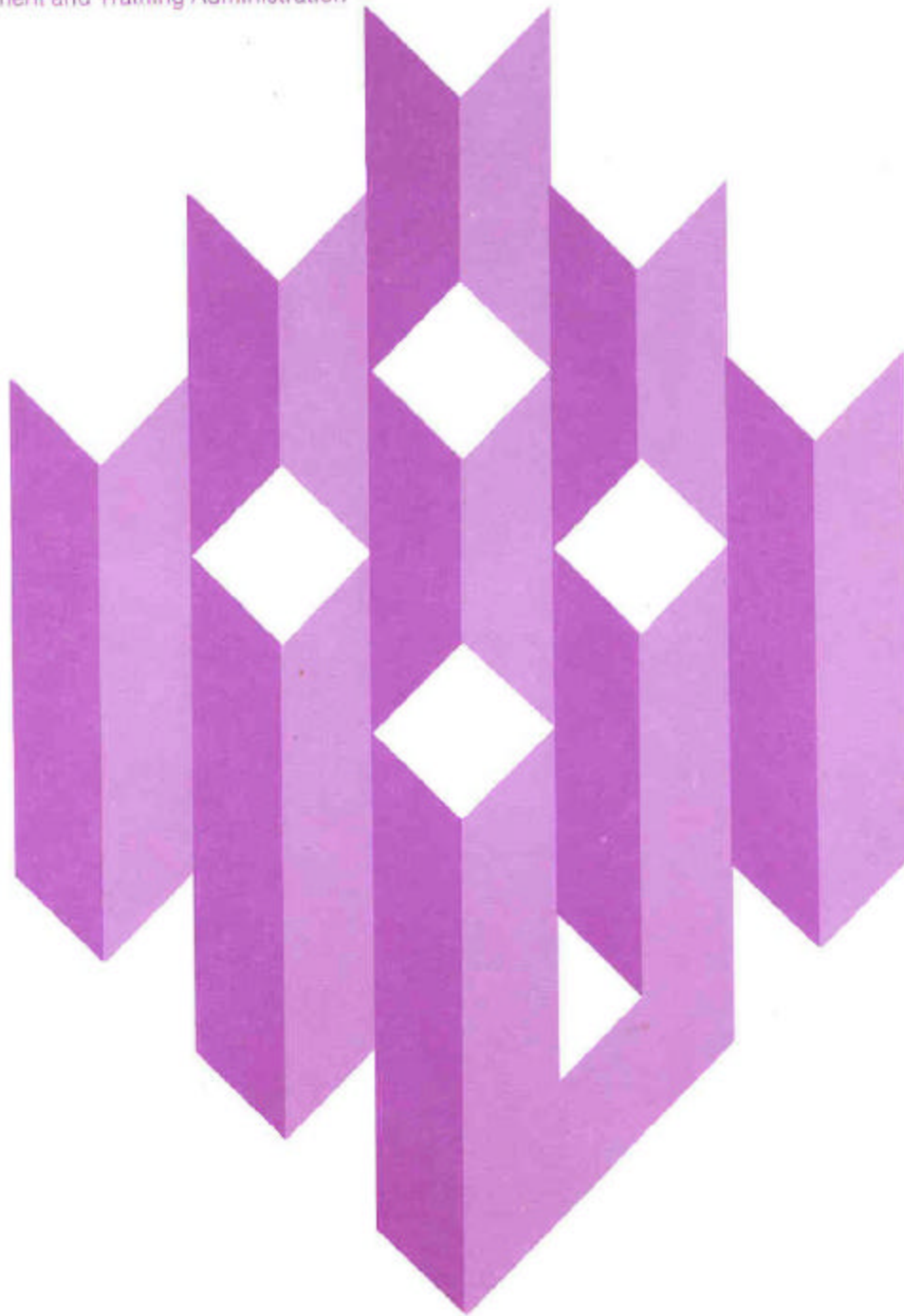


Unemployment Insurance Beneficiary Job Search Behavior: What Is Known and What Should Be Known for Administrative Planning Purposes



U. S. Department of Labor
Employment and Training Administration



**OP
77-3**

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U.S. Department of Labor
Ray Marshall, Secretary
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Employment and Training
Unemployment Insurance Service
1977

Of course, public policy should be grounded in the empirical analysis of job search. Policy applications should be undertaken only after exhaustive empirical testing has been accomplished.¹

INTRODUCTION

The first assertion cited is unexceptionable; the second is impractical. A number of events in recent years limited the capability of the Unemployment Insurance Service (UIS) to pursue claimant service and quality control goals. Extraordinary levels of unemployment triggered Federal-State extended benefits (EB) for those who exhausted regular State benefits eligibility²; led to approval of Federal supplemental benefits (FSB) under specified economic conditions³; produced special unemployment assistance (SUA) coverage for individuals whose work was not otherwise insured⁴; and influenced the provisions of the Unemployment Compensation Amendments of 1976⁵.

¹ Steven A. Lippman and John J. McCall, "The Economics of Job Search: A Survey," Economic Inquiry, 14:3 (September 1976), 364.

² See: The Employment Security Amendments of 1970, P.L. 91-373.

³ See: The Unemployment Compensation Act of 1974, P.L. 93-572.

⁴ See: The Emergency Jobs and Unemployment Assistance Act of 1974, P.L. 93-567.

⁵ See: Staff Data and Materials on Unemployment Compensation Amendments of 1976 (H.R. 10210), U.S. Senate Committee on Finance, September 3, 1976, 122 pp.

The case for unemployment compensation rests largely on public acceptance of the principle that earnings replacement is a proper social objective. Therefore, political viability of the UI system has traditionally been linked to a belief that benefits received are an earned right deriving, at least in part, from one's own prior employment record. Satisfaction of a prior earnings/employment requirement is a necessary, but not a sufficient condition to establish and maintain eligibility to receive UI benefits. As Ralph Altman observed in 1950:

The existence of the availability requirement in the unemployment compensation laws reflects certain basic assumptions: (a) Not only the past but the present labor-force attachment of claimants should be ascertained. (b) It is feasible to make a satisfactory determination of labor-force attachment. (c) The unemployment compensation agency, with the aid of the employment service, is the proper agency to make such a determination. (d) Availability can be determined as a matter of routine without an exhaustive investigation in every case. Although acceptable, these assumptions do not have the compelling force of axioms.⁶

The former sharp distinction between regular work commitment (read deserving) and irregular commitment (read undeserving) has evolved into a less easily discernible boundary which, in turn, has produced social and administrative tensions about testing continuing eligibility of UI beneficiaries. Most state UI statutes provide that, to remain eligible, a claimant must be: Able to work, available for employment, and free from disqualification for cause including failure to actively seek work and refusal of available (suitable) employment.

One consequence of the legislative and administrative actions cited above: a changing age/sex labor force profile with more attractive nonemployment opportunities than those previously available to the largely adult male labor force of the past; a shift to multiple-earner households as a norm rather than an exception; and rising UI benefit level/earnings opportunity ratios

⁶ Ralph Altman, Availability For Work: A Study in Unemployment Compensation, Cambridge, MA: Harvard University Press, 1950, 94.

which reduce the urgency of returning to work, is increased public and political concern about the "moral hazard" of the UI system. (A moral hazard occurs when the availability of insurance protection increases the incidence of the risk insured against.)

Since both legislative and administrative attention focuses on the current labor force commitment of UI beneficiaries, this paper addresses the active search and willingness to accept available (suitable) work criteria for maintaining continuing UI benefit eligibility. The following aspects of monetary qualification and continuing eligibility to receive UI benefits are not examined:

- Prior earnings/employment record.
- Reason(s) for prior job separation.
- Current ability to work.
- Present availability for work.

The 'active search' and 'willingness to accept...' requirements are administratively separable. A claimant can be actively seeking work, while declining job offers which meet the UI agency's definition of available suitable work. Or, a claimant may be willing to accept work which is brought to his/her attention, while expending no personal effort to secure job offers. The 'active search' requirement involves the definition and monitoring of appropriate claimant job search behavior. The 'willingness to accept...' requirement involves a determination of the claimant's state of mind, which cannot be ascertained in the absence of a bona fide job offer.

BACKGROUND

What the lay public thinks of as a UI work test is rarely that. Short of providing a guaranteed job⁷, it is necessary to establish guidelines for individual claimant and local-office administrative behavior which will satisfy the public's desire to ascertain the present labor force attachment of UI beneficiaries.

Obviously the U.S. Employment Service (USES), through the local offices of its state affiliates, serves an important function

⁷ A Work Equity Through Meaningful Employment demonstration program (which is in the final design phase at this time) to be conducted in 46 rural counties and the city of St. Paul, Minnesota is intended to provide a guaranteed Community Work Project job for employable AFDC, General Assistance, and Food Stamp recipients who cannot locate alternative employment.

in the administration of any recurring test of claimant willingness to accept available work. But this role creates conflicts for the USES. More than forty years ago E. Wight Bakke provided an early statement of the conflicts inherent in USES efforts to wear more than one hat simultaneously. He noted that

...the constant reminder to the unemployed and to the public that the receipt of insurance benefits is dependent on efforts to secure work is of the greatest importance... insofar as exchange officials wish to build an efficient labor supply service, about the only evidence of willingness to work they can provide is certification of periodic registration of the unemployed at the exchange.⁸

Even earlier, in England the Royal Commission on Unemployment Insurance in 1932 concluded:

The offers of work through employment exchanges cannot and should not be used primarily as a test of the bonafides of a claimant for unemployment benefit. Such service as the exchanges may perform in this respect will be incidental and no more than incidental to the performance of their primary function.⁹

In mid-1976 then Assistant Secretary of Labor for Employment and Training Administration William H. Kolberg stated in House testimony:

For the present, we do not feel that additional client group priorities are in the best interests of any of the clientele of the ES. Such priorities hinder rather than help the ES in providing services needed by each of the clientele groups.¹⁰

And in September 1976 the House Committee on Government Operations reported:

⁸ E. Wight Bakke, "Public Employment Offices and Unemployment Insurance Systems: Some Hazards in Their Association" Employment Service News, 2:10 (October 1935).

⁹ The Royal Commission on Unemployment Insurance, Final Report, November 1932, Cmd. 4185, p. 300.

¹⁰ William H. Kolberg, statement before the Subcommittee on Manpower, Compensation, and Health and Safety of the Committee on Education and Labor, and the Subcommittee on Unemployment Compensation, Committee on Ways and Means, U.S. House of Representatives, June 16, 1976, p. 22.

The Committee recommends that the Department of Labor develop guidelines to assist the states in devising the best work test requirements possible. These should include exemptions from registration when placement is highly unlikely and more precise criteria for determining what constitutes suitable work.¹¹

This recommendation is linked to previous GAO staff testimony reporting the findings of their 15 site review of local office operations in the Federal-State Employment Service system.¹²

The Employment and Training Administration (ETA) in the U.S. Department of Labor has not been unaware of public and Congressional concerns about quality control practices within the UI system. In late 1975 a General Administration Letter was issued to all state employment security agencies (SESA's) on the subject: Unemployment Insurance Quality Control Processes and Reemployment Assistance to Claimants.¹³ This document states, in part:

In order to maintain the basic quality aspects of the program, we must reestablish those practices and procedures which assure that benefits are paid only to claimants who are truly attached to the labor market, are actively seeking work, and meet eligibility criteria. ...(A) strong program of reemployment assistance will help speed the claimants' return to work. (emphasis added).¹⁴

This directive was complemented by a similar communication from the regional administrative level to SESA's:

Research indicates that at least three different processes have been used to select which claimants will be provided special job finding assistance; some SESA's use "demand occupation" lists and work only with those claimants who have work experience in those demand occupations. Other SESA's say that a claimant will

¹¹ Finding Jobs For Workers: The Performance of the U.S. Employment Service and Its State Partners, Thirty-Fifth Report By The Committee on Government Operations, House Report No. 94-1708, September 28, 1976, p. 31.

¹² Gregory J. Ahart (Director, Manpower and Welfare Division, General Accounting Office), Statement before the Manpower and Housing Subcommittee of the Committee on Government Operations, Operation of the U.S. Employment Service, Hearings print (May 24, 1976), pp. 244-275.

¹³ General Administration Letter No. 13-75, December 31, 1975, 6 pp.

¹⁴ Ibid, p. 2.

receive special assistance after he or she has been collecting for a specific number of weeks--e.g. 14 weeks. A third approach is to simply say that "x percent" (2, 5, 10) of all claimants will receive placement assistance. We have no hard evidence as to which approach will work best (emphasis added).¹⁵

These actions were followed, in turn, by a memorandum within the UIS national office¹⁶ proposing development of a generalized Claimant Reemployment Assistance and Eligibility Review Program which could be adopted by any SESA. This program was conceived as combining elements of the traditional Periodic Interview (PI) adopted years ago as a way to monitor the labor force attachment of UI beneficiaries¹⁷, the Service to Claimants (STC) program¹⁸, also developed more recently by the UIS; and regular ES placement services. This paper is written in support of this renewed desire by the UIS to develop a reemployment assistance program for claimants.

OBJECTIVES

There are five specific tasks to be accomplished in the remaining pages:

- Review what is known about UI beneficiary job search behavior.
- Identify, if possible, screening criteria which might be used routinely to select claimants for reemployment assistance.
- Identify information sources and materials which might be used in providing reemployment assistance.
- Assess the respective roles of the USES and the UIS in promoting reemployment assistance for claimants, and examine alternative administrative possibilities.

¹⁵ Region I Letter Series No. 96-76: Providing Job Finding Assistance to Unemployment Insurance Claimants, March 19, 1976, 3 pp.

¹⁶ "Unemployment Insurance Program Quality--Reemployment Assistance and Review," April 20, 1976, 5 pp.

¹⁷ Employment Security Manual, Part V: Sections 5415, 5438 and 5462-5464.

¹⁸ See: V.C. Austermann, R.L. Crosslin, and D.W. Stevens, Can The Unemployment Insurance Service Improve The Employment Prospects of Claimants?, November 1975, 126 pp.; and, D.W. Stevens, Assisted Job Search For The Insured Unemployed, Kalamazoo, MI: The W.E. Upjohn Institute For Employment Research, January 1974, 112 pp.

- Provide a future research agenda for this topic.

While an "Issue Paper" format has been adopted to the extent feasible, this paper is intended for immediate administrative use within the UIS. My colleagues in the research community will find no theoretical breakthroughs in these pages. What will be found is a balanced treatment of the issues examined, new statistical analysis of data not previously analyzed for these purposes, a fresh approach to the job search assistance issue, and a selective bibliography for those who want to pursue the topic in greater depth. The findings, conclusions, and recommendations should be of interest to the new National Commission on Unemployment Compensation.¹⁹

A CAUTIONARY NOTE

The statistical analysis reported in this paper is based on data sets produced by the author in studies conducted in Pittsburgh, PA (1967-68); Cleveland, OH (1970-71); and St. Louis, MO (1971-73). The sample selection criteria which were established in each case limit our ability to generalize findings to the population of future claimants. Two possible responses are open to UIS administrators in this situation. On the one hand, they can await "exhaustive empirical testing" before establishing any claimant reemployment assistance policy; perhaps simultaneously initiating the appropriate testing themselves. On the other hand, an informed decision can be made about the adequacy of what is already known about claimant job search behavior. Choosing the second approach does not preclude investment in continuing inquiry. Indeed, an important first step, taken in the final section of this paper, is to pose the right questions for future exploration.

We proceed in the following manner: Introduce the most significant theoretical contributions to our understanding of claimant job search behavior; relate these concepts to the studies of actual claimant experience which have been conducted; examine in detail the job search behavior of a specific sample of 2,600 claimants;

¹⁹ Unemployment Compensation Amendments of 1976.

explore the potential for determining claimant screening criteria for routine local office adoption; identify data sources which might be used in offering job search assistance through local office auspices; explore the respective USES and UIS roles in serving claimants; and finally, develop a future research agenda.

A PRIMER ON ECONOMIC ANALYSIS
OF CLAIMANT JOB SEARCH BEHAVIOR

This section attempts to convey for UIS administrative use an understanding of the economist's approach to examining claimant job search behavior. A(nother) review of the litany of articles which have developed these theories²⁰ would compromise our basic purpose, which is to inform administrative decisions. Actually, each of the elegant mathematical models of search behavior represents a variation on a single core theme; a commonsense story of labor market stimulus and worker response.

