending, by and large, are considerations of efficiency -- getting the most goods or services for the tax dollar spent -- fre-
quentiy modified by the political process. To these criteria should be added explicit considera-
tion of the distributinal effects of these in-
vestments.

The calls for systematic assessment of spatial variation in social program effectiveness have been clear. What is required to analyze these disparities? First, the existence and extent of variation in program effectiveness must be demonstrated. Second, factors creating these variations must be identified. Demonstrating variations in program ef-
fectiveness is a relatively easy task. The identification of the factors, however, is a more complex procedure. It requires a conceptual model which describes not only what the major influences are, but also how they are thought to operate.

The following sections begin the task above. In the first section, spatial variation in the effectiveness of the food stamp program is demonstrated. In the second section, a conceptual model is developed which outlines the broad factors postulated to influence variations in program effec-
tiveness. In addition, the model specifies how these fac-
tors, themselves varying through space and time, create spa-
tial-temporal disparities in program effectiveness.
1.3 THE U. S. FOOD STAMP PROGRAM

With the Food Stamp Act of 1964, Congress instituted a nationwide program to increase the food purchasing power of low-income households in the United States. The food stamp program is currently one of the largest national programs of income support to the poverty population, both in terms of the people served and government expenditures.²

The food stamp program is an entitlement policy, such that eligible recipients, defined as "any household whose income and assets are determined to be a substantially limiting factor in the attainment of a nutritionally adequate diet," should be able to participate whenever or wherever they are in need of assistance (Food Stamp Act, section 1, emphasis mine).

Considered at the aggregate level, therefore, participation in this program should ideally reflect only spatial or temporal variations in economic need for assistance. There is considerable evidence, however, that the food stamp program has not fully, nor has it uniformly, reached low-income

² In 1977, the four largest support programs were: Medicaid, for which the government paid $9.7 billion to 24.7 million persons; the food stamp program, which assisted 17.4 million people at a cost to the government of $5.4 billion; AFDC, which provided for 11.4 million recipients at a government cost of $5.9 billion; and Supplemental Security Income, which allocated $6.3 billion to 4.4 million people.
households in this country. For example, the proportion of the eligible population who participate in the program has generally increased through time but it has never been more than 55 percent. When the national participation rate is disaggregated to the state level, spatial disparities in use of the program are evident as well. In 1975, for instance, participation varied from a low in North Dakota, where only 18 percent of the eligible population participated, to a high in Rhode Island, where fully 84 percent used the program.

This historically low and geographically uneven use suggests that the food stamp program has not operated as a pure entitlement policy, with eligible participants responding only to conditions of economic need. Although the eligible recipients of national social programs have been found in many contexts to respond in a rational manner to economic incentives and changing conditions of need, they are able to do so only when fully informed of the options available to them and when the program is structured and implemented in such a manner that it is effectively provided to them (Coe, 1980, p. 16). Rational, free choice in the decision to use welfare is apt to be the exception in an environment of

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3 The eligible population is estimated throughout the dissertation as the number of persons whose income is below 125 percent of the poverty level. The use of this surrogate in arriving at these estimates of program participation is specified and justified in a later chapter.
misinformation, administrative complexity, and financial constraints which force strict allocative decisions.

The U. S. food stamp program thus provides an interesting example of a national social policy with distinct spatial and temporal variations in its utilization. It is helpful to develop a model which describes the influence of these economic need and program provision factors upon the program.

1.4 A SPATIAL-TEMPORAL MODEL FOR THE ANALYSIS OF SOCIAL PROGRAMS

Although some researchers have described the spatial patterns in the use and effectiveness of social programs, neither applied policy analysts nor geographers have undertaken a systematic assessment of the factors which create these variations.  

* The identification and search for explanations of areal differences in social program effectiveness should not necessarily constitute a major research focus for either group. The discovery of spatial variations in program use is certainly not a central, nor is it a sufficient, problem confronting the policy analyst. Similarly, the specific issue of social policy evaluation is not likely to command a great proportion of the geographer's attention since it is but one detailed issue of potential interest to the discipline. The analysis of spatial issues in social programs can nevertheless make important contributions to both general geographic theory and to specific policy analysis.
The conceptual model outlined here identifies the major factors influencing spatial and temporal variations in program effectiveness and the manner in which these factors operate. The starting point for the discussion is Figure 2. This conceptual model is divided into two sections, a contextual environment, for the operation of overall political, social, and economic processes, and a social policy component, specific to the analysis of varying effectiveness.

Consider first the contextual environment. Within it operate three systems, which are separated for purposes of clarity, but are not necessarily independent. The political, economic, and social systems are presented as arbitrary segmentations of "the blooming, buzzing confusion which constitutes the real world" (Simon, 1957, p xxv).

Only certain aspects of these systems are directly involved in the formation and utilization of social programs. Researchers analyze the relevant components of these systems in terms of processes, which are formal descriptions of the system's operation. For example, the policy process, which will be elaborated in later chapters, is one of a set of political processes which describe the mechanisms of the

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5 Throughout the dissertation, program effectiveness is measured in terms of the extent to which it is used by eligible recipients. Other measures of program effectiveness could be used as well.
Contextual Environment

- Political System
  - Political Processes
- Economic System
  - Allocative Processes
- Social System
  - Social Processes

Diffusion Processes Through Space & Time

Social Policy Component

- Supply
- Need
- Demand

Program Use
political system. A set of allocative processes describe the economic system. One such process pertinent to social policy is long term regional cycling in economic growth. Finally, a set of social processes describe the social system. One of these is the Protestant work ethic, which represents attitudes toward work vis a vis welfare.

None of these processes is aspatial or atemporal. For example, the policy process will be viewed in this dissertation as an evolutionary process with an explicit spatial component. In addition, allocative processes, which in this country are geared toward efficiency, create spatial inequities in economic growth. Finally, social processes have spatial and temporal components as well. Attitudes toward work versus welfare change through time and differ throughout the country.

Let us now turn to the social policy component of Figure 2, and the implications that the contextual environment has for it. These implications are two. First, by identifying the relevant processes, the factors important to social program effectiveness become clear. For example, the political process primarily determines the supply of a social program, that is, the way in which it is designed and implemented. The allocative process, on the other hand, primarily determines economic need for a program. Finally, social
processes, such as attitudes toward welfare among social groups, influences the demand for a program. These supply, need, and demand factors, in turn, directly influence the use of a social program.

The second implication is that these factors cannot be analyzed without regard to the spatial-temporal variation in their underlying processes. The following subsections provide elaboration of the spatial and temporal nature of supply, need, and demand factors.

1.4.1 Program Supply

Social programs are not provided simultaneously across space. The particular mixture of federal, state, and local financial ability and willingness to provide determine the extent to which a program is effectively supplied. As Perlman (1980) points out:

The formulas by which costs are divided among levels of government have become major political issues, calling into being coalitions along both interest and geographic lines and producing profound impacts on the distribution of social service resources among areas of the country and among consumers of the services.

Presently, the federal government is attempting to contract its role in social program provision, an action with definite spatial impacts. Generally, spatial variations in provision are greater when state and local governments are
responsible for provision rather than the national government. As Orr (1976) illustrates: "Public Assistance payments (made by) the most generous states are over six times as large as those in the least generous states."

1.4.2 Economic Need

Economic need for social assistance varies spatially and temporally as well. To the extent that social programs operate as the entitlement policies they purport to be, spatial and temporal variations in program participation should reflect only such variations in need. Program use should thus reflect the historical ebb and flow of national economic cycles and geographic disparities in economic conditions, given the different sectoral employment mixtures in the various regions of the country.6

These regional economic fluctuations are a response to changing demand for regional endowments and specialities (Schumpeter, 1942), alterations in interindustry linkages (Beyers, 1979), differential aging of the built structure of urban areas (Walker and Large, 1975), shifting migration streams (Berry and Dahlman, 1980), and other economic and

6 For discussions of national economic cycling in the context of social development, see Easterlin, 1968; Kondratieff, 1935; and Schumpeter, 1947. For the translation to regional economic cycles and disparities, see Alonso, 1968; Beyers, 1979; Kuznets, 1935; Rees, 1979; Williamson, 1965; and Zimon, 1979.
demographic trends. The imbalances and time lags associated with this ongoing adjustment process creates a continuing reappearance of regional disparities in the well-being of the population living in those areas.

Although they are not deliberately spatial, social policies in the United States do tend to provide more to some regions than to others due to variations in need. Benshaw and Friedenberg (1977, p. 5) describe the variations in governmental assistance in the U.S. due to regional cycling:

(In the Northeast and Great Lakes regions, there was) a long-term reduction in job opportunities, aggravated by the cyclical downswings in 1970 and 1974-75, which accelerated in the seventies. The redistribution of manufacturing and associated activities away from these highly industrialized regions led to rapid growth of public assistance and unemployment compensation payments. The transfers contributed to financial difficulties, because they increased faster than the state and local tax base. In contrast, in the Southern and Western regions, economic activity grew rapidly and was relatively unaffected by recessions. Therefore, personal income required relatively little supplementation by transfers.

1.4.3 Social Demand

The demand for welfare, itself a function of a dynamic social process, tends to increase as the stigma attached to social assistance declines. However, negative attitudes toward welfare persist in some areas of the country. These attitudes reflect conflicting interpretations about why people need social assistance. One major interpretation views
poverty as a manifestation of individual failing and thus, government has no responsibility to provide. The major opposing view contends that poverty reflects the shortcomings of the economic system. Government is therefore responsible for buffering the effects of the economic system by providing social assistance. At various times in the nation's history and in various areas of the country, one of these conflicting interpretations has become dominant, thus influencing policy formulation, provision, and acceptance.

Thus, this conceptual model of social program effectiveness makes explicit the necessity for analyzing the operation of need, supply, and demand factors through time and in space at different points in time. The following section outlines the chapters of the dissertation which apply this model to the U. S. food stamp program.

1.5 OUTLINE FOR THE STUDY
Researchers in various disciplines emphasize different components of the conceptual model described above. Most often, the particular process studied reflects the analyst's disciplinary background, such as political science,

7 Discussions of this controversy, including its historical and geographical manifestation, are found in Horton, 1973; James, 1972; London, 1975; Piven and Cloward, 1977; and Watchell, 1974. For an explicit discussion of regional variations in political attitudes, see Elazar, 1972.
economics, or sociology.

The process studied in this dissertation, however, draws upon the research of several disciplines. Referred to as the policy process, it describes the mechanisms of policy design, implementation, and utilization. Thus, it incorporates supply, need, and demand factors influencing program participation.

Chapter 2 describes the policy process and reviews major approaches to the study of each stage. A final section of this chapter notes examples of spatial processes and biases which operate at each stage of the policy process but are rarely considered by policy analysts.

Chapter 3 illustrates how several thematic approaches used by geographers to study other issues are relevant to the analysis of the policy process. Although many such approaches are applicable, they are rarely used in this manner, as a review of the pertinent geographic literature illustrates.

Having demonstrated the lack of attention paid to the spatial dimensions of social policies by both geographers and policy analysts, Chapter 4 begins the analysis of the food stamp program. An historical review of the political,
The remainder of the dissertation presents an analysis of the U.S. food stamp program, utilizing pertinent aspects of the general conceptual framework. Chapter 5 presents an historical analysis of national program participation from 1964, when the program was initiated, to 1980. Economic fluctuations and changes in program provision are studied for their relative effect upon changes in program participation.

In chapter 6, a spatial dimension is added to analyze the determinants of changing state participation levels for various times in the history of the program. Finally, in Chapter 7, local variations in political, economic, and social factors are studied for their effect on county participation levels in Ohio.

Chapter 8 summarizes the findings of these temporal and spatial variations in use of the food stamp program and discusses the relevance of these conclusions to general understanding of the spatial nature of national social programs. The dissertation concludes with a discussion of the contribution which a spatial policy analysis framework makes both to the body of geographic theory and to applied policy evaluation.
Chapter II

THE POLICY PROCESS

The first chapter discussed the importance of understanding why national social programs vary spatially in their utilization and effectiveness. It then defined a plan for the investigation of this issue. This chapter begins the task, drawing upon several bodies of literature, to articulate a general framework for the analysis of national social programs. Although the framework is appropriate for the investigation of many other public policies, such as economic, environmental, and regional development programs, the discussion here is confined to its relevance in the analysis of social programs, which are targeted toward the well-being of individuals.

The first section of the chapter presents a framework for the study of national social programs which focuses upon the process of policy design and implementation. This process is presented as a series of stages, beginning with the recognition of a societal problem and ending with review and revision of the program. The second section illustrates that each stage has a specific spatial component.
2.1 THE FRAMEWORK

The establishment of a national social program is a complex procedure, requiring the inputs of many actors who work in a variety of institutional settings. The cumulative effect of these decisions gives the policy its particular structure, which affects the extent to which the program is utilized.

This section reviews the policy-making process to illustrate how these political actors influence the design and implementation of a government program. The process is presented as a sequence of stages which identify various political activities according to their institutional setting and the input they make to the policy (Figure 3). These stages are separated for purposes of clarity but do not necessarily occur independently. The seven stages are: agenda-setting, policy formulation, macro-implementation at the national level, program adoption by subnational governments, micro-implementation at the subnational level, program adoption by individuals, and program evaluation and feedbacks.

This framework is based upon several previous models of the policy process (Figure 4). Anderson (1976) used a five-stage model which is similar to the framework used in the present study. His scheme, however, does not distinguish between the administrative activities which occur at different levels of the government hierarchy. The present
AGENDA SETTING
Demand for attention to a problem creates an issue which reaches the government agenda

POLICY FORMULATION
Formal policy choice is made

MACRO-IMPLEMENTATION
Vaguely-defined policy is transformed into a program with specific procedures and guidelines

MICRO-ADOPTION
Subnational units adopt the program

MICRO-IMPLEMENTATION
Program transformed into daily administrative procedures

INDIVIDUAL ADOPTION
Individuals participate in the program

PROGRAM EVALUATION AND FEEDBACKS
Intended and unintended impacts of the program alter the original problem which creates feedback and revision of previous stages

Figure 3: Stages of the Policy Process
framework thus expands Anderson's implementation stage, incorporating the macro-implementation and micro-implementation stages of Berman (1978) to represent administration at the national and subnational levels, respectively.

Additionally, Anderson's conceptualization does not distinguish program adoption by subnational governments from adoption by individuals. The present framework includes an individual adoption stage in the policy process, which makes explicit the role of program recipients.

Easton's (1965) systems approach to the policy process and the similar work by Jones (1977), emphasize the operation of feedbacks whereby the assessment of policy outcomes causes the program to be revised at some previous stage. The notion of feedback is also incorporated into the present framework.

Policy analysts have developed many theoretical and methodological approaches to examine government programs. Most models are concerned with a single aspect of the policy-making process. For example, some analysts concentrate upon the decision-making process by which a policy is chosen, while others study the administration of the program. These various approaches will be reviewed in the stage of the policy process for which they are pertinent.
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2.1.1 Agenda-Setting

The policy process begins when a societal problem gains sufficient attention to be identified as a public issue and is placed on the government agenda. Questions typically addressed by policy analysts who study this stage include:

1. Who brings an issue to the attention of government officials?

2. Why do some issues never reach the government agenda?

In searching for the answers to these questions, policy analysts have divided into different schools of thought. Group theorists, whose conceptualizations derive from the work of Truman (1951), emphasize the importance of outside interest groups in bringing issues to the attention of policy-makers. Although these coalitions of individuals differ in their ability to influence which issues are considered, group theorists contend that the agenda reflects the demands of many interests in society.

* For a more detailed synopsis of these approaches, see Anderson, Brady, and Bullock (1978) and Dye (1981).
Two major perspectives differ from group theory in their interpretation of agenda-setting. Researchers using the elite perspective, for example, propose that only a small segment of society, the governing elites, structure the government agenda to reflect their own views rather than the interests of society as a whole. The general populace is seen as apathetic, misinformed, and removed from the political process (Dye and Zeigler, 1975). These researchers hold that democracy is an illusion, perpetuated by elites, so that the general population feels that it shares in the political process. Thus, those issues which do not represent the interests of the governing elites do not reach the government agenda (Bachrach and Baratz, 1970).

Another alternative to the group theory perspective is conflict theory. Proponents of this perspective contend that the issues considered by government systematically reflect the interests of capital, a class in control of the government as well as the economic system. Only policies which serve to perpetuate the existing capitalist system are considered. Policy is designed such that it gives the appearance of assisting other classes but it cannot actually do so because the interests of capital conflict with those of the remainder of society.
Thus, these three schools of thought are in disagreement about the accessibility of societal groups to the government agenda. By whatever means they get there, issues which do reach the agenda proceed to the second stage of the policy process.

2.1.2 Policy Formulation

In the second stage, government considers alternative courses of action on a public issue and a policy choice is made. Questions typically addressed during this phase include (Anderson, 1976, p. 7):

1. Who participates, and with what effect, in policy formulation?

2. What alternatives exist for dealing with a problem and how is a policy chosen from among them?

Once again, several schools of thought have developed to address these questions. The traditional approach, termed institutionalism, studies the formal behavioral procedures which guide institutions of government in formulating policy. By examining the respective responsibilities of the executive, legislative, and judicial branches of government, institutionalists have sought to answer the first question above, namely how did a specific policy come to be approved? Examples of studies within this genre include Barton's
(1976) examination of Congressional coalition building and Reiselbach's (1973) analysis of how these coalitions influence policy voting decisions.

Recently, institutionalism has been supplemented by several other approaches. For example, Lindblom (1968) has brought a set of rational choice models to the study of government decision-making. Applied in this manner, rational choice theory abstracts the process by which a policy is chosen from alternative proposals. Thus, researchers using this theoretical approach search for answers to the second question, above. The model assumes that all possible policy alternatives and their outcomes are known by public officials and that they are capable of calculating the relative benefits and costs of each. The policy alternative which maximizes overall benefits is chosen.

As an extension of rational choice theory, game theory incorporates the possibility of interdependent policy choices. In other words, the outcome of a particular policy is seen as dependent upon the outcomes of other policy decisions.

Due to the strict assumptions required by rational choice theory and game theory, policy analysts have devised and utilized more realistic approaches, such as incrementalism.
Researchers using this perspective contend that government officials make policy choices which are only a slight modification, or increment, of past government actions. Incrementalists hold that the rational choice model requires too much of public officials by assuming that all possible policy alternatives, and their costs, benefits, and outcomes, can be known.

Many actors are involved in policy formulation including the executive, legislative, and judicial branches as well as administrative agencies, task forces, interest groups, and individuals. These actors are aware of the need to make policy choices which will eventually be politically palatable, and thus implementable. It is in this sense that the policy formulation process, although separated for conceptual purposes, cannot be divorced from the subsequent implementation and adoption stages.

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9 For studies which examine the executive branch in policy formulation, see Gilmour (1971) and Thomas and Wolman (1969). For an example of incrementalism as applied to Congressional negotiation and decision-making, see Jones (1974). Finally, for a description of the role of private corporations in policy formulation, see Nadel (1976).

10 See Marmor (1973) for an illustration of the interrelation of these stages.
2.1.3 Macro-Implementation

During the third stage of the policy process, the formal policy is transformed into a program with specific guidelines and procedures. Pertinent questions addressed at this stage include (Anderson, 1976, p. 7):

1. Unless a policy is self-executing (and relatively few are), what if anything is done to carry it into effect?

2. Who is involved?

3. What impact does implementary action have on policy content?

The classic conceptual work is Pressman and Wildavsky's Implementation (1973). The authors stress the importance of national administrative agencies in implementing social policy.11 These agencies are given a great deal of discretion in how they administer a policy. This freedom is generally attributed to the fact that Congress must formulate vaguely-defined policies in order to garner sufficient support for passage. These policies, therefore, must be given substance by administrative agencies.12

11 Other branches of government are involved in implementation as well, but not to the extent that the administrative agencies are. The judiciary, for example, administers policy on public school desegregation.
The importance of implementation in the policy process has only recently begun to be studied. Previously, analysts examined primarily the agenda-setting and policy formulation stages. Thus, program effectiveness could only be judged in relation to the original policy itself.

There presently exists a growing belief among some policy analysts that traditional policy evaluation, by measuring outcomes relative to original purposes only, has failed to identify a crucial influence on program effectiveness. In many cases, the failure of a social program to meet specified needs lies not only with the formal policy itself, but also, or alternatively, in the way it has been administered. Thus, many analysts have recently begun to evaluate implementation, the "missing link" between policy and outcome, which influences program effectiveness (Hargrove, 1975).

Implementation analysis is pertinent in those situations where there is a possibility for variation in the administration of a policy. Because it is now increasingly recognized that implementation has a definite impact on the outcomes of most social policies, analysts are emphasizing its importance in the evaluation of these programs. A recent RAND study, for example, found that success of educational

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12 The action of the agency is in fact often more important than the policy statement itself. The importance of "broad discretionary authority" vested in the Antitrust Division of the Justice Department in deciding the ITT antitrust case provides an example (Blake, 1976).
innovations depends less on what is being applied than on the way it is tried in different school systems (Berman and Pauly, 1975). Other examples of the increasing use of this analysis approach include Browning and Marshall (1975) and Thomas (1975).

2.1.4 Micro-Adoption

Once a program has been devised, it must be disseminated. This process of program diffusion to subnational units is referred to as Micro-Adoption. Several points form the focus of policy analysis at this stage:

1. How is the program transferred to subnational governments?

2. If adoption of a program is voluntary, which subnational governments tend to accept a policy immediately and which governments resist adoption?

3. What accounts for the differential timing of program adoption by subnational governments?

The major approach to the analysis of these issues is referred to as the "American states" literature. Several analysts have focussed on the timing of policy adoptions by the states. Walker's important study (1969) classified the
states into national leaders, regional leaders and followers in the adoption of 88 public policies. Gray (1973), expanding on Walker's work, disaggregated public policies by type and found that leading adopters of some kinds of programs (educational, for example) are often followers in the acceptance of other policies (welfare, for example). Gray differs from Walker, concluding: "innovativeness is not a pervasive factor; rather it is issue-and-time specific at best" (Gray, 1973, p. 1185).

Other researchers working in the context of the "American states" literature have attempted to explain why the states differ in their adoption and use of policies. The general conclusion of these studies is that socioeconomic conditions within the states exert a greater influence upon policy acceptance and utilization than do political conditions, such as interparty competition or party type (Cowart, 1969; Dawson and Robinson, 1963; Dye, 1966; Hofferbert, 1966; Lewis-beck, 1977; and Sharkansky, 1968. For a bibliographical review of this literature, see Fenton and Chamberlayne, 1969). In fact, social and economic conditions are seen as antecedent to both the political system and policy use.

Once a subnational government has adopted a policy, it must translate program directives to conform with local conditions. This translation occurs in the next stage of the policy process.
2.1.5 Micro-Implementation

In the fifth stage of the policy process, the program is adapted to local conditions and day-to-day administrative procedures are devised and implemented. Questions appropriate for this stage of analysis are similar to those for the Macro-Implementation stage (Anderson, 1976, p. 7):

1. Unless a policy is self-executing, what if anything is done to carry it into effect?

2. Who is involved?

3. What impact does implementary action have on the content of the policy?

The perspectives and methodologies used to examine implementation procedures at this stage are also similar to those used to study the Macro-Implementation stage. In this stage, however, researchers focus upon the actions of state and local level social service agencies rather than those of the national level administrative agency.

National-level macro-implementation must be separated conceptually from local-level micro-implementation because different institutional settings create unique perspectives on how policy should be handled. In other words, the problem, and the decision on how best to use policy to affect
that problem, appear very different to organizations working at different levels of the implementation hierarchy because of various combinations of institutional and cultural influences on them. The analyst studying the entire process of implementation is thus confronted with the "Russian doll-within-a-doll" of successive implementation processes occurring at various scales of investigation (Berman, 1978, p. 176).

Although each organization is seen as operating within its own particular "domain of consistency" generated by the institutional environment, the decision is by no means uniquely determined. Implementation analysts attempt to search out the actual decision process which occurs at each stage rather than assuming that organizations, and individuals within them, operate only according to their formal roles. If these analysts were content to study only specified, formal roles of organizations, implementation analysis would reduce to institutionalism and much of the process which illustrates how implementation affects program outcomes would become invisible. Particular institutional forms influence and give structure to the way organizations delimit the range of alternative courses of action but they do not completely account for resultant decisions (McNicoll, 1980, p. 457).
2.1.6 **Individual Adoption**

Once a program is made available, individuals make the decision whether or not to participate. Questions addressed at this stage include:

1. Are individuals given equal access to a program?

2. How do individuals make the decision to participate in a program?

Much of the work in this area is based on demand models which attempt to assess how individuals decide to participate. Oftentimes, a cost-benefit framework is utilized to gauge the extent to which different groups of individuals (donors and recipients, for example) gain or lose relative to other groups. A radical extension of this literature focuses on differential access to a program, often emphasizing that those who are supposedly served by a program are in fact not served.