Obviously a "whether to seek employment" decision precedes, and may make unnecessary, a "how to search" determination.²¹

²⁰ See: Steven A. Lippman and John J. McCall, "The Economics of Job Search: A Survey," (Part I) Economic Inquiry, 14:2 (June 1976), 155-189; and (Part II) Economic Inquiry, 14:3 (September 1976), 347-368, for a general survey; Mamoru Ishikawa, Unemployment Insurance, Job Search, and Manpower Policy, Unemployment Insurance Technical Staff Paper 2, 1976, 144 pp., for a specific application reflecting UI program parameters; Curtis C. Aller et al., "Job Search and Information Channels Review," draft chapter of a review of research on the USES as a labor exchange, Berkeley, CA: Center for Applied Manpower Research, undated, 45 pp. for a specific application focusing on the ES role; Dale T. Mortensen, "Unemployment Insurance and Labor Supply Decisions," Symposium on the Economics of Unemployment Insurance, University of Pittsburgh, April 9, 1976, 30 pp., for an integration of the search and time-allocation theories; and Finis Welch, "What Have We Learned From Empirical Studies of Unemployment Insurance?" April 1976, 17 pp., for a critique of the Classen, Ehrenberg/Oaxaca, Burgess/Kingston, and Holen studies of the effect of UI benefits on unemployment duration, wages, or subsequent earnings. A recent symposium on the economics of information is also informative; see: "Symposium: The Economics of Information," Quarterly Journal of Economics, 90:4 (November 1976), 591-627.

²¹ See: Martin Feldstein, "Temporary Layoffs in the Theory of Unemployment," Journal of Political Economy, 84:5 (October 1976), 937-957; _____, "The Importance of Temporary Layoffs: An Empirical Analysis," Brookings Papers on Economic Activity, 1975:3, 725-744; and, _____, "Unemployment Policy After the Recession," Discussion Paper No. 441 (October 1975), Harvard Institute of Economic Research, 64 pp.

These decisions are interdependent and, to some extent, reversible. As circumstances (stimuli) change preferred status (response) may change also. What determines whether and how often current status is reassessed? The economist's answer is: An individual will reassess a situation whenever the expected reward for doing so exceeds the anticipated costs of reassessment. If a person is satisfied in his present status he may be unwilling to incur any direct cost to explore alternatives. We can infer from this inaction that the opportunities which he expects to result from considering the alternatives provide insufficient incentive to engage in the effort.

Claimant job search behavior, then, is viewed as a sequence of recurring choices between maintaining one's current known status and selecting a new, perhaps less certain, status: File a claim to establish benefits eligibility, or waive these benefit rights; satisfy administrative requirements for continuing eligibility, or risk disqualification; accept a job offer, or remain unemployed; etc. The pros and cons of each option are weighed on the basis of what is known about each at the time a decision is required. Information is imperfect, costly to acquire, and susceptible to obsolescence.

Job search can be "produced" with different combinations of time and purchased services. The mix of these inputs which is chosen will reflect both alternative uses of one's time and ability to pay for the services. If the time/purchased services mix is, at least in part, administratively determined--as it is for claimants--this time cost is considered in deciding whether maintenance of continuing eligibility to receive benefits is worthwhile.

A claimant may search in anticipation of finding job opportunities which would not be known otherwise, or to expand what is known about opportunities of which he is already aware. Broadening the information base has been characterized as search at the extensive margin, while deepening the information field is designated as search at the intensive margin.²² This distinction will be useful

²² Albert Rees, "Information Networks in Labor Markets," The American Economic Review, 56:2 (May 1966), 500.

in our examination of the mix of claimant job search activities. Can we determine which claimant attributes are associated with differential use of these types of search activity?

A second set of concepts helps us to answer this question. An inspection good is one whose quality is immediately obvious upon initial inspection. An experience good is one which must be possessed for a while to know its worth.²³ Both jobs and workers exhibit 'experience' elements, but not uniformly so. This designation is most appropriate for those jobs/workers which exhibit the greatest variation in quality; i.e., involve the greatest likelihood of mistake if a contract is accomplished at the time of initial inspection. Claimants whose experience/aspirations directs them toward job opportunities which inherently exhibit a wide range of attractiveness in the total work situation will invest more in job search at the intensive margin than will claimants whose opportunities are characterized by a greater degree of uniformity. Similarly, employers will invest more at the intensive margin in recruitment of employees who will be able to exercise substantial discretion over job performance and productivity, or who must meet a high minimum performance standard, than for prospective workers for positions offering little latitude for autonomous action or exhibiting a low required productivity standard.

The less alike jobs/workers are, the greater the expected return from search at the intensive margin; learning more about jobs/workers already known to the searcher. Also however, the greater the differences exhibited among employing establishments/worker attributes, the higher the probability that screening will either command a price²⁴ or draw upon internal ties.

The coexistence of a 'free' public employment service and fee-charging private employment agencies is explained, in part,

²³ Richard S. Toikka, "The Economics of Information: Labor Market Aspects," Swedish Journal of Economics, (1974), 65.

²⁴ See: George J. Stigler, "Information in the Labor Market," Journal of Political Economy, 70:5, Part 2 (October 1962), 102; and Armen A. Alchian, "Information Costs, Pricing, and Resources Unemployment," Western Economic Journal, 7:2 (June 1969), 123-124.

by this specialized function of operating at the intensive margin served by the fee-charging intermediaries. The network of internal ties, i.e. friends and relatives who can alert a job seeker to the appearance and features of a job-opening, also serves an important role in this regard. Unfortunately, it is generally infeasible to advise persons without such inside information to establish such ties. This creates an uneven distribution of access to the types of information produced through these personal and purchased sources.

The "search literature" has focused on the individual's adaptive behavior in establishing an optimal acceptance wage given various premises about obsolescence of information, time horizons, ability to accumulate job offers, and awareness of wage-offer distributions.²⁵ Since we focus on the job search process itself, rather than the determination of acceptance wage behavior²⁶ or optimal stopping rules, it is not necessary to delve deeply into

²⁵ See: John M. Barron, "Search in the Labor Market and the Duration of Unemployment: Some Empirical Evidence," American Economic Review, 65:5 (December 1975), 934-942; R. Gronau, "Information and Frictional Unemployment," American Economic Review, 61:3, Part I (June 1971), 290-301; Mamoru Ishikawa, loc cit.; Robert E. Lucas, Jr. and Leonard A. Rapping, "Real Wages, Employment, and Inflation," Journal of Political Economy, 77:5 (Sep/Oct 1969), 736; J. J. McCall, "Economics of Information and Job Search," Quarterly Journal of Economics, 84:1 (February 1970), 113-126; David Metcalf, "Pay Dispersion, Information, and Returns to Search in a Professional Labor Market," Review of Economic Studies, 60:4 (October 1973), 491-506; Dale T. Mortensen, "Job Search, the Duration of Unemployment, and the Phillips Curve," American Economic Review, 60:5 (December 1970), 847-862; Albert Rees, "On Equilibrium in Labor Markets," Journal of Political Economy, 78:2 (Mar/Apr 1970), 306-310; Stephen W. Salant, "Search Theory and Duration Data," unpublished manuscript dated January 22, 1974, 28 pp; S.C. Salop, "Systematic Job Search and Unemployment," Review of Economic Studies, 40:122 (April 1973), 191-202; Arie Melnik and Daniel H. Saks, "Information and Adaptive Job-Search Behavior: An Empirical Analysis," Working Paper No. 94, Industrial Relations Section, Princeton University (December 1976), 27 pp.; and, of course, S.A. Lippman and J. J. McCall, loc cit.

²⁶ See: Robert L. Crosslin and David W. Stevens, "The Asking Wage-Duration of Unemployment Relation Revisited," Southern Economic Journal, 43:3 (January 1977), 1298-1302.

these treatments. Nor do we intend to get caught up in the merits of various arguments concerning the disincentive effects of UI benefits.²⁷

Finally, the different characterizations of unemployment which have been stated: E.g., Alchian's definition of one type of unemployment as "self-employment in information collection,"²⁸ McCall's observation that "remaining unemployed is regarded as simply another occupation, say, the null occupation (leisure), that the individual may choose,"²⁹ and Feldstein's assertion that "almost every unemployed person can now find a job in a very short time,"³⁰ are of no moment for present purposes. As Hall has written:

It strikes me that a debate over whether or not unemployment is voluntary is practically meaningless. ...I suspect that the real issue is how tolerant of unemployment the federal government should be.³¹

Having established the boundaries of our inquiry, we continue the development of basic economic concepts which will contribute to our understanding of claimant job search behavior; and therefore to an examination of the UIS role in promoting SESA local-office intervention in this behavior pattern. Administrative sanctions for failure to satisfy continuing eligibility requirements affect

²⁷ See: Robert L. Crosslin and Stanley M. Atkinson, Unemployment Insurance and Job Search: Empirical Relationships and Interpretations, Final report submitted to the UIS, June 1975, 117 pp.; Raymond Muntz and Irwin Garfinkel, The Work Disincentive Effects of Unemployment Insurance, Kalamazoo, MI: The W.E. Upjohn Institute for Employment Research, September 1974, 65 pp.; and Stephen T. Marston, "The Impact of Unemployment Insurance on Job Search," Brookings Papers on Economic Activity, 1975:2, 13-48 (and accompanying discussion, pp. 49-60). Numerous additional citations are found in: V.C. Austermann, R.L. Crosslin, and D.W. Stevens, Can The Unemployment Insurance Service Improve The Employment Prospects of Claimants?, November 1975, 6-7.

²⁸ Arman Alchian, loc cit.

²⁹ John J. McCall, op cit, p. 114.

³⁰ Martin Feldstein, "Unemployment Policy After the Recession," op cit, p. 42.

³¹ Robert E. Hall, "Review of Microeconomic Foundations of Employment and Inflation Theory," Journal of Economic Literature, 10:1 (March 1972), 65.

claimant decisions about whether, and how, to seek employment.³² Local-office involvement in claimant job search behavior serves two not necessarily complementary functions: Continuing UI benefit eligibility enforcement, and positive job search assistance. One purpose for allocating local-office staff resources to revealing claimant job search activity is to fulfill the administrative enforcement function. The objective of this enforcement activity is to assure that availability, active search, and willingness to accept available (suitable) employment conditions for continuing eligibility are satisfied.³³ The claimant characteristics associated with eligibility abuse on one or more of these criteria exhibit no necessary a priori relationship to the claimant attributes determining need for job search assistance. This means that attempts to accomplish both enforcement and assistance objectives with a single claimant selection procedure will create target inefficiencies in pursuing each goal. (A target inefficiency occurs when program resources are not restricted to serving the intended target population.) Furthermore, the procedures required to elicit information appropriate to the enforcement activity may be counterproductive in determining the need for positive job search assistance.

The term "need" for job search assistance has been used several times without definition. It is necessary to distinguish among claimant, unemployment insurance program, and social interests in this regard. An individual claimant may, or may not, recognize or express a need for help in finding a job. This recognition will depend upon the claimant's expectations about his situation with and without such assistance. The SESA's determination of claimant

³² See: David W. Stevens and V.C. Austermann, Equity and Efficiency Considerations in the Unemployment Insurance 'Work Test': An Analysis of Local Office Administrative Practice, final report submitted to AS/PER, DOL, October 1975, 64 pp.; Arlene Holen and Stanley A. Horowitz, "The Effect of Unemployment Insurance and Eligibility Enforcement on Unemployment," Journal of Law and Economics, 17:2 (October 1974), 403-431; and Arlene Holen, Effects of Unemployment Insurance Entitlement on Duration and Job Search Outcome, Technical Analysis Paper (draft), AS/PER, DOL, November 1976, 46 pp.

³³ See: Lester C. Thurow, "Equity Versus Efficiency in Law Enforcement," Public Policy, 18:4 (Summer 1970), 451-462; and, Gary S. Becker and George J. Stigler, "Law Enforcement, Malfeasance, and Compensation of Enforcers," Journal of Legal Studies.

need for job search assistance is based on very different considerations. The goal of UI administrators should be to minimize the withdrawal of UI trust funds consistent with maintenance of the insurance principles of the program.³⁴ This goal differs from an unconstrained attempt to minimize the length of each spell of insured unemployment. It is much easier to achieve a prompt placement than a successful placement³⁵, but each has different actuarial and equity consequences. Society's interest in determining claimant needs for job search assistance differs from either of the above considerations. Greater weight is given to the productivity losses associated with continuing unemployment, as well as the distributive effects of imperfect experience rating of the UI tax system.³⁶ Our attempt to define UIS administrative options recognizes these differing interests, and explores the claimant and social consequences of focusing on SESA goals.

The purpose of this section has been to introduce a few economic concepts which are useful in examining claimant job search behavior. We have distinguished between the whether to search and how to search decisions, while noting their interdependence. We have stated that the frequency and extensiveness of status reassessment is determined by the net return expected from doing so. Expectations, in turn, are determined by the completeness and accuracy of information about the alternatives among which a choice is to be made. Information acquisition about job opportunities is costly and may require frequent updating. We have noted that job search can be produced with varying combinations of time and purchased services, and that search effort must be allocated between broadening (the extensive margin)

³⁴ See: David W. Stevens, statement before the Subcommittee on Manpower, Compensation, and Health and Safety of the Committee on Education and Labor, and the Subcommittee on Unemployment Compensation, Committee on Ways and Means, U.S. House of Representatives, June 17, 1976, p. 12 (Hearings print forthcoming).

³⁵ Richard Toikka, op cit, p. 65.

³⁶ See: Martin S. Feldstein, loc cit; Charles E. McClure, Jr., "The Incidence of the Financing of Unemployment Insurance," Symposium on the Economics of Unemployment Insurance, University of Pittsburgh, April 9, 1976, 31 pp; and, Joseph M. Becker, S.J., Experience Rating In Unemployment Insurance: Virtue or Vice?, Kalamazoo, MI: The W.E. Upjohn Institute For Employment Research, December 1972.

and deepening (the intensive margin) the information base. We have introduced the terms experience goods and inspection goods because this allows us to explore the importance of uncertainty about the quality of jobs/workers. We have identified two very different objectives of SESA local-office involvement in claimant job search activity, enforcement and assistance; goals which may involve conflicting administrative incentives. And finally, we have distinguished among claimant, SESA, and social interests in local-office participation in claimant job search activity. These concepts are applied in examining actual claimant job search behavior in the next section.

WHAT IS KNOWN ABOUT CLAIMANT JOB SEARCH BEHAVIOR

The approach taken in this section is to begin with an analysis of the most detailed data on claimant job search behavior and results known to the author, and then to complement this analysis with other more general studies which are available. It may surprise some readers to learn that no study has been undertaken for the specific purpose of learning how claimants seek and find jobs.

The first data set which is examined was created in conjunction with an evaluation of the St. Louis, Missouri Service to Claimants (STC) program,³⁷ which was offered in four local offices of the Missouri Division of Employment Security between November 1970 and February 1973. Between October 1971 and May 1972 personal interviews were conducted by a university survey research group with a total of 2,598 claimants during the seventh week following their filing of an initial claim to establish a new Benefit Year. (These interviews were conducted in the respondents' homes and no mention was made at any time of an association with the Missouri Division of Employment Security or any awareness of the individual's claimant status.) The following criteria were used to identify persons to be interviewed:

³⁷ See: V.C. Austermann, R.L. Crosslin, and D.W. Stevens, loc cit. Interested readers are referred to this volume for a description of the St. Louis implementation of generalized STC principles, sampling design, survey procedures, and evaluation findings.

- Reported to one of the four participating MDES local-offices to claim a second compensable week (the third week following initial filing, including a noncompensable waiting week).
- Classified as not job-attached ("...defined by a specific expected date within five weeks to return to work with the immediate past employer; or membership in a union that provides its own job-referral service, signified by affirmation of this fact by a union officer..."³⁸).
- Determined not to be in need of supportive services beyond the scope of the STC job search assistance package.

Approximately half of the total flow of initial claims fell into the job- or union-attached category, and another ten percent was determined to need supportive services beyond the scope of the STC program. The remaining 40 percent of persons filing initial claims, minus those who failed to appear to claim a third week,³⁹ comprised the potential study population. The 2,598 interviews conducted during each respondent's seventh claim week represent 78 percent of the 3,334 claimants originally identified for followup contact. If the purpose of the following pages had been to reach precise conclusions about the correlates of variation in compensated duration or some other aspect of claimant experience, readers would require much more detailed information about sampling design and survey procedures. But the immediate objective is less exacting, and we want to avoid overwhelming readers with statistical detail. The essence of the 2,598 claimants in the analysis which follows is that they are unemployed workers who cannot rely on a specific labor union intermediary to refer them to a new job; have no specific date of expected recall by the immediately preceding employer; and do not require extensive employability development services. These observations reflect conditions in a single metropolitan labor

³⁸ Ibid, p. 9.

³⁹ For any reason, including return to work, withdrawal from the labor force, movement out of the metropolitan St. Louis area, etc.

market at a specific point in time.⁴⁰ Some argue that this limits the extent to which generalizations can be drawn from observed relationships. Others assert that this standardization of external circumstances is conducive to meaningful results. The author's judgment is that the insights set forth in the following pages, when properly qualified, clearly merit consideration in the administrative determination of a UIS job search assistance policy.

The (foldout) flow diagram which follows traces the job search activities, and employment opportunities generated thereby, of these 2,598 claimants. Reading from top to bottom on the flow diagram, we first find in STAGE 2 an unusually large proportion of former military personnel. This is an artifact of the 1971-72 timing of the study--during the Viet Nam war period. Obviously, these former military respondents should be excluded from an examination of employer recall events!

After this former military group is excluded (STAGE 3), ten percent of the civilian respondents acknowledge having received an offer to return to a former employer within the four week observation period. Remember that a specific expectation of recall within five weeks was a criterion used to screen claimants out of this study. This finding that one out of every ten persons who "passed" this selection criterion was subsequently asked within four weeks to return to a former place of employment⁴¹ indicates that the STC program determination of recall expectation was susceptible to substantial error.

What is the significance of screening errors such as that just demonstrated to have occurred in the St. Louis STC program? One

⁴⁰ Actually a seven-month interval, during which the estimated unemployment rate in the St. Louis SMSA fluctuated between 5.3 percent and 6.9 percent of the labor force. Source: Missouri Division of Employment Security, Annual Labor Area Work Force Reports, 1971 and 1972.

⁴¹ Which is not the same statement as being asked to return to their former job; i.e. a specific position within the enterprise. It is possible to determine the frequency of this distinction occurring, but the necessary analysis has not been completed for this paper. Also see: James S. Henry, On Taxing The Unemployed, And Other Modest Proposals, unpublished manuscript, Harvard University, April 1976, 59 pp. This generally uncited paper raises very important job search issues.

A FOUR WEEK PERSPECTIVE ON CLAIMANT JOB SEARCH BEHAVIOR AND RESULTS
 (St. Louis STC Program Evaluation Data Set.
 Fourth Through Seventh Claim Weeks Monitored)

**FLOW
STAGE**

1

STUDY POPULATION:

2598
(100)

2

PRIOR JOB:

2281
(88)

civilian

317
(12)

military

3

RECALL OFFER:

229
(10)

yes

2052
(90)

no

4

ACCEPT RECALL OFFER:

156
(68)

yes

73
(32)

no

5

STILL WORKING THERE:
(maximum four week
interval)

120
(76)

yes

2 *

34
(24)

no

6

EXPECT TO BE RECALLED:

448
(22)

yes

7 *

1426
(69)

no

171
(9)

don't
know

7

ATTEMPTED TO FIND A
JOB WHILE WAITING:

443
(99)

yes

1 *

4
(1)

no

8

HAS GONE IN PERSON
TO EMPLOYERS:

2332
(95)

yes

9 *

123
(5)

no

9/10

NUMBER OF EMPLOYERS
CONTACTED IN PERSON
SINCE JOB SEPARATION
(minimum of 7 weeks):

1- 5 employers
6-10 "
11-20 "
21-35 "
36-50 "
> 50 "

2307

25 *

293	(13)
477	(21)
758	(33)
453	(19)
197	(9)
129	(5)

NUMBER OF EMPLOYERS
CONTACTED IN PERSON
SINCE SELECTION **
(four week interval):

None
1- 5 employers
6-10 "
11-20 "
21-35 "
36-50 "
> 50 "

2327

5 *

137	(6)
895	(30)
695	(30)
636	(27)
107	(5)
32	(1)
25	(1)

PRECEDING CONTACTS:

Private employment agency
 Public employment service referral
 Friend/relative suggestion
 Newspaper advertisement
 Public employment service suggestion
 Telephone listings
 No prior knowledge of openings
 Other

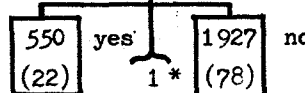
(Total N= 2190)

through source

since selection

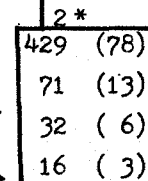
172	534	(2)
289	555	(2)
1184	4796	(19)
1165	6536	(26)
306	765	(3)
506	3083	(12)
1010	7714	(31)
135	886	(4)
	24869	

12 RECEIVED JOB OFFER(S):



13 NUMBER OF JOB OFFERS:

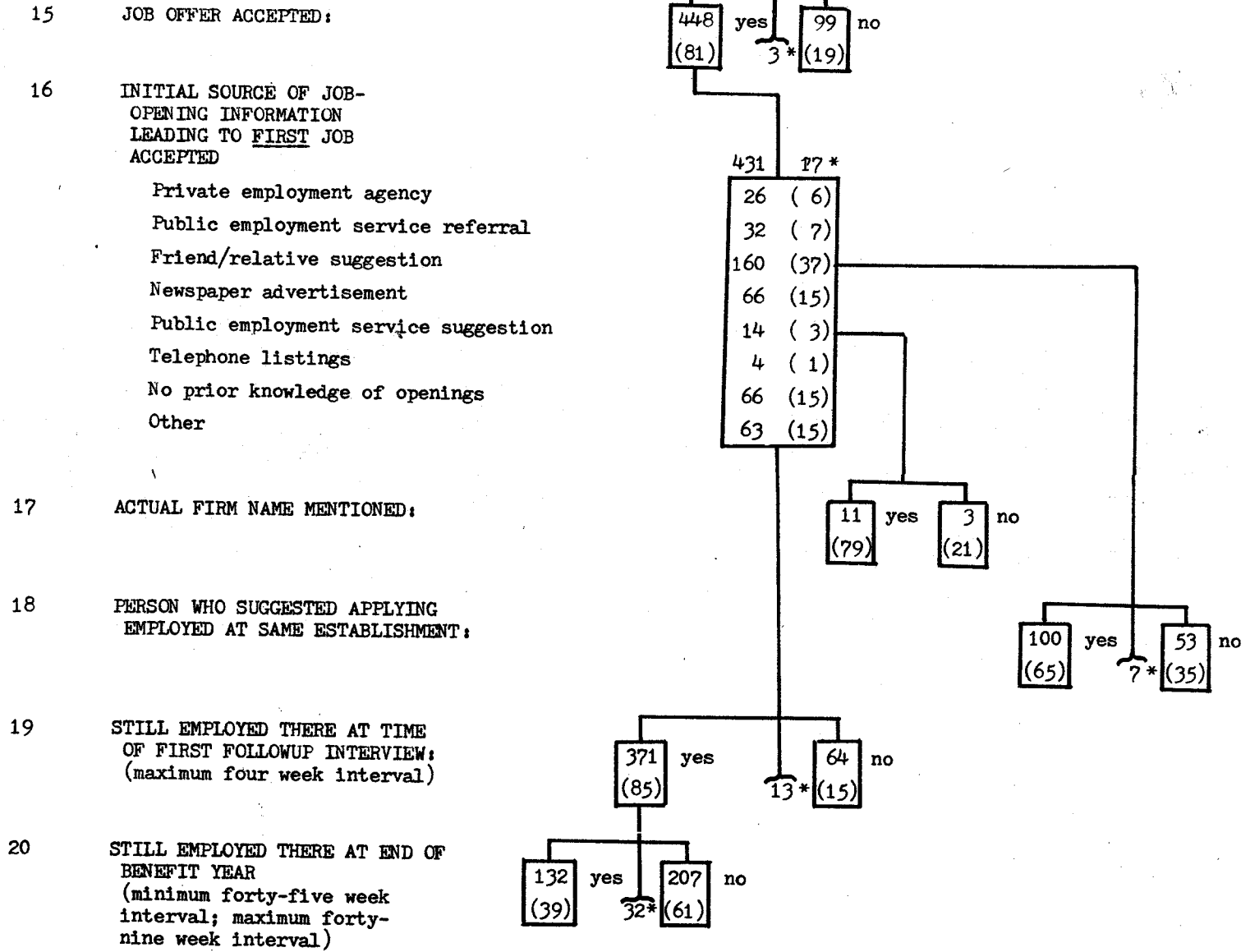
one
 two
 three
 > three



14 INITIAL SOURCE OF JOB-
 OPENING INFORMATION
 LEADING TO JOB OFFER:

Private employment agency
 Public employment service referral
 Friend/relative suggestion
 Newspaper advertisement
 Public employment service suggestion
 Telephone listings
 No prior knowledge of openings
 Other

	First Offer 550	1 *	Second Offer 120	2 *	Third Offer 48	2 *
Private employment agency	35	(6)	10	(8)	3	(7)
Public employment service referral	41	(7)	6	(5)	1	(2)
Friend/relative suggestion	186	(34)	28	(24)	12	(26)
Newspaper advertisement	99	(18)	25	(21)	10	(22)
Public employment service suggestion	26	(5)	5	(4)	1	(2)
Telephone listings	8	(1)	3	(3)	1	(2)
No prior knowledge of openings	75	(14)	28	(24)	14	(30)
Other	79	(14)	13	(11)	4	(9)



* Missing observations
 ** 'Selection' refers to the third claim week.

consequence is that target inefficiencies may occur. We qualify this statement because the reader will discover below that getting an offer to return to a former place of employment is not synonymous with acceptance of such an offer, or of extended job tenure even if the offer is accepted. The issue, to which we will return later, is whether to accept this target inefficiency or incur the additional costs necessary to sharpen the screening procedure. The administrative decision made by the UIS on this matter will not reflect either the claimant or social consequences of the decision except insofar as these effects are also pertinent to UIS incentives.

The first unexpected finding occurs at STAGE 4 of the claimant flow under examination. Nearly one-third of those who were offered an opportunity to return to a former employer declined to accept. (The reasons which were given for this action are known, and this phenomenon has been examined by sex/ethnic/local office classifications, but such a detailed discussion would divert us from the main theme of the story which is unfolding.) And of those who had returned to a former place of employment during the four week observation period (STAGE 5), one out of every four had already left again prior to the followup interview. In other words, just under half of those who had received a recall offer either did not accept or returned but soon left again.

Among the nine out of every ten civilian workers who had not received a recall offer during the four week interval (STAGE 6), 22 percent expressed an expectation that they would be recalled in the future. This increases the "error rate" in screening out those who expect recall to 30 percent. We must be careful here though; both because we are lapsing into a reliance on too many numerical references and because the logical sequence is jeopardized. Some of those who actually received a recall offer may not have expected to, or may not have acknowledged such an expectation on their application forms; and many of those who expressed an expectation of future recall may never be contacted and may not have had a specific date of expected recall in mind. One indication of the tenuous nature of the expectation expressed in the followup interview is the fact that only one percent did not attempt to find another job while allegedly awaiting recall (STAGE 7).

The importance of the analysis up to this point is the demonstration that employer recall is a complex phenomenon. This illustrates a point made earlier: Changing circumstances may alter the ordering of preferred status. A job which is preferred by an incumbent may appear less attractive from the outside looking in; particularly if the exit was involuntary.⁴²

Referring to the flow diagram again, we are now interested in the nine out of every ten respondents who had actually gone to establishments to seek employment (STAGE 8). The author has stressed the economic significance of this action before.⁴³ The economic literature on job search behavior, with few exceptions, fails to define use of a method of job search. This concept lies at the core of our ultimate conclusions about the potential for assisting claimant job search activity. Recall the previous distinction drawn between time and purchased services inputs to the production of job search. Using these terms it is easy to see that use of a fee-charging private employment agency involves almost entirely purchased services inputs with very little of the user's time required. At the other extreme, direct employer contact without prior knowledge of job-openings involves large quantities of the user's time and an actual cash outlay for transportation, and perhaps lodging and apparel.

The importance of this time/purchased services continuum of ways to produce job search is that a single use event of different methods of search represents very different expenditure levels, and therefore different necessary expected outcomes to make the action worthwhile. Registration with a fee-charging employment agency may assure frequent file-search of listed job-openings at no additional expense to the job-seeker. Direct employer contact involves no such ongoing representation (except in those instances where the "don't call us, we'll call you" response reflects a genuine intention to maintain an application in active review status).

⁴² This use of the term "involuntary" is troublesome. Cf. Philip W. Cartwright, "Unemployment Compensation and the Allocation of Resources," in Moses Abramovitz et al. (eds). The Allocation of Economic Resources, Stanford, CA: Stanford University Press, 1959, 65-81.

⁴³ See: David W. Stevens, "Job Search Techniques: A New Index of Effectiveness," Quarterly Review of Economics and Business, 12:2 (Summer 1972), 99-103.

The only way to create a standard definition of use, in an economic sense, is to impose a common activity requirement in all instances. This is why actual in-person contact with employers is established as the common denominator of job search activity. But even this approach, which is far superior to the more common "sought job-opening information from" usage,⁴⁴ involves serious weaknesses. First, the time necessary to initiate an in-person employer contact is not uniform. Indeed, we will demonstrate later that one of the major differences between the claimant and nonclaimant unemployed, and between black and white job seekers, is access to private automobile transportation. This may be attributable, in part, to location of residence; the point is it changes the time necessary to reach, and even the possibility of reaching a given employer's establishment. Therefore the time cost of in-person contact varies across individuals, and at different times for a given individual. One consequence of this is that a uniform job search activity requirement imposes different costs on those who are affected by the requirement.

A second weakness of the common in-person contact requirement to signify use of a job search method is that the value of time varies across individuals too.⁴⁵ So even if we could control, or measure, the time taken to accomplish the employer contact it would still be necessary to calculate the shadow-price of this time for each person. (A shadow-price estimates the value of the resource, in this case time, in its next best use. What has been given up by allocating the time to job search?) At this point noneconomist

⁴⁴ See: Jobseeking Methods Used By American Workers, Bureau of Labor Statistics Bulletin 1886, 1975, p. 4 where it is stated: "Informal methods are generally easier to use than formal methods and have minimal or no cost (emphasis added)." Also see: Thomas F. Bradshaw and Janet L. Scholl, "The Extent of Job Search During Layoff," Brookings Papers on Economic Activity, 1976:2, 515-526.

⁴⁵ See: Gary S. Becker, "A Theory of the Allocation of Time," Economic Journal, 75:299 (September 1965), 493-517; and D.E. Nichols, E. Smolensky, and T.N. Tideman, "Discrimination By Waiting Time in Merit Goods," American Economic Review 61:3-I (June 1971), 316.

readers may despair of understanding the significance of this treatment of search time as a pivotal concept in examining job search behavior. Therefore, let's pause to illustrate the point by analogy. When I develop the time-allocation concept for university students in labor economics classes, the issue is posed by my assertion that "It costs me more to attend a local movie than it costs you (students)". After some confusion and denials perceptive students realize that we all pay the same amount of money for a ticket, but the time spent waiting in line may be more costly to me than for them. Indeed, I tell these students that I would pay a premium price for a reserved seat if I could then arrive at the last minute. Now apply this treatment to job search. If a high value is placed on alternative uses of one's time, and if there is an ability to pay, we should expect to observe a preference for use of those methods of job search which economize on time inputs while absorbing relatively large amounts of purchased services. Conversely, if a relatively low value is given to alternative activities, and if there is a limited ability to pay for purchased services, a more time-intensive approach to search is anticipated.

Returning to the flow diagram, we observe that over the minimum seven week interval⁴⁶ from prior job separation to followup interview, one-third of the respondents had contacted fewer than ten employers in person (STAGE 9). Is this good or bad? We can't say, for several reasons. First, a filtering process occurs which is not reflected in this flow diagram. Contact is initiated only when the expected return from this effort exceeds the anticipated cost of the activity. When information about possible job-openings becomes known it is assessed and may, or may not, lead to further exploration. Second, it only takes one "right" contact to get a job (and perhaps not even that!). We certainly do not want to maximize or minimize the number of in-person contacts made with prospective employers. Rather the objective is to optimize the investment in job search (remembering that this optimum can be expected to differ from the claimant, UIS, and social perspectives). Forcing a premature choice of employment may be just as unwise as

⁴⁶ If any delay occurred between job exit and initial claim filing this interval would be longer than seven weeks, since the seven week period is measured only from the date of claim filing.

as allowing an unduly extended search. Our objective is to establish signals which might reduce the incidence of such miscalculations.

As expected, a comparison of job search activity during the most recent four week period (STAGE 10) with the longer interval extending back to job separation (STAGE 9) reveals a lesser intensity of search effort. There are several reasons for this relationship. First, to the extent that an individual's search strategy is not random (totally uninformed), there is a sequential movement from most promising to less attractive possibilities. At some point in this process the expected outcome from initiating contact becomes unattractive relative to the cost of continued search, and activity ceases until something changes in the individual's circumstances. This static view of the job search process does not allow for periodic arrival of new job opening information. This new information may continuously revise both the relative ordering of opportunities and the time at which the 'stop' threshold is reached. A second reason why the observed intensity of job search might decline for a given cohort of claimants in a static situation is that intensity of search is expected to be negatively correlated with duration of unemployment. However, as is shown below, if there is a sequential movement from "best bets" toward less well informed search we should observe an increase in the number of contacts necessary to produce an acceptable job offer.

During the four week observation interval, the 2,190 claimants who made one or more in-person contacts with potential employers initiated a combined total of 24,869 contacts. Is this credible? There is no independent source of verification of the contacts reported. There are two indicators which support the accuracy of the reported figures. First, each respondent was asked the following sequence of questions:

- . How many employers did you go to in person since you left (company name from Q. 1)?
- . How many of these actual visits to employers would you say have been made since (date 2 from cover page)?
- . This next set of questions refers to these ____ visits.
How many were based on ... (show card 1. Read each category.)