Several researchers have examined the importance of surrounding political culture in influencing an individual's decision to use welfare. Sharkansky and Hofferbert, for example, have explored the importance of regional political cultures. In their initial examination, they state: "the exploration of the values that prevail in the cultural
environments of the individual states may be essential for a thorough understanding of interstate differences in politics and public policy" (1969, p. 879).

Elazar (1966 and 1972) was the first to classify regional political cultures throughout the United States. The categories were based upon Elazar's observations as a student of state politics for many years. Since then, Sharkansky (1969) has quantified the impressionistic Elazar typology and found it useful in explaining differences in policy use among states.

2.1.7 Program Evaluation and Feedbacks

In the final stage of the policy process, intended and unintended impacts of the program alter the nature and extent of the original problem, causing feedbacks to previous stages. For example, evidence of particularly low program participation may force changes in the regulations set during the Macro-Implementation Stage. Questions addressed during this stage include:

1. What are the impacts, the outcomes, of the program?

2. Were these outcomes intended?

3. Has the program altered the original problem and goals for its solution?
4. How should the program be altered to incorporate these changes?

The vast majority of policy case studies occur at this stage because policy analysts are often most concerned with the outcome of a program, i.e., whether it performs as intended. This stage is not reviewed in detail because the policy analyst must study at least one of the preceding stages to gain an understanding as to why a program is effective or not.

2.2 THE SPATIAL NATURE OF THE POLICY PROCESS

The preceding section has sketched the broad outlines of the policy process, incorporating where appropriate major theories, models, and representative empirical studies. This section discusses spatial aspects of the policy process. It will be demonstrated that each stage of the policy process is inherently spatial, because of the roles played by the various actors in the particular stage, or because of local conditions which influence the design and therefore the success or failure of a program. For example, first consider the roles played by interest groups in the Agenda-setting stage. Such groups are often either implicitly
spatial, because of their organizational or membership structure, or explicitly spatial, because of their lobbying for regional issues.

Consider next the roles played by state and local administrators in the Micro-Implementation stage. Their effectiveness in administration is influenced by their own attitudes toward the program and by their perception of local support. Because attitudes about the proper role of government in providing social welfare vary substantially throughout the country, effective implementation is apt to vary accordingly.

Next consider the influence of local conditions upon the design of a national social policy. Although the program is instituted nationwide, specific regulations and guidelines are often devised to alleviate problems in particular local areas. Thus, the Macro-Implementation stage can have a strong spatial component.

Finally, the entire policy process occurs in a spatial context because of the nature of the federal system in this country. Each stage in the process represents a particular level of the governmental hierarchy. It is unreasonable to assume that any national program will be equally effective in all areas. Local conditions can in fact determine the
success or failure of a program in the final stage of the policy process.

This discussion serves to introduce the policy process as an inherently spatial one. The following subsections note representative examples of the spatial dimensions in each stage of the policy process.

2.2.1 Agenda-Setting
Interest groups, which vie for the attention of government, tend to represent general issues such as energy, poverty, or defense. But many of these issues represent problems which occur to greater extents in some areas of the country than in others. The regulation and control of water rights, for example, is a recurring and important national issue yet the support for alternative approaches to the problem come from specific areas of the country, especially Western states, which would be most affected by a national policy decision (Ingram, 1972 and Cummings and McFarland, 1977).

In fact, practically all national interest groups are regionally based. Agricultural interests derive most support from the Midwest, defense interests from the Gulf coast and southern California, and even groups such as the National Rifle Association (NRA) and the National Organization for Women (NOW) are sustained by memberships which are spatially
clustered. The differential ability of these groups to gain access to the government agenda and thus influence national legislation, has a bearing on the eventual distribution of national resources to regional concerns.

2.2.2 Policy Formulation

In the formal government proceedings during which a policy is designed, coalitions working for regional interests are often evident. For example, economic decline of the Northeast industrial core relative to other sections of the country during the 1970's has shifted regional tensions. The Northeast Governors' Alliance and the Northeast-Midwest Congressional Coalition are both explicit attempts by government officials in that part of the country to insure that federal programs are not biased against their interests (Perlman, 1980, pp. 247-8).

Additionally, power in Congress has spatial form. Historically, positions on committees of Congress were largely determined on the basis of seniority. Those sections of the country where the one party system tended to dominate and thus return the same person to Congress term after term, were represented by officials with high seniority. Thus, for example, the powerful agricultural committee of the House of Representatives was composed primarily of Southern statesmen whose states were solidly one-party. These
Congressmen were able to push for legislation which favored their region, such as, cotton and tobacco subsidies.

More recently, the importance of seniority in Congress has declined and younger members are taking a more active role. Coincident with this change, there is an increasing trend toward direct representation of constituent interests (Fiorina, 1977). Rather than representing broad, symbolic issues, such as foreign affairs, Congressmen currently confront a multitude of local constituent concerns, such as the effect of OSHA regulations on small businesses or the effect of court decisions on school desegregation or bilingual education. Thus, Congress's increasing attention to constituent issues illustrates the importance of local inputs into the formulation of national social programs.

2.2.3 Macro-Implementation

The specific regulations and procedures devised for a program by national level administrators often contain spatial biases, although they may not be intentional. For example, Urban Development Action Grants (UDAG), designed to encourage investment by private corporations in deteriorating urban areas, were initially intended to assist older urban areas of the Northeast industrial core. But because private corporations tended to invest only in projects where the chances of large returns for investment were high, cities in
the South, which needed less assistance than the older cities of the Northeast, received the greater share of UDAG funds (Bohland and Gist, 1982).

The recent Clean Air Act provides an additional example. A major regulation requires that industrial pollution not exceed a certain level in any city. As a result, firms seeking new locations for their industries were drawn to cities in the South and West, where urban pollution levels were not near the limits. The Clean Air Act thus worked to the disadvantage of the old industrial core since new firms were discouraged from locating there.

2.2.4 Micro-Adoption

The decision made by a state or local government to adopt a policy is often influenced by social, economic, and political conditions of the area, as well as decisions made in neighboring areas. Thus, the adoption pattern of a program often has spatial form. This tendency has been recognized by analysts of the "American states" literature described above. Program adoption is the stage of the policy process which has been given the most explicit spatial treatment by policy analysts.

The federal grants-in-aid program provides an example of a policy which is optional to the states. Any state not
wishing to comply with nationally imposed conditions for these grants may reject the offer of federal funds. States have done so in several instances (Dye, 1981, p 253). Although grants are adopted in most cases, variations between states in the amounts they receive and the uses to which funds are put are substantial (Dye, 1975, pp. 320-324).

2.2.5 Micro-Implementation

Because state and local governments are given a great deal of discretion in how they transform and implement a program to conform with their particular political and economic situations, the possibilities for areal differences in the content and administration of a program are great. Local attitudes can often present substantial resistance to a national policy, thus influencing the degree to which it is implemented in that area. For example, defiance of the Supreme Court school desegregation order (Brown vs. Topeka, 1954) lasted for more than a decade in the Southeast.

Additionally, there are apt to be variations in micro-implementation as different local delivery systems react to specific local pressures. Implementation decisions made in a local area which is relatively "open" to outside forces (due to factors such as strong national control over administration or a sophisticated intergovernment communication network) will differ distinctly from the administration of
the same program in a "closed" area, which reacts more to local than to national pressures (for a discussion of open and closed societies, see Skinner, 1971, pp. 270-281).

2.2.6 Individual Adoption

The use of a program by individuals is also apt to vary spatially. First, conditions of need are rarely ubiquitous or homogenous. Additionally, certain groups of individuals which are spatially clustered differ in their attitudes toward public programs. For example, the elderly tend to regard social programs as charity. Those areas of the country where the elderly predominate, such as the agricultural Midwest, would thus be expected to have relatively low participation rates.

2.2.7 Program Evaluation and Feedbacks

Finally, given the possibilities for spatial variations in the design, implementation, and use of a program in the previous stages, the program is apt to have different effects on the problem in different areas. As a result, the demand for program modification will vary spatially as well.

Not only is the spatial impact of a social program generally ignored, the areal manifestation of conflicts between different programs is also often disregarded. For example, HUD's efforts to revitalize central cities with a series of
urban programs have been partially cancelled by DOT's construction of urban highways. These new corridors damaged conditions in the inner cities by assisting industries, commercial activities, and the relatively wealthy to suburbanize. (Dye, 1981, p 212). Such contradictory policies, which are designed by administrative agencies without regard to their effect on other programs, can have no positive effect in the spatial dynamics of the city.

2.3 **SUMMARY**

This chapter has provided the first step to incorporate a geographical perspective into national social program analysis. The first section outlined the policy process, during which a program is designed and implemented at the national level, transferred to the responsibility of state and local governments, administered locally, adopted by individuals, and revised through time to meet new problems and serve new political priorities. Important policy theories, models, and their applications were noted throughout the discussion of these stages to illustrate the major approaches used by policy analysts. The second section reviewed examples of spatial biases in the processes operating at each stage.

Several conclusions may be drawn from this chapter. First, policy analysts disagree about the relative roles of different organizations in determining policy. Different
schools of thought have developed, each emphasizing the input made to policy by a particular group of actors. With the exceptions of the "American states" literature and the regional political culture studies, none of these approaches explicitly considers the locational perspective from which these political actors work. The following chapter reviews geographic theories and techniques which can contribute to the systematic understanding of these locational perspectives and spatial processes.
Chapter III

GEOGRAPHIC APPROACHES TO SOCIAL POLICY ANALYSIS

The previous chapter demonstrated that the policy process is inherently spatial. This chapter illustrates how geographic theories and methodologies may be used to gain understanding of the spatial context within which social programs operate. The purpose is to make explicit the geographer's role in social policy analysis.

Within the discipline of geography, few empirical analyses and virtually no theoretical work has been directly concerned with social policy analysis. Nevertheless, a variety of geographic theories, approaches, and tools are applicable to the examination of these programs.

To understand the link between geography and policy analysis, we must first identify the classic issues in social policy to which geographers could make a contribution. With regard to these issues, we address several questions: How

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The majority of policy oriented research within the field has examined programs which are targeted toward places, such as the extensive work on regional economic development or the environment. They rarely study programs which are directly concerned with the welfare of individuals, which is the focus of social programs.

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have geographers studied these issues? Which schools of thought have been most active and what approaches have they used to study policy? What have geographers ignored? At which stages of the policy process have geographers concentrated their efforts? Five issues have been selected for discussion. They are:

1. Social well-being. To what extent do spatial disparities in program provision create areal variations in the well-being of program recipients?

2. Public facility location. What is the government decision-making process which locates social service facilities to provide a program?

3. Accessibility. To what extent are these facilities accessible to program recipients?

4. Program allocation. How are program funds distributed through the federal system to different areas of the country?

5. Regional impact. What are the broad areal variations in the utility and impact of a program?

Each section of this chapter reviews one of these issues. A section first outlines the major philosophical and/or methodological approaches used by geographers to examine
the issue. This is followed by a synopsis of representative studies, some of which are descriptive and others of which are more directly analytical. The review is confined to those studies which are directly concerned with social program analysis. Each study is placed in the context of the policy process framework to illustrate the stages of policy development within which geographers have concentrated their interests. Each section concludes with a discussion of the manner in which the approach could further contribute to social policy analysis in ways not yet explored by geographers.

3.1 SOCIAL WELL-BEING AND SPATIAL EQUITY

The geographers who have come closest to social policy analysis have worked on issues of spatial equity and social well-being. Much of this work is concerned with the effect of location upon personal and collective welfare. Where one lives affects the ability to make use of surrounding conditions, such as the physical environment, employment opportunities, political relationships, social services, and amenities, all of which influence one's sense of well-being. Two important geographic works which emphasize social well-being and spatial justice themes are Human Geography: A Welfare Approach (Smith, 1977) and Social Justice and the City (Harvey, 1973). Smith (1977) succinctly describes human welfare oriented geographic research, referring to it as the study of "who gets what, where, and how" (p. 7).
The concern for spatial aspects of well-being began to appear in the geographic literature in the United States by the late 1960's and expanded rapidly in the 1970's. The growth in this subdiscipline paralleled similar trends experienced in other social sciences, all of which reflected increased public concern for important social issues. Geographers applied their locational conceptualizations and methodologies to many social issues, including poverty (Brunn and Wheeler, 1971; Morrill and Wohlenberg, 1971), crime (Harries and Brunn, 1978), health (Gould and Leinbach, 1966; Shannon and Deever, 1974), day care (Brown et al., 1974), public services (Antipode, 1971), housing (Morrow-Jones, 1980), hunger (Peet, 1971), political power (Cox, 1973; Cox, Reynolds, and Rokkan, 1974), education (Maxfield, 1972), job accessibility (Bederman and Adams, 1974), social administration services (Massam, 1975), income and cost of living inequalities (Coates, Johnston, and Knox, 1977), student violence (Demko et al., 1973), and political redistricting (Morrill, 1973).

Some of these social issues studies were content to describe the geographical patterns, and having found a degree of spatial variation, to emotionally denounce the inequities uncovered (see, for example, Peet, 1971). Those geographic studies which proceeded beyond spatial description tended to examine the conditions which create and perpetuate
inequitable patterns (See, for example, Coates, Johnston, and Knox, 1977). Although the majority have sought solutions to social problems within the existing political system, one group of geographers has proposed more radical solutions, although they tend to stop short of a call for the total restructuring of society along the lines advocated by Marxist theory.

Only rarely have geographers examined the importance of social policies in influencing the areal variations in social well-being (O'Loughlin, 1975). Several notable exceptions should be noted. Brunn (1974) analysed the spatial provision of two federal poverty programs, the aid to families with dependent children program (AFDC) and the food stamp program (FSP), noting the different standards of each and searching out reasons for variations in provision. Eligibility criteria for AFDC are set by the individual states which Brunn finds results in substantial spatial variations in use of the program. For example, he found provision to be most stringent in the South and most lenient in the Northeast and on the West Coast. Additionally, provision was more lenient in urban than in rural areas.

Eligibility for the food stamp program, on the other hand, is set by the federal government and is equal in all areas. Because the program requires the cooperation of
federal, state, and local governments, however, responsibility is diffused throughout the political hierarchy and state and local governments have influenced the extent to which the program is made available. For example, until 1974, the states made the decision whether or not they wished to institute the program. Brunn notes the possible influence of regional political philosophies as a reason for the resulting temporal and spatial variations in the establishment of the program. Additionally, local governments and welfare agencies, because they are responsible for actual implementation of the program, are able to influence participation. They can do so through incentives, such as Outreach projects, or through disincentives, such as inaccessible locations. Finally, Brunn suggests that spatial variations in personal stigma attached to accepting welfare may have influenced the spatial pattern of adoption.

Another example of social policy analysis within the spatial equity perspective is Wohlenberg's (1976a) analysis of AFDC. He found substantial interstate variations in eligibility standards and benefit levels and some differences among the states in restrictive practices. As an example of such variations, Wohlenberg discovered that the difference in benefit levels paid by the states was more than 200 percent whereas cost of living differences, which might justify the variations in benefits paid, were approximately 26 percent (p. 258).
Perlman (1980) examined the effect of population distribution and migration upon the use of social policies. Reviewing the history of social program provision, Perlman found that social services were first established in urban areas where need was concentrated and the economic base sufficiently strong to support such public programs. Thus, the Northeast section of the country and metropolitan areas have historically provided more comprehensive services. Additionally, Perlman noted that the present net migration of the poor to the South and West is increasing demand for social services in those areas. Because financial capacity to support them is also increasing in those regions, he predicts that welfare provision will become more equitably distributed.

Another example is Johnston's (1977) study of interstate variations in AFDC. He found that interparty competition was substantially correlated with a number of AFDC effectiveness criteria. More specifically, program regulations and administration were more lenient in states where competition between parties was strong. Johnston attributes this finding to the notion that in states with no dominant party, Congressmen had to compete for votes of the poor by influencing policies.

Examination of these analyses reveals that policy issues of spatial equity and social well-being have been studied by
geographers primarily in the context of Micro-Implementation. For example, both Brunn and Wolenberg investigate the effect of subnational administrative regulations on the utilization of programs. Additionally, Perlman traced the historical development of regional disparities in program provision. Only Johnston considers the effect of national-level policy-makers upon the provision and use of a program.

Geographers using spatial equity perspectives could conceivably examine other stages of the policy process. As an example, radical social geographers might study how the initial design of a program influences its variable effectiveness. Focusing on the Agenda-Setting and Policy Formulation Stages, such research would seek to determine the extent to which capital, in control of the government as well as the economic system, is able to design social programs which have the appearance of assisting the poor but nevertheless do nothing to redistribute income or power. Additionally, geographers using the social equity perspective might study the Micro-Adoption stage to determine how the timing of program establishment by the various states creates spatial disparities in its provision and use.
3.2 DECISION-MAKING IN PUBLIC FACILITY LOCATION

One group of geographers, working from a primarily economic perspective, has studied the role of private decision-makers, who allocate resources in a competitive environment to create a particular spatial economy. Recently, some research has also been done on the role of public decision-making in setting the economic landscape. This work is applicable to the examination of the government's role in locating facilities which provide social programs.

Public service location theories have been designed which differ in important assumptions from the conventional location models based upon private decision-making (See Teitz, 1968, for the seminal work in this area). Essentially, conventional location theories of private economic decision-making assume a freely operating market system, a competitive price structure, and the role of choice, taste, and utility in determining the location decisions made by many individuals, each seeking profit maximization. In contrast, public location theory acknowledges a mixed market-nonmarket system, where government, rather than a multitude of private individuals, makes its locational decisions according to some welfare criterion rather than for profit maximization (Teitz, 1968, pp. 37-44).

The essential question posed by geographers concerned with public decision-making is how to allocate government
funds and locate public services optimally. To answer this question, traditional location-allocation models have been extended to incorporate different assumptions inherent in public service location theory. In contrast to private location theory, where the goal is clearly defined by profit maximization, public location theory has as its goal the optimization of some social welfare criterion. Most often these geographers have utilized spatial efficiency functions, such as minimization of travel time, cost, and effort for those who use public facilities (Massam, 1975, p. 57). In contrast, several geographers have advocated the use of social equity criteria. Harvey (1972) defines equity in a spatial context as "a just distribution justly arrived at" while Davies (1968) describes it as the process of allocating "to each area according to the needs of the population in that area." Smith (1973, pp. 7-8) makes explicit the distinction between efficiency and equity criteria, referring to the former as a search for economic welfare, "what people get from the consumption of goods and services purchased by money or available as a public provision," and describing the latter as social welfare, which "embraces all things contributing to the quality of human existence."

Since all government services result from a public policy, even if it is only informally defined, geographers utilizing economic perspectives and models to examine the
locational decisions made by government are implicitly conducting policy analyses. For the most part, however, these studies have been highly abstract and have not examined specific policies or services. For example, Bigman and BeVelle (1978) present a theoretical structure for public service location utilizing a social welfare function which accounts for the spatial interaction of individuals and economies of scale. Lea (1979) extends the Bigman and BeVelle framework, incorporating additional and alternative factors into the social welfare function.

A few empirical examples do exist. Taylor (1971) studied the inequality of services, such as police protection, health care, and education, between blacks and whites in the United States. Earickson (1970) used spatial efficiency criteria to analyze the variable access to public services by a variety of ethnic groups.

A wide discrepancy exists between the theoretical discussions of public service location, as exemplified by Bigman, BeVelle, and Lea, and the actual analyses of specific services, as done by Taylor and Earickson. Apparently the operationalization of such theoretical frameworks is sufficiently difficult to prevent its application.

The theoretical and empirical research on this topic, however, both examine the same stage in the policy process.
The theoretical works emphasize the locational and allocational decisions made by government in providing services. Thus, they work within the realm of Micro-Implementation. The empirical analyses of public facility location are concerned with the access of recipient groups to services provided by the government. Thus, they also deal with implementation processes.

Although it apparently has not been studied, location-allocation modelling would also be appropriate for the Micro-Adoption Stage, at which time the program is transferred from the national level and allocated to state and local areas. Given that the national government works under conditions of scarce funds, particularly when initiating a new program, it is rarely possible to provide the program to all places at the same time. Location-allocation models and similar conceptualizations utilized by economic geographers could be used to answer such questions as: How are funds allocated? Who Decides? Where is the program first located -- in areas of greatest need or in areas where it is most likely to succeed so that effectiveness of the program can be easily demonstrated?

3.3 TRANSPORTATION GEOGRAPHY

The focus of geographic studies in transportation is to examine the extent to which areas or points are connected,
enabling people, products, and ideas to move through space. A significant component of this research studies intra-urban transportation systems, reflecting the increased concern about the role transportation plays in general urban problems, such as congestion and pollution.

Initially, most research in the area was conducted at aggregate levels, utilizing spatial interaction techniques such as the gravity model, to gain understanding of urban transportation patterns. More recently, the focus of this research has shifted toward explanation of the patterns. As a result, a body of literature has recently developed within the discipline which studies the preferences and behavior of individuals in choosing particular travel modes and routes; the implicit notion being that the cumulation of these decisions and actions set the urban transportation patterns observed (Gauthier and Mitchelson, 1981).

As a subset of this research, a small segment of the literature studies the accessibility of disadvantaged groups, such as the elderly, handicapped, and poor, to jobs and services via a transportation network (Bernstein, 1973; Burnett, 1978; Deskins, 1972; Golant, 1972; Greytak, 1974; Perle, 1968; and Wheeler, 1971). Much of this work is at least an indirect response to the controversy recently raised about the rights of disadvantaged groups to use urban transportation systems. Federal law, particularly section
16 of the 1964 Urban Mass Transportation Act and section 504 of the 1973 Rehabilitation Act, has mandated that public transportation systems must be made accessible to all individuals. Controversy arose when local transit authorities found it financially difficult to comply with such national directives. Several geographic studies have evaluated the ability of special transportation services to serve the travel needs of these disadvantaged groups (Gauthier, 1981a and Gauthier, 1981b).

These studies, in focusing upon the preferences and behavior of individuals in choosing transportation systems which meet their travel needs to jobs and services, are conducted at the Individual Adoption Stage. A slight shift in focus, however, would enable transportation geographers to examine the locational positioning of government social services relative to the groups in need and relative to the existing transportation systems which link people and services. Thus, transportation research is not far from an examination of processes operating at the Macro- and Micro-Implementation stages.

3.4 PROGRAM ALLOCATION

Geographers who study political issues have rarely concerned themselves with the spatial dimensions of national social programs. In a recent attempt to define new approaches
taken in this subdiscipline, however, Hall (1974, p. 51) justifies the examination of the political process which distributes government funds within the federal system: "almost all public decisions, by definition, involve the disposition of resources in geographical space."

The few empirical analyses examine areal variations in program spending and search for reasons which account for such disparities. Several provide descriptive explanations, while others utilize quantitative techniques, particularly multiple partial correlation and regression models, to study the political process. In either case, these studies are conceptually similar to the American states literature in political science, which has sought to identify the major socioeconomic and political factors which explain areal variations in government spending (see chapter 2, for a summary of this literature). Representative geographic studies are reviewed below.

Brunn and Hoffman (1969) study interstate variations in national government funding. Their purpose is to "find factors weighed by the federal government in its decision to allocate funds to a state" (p. 231). The factors they examine, however, are state level conditions, such as level of urbanization, employment mixture, amount of poverty, tax structure, and political viewpoint. It is not at all clear that the federal government actually evaluates these criteria.
in its decision to allocate funds. Thus, Brunn and Hoffman study Micro-Implementation processes rather than the Macro-Implementation stage as they claim. They find that anti-poverty funds allocated to the agricultural states are comparatively low due to a scattered rural population, relatively low need, and a strong individualistic political philosophy. Anti-poverty allocations are highest in the Southeast where extensive urban and rural poverty exist. In general, they find that poverty allocations are higher in areas where a Democratic majority is strong and where per capita state and local taxes are low.

Browning (1971) examines federal funding to the Southeastern section of the country. He finds wide disparities in the amounts allocated for different programs among these states and concludes that such discrepancies are not strongly related to population or income characteristics of the areas.

In two additional studies, Johnston (1978a and 1978b) examined the allocation of federal funds to individual states. He found that political factors, such as the appointment of a state's Congressman on a powerful committee, were as important as socioeconomic conditions of need in influencing the amount of government allocations which reach a state.
The studies which investigate social program fund distributions are conducted within several stages of the policy process. Johnston's analyses study the influence of Congressional power upon such federal funding and thus are concerned with the Policy Formulation Stage. The other analyses discussed above operate at the Micro-Implementation Stage.