The first question refers to the interval between date of job separation and the followup interview (a minimum of seven weeks). The second question refers to the four weeks preceding the interview. The third question asks the respondent to distribute the number of contacts reported in answering the second question among the standard methods of job search which were listed on a card given to the respondent. The "control total" was never repeated, so a comparison of the sum of the individual method totals and the control total provides an indication of accuracy. In fact, the distributed total is two and one-half percent higher than the control total. Furthermore, the "No Prior Knowledge" method of search was not included on the card given to the respondent. The intent was to elicit all possible instances of some source of prior information about job openings preceding actual employer contact. Only when the respondent volunteered information about use of this approach was it recorded. Over thirty percent of all contacts initiated were so classified! "

A second, less direct, indicator of reporting accuracy is the consistency of the information produced in this study with that developed in two similar studies conducted earlier by the author.⁴⁷ Since the interviewing procedures were identical in all three cases, and non-claimants were included in the former two, it was possible to test for a reporting bias associated with the UI active search requirement.⁴⁸ No such distortion is observed.

We have arrived, some might think via a circuitous route, at the heart of our inquiry. How did the claimants in St. Louis learn about job opportunities which were viewed with sufficient enthusiasm to evoke subsequent employer contacts? And, what resulted from

⁴⁷ See: David W. Stevens, Supplemental Labor Market Information as a Means to Increase the Effectiveness of Job Search Activity, August 1968 (NTIS Accession No. PB 180531); and, _____, Job-Market Information and Self-Initiated Job Search, November 1971 (NTIS Accession No. PB 204594).

⁴⁸ See: David W. Stevens, Supplemental..., op cit, p. 144. The fact that 137 claimants reported having made no actual contacts in the four week period is also appealed to as an indication that the respondents drew no connection between the survey and their continuing eligibility status. (Of course, failure to initiate such contacts is not an indication of ineligibility.)

this collective effort? The sources of job-opening information are listed in the flow diagram (STAGE 11) in the order of their specificity and advocacy on the individual's behalf. The private fee-charging agencies are listed first because they less frequently practice a multiple-referral strategy on the basis of a single job-listing. The "three for one" rule adopted in many ES local-offices (refer three people to each job-order unless the employer specifies a different desired number) places job seekers in direct competition with each other; i.e., reduces each one's likelihood of being offered the job.⁴⁹

The distribution of in-person contacts by originating source of information demonstrates the usefulness of the economic concepts developed earlier, particularly the time/purchased services distinction. Only two percent of the contacts originated with each of the formal labor-exchange intermediaries. This low use rate occurs because the traditional treatment of use in each case reflects only registration with the intermediary; i.e., exposure to their job-listings. The number of subsequent employer contacts which are initiated (our definition of use) depends first on employer listing of openings, and second on the intermediary's advocacy on the registrant's behalf.⁵⁰ This "purchased services" screening activity is what distinguishes the formal labor-exchange intermediaries from other sources of job-opening information. These screening services are purchased either separately or jointly by job seekers and employers in the case of private fee-charging agencies, and by taxpayers (not mutually exclusive of job seekers and employers) in the case of the public employment service.⁵¹

Next, observe that the most frequent use of search methods, meaning actual employer contact, occurred through the "No Prior

⁴⁹ See: David W. Stevens, Statement..., op cit, p. 5.

⁵⁰ Or, more recently, in ES local-offices providing direct registrant access to job-orders with employer identification suppressed so control of referral is still maintained.

⁵¹ Actually, only 15 percent of Grants to States funding in FY 1975 came from general revenues, while 85 percent was drawn from the UI trust fund. This combined Title III funding represented 83 percent of total SESA support. See: William H. Kolberg, Statement..., op cit, p. 30.

Knowledge of Openings (Direct Contact), "Newspaper Advertisement", and "Friend/Relative Suggestion" methods. Three out of every four contacts originated through these sources. The importance of this pattern can be seen most easily by ranking the sources of information by the average number of employer contacts initiated through each by those who made at least one such actual contact. In other words, focusing only on those who did contact at least one potential employer based on a particular source of information, we ask: What is the average number of employer contacts made based on information secured from each source during the four week observation period? The resulting ranking is:

	<u>Number of Contacts/ Number of Users</u>
Public employment service referral	1.9
Public employment service suggestion	2.5
Private employment agency	3.1
Friend/relative suggestion	4.1
Newspaper advertisement	5.6
Telephone listings	6.1
Other	6.6
No prior knowledge of openings	7.6

What relationship exists between this rank ordering and the time/purchased services mix in producing job search? The smaller the input of purchased services, i.e., outside advocacy on one's behalf, the greater the observed number of contacts made. In other words, the less specific the quality of information the greater the input of own time which is required. Provision of a public labor exchange, or other tax-supported investment in job search assistance on claimants' behalf, shifts part of the expense of screening employers to find job-openings from claimants who must therefore invest less time and actual cash outlay to engage in job search, to taxpayers who hope to thereby reduce the duration of claims and realize the associated UI benefit savings. Own time and external screening sources are substitutes in the job search process.

This finding is essential in designing an efficient and equitable job search assistance program.

The payoff to incurring either time or direct money costs in job search is not in making employer contacts, but rather in producing job offers. The logical next step in our interpretation of the claimant flow diagram then, is to ask: How many job offers resulted from the 24,869 contacts made? Referring back to the flow diagram again, in STAGE 13 we find that the answer is (approximately) 731 job offers were generated. (The term 'approximately' is added because 16 respondents reported having received more than three job offers. These responses were treated as four job offers; perhaps introducing a slight underestimate of the actual number of job offers received during the four week interval.)

So, after four weeks of search only 22 percent of those who had made employer contacts had received a job offer. This amounts to less than a three percent success rate ($731/24,869$), or 34 contacts per job offer! Quibble with the accuracy of the total number of contacts made if you wish, the conclusion remains the same: A lot of fruitless job search effort occurs.⁵²

The next level of the flow diagram (STAGE 14) shows what sources of information led to the job offers which were received. We pass through this stage without extended comment because the more important question is: What sources of information produced job leads which resulted in job acceptance? Before passing on to this issue it is noted that the distribution of second and third offers across sources of information differs very little from the pattern of first offers. While this does not necessarily mean that each individual who develops multiple offers does so through the same channels, it does appear that in the aggregate no sequential process of generating subsequent offers through less formal channels occurs.

⁵² Failure to generate a job offer may not indicate the absence of any payoff to the search costs incurred. An applicant may obtain further job leads, or at least increase what is known about the current market for his services.

What proportion of job offers is rejected (STAGE 15)? One out of every five offers received was refused. At this time we are not able to determine to what extent this reflects simultaneous job offers, one of which is accepted and the rest rejected, versus rejection of single job offers to which the alternative status is continued unemployment. The policy implications of these two scenarios obviously differ.

Finally, what sources of job opening information produced job offers which were accepted (STAGE 16)? There are two ways to approach this question. First, how many job offers which were accepted were generated per contact made through each source? And second, what proportion of job offers generated through each source were accepted? The first approach focuses on the efficiency of the technique in placing people in jobs. The second approach addresses the qualitative aspect of job offers generated through these methods. Presumably, the higher the percentage of offers accepted the better the match between job seeker aspirations and employment opportunities "produced" through the originating source of job opening information.

The ranking of sources of job opening information based on job acceptance/contacts initiated ratios is:

	<u>JOB OFFERS</u> <u>ACCEPTED</u>	<u>CONTACTS</u> <u>INITIATED</u>	<u>ACCEPTANCE/</u> <u>CONTACTS RATIO</u>
Public employment service referral	32	555	.058
Private employment agency	26	534	.049
Friend/relative suggestion	160	4796	.033
Public employment service suggestion	14	765	.019
Newspaper advertisement	66	6536	.010
No prior knowledge of openings	66	7714	.009
Telephone listings	4	3083	.001
Other	63	886	.071

Interpretation of this ranking is tricky. For example, the placement rate per contact made is highest for the public employment service. This is fine, but this must be interpreted in the context of FY 1975 ES data which show that claimants comprised 35 percent

of the total number of applicants, but accounted for only 18 percent of the persons placed in jobs⁵³; or that of 6.5 million claimants in FY 1975, only 8.5 percent were placed in jobs by the ES.⁵⁴ Another way of citing the same type of evidence is to refer back to the flow diagram. Out of a total number of placement "candidates" of 2,478 (2,598 minus the 120 persons who were recalled and still working at the time of interview) the ES had placed 32 through direct referral during the four week interval monitored. Even if the 399 persons who located jobs in other ways are excluded, the basic point remains. Indeed, the "public employment service suggestion" source of information⁵⁵--the STC service--proved one-third as effective as direct ES referral without reliance on known job-openings.

Now, we are only considering the outcome aspects of the labor-exchange at this point. If the resource costs of producing these outcomes are introduced, the relative attractiveness of the direct referral and indirect suggestion activities is seen in a new light. It is much more costly to process specific job referral transactions than to convey informal suggestions about where a claimant might seek work. We will return to this issue in a later section.

What else needs to be said about the job acceptance/contacts initiated ratios? They reflect substantial amounts of uninformed job search activity. One can infer that significant costs are also borne by employers in reviewing these applicants with varying degrees of thoroughness.⁵⁶

The second approach to examining the job offers accepted is to relate them to the job offers received by originating source of job opening information. A ratio of 1.0 would indicate that every offer produced was accepted. Again, this only contributes to our understanding of the quality of offers relative to the applicants'

⁵³ Gregory J. Ahart, in Operation of the U.S. Employment Service, op cit, p. 246.

⁵⁴ Ibid, p. 251.

⁵⁵ Actually, this classification should be "public unemployment insurance agency suggestion" because it refers only to the STC job search assistance procedure which was a UI function.

⁵⁶ David W. Stevens, Statement..., op cit, pp. 9-10.

aspirations. Nothing can be said, on the basis of this analysis, about the quantitative performance of each source (see the preceding text). Very interesting results are found:

	<u>JOB OFFERS ACCEPTED</u>	<u>JOB OFFERS RECEIVED</u>	<u>ACCEPTANCE RATE</u>
No prior knowledge of openings	66/75		.88
Friend/relative suggestion	160/186		.86
Public employment service referral	32/41		.78
Private employment agency	26/35		.74
Newspaper advertisement	66/99		.66
Telephone listings	4/8		.50
Other	63/79		.79

Whereas uninformed job search, in the form of direct contact without prior knowledge of job openings, produced few job offers per contact initiated, this approach produced the highest job offer acceptance rate. This undoubtedly reflects the last resort nature of this type of job search. Having exhausted alternative sources of job leads, whatever is discovered through this approach is likely to be accepted. The high acceptance rate exhibited for the "friend/relative suggestion" category is explained in very different terms. In this case, the quality of information at the preliminary screening stage is good, so there is a high probability that a job offer will be accepted. Unfortunately, the friend/relative's assessment of the claimant's qualification for the employment situation to which he is directed, or about the actual existence of a specific job opening, is less precise. This is indicated by the fact that 4,796 employer contacts initiated at a friend/relative's suggestion produced only 226 job offers (including second and third offers).

With the exception of the "no prior knowledge" approach to direct contact; the lower the quality of prior information provided through the source, the lower the subsequent acceptance rate of any offers which are generated. Again, this is consistent with what application of our analytical framework would predict. Own search time can be substituted for purchased job opening information sources, but this will be reflected in more unproductive contacts (and costs

associated with these contacts) and a higher incidence of job offers which are not acceptable to the searcher. This conclusion will be an important element in determining what UIS administrative actions are recommended to modify claimant job search behavior.

The next two items in the flow diagram extend our understanding of two of the job opening information sources which actually led to jobs being accepted. First (STAGE 17), we observe that in 11 of the 14 cases in which the STC interview resulted in a subsequent placement, a specific employer's name was mentioned to the claimant. This indicates that informed local-office UI personnel can provide some assistance. The second item (STAGE 18) indicates whether the person who suggested contacting an employer which led to a job acceptance worked at the same establishment. In two out of every three cases the answer is "yes". One consequence of this, of course, is that those who do not have friends or relatives who are employed in desirable local enterprises will be at a distinct disadvantage in learning about the existence of job openings in these establishments. Who you know matters.

And finally, having followed these 2,598 claimants through one month of their job search activity, what number had found satisfactory employment--from both their perspective and that of their employer--during this four week interval? A total of 120 had been recalled by their former employer and were still working there when interviewed. Another 371 had accepted jobs in which they were still employed when interviewed (STAGE 19), but only 132 of these people still held the same job when interviewed again at the end of their Benefit Year (STAGE 20). So, fewer than 500 out of the 2,598 claimants interviewed had found satisfactory employment solutions to their unemployment status during the four week interval which was monitored. Virtually every shred of evidence at hand suggests that this situation reflects a mismatch of employer 'needs' and job seeker qualifications/aspirations; not an absence of job search effort on the claimants' part.

We leave this particular data set having accomplished two major purposes. The economic concepts set forth earlier have been applied in a specific context to explain observed patterns of

claimant job search behavior. And the extent of abortive job search activity which occurs has been documented in substantial detail. Our next objective is to complement this analysis with the less detailed findings of this and other studies, including a reanalysis of data sets from two of these studies conducted by the author.

A unique feature of the data set compiled to conduct the evaluation of the St. Louis Service To Claimants program is its balanced representation of a downtown local-office clientele and three suburban local-office constituencies. The interoffice analysis which this allowed has produced a number of important findings. For example, this analysis revealed the extent to which employer contacts initiated on the basis of newspaper advertisements is a suburban white male domain. This approach also revealed the fact that the job offer rate for white men and women claimants who reported regularly to the downtown local-office was half that exhibited for their counterparts filing in one of the suburban offices. There are many plausible explanations for these relationships, all requiring extensive multivariate testing before any explanation can be rejected. For our purpose though, it is not even necessary to burden the reader with the descriptive statistics themselves. The existence of interoffice differences in the use of job search methods, and the combined result of such use, is introduced to warn UIS administrators against development of uniform local-office procedures which might result in inequitable treatment of individual claimants and inefficient use of agency resources which might be devoted to job search assistance uses.

The Cleveland and Pittsburgh data sets, compiled by the author in 1970-71 and 1967-68 respectively, are less well suited than the St. Louis data to exploring claimant job search behavior, but they provide some very important complementary and reinforcing insights. First, the limitations of these data sets: Each includes only men who had registered with an industrial occupations office of the respective SESA; the initial followup interval following ES registration was only three weeks in Cleveland and two weeks in Pittsburgh; 84 percent of the Cleveland respondents were claimants, as were just over half of the Pittsburgh registrants.

The major contribution of these two data sets is their inclusion of both claimant and nonclaimant job seekers. Since there are numerous studies of general job search behavior, it is important to determine in what way(s) claimant behavior differs from that of the population at large. Unfortunately, our data apply only to ES registrants. Presumably, most nonclaimant job seekers do not use the public employment service at all.⁵⁷

Reporting an analysis of the Cleveland data first, there are several items which clearly identify claimants as "the elite of the unemployed" compared to other ES registrants. Consider the following Cleveland data:

OWN A CAR AND HAVE A VALID DRIVER LICENSE

<u>Claimants</u>	<u>N</u>	<u>Percent of Study Population</u>
White	439	(80)
Nonwhite	176	(65)
<u>Nonclaimants</u>		
White	38	(57)
Nonwhite	40	(45)

TRANSPORTATION IS A PROBLEM IN MY JOB SEARCH

<u>Claimants</u>	<u>N</u>	<u>Percent of Study Not Employed</u>
White	75	(17)
Nonwhite	66	(31)
<u>Nonclaimants</u>		
White	13	(36)
Nonwhite	23	(52)

⁵⁷ See: Recruitment, Job Search, and the United States Employment Service, R and D Monograph 43, Employment and Training Administration, U.S. Department of Labor, 1976, p. 2-38.

MEANS OF TRANSPORTATION USED IN JOB SEARCH

	Own Car		Public Transportation		Other	
	N	Row	N	Row	N	Row
		%		%		%
White claimants	368	(85)	43	(10)	20	(5)
Nonwhite claimants	136	(65)	51	(24)	24	(11)
White nonclaimants	25	(69)	6	(17)	5	(14)
Nonwhite nonclaimants	14	(32)	22	(50)	8	(18)

The white/nonwhite pattern among claimants, and the claimant/nonclaimant pattern is striking. Job search transportation is more accessible to whites than nonwhites, and to claimants compared to nonclaimants. Again, multivariate statistical analysis would reveal other correlates of these relationships; factors such as inner city residence, age, and normal earnings level. The point is, white claimants can more easily respond to suggested employer contacts than nonwhite claimants can.⁵⁸

Other interesting claimant/nonclaimant relationships which are observed in the Cleveland data include:

- Seven out of every ten claimants expressed an expectation that they would be recalled by a former employer, while fewer than one out of every five nonclaimants expressed such an expectation. This relationship is expected since new entrants and reentrants to the labor force are nonclaimants.
- Among those citing reasons why they were unable to find a satisfactory job, claimants mentioned "lack of jobs" nearly twice as often as did nonclaimants. Since claimants are more likely to have been involuntarily terminated this is not surprising.
- Fewer than one out of every ten claimants who were unemployed when interviewed expressed an intention to await ES action as the sole future method of job search, which is comparable to nonclaimants' reported intentions.

⁵⁸ Cf. R.L. Crosslin and Stanley M. Atkinson, loc cit., Statistical Supplement, pp. 1-9.

- Another one-third of both the claimant and nonclaimant groups who were still unemployed when interviewed expressed an intention to continue checking with the ES for job openings, rather than awaiting ES initiative on their behalf.

These data suggest that the major difference between claimants and nonclaimants, as groups, is the advantages claimants have in ease of transportation, hope of recall by a former employer, and of course UI benefits. But within the claimant population there is clearly a separate continuum of relative advantage; one in which whites are better off than blacks.

The Pittsburgh data, which are now a decade old, corroborate the transportation findings reported from the Cleveland data. The proportion of white claimants who reported having their own car (65 percent) is nearly twice the comparable situation reported by nonwhite claimants (37 percent).

Another perspective on the Pittsburgh and Cleveland data, and on yet another data set from the Claimant Advisory Service Program (CLASP) which was conducted in New York City Local Office 651 (Brooklyn) in 1967-68,⁵⁹ is drawn from Chapter V: "Role of the Employment Service in Reemployment of the Insured Unemployed", of my Upjohn Institute monograph⁶⁰.

CLASP (Brooklyn, 1967-68):

- Did the change in the provision of job search assistance have a perceptible impact on the job finding success of claimants?
- It is concluded that the CLASP services were beneficial, on average, for those...claimants who were not so deficient in one or more characteristics that services in addition to job search assistance would be needed.

⁵⁹ See: CLASP: Report on Research Findings, Operations Study No. 3, Division of Employment, New York State Department of Labor, April 1970, 42 pp.; Ruth Entes, CLASP: An Experimental Advisory Service Program For Unemployment Insurance Claimants, Final Report, Operations Study No. 4, Division of Employment, New York State Department of Labor, March 1971, 160 pp.. The data were provided to the author in EDP card form by Murray Dorkin, Chief, Employment Security Research and Evaluation, Division of Employment.

⁶⁰ David W. Stevens, Assisted Job Search..., op cit, pp. 45-69.

- It is further concluded that the objective of identifying job- and union-attached claimants who should not be referred to an ES office as a matter of course was successfully achieved without untoward effects on the length of time these claimants remained unemployed.
- Finally, it is concluded that CLASP collaboration in job search planning...was effective in accomplishing the stated goal of reducing the average amount of unemployment of most recipients of these services.

SLMI (Pittsburgh, 1967-68):

- The effect of supplemental job information on the intensity of search appears to be stronger than its effect on the composition of the effort.
- ...It is clear that the claimants were prepared to respond to new information. This is a major point which is consistent with the CLASP finding that job search assistance can evoke a significant response by many claimants.
- It is concluded that the level of job search activity by claimants can be increased substantially by using new information that appears credible, without reducing the use of other search methods or information.
- It is important to recognize, however, that the short- and long-term credibility of the information may differ significantly...Over an extended period of time, the unknown value of the supplemental information would be expected to be identified. If acceptable jobs were not, in fact, discovered through the use of this information, the response to it would probably decline.
- The use of supplemental job information is merely a means to achieve an end--the discovery of a satisfactory job opportunity. So the key question is: "What success did the users of the supplemental job information achieve?" Unfortunately, the answer shown by the evidence is "very little".
- It is concluded that the value of the supplemental job information in facilitating the discovery of acceptable job opportunities for claimants as a group was not demonstrated in the SLMI project.

ELMO (Cleveland, 1970-71):

- The ELMO experiment...failed to confirm the desirability of providing jobseeking claimants with additional information about employers in the local area who were known to employ persons with work experience comparable

to the claimants' own background. Examination of the results of the experiment and of the participating claimants' statements about appropriate ES job search services indicates that the users of the agency's services have a strong preference for job market information beyond that contained in the job-order listings.

STCE (St. Louis, 1971-73)⁶¹;

- The results of tests performed suggest virtually no impact of STC services reflected in the initial spell of unemployment.
- (Summary of Effectiveness of Job Search Information Furnished) This section has turned out to be a very 'mixed bag'. Eleven different measures have been examined. Some measured actions, some outcomes, and others subjective attitudes. No pattern developed. There is little evidence from these indices that either supports or contradicts the duration and benefit measures examined in the preceding section. There just is not any definitive evidence that the STC program impacted in any consistent manner on the subgroups defined.

The highlights of four separate attempts to provide job search assistance for claimants reported above reflect the author's own analysis and conclusions. The St. Louis data set represents the best source of information for examining this issue. There are, however, other related studies of claimant job search assistance efforts which should be considered before broadening the scope of inquiry.

Burgess and Kingston have published a series of monographs and papers⁶² reporting analyses of data from The Five-Cities Project

⁶¹ V.C. Austermann, R.L. Crosslin, and D.W. Stevens, Can The Unemployment Insurance Service..., op cit, pp. 55 and 68.

⁶² See: Paul L. Burgess and Jerry L. Kingston, The Five Cities Service-to-Claimants Project: Intercity Comparisons, January 1973, 25 pp. (and individual reports for each of the five participating cities); _____, Unemployment Insurance, The Job Search Process and Reemployment Success, UIS/DOL, June 1974, 133 pp (a compilation of five papers); _____, Applications of Multiple Linear Discriminant Analysis to the Labor Market Experience of UI Claimants, UIS/DOL, June 1974, 26 pp. Also see: Portland Services to Claimants Program Analysis Evaluation, Employment Division, Oregon Department of Human Resources, August 1972, 91 pp. for another adaptation of the STC concepts.

(FCP). The UIS provided supplemental budgets to several states beginning in 1969 to undertake Service-to-Claimants projects in Boston, Minneapolis-St. Paul, Phoenix, San Francisco-Oakland, and Seattle. Based on 1969-70 performance, Burgess and Kingston draw the following conclusions:

1. For the total groups [Treatment and Control], project assistance was extremely effective in the short-run in reducing claim series duration in three of the four cities. Claim series duration refers to the length of uninterrupted beneficiary status. Four cities are cited because data limitations necessitated the exclusion of Seattle.
2. For the total groups, project assistance apparently was not effective in the short-run in reducing spells of unemployment and benefits paid in the benefit year.
3. For the total groups, project assistance had almost no long-run impact on the post project-to-preproject ratios of annual earnings, number of quarters of employment, or mean quarterly earnings recorded for test group persons, compared with the ratio recorded for their counterparts in the control groups.

A Special Program of Rehabilitation for Unemployment Compensation Exhaustees (SPRUCE) was conducted in Buffalo, NY during 1969-71 by the New York State Department of Labor. The purpose of this project was "(t)o determine and furnish extra employability services needed by unemployment insurance claimants who seem likely to exhaust their benefit rights, so as to help them take advantage of available job opportunities."⁶³ This program didn't screen claimants until at least the 13th week of benefit status, and provided training, guidance, relocation, medical assistance, and other rehabilitative services far beyond the scope of job search assistance. It is therefore outside the scope of our inquiry.

CONCLUSIONS FROM REVIEWING WHAT IS KNOWN
ABOUT CLAIMANT JOB SEARCH BEHAVIOR

The preceding section has presented a detailed reanalysis of the most extensive data sets available for examination of claimant

⁶³ Project SPRUCE, Volume 1. Final Report, Labor Research Report No. 8, May 1973, Division of Research and Statistics, New York State Department of Labor, p. iv. (Also see Volume 2, Supplement to Final Report.)

job search behavior, and of attempts which have been made to modify that behavior. The latter efforts are still best summarized by a statement of the author's published three years ago:

The reader is urged to recognize that the success achieved through the provision of special assistance in increasing job search effort can be separated from the lack of success of the search effort in achieving reemployment, as observed in these studies. It would thus appear that the substance of the job search assistance provided can be modified with some assurance that the same type of initial response; i.e., increased search effort, will be forthcoming. Then, if the modified assistance produces more favorable results in terms of reemployment, one would expect a continued positive response by claimants to the assistance offered over the long run. Continued experimentation with the kind of search assistance supplied may well lead to the identification of a proper balance of substantive job information and counseling that would result in more satisfactory service to claimants.⁶⁴

The detailed description of job search activity during a four week period by the 2,598 St. Louis claimants continues the author's effort to alert both researchers and administrators to the misleading signals obtained from reliance on traditional definitions of use of job opening information sources.⁶⁵ Only through accurate recording of actual employer contacts made in the job search process can necessary estimates of comparative efficiency among sources of job opening information be calculated. In the absence of such data we are unable to determine what the consequences of job search modification will be. This is particularly important in the case of UIS administrative actions to intervene in claimant job search activity, because many of the costs of this action will be external to the agency and therefore not considered in determining whether and how to proceed. For instance, requiring designated claimants to demonstrate that they satisfy active search and willingness to accept available (suitable) employment continuing eligibility conditions

⁶⁴ David W. Stevens, Assisted Job Search..., op cit, pp. 68-69.

⁶⁵ Some readers may wonder why I have not reviewed, again, the many general studies of job search behavior, including BLS Bulletin 1886, loc cit, and, Recruitment, Job Search and the U.S. Employment Service, loc cit. Therefore, a table from D.W. Stevens, Supplemental Labor Market Information..., loc cit, which reports the results of 22 such studies conducted in the 1930-1966 period, is reproduced as an Appendix to this paper.

by, say, providing evidence of having made a certain number of employer contacts each week, introduces the following effects:

- Claimant costs of job search may increase; if the required number of contacts exceeds the number which would have been made in the absence of the requirement. This increase in cost will be largely "hidden", because it will occur mainly in the form of a greater input of claimant time.
- Employer recruitment costs may increase; if the number of applicants screened exceeds the number who would have been reviewed in the absence of the UI administrative requirement, or if the applicants who are screened have a lower probability of being offered a job or of accepting a job which is offered (assuming the same employer expenditure in screening "voluntary" and "involuntary" applicants.) There is an extensive literature on screening phenomena⁶⁶ which is pertinent here. If claimant status is viewed by employers as a signal of lower probability of job acceptance, lower productivity and job satisfaction if hired, or shorter job tenure, a variety of protective steps may be taken to avoid incurring associated personnel costs. First, the employer may refuse to consider claimants at all. Second, the employer might restrict the types of jobs for which claimants will be considered; protecting those which involve substantial employer-borne training costs. And third, the employer may exercise this restriction on training expenditure regardless of the position into which a claimant is hired. These claimant and social costs, in the form of lower earnings and foregone productivity, will be hidden from the UIS administrator's view.
- If all claimants are not required to satisfy the same administrative requirement there will be distributive effects as well. What criteria will be chosen to select those for whom the job search requirement is to be imposed? (The next section addresses this question.)
- There is also a distributive effect among employers, since claimant contacts will not be uniformly distributed across employers. (The author has noted before that to the extent these employers connect the new, unsolicited and unwanted, flow of applicants with their listing of job-openings with the public employment service, one action which must be anticipated is some reduction in such listings.)

⁶⁶ Cf., A. Michael Spence, Market Signalling: Informational Transfer in Hiring and Related Screening Processes, Cambridge, MA: Harvard University Press, 1974.

There are two possible administrative rationales for imposing a specific job search activity requirement to maintain continuing eligibility. First, there may be a conscious desire to increase the claimant costs associated with maintaining benefit eligibility, thereby shifting the threshold beyond which it is no longer worthwhile to maintain eligibility. This will reduce the claims load and the immediate drain on the Trust Fund. Of course, it will not be a costless exercise to administer the new requirement, so the net saving will be less than the reduction in benefit flows. Also, the long-term consequences of this action will be unknown. If individuals now make poorer decisions in choosing a job, they, the UI system, and the larger society may bear the effects of this hasty action. However, there is little evidence about what these losses would actually amount to.

The second administrative rationale for intervening in a claimant's job search behavior is a conclusion that the SESA local-office really can improve the individual's job finding prospects. The first rationale was based on a difference between the claimant's incentives and the UI system's incentives. This second approach directs attention toward more altruistic motives: Help the individual claimant reestablish himself in satisfactory employment, thereby achieving UI system and social goals as well. The first rationale requires careful attention to the social insurance principles of the UI system without the signals appropriate to striking such a fine-tuning of the program. An expected result would be recurring swings along an administrative requirements--sanctions for nonconformity continuum. The second rationale involves no explicit fine-tuning. It produces a supportive procedure in which administrative confidence is placed. If the procedure merits this confidence, claimants will become aware of the benefits to be derived from participation and the coercive aspect can be minimized.

The next section explores one approach to defining routine screening criteria which could be used to identify claimants who might benefit from job search assistance through SESA local-office auspices.

TOWARD THE IDENTIFICATION OF ROUTINE
SCREENING FACTORS TO BE USED IN SELECTING
CLAIMANTS FOR JOB SEARCH ASSISTANCE

The preceding sections relied primarily on existing knowledge, although extensive new analysis and translation of technical concepts for administrative use has been stressed. This section is exploratory in nature, providing only a hint of what might be found by pursuing such methods in the future. The technique and purpose are the same as reported by Burgess and Kingston in 1974:

The purpose of the [multiple linear discriminant] analysis was to explore the feasibility of using such techniques to identify, at the time of initial UI claims filing, certain mutually exclusive groups of claimants. If reasonably accurate 'screening profiles' could be developed for any of a number of different mutually exclusive classifications on the basis of data normally obtained from claimants at the time they first file for benefits, discriminant techniques would represent a potentially important policy tool for identifying, for example, the level and type of UI assistance appropriate for each claimant.⁶⁷

The objective of the analysis reported here is to identify claimant characteristics which might allow us to consistently predict the length of spell of unemployment which will be experienced. If this capability exists the administrative uses of this information are apparent. Since we cannot hope to specify the correlates of duration classification exactly, we must consider the consequences of misclassification.⁶⁸ This is the same target inefficiency issue which has been mentioned before. Imprecise predictors will sometimes allocate the wrong people to given duration categories, which will result in claimants being assisted who "don't need help" and other claimants not receiving help they "need". For purposes of this illustrative analysis it is assumed that a long spell of unemployment is to be avoided if possible. We are aware that multiple spells of unemployment, each of which is brief, may constitute as serious a

⁶⁷ Paul L. Burgess and Jerry L. Kingston, Applications of Multiple Linear Discriminant Analysis..., op cit, p. 1.

⁶⁸ Burgess and Kingston, *Ibid*, develop this concept. See pp. 4 ff.

problem; and perhaps one that is more susceptible to corrective action.

Burgess and Kingston analyzed only the overall capability of the discriminant functions they specified to correctly classify claimants into (1) exhaustee/nonexhaustee categories; and (2) claims series durations of 1-4 weeks, 5-15 weeks, and 16 weeks or more. Our objective is both more ambitious and more fraught with problems. We seek to estimate the relative importance of individual claimant characteristics in determining the classification power of the discriminant functions specified. We use the actual length of the first unemployment spell, from time of prior job separation to time of first reemployment (or the end of the Benefit Year if this occurred first). And we examine both three-group and five-group classifications of unemployment duration, to test the sensitivity of the results to the refinement of classification.

The three-group analysis attempts to classify claimants into less than 27 weeks, 27-52 weeks, and more than 52 weeks categories. The first category is roughly comparable to Burgess and Kingston's "nonexhaustee" classification (if maximum potential duration is assumed constant at 26 weeks). The third category includes those who had not returned to work by the end of the full Benefit Year observation period. The more highly refined five-group analysis uses the following categories: Less than 14 weeks, 14-26 weeks, 27-39 weeks, 40-52 weeks, and more than 52 weeks. These classifications are, in part, an artifact of the desire to create an approximately equal number of observations in each category.

The "routinely available" claimant characteristics which were used in specifying the discriminant functions are: Sex, Age (continuous form), Color (black/white), Education (continuous form), Marital Status (head of household/not h. of h.), Years Worked on Prior Job (continuous form), Local-Office (suburban/urban), Weekly Benefit Amount, Maximum Benefit Amount, Hourly Pay on Prior Job, and Expectation of Recall (yes/no). While this specification is plausible, it is far from definitive. No occupational or industry attachment measure is used. No attitudinal indices are introduced.

The source used to conduct this discriminant analysis is the St. Louis STC program evaluation data set.⁶⁹

The following excerpts from M. M. Tatsuoka, Multivariate Analysis, "Discriminant Analysis and Canonical Correlation" (pp 157-170) may be of some help in interpreting the results which follow:

...(T)he problem of studying the direction of group differences is, equivalently, a problem of finding a linear combination of the original predictor variables that shows large differences in group means.

The first step...is to decide on a criterion for measuring such group-mean differences....(T)he familiar F-ratio for testing the significance of the overall difference among several group means on a single variable suggests an appropriate criterion.