Geographers working within this theme could easily extend Johnston's approach to investigate, in greater detail, the actions of the federal government in allocating funds for specific social programs. Such analyses would make an important contribution to the understanding of spatial variations in social programs since the federal government is the distributor of funds. In particular, questions about how the national government accomplishes the allocation of social program funds, who is involved, and why, need to be addressed.

3.5 REGIONAL IMPACT STUDIES
Extending their work on national development, one group of geographers have studied regional growth processes and the factors which create areal disparities in social and economic conditions within a nation. In this context, a few have specifically examined the regional impacts of government programs. This work derives not only from the increased
concern for government accountability in the 1970's but also reflects shifting concerns within the development literature. In the early 1970's, development experts and researchers began to study social aspects of development, such as the health, education, and general well-being of the population rather than focusing only on the economic aspects, such as income levels and productivity.

This increased concern for social development led some geographers to study the effect of social programs on the welfare of the population living in various regions of the country. For example, Wilbanks and Huang (1975) assessed the variable effects of the proposed guaranteed annual income program. Thrall (1981) used a simultaneous equation format to study spatial dynamics in the supply of, and demand for, AFDC. Wolpert (1972) studied the influence of interest groups in locating public service facilities. He found that social services have mixed benefits which vary spatially and for different social groups.

Many techniques which are used by geographers in the context of development are applicable to social policy evaluation. Calculation of inequity measures at various times in the maturing process of the policy and in different areas of the country assist in gauging the extent to which a program is evenly provided. Wohlenberg's (1976b) index of
eligibility standards for public assistance in the United States illustrates the applicability of such measures. He constructed a Composite Restrictiveness Index for each state to determine the relative stringency of regulations set by states. For AFDC in 1972, he found that the Southeast was most restrictive and the Northeast most lenient in administrative procedures.

As with many of the previously described themes, geographic policy analyses with a regional development focus have tended to study processes operating at the subnational level in the Micro-Implementation Stage. Very little attention is paid to the influence of the national government on spatial variations in social program use and impact.

3.6 SUMMARY
The small number and diverse nature of social program analyses conducted by geographers, as reviewed in this chapter, demonstrate the lack of a coherent theoretical basis for such analyses. Placing these geographic studies in the context of the general policy process framework illustrates their limited attention to social policy (Figure 5).

Of particular note is the fact that the majority of these analyses have studied the latter stages of the policy process, particularly Micro-Implementation and Individual
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**Figure 5: Selected Geographic Analyses of Social Programs**
Adoption. It appears that geographers are concerned primarily with the effect of processes operating at the subnational level upon spatial variations in program effectiveness. Certainly a case can be made for also examining the intentions and actions of the federal government which has primary responsibility for designing and administering national social programs.

This chapter has sought to demonstrate the variety of angles which geographers can take in the analysis of national social programs. The following chapter begins the analysis of one social policy, the U. S. food stamp program. Geographic perspectives of diffusion theory are used to illustrate how the spatial context of a national social program might be studied by geographers.
Chapter IV

HISTORY OF THE FOOD STAMP PROGRAM AND OUTLINE FOR ANALYSIS

This chapter provides a link between the previous chapters, which discuss the manner by which the spatial dimensions of national social programs could be examined, and the following chapters, which present one such analysis.

The first section of the chapter reviews the historical development of the U. S. food stamp program, in terms of the stages in the policy process framework previously described. This synopsis serves two purposes. First, it familiarizes the reader with the political and economic forces which have historically influenced the design, implementation, and utilization of the program. Additionally, the descriptive review provides cues for structuring further analysis. It suggests, for example, relevant time spans, appropriate scales of analysis, and a variety of factors which can be further examined for their influence on the program.

The second section of this chapter draws upon the historical review to present an outline for the analysis of the food stamp program. The applicability of geographic perspectives in diffusion theory to the policy process in general, and to the food stamp program in particular, is
demonstrated. The time and space dimensions are set forth. Additionally, the participation rate, which is used to measure program use in this dissertation, is defined and its validity is discussed.

4.1 HISTORICAL DEVELOPMENT OF THE FOOD STAMP PROGRAM

On August 31, 1964, President Lyndon Johnson signed the Food Stamp Act into law, expanding to a national scale an earlier pilot project which had been established by the executive order of President Kennedy in 1961. The purpose of the Act was stated as follows:

A bill to strengthen the agricultural economy; to help to achieve a fuller and more effective use of food abundances; to provide for improved levels of nutrition among economically needy households through a program of food assistance to be operated through normal channels of trade; and for other purposes (Food Stamp Act of 1964, section 1).

The program was to work in the following manner: A household, judged to be eligible for the program by the local welfare agency, would pay the agency an amount of money determined to be a "normal" monthly food expenditure for a household of its size and income. In return, the participants would receive food stamp coupons, of a higher monetary value, to be used in the purchase of food at local grocery stores.

The following subsections review the historical development of the food stamp program as it proceeded through the
stages of the policy process. In accordance with the process framework, the following questions will be addressed:

1. What were the problems which created initial need for the program?

2. How did the problems become a public issue and how did the issue come to be included on the formal government agenda?

3. Who participated in the formulation process, why, and to what effect?

4. How was the program implemented at the national level?

5. How was the program adopted and implemented by the state and local areas?

6. To what extent was the program utilized by individuals?

7. How has it been revised?

4.1.1 The Problems

By the early 1960's, the inadequacy of a federal food assistance program then in existence was becoming evident. Under the Commodity Distribution program, surplus foods, purchased
by the national government through subsidy policies designed to stabilize agricultural prices, were distributed free to the poor through local distribution centers.

The Department of Agriculture, which administered the program, as well as business interest groups, felt that the commodity distribution program was less effective than the retail food system would be in delivering food to the poor. For example, the free commodity distribution system competed with local retail stores in economically depressed areas which exacerbated local business problems. Additionally, USDA studies found that the distribution of free food commodities released some of the budget of the poor, which they tended to use for nonfood purchases (U. S. House of Representatives, 1963, p. 10).

The Department of Agriculture wanted to replace the commodity distribution program with a food stamp program, similar to the one which had existed in the United States during the Depression (Clarkson, 1975, p. 5; Dun's Review, 1981, p. 118; and MacDonald, 1977, pp. 1-4). The stamp program had the advantage of channeling food through the established commercial food system, thus helping business interests, and, because participants were required to purchase food stamp coupons, guaranteeing that a larger portion of the budget of the poor would be used to buy food products, thus helping agricultural interests. To quote Orville Freeman,
then Secretary of USDA (U.S. House of Representatives, 1967, p. 38):

The advantage of this food tie-up is that they use what they have been spending for the stamps which... means that the money is going for food. It is not going for something else. This is very important, very important.

For different reasons, poverty interest groups were also dissatisfied with the commodity distribution program (CBIHN, 1968, pp. 50-51). Although by the early 1960's the majority of the country's population was enjoying the proceeds of post-war prosperity, significant numbers of people seemed unable to obtain any portion of that affluence. As of 1962, 33 to 35 million Americans, or approximately 20 percent of the population, were classified as living below the poverty level. 14

It was widely recognized that the federal food commodity distribution system was insufficient in helping the low-income population obtain an adequate diet. The only national nutrition survey estimated that a mere 37 percent of the population below the poverty level consumed a "good diet." 15 Until 1961, in fact, recipients of the distribution program could obtain only four commodities (CBIHN, 1968, p. 50).

14 The poverty level was calculated at the time as an annual income of less than $3000 for a family of four (Congressional Quarterly Almanac, 1964, p. 214).

15 A "good diet" is defined by the National Research Council as one which meets the full Recommended Daily Allowance of seven major nutrients.
Thus, the inability of the commodity distribution system to provide a sufficient, varied diet for the poor or to support the aims of the Department of Agriculture generated initial demand for a food stamp program. Although these problems had existed for some time, it was not until the early 1960's that the need for a new food program became a public issue. What circumstances brought these problems to the national attention and justified formal government consideration?

4.1.2 The Issue and its Inclusion on the Government Agenda

The early 1960's was a time of shifting national concerns. Interpreters of the era have often written of a "democratic surge" then existent whereby "the spirit of protest, the spirit of equality, and the impulse to expose and correct inequities were abroad in the land" (Huntington, 1975, p. 9). Such democratic ideals have always been a part of the American philosophy but rarely have they had such substantial support by elites, who were instrumental in obtaining government support for poverty assistance.

The media were instrumental in increasing awareness of the nature and extent of American poverty and hunger. Television reports, such as Edward R. Murrow's "The Harvest of Shame" (1960), and several books, including Michael
Harrington's *The Other America* (1962), were a revelation to Americans removed, both socially and geographically, from the evidence of poverty.

Heightened national concern over social problems, particularly among elites, ran concurrent with increased emphasis toward social programs by the national government. After the defense dominated Eisenhower years, the Kennedy and Johnson administrations focused considerably more attention on social rights and poverty. General economic prosperity during the 1960's allowed the government to invest in substantial anti-poverty efforts.

In 1960, Kennedy included hunger as a major campaign issue in his bid for the presidency. Shocked by the indigence and hunger he had witnessed during a campaign visit to Appalachia, Kennedy's first official act as President was to sign an executive order establishing pilot food stamp projects in targeted areas (*Dun's Review*, 1981, p. 118 and Schlossberg, 1975, p. 12). That Kennedy was looking after the interests of agriculture, as well as the poor, is evidenced in his statement of purpose for the program:

The increased use of food under a stamp plan would increase utilization of agricultural commodities and tend to expand farm income. In addition, increasing the food-purchasing power of low-income families would help to remove price-depressing surpluses, particularly perishables, from the market (*Congressional Digest*, 1981, p. 7).
Preliminary evaluation showed that the pilot food stamp program was successful in increasing food consumption and improving diets of participants. Retail sales at grocery stores located in pilot project areas had increased eight percent relative to stores elsewhere (USDA, 1962). Thus, there was evidence that the program served the interests of agriculture, by increasing the sale of farm products; the interests of business, by channeling food through the retail system rather than competing with it; and the interests of the poor, by increasing nutrition levels.

Many of the social welfare ideas proposed by Kennedy's task forces and experimented with in trial programs were translated and enacted on a nationwide basis as a part of Johnson's War on Poverty (Thomas and Wolman, 1976). The food stamp program was a part of the legislation formulated to wage that war. As Johnson took office, more than 350,000 people in 43 project areas scattered throughout 22 states were participating in the pilot food stamp program. Recognizing the advantages of the food stamp program over the alternative commodity distribution system, Johnson recommended that Congress establish the food stamp program on a permanent, nationwide basis and begin to phase out the commodity distribution program.

Although bills similar to the food stamp legislation had been introduced in every session of Congress from 1943
through 1964, it was not until 1964 that the program was enacted as formal legislation (U. S. Senate, 1964, p. 2). What circumstances led to Congressional establishment of the program in 1964?

4.1.3 Policy Formulation

The eighty-eighth Congress, which considered the food stamp legislation proposed by Johnson, was heavily dominated by Democrats who supported all such War on Poverty programs of the President. When the food stamp bill was passed in Congress, the sponsor of the bill, Leonor Sullivan (D., Mo.), attributed its success to the President: "President Johnson put the full weight of his office, and his tremendous powers of persuasion, behind this legislation, and its passage in the Congress today is largely a tribute to his powerful leadership" (Congressional Quarterly Almanac, 1964, p. 115). Sullivan had proposed similar legislation during the Eisenhower administration but the President and his Agriculture Secretary had opposed the plan.

An examination of the distribution of votes on the food stamp bill illustrates the importance of Democratic support for the program advocated by Johnson. Northern and eastern Democrats, who represented the majority of urban poor and who tended to back all such social legislation, were the strongest supporters, voting 141 to 2 for passage of the
Food Stamp Act (Congressional Quarterly Almanac, 1964, p. 618-619). Republicans, only a minority of the 88th Congress, opposed the program by a margin of 163 to 13. The 13 Republicans who voted for the bill were mainly northerners whose districts "clearly would benefit" from the program (Congressional Quarterly Almanac, 1964 p. 114).

Southern Democrats supported the bill only when induced to do so. When the food stamp bill was presented to the House floor for a vote, late in the evening of April 8, 1964, a cotton-wheat subsidy bill was included with it. These two bills were brought up for House consideration together in a maneuver whereby northern and southern Democrats traded votes to ensure passage of both. Johnson himself was credited with devising the logrolling maneuver.

Despite Republican efforts to adjourn for the day, to postpone the vote in observance of the late General Douglas MacArthur then lying-in-state, to convince southern Democrats that the bill contained too many civil rights provisions, and other tactics designed to delay the vote and erode support, the Food Stamp Act was approved that evening.

In June, the Senate debated, amended, and passed the bill with far less opposition then there had been in the House. The amended bill was sent back to the House where it was passed by a voice vote. On August 31, 1964, President
Johnson signed the bill into law and, reiterating its dual purposes, called it "one of our most powerful weapons for the War on Poverty" and a step "toward the fuller and wiser use of our agricultural abundance" (Congressional Quarterly Almanac, 1964, p. 115).

4.1.4 **Macro-Implementation**

Nationwide responsibility for administration of the new program was transferred to the Department of Agriculture. Specific regulations devised by USDA have had a definite impact upon the program's use. For example, the original program served the interests of agriculture more than it assisted the poor despite the fact that the policy was couched in the rhetoric of Johnson's War on Poverty. A program which requires the poor to commit up to one third of their monthly budgets in order to participate clearly favors business and agriculture more than it reduces poverty. The food stamp program eventually replaced the commodity distribution program which, for all its problems, had at least delivered food at no cost to the poor. It is estimated that participation in food programs dropped by an average of 40 percent when counties shifted from the commodity distribution to the food stamp program (MacDonald, 1977). This low use of the food stamp program is generally attributed to the inability of the poor to commit such a high portion of their monthly budget to the purchase of the food stamp coupons.
The original food stamp program was weighted toward the interests of agriculture because, in the design and implementation processes, representatives of the interests of poverty were conspicuously lacking. Most of the impetus and support came from the agricultural sector. The Department of Agriculture and the powerful agricultural committees of Congress, which represented the producers of major commodities rather than the poor, controlled its design and dissemination (CBIHM, 1968, p. 78).

Evidence of the importance of the food stamp program to agricultural interests is provided in a statement given by then Secretary of Agriculture, Orville Freeman, during Senate hearings on the program. When asked why the USDA should want to be responsible for such an expensive welfare program, his reply was (U. S. Senate, 1964, p. 20):

If we are to meet our responsibilities in connection with agriculture and its commodities, we need to be in a position to respond to the needs of the American agricultural programs that are intimately related to the welfare of American agriculture and not to turn these programs over to other agencies of this government which would administer them without any regard for the welfare of American agriculture.

4.1.5 Micro-Adoption and Micro-Implementation

Until 1974, state welfare officials made the decision whether or not to institute the food stamp program in their jurisdictions. The program had been made voluntary in order
to ease its passage through Congress. Conservatives could vote for passage, secure in the knowledge that the state they represented did not have to implement the program if there was substantial local resistance.

Diffusion of the program throughout the country was a slow process. Adoption was especially slow in interior agricultural states, such as South Dakota and Idaho, and in New England (Figure 6). By 1969, five years after the initiation of the program, six states still did not provide the food stamp program to their eligible recipients.

While USDA administers the program at the national level, state social welfare departments are responsible for micro-implementation. A certain amount of confusion has resulted as these state agencies attempt to coordinate the welfare directives received from USDA, for the food stamp program, and HHS, for the other welfare programs.

State welfare departments are responsible for merging the food stamp program into the overall state welfare systems. It is also required to direct Outreach activities to advertise the program. States bear little of the financial burden for the program, contributing only to a portion of the administrative costs. Originally, states set their own eligibility requirements but these are now uniformly set by USDA.
State welfare departments were responsible for establishing local food stamp project areas. These areas are in almost all cases counties. As the program diffused in the late 1960's, there was a waiting list for local areas to be placed on the program. Local areas were ranked, not according to the actual hunger of the populations within them, but according to their willingness to help with administrative costs of the program and average income data. USDA claimed that it was "politically strategic to establish the program first in places where it could be assured of good administration, the lowest possible costs, and effective results" (Segal, 1970, p 51).

The county offices of the state welfare department are responsible for daily administration of the program. Thus, they exert considerable control over program use in terms of office locations, hours of operation, application procedures, etc. Evidence exists that local areas have, upon occasion, made the program inaccessible or not worth the effort to the eligible population. Sometimes, these efforts to decrease the effectiveness of the program were fostered by community pressures. For example, food stamp offices were closed during harvest in many rural Mississippi counties so that local farmers had access to a labor force to work in the fields (James, 1972, p. 56 and Thorkelson, 1969, p. 189). Evidence also exists that merchants discouraged
the program from becoming established in their area because they felt it would hurt sales (Segal, 1970). If merchants were unsuccessful in squelching the program, they often increased prices to ensure that sales would not suffer (for further discussion on the pricing strategies of retail grocers who are involved in the food stamp program, see Petrof, 1971; Piven and Cloward, 1971; Sexton, 1973; and U. S. Congress, 1968).

4.1.6 Individual Adoption

During the first years of the food stamp program, there was slow expansion in participation as the program was established in various areas and as eligible households became aware of the program and applied. By 1969, food stamp projects existed in less than half of the nation's counties and, as a national average, only 22 percent of the eligible population in those counties were participating (U. S. Senate, 1969). Participation by eligible participants was greater than 40 percent in only 10 percent of the counties nationwide. When asked to justify the low utilization of the food stamp program, Agriculture Secretary Freeman listed as major reasons (U. S. Senate, 1967, pp. 120-125):

1. Inadequate administrative, informational, and educational support by the federal government.
2. Failure of state and local governments to use the program.

3. Weak administration by local government either by intent, ineptness, or inadequate resources.

4. Failure of the poor to participate because of lack of information, understanding, or money.

The Secretary identified problems operating throughout the policy process. His four points identify mistakes in the Macro-Implementation, Micro-Adoption, Micro-Implementation, and Individual Adoption stages, respectively. With regard to problems in the Individual Adoption Stage, researchers disagree over why individuals resist the adoption of social programs for which they are eligible. Some contend that such resistance is a function of the personal stigma attached to accepting welfare (Brunn, 1974 and MacDonald, 1977). According to this perspective, resistance to the program would be higher in areas dominated by a strong individualistic philosophy or in rural areas where the stigma attached to welfare persists. Additionally, program participation would be lower in areas where the elderly are concentrated. This group is especially imbued with the Protestant work ethic and consider social programs a handout which they do not deserve.
More radical researchers contend that individual resistance to a social program is more than a function of personal stigma (Piven and Cloward, 1977). According to this perspective, societal norms which create such stigma are perpetuated by capitalist ideology. Norms such as the Protestant work ethic, which praise the virtues of work and condemn the acceptance of welfare, cause poor individuals to feel embarrassed about using public assistance. Capital is interested in perpetuating this notion because it causes individuals to take responsibility for their own welfare. Thus, they are less apt to recognize that their poverty is a necessary component of the inequalities endemic to the capitalist system and less apt to utilize social programs.

4.1.7 Program Evaluation and Feedbacks

By the late 1960's, there was increasing national concern over the prevalence of hunger and malnutrition in the country despite the domestic food programs. Evidence of widespread poverty and hunger in rural Mississippi generated hearings in the Senate subcommittee on Employment, Manpower, and Poverty, which culminated in the subcommittee's recommendation that the purchase price of food stamps be lowered by USDA to allow participation by the poorest of the low-income population (MacDonald, 1977, p. 9).
In 1968, the Citizen's Board of Inquiry into Hunger and Malnutrition, an independent organization, published the results of its nationwide survey, identifying more than 200 counties where hunger was prevalent and recommending that free food stamps be available in all counties (James, 1972, p. 59). After a CBS report, "Hunger in America," was televised to disseminate the findings and recommendations of CBIIHM, many groups supporting poverty groups in the United States pressured USDA to alter the program (Gregg, 1978, p. 25). By the time of the 1968 presidential election, hunger and poverty had again become major political issues.

At least in partial response to these pressures, the U. S. food stamp program has been substantially altered by Congressional legislation several times. These modifications changed the focus of the program from an agricultural subsidy policy to a poverty assistance program, which has had an impact on its use. These legislative changes will be reviewed below.

4.1.7.1 1970-1975:
The 1971 legislation, initiated by President Nixon, eliminated the provision whereby the states set their own eligibility criteria. The Secretary of Agriculture was designated to set nationally uniform eligibility standards and to reduce the purchase requirement of the stamps.
Additionally, states were required to establish outreach activities to inform low-income households of their eligibility. Finally, territories of the United States, such as Guam, Puerto Rico, and the Virgin Islands, were brought into the program.

The 1973 legislation, also under Nixon’s proposal, required all counties to have a food stamp program by June 30, 1974. Thus, the program was no longer available only at the option of the state and local governments and was transformed into a unified national program.

Just after the provisions of the food stamp program were loosened to include a greater proportion of the low-income population, national economic conditions worsened so that many more people needed the program. Food prices increased drastically at an annual rate of 20.7 percent between the first and second half of 1973 and full economic recession followed in the fall of 1974 (Hoagland, 1976 and NBER statistics).

4.1.7.2 1975-1980:
Radically increasing participation in the food stamp program, due to the liberalized program structure, economic recession, and the inclusion of federal territories in the program, alarmed Congress and USDA as they watched program costs surge upward. In the 1976 Presidential campaign,
Gerald Ford proposed stringent revisions be made to the program which it was estimated, would have eliminated 5 million people from the program. It is widely viewed that Ford made such a proposal, at least partially, as an attempt to draw conservative support from Ronald Reagan, who threatened Ford's nomination by the Republican party (Gregg, 1978, p. 29).

Carter eventually won the 1976 presidency and appointed Robert Bergland as his Agriculture Secretary, the first USDA secretary since Freeman to support the program (Gregg, 1978, p. 29). Bergland combined forces with the Democrat controlled Congress to institute substantial program revisions. Most important of these was elimination of the purchase requirement. That is, participating households were no longer required to pay USDA the "normal" monthly expenditure for food stamps of a greater monetary value. Instead, they paid nothing and received coupons for only the bonus value, the difference between the amount they had previously paid and the amount they had received.

This provision freed that portion of the recipients' budgets which had been allocated to the purchase of food coupons (averaging about 25 percent of their income) so that it could now be used for nonfood purchases (Food Research and Action, Corp., 1978 and Gregg, 1978, p. 29). Such a change in the regulations thus altered the program from one
which primarily served the interests of agriculture to one which was more explicitly aimed toward the poor. The change was made politically feasible due to decreased surpluses of agricultural products, and, therefore, decreased interest in the program by the agricultural sector, as well as, the increased power of northern and eastern urban Congressmen to press for the interests of the low-income population (Clarkson, 1975, p. 9 and MacDonald, 1977, pp. 17-18).

This change altered use of the program by various segments of the poverty population. Elimination of the purchase requirement encouraged the lowest income group, who had previously been prevented from using the program when the purchase of coupons were required, to participate.

4.1.7.3 Since 1980:
The substantial rise in participation during the late 1970's, due to the latest set of program liberalizations and the worsening economy, has fostered widespread criticism of the program. As a part of sweeping cuts to national social programs, the Reagan administration is attempting to curb growth in the food stamp program by decreasing program funding, changing eligibility standards, and improving state administration.

South Carolina Senator, Jesse Helms, who is the Chairman of the Senate Committee on Agriculture, Nutrition, and Forestry, leads the forces against the program. New York
Representative Fred Richmond, Chairman of the House Committee on Agriculture's subcommittee on nutrition, is the most outspoken proponent of the program. It is questionable whether Richmond will be able to collect the traditional rural-urban food stamp coalition to counter the conservative tendencies of the present Congress (Dunn's Review, 1981, p. 123). It is not yet known what the consequences of the present reforms will mean in terms of program use.

4.2 OUTLINE OF THE ANALYSIS

The preceding review has portrayed the food stamp program as a complex, evolving national policy, the structure and utility of which has responded to a multitude of political, economic, and social forces. Originally designed in accordance with agricultural interests and later modified by poverty interests, the program has been increasingly criticized as the economy faltered in the mid-1970's.

To analyze the spatial and temporal dynamics of political, economic, and social forces upon use of the food stamp program, the conceptual model developed in the first chapter will be brought back into the discussion and applied (Figure 7). The policy process, described and placed in spatial context in Chapters 2 and 3, represents facets of political, allocative, and social processes. First, political processes operate primarily during the first five stages of the
policy process, from Agenda-Setting through Micro-Implementation, as the program is supplied to eligible recipients. Additionally, allocative processes determine primarily the need for a program and social processes the demand for it. These latter two processes thus operate in the sixth stage of the policy process, Individual Adoption.

To operationalize this conceptual model of the policy process, the spatial and temporal variations in supply, need, and demand factors will be studied using diffusion theory. Two geographic perspectives of diffusion theory, which specifically address time and space dimensions of supply and demand processes, are pertinent to the analysis. To demonstrate the applicability of diffusion theory to the policy process, it is first necessary to review major aspects of the theory. The next subsection reviews diffusion research and this is followed by a discussion of its incorporation into the policy process framework and its application to the food stamp program.
Figure 7: The Policy Process in the Conceptual Model

Contextual Environment

- Political System
  - Political Processes

- Economic System
  - Allocative Processes

- Social System
  - Social Processes

Social Policy Component

- Supply
- Need
- Demand

Supply, Need and Demand Factors Studied in Terms of Their Spatial and Temporal Variations

Program Use
4.2.1 A Review of Diffusion Theory

Diffusion research examines the process by which innovations, such as new ideas, products, or practices, become established throughout a society over time. Acceptance of an innovation is rarely instantaneous or complete throughout a society. Typically, there exist distinct spatial and temporal variations in the rate of adoption. Several geographic perspectives have been developed which emphasize different explanations for such variations. Two such traditions of diffusion research are pertinent to this analysis.

4.2.1.1 The Adoption Perspective

One approach is referred to as the adoption perspective. This approach emanates from the work of Everett Rogers, a rural sociologist, and his colleagues. The adoption perspective emphasizes demand side explanations, contending that the acceptance of an innovation is a function of an individual's receptivity or resistance to adopt something new. Individuals are seen to vary in their innovativeness, which is measured as the time one accepts an innovation relative to all other potential adopters. Individuals are placed along a continuum of innovativeness, from innovators, those who are most receptive to an innovation and first to adopt it, through early and late adopters to laggards, those who resist the innovation and are last to accept it.
No consideration is given to conditions beyond the individual's control which affects his accessibility to the innovation and, thus, his ability to adopt it. Researchers using the adoption perspective often study "selective exposure" as a part of the process but this concept does not refer to the variable availability of the innovation to different individuals. Instead, selective exposure is seen as the responsibility of the individual:

Generally, individuals tend to expose themselves to those ideas which are in accord with their interests, goals, and existing attitudes. We consciously or unconsciously avoid those messages which are in conflict with our predispositions (Rogers, 1962, p. 105. emphasis added).

Although most of the empirical diffusion studies conducted by Rogers and his colleagues are concerned with adoption by individuals, the process by which groups and organizations adopt innovations is also considered. With regard to such collective decisions to adopt, Rogers identifies several groups of actors. "Stimulators arouse interest in the need for a new idea; initiators introduce the idea into the social system; legitimizers (with either formal or informal positions of authority) legitimate the innovative idea; members of the social system make decisions to support or reject the innovation; and, if supported, the innovation is adopted over time" (Lucas, 1982, p. 6 and Rogers and Shoemaker, 1971, pp. 275-297).
Thus, Rogers provides the basic framework to examine collective adoption processes such as the diffusion of a social program throughout the country. Although Rogers identifies the stimulators, initiators, and legitimizers who are responsible for the provision of an innovation, many examinations of political diffusion processes ignore the supply side of adoption. The political diffusion literature works primarily within the adoption perspective. Both the "American states" research by Walker (1969), Gray (1973), and their colleagues and the cross-national political diffusion work by Collier and Messick (1975) and others focus upon the relative timing of policy adoption by governmental units. In a direct parallel to Roger's work on individuals, they ascribe labels of innovativeness to states countries. In place of Rogers' individual "innovators," for example, Walker substitutes "regional leaders." In place of Rogers' "laggards," Walker substitutes "followers." No consideration is given to circumstances which might have caused some places to be provided with the innovation before others are supplied.

Thus, the adoption perspective examines that aspect of the diffusion process which involves the adoption decision, the demand side. It ignores, however, constraints which limit the availability of the innovation, the supply side.
4.2.1.2 The Market and Infrastructure Perspective

Researchers utilizing the market and infrastructure perspective, on the other hand, contend that a diffusion process is more than the result of individual decision-making. Before an individual can decide whether or not to accept an innovation, he must have access to it. The market and infrastructure perspective emphasizes the operation of those constraints which create variable access to the innovation by different individuals.

The focus of research is thus on the actions of the diffusion agency, which is responsible for supplying the innovation (Brown, 1981, chapters 3 and 4) (figure 8). The diffusion agency may or may not be motivated to supply the innovation for profit. The decisions it makes concerning the diffusion of an innovation may issue from a centralized organization or a set of decentralized organizations with or without a coordinating authority. The diffusion agency devises certain strategies to diffuse the innovation, including pricing policies, promotional campaigns, and the establishment of an infrastructure to disseminate the innovation.

The market and infrastructure perspective has been primarily applied to examine the diffusion of commercial, private enterprise innovations (see, for example, Brown and Brown, 1976 and Zeller, 1978). The framework is nevertheless
applicable to social program diffusion processes. The diffusion agency, in this case government administrative agencies, are not profit motivated. Provision of the program is the shared responsibility of national, state, and local governments. Thus, authority for diffusion is decentralized among subnational governmental units, but has a centralized authority, the federal agency. Social programs vary in the degree to which they are controlled by centralized or decentralized authorities. For example, provision of AFDC is far more decentralized than that of the food stamp program. The diffusion agency devises a number of strategies to make the program available, such as setting the infrastructure of welfare office locations, selecting its market by setting eligibility criteria, and promotional activities to inform potential participants of their eligibility.
Source: Brown, 1981

Figure 8: The Provision of Innovations
4.2.2 Application of Diffusion Theory to the Policy Process

The application of diffusion theory to the study of social policies would evaluate the extent to which a program is used by those it was designed to serve. The adoption and the market and infrastructure perspectives would differ, however, in their explanations of spatial or temporal variations in program use. According to the adoption perspective, under-utilization would be due to the failure of individuals to take advantage of the program. The market and infrastructure perspective, on the other hand, would focus upon explanations as to why the program was not properly supplied to those in need.

These two perspectives are easily incorporated into the policy process framework (Figure 9). The relevance of supply-side and demand-side explanations to each stage of the policy process will now be reviewed and examples of their application to the analysis of the food stamp program described.

The first five stages of the process, from Agenda-Setting through Micro-Implementation, determine the manner by which a program is supplied to an eligible population and thus, the approaches and methods used in the market and
Figure 9: Diffusion Perspectives of the Policy Process
infrastructure perspective are appropriate. More specifically, in the initial Agenda Setting stage, uneven access to the government agenda by different interest groups influences the type of social problems considered by the government and, indirectly, the manner in which resulting policies are structured and supplied to meet those problems. With regard to the food stamp program, both agricultural and anti-poverty interest groups felt that the commodity distribution program should be supplemented or replaced with a food stamp program. Although anti-poverty forces had petitioned the government in every session of Congress since 1943 to institute a food stamp plan, it was not until the President and his Secretary of Agriculture supported the issue that the proposal was successful. Thus from the beginning of the policy process, the food stamp program was guided and structured more by agricultural interests than by anti-poverty groups.

In the Policy Formulation stage, the government makes a formal policy choice which, although it is vaguely defined, nevertheless gives the broad outline of the terms by which it is provided. The food stamp plan was debated and designed solely within the Congressional committees of agriculture and the resulting Food Stamp Act of 1964 required the poor to commit up to one third of their monthly budgets to purchase the stamp coupons. To use the terminology of the
market and infrastructure perspective, the "pricing policy" set by the agricultural sector required the poor to pay a portion of their monthly income to participate. This particular provision is generally regarded as the major constraint which prevented many eligible recipients from participating. Thus, the structure of the original food stamp program determined that many of the poor, although they were legally eligible to participate, were not effectively supplied with the program.

In the Macro-Implementation stage, a national-level administrative agency transforms the policy into a more highly defined program, further specifying the constraints under which the program is provided. The very fact that USDA, whose primary responsibility is to serve agricultural interests, was given responsibility for administering the food stamp program rather than HHS, which is more oriented toward welfare issues, indicates that the original program was geared more toward the agricultural sector. Borrowing again from the terminology of the market and infrastructure perspective, USDA developed the overall "organizational capabilities" of the diffusion process.

In the Micro-Adoption stage, state and local areas are given the option to adopt the program. Spatial and temporal variations among these areas in their decisions whether or
not to provide the program create inequitable availability of the program to individuals. Most of the states were very slow in establishing the food stamp program in local areas. By 1969, five years after the policy was approved, less than half of the counties in the nation were operating a project. Thus, although the program was ostensibly a nationwide entitlement policy, the poor who happened to reside in any one of the 1,500 counties which did not operate a project were not effectively supplied.

Finally, in the Micro-Implementation stage, the program is adapted to local conditions and daily administrative procedures are instituted. State governments are required to run promotional campaigns, such as Outreach activities, and until 1971, they selected their own markets by determining eligibility criteria. Local governments are responsible for establishing and maintaining the welfare offices through which the program is provided. Thus, subnational governments are responsible for various infrastructure, promotional, and market selection strategies as delimited by the market and infrastructure perspective. Even when a social program is provided in an area, local attitudes about the program in particular, and about welfare in general, influence the manner in which it is administered, or supplied, to potential recipients. In many cases, the food stamp program was only sporadically or grudgingly provided in local areas,
particularly in those counties which instituted the program only when forced to do so in 1974. Thus, the first five stages of the policy process are concerned with the manner by which a program is supplied, a viewpoint utilized by the market and infrastructure perspective.

The sixth stage in the policy process, the Individual Adoption stage, examines how individuals decide whether or not to use a program. The demand for programs would thus be studied using approaches and methods used by the adoption perspective. With regard to the food stamp program, utilization patterns reflect not only the fact that the program is variably supplied but also that groups in certain areas of the country hold different attitudes about welfare and are thus apt to vary in their demand and use of the program. The adoption perspective would focus upon spatial and temporal variations in such factors as the stigma attached to using welfare, in general, and the food stamp program, in particular.

It is important to bear in mind that, although demand is explicitly studied only with regard to this final stage of the policy process, individual demand for social assistance feeds back on each of the preceding stages to the extent that potential participants in a program influence the manner in which the government supplies it to them. In fact,
none of the stages should be viewed as mutually exclusive
events occurring in a strict, sequential order. The entire
process is dynamic, involving alterations in the program it-
self and changes in the actions taken by the diffusing agen-
cies and potential adopters.

4.2.3 Model for the Analysis
The analysis in this dissertation will examine supply-side
and demand-side explanations of temporal and spatial varia-
tions in utilization of the U.S. food stamp program. In
accordance with the policy process framework, each level of
the government hierarchy which is responsible for program
provision will be studied in a separate analysis.16

First, at the national level, a time series diffusion
model of growth in program use is devised to see how changes
in supply of the program, such as alterations in the regula-
tions, and changes in economic need for the program, such as
fluctuating food prices, have influenced its use. Quarterly
data from 1964, when the program was initiated, to 1980 will

16 The selection of particular scales always influences the
results of an analysis. Thus, the national state, and
local levels of the government hierarchy are considered
here to see if factors found to be important at one scale
are simultaneously significant at other levels. Other
scales could have been used, such as the Census' Standard
Economic Areas, which would more closely represent social
and economic spatial units than do the political areas.
Only political units were used in the following analyses
so that the influence of variable political control could
be studied for its effect on program use.
be used.

Separate analyses at the state and local levels will examine how the political supply, economic need, and social demand factors influence spatial variations in program utilization at particular times in the history of the program. Because data are available at the subnational level for only two time periods, cross-sectional analyses will be used for 1969 and 1975. These two time periods represent different legislative phases of the program.

The emphasis throughout all three of the analyses will be upon the changing relative influence of the factors. Every attempt has been made to use the same data for the factors in each analysis. For a description of the parallels and discrepancies in measurement between the three scales of analysis, see Appendix A.

4.2.3.1 Estimation of the Participation Rate
Throughout the analyses, program use is measured by the participation rate, defined for each temporal and spatial unit, as the number of persons participating in the program divided by the number who are eligible.

The ratio consists of two components. First, data on the number of persons participating were collected from the
USDA's "Statistical Summary," which provides information on the food stamp program, monthly, for local project areas. The number of persons participating in the food stamp program has increased in a generally logistic manner throughout the study period, 1964-1980.

Data for the denominator, the number of eligible persons, on the other hand, are not available because the U. S. government does not collect such statistics for the food stamp program or other social programs. It is difficult to precisely measure the number of people actually in need of the program. First, little is known about the prevalence of hunger in this country. During 1967 Senate hearings, the Surgeon General admitted (U. S. Senate, 1967, p. 169):

We do not know the extent of malnutrition anywhere in the United States. Among the population there is a fair amount of it. I can not say what the extent is because we just don't know. We have been trying to get ourselves to do this kind of work in the United States. We can do it all over the world but not in the United States.

Due to the lack of information on national dietary conditions and the difficulty involved in certifying individuals as qualified for food assistance based on their actual intake of nutrients, eligibility to participate in the food stamp program is based on income level. A household of a certain size and income is eligible for the program if its financial resources are considered insufficient to obtain an adequate diet. The regulations which set limits on income,
assets, and deductions are so complicated and have been changed so frequently, however, that it is almost as difficult to measure nationwide need for the program using the income criteria as it is to estimate the extent of hunger. For example, national household income data are collected annually while eligibility for the food stamp program is based on monthly income. Additionally, information of household assets, which would disentitle some households from program benefits, and data on allowable deductions, which would qualify otherwise ineligible households, are not available on a monthly basis (Barnack, 1977, p. 526).

In view of these problems, the best overall surrogate to measure the number who are eligible is the number of persons whose income is less than 125 percent of the poverty level. This surrogate is currently used by Mathematica Policy Research, Inc., a private research firm under contract by Congress to study the food stamp program. Using this definition, the number of persons eligible to participate in the food stamp program generally declined throughout the history of the program. In 1964, approximately 50 million persons were qualified but, by 1980, this number had declined to roughly 40 million. Although the overall trend has been downward, important increases in the number eligible are evident in 1969-1970, 1973-1974, and 1978-1979, which correspond to worsening conditions in the national economy in those years.
This chapter first reviewed the historical development of the U.S. food stamp program, emphasizing political and economic forces which have had a bearing upon the nature of the policy and possibilities for its utilization. To study the relative influence of these forces upon program use, a conceptual model was constructed by incorporating two geographic perspectives of diffusion theory into the general policy process framework. The supply-side diffusion approach emphasizes the impact of political forces upon program use while the demand-side perspective focuses upon the influence of economic conditions which set the level of need and social conditions which influence demand. From this model and the historical review of the program, the broad outlines of the analyses to follow were derived and described. In the following three chapters, the relative influence of political, economic, and social forces upon use of the food stamp program will be presented for the national, state, and local levels.
Chapter V

NATIONAL LEVEL ANALYSIS OF THE FOOD STAMP PROGRAM

To analyze the relative influences of economic need, program provision, and social demand upon use of the food stamp program, the conceptual framework for spatial and temporal policy analysis will now be applied. In this chapter, the effect of the economic and political situation upon growth of the program at the national level is examined.17

The first section reviews the growth trend of national participation rates. The time period examined extends from 1964, when the program was initiated, to 1980. The second section presents a set of economic and political factors which are postulated from the historical account to have had an effect upon participation. These factors are quantified and incorporated into long-term and short-term time series models to gauge the relative and shifting influence of national economic and political conditions.

17 Social demand factors are not studied at the national level because variables available to measure attitudes about welfare do not vary sufficiently over the time period of the analysis to be able to gauge their effect upon changing participation rates.
5.1 GROWTH IN PARTICIPATION RATES, 1964-1980

The trend in participation rates has been generally logistic throughout the history of the program (Figure 10). After a slow growth period from 1964 through 1969, during which participation rates increased to only 10 percent, the program grew rapidly until 1975. At this time, the proportion of eligible persons participating in the program levelled off at roughly 50 percent. Since 1975, participation rates have remained near 50 percent but have fluctuated much more drastically than they did early in the history of the program. Note that significant increases in the participation rate occur in 1969-1970, 1973-1974, and 1978-1979.

One of the empirical regularities found in social diffusion research is that the cumulative proportion of the population adopting an innovation follows a trend which is approximated by an S-curve (Brown, 1981, pp 30-31) (Figure 11). This curve represents the tendency for a diffusion process to begin slowly, accelerate, and then slow as saturation levels are reached.

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16 It should be recalled that the participation rate is the proportion of the eligible population who participate. Because eligibility is difficult to measure, the participation rate is biased and should be regarded as an approximation of the actual rate.
Figure 10: Trend in National Participation Rates, 1964-1980
Figure 11: The S-Curve for Diffusion through Time
The logistic trend in food stamp program participation rates closely approximates this S-curve. The following section describes program provision and economic need factors which represent supply-side and demand-side diffusion processes, respectively. These processes are examined to gauge their effect upon the logistic trend in participation rate diffusion.

5.2 SOURCES OF PROGRAM GROWTH

This section begins an analysis of the specific conditions and constraints which have influenced the expansion of the program from 1964 to 1980. Two sets of factors, changes in economic conditions and alterations in program provision, are drawn from the general historical account and postulated as sources of program growth. These factors will be measured and used as variables in the following analysis. The economic processes studied for their effect on use of the program are:

1. The unemployment rate

2. The food price index

The program provision influences examined are:

Concise measures of the overall political context are generally unavailable and must be studied indirectly through the specific aspects of the program which were generated by the overall political situation. In some cases, the changing political context does not lend it-
1. The benefit level

2. The proliferation of local food stamp project areas

3. The establishment of national eligibility standards

4. The initiation of outreach activities

5. The elimination of the purchase requirement

Each of these factors will be discussed below in a format which first describes the hypothesized relationship between the factor and participation in the program, then presents the factor in variable form, and finally graphically displays the trend of the variable through time and its temporal relationship with participation rates.

self to quantitative measurement. For example, cycles of conservative and liberal control of the national government can not be adequately measured, given the complex and sometimes conflicting ideologies in Congress, the Department of Agriculture, and the White House. In other cases, the political context may have an influence upon the program but does not vary sufficiently through time to be able to measure its effect upon participation levels over the study period.
5.2.1 Changes in Economic Conditions

5.2.1.1 Unemployment Rates:

Of the many indicators of aggregate economic conditions, the unemployment rate is perhaps the single most relevant measure of need for the food stamp program (Amidei, 1981, p. 15; Coe, 1980, p. 7; Devens, 1979, p. 47; and Fersh, 1981, p. 10). USDA currently estimates that a 1.0 percentage increase in the unemployment rate raises annual food stamp program participation by 1.0-1.3 million persons and Robert J. Fersh, a primary administrator of the food stamp program during Carter's term, contends that participation in the program is "second only to unemployment insurance in responding to job losses" (Coe, 1980, p. 7; Congressional Digest, 1981, p. 27; and Fersh, 1981, p. 10). Food stamp households are more sensitive to changes in national employment conditions than are other households due to the fact that they have an unemployment rate five times that of nonrecipient households (Devens, 1979, p. 47).

In the following time series analysis, the unemployment rate is measured as the percentage of the civilian labor force which is unemployed. The participation rate for one month will be regressed on the unemployment for the previous month. The aggregate response in participation to a change in unemployment conditions is apt to lag by one month.
because the application process, which certifies that an individual may participate in the program, usually requires several weeks of paperwork but is required by law not to exceed thirty days. Additionally, the unemployment rate is deseasonalized by the Census 11 decomposition method to remove the confounding effect of systematic seasonal fluctuations in unemployment (See Makridakis and Wheelwright, 1978, pp. 106-138 for a discussion of this method).

The trend in the deseasonalized unemployment rate from 1964 to 1980 has fluctuated substantially from a low of 3.4 percent in the winter of 1968-69 to a high of 8.9 percent in the spring of 1975 (Figure 12). Note that sharp increases in the unemployment rate in 1970 and 1974 correspond closely with similar rises in food stamp program participation rates (Figure 10).

Throughout the history of the program, the zero-order correlation of the monthly participation rate with the previous month's unemployment rate is 0.82. This strong positive correlation is reflected in a scatterplot of the variables for the 192 monthly observations in the time period (Figure 13).
Figure 12: National Unemployment Rate, 1964-1980
Figure 13: Relation between Unemployment and Participation Rate

unemployment rate

A = 1 observation
B = 2 observations, etc.
5.2.1.2 Food Expenditures:

In addition to the unemployment rate, the food price index is a relevant measure of economic conditions affecting growth of the food stamp program (Fersh, 1981, p. 10 and USDA, 1980, pp. 10-12). The Bureau of Labor Statistics calculates the food price index (FPI) along with other indices which comprise the overall consumer price index (CPI). In the following time series analysis, the food price index is lagged, to account for the reaction time between a change in food prices and growth of the program, and deseasonalized, to remove systematic seasonal fluctuations in market prices.

Unusually large worldwide increases in food prices have been recorded for late-1972 through mid-1975. In the United States, the Consumer Price Index for food items reflected such changes throughout the world. The FPI increased at an annual rate of 16 percent in the first half of 1973 and by another 25 percent from the last half of 1973 to mid-1975. Additional large increases are noted for 1978-1979. The trend in the deseasonalized food price index reflects these increases (Figure 14). The correlation of the participation rate with the previous month's food price index is very high (0.89) as reflected in the scatterplot (Figure 15).

Reasons for the sharp increase in food prices include: a decline in government-held grain stocks, poor weather, increases in worldwide demand for food, devaluation of the U.S. dollar, and substantial Soviet grain imports during this time.
Figure 14: National Food Price Index, 1964-1980
Figure 15: Relation between Participation Rate and Food Price Index

A = 1 observation
B = 2 observations, etc.
5.2.2 Alterations in Program Provision

5.2.2.1 Benefit Levels:
The amount of benefits received by participants in the food stamp program has been frequently changed, causing the program to vary in its attractiveness to potential recipients. If benefit levels are set too low, many households which are eligible would choose not to participate, given the time and inconvenience of applying for and obtaining the stamp coupons. The higher the ratio of benefit levels to total household income level, the more attractive the program should appear to potential recipients.

Benefit levels have been shown in previous cross-sectional studies to have a significant effect on participation in the food stamp program (Clarkson, 1976 and MacDonald, 1977). In one nationwide study of food stamp program use, the benefit level was an insignificant predictor of participation but the author contends that its effect was largely masked by other variables in the analysis (Coe, 1979).

In the following time series analysis, the benefit level is controlled for inflation through time by taking it as proportion of disposable income. In other words, it is not the absolute value of benefits but the amount of benefits relative to income which is hypothesized to have an influence on participation in the program. One again, the variable is lagged and deseasonalized.
The trend in the deseasonalized benefit rate shows two abrupt increases in 1970 and 1974 due to increases in the bonus amount of coupons set in those years (Figure 16). These breaks are also evident from a scatterplot of the participation rate with the previous month's benefit rate for the time observations (Figure 17). Note the three distinct clusters of observations which illustrate how increased participation rates are associated with increased benefit rates. The positive correlation between the two variables is quite strong (0.91).

5.2.2.2 Establishment of Local Food Stamp Project Areas:
During the 1967 Senate subcommittee hearings, Secretary of Agriculture Orville Freeman cited the failure of state and local governments to adopt the program as one reason for low participation in federal food programs (see Historical Development of the Program, above). Adoption of the program at the local level was voluntary at that time although the inability of USDA to accommodate all requests for funds to establish project areas prevented some local governments which wanted the program from establishing a project area (Segal, 1970, p. 51). By the end of June, 1974, however, all counties were required to operate a local food stamp project.
Figure 16: National Benefit Levels, 1964-1980
Figure 17: Relation between Participation and Benefit Rates

A = 1 observation
B = 2 observations, etc.
Since potential recipients in the food stamp program are required to apply in the county in which they reside, participation has been necessarily constrained by the number of local project areas in operation. The variable is expressed as the proportion of all counties which operated a project at a given time. The variable is lagged but not deseasonalized.

Of the 3,044 total possible project areas, the number in operation increased from 43 in 1964 to full national coverage in mid-1974 (Figure 18). The logistic trend in the establishment of local project areas closely corresponds to the similar trends in program participation rates as illustrated by a scatterplot of the variables and as demonstrated by the extremely high positive correlation of 0.97 (Figure 19).

5.2.2.3 National Eligibility Standards:
The 1971 legislation directed the Department of Agriculture to set nationally uniform eligibility criteria for participation. Prior to that time, the states had set eligibility standards to account for areal cost-of-living differences but the disparities in criteria were deemed unnecessarily large. The change to national standards has been cited as having had a positive effect on participation rates (Levitan, 1981). This change is presented as a dummy variable
Figure 18: Establishment of Local Project Areas, 1964-1980
Figure 19: Relation of Participation with Project

Proportion of projects in operation

A = 1 observation
B = 2 observations, etc.
which is assigned the value of 0.0 prior to July, 1971 and the value 1.0 since that time.