Once we have decided on a criterion for group differentiation, our task reduces to that of determining a set of weights...., which maximizes the discriminant criterion.

...(T)he dimensions represented by the discriminant functions may be susceptible to meaningful interpretations.... In seeking to interpret the discriminant functions, we would want to know which of the original p variables contribute most to each function.... (W)e must compare the weights that would be applied to the predictors in standardized form.

It may often happen, however, that the number of significant discriminant dimensions may be even smaller. That is, not all of the discriminant functions may represent dimensions along which statistically significant group differences occur.

Three-Group Analysis

The standardized discriminant function coefficients for Discriminant Functions One and Two are:

⁶⁹ See V.C. Austermann, R.L. Crosslin, and D.W. Stevens, Can The Unemployment Insurance Service..., loc cit, for a detailed description of this data set. The discriminant analysis for the present paper was conducted by Christy Austermann.

<u>Variable*</u>	<u>Discriminant Function One</u>	<u>Discriminant Function Two</u>
Sex	1.3	-3.1
Color	2.7	-5.5
Age	-5.0	-1.3
Head of household	1.4	-5.3
Education	2.3	-1.8
Years worked on prior job	2.1	1.5
Local-office location	-2.8	-6.3
Weekly benefit amount	-5.2	1.1
Maximum benefit amount	6.7	3.0
Hourly pay on prior job	2.7	-2.2
Expect recall	2.9	4.0

* The following dummy variable classes were given a value of one: Males, Whites, Heads of Household, Urban Local-Office, Expect Recall.

N = 1,644

Each of the standardized discriminant function coefficients shown above represents the relative contribution of the associated variable to the function. The sign of each coefficient indicates whether the contribution of the variable is positive or negative. In Discriminant Function One for example, claim filing in the Downtown (Urban) local-office is twice as important as head-of-household status, and of opposite sign.

Discriminant Function One separates group 1 (less than 27 week spell of unemployment) from group 3 (continuously unemployed through the end of the Benefit Year). The most important characteristics associated with group 3 membership are: Young, filed claim at the Downtown (Urban) local-office, and eligible for a relatively low weekly benefit amount. While these characteristics would be expected to reflect labor market difficulties, it is surprising to find that this group exhibits a single continuous spell of unemployment, rather than intermittent periods of work and unemployment.

Discriminant Function Two distinguishes group 2 (27-52 week spell of unemployment) from groups 1 and 3. The most important

predictors of group 2 status are: Expectation of recall, relatively high maximum benefit entitlement, and longer job tenure in previous job. Of course these three factors are not unrelated. Job stability is a plausible determinant of both UI benefit entitlement and recall expectation.

There are several available measures of the relative ability of the functions to separate the groups along the duration of unemployment dimension sought. Wilk's lambda, and its associated chi-square test of statistical significance, indicates the discriminating power existing in the variables included. The higher the value of Wilk's lambda the less explanatory power is present in the variables. The lambda values of 0.918 for the variables before the discriminating power of Discriminant Function One is considered, and 0.983 after Discriminant Function One is considered indicates the low level of discriminating power which is present in either case. The corresponding eigenvalues of 0.071 and 0.017 respectively also reflect the relative ability of each function to classify cases into the identified groups. Discriminant Function One contributes 80 percent of the discriminating power, and Discriminant Function Two contributes 20 percent.

The administrative value of this analysis would lie in its ability to classify individuals at the time of initial claim filing on the basis of predicted claims (unemployment) duration using only known characteristics (discriminating variables). Each individual is assigned a classification score which represents the sum of the standardized coefficients multiplied by the discriminant variable values exhibited. A distinct linear combination of variables is produced for each group assignment tested, and the individual case is allocated to the group which reflects the highest probability of accurate assignment.

The three-group prediction results are shown in the following tabulation:

<u>Actual Group</u>		<u>No. of Cases</u>	<u>Predicted Group Membership</u>		
			<u>Gp. 1</u>	<u>Gp. 2</u>	<u>Gp. 3</u>
Group	1	764.	606. 79.3%	4. 0.5%	154. 20.2%
Group	2	329.	231. 70.2%	1. 0.3%	97. 29.5%
Group	3	551.	333. 60.4%	0. 0.0%	218. 39.6%

Percent of "Grouped" Cases Correctly Classified: 50.18%

Using Discriminant Functions One and Two just over half of the 1,644 claimants, whose actual length of initial spell of unemployment was known beforehand, were correctly classified using the specified predictors. Obviously, a particular weakness of these predictors lies in their inability to identify those who will get jobs within the year, but not before six months have elapsed.

Are these results good or bad? Relative to what? How would local-office staffs have performed in doing the same classification exercise based on registration forms only? (This is more than a rhetorical question. This comparative information is precisely what UIS administrators need to guide their decisions about whether to proceed in developing techniques such as these.) We turn now to the five-group analysis, with some prior expectations based on the three-group results.

Five-Group Analysis

Again, only two discriminant functions have a reasonable amount of classification power (although four functions would be necessary to classify five groups). The relative discriminating power of Function One is 60 percent, and that of Function Two is 23 percent; with eigenvalues of 0.078 and 0.031 respectively. Wilk's lambda before Function One is considered is 0.880 and after Function One it is 0.949. Function One separates groups 1 (less than 14 weeks spell of unemployment) and 2 (14-26 weeks spell of unemployment) from group 5 (continuously unemployed through the end of the Benefit

Year). Function Two then separates group 1 (less than 14 weeks spell of unemployment) from group 2 (14-26 weeks spell of unemployment). Obviously, this classification power is of particular UI program interest.

The standardized discriminant function coefficients for each of these functions are shown below.

<u>Variable*</u>	<u>Discriminant Function One</u>	<u>Discriminant Function Two</u>
Color	3.3	2.9
Age	-4.6	-1.1
Head of household	1.5	1.5
Education	2.5	-1.1
Years worked in prior job	1.4	0.5
Local-office location	-2.8	-0.0
Weekly benefit amount	-4.9	-2.6
Maximum benefit amount	6.9	2.3
Hourly pay on prior job	2.6	0.4
Expect recall	3.0	-9.2

* The following dummy variable classes were given a value of one: Whites, Heads of Household, Urban Local-Office, Expect Recall.

N = 1,644

The interpretation of Discriminant Function One in this five-group case is identical to that of the three-group analysis. The same predictors are important in classifying the long-term unemployed. Similarly, Function Two shows expectation of recall to be the most important factor in predicting group 2 membership.

The five-group prediction results are:

Actual Group	No. of Cases	Predicted Group Membership				
		Gp. 1	Gp. 2	Gp. 3	Gp. 4	Gp. 5
Group 1	435.	204. 46.9%	49. 11.3%	0. 0.0%	0. 0.0%	182. 41.8%
Group 2	329.	118. 35.9%	71. 21.6%	0. 0.0%	1. 0.3%	139. 42.2%
Group 3	219.	86. 39.3%	37. 16.9%	0. 8.0%	0. 0.0%	96. 43.8%
Group 4	110.	26. 23.6%	15. 13.6%	0. 0.0%	0. 0.0%	69. 62.7%
Group 5	551.	116. 21.1%	54. 9.8%	0. 0.0%	0. 0.0%	381. 69.1%

Percent of "Grouped" Cases Correctly Classified: 39.90%

As expected, the percent of correct classification has fallen as we attempt to produce a more finely-tuned predictive procedure.

Summary

Our achievements have been modest at best in identifying screening factors which might be routinely adopted at the local-office level to predict, at the time of initial filing, which claimants are likely to experience long spells of unemployment. Remember though, that the St. Louis claimant sample excluded all of those who returned to work within three weeks from the time of initial claim filing. Also, only those filers who were establishing a new Benefit Year were included. In other words, many of the "easier" cases to predict from a total claimant flow have not been included in this analysis.

This discriminant analysis approach to predicting claimant experience is hardly at a stage to be introduced as standard procedure. Having said this, there are important refinements which might be explored. The author concurs with Burgess and Kingston's conclusion that discriminant analysis should be conducted in a simulated operational context, particularly with the advent of comprehensive Continuous Wage and Benefit History (CWBH) files in some states.

A different approach, and one with much greater intuitive appeal for the statistically unsophisticated, is to plot the cumulative percentage of individuals whose initial spell of unemployment ended at any specified time during the Benefit Year monitored. The visual impact of this approach is demonstrated in the four diagrams which follow this page. The particular claimant attributes chosen for illustrative purposes include those found to be of the greatest relative importance in the discriminant analysis just described.

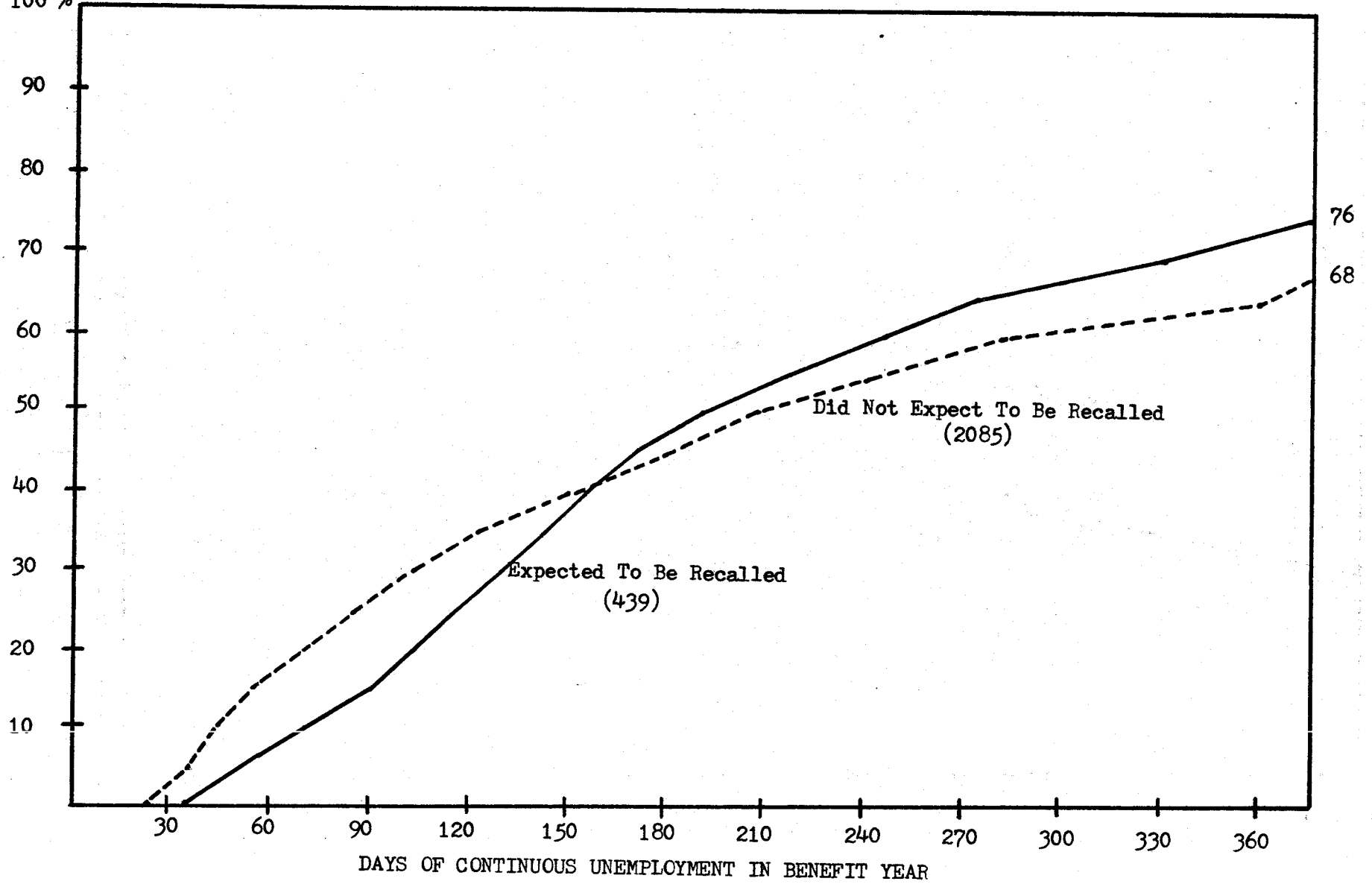
Readers are urged to read across any one of the diagrams at any employed percentage (vertical) level to gain a sense of the difference in length of time it took claimants with the respective attributes plotted to return to work. Or, select any point along the horizontal axis (representing a given elapsed time) and reading up and down determine the difference in the proportion of claimants from each group that had returned to work. The potential uneven impact of uniform administrative treatment of claimants must be estimated in light of relationships such as these which have been hidden from view until now.

In the next section we return to a survey approach in describing some of the new information sources and materials which might be used in providing reemployment assistance for claimants.