5.2.2.4 Outreach Activities:
The 1971 legislation required state agencies to undertake "effective action, including the use of services provided by other federally funded agencies and organizations, to inform low-income households concerning the availability and benefits of the food stamp program" (Federal Register, 1975, p. 1883). It soon became evident that the states had not effectively established outreach activities. Between 1971 and 1974, poverty interest groups in 18 states filed suits against USDA for failing to adequately implement the outreach requirement (see, for example, Bennett vs. Butz, 1974, 386 F Supp. 10-59, C. D. Minnesota). As a result, USDA established outreach coordinators in each state in April, 1974 who were made directly responsible for informing potential recipients of their eligibility and rights. Although it is not possible to gauge the direct effects of expanded outreach activities on program participation from published USDA statistics, a study from the Institute for Research on Poverty maintains that "in areas where these efforts are conscientiously undertaken, they have probably contributed to modest expansions in overall caseloads" (MacDonald, 1977, p. 17). The establishment of outreach coordinators is expressed as a dummy variable which is assigned the value 0.0 prior to April, 1974 and 1.0 since then.
5.2.2.5 Elimination of the Purchase Requirement:
Many studies on the food stamp program maintain that a major constraint which prevented eligible households from participating was that they were required to commit up to a third of their monthly income to purchase stamp coupons (See, for example, Amidei, 1981 and Persh, 1981). In 1978, the purchase requirement was abolished and households were issued stamps only for the bonus amount. Once again, a dummy variable is used to represent this alteration in the policy. The variable equals 0.0 prior to January, 1979 and 1.0 since then.

5.3 TIME SERIES ANALYSIS OF LONG TERM TRENDS IN PARTICIPATION
The logistic trend in participation rates from 1964 to 1980 (see Figure 10, above), will be analyzed with a logistic time series regression model. Although a linear model is used most frequently in a time series regression format, any curvilinear trend which is intrinsically linear in the parameters and fulfills the assumptions of regression is justified. The general logistic equation is applied to growth in program participation and the equation is linearized for estimation (figure 20). Note that, due to the particular form of the logistic equation, variables which are positively associated with the participation rate show negative coefficients in the regression analysis. Throughout
the discussion of results for this analysis, the signs have been reversed so that the association between the variables is easily discernible.

The resulting regression, using quarterly data from January, 1964 through December, 1979, presents the relative association of economic conditions and aspects of program provision on growth in participation rates. The adjusted $r^2$ of 92 percent is initially surprising but considering the high correlations of most of the variables with participation rates, the percentage variation explained in the logistic rate of participation is reasonable.

The standardized regression coefficients, which describe the relative importance of each variable, are listed with a ranking of their importance and indication of their significance (Table 1).

Examination of the table reveals that three aspects of program provision, the proportion of local project areas in operation (standardized regression coefficient = .77), the benefit level (.16), and the establishment of national eligibility standards (.13), are all positively and significantly associated with the trend in participation rates. Two other provision variables, initiation of outreach activities (.01) and elimination of the purchase requirement (-.09), are insignificant. Neither of the economic
Logistic Equation:
\[ Y = \frac{1}{1 + e^{-b_0 - b_1 x}} \]

Analysis Equation:
\[ P_R_t = \frac{1}{1 + e^{b_0 - b_1 UR_{t-1} - b_2 FPI_{t-1} - b_3 BEN_{t-1} - b_4 PRO_{t-1} - b_5 NAT - b_6 OUT - b_7 EPR}} \]

where
- \( P_R_t \) = participation rate at time \( t \)
- \( UR_{t-1} \) = unemployment rate at time \( t-1 \)
- \( FPI_{t-1} \) = food price index at time \( t-1 \)
- \( BEN_{t-1} \) = benefit level at time \( t-1 \)
- \( PRO_{t-1} \) = project establishment at time \( t-1 \)
- \( NAT \) = establishment of national eligibility standards in July, 1971
- \( OUT \) = initiation of outreach activities in April, 1974
- \( EPR \) = elimination of purchase requirement in January, 1979

Linearized Equation:
\[ \ln \left( \frac{1}{1 - P_R^2} \right) = b_0 - b_1 UR_{t-1} - b_2 FPI_{t-1} - b_3 BEN_{t-1} - b_4 PRO_{t-1} - b_5 NAT - b_6 OUT - b_7 EPR \]

Figure 20: Model for the Long Term Analysis
<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project establishment</td>
<td>.77 **</td>
</tr>
<tr>
<td>Benefit level</td>
<td>.16 **</td>
</tr>
<tr>
<td>Establishment of national eligibility standards</td>
<td>.13 *</td>
</tr>
<tr>
<td>Food Price Index</td>
<td>.11</td>
</tr>
<tr>
<td>Elimination of purchase requirement</td>
<td>-.09</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-.05</td>
</tr>
<tr>
<td>Initiation of outreach activities</td>
<td>.01</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .92$

**F test $>4.0$  
*F test $>2.0$
condition variables, the unemployment rate (-.05) or the food price index (.11), are significant.21

The analysis suggests that the food stamp program is not a pure entitlement policy whereby potential recipients, responding only to economic need, are able to exercise rational, free choice in the decision to use the program. Alterations in the manner in which the program is provided to the potential participants appears very important. This finding does not imply that an individual's economic circumstances are unimportant. Rather, the results of the analysis imply that, at the aggregate level, conditions of supply influence use of the program as well as the expected conditions of need. The proportion of local project areas in operation at a given time appears, from this analysis, to have the greatest single effect upon use of the program. Although it is not surprising that the number of projects in operation constrained use of the program, it is important to control for this variable so that the effects of other variables can be examined.22

21 Strictly speaking, significance tests of regression coefficients are applicable only when a researcher wishes to generalize the results of an analysis based upon a sample to the overall population. This analysis is not based upon a sample. Significance tests are used as a cut off value which separates relatively important variables from comparatively unimportant ones.

22 Although associations demonstrated between explanatory variables and the dependent variable in time series regression analysis do not necessarily imply causation but only that the individual processes trend through time in
When interpreting the relative contribution of the individual variables to the explanation of participation rates, it is important to note that those variables which exhibit long-term, non-fluctuating trends (such as the project area establishment variable) show the largest associations with the participation rate. Some of the variables which show short-term cyclical trends (such as the unemployment rate) are less strongly associated. It may well be that these variables appear less important in explaining participation rates because their effect is less uniform throughout the history of the program than is the case for the smoothly trending variables. Thus, for example, the importance of a sharply increasing unemployment rate in 1974 in explaining the large rise in participation rates at that time may be masked over the long term. In order to examine more specifically the changing influence of the cyclical and long-term variables in accounting for participation rates, the entire trend from 1964 to 1980 will be dissected into shorter phases of the program.

The need to divide the trend into shorter growth phases is further indicated upon examination of the trend in standardized residuals (Figure 21). The unstandardized residuals a similar manner, the preceding discussion of historical circumstances affecting the food stamp program and the other research studies cited lend support to the argument that the processes included in this analysis do indeed affect participation in the food stamp program.
are small, due to the high percentage of the variation in participation rates which is explained by the logistic model, but when standardized, the residuals exhibit a distinct pattern. The logistic model overaccounts for participation rates in some periods and underaccounts at other times.

Thus, because the effect of cyclical variables seems to be masked in the long-term equation, and because trend in residuals indicates that the model over- and underaccounts for the data for certain periods, the logistic trend in participation rates will be divided into three linear trends representing program growth periods.

These are:

Phase 1: Initial Slow Growth Period, 1964-1969
Phase 2: Acceleration Period, 1970-1974
Phase 3: Stabilization Period, 1975-1980

Although arguments could be made for a different number of phases or for different break points between them, this classification is justified given the fact that they represent, as closely as is possible to divide them, defined periods in the history of the program.
Figure 21: Standardized Residuals, Long-Term Analysis
5.4 **TIME SERIES ANALYSIS OF SHORT TERM PHAS IN PARTICIPATION**

The time series analysis is repeated for each of the phases, utilizing the same variables but relating them to participation rates in a linear function rather than a logistic one (Figure 22). The results of each growth phase analysis are presented in Table 2.

Interpretation of the changing effects of these processes is aided by a visual display (Figure 23). The unemployment rate (UBS) shows no significant association with participation rates in the first phase while the national economy was relatively strong. The unemployment rate demonstrates a positive association in the second phase and becomes overwhelmingly the most important factor in accounting for rises in the participation rate in the final phase as the economy worsened.

The proportion of total project areas in operation (PR) was small in the first phase. In fact, only two percent were operating by the end of this first period. During this time, the project rate shows the highest positive

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23 The dummy variables were not used in the linear analyses because of the small number of data points with which to work.
\[ PR_t = b_0 + b_1 UR_{t-1} + b_2 FPI_{t-1} + b_3 BEN_{t-1} + b_4 PRO_{t-1} \]

where

- \( PR_t \) = participation rate at time \( t \)
- \( UR_{t-1} \) = unemployment rate at time \( t-1 \)
- \( FPI_{t-1} \) = food price index at time \( t-1 \)
- \( BEN_{t-1} \) = benefit level at time \( t-1 \)
- \( PRO_{t-1} \) = project establishment at time \( t-1 \)

Figure 22: Model for the Short Term Analyses
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Project establishment</td>
<td>.90 **</td>
<td>.29 **</td>
<td>N.A.</td>
</tr>
<tr>
<td>Benefit level</td>
<td>.28 **</td>
<td>-.40 **</td>
<td>.30</td>
</tr>
<tr>
<td>Food Price Index</td>
<td>.24 **</td>
<td>.96 **</td>
<td>.86 **</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-.15</td>
<td>.44 **</td>
<td>1.55 **</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.99</td>
<td>.79</td>
<td>.88</td>
</tr>
</tbody>
</table>

**F > 4.0

N.A. not included in analysis because value always equals 100 percent.
Figure 23: Change in Standardized Coefficients between Eras
association with participation rates and it is not unreasonable to assume that the small proportion of local project areas operating substantially constrained participation during the initial slow growth phase. The project rate remains important in the second phase. This variable could not be included in the analysis of the final phase because its value is always constant at 100 percent.

The food price index (FPI) shows a small positive association with the participation rate in the first phase. It becomes the most important variable in the second era, reflecting the sharp increase in food prices from 1972 to 1975. It remains important in the final era. The benefit level (BLS) was positively associated with the participation rate in the first and third phases but negatively associated in the second phase.

Thus, by dividing the long term growth trend of participation in the food stamp program into shorter growth phases, analysis of the changing relative influence of the political and economic is enhanced. Over the long term the economic need conditions, measured by the food price index and the unemployment rate, appear insignificant in accounting for growth of the program. Their importance becomes evident in those short term phases characterized by downturns in the state of the economy. In addition, the establishment of
local project areas, which is the single most important variable in the long term analysis, varies in its significance through the growth phases. During the early history of the program, when few projects were in operation, the project establishment rate is very important in constraining program participation. Beginning in 1974, when all counties were required to operate a project, the number of project areas ceased to have an effect on growth of the program.

5.5 SUMMARY INTERPRETATION

The preceding analysis of national trends in the use of the food stamp program demonstrates that aggregate conditions of economic need and program provision are both important in accounting for growth in the program throughout its history. Further, the relative importance of these factors varies through time. When the program was first established in the 1960's, participation was largely constrained by the small number of projects operating at that time. Of the more than 50 million eligible participants, only about 10 percent used the program in this early period. Later in the history of the program, worsening economic conditions became more influential in accounting for growth of the program. Participation increased sharply in the particularly weak economic years of 1974, 1978, and 1979.
Supply constraints ceased to be as important in this latter phase of the program. Many of the original provisions of the policy were revised, shifting the focus of the program more toward the needs of the poor. In 1971, for example, nationwide eligibility standards were imposed so that low income households throughout the country had an equal opportunity to participate. By 1974, all counties were required to provide the food stamp program so that local or state resistance to national government assistance could not prevent eligible participants from using the program. In 1979, the purchase requirement was eliminated so that low income households no longer had to commit a portion of their monthly budget in order to participate. Throughout the history of the program, benefit levels were increased to make the program worthwhile to recipients. These changes removed many of the constraints which, early in the program's history, had prevented eligible households from using the program.

Finally, these findings need to be interpreted within the context of the policy process and supply and demand side diffusion theory. Consider first the policy process. The early stages of the process, from Agenda-Setting through Micro-Implementation, are stages which determine the supply of the program. It is, in turn, these supply factors which were found to be most important in the early growth phases of the program's history. The supply factors became less
influential as the program matured, during which time, economic need became more important. Economic need is a reflection of later stages of the process, especially the Individual Adoption stage. As a consequence, the relative influence of these factors over time can be interpreted as corresponding to the stages of the policy process.

Next, consider the implications for diffusion theory. Rather than focusing exclusively on supply or demand approaches to diffusion theory, this analysis suggests that both are important, albeit during different periods of the program's history and therefore, at different stages of the policy process. In summary, supply side diffusion theory, as well as the early stages of the policy process, are more appropriate perspectives from which to examine program utilization in the early growth phases. Demand side diffusion theory, and the Individual Adoption stage, on the other hand, are more relevant approaches for the study of the latter growth period.

The influence of economic conditions and aspects of program provision upon use of the food stamp program, which have varied in their importance through time, are apt to have had different effects throughout the country given the hierarchy of controls on the program. Following chapters present analyses of the influence of these factors at the state and local levels.
Chapter VI
STATE LEVEL ANALYSIS OF THE FOOD STAMP PROGRAM

The previous chapter illustrated that the food stamp program has become more of an entitlement program over time because of decreases in supply constraints. National level participation by eligible recipients has responded to these changes. Held low throughout the 1960's, participation rates rose rapidly during the early 1970's and have since fluctuated in tandem with cycling economic conditions.

In this chapter, a spatial dimension is added to examine how the program has been variably adapted by the states and utilized by the eligible population at different points in time.\(^2\) The analysis attempts to determine how the economic need and program provision factors, found to be important in accounting for use of the program at the national level, have been differentially translated through conditions in the individual states to create interstate variations in participation rates. Additionally, social demand factors, such as differing attitudes toward welfare throughout the

\(^2\) Washington, D. C. and the federal territories are not included in the analyses. Data on food stamp participation do exist for these areas, however, much of the information for the independent variables are not available.
country, are examined.

Although state level analysis may seem an inappropriate scale for social research, it is legitimate in the examination of the food stamp program because of the states' importance in the hierarchy of governmental controls over the program. National level directives are set by the Department of Agriculture, but local level implementation is carried out by the individual welfare offices. Because the state welfare offices are given a great deal of discretion in translating national level proclamation into local administration, the state offices are able to influence the extent to which the food stamp program is provided and utilized within their jurisdictions.

The analysis of interstate participation rates consists of cross-sectional analyses at two time periods. The first, in 1969, examines reasons for the variable use of the program at the end of its early growth phase, before major legislative revisions had been enacted. The second, in 1975, analyses the reasons for variations in program effectiveness at the end of the acceleration phase of the program.  

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25 State level data on program eligibility are available for 1969 and 1975 only. Although analyses of other years were not possible, the results for 1969 and 1975 are broadly representative of their legislative phases.
The first section of this chapter presents a description of state participation rate variations in 1969 and 1975. This is followed by a review and justification of factors hypothesized to have had an effect upon such rates. These factors are then incorporated into the cross-sectional models. A final section examines changes in the influences of these factors between the two time periods.

6.1 **INTERSTATE VARIATIONS IN PARTICIPATION RATES**

The national level analysis in the previous chapter illustrated that the proportion of eligible individuals who participated in the food stamp program remained very low throughout the first six years of the program, reaching only 10 percent by 1969. Participation rates increased substantially during the next six years, levelling off at approximately 50 percent in 1975. The national rates, however, obscure large differences among the states in participation rates. In 1969, for example, seven states had no food stamp program, while in Mississippi, the rate was highest of all states, with 38 percent of the eligibles using the program (Figure 24).

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26 The factors reflect, as closely as possible, the variables used in the national level analysis. Refer to Appendix A for parallels and discrepancies between these analyses.
Figure 24: State Participation Rates, 1969
Little regional clustering is evident, except for a tendency toward low participation rates in the Mountain Plains states. The states without a program in 1969 show little regional concentration as well, ranging from Florida to Idaho to Delaware and from New Hampshire to Nevada, Oklahoma, and Arizona. Moreover, states which are considered similar on many social, economic, and political dimensions often show large differences in the extent to which the program is used. For example, Washington’s participation rate was 19 percent as of 1969 while Oregon’s was only 3 percent. In Vermont, 17 percent of the eligible population used the program while in New Hampshire there was no food stamp program and in Maine, only two percent participated.

By 1975, the food stamp program was well established throughout the country. Although the program had been required in every county since July, 1974, there were nevertheless spatial variations in the extent to which the

program was used (Figure 25). Participation rates ranged from a low in North Dakota, where only 18 percent of the eligible individuals received the program, to a high in Rhode Island, where fully 84 percent participated. The clearest regional pattern is, once again, the tendency for low participation rates in the Mountain Plains states. The Southeast exhibits near average rates while the Midwest and New England states tend to have higher proportions of their eligible populations participating.

Evidence of the variation in participation rates is provided by comparing, for each time period, the magnitude of the overall U. S. mean with its standard deviation. In 1969 the mean participation rate was 9.3 percent (median=9.4 percent) but its standard deviation was almost as large, at 7.8. By 1975, the mean participation rate had increased to 48.3 percent (median=47.0) while the standard deviation had risen to only 15.8 percent. Such comparisons provide rough evidence that the relative variation in participation rates among the states declined between the two time periods, as the program became established.

Changing spatial disparities in participation rates can be further specified by applying Coulter's Coefficient of Inequality for each time period (Coulter, 1980). Adapting the measure to the present purpose, the technique compares
the actual program use in each state with expected use, given an appropriate equity standard, in order to identify the magnitude and direction of disparities occurring in different areas of the county. The equity standard used here to measure expected participation is the number of persons in each state whose income is less than 125 percent of the poverty level.

The Coefficient of Inequity (I) measures the aggregate discrepancies for the country as a whole:

\[ I = 100 \frac{\sum_{i=1}^{K} (\frac{x_i}{s} - E_i)^2}{\sqrt{1 + \sum_{i=1}^{K} E_i^2} - 2 \min E_i} \]

where \( K = 50 \) states

\( i \) = one state

\( x_i \) = number participating in state \( i \)

\( s \) = number participating in 50 states

\( E_i \) = proportion of expected number participating in state \( i \), given equity standard

\( I \) = coefficient of inequity

The numerator is a variation of chi-square, representing the proportional difference between actual and expected participation in state \( i \). Disproportionate weighting is given to large differences between actual and expected participation. Thus, the measure assumes that small differences are
relatively less important than large discrepancies between actual and expected use, an assumption we would want to make in the analysis of food stamp program participation.

The denominator gives a theoretical maximum for the numerator. Thus, I is bounded, with 0.0 representing total equity between the states and 1.0 representing total inequity, if all participation were in one state. As used in other empirical analyses, I is rarely greater than 0.50. The overall Coefficient of Inequity (I) for 1969 is 0.1314, indicating moderate disparities for the country as a whole. It decreases to 0.0316 by 1975, indicating a decline in spatial disparities between the two time periods.

More important than the national average, is an examination of how the individual states fare relative to each other. Is the inequity found at the national level due to uniform and small discrepancies between actual and expected use in all states or is the discrepancy concentrated in particular areas of the country? The magnitude and direction of inequity in each state is measured by:

\[
\frac{X_i}{S} - E_i
\]

28 For additional information on the Coefficient of Inequity, see Appendix B.
Therefore, the extent to which a state contributes to the overall national inequity is:

\[
\frac{\sum_{i=1}^{K} \left( \frac{x_i}{s} - E_i \right)}{s}
\]

In 1969, the states with greater than expected participation, given the equity standard, were clustered in the Mid-Atlantic and Midwestern states and scattered throughout the Southeast and on the West coast (Figure 26). Mississippi exhibited the strongest positive inequity, with a score of 12 percent. In that state, far more eligibles participated in the program than expected. Paraphanetically, most of the eight states which were given pilot projects in 1961 exhibit positive inequities, indicating that participation levels may in part reflect time since establishment of the program.

States with less than expected participation were also scattered throughout the country. Fully 22 percent of the inequity in food stamp program participation was due to less than expected participation in Texas. Several other Southwestern states, as well as, Florida, New York, Virginia, and Massachusetts, show low use relative to expectation.
Thus, by dissecting the inequity found at the national level into the individual state contributions, it is evident that substantial spatial disparities in use of the food stamp program existed as of 1969. Although many states had participation near the norm, significantly greater than expected use was found in the Northeast and on the West coast while lower than expected use was evident in the Southwestern states.

By 1975, the national average for disparities in the program had declined but some states still deviated substantially from the norm (Figure 27). The Midwestern and Mid-Atlantic states remained the primary area with more than expected participation. The New England states, as well as South Carolina, Washington, and Oregon also showed more than expected participation. The rest of the country tended to show less than expected participation, led by Texas, which contributed 8.5 percent of the national disparities.

Comparing the two time periods, several states exhibited a dramatic change over the six year period. Massachusetts had far less than expected participation in 1969 but far more in 1975. California, on the other hand, was strongly positive in the program’s early history but became strongly negative by 1975.
In summary, disparities in use of the food stamp program have declined between 1969 and 1975. The maps of state participation rates and state inequities identify where the variations in program use have been most substantial. Lowest regional participation rates were located in the Mountain Plain and Southwestern states in 1969 and 1975. Texas had far less than expected participation in both periods. By 1975, regional clustering of high participation rate states was evident as well in the Midwestern, MidAtlantic and New England states. Most Western and Southeastern states had close to expected participation rates by 1975.

Clearly, for these two time periods, the food stamp program was not consistently used by the eligible populations of the 50 states. Are such discrepancies due to differences between the states in economic conditions, variations in the demand for welfare by the eligible population, disparities in the manner in which the program is supplied to potential recipients, or, more likely, a combination of each? Have the factors responsible for variations in program use altered through time at the state level as they were found to at the national level? The following section addresses these questions.
6.2 SOURCES OF VARIABLE PROGRAM USE

As identified in the conceptual framework of Chapter 1 and demonstrated in the national level analysis, food stamp program use is affected by economic, political, and social processes. These, in turn, influence the need, supply, and demand for the program. Variables measuring each of these factors are discussed in the following section.

Economic need is measured by the state unemployment rate. Program supply for each state is measured by the year in which the greatest number of local projects were established; the number of experimental projects prior to 1964; the ratio of food stamp program to AFDC benefits; and support for the Food Stamp Act in Congress by national representatives. Finally, social demand in the states is measured by the metropolitan composition of the population; age structure; racial composition; and religious background.

Each of these will be discussed below in a format which first describes the hypothesized relationship between a variable and participation rates and then specifies the measurement of the variable.
6.2.1 Economic Conditions

6.2.1.1 The Unemployment Rate:
Since the national participation rate was found to respond to changes in the national unemployment rate, state-level variations in program utilization may reflect areal differences in unemployment levels. As areas of the country move through different economic cycles, there is a continual rearranging of relative prosperity between regions. The imbalances and time lags associated with this ongoing adjustment process create fluctuations in the need for governmental assistance which vary spatially at any given time, and change through time, to produce ever new patterns of need.

Moreover, given that the economies of the various regions are composed of different mixtures of sectoral employment, some areas experience more dramatic economic swings than other regions.

In the relatively strong economic year of 1969, the unemployment rate was low (national average=3.7 percent) (Figure 28). Unemployment rates were marginally higher in the West than in the rest of the country.

By 1975, the national economy had weakened (national average unemployment rate=8.1 percent), and some regions of
Figure 28: State Unemployment Rates, 1969
the country were more adversely affected than others (Figure 29). Michigan, with its economy heavily dependent on the auto industry, as a result of the oil embargo, had the highest unemployment rate as 13 percent of its labor force searched for jobs. The Northeast and West Coast also experienced high unemployment rates. In contrast, most interior states recorded unemployment figures at or near the low levels of 1969, and therefore experienced less drastic swings in employment conditions than did the rest of the country.29

As a result of these temporal changes in regional economic conditions, there should be parallel alterations in the use of governmental assistance, such as the food stamp program. As with the national level analysis, the unemployment rate variable is measured as the percentage of the civilian labor force which is unemployed. The simple order correlations between state participation rates in the food stamp program and the state unemployment rate was .41 in 1969 and .65 in 1975, indicating greater state-level sensitivity of program participation to the unemployment rate of the latter period.

29 Several substantive studies have documented this tendency for some regions to experience more widely varying economic cycles than other areas (Office of Income Security, in Coe, 1980; and Casetti, King, and Jeffrey).
Figure 29: State unemployment rates, 1975
6.2.2 Program Provision

6.2.2.1 Local Project Area Establishment:
As illustrated in the national-level chapter, the small proportion of local project areas in operation early in the history of the program substantially constrained participation until 1974, when states were required to provide the program in every county. The timing of project area establishment within each state varied significantly during this early era of the program and is apt to have notably influenced participation rates among the states.

State trends in local project area openings, by USDA region, are presented in Appendix C. These graphs illustrate that no region was comprised of consistently early or late adopters. Neighboring states often had very different adoption trends.

To incorporate the trends in project area establishment for each state into a single variable, the following analyses will use the year in which a state opened the greatest number of its local projects.30

30 Such a measure ignores the fact that, in some states, most project areas were established in the same year, indicating a sudden willingness on the part of the state to provide the program, while in other states, the estab-
There is little regional pattern in the timing of project areas within states although a slight tendency for late adoption is noticeable in the Western and Southwestern states (Figure 30).

There is little evidence of a diffusion of the program from state to state, of the kind identified by Walker (1969) for many government programs. Based on the adoption timing of 88 federal programs since the late 19th century, Walker identified regional leaders (such as, New York, Illinois, California, and Virginia) which tended to establish programs quickly. The experience of the leaders was then diffused to surrounding states which later adopted the policy.

Walker calculated state political innovativeness scores, which have since been widely used in studies of the variable use of federal programs among the American states. The zero-order correlation between Walker's innovativeness score and the state timing of project area establishment, however, is a weak .13. Assuming the validity of Walker's index, there seems to be little evidence of the diffusion of the food stamp program within regions as has been found for many
Figure 30: State Project Area Establishment
other programs.

The timing of project area establishment within the states is strongly associated with state participation rates early in the history of the program. In 1969, the zero-order correlation was -.65. By 1975, the association had declined, with a correlation of -.12.

6.2.2.2 Pilot Project Areas:
In 1961, President Kennedy established pilot food stamp projects in eight counties to test the effectiveness of such a program on a trial basis.\textsuperscript{31} By 1964, when the food stamp program was formally enacted as a national program, experimental project areas existed in 43 areas scattered throughout 22 states, primarily Appalachia (Figure 31).

To determine if the existence of experimental projects was later reflected in high participation rates, the following analyses include the number of pilot projects operating in a state as of 1964. As might be expected, the association between the existence of pilot projects and a state's participation rate decreases through time, as other factors

\textsuperscript{31} The counties selected, all areas of chronic high unemployment, were: Franklin County, Illinois; Floyd Co., Kentucky; City of Detroit, Michigan; Virginia-Hibbing-Nashwauk complex, Minnesota; Silver Bow Co., Montana; San Miguel Co., New Mexico; Fayette Co., Pennsylvania; and McDowell Co., West Virginia.
Figure 31: Pilot Projects

number of pilot projects

0 1 2 3 4
become more important. In 1969, the zero-order correlation was .23 but by 1975, this relationship had declined to .01.

6.2.2.3 Ratio of Welfare Benefit Levels:
In recent years of tightening fiscal resources, states have cut back on social programs for which they bear a great portion of the financial responsibility. Federally funded programs were expected to supplement the state funded programs. As a result, the federally funded food stamp program has recently come to be regarded as "an implicit form of revenue sharing," as federal funds replace state funds (Amidei, 1981, p. 16).

APDC, the nation's largest welfare program, is primarily funded by the states. Large variations in benefit levels have resulted from decentralized control (Wohlenburg, 1976a; Orr, 1976; and Kasten and Todd, 1980).\(^{32}\)

In 1964, the federally funded food stamp program, with its fairly uniform state benefit levels, was added to the existing welfare system with its inequitable spatial pattern

\(^{32}\) In 1969, for example, an APDC recipient living in Mississippi received $12 per month on average while his counterpart in Massachusetts received $96, or eight times as much. By 1975, the ratio between high and low states had increased to nine times. Even after controlling for areal differences in cost of living, level of urbanization, and family size, it is evident that where one lives has a major impact on the amount of assistance one receives in this governmental program.
of benefits. The food stamp program has thus acted to level interstate differences in total welfare benefits (MacDonald, 1977, p. 80).

The food stamp program would thus appear relatively more attractive to eligible individuals in states where AFDC benefits are relatively low than in states with high AFDC payments. Participation rates in the food stamp program may reflect these state-to-state differences. In the following analyses, the interaction between welfare programs is measured as the ratio of average monthly food stamp benefits to average monthly AFDC benefits. In 1969, distinct spatial variations in this measure were evident (Figure 32). FSP benefits were highest relative to AFDC payments in the Southeast, particularly Mississippi, where the FSP paid 64 percent of the amount provided by AFDC. As a national average, FSP benefits were only 14 percent of AFDC benefits although the variation around the mean was substantial (standard deviation=12 percent).

By 1975, FSP benefits had increased relative to AFDC payments (mean 43 percent) but the variation around the mean was relatively small (standard deviation 27 percent). Once again, the South had the highest ratios (Figure 33). In Mississippi, the federally funded food stamp program paid 174 percent the amount of benefits issued by the state funded AFDC program.
Figure 32: Ratio in Welfare Benefits, 1969

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food stamp program benefit level

AFDC benefit level
In 1969, the relationship between state participation rates and the ratio of benefits was strongly positive, at .57. By 1975, however, no association between the variables is evident (zero-order correlation=-.03).

6.2.2.4 Political Support for the Food Stamp Program:
An indication of a state's political support for the food stamp program is provided by examining how a state's representatives in Congress voted on the 1964 Food Stamp Act. In the following analyses, the measured used is the proportion of a state's House of Representatives voting on the Food Stamp Act who voted in favor of it. There was virtually no support for the program in the Mountain Plains states (Figure 34).

Evidence that support for the program may have translated into effective provision of the program is provided by examining the association between a state's participation rate and its vote. In 1969, the zero-order correlation was .23 and in 1975, the association was .37, indicating a moderate relationship in the expected direction. Given that Congressmen in Washington have only an indirect impact on actual program administration in their jurisdictions, these associations are not surprising.
Figure 34: Congressional Support for the 1964 Food Stamp Act
One set of studies in the political science literature has sought to understand how regions of the country differ in their support for Federal programs. An early contribution to this literature was made by Elazar (1966), who identified regional political cultures throughout the United States. Subareas of states were classified as Moralist, Individualist, or Traditionalist.33

These cultures are variably distributed throughout the country (Figure 35). Pure examples of each culture are well known in American politics: Minnesota, which fostered Hubert Humphrey, is the purest example of a moralist culture, Illinois, renown for Richard Daley politics, is strongly individualist, and Alabama, which promoted George Wallace, is consistently traditionalist.

Elazar's impressionistic regional political cultures have been translated by other researchers into a quantitative index (Sharkansky, 1969). Its usefulness as a measure of state political attitudes has been demonstrated by comparing

33 Briefly, the moralist political culture views politics as the duty of all citizens in order to assure the good of all, the individualist culture views politics as a way to further one's personal goals, and the traditionalist culture sees politics as the property of elites. With respect to federal programs, the moralist sees such programs as necessary in order to provide for the good of all, the individualist sees programs primarily as favors exchanged in the political bargaining process; while the traditionalist opposes federal intervention except as is necessary to maintain the existing status quo for elites.
M: Moralistic
I: Individualistic
T: Traditionalistic

Note: Two letters juxtaposed indicates either a synthesis of two subcultures, or the existence of two separate subcultural communities in the same area, with the first dominant and the second secondary.

Source: Elazar, 1972, p. 106

Figure 35: Regional Political Cultures
it to individual measures of state political activities.34

Although Elazar's political culture index is quite successful in accounting for spatial differences in many political activities, it produces unexpected results in accounting for interstate variations in voting support for the Food Stamp Act. The zero-order correlation between Elazar's index and the vote variable was -.53. The negative association indicates that more traditional states tended to vote for this welfare program while more moralistic states tended to vote against it, a finding contrary to the typical support of social programs. Perhaps Congressmen in the more traditional states felt that the food stamp program was one welfare program they could support, given that the federal government assumed most financial responsibility and given that the provision of food to the needy was more in accordance with their political ideology than handing out cash, as is the case for many other social welfare programs.

34 In one study, for example, fifteen of 23 such measures were significantly correlated with the political index. As an additional check, partial correlations were computed between the individual measures of state politics and the overall state political culture variable, controlling for socio-economic conditions within the states. Most of the fifteen variables were significantly related to Elazar's political culture index, when variations in surrounding conditions were held constant.
6.2.3 Social Conditions

The following set of variables to be used in the cross-sectional analyses attempt to gauge the influence of social conditions within the states upon use of the food stamp program. Because such variables tend to be highly correlated in space and to measure the same dimensions, a principal components analysis is first performed on the following variables for each time period:

1. Percent of population living in metropolitan areas
2. Percent of population living on farms
3. Percent of civilian labor force employed in manufacturing
4. Percent of population living in state entire life
5. Percent of population over 65 years of age
6. Median education level
7. Concentration of black population

The final variable requires elaboration. It is measured as:

\[
\left( \frac{\text{state black population}}{\text{state total population}} \right) \div \left( \frac{\text{U. S. black population}}{\text{U. S. total population}} \right)
\]

Thus, the variable measures the proportion of blacks in a state population to the proportion of blacks in the national population in order to identify concentrations of the black population.
The rotated factor matrices for 1969 and for 1975 are presented in Table 3. For each time period, three factors accounted for more than the average variation (i.e., eigenvalue is greater than 1.0). The first factor summarizes the racial and educational composition of the states' populations with a strong, positive factor loading for the black population variable and a large negative loading on median level of education. The second factor represents the urban-rural composition of the states' populations and of the mixture of economic activities found in those areas. The percent of the population living in metropolitan areas shows high loadings on this factor while the percent employed in manufacturing is moderately positive. The percent of a state's population living on farms is strongly negative.

The third factor portrays the age structure and stability of the states' populations. The percent of the states' population over 65 years of age loads especially highly on this factor. Also of importance is the percent of the population living in the state their entire lives.

In addition to these three social factors, a measure of religious fundamentalism was examined as an indication of social demand for the program. Although these variables primarily measure social demand, a case can often be made that they represent program provision as well. The
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Varimax rotation
hypothesized relationship between the social factors and participation rates will now be described and possible supply and demand explanations for such relationships will be explored.

6.2.3.1 Racial Composition:
The War on Poverty policies of the 1960's have generally come to be regarded as black welfare programs since greater proportions of blacks than whites participated in them. Yet whites were beneficiaries as well. To quote Vernon Jordon, of the Urban League:

The so-called "black" War on Poverty became a major instrument for reducing white poverty faster and in greater numbers than black poverty.....To the extent that blacks benefited in disproportionate numbers from these programs, it is because blacks were disproportionately poor (in Warner, 1977, p.7).

That blacks tend to be poor in this society and to use social programs to a greater extent than other ethnic groups is not generally argued. Why this should be so is the issue, part of a larger debate concerning the nature of poverty and possibilities for its alleviation. At least two competing positions in this debate can be identified. The Culture of Poverty proponents view the greater use of welfare programs by blacks as evidence that, in the black subculture of despair and acceptance of racial discrimination, blacks feel resigned to accept "government handouts" (Aaron,
Thus, according to this viewpoint, blacks tend to participate in welfare programs to a greater extent than other ethnic groups because the stigma attached to accepting charity is less imbedded in their particular subculture.

Whereas the Culture of Poverty proponents argue that social demand factors cause blacks' disproportionate use of welfare programs, others involved in the debate see this tendency as a result of supply factors, especially the targeting of welfare information to blacks during the civil rights movement. This group sees poverty as a manifestation of institutional weaknesses in capitalism (Aaron, 1977, pp. 20-25; Rossi and Blum, 1969, p. 44; Rainwater, 1974, p. 10). Thus, they feel poverty could be attacked by changing the structure of welfare institutions. They regard the civil rights movement of the 1960's as a positive force which increased blacks' awareness that their poverty was due to inequities endemic in society. This awareness has contributed to what has been termed the "welfare explosion:"

The welfare rolls had risen primarily because families of long-standing eligibility had been led to apply for public assistance in unprecedented numbers as a result of a great variety of welfare rights activities (Piven and Cloward, 1971, p. 331).

Further, proponents of this view, witnessing large regional disparities in the number of welfare recipients, claimed
that the relatively low increase in the use of welfare in the South was due to local resistance against attempts to spread information about welfare rights (Piven and Cloward, 1977, pp. 333-337).

Whether one attributes it to social demand or political supply factors, nonwhites participated in the food stamp program to a slightly greater extent than whites. A recent USDA survey of participating households found that, although blacks are 12 percent of the U. S. population, and 33 percent of the poverty population, they represent 45 percent of the food stamp program population (USDA, 1980, p. 17).

The factor score for each state represents largely the concentration of the black population in that state. The maps of factor scores for 1969 and 1975 show similar patterns with distinct regional clusterings (Figure 36). The Southern states show the highest positive scores, indicating higher than average concentrations of blacks in those states. The remainder of the country tends to exhibit negative scores.

---

35 When the maps for 1969 and 1975 are very similar, only the 1975 map will be presented.
Figure 36: State Racial Composition, 1975

factor scores

-1.2 -0.4  0.3  1.1  1.8
  to  to  to  to  to
-0.4  0.3  1.1  1.8  2.6
The simple correlation of state participation rates with the black population factor is moderately high and positive in 1969 (.35), evidence that use of the program was relatively greater in states where clusterings of blacks occurred. This does not necessarily indicate that an individual black uses the program more than a white of similar economic circumstance. Problems of the ecological fallacy prevent such a conclusion. By 1975, the association between state participation rate and a concentrated black population had declined to .18.

6.2.3.2 Metropolitan Factor:
Eligible welfare recipients living in large urban areas are more apt to use social programs than those of similar circumstances living in more rural environments. A study of participating food stamp program households, conducted for Congress in 1975, supports this general notion, stating that users are more likely to live in central cities than elsewhere (U. S. Senate, Select Committee on Nutrition and Human Needs, 1976).

The tendency toward higher usage in urban areas may result from the superior provision of the program in the cities, where a well-established welfare bureaucracy "presumably affects access to, and information about, food stamp benefits" (MacDonald, 1977, p. 78). Participation may be
lower in rural areas due to supply conditions as well. Incomes of the rural poor fluctuate throughout the year, especially in agricultural areas, yet the program is designed in such a way that "counties are unwilling to allow for seasonal changes in income" (CEBNM, 1968, p. 61). The problem was particularly important prior to 1978 when program participants were required to purchase food stamp coupons. The rural poor tended to be ineligible for the program in the summer and fall, due to agricultural employment, but when they were eligible in the winter and spring months, they lacked the money to purchase the coupons. A confidential memo from the office of Economic Opportunity to the Department of Agriculture illustrates that officials were aware of this problem as early as 1967, although the purchase requirement was not eliminated until a decade later:

> If the food stamp purchasing requirement is based on a month of high income, the family may not be able to afford stamps in the succeeding months. USDA has asked communities with this problem to determine purchase requirements every month. But this is expensive and gives authorities good excuse not to do it. (CEBNM, 1968, p. 61).

Alternatively, urban-rural differentials in the use of the food stamp program may be due to corresponding variations in social demand for the program. For example, attitudes vary between urban and rural areas about the acceptance of charity. The stigma attached to governmental assistance tends to be greater in the small towns and rural
areas of this country, where traditions of self-sufficiency and remnants of the Protestant work ethic still prevail (Wohlenburg, 1976a, p. 260).

To gauge the degree of association between state participation rates and the urban-rural composition of the states' populations, the metropolitan factor will be used in the following analyses. For both 1969 and 1975, state factor scores show similar patterns (Figure 37). The northeastern industrial states, lower New England, and the West coast show positive factor scores, reflecting the highly urbanized nature of the populations in those states. Most of the interior states, on the other hand, demonstrate negative scores, characterizing the predominance of agriculture and rural populations in those areas.

The zero-order correlation between state participation rate and the metropolitan factor is much higher in 1975 (.65) than in 1969 (-.02), indicating relatively high program usage in more highly urbanized states in the latter period.

6.2.3.3 Age Structure:
The elderly who are eligible to participate in welfare programs tend to use these programs far less than qualified persons under 65 years of age. As with the other social
Figure 37: State Metropolitan Composition, 1975

factor scores

-2.1 -1.4 -0.7 0.1 0.8
to to to to to
-1.4 -0.7 0.1 0.8 1.5
characteristics, there is more agreement on this tendency than there is on why it might be so. Once again, disagree­ment centers on social demand versus program provision influ­ences. Some contend that the less frequent participation by the elderly is due to the stigma these people are espe­cially sensitive to in accepting charity (Coe, 1980, p. 26; MacDonald, 1977, pp. 98-103). Others see the lower usage as a reflection of supply constraints, because the elderly have difficulty in obtaining access to welfare offices and in stating their needs to the complex welfare bureaucracy (Amidei, 1981, pp. 16-18; MacDonald, 1977, p. 99).

In terms of the food stamp program in particular, the elderly do not participate to the extent that the non-elder­ly do (MacDonald, 1977, pp. 101-103). This tendency was particularly so prior to the 1978 elimination of the pur­chase requirement because the elderly seemed especially re­luctant to commit such a large portion of their budgets to purchase food coupons when that money might be needed later in the month for medical care (MacDonald, 1977, pp. 101-103).

In 1969, the zero-order correlation between state partic­i­pation rates and the elderly factor was -.14 and by 1975, the association had declined to -.03. This indicates that states with a high proportion of their population elderly
showed a slight tendency to have lower participation rates. Examination of the factor score map for 1975 reveals that the areas with highest proportions of elderly populations were in the interior agricultural states (Figure 38).

6.2.3.4 Religious Fundamentalism

The final variable used to measure social demand for the food stamp program is the religious composition of the population. The variable reflects different cultural milieux within the states, the mixtures of shared perceptions which people with a common religion share. Researchers have long recognized the link between religious attachment and political views (Kleppner, 1970; Kleppner, 1979; Lazarfeld and McPhee, 1954; Menendez, 1977; and Miller, 1958). Stonecash and Hayes (1981) summarize: "How one expects government to behave and the kind of world one would like to see government foster surely constitute an integral part of (one's) cultural baggage."

The religious composition of a state's population is measured in this analysis as the proportion of a state's religious membership which belongs to a fundamentalist Protestant organization.36

36 Fundamentalists believe in a literal translation of the Bible. The data were collected from the United Council of Churches list of church memberships. The religions categorized as fundamentalist are: Southern Baptist,
Figure 38: State Elderly Composition, 1975

factor scores

1.7
1.0
0.2
0.5
1.3
-0.5
-1.0
-1.3
-2.0
-2.5
-3.0
The categorization was devised by Hutcheson and Taylor (1973) who found fundamentalism highly associated with variations in policy use. Their findings have been corroborated by Fairbanks (1973) and extended by Stonecash and Hayes (1981).

Fundamentalism is used instead of the traditional trichotomy of Protestant-Catholic-Jewish because it more adequately reflects differences in political views. As Stonecash and Hayes state: "The impact of fundamentalism appears to stem from the Protestant Puritan heritage which emphasizes industry and productivity and produces very strong feelings on policies relevant to controlling and assisting individuals" (p. 687).

Southern Methodist, Assemblies of God, Churches of God, Church of God in Christ, Primitive Baptist, Pentecostal Church of God in America, Bible Protestant Church, Seventh Day Adventist, Church of Jesus Christ, Seventh Day Baptist General Conference, Missionary Church Association, Free Will Baptist Church, Primitive Church of God, Free Methodist Church of North America, Holiness Methodist Church, Pentecostal Holiness Church, Church of the Nazarene, Pilgrim Holiness Church, Wesleyan Methodist Church of North America, National Spiritualist Association of Churches, Church of God of Prophesy, Church of the Brethren, Old Order Amish Mennonite Church, Mennonite Church, International Church of the Foursquare Gospel, Unaffiliated Conservative Amish Mennonite Church, Reformed Zion Union Apostolic Church, Volunteers of America, Divine Science Church, Disciples of Christ International, United Baptist, Christian Unity Baptist Association, and Open Bible Standard Churches.
The map of religious composition of the population illustrates that Protestant fundamentalism is strongest in the southern states (Figure 39). Zero-order correlations between food stamp program participation rates and fundamentalism are low in both 1969 (0.07) and in 1975 (-0.09).
Figure 39: State Religious Composition
6.3 CROSS-SECTIONAL ANALYSES

The variables described above will now be incorporated into a multiple regression format to gauge the relative influence of each on use of the program for the 50 states in 1969 and again in 1975. The model used for each time period is presented in Figure 40.

Multicollinearity does not present a problem in either of the analyses due to the generally small intercorrelations between the independent variables in each time period. The only exception is that a concentrated black population tends to be located in areas where there is a large difference between PSP and AFDC payments. The correlations between these two variables are 0.74 in 1969 and 0.62 in 1975.
Figure 40: Model for the State Level Analysis

\[ PR = b_0 + b_1 UR + b_2 PRO + b_3 PIL + b_4 BEN + b_5 VOTE + b_6 MET + b_7 AGE + b_8 RACE + b_9 REL \]

where
- \( PR \) = participation rate
- \( UR \) = unemployment rate
- \( PRO \) = project establishment
- \( PIL \) = pilot projects
- \( BEN \) = benefit ratio
- \( VOTE \) = vote on Food Stamp Act, 1964
- \( MET \) = metropolitan factor
- \( AGE \) = age factor
- \( RACE \) = racial factor
- \( REL \) = fundamentalism
6.3.1 1969 Results
The model successfully accounts for 72 percent of the inter-state variations in participation rates (adj. r² = .65). Standardized regression coefficients for each variable are presented in Table 4, with a ranking of their importance and indication of their statistical significance.

All but one of the variables show associations with the state participation rates in the expected direction. The exception, the elderly factor, is insignificant.³⁷

The most important variable in the 1969 analysis, when controlling for the remaining independent variables, is the ratio of food stamp program to AFDC benefits (standardized regression coefficient = .52). The year in which a state established the greatest number of local project areas (-.45) is also important. This finding is similar to the results of the national-level chapter, wherein the proportion of project areas in operation in the early history of the program had the largest single association with participation rates. Also of substantial importance in accounting

³⁷ Since a population, rather than a statistical sample, is used in these analyses, tests of statistical significance provide evidence of the importance of each variable in accounting for the dependent variable. They do not imply anything about an unmeasured, more general situation.
### TABLE 4

State Regression Results, 1969

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit ratio</td>
<td>.52 **</td>
</tr>
<tr>
<td>Project establishment</td>
<td>-.45 **</td>
</tr>
<tr>
<td>Fundamentalism</td>
<td>-.29 **</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>.25 **</td>
</tr>
<tr>
<td>Metropolitan factor</td>
<td>.11</td>
</tr>
<tr>
<td>Racial factor</td>
<td>.09</td>
</tr>
<tr>
<td>Vote</td>
<td>.09</td>
</tr>
<tr>
<td>Age factor</td>
<td>.06</td>
</tr>
<tr>
<td>Pilot project</td>
<td>.05</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .65$

**F test > 4.0**
for variable participation rates in the program are the religious composition of the population (-.29) and the unemployment rate (.25). Thus, as of 1969, welfare provision conditions such as the establishment of local project areas and benefits of this new program relative to those of existing welfare programs, exhibited the most substantial influences on interstate differentials in program use. Also important, but less so in this early phase of the program, were conditions of economic need and the religious composition of the population.

Examination of the standardized residuals from the regression indicates how well the participation rate in each state is accounted for by the model. For 1969, the model does not systematically over- or under-predict participation rates in any region (Figure 41). Most states are well predicted by the regression, especially in the Mountain Plain region. Those which are not well accounted for tend to be scattered throughout the country. Mississippi (2.2), Rhode Island (1.8), and Vermont (2.0) have substantially higher participation rates than expected. Montana (-1.2) had significantly less than expected use of the program.
6.3.2 1975 Results

The 1975 model also accounts for a substantial portion of interstate variations in food stamp program participation, with an $r^2$ of .66 (adj. $r^2 = .58$). The ranking of the variables in terms of their importance, along with the standardized coefficients and indication of their significance are presented in Table 5.

In the relatively depressed economic year of 1975, the unemployment rate (standardized regression coefficient = .46) shows the largest association with state participation rates. The metropolitan composition of a state's population (.34) appears almost as important as the unemployment rate. Additionally, the racial factor (.29) is highly associated with state participation rates. The year when a state established the majority of its project areas (-.21) still seems to be reflected in that state's participation rate although all county projects had been in operation for some time.