PERCENT
EMPLOYED

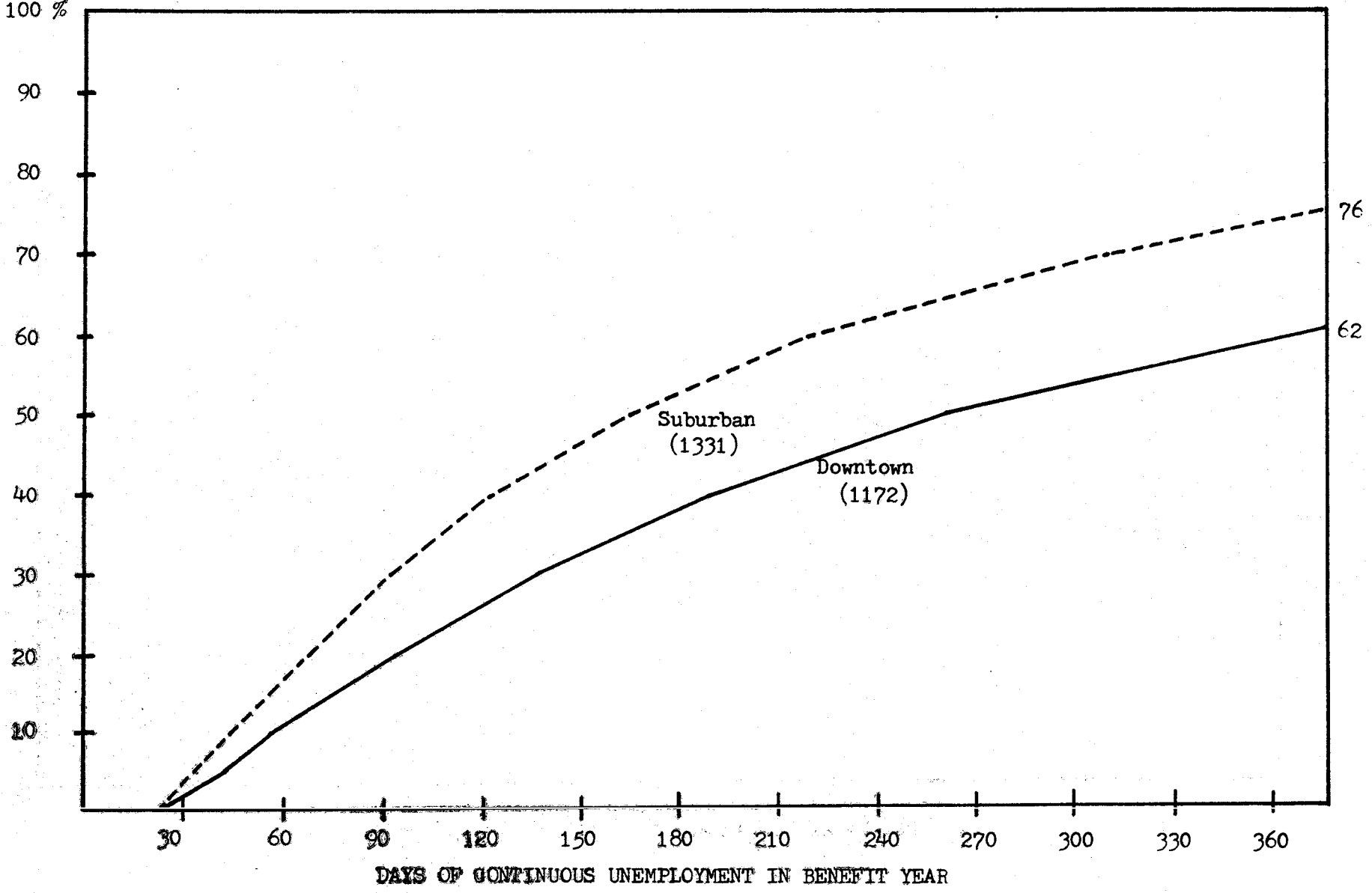
EXPECTATION OF RECALL AT TIME OF CLAIM FILING

100 %



PERCENT
EMPLOYED
100 %

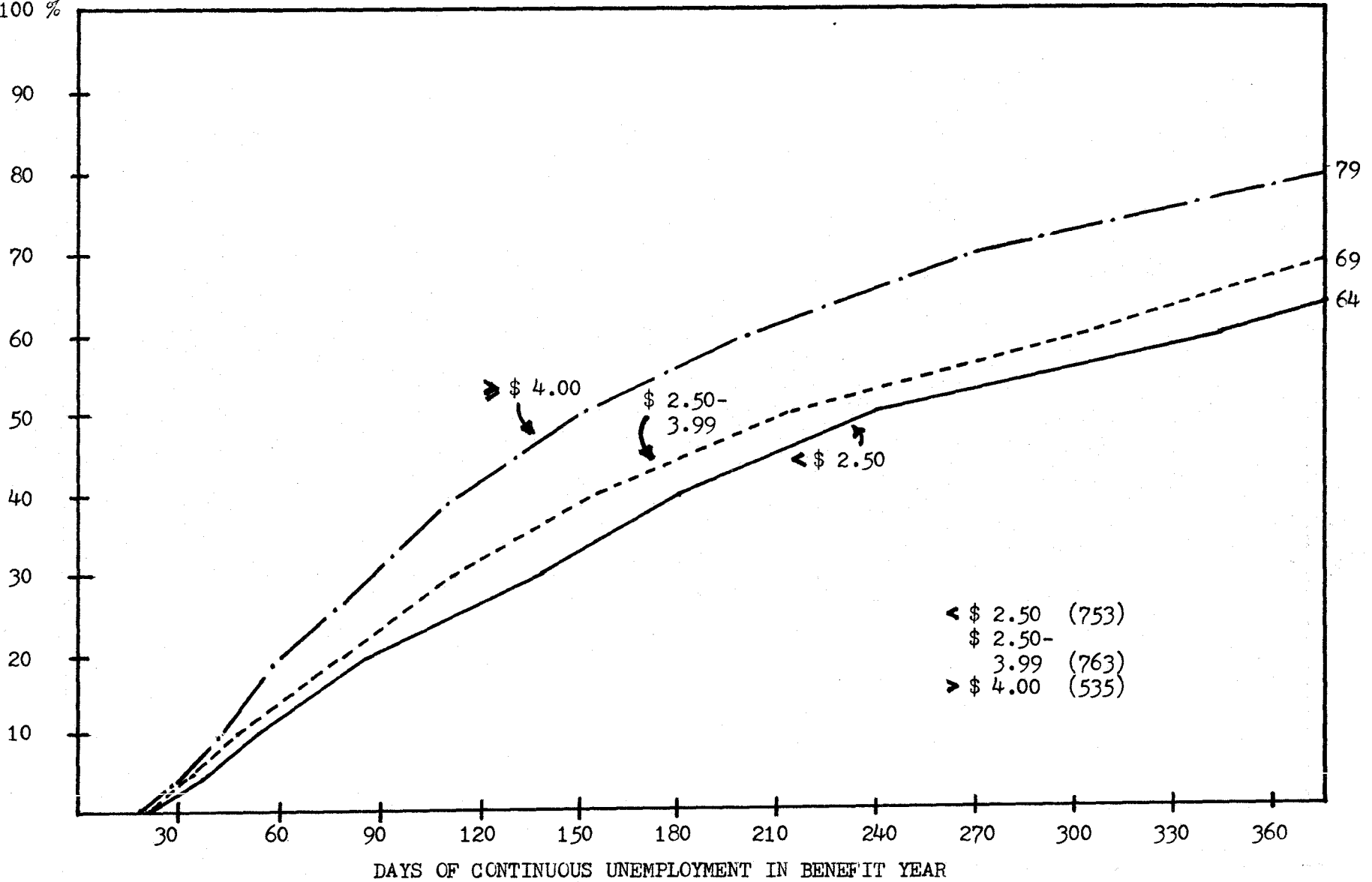
LOCATION OF LOCAL-OFFICE WHERE CLAIM WAS FILED



-76-

PERCENT
EMPLOYED
100 %

WAGE LEVEL IN FORMER REGULAR JOB



PERCENT
EMPLOYED

CLAIMANT SEX/COLOR

100 %

90

80

70

60

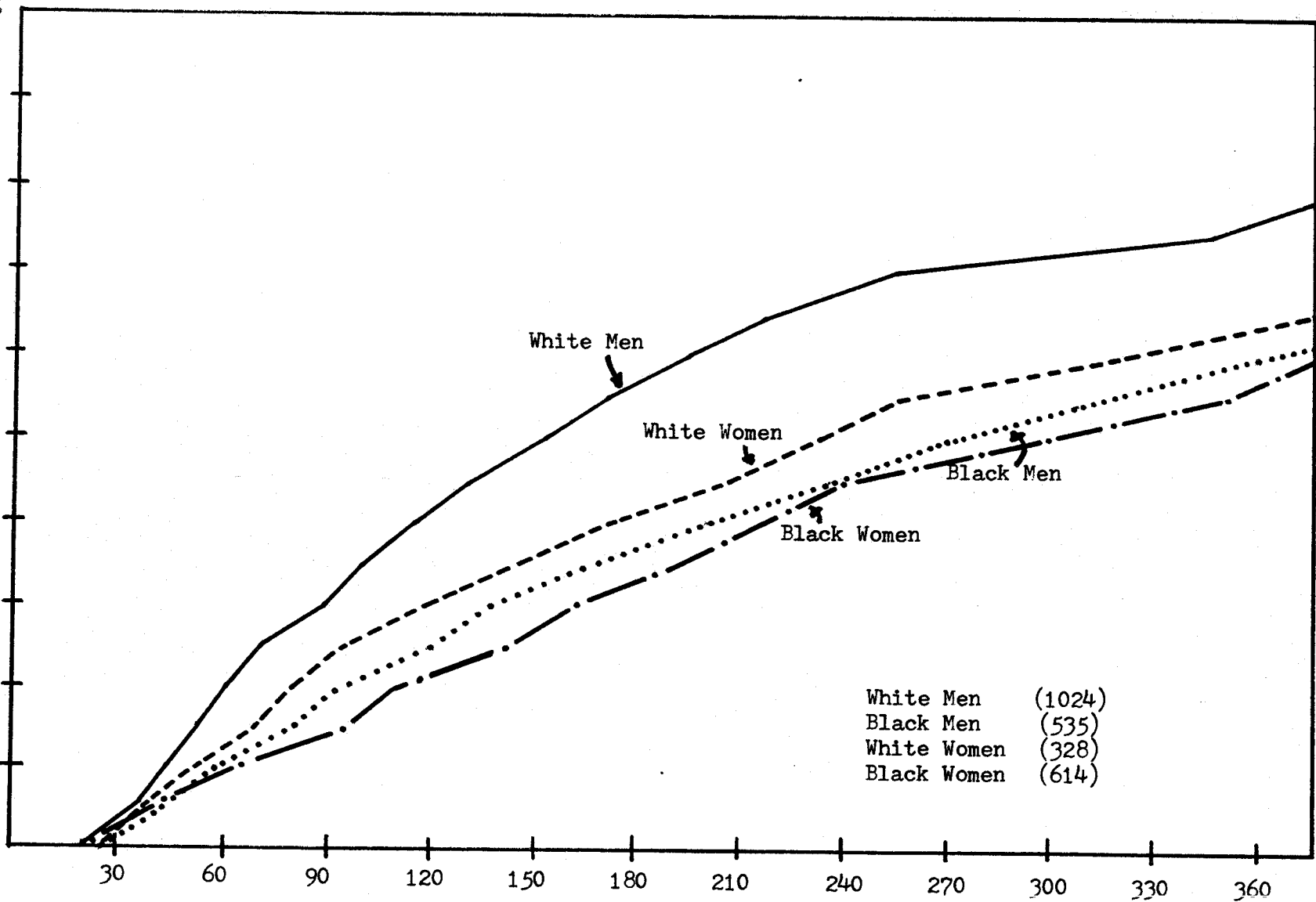
50

40

30

20

10



78

66

62

60

DAYS OF CONTINUOUS UNEMPLOYMENT IN BENEFIT YEAR

IDENTIFYING INFORMATION SOURCES AND
MATERIALS FOR USE IN PROVIDING
CLAIMANT JOB SEARCH ASSISTANCE

If ever a topic existed that provides built-in assurance that whatever is written will be obsolete before the ink is dry, this is it. Indeed, there are so many sources that the real need is for some guidelines which local-office staffs can use to establish priorities for information development. Excellent catalogs,⁷⁰ operations manuals,⁷¹ and analytical perspectives⁷² already exist. Additional materials are in the final stages of preparation.⁷³ What complementary role, then, is left for this inquiry to serve?

The newest, and most promising, sources of information which might be converted to claimant job search support uses (will) appear within the SESA's themselves.⁷⁴ One need only read between

⁷⁰ Cf. Arthur I. Shiigi, Handbook For Developing Job Search Materials, USES/DOL, draft dated May 22, 1974, which was designed for use by SESA staff with responsibility for Job Search Information (JSI) functions in support of the Job Information Service.

⁷¹ Cf. Job Information Specialist's Operations Manual, prepared for the UIS/DOL, Computing and Software, Inc., February 1973.

⁷² See: Marged S. Sugarman, A Systematized Approach to Using Job-seeker Information As A Means of Maintaining A Localized Job Search Information System, Northern California Employment Data and Research Section, Employment Development Department, State of California, July 1974, 277 pp.; and, Andrew M. Sum, "Labor Market Information From a User's Perspective," manuscript dated December 17, 1975, 58 pp.

⁷³ Olympus Research Corporation is preparing a Labor Market Analysis Handbook which is intended to qualify labor market analysts to serve multiple constituencies. Also, the U.S. Employment Service, Office of Technical Support, Division of Occupational Analysis has a ten city Job Search Information special project underway. The purpose of this project is to develop and disseminate prototype local information, and to export accumulated expertise to other sites.

⁷⁴ See: Glen A. Siebert, "First Progress Report on the Employment Service Potential Project," Employment Data and Research Division, California Employment Development Department, June 1976, 71 pp. + appendix and tables; "Progress Report: Employment Service Potential Project," Manpower Information and Research, Nevada Employment Security Department, June 15, 1976, 14 pp. + appendix and tables; Virgil J. Brown, Missouri Employer Identification and Management Information System, Missouri Division of Employment Security, January 1976, 21 pp.; and, Malcolm S. Cohen, A Study of On-Line Use of Job Information in Employment Service Local Offices, July 1975, (draft), 135 pp.

the lines of the Employment Security Automation Plan (ESAP)⁷⁵ to visualize the following capabilities:

- In the 37 quarterly wage-reporting states, in which covered earnings are reported by employer identification number and social security number of the recipient, standard computer programs will be available to produce quarter-to-quarter changes in employer-specific staffing patterns. Both separations and accessions will be exhibited. These data will be compiled in a flexible data processing format so various configurations can be examined; e.g., inter-firm differences in turnover within an industry, or interarea differences in separations within an industry. (The Employment Service Potential project in California and Nevada is developing these capabilities.)
- Using longitudinal Continuous Wage and Benefit History (CWBH) files, and standard inquiry routines, determine which claimants are frequent 'repeaters' and conduct an analysis of the correlates of such recurring claims experience. One aspect of this inquiry would involve a procedure to detect particular firms and industries which create frequent claims filing. For job search assistance purposes, the intent of this line of exploration would be to develop warning signals about particular sectors of the covered employment base.
- Access an integrated Employment Security Automation System, using standard software, to audit the frequency and composition of ES job-referral of claimants and subsequent actions on such referrals. Conduct this analysis at a local-office level to determine the interoffice range of exposure to job opportunities claimants are receiving through ES auspices.

⁷⁵ Employment Security Automation Plan, ETA/DOL, April 15, 1976, 37 pp.

- Selecting initial claims only and again using routine procedures, examine the distribution of claimants' most recent work experience; say, by occupation and industry codes.⁷⁶ The purpose of this analysis would be to identify concentrations of claimants in particular sectors. This study should be accomplished at the local office level, because the results would be expected to vary across offices. This exemplifies the difficulty of standardizing job information materials and inquiry procedures.
- Conduct a benefit-cost analysis of experimental variations of local-office procedures designed to enforce claimant satisfaction of continuing eligibility requirements and to facilitate claimants' return to work.

These are just a few exemplary types of analyses that will be feasible in the near future using data generated by the SESA's themselves in the routine conduct of their unemployment insurance and labor exchange functions. It is essential that this promise within the SESA data processing systems be brought to fruition. However, there are many lessons to be learned from the Employment Service Automated Reporting System (ESARS) experience. There are advantages to being second; one can learn from a predecessor's experience. Fixed-format reporting, of the ESARS type, would not produce the necessary data to respond to the types of questions just posed.

A contractor⁷⁷ is currently studying the entire USES management information system in an attempt to determine what data items are needed by whom at what times to support management decisions

⁷⁶ D.W. Stevens and V.C. Austermann, Equity and Efficiency Considerations..., loc cit, found that "twenty-five two-digit occupational categories account for 76 percent of the claimants who filed full (ES) applications. One-third of the claimants are found in six of these categories" (p. 49). This suggests a much narrower range of job information needs than might normally have been expected to be needed.

⁷⁷ Macro Systems Incorporated. Through a subcontract to Abt Associates, Inc. the author is participating in this study to develop a statement of Research and Development data needs vis a vis the USES.

at the national, regional, state, district, and local office levels. A small-scale replication of this approach in the UIS job opening information domain might be appropriate at this time, particularly in light of the large number of independent efforts to develop materials and procedures which are already underway or planned. Who is the intended user of materials which are available or under development? What indications do we have that this person will actually make appropriate use of these materials? It is not enough to assert that a local-office staff member should behave in a desired way. Are the known incentives such that the desired behavior is also expected?

Can we set forth priorities, or short of this criteria for the establishment of priorities, for the development of job information materials for UI staff use at the local-office level? Yes. First, a procedure is needed to guide local-office staffs in determining the relevant characteristics of their claimant clientele. What work experience and other qualifications are represented? Do these indices accurately reflect claimant intentions about future employment? (In this regard, the reader is urged to consider the verbatim comments by claimants published as Appendix One: Claimant Attitudes Toward Local Office Services and Procedures, pp. 102-115 in V.C. Austermann, R.L. Crosslin, and D.W. Stevens, Can The Unemployment Insurance Service Improve The Employment Prospects of Claimants? There is evidence here that the traditional notion of claimant unwillingness to consider a range of job types is a myth.)

How does one determine what the "relevant" claimant characteristics are? We concluded the previous section on screening factors by saying it is premature to introduce standard guidelines for this purpose. At this time, then, documented trial-and-error will still be necessary. Flag selected claims records at the time of initial filing based on predetermined criteria, and then record the accuracy of expectation about the claims series at some subsequent date. This procedure merely substitutes the local-office staff's expertise for the computer in searching for classification power. Why wasn't the predictive power of our discriminant functions higher? Perhaps local-office staff expertise can produce

a better discriminant function. Step one would then be accomplished: Know your "product".

Second, develop the use of SESA program data to identify "where the action is" in local labor markets. It was noted above that quarter-to-quarter accessions and separations in the covered sector are known (in the 37 wage-reporting states). These data provide no occupational detail. The ESP project in California and Nevada is using the BLS industry-occupation matrix to transform industry data to occupational components. This assumes that turn-over rates are uniform across occupations within an industry, which is obviously inaccurate (the ESP analysts know this). To the extent that separations result in claims it is possible to identify the occupational composition of these flows.

What can be accomplished on the accessions side of the equation? The Utah Department of Employment Security has experimentally included an occupational identifier for all new hires in the quarterly wage reporting by covered employers. The results of this procedure should be known in the next few months. It is conceivable that such a procedure, conducted on a periodic basis, perhaps with rotating samples drawn from designated sectors (as the Occupational Employment Survey is presently conducted in three-year cycles), can provide appropriate information about the dynamics of local labor markets. The OES program itself is an available resource to be drawn upon.

These suggested uses of SESA data-processing capabilities and data, some of which are already in demonstration stages, leads us directly to the next topic to be explored: What are the respective roles of the unemployment insurance and employment service units in this job search assistance domain?

UNEMPLOYMENT INSURANCE SERVICE AND EMPLOYMENT SERVICE
ROLES IN PROMOTING CLAIMANT
JOB SEARCH ASSISTANCE

Our purpose here is not to review the historical development of UI-ES relationships⁷⁸, or to examine the ES labor-exchange function per se.⁷⁹ Rather, the ideas expressed are limited to the author's conclusions about potential areas of cooperation and conflict between the UIS and USES when the claimant reemployment assistance effort is introduced in a formal manner.

At the present time the name of the ES labor-exchange game is placements. In House testimony last June (see footnote 34) I developed the economic reasons why the ES will not be an enthusiastic partner in the testing of claimant willingness to accept available (suitable) employment. Briefly, the argument develops as follows: Mandated ES registration of many claimants eliminates the voluntary action signal sought by job placement interviewers to guide their determination of expected job acceptance probabilities prior to referral. If a job placement outcome nourishes the system, anticipated acceptance probability prior to referral is a relevant screening criterion. The employer's interest in this matter has already been described in a previous section: Applicants who appear, in part, to satisfy an administrative requirement to maintain continuing UI benefit eligibility, are therefore more costly to screen.