Thus, by 1975, the factors important in accounting for interstate variations in program participation rates had changed. Conditions of economic need, as measured by the unemployment rate, had the greatest effect. The metropolitan and racial composition of the states was also important.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment rate</td>
<td>.46 **</td>
</tr>
<tr>
<td>Metropolitan factor</td>
<td>.34 **</td>
</tr>
<tr>
<td>Racial factor</td>
<td>.28 **</td>
</tr>
<tr>
<td>Project establishment</td>
<td>-.21 **</td>
</tr>
<tr>
<td>Fundamentalism</td>
<td>-.15</td>
</tr>
<tr>
<td>Vote</td>
<td>.12</td>
</tr>
<tr>
<td>Pilot projects</td>
<td>-.11</td>
</tr>
<tr>
<td>Benefit ratio</td>
<td>-.09</td>
</tr>
<tr>
<td>Age factor</td>
<td>.05</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .58$

**F test > 4.0**
The 1975 standardized residuals show a different pattern from those in 1969 (Figure 42). Although most states are, once again, well predicted by the model, the states which deviate most substantially have changed. Arizona (-1.7) and Michigan (-1.5) have significantly less participation than expected. States with the largest positive residuals are Maine (2.3), Oregon (1.9), and Massachusetts (1.7).
Figure 42: Standardized Residuals, by States, 1975
6.4 CHANGING EFFECTS UPON PARTICIPATION RATES, 1969 AND 1975

Figure 43 displays changes in the relative importance of the variables between 1969 and 1975. Consider first the unemployment rate (UNE). Positively and significantly related to the participation rate in both time periods, it became the most important variable in 1975, when controlling for other variables. As noted previously, the economy worsened between 1969 and 1975 but its effects were felt differently throughout the country. Those states whose industrial structure was most severely affected during the mid-1970's experienced the largest increases in unemployment. The states with extremely high unemployment rates in 1975, such as Michigan, Massachusetts, and Oregon, also had very high participation rates in the food stamp program. Interior, agricultural states, on the other hand, experienced little or no increase in their unemployment rates and use of the food stamp program remained relatively low.

Consider next how the ratio of food stamp program to AFDC benefit levels (BEN) has changed between the two time periods. This variable was positively and significantly related with participation rates in 1969. The ratio was not significantly related in 1975. In 1969, the food stamp program
Figure 43: Change in Standardized Coefficients, 1969 to 1975

\* F test > 4.0
was a relatively new program, with low and uniform benefit levels between states. As a national average, the food stamp benefit paid to an individual was only 14 percent of per recipient AFDC payments. There was substantial interstate variation in the ratio, however, because the states paid very different amounts in AFDC benefits. Those states which paid the least in AFDC benefits had the highest participation rates in the food stamp program. As an example, Mississippi paid so little in AFDC benefits that food stamp payments were over 60 percent of this amount. At that time, Mississippi's participation rate in the food stamp program was the highest in the nation. Thus, in 1969, it appears that states which did not support the AFDC program, as demonstrated by their failure to commit state funds for benefit payments, experienced disproportionate use of the food stamp program.

By 1975, interstate variations in the ratio of benefit levels had declined and the variable was insignificant in its association with food stamp program participation rates. Although it is not explicitly examined in this analysis, the substantial erosion of state financial resources since 1975 has caused AFDC benefits to decline drastically relative to food stamp payments. Several empirical studies have demonstrated that this change has created a shift of welfare recipients from AFDC to the food stamp program (Amidei, 1980,
Thus, this variable would presumably increase in its effect upon the participation rate if a more recent analysis of interstate variations in program use were possible.

Returning to Figure 43, it is evident that states which established projects relatively early tended to have higher participation rates in the program. The association between the participation rate and the year a state established the greatest number of local projects (PRO) is significantly and negatively related in both 1969 and 1975. The effect of such timing was smaller in 1975 than in 1969. It is interesting to note that the variable is still significant in 1975, a full year after projects had been required in every county.

The effect of the religious composition of a state's population (REL) also declined in importance between the time periods. In 1969, the variable was negatively and significantly associated with participation rates, controlling for other factors. This indicates that states with substantial concentrations of fundamentalist Protestant religions tended to experience lower participation rates in the food stamp program. These religious groups comprised approximately 20 percent of the religious populations in Georgia and Alabama, for example. Program use in these states was far less than
the national average. By 1975, the variable was insignificant.

Although the relationship is not evident in the early phase of the program, interstate variations in the participation rate are significantly related with the racial factor (BL) in 1975. Those states with a concentrated black population tended to have higher program participation rates, when controlling for other independent variables.

The metropolitan factor (MET) shows a similar pattern. Insignificantly related to participation rates in 1969, it became the second most important variable in the 1975 analysis. Is the greater use of the program in highly urbanized states due to a more developed welfare bureaucracy within cities or due to lower resistance to welfare in urban areas? These program provision and social demand processes cannot be separated to test their individual effects upon use of the program. The following is therefore speculation. Other variables which measure stigma, such as the religious variable and the racial factor, have shown that social resistance to program use has declined between the two time periods. It may be, therefore, that urban-rural differences in stigma have declined as well. Thus, it appears that program supply, rather than social demand, is being measured by the metropolitan factor.
Finally, three variables were insignificant in both time periods. Political support for the program (VOTE), the concentration of an elderly population (AGE), and the existence of pilot projects (PIL) were all unimportant.

6.5 **SUMMARY**

State-level disparities in use of the food stamp program do not conform only to the pattern of need, as demonstrated by visual inspection of participation rate maps, by the evidence provided in the inequity analyses, and by the failure of the economic need variable in the regression analyses to fully account for disparities in program use. Conditions of economic need do become more important in accounting for participation rates between the two time periods, however. The unemployment rate, for example, is a stronger predictor of program use in 1975 than in 1969. Supply constraints, such as the diffusion rate of project establishment and the benefit level relative to that of AFDC, diminished between 1969 and 1975. Thus, the findings of this analysis directly corroborate the conclusions of the national level time series analysis. In addition, spatial variations in social demand for the program, such as the racial and metropolitan composition of the population, demonstrated a larger effect upon participation rates in the latter period.
These findings need to be interpreted within the context of the policy process and supply and demand side diffusion theory. Consider the policy process. Actions taken during each stage influence spatial variations in program use. For example, decisions made during the Micro-Adoption stage, concerning the timing of project area establishment, created interstate disparities in program participation, especially in the early history of the program. Additionally, Micro-Implementation procedures are important since more highly urbanized states, with more sophisticated welfare bureaucracies, tended to have higher participation rates.

Spatial disparities in program use also reflect variations in conditions within the states, such as the unemployment rate and the religious composition of the population. These economic need and social demand factors primarily operate during the Individual Adoption stage. Finally, the combined effect of Macro-Implementation and Micro-Implementation procedures affect spatial disparities in program use. Interstate variations have been found to reflect food stamp program benefit levels, set by the national government (Macro-Implementation), relative to AFDC benefits, which are determined by the states (Micro-Implementation).

As was found to be the case in the national level analysis, influences upon program use, which derive from the
early stages of the policy process and which represent supply side diffusion perspectives, have their greatest effect in the early period of the program. Influences upon program use, which derive from stages occurring later in the sequence and represent demand side diffusion theory, are more important in the recent period.

The final analysis chapter examines the influence of political, economic, and social factors upon program use at the local level.
Chapter VII

LOCAL LEVEL ANALYSIS OF THE FOOD STAMP PROGRAM

The previous chapter accounted for interstate variations in use of the food stamp program and examined changing influences upon such variations. The state level is an appropriate scale of analysis because much of the responsibility for program administration lies with the states. For example, each state welfare department made the decisions where and when to locate project areas within their jurisdictions. Thus, the project establishment variable is best examined at this scale. Additionally, variables which measure the ratio in benefits between welfare programs and Congressional voting decisions on the 1964 Food Stamp Act are most appropriately studied at the state level.

This chapter examines the effect of local conditions upon intercounty variations in use of the food stamp program. There are two reasons why the county level study is appropriate. First, county welfare offices are responsible for daily administration of the program and, as such, they have a good deal of control over how the program is provided. Several examinations of the food stamp program have found that local attitudes about the worth of the program
translate into administrative procedures and thus influence
the provision of the program (Georgia Legal Services, 1980,
pp. 19-28; MacDonald, 1977, p. 96; Segal, 1970, pp. 55-65;

Second, the county level is a more appropriate scale of
analysis than the state level in examining many economic
need and social demand factors. A state represents the ag­
ggregation of widely varying economic and social conditions.
For example, New York is ranked as one of the most highly
urbanized states. It also contains a substantial population
living in small towns, however. A high program participa­
tion rate for the state as a whole may mask the very different
use of the program between New York City and Oneida, for
example. In addition to the urbanization variable, a county
level analysis provides clearer specification of such eco­
nomic and social factors as the concentrations of the elder­
ly, of blacks, and of fundamentalist religious groups.

The local level analysis consists of the counties of
Ohio. Because the state includes a wide variety of cultural
and institutional settings, it is an appropriate area to
study. For example, its largest metropolitan centers,
Cleveland, Cincinnati and Columbus, have highly developed
welfare bureaucracies. The northern section of the state is
part of the old industrial core. The industrial workers
living in such cities as Toledo and Akron, for instance, are renown for their support for the work ethic. Due to sharp declines in the economy of this area, however, many of these workers have been forced to accept government assistance if they are to remain in the region. The southeastern section of the state, which grades into the Appalachian Mountains of West Virginia and Kentucky, is primarily poor and rural. Southern and eastern counties which line the Ohio River contain old urban centers which have historically been poor. In the northwestern section of the state is located a wealthy farming region. Thus, the variation in local environments is substantial within Ohio. Use of the food stamp program may vary in accordance with the diversity of social, economic, and political milieux.

The format of this chapter is parallel to the procedure used in the national and state level chapters. The first section reviews the 1969 and 1975 patterns of intercounty variations in food stamp program participation rates. The second section specifies the economic, political and social factors to be included in the analysis. The hypothesized relationships between these factors and the participation rate were discussed in detail in the previous chapter. They will not be repeated in this chapter. The third section presents the cross-sectional studies for 1969 and 1975. A final section discusses changes in the influence of these factors between the two time periods.
7.1 INTERCOUNTRY VARIATIONS IN PARTICIPATION RATES

The state of Ohio demonstrates substantial intercounty variations in program participation rates in both 1969 and 1975. In 1969, participation rates were highest in the counties which contained Cleveland, Cincinnati, Toledo, and Portsmouth (Figure 44). Eighteen counties did not provide the program at that time. These counties cluster into four contiguous groups.

By 1975, use of the program had risen throughout the state but substantial variations in participation rates were still evident (Figure 45). The tendency for high participation rates in urbanized counties was stronger than in 1969. Cuyahoga county, which contains Cleveland, had the highest participation rate, with fully 88 percent of its eligible population using the program. Holmes county, located 50 miles south of Cleveland, had the lowest participation rate. A rural county containing the largest concentration of Amish people in the state, it had only 13 percent of its eligible population using the program in 1975.

Intercounty variations in use of the food stamp program declined between the two time periods. In 1969, the mean participation rate was 10.2 percent but the standard deviation about the mean was almost as large, at 8.1 percent. By 1975, the mean had increased to 50.8 percent but the standard deviation had risen only to 14.7 percent.
Figure 44: Ohio Participation Rates, 1969
Figure 45: Ohio Participation Rates, 1975
7.2 SOURCES OF VARIABLE PROGRAM USE

The variables to be used in the 1969 and 1975 intercounty analyses are similar to those used in the interstate studies. Economic need is measured by the unemployment rate. Program supply for each county is measured by the year in which a project was established; the ratio of food stamp program to AFDC benefits; whether or not a county had been a pilot project; and whether or not a county is located within Appalachia. Social demand for each county is measured by the rural-urban composition of the population; the age structure; the racial composition; religious background; educational level; and political liberalism.

Each of these variables will be discussed in turn, noting their spatial variation throughout the state of Ohio and their association with participation rates in the food stamp program.

7.2.1 Economic Conditions

7.2.1.1 The Unemployment Rate:

The unemployment rate is measured as the proportion of the civilian labor force which is out of work. It is measured in the same manner throughout the national, state, and local
analyses. Unemployment in Ohio was higher than the national average in both 1969 and 1975. In 1969, the state average was 4.5 percent. By 1975, one in ten Ohio workers was unemployed.

In 1969 little intercounty variation in the unemployment rate was evident except that higher than average rates existed in the southeastern portion of the state (Figure 46). By 1975, high rates of unemployment are noted in the southern portion of the state, particularly Adams county, where almost one quarter of the labor force was out of work (Figure 47).

Especially high unemployment rates existed in 1975 in counties where the economic base was primarily dependent upon the auto industry. By this time, glass, rubber, and steel industries, which produced inputs to the auto industry, were already suffering from a severe slump in auto sales. The economic base of Knox county, in the north central section of the state, for example, is largely dependent upon the production of diesel engines. The industries of Seneca county, just south of Sandusky, primarily produce industrial glass and crankshafts. The unemployment rates in these two counties were 15 and 14 percent, respectively, reflecting decreased demand for their products.
Figure 46: Ohio Unemployment Rates, 1969
Figure 47: Ohio Unemployment Rates, 1975
The zero-order correlation of the unemployment rate with the participation rate was positive, but small, in both time periods. In 1969 the association was -.14. By 1975, it was .07.

7.2.2 Program Provision

7.2.2.1 Local Project Area Establishment:
In the state level analysis, the trend in local project area establishment was measured as the year a state opened the greatest number of projects. In the county level analysis, a more direct measure was available. The year in which a county project area was established was used in this analysis.

Compared with other states, Ohio opened local projects relatively early. The number of county projects began to increase sharply in 1966 (Figure 48). Each year, large numbers of projects were established until the process was virtually completed in 1971. The program existed in every county several years before national legislation required it. This is due, in part, to the fact that a state law was passed in late 1970 requiring that all counties in Ohio operate a food stamp project.
Figure 48: Trend in Ohio Project Establishment, 1964-1980
The map depicting time of county project establishment shows little clustering of early or late adopters (Figure 49). The last counties to abide by the state legislation requiring the program were Gallia and Jackson counties, in the southeastern corner of the state. These project areas were established in 1972 and 1973, respectively.

In 1969, the zero-order correlation between the participation rate and the year a project was established was -.76. Thus, those counties which first established the program tended to have high participation rates. By 1975, this association had declined to -.21. Thus, it appears that the time since establishment had declined in importance by 1975.

7.2.2.2 Pilot Project Areas:
Whereas the number of pilot projects operating in a state was used in the state level analysis, the actual location of the pilot was measured as a dummy variable in the county analysis. If a county was a pilot project, it was assigned a value of 1.0. If it was not an experimental project, it was assigned a value of 0.0. There were two pilot projects in operation prior to the 1964 Food Stamp Act. Lucas county, which contains Toledo, became a pilot project in 1962 and Cuyahoga county, which contains Cleveland, began an experimental project in 1963. These cities were chosen because they demonstrated a need for the program and were
Figure 49: Ohio Local Project Establishment
"good test cities" (G. Fulmer, Head, Ohio Food Stamp Program, USDA, in conversation).

As with the project area establishment variable, the association between the existence of a pilot project and program participation rates declined between the time periods. In 1969, the zero-order correlation was .46 and in 1975, it was .31.

7.2.2.3 Ratio of Welfare Benefit Levels:
This variable is measured in the same manner as it was in the state level analysis, as the ratio of average monthly food stamp program benefits to average monthly AFDC benefits. The ratio in food stamp program to AFDC benefits in Ohio was similar to that of the nation as a whole in both time periods. In 1969, food stamp benefits averaged 16 percent of AFDC payments in the state. In 1975, the ratio had risen to 36 percent. Intercounty variation was not substantial in either period (Figures 50 and 51).

The association between participation rates and the ratio in welfare benefits was fairly strong in both time periods. The zero-order correlation was .55 in 1969 and .52 in 1975. Thus, counties with low AFDC benefits relative to food stamp payments tended to have comparatively high participation rates.
Figure 50: Ohio Welfare Benefit Ratios, 1969

food stamp program benefit level

AFDC benefit level

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>less</th>
<th>12</th>
<th>17</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>than</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
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<tr>
<td>12</td>
<td>17</td>
<td>23</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 51: Ohio Welfare Benefit Ratios, 1975
7.2.2.4 Appalachian Region:

In 1964, the federal government identified several sections of the country with chronic economic problems. One of these was the Appalachian region, which includes portions of Ohio, West Virginia, and Kentucky. The Appalachian Regional Commission was set up to study the problems of the region and to channel federal assistance to the area. To gauge the extent to which the food stamp program was used in this area, a dummy variable was incorporated into the analysis. A county was assigned the value of 1.0 if it was located within Appalachia and a value of 0.0 otherwise (Figure 52).

Examination of the association between participation rates and location within the Appalachian region indicates that the Commission did not have an effect upon use of the program. In 1969, the zero-order correlation between the variables was .12. By 1975, the correlation was -.22, indicating relatively lower use of the program in the Appalachian counties.
Figure 52: The Appalachian Region in Ohio
7.2.3 Social Conditions

7.2.3.1 Racial Composition:
This variable is measured as the percentage of a county's population which is black. A map of the distribution of blacks in Ohio illustrates that they are primarily located in the largest cities (Figure 53).

The association between participation rates and the presence of blacks was fairly strong in both time periods. In 1969, the zero-order correlation was .56 and in 1975, it was .57.

7.2.3.2 Urban Composition:
This variable is measured as the percentage of a county's population living in urban areas. Several counties in the southern and southeastern portions of the state are completely rural (Figure 54). Cuyahoga county is 99 percent urban.

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38 As was the case in the previous chapter, only the 1975 map will be shown when the 1969 and 1975 maps show identical patterns.
Figure 53: Ohio Racial Composition
percent living in urban areas

Figure 54: Ohio Urban Populations
The association between participation rates and urbanization was fairly strong in both time periods and it increased between 1969 and 1975. In 1969, the zero-order correlation was .45 and in 1975 it was .53.

7.2.3.3 Age Structure

This variable is measured as the percentage of the population below the poverty level which is over 65 years. It will be used to gauge the extent to which counties with high proportions of elderly poor are associated with low rates. It appears that such an association exists. The zero-order correlation for the two time periods were -.37 in 1969 and -.28 in 1975. The relationship declined between the two time periods, indicating decreased resistance to the program in counties with large elderly poor populations.

Counties with large proportions of elderly poor were clustered in the northwestern section of the state (Figure 55). Rural counties tended to have poor populations which were disproportionately elderly.

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39 The state level analysis used the proportion of a state's entire population which was over 65 years old. Data on the age structure of the poverty population were not available at the state level.
percent poor over 65 years

<table>
<thead>
<tr>
<th>14.1</th>
<th>20.0</th>
<th>25.8</th>
<th>31.6</th>
<th>37.5</th>
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<tr>
<td>to</td>
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<td>to</td>
</tr>
<tr>
<td>20.0</td>
<td>25.8</td>
<td>31.6</td>
<td>37.5</td>
<td>43.3</td>
</tr>
</tbody>
</table>

Figure 55: Ohio's Elderly Poor Population
7.2.3.4 Religious Composition

This variable is measured the same way as it was in the state level analysis, the proportion of a county's religious membership which belongs to a fundamentalist Protestant organization.

Fundamental religious groups are a small proportion of all religious groups in most counties in Ohio (Figure 56). The most notable exceptions are Holmes and Wayne counties, in the northeastern section of the state, where Amish and Mennonite groups predominate. The Mennonites are also a substantial part of the population in Fulton county, west of Toledo. A further exception is Highland county, northwest of Cincinnati, where the Disciples of Christ are an important religious group.

The association between participation rates and the predominance of fundamental Protestant religions is negative in both time periods, as might be expected. The zero-order correlation was -.27 in 1969 and -.19 in 1975, indicating that counties with substantial fundamentalist groups were less likely to have low participation rates in the latter period.
percent fundamentalist

less than 

3.0 5.7 7.0 10.0

than to to to to

3.0 5.7 7.0 10.0 21.1

Figure 56: Ohio's Fundamental Religious Groups
7.2.3.5 Educational Level
Median educational levels were used in the intercounty analysis to see the extent to which education was associated with participation rates. No such association was found in 1969 (zero-order correlation = .01). By 1975, counties with higher education levels showed a slight tendency toward higher program use (.11).

There was little intercounty variation in education levels except that slightly lower levels were common in the southeastern portion of the state (Figure 57). Holmes county was an outlier for this variable as it was for many others. While most counties have median education levels of 11 or 12 years, Holmes' level was 9.5.

7.2.3.6 Political Attitudes
The final variable used to gauge social demand was the political attitude predominant in counties. This variable was measured as the percentage of the voting population which cast their vote for McGovern in 1972. Although a vote for Nixon did not necessarily indicate conservative political attitudes, a vote for McGovern almost certainly suggested a liberal stance on political issues. It is hypothesized that the higher the proportion of a county's vote cast for McGovern, the higher the use of the food stamp program.
Support for the liberal candidate of the 1972 Presidential election varied between the counties of Ohio (Figure 58). Athens county, which contains the University of Ohio, had the largest proportion, as 50.1 percent of its voting population cast their ballots for McGovern. Support was also quite strong in the counties surrounding Cleveland.

The association between participation rates and county liberalism was substantial in both time periods, but it declined between 1969 and 1975. The zero-order correlation was .44 in 1969 and .35 in 1975.
percent voters supporting McGovern

<table>
<thead>
<tr>
<th></th>
<th>22.1</th>
<th>27.7</th>
<th>33.3</th>
<th>38.9</th>
<th>44.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>to</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>27.7</td>
<td>33.3</td>
<td>38.9</td>
<td>44.5</td>
<td>50.1</td>
<td></td>
</tr>
</tbody>
</table>

Figure 58: Ohio Support for McGovern, 1972
7.3 CROSS-SECTIONAL ANALYSES

The variables described above will now be incorporated into a multiple regression model to gauge the relative influence of each on use of the food stamp program. The 88 counties of Ohio are studied in 1969 and again in 1975. The model used for each time period is presented in Figure 59.

Multicollinearity does not represent a problem in either of the analyses due to the generally small intercorrelations between the independent variables in each time period. The only exception is that counties with a high concentration of blacks tend to be highly urbanized. The correlation between these variables was .72.
PR = $b_0 + b_1 \text{UR} + b_2 \text{PRO} + b_3 \text{PIL} + b_4 \text{BEN} + b_5 \text{APP} + b_6 \text{URB} + b_7 \text{AGE} + b_8 \text{RACE} + b_9 \text{REL} + b_{10} \text{EDUC} + b_{11} \text{VOTE}$

where

- PR = participation rate
- UR = unemployment rate
- PRO = project establishment
- PIL = pilot projects
- BEN = benefit ratio
- APP = Appalachian region
- URB = percent in urban areas
- AGE = percent poor over 65 years
- RACE = percent black
- REL = fundamentalism
- EDUC = median education level
- VOTE = Presidential vote, 1972

Figure 59: Model for the Local Analysis
7.3.1 **1969 Results**

The model successfully accounts for 78 percent of the inter-county variation in food stamp program participation rates (adjusted $r^2 = .75$). Standardized regression coefficients for each variable are presented in Table 6, with a ranking of their importance and indication of their statistical significance. *\(^{40}\)

The most important variable in the 1969 analysis, when controlling for the remaining independent variables, is the year in which a county project was established (-.47). Although it was necessary to measure them in slightly different manners, the variable representing timing of project establishment is the single most important variable in the early period analyses at all three scales.

The ratio in welfare benefits (.29) is the second most important variable. The lower the AFDC benefits paid relative to food stamp benefits, the higher the use of the food stamp program. This variable was also significant in the early period analyses of the state and national levels.

*\(^{40}\) As with the previous chapters, significance tests are used here only as a cut off value separating relatively more important variables from comparatively unimportant ones.
### TABLE 6

Ohio Regression Results, 1969

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project establishment</td>
<td>-.47 **</td>
</tr>
<tr>
<td>Benefit ratio</td>
<td>.29 **</td>
</tr>
<tr>
<td>Fundamentalism</td>
<td>-.21 **</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>.18 **</td>
</tr>
<tr>
<td>Pilot projects</td>
<td>.17 **</td>
</tr>
<tr>
<td>Percent black</td>
<td>.16 *</td>
</tr>
<tr>
<td>Percent poor over 65 years</td>
<td>-.11 *</td>
</tr>
<tr>
<td>Vote</td>
<td>-.07</td>
</tr>
<tr>
<td>Median education</td>
<td>-.02</td>
</tr>
<tr>
<td>Appalachia region</td>
<td>.02</td>
</tr>
<tr>
<td>Percent living in urban areas</td>
<td>-.01</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .75$

**F test $> 4.0$  
*F test $> 2.0$
Also of importance is the religious variable (-.21). Counties with relatively high proportions of fundamental Protestant groups tended to have comparatively low participation rates in the food stamp program.

The variable measuring economic conditions, the unemployment rate (.18), is positive and significant in 1969. A final important variable is the existence of pilot projects (.17). The counties with experimental projects tended to have relatively high usage of the program.

Thus, as of 1969, program provision conditions, such as the establishment of local project areas, benefits of this new program relative to an existing welfare program, and the location of pilot projects, exhibited the most substantial influence on intercounty differentials in program use. Also important, but less so in this early phase of the program were conditions of economic need and the religious composition of the population.

Examination of the standardized residuals from the regression indicates how well the participation rate in each county is accounted for by the model. Three areas of the state exhibit substantial positive residuals (Figure 60). Cuyahoga and Lorain counties (which include Cleveland), Clermont and Warren counties (east of Cincinnati), and Meigs
and Lawrence counties (in the southeastern portion of the state) all have much greater participation rates than expected, given the variables in the model. With the exception of Warren county, these are the counties with very high participation rates. It appears that the model does not adequately account for areas with the highest proportion of their eligible populations participating.

Harrison, Pike, and Richland counties exhibit substantial negative residuals. Harrison's project had been in operation for less than one year by this time. Pike county, with by far the highest unemployment rate in the state at that time, had no food stamp program.
Figure 60: Standardized Regression Residuals, Ohio, 1969
7.3.2 1975 Results

The 1975 model also successfully accounts for a substantial portion of the intercounty variations in program participation rates. The $r^2$ was .53 (adjusted $r^2 = .46$). The ranking of the variables in terms of their importance and indication of their significance are presented in Table 7.

The most important variable in the 1975 model is the ratio of welfare benefits (.37). This finding is contrary to the state and national results which found that the ratio was insignificant in 1975.

Also important are the level of urbanization (.25) and the concentration of blacks (.31). These two variables are themselves fairly highly correlated. Finally, the unemployment rate (.22) exhibits some effect upon participation rates. It appears that highly urbanized counties, where the black population tends to be concentrated and where unemployment is high, tended to have relatively high use of the food stamp program.

The 1975 standardized residuals show a pattern different from those in 1969 (Figure 61). Although most counties are, once again, well predicted by the model, the counties which
TABLE 7
Ohio Regression Results, 1975

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit ratio</td>
<td>.37 **</td>
</tr>
<tr>
<td>Percent black</td>
<td>.31 **</td>
</tr>
<tr>
<td>Percent living in urban areas</td>
<td>.35 **</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>.22 **</td>
</tr>
<tr>
<td>Project establishment</td>
<td>.17 *</td>
</tr>
<tr>
<td>Pilot project</td>
<td>.05</td>
</tr>
<tr>
<td>Vote</td>
<td>.04</td>
</tr>
<tr>
<td>Percent poor over 65 years</td>
<td>-.04</td>
</tr>
<tr>
<td>Fundamentalism</td>
<td>.03</td>
</tr>
<tr>
<td>Appalachian region</td>
<td>-.03</td>
</tr>
<tr>
<td>Median education</td>
<td>.03</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .46$

**F test > 4.0

*F test > 2.0
deviate most substantially have changed. Six counties scattered throughout the state exhibit large negative residuals. Of these, Holmes County probably has lower than expected participation rates because its Amish community disapproves of formal government assistance, preferring private assistance between and among families.

Six counties show substantial positive residuals. Of these, Scioto County, located on the Ohio River, had higher than expected use due to the closing of a steel company in 1975. Clermont County had much higher expected use in both 1969 and 1975. The Clermont project was one of the first to be established in the state, possibly accounting for its higher than expected participation rate. Perhaps more important, however, is the fact that Clermont County, located just to the east of Cincinnati, is rural in character but urban in attitudes. Much of its labor force commutes from the small towns into Cincinnati work. According to the model, Clermont County would be expected to have have low participation rates because it is rural. Its population, may have "urban" attitudes about welfare, which translates into high usage of a social program.
Figure 61: Standardized Regression Residuals, Ohio, 1975
7.4 CHANGING EFFECTS UPON PARTICIPATION RATES, 1969 AND 1975

Figure 62 displays changes in the relative importance of the factors between 1969 and 1975. Consider first the unemployment rate. It was positively and significantly associated with participation rates in both periods and it increased between 1969 and 1975 as the economy worsened. This finding is consistent with the state level analysis except that at the local level the unemployment rate does not become the most important variable in 1975.

The ratio of welfare benefits is positive and significant in both time periods. Contrary to the findings at the state level, this variable increases in importance between 1969 and 1975. It appears that counties with a high ratio between food stamp and AFDC benefits tend to have high participation rates in the food stamp program. This tendency increases through time in Ohio but, for the states as a whole, it declines.

The urbanization and black variables follow similar trends. Both are insignificantly related with participation rates in 1969 but positive and significant in 1975. Community activist groups working in the large cities may have been successful in targeting information about the program.
Figure 62: Change in Standardized Coefficients, 1969 and 1975

* F test > 4.0
to low-income blacks and other groups. The findings for both of these variables are consistent with the state analysis.

Both the pilot project and the project establishment variable are important in 1969 but insignificant in 1975. The findings indicate that in 1969, relatively new projects tended to have low participation rates. This may be due to the fact that the eligible population was not yet aware of their eligibility or due to the fact that welfare offices had not yet set up an efficient system of provision. By 1975, most projects had existed for several years and the effect of the date of establishment was no longer important. The finding on the project establishment variable is inconsistent with the state level analysis. At that scale, the variable declined in importance between 1969 and 1975 but it remained significant.

The timing of project establishment was still marginally important in 1975 at the state level because national legislation had mandated that projects operate in every county only one year prior to 1975. The timing of project establishment was no longer important in Ohio by 1975 because state legislation had required that projects operate in every county five years prior to 1975. The diffusion process had been completed for several years in Ohio and it no
longer exhibited any effect upon intercounty variations in participation rates.

Returning to Figure 62, the religious variable is negatively and significantly related to participation rates in 1969 but is insignificant in 1975. Thus, in 1969, counties with substantial concentrations of fundamentalist groups tended to have low participation rates. By 1975, this tendency had disappeared. This finding is consistent with the state level analysis.

Several variables were insignificant in both time periods. Education level, political liberalism, age structure, and location within Appalachia were all unimportant at the county level in Ohio.

The findings for five variables were consistent between the state and local levels. On variables such as urbanization, the county level analysis helps to confirm the findings of the state level study because the former is a more sensitive scale for the variable. On variables such as the unemployment rate, however, the state level analysis helps to confirm the results of the county level study. Because there is a certain amount of movement across county boundaries to work, the unemployment rate is biased due to cross-county employment patterns.
In several instances, findings were inconsistent between the state and local level studies. Such inconsistencies help to identify the operation of underlying processes. The fact that Ohio required projects to operate in every county five years before national legislation mandated it throughout the country explains Ohio's faster diffusion of the program and accounts for the different results obtained in the state and local analyses.

7.5 **Summary**

This chapter has examined reasons for intercounty variations in the use of the food stamp program in Ohio. Although unemployment was relatively high in the state in both 1969 and 1975, conditions of economic need were not the most important factors influencing program participation rates. Program provision factors, such as the amount of benefits distributed for the food stamp program relative to AFDC, were more important. In 1969, the length of time a project had been in operation had a substantial impact upon program use but by 1975, its effect had disappeared. The religious composition of a county's population also demonstrated less effect in 1975 than in 1969. The level of urbanization and the presence of blacks in a county, on the other hand, increased in importance between the two time periods.
The findings of the local level analysis, in terms of the policy process and supply and demand side diffusion theory, are similar in many respects to those of the national and state level analyses. Actions taken during many of the stages of the process create intercounty disparities in program use. For example, the time in which a project was established, determined during the Micro-Adoption stage, influenced program use in the early period but not in the later period. Micro-Implementation procedures, on the other hand, were only important in the recent period. As an illustration, highly urbanized counties, with more sophisticated welfare bureaucracies, tended to have higher participation rates.

Once again, supply side diffusion perspectives and the early stages of the policy process have been found to be more appropriate in examining the early period of the program. Demand side diffusion and the Individual Adoption stage were more relevant approaches to study the later period.

Many aspects of local program provision, which could not be studied in this analysis, are also apt to have had an effect upon program participation. Several examples follow. The location of welfare offices in a county relative to residences of the poor has often been cited in the food stamp
Several counties in Ohio have only one food stamp office, located in the county seat, so that low-income families must travel substantial distances every month to obtain the coupons. In other counties, many offices are available. In Licking county, for example, banks in several small towns are authorized to distribute the coupons. In Muskingum county, which is large and primarily rural, welfare officials experimented with a travelling van which issued food stamp coupons throughout the county. In several counties, the coupons are now mailed to program participants so that distance to the welfare office is unimportant.

The hours of operation in welfare offices also vary substantially. Some counties issue food stamp coupons only during restricted hours and days of the week. Welfare offices in many other counties operate during the evening and on weekends so that the working poor have access to the program.

Measures of accessibility to the program in terms of office locations and hours of operation, could have been incorporated into the county analyses in several ways. The ratio of offices or office staff to the eligible population could have been used or dummy variables for mail issuance or
evening hours of operation could have been incorporated. Unfortunately, such data are not available for 1969 and 1975.

Even if the information had been available, these measures of office location and hours of operation are fairly weak surrogates. Appropriate measures of accessibility are not easily incorporated into a space-time model, such as the one used in this dissertation. Location-allocation modelling and several of the methods used in transportation research would more directly examine variations in accessibility. Thus, we return to the point made in Chapter 3. A variety of geographic approaches and methodologies are appropriate, and necessary, to understand the spatial dimensions of social program effectiveness.
Chapter VIII

CONCLUSIONS

The aim of this dissertation has been to articulate a conceptual framework by which the spatial and temporal dimensions of national social program effectiveness could be examined. Variations in utilization of the U. S. food stamp program were analyzed using this conceptual model.

Federal social programs change in their effectiveness through time and vary in their usefulness throughout the country at any one point in time. Although applied policy analysts and academic geographers have paid relatively little attention to this issue, many theoretical approaches and methodologies exist to examine the reasons for these variations in effectiveness.

To illustrate how academic theory can contribute to policy analysis, a general conceptual model of economic, political, and social processes affecting program effectiveness was devised. From the many possibilities, one particular process was chosen for examination. Referred to as the policy process, it incorporates economic, political, and social influences upon the design, implementation, and utilization
of a national social program. In other words, the policy process model includes the influence of need, supply, and demand factors upon program effectiveness, all of which vary over time and through space.

To further specify the model, two geographic perspectives of diffusion theory were applied to the policy process. Supply-side diffusion theory is appropriate for the examination of supply factors, such as program provision, which were found to operate during the early stages of the policy process. Demand-side diffusion theory is applicable to the study of economic need and social demand factors, which were found to operate during later stages of the policy process.

The general conceptual model, which incorporates diffusion theory to study the spatial and temporal dimensions of the policy process, was applied to analyze the U. S. food stamp program.

8.1 SUMMARY OF THE ANALYSES
Separate analyses were conducted at the national, state, and local levels. These examined the operation of policy administration at each level of the government hierarchy, as well as the influence of economic conditions and social attitudes.
A time series model of program participation rates at the national level examined temporal fluctuations in use of the food stamp program from 1964 to 1980. Political and economic factors were found to vary in their relative influence upon program use through time. Supply constraints prevented substantial growth in program use early in its history. Later, as legislative revisions lifted these constraints, and as the program diffused throughout the country, use of the program increased sharply and has since fluctuated more in tandem with national economic conditions. The analysis illustrates that the program is quite sensitive to administrative controls.

The state level study consisted of cross-sectional regression analyses for two time periods. The first, in 1969, occurred at the end of the initial slow growth phase of the program, before major legislative revisions took effect. The second, in 1975, occurred at the end of the major growth phase of the program. In the early period, supply constraints were most important in accounting for interstate variations in use of the program. By 1975, state economic conditions and regionally varying attitudes about welfare had become paramount.

The local level study also consisted of cross-sectional regression analyses for 1969 and 1975. The counties of Ohio
were examined for local variations in program use. Although Ohio's economy was relatively weak in both time periods, local variations in economic conditions were not the most important factors influencing intercounty disparities in program use. Program provision and social demand factors appear more important in this state. For example, highly urbanized counties were better able to provide the program through more sophisticated welfare bureaucracies. Social demand, as measured by the black population and by membership in fundamentalist religious groups, was also found to influence program use.

The different scales of analysis are necessary to illustrate how political, social, and economic factors operate at each level of the governmental hierarchy. In many cases, conclusions drawn from one level of analysis corroborate the findings of another scale. For example, the national level analysis demonstrated that fluctuations in program use became more sensitive to economic conditions in the recent history of the program. The findings of the state level analysis mirror the conclusion of the national study. The 1975 analysis demonstrated that those states with the weakest economic conditions, and therefore the greatest need for the program, had the highest participation rates.
In several instances, on the other hand, the findings of the three analyses are not parallel. For example, the state level analysis revealed that the timing of project area establishment remained relatively important in 1975. The Ohio county analysis for 1975, however, found that timing of project establishment was no longer important. This discrepancy is due to the fact that the establishment of projects was mandated earlier in Ohio than at the national level. In summary, the parallels and discrepancies discovered in the three analyses illustrate the importance of viewing the program at different scales.

8.2 IMPLICATIONS FOR POLICY

The theoretical framework and resultant analyses of the dissertation contribute to an understanding of the food stamp program. Although many examinations of the program have studied factors which influence program use, only rarely have these factors been placed in spatial or temporal context. The analyses in the dissertation have shown that the U.S. food stamp program is almost continually in flux, as it responds to a variety of regional economic cycles, legislative and administrative revisions, and shifting attitudes toward welfare. Program use in different areas of the

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* Several exceptions exist. See Coe, 1979, for an evaluation of temporal dynamics in program use; MacDonald, 1977, for an analysis which incorporates the influence of regions; and Martin and Lane, 1977, for a county level study of variations in program costs.
country responds to various combinations of these contextual factors.

The framework illustrates to policy makers and program administrators at all levels of the government hierarchy the influential factors which are outside their control, such as general economic conditions, and those which they are capable of altering, should they decide to do so.

More specifically, there exist many possibilities for changing program provision, each reflecting political intentions for social assistance. For example, revisions to the program come from the early stages of the policy process, such as Agenda-Setting and Policy-Formulation. The food stamp program could once again assume the role of an agricultural subsidy policy if prevailing social attitudes force a retraction in its role of assistance to low-income households. This shift in the purpose of the program could be instituted by policy formulators if, for instance, food purchases were limited to agricultural products in surplus. Removing products which glut the market would assist the agricultural sector but would decrease the ability of the poor to obtain a well balanced diet.

Additionally, national level administrators, responsible for Macro-Implementation, could change provision of the
program by altering benefit levels. The Senate agricultural committee and USDA have, in fact, recently proposed major reductions in benefit levels. The analyses in the dissertation suggest that lower benefit levels would not only cut program spending but also reduce incentives to use the program.

Differing Micro-Implementation procedures used by state and local officials in daily administration create spatial variations in program use. Their influence would almost certainly increase if primary responsibility for the program is shifted to the states, as advocated by the new federalism movement. Thus, spatial disparities in program use would also be apt to increase.

Finally, the analysis has demonstrated that, in the Individual Adoption stage, there are several distinguishable segments of the poverty population who differ in their demand for, and use of, the food stamp program. Depending on their political ideology, policy makers and public administrators might choose to encourage use of the program by groups, such as the elderly, who are reluctant to participate. In a recent experiment in Cleveland, Ohio, welfare officials dispensed cash, rather than food stamp coupons, to elderly participants to see if the use of coupons had created stigma against the program by this group.
In summary, provision of the program is contingent upon the intentions and actions of many political actors, working at each stage of the policy process. The analyses have attempted to identify times and places where the provision factors, as well as social and economic conditions, have influenced use of the program.

8.3 IMPLICATIONS FOR DIFFUSION THEORY

The theoretical framework and analyses of the dissertation also make a contribution to diffusion theory. The application of supply and demand side diffusion perspectives to particular stages of the policy process illustrates the contribution which each makes to the analysis of social programs. Additionally, such an application demonstrates that each is relatively more appropriate for examining the actions taken by political actors and program participants at different stages of the policy process.

The market and infrastructure perspective, which emphasizes the supply side, was used in the dissertation more extensively than was the adoption perspective. In previous research, the market and infrastructure perspective has been applied primarily to the study of entrepreneurial innovation diffusions. This analysis of the spatial and temporal spread of the food stamp program has tested the ability of the market and infrastructure perspective to account for the
diffusion of a non-commercial innovation. In general, the basic market and infrastructure framework, which emphasizes the importance of diffusion agency organizational structure, motives, and strategies for dissemination of an innovation, has been found in this analysis to assist in understanding spatial and temporal variations in the food stamp program. More specifically, various aspects of the market and infrastructure framework are directly applicable. For example, the framework specifies that the motive which a diffusion agency has for disseminating an innovation influences the manner in which it is supplied. Whereas an explicit profit motive lies behind the desire to provide a commercial product, the incentives for establishing a social program are not so clearly defined. Oftentimes, the motive is to provide a service to meet a particular, social need. In the case of the food stamp program, the program was originally designed with dual, almost contradictory aims, "to strengthen the agricultural economy" and "to provide for improved levels of nutrition among economically needy households" (Food Stamp Act of 1964, section 1). The first of these motives was clearly dominant in the early history of the program. USDA was already providing for the poor through its commodity distribution program. The agency wanted to replace that program, which was free to the poor, with a food stamp program, which channeled a portion of low-income household budgets to the agricultural sector.
The market and infrastructure framework also specifies a set of strategies which are used to disseminate an innovation. In the case of the food stamp program, these strategies have been altered through time, reflecting changing motives for the program. First, "market selection," whereby a diffusion agency identifies to whom the innovation is intended, have been changed. The market for the food stamp program was determined by setting income limits for participation. Early in the history of the program, states set these eligibility standards. Spatial disparities in these criteria were so large, however, that in 1971 nationally uniform eligibility standards were established.

Additionally, "promotional campaigns," used by a diffusion agency to inform potential adopters of the innovation, have been altered. In 1974, after a series of legal suits against USDA for failing to encourage use of the program, all states were required to conduct specific Outreach activities.

A third strategy used by diffusion agencies to provide the innovation is to establish an "infrastructure" from which the innovation can be obtained. The food stamp program is provided through local welfare offices already in existence. Thus, USDA did not have to construct a network of dissemination points. At first, the program was
voluntary and state governments decided whether or not to provide the program through its welfare bureaucracy. After 1974, all counties were required to provide the program.

Finally, diffusion agencies set "pricing policies" for an innovation, which specify to whom the innovation is intended. As noted previously, low-income households were originally required to pay for food stamp coupons in order to participate. Elimination of the purchase requirement in 1979 removed this constraint.

In addition to diffusion agency motives and strategies, the market and infrastructure framework distinguishes between various organizational structures of diffusion agencies and the impact such structures have upon program provision. In some cases, the structure is centralized, such that a single individual, corporation, or agency makes all decisions regarding the provision of an innovation. In other cases, the structure is decentralized, with many separate diffusion agencies independently deciding how to supply the program. The structure of the federal system is decentralized among state and local governments but controlled to some extent by a coordinating authority, the national government. With regard to the food stamp program, responsibility for provision has shifted among the various levels of the government hierarchy. Early in the history of the
program, states had greater control over the program. The program was voluntary and the states set eligibility criteria. Through a set of legislative revisions, the national government later gained greater control. Once again, if the new federalism movement were to take effect, responsibility would be shifted back to the states, with definite spatial ramifications for program provision and use.

As illustrated in the examples above, the market and infrastructure perspective provides a basic framework which is applicable to the examination of social program diffusion processes. The examples do illustrate that in the case of the food stamp program, provision structures, motives, and strategies have all been changed through time, altering the nature of the innovation (the program) itself and influencing the degree to which it could be used. The utility of the market and infrastructure framework would be enhanced if such alterations in aspects of provision were explicitly incorporated.

The conceptual framework, historical review, and quantitative analyses of the dissertation illustrate how diffusion theory can be extended to include changes in the innovation itself, the manner in which it is provided, and the extent to which it is demanded. This was accomplished by applying diffusion theory to the policy process, a stage model which
specifically addresses policy formulation, revision, and utilization in a temporal framework. The policy process represents a substantial literature on policy analysis. Any one of these sets of literature, which study the actions of political actors and program participants at various stages, could be drawn upon to lend substance to diffusion theory and to assure its applicability to policy analysis.

That the food stamp program has not operated as the pure entitlement policy it purports to be is not surprising. That there exist spatial and temporal variations in use of the program, beyond such variations in need, is not surprising. Rather, the contribution of this research lies in the conceptualization of the manner in which political, economic, and social factors shift in their relative importance through time and across space to create variations in program utilization.
Appendix A

Throughout the national, state, and local analyses, the same political and economic forces are studied for their influence upon utilization of the food stamp program. The analyses differ in several respects, however, due to limitations of the data and the inappropriateness of studying the effects of certain variables at all scales. The following table is provided to make explicit the parallels and discrepancies between the analyses. Variables which are not relevant for a particular scale are denoted n. r. while variables for which data are not available are marked n. a.
### TABLE 8

**Variables Used in the Three Analyses**

<table>
<thead>
<tr>
<th>National</th>
<th>State</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Need</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) unemployment rate</td>
<td>1) unemployment rate</td>
<td>1) unemployment rate</td>
</tr>
<tr>
<td>2) food price index</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supply</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) percent projects operating at a given time</td>
<td>1) year in which greatest number of projects opened</td>
<td>1) year project established</td>
</tr>
<tr>
<td>2) per capita F.S.P. benefit per capita disposable income</td>
<td>2) number of pilot projects in a state</td>
<td>2) whether or not project was a pilot project</td>
</tr>
<tr>
<td>3) establishment of national eligibility standards</td>
<td>3) average F.S.P. benefit average AFDC benefit</td>
<td>3) average F.S.P. benefit average AFDC benefit</td>
</tr>
<tr>
<td>4) initiation of outreach activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) elimination of the purchase requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Demand</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) metropolitan factor</td>
<td>1) percent living in urban areas</td>
<td>4) whether or not located in Appalachia</td>
</tr>
<tr>
<td>2) racial factor</td>
<td>2) percent black</td>
<td></td>
</tr>
<tr>
<td>3) age factor</td>
<td>3) percent poor over 65 years</td>
<td></td>
</tr>
<tr>
<td>4) fundamentalism</td>
<td>4) fundamentalism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) median education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6) Presidential vote, 1972</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

Changing spatial disparities in participation rates can be specified by applying Coulter's Coefficient of Inequity for each time period (Coulter, 1980). Adapting the measure to the present purpose, the technique compares actual program use in each state with expected use, in order to identify the magnitude and direction of disparities occurring in different areas of the country. The equity standard used here to measure expected participation is the number of persons in each state whose income is less than 125 percent of the poverty level.

The Coefficient of Inequity (I) measures the aggregate discrepancies for the country as a whole:

\[ I = \frac{\sum (X_i - E_i)^2}{S^2} \]

The numerator is a variation of chi square, such that \( \frac{X_i}{S - E} \) represents the proportional difference between actual and expected participation in state i. Summing the squared
deviations and taking the square root gives disproportionate weighting to large differences between actual and expected participation. Thus, the measure assumes that small differences are relatively less important than large discrepancies between actual and expected use.

The denominator gives a theoretical maximum for the numerator. Thus I is bounded, with 0.0 representing total equity shared by the states in the country and 1.0 representing total inequity, if all participation were in one state. As it is used in other empirical analyses, I is rarely greater than 0.5.

Additional information on I includes the following: 1). I is unit free since it is normed in terms of the participation mean for all states and for its maximum. It is therefore comparable between different time periods, numbers of areas, and types of services. 2). I is scale invariant because multiplying I by a constant does not alter the degree of inequity. A proportional increase does not alter the relative differences between the states. 3). The size of I is not dependent on the number of states, k. 4). Adding a constant to the X's causes I to decrease. For example if three states have an equal number of eligibles but participation levels of 5, 10, and 25, the differences are large and important. If participation in each state increases by
a constant, say 200, their respective participation levels are 205, 210, and 225. The differences are less important and I is lower.
Figure 63: Trend in Project Establishment, New England
Figure 64: Trend in Project Establishment, MidAtlantic
Figure 65: Trend in Project Establishment, Midwest
Figure 66: Trend in Project Establishment, Southeast
Figure 67: Trend in Project Establishment, Southwest
Figure 68: Trend in Project Establishment, Mountain Plains
Figure 69: Trend in Project Establishment, West
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