These negative aspects of mandated ES registration for claimants are countered, at least partially, by the exposure to

⁷⁸ See: David W. Stevens, Assisted Job Search..., loc cit, Chapter II: "The Employment Service and the Unemployment Insurance Program: An Evolving Relationship," pp. 5-10, and the citations found there for additional historical perspective. Also see: "Public Employment Service System Review and Oversight," (preliminary), ETA/DOL, June 11, 1976, which will accompany Assistant Secretary Kolberg's testimony cited in footnote 10 when the Hearings volume appears.

⁷⁹ Cf. Richard M. Jones, "The Role of Public Employment Agencies in the Labour Market," Industrial Relations Journal, 3:4 (Winter 1972), 43-50; The Public Employment Services and Management, Supplement to the Final Report, "Economics of a Public Employment Service" (three papers), CECD, 1966, 137-177; Noah Meltz, "The Economic Role of Canada's Public Employment Service: Preliminary Study," Dept. of Manpower and Immigration, Toronto, Oct. 30, 1969, pp. 2-13; and, Readings on Public Employment Services, House Committee on Education and Labor, Part II: "The Theory of Public Employment Agencies," December, 1964, pp. 143-247.

job opening information which claimants might not otherwise receive. Full exploration of this issue would involve a careful weighing of the pros and cons of local-office job-order file search on behalf of previous registrants and call-in procedures. Indeed, a major potential source of internal conflict arises in responding to the job placements incentive while attempting to provide priority service to those who registered for job-placement assistance first and must be called-in to be informed of the referral opportunity.

This brings us right back to the time/purchased services issue. The way to increase the probability of being the first to know about a job-opening is to be in the right place at the right time. How does one accomplish this? One way is to have good intelligence, i.e., inside information. The easiest way to obtain inside information is to know someone on the inside! Unfortunately, there is little one can do about this; you either know people in the right places, or you don't.

A second way to get a jump on other aspirants to the same opening is to "purchase" a place in the applicant queue. This can be done by purchasing a newspaper and then investing time in following up on advertised opportunities; through registration with a private fee-charging employment agency, which will then become the client's advocate in the sectors of the labor market known to them; by investing one's own time in frequent direct contact with preferred establishments where job openings may, or may not, exist at any given moment; or, by checking frequently with the ES which serves as a screening device to offer for consideration only known openings.

The observed incidence of each of these types of action is revealing. The relatively low rate of frequent checking with the ES suggests that this approach is not viewed as worthwhile relative to the alternatives; i.e., the expected return on the investment of one's time is not sufficient to produce the action. Why not? One possibility is that time spent in obtaining advance notice of job

openings through ES auspices "buys" one into the wrong queues⁸⁰; i.e., into priority consideration for jobs which are not acceptable. This event is particularly undesirable for claimants if nonresponsiveness jeopardizes their continuing benefit eligibility status. Another possibility is that the ES policy of multiple-referrals on most job-orders reduces the expected probability of receiving a job offer below the threshold which is necessary to make such contact worthwhile. (Again, the verbatim claimant comments cited above are revealing in this respect.) The distributive, as well as efficiency, effects of this employer (job placement) oriented procedure by the ES--which attempts to achieve a probability of 1.0 that a job-order will be filled by consciously reducing the probability of a given applicant's getting a job offer to no higher than 0.33 if the "three-for-one" rule is applied and no other sources of applicants are considered--merit further analysis.

So, the ES unit may be able and willing to accomplish relatively little on claimants' behalf. What administrative posture would one expect the USES to take then, vis a vis a job search assistance effort within the UIS domain? Only to the extent that the program is found to be complementary to the ES job-placement activity should cooperation be expected. For instance, if such an effort is accompanied by a total withdrawal of mandated ES registration by claimants, the ES job-placement interviewer's performance should improve; due to clearer signals of job acceptance probabilities when referrals are made. But recall again the two possible rationales which were set forth for UIS job search intervention. The USES will be comfortable with the "increase the costs of continuing benefit eligibility borne by claimants" rationale, which has no direct employment outcomes goal. The USES will, however, be threatened by the second rationale which has an explicit job placement of claimants objective.

⁸⁰ See: D.W. Stevens and V.C. Austermann, Equity and Efficiency Considerations in the Unemployment Insurance 'Work Test': ..., loc cit, pp. 12-15, where the implications of various definitions of the ES as a 'low wage' labor-exchange intermediary are examined. Also see: Henry E. Felder, Job Search: An Empirical Analysis of the Search Behavior of Low Income Workers, Research Memorandum 25, Stanford Research Institute, May 1975, (particularly pp. 19-59 which, unfortunately, reflects the standard definition of 'use').

It is therefore in the UIS' interest to provide for a re-employment assistance program monitoring system which will produce the data and analysis appropriate to a clear determination of the extent to which the UIS effort complements, rather than substitutes for, the USES job-placement objectives.

The purpose of the paper, up to this point, has been to synthesize for UIS administrators what is known about claimant job search behavior, and to place this synthesis in an analytical framework which is appropriate to their need to make immediate decisions on some of these matters. The essence of the economist's approach, of course, is a comparison of alternatives. The main actors considered have been claimants, the UIS, the USES, and the SESA's. The limited scope of the paper has necessarily created a list of topics which merit more extended treatment. Chief among these is the difference in claimant, UIS, USES, SESA, and social costs and benefits which will accompany any chosen strategy to intervene in claimant job search activity. In practice, these differences are reflected in the dynamics of legislation, administrative regulation, and judicial interpretation on those occasions in which the individual consequences of operational practice are challenged. The substance of what has been presented is seen as a decision-support input. The state-of-the-art on the topic "Claimant Job Search Behavior" is reflected in these pages.

What we know though, is rarely synonymous with what we would like to know about a topic. Without awaiting "exhaustive empirical testing", we can comment on the most urgent research need which would contribute to more informed decisions about these issues.

AN IMMEDIATE RESEARCH AGENDA

Nine years ago I recommended that

a comprehensive experimental program be undertaken which would make Employment Service registration for job-search assistance voluntary at the applicant's initiative...The objective of this program would be to evaluate the resulting reallocation of resources. Would UI ... recipients remain unemployed longer if they were not required to register with the Employment Service? Would they make less use of Employment Service placement services? Would

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the change in Employment Service operations result in more effective service to the voluntary registrants? Would employer costs rise because of extended duration of covered unemployment? What group or groups would benefit from such an operational change, and which would incur greater costs? A comprehensive benefit-cost evaluation of the suggested program is both feasible and timely.⁸¹

What was timely then is urgent today. This paper provides a conceptual framework and empirical foundation for the design of such an experiment. The first goal of such an undertaking must be to estimate the differences in UI claimant, Unemployment Insurance Service, U.S. Employment Service, State Employment Security Agency, and social costs and benefits which accompany any chosen strategy to intervene in claimant job search activity.

Second, it is in the UIS' interest to provide a management information system which will produce a clear determination of the extent to which UI intervention in claimant job search efforts complement, rather than substitute for or interfere with, the ES job-placement objective.

And third, the equity and efficiency effects on the UI system of the ES multiple-referral policy also merit immediate analysis. While it may be in the interest of the ES to seek a probability of 1.0 that a job-order will be filled by consciously reducing the probability that a given claimant will get a job offer; the claimant, UI program, and social consequences of this practice should be determined.

The message of this paper is simple: Legislative and administrative attempts to maintain the short-term fiscal integrity of the Federal Unemployment Trust Fund threaten the insurance principles of the program and create both purposeful and unintended costs which might never be linked to the actions taken. It is obviously not in everyone's interest to have these costs estimated. Since most of the impacts of Congressional and SESA mandates are not reflected in present management information systems, it is unlikely that either the Congress or the SESA's will initiate the

⁸¹ David W. Stevens, Supplemental Labor Market Information ... op cit, p. 162.

actions necessary to estimate the cost and benefit concepts treated in this paper. It is therefore incumbent on a third party to do so.

APPENDIX

A COMPILATION OF STUDIES
OF JOB SEARCH BEHAVIOR⁸²

⁸² Reproduced from: David W. Stevens, Supplemental Labor Market Information ..., op cit, pp. 4-7.

SURVEY OF STUDIES INDICATING WHICH INFORMATION CHANNELS
WERE SUCCESSFULLY USED BY JOB SEEKERS

Author(s) ¹	Date of Study	Labor Market Area	Size of ² Population	CHANNELS ³											
				FORMAL						INFORMAL					
				1	2	3	4	5	6	7	8	9	10	1-10	
1. Adams-Aronson	1949-50	Auburn, N.Y.		2	-	-	-	-	-	-	22	32	12	12	100
2. Belzung-Oven-MacNaughton	1951-53	Baytown, Tex.	265	-	-	8	6	9	-	-	27	39	-	11	100
3. deSchweinitz	1930	Philadelphia, Pa.		-	2	3	-	-	-	-	50	23	-	14	100
4. Ferman	1963	Detroit, Mich.	185	1	1	1	40	16	-	-	9	27	-	5	100
5. Heneman-Fox-Yoder	1947-48	Minneapolis, Minn.		6	5	14	7	-	-	-	30	32	-	6	100
6. Kaufman-Schaefer-et al. ³	1965	(nine cities)		7	-	5	-	-	23	-	26	34	-	5	100
7. Lurie-Rayack	1964	Middletown, Conn.		2	10	3	4	-	-	-	36	45	-	-	100
8. MacQuown	1966		8,658	4	23	11	-	-	-	-	12	37	-	13	100
9. Miernyk	1951-53	Lowell, Mass.		9	-	9	2	-	-	-	36	35	-	9	100
		Lawrence, Mass.		3	-	7	1	-	-	-	50	35	-	4	100
		Fall River, Mass.		5	-	3	1	-	-	-	59	29	1	2	100
		New Bedford, Mass.		3	-	-	3	-	-	-	39	42	11	2	100
		Providence, R.I.		3	-	7	3	-	-	-	32	42	-	13	100
10. Myers-Schultz	1948-49	Nashua, N.H.		5	-	3	3	-	-	-	33	16	33	2	100
11. Myers-Maclaurin	1937-40	Fitchburg, Mass.		1	1	2	-	-	-	-	39	33	22	2	100
12. Reynolds ⁴	1947	(factory city)	350	13	-	5	1	-	-	-	27	42	8	4	100
13. Reynolds-Shister ⁵	1947	New Haven, Conn.	450	13	-	13	5	-	-	-	28	20	13	8	100
14. Sheppard-Belitsky ⁶	1950	Eric, Pa.	136	14	-	4	5	-	-	-	56	-	14	7	100
15. Sheppard-Ferman-Taber	1957-58	Detroit, Mich.	116	5	-	3	-	-	-	-	34	30	22	6	100
16. Ullman-Taylor ⁷	1961-63	Chicago, Ill.	354	3	10	14	-	-	18	-	37	9	8	1	100
17. Wilcock-Franke	1960-62	Columbus, Ohio		4	-	-	-	12	-	-	37	32	-	15	100
		Oklahoma City, Okla.		4	-	-	-	3	-	-	33	40	-	20	100
		E. St. Louis, Ill.		3	-	-	-	7	-	-	53	22	-	15	100
		Provia, Ill.		5	-	-	-	5	-	-	43	31	-	16	100
		Fargo N.D.		9	-	-	-	7	-	-	31	35	-	18	100
18. Wilcock-Sobel	1952	Kankakee, Ill.		8	-	19	-	-	-	-	46	23	3	1	100
19. Minnesota B.E.S.	1966	St. Paul, Minn.	3,735	9	6	9	7	-	7	-	36	24	-	2	100
20. St. Paul, Minnesota B.E.S.	1965	St. Paul, Minn.	5,700	8	6	8	6	-	6	-	32	22	-	12	100
21. Ohio B.U.C.	1962-63	(six cities)	1,430	8	7	14	6	-	-	-	24	30	-	11	100
22. U.S.E.S.	1955-62	(eight cities)		16	4	11	-	-	-	-	23	36	-	10	100

*CHANNEL CODES: 1) Public Employment Agency, 2) Private Employment Agency, 3) Newspaper Advertisements, 4) Union, 5) Employer Assistance, 6) Educational Institution Placement Bureau, 7) Friends and Relatives, 8) Direct Application Without Prior Knowledge of Openings, 9) Recall to Previous Job, and 10) Other, and Not Known.

Footnotes--Table 1

1. A complete list of sources follows these footnotes.
2. In many cases the size of the study population, upon which the percentage distribution is based, is not given.
3. Male graduates of vocational curriculum only.
4. Manufacturing sample.
5. Manual labor sample.
6. Recalls were excluded from study population.
7. Key punch operators only.

Sources--Table 1

- Leonard P. Adams and Robert L. Aronson, Workers and Industrial Change: A Case Study of Labor Mobility, Cornell Studies in Industrial and Labor Relations, No. VIII, Ithaca, New York: Cornell University Press, 1957.
- L. D. Belzung, John P. Owen, and John F. MacNaughton, The Anatomy of a Workforce Reduction, Center for Research in Business and Economics, College of Business Administration, University of Houston, 1966.
- Dorthea deSchweinitz, How Workers Find Jobs, Philadelphia: University of Pennsylvania Press, 1932.
- Louis A. Ferman, Death of a Newspaper: The Story of the Detroit Times - A Study of Job Dislocation Among Newspaper Workers in a Depressed Labor Market, Kalamazoo, Michigan: The W. E. Upjohn Institute for Employment Research, 1963.
- H. G. Heneman, Harland Fox, and Dale Yoder, Minnesota Manpower Mobilities, University of Minnesota, 1950.
- Jacob J. Kaufman, et al, The Role of the Secondary Schools in the Preparation of Youth for Employment, Institute for Research on Human Resources, The Pennsylvania State University, February, 1967.
- Melvin Lurie and Elton Rayack, "Racial Differences in Migration and Job-Search: A Case Study," The Southern Economic Journal, Vol. 33 (July 1966), pp. 81-95.
- Richard S. MacQuown, statement printed in Manpower Services Act of 1966 and Employment Service Act of 1966, Joint Hearings before the Subcommittee on Employment and Manpower of the Senate Committee on Labor and Public Welfare, and the Select Subcommittee on

Labor of the House Committee on Education and Labor, Washington, GPO, 1966, p. 332; data from National Employment Association study January 1966, and from the following studies by state BES agencies conducted between 1958 and 1962, cited in "Employment Service Participation in the Labor Market," Readings on Public Employment Services, GPO, December 1964, p. 491.

"A Study of Community and Worker Adjustments to Factory Layoffs, Lincoln, Nebraska" Nebraska Department of Labor, Division of Employment Security, Lincoln, Nebraska, November 1958.

"An Analysis of the Worker Recruitment Methods in the Albuquerque Area," New Mexico State Employment Service, Albuquerque Area Skill and Training Survey, September 1959.

"A Study of Hiring Channels, Fargo, North Dakota," North Dakota State Employment Service, Bismarck, North Dakota, May 1962.

"A Study of Hiring Channels, Grand Forks, North Dakota," North Dakota State Employment Service, Bismarck, North Dakota, November 1961.

"A Study of Hiring Channels, Jamestown, North Dakota," North Dakota State Employment Service, Bismarck, North Dakota, March 1962.

"An Analysis of Hiring Channels of Employers and Workers in the Spokane, Washington Area," State of Washington, Spokane Social Office and Research and Statistics Section, Olympia, Washington, January 1962.

"La Crosse Reemployment Study," the Wisconsin State Employment Service, a division of the Industrial Commission in Cooperation with the Unemployment Compensation Department, September 1960.

"Sources for Employment in Milwaukee County: How 231 Milwaukee Workers Heard About Jobs," by the Wisconsin State Employment Service, August 1961.

William H. Miernyk, Inter-Industry Labor Mobility, Boston: Northeastern University, 1955.

Glen W. Miller, et al., Use of and Attitude Toward the Ohio Bureau of Unemployment Compensation: A Research Report, Project 1472 administered through the Research Foundation of the Ohio State University, 1963.

Minnesota Department of Employment Security, St. Paul Hiring Channels, Prepared by Research and Planning Section, St. Paul, Minnesota, March 1965.

_____, Job Tenure Study, July 1966.

Charles A. Myers and W. Rupert Maclaurin, The Movement of Factory Workers, The Technology Press of the Massachusetts Institute of Technology and John Wiley and Sons, Inc., New York, 1943.

Robert J. Myers and George P. Schultz, The Dynamics of a Labor Market, New York: Prentice Hall, Inc., 1951.

Lloyd G. Reynolds, The Structure of Labor Markets, New York: Harper and Brothers, 1951.

Lloyd G. Reynolds and Joseph Shister, Job Horizons: A Study of Job Satisfaction and Labor Mobility, New York: Harper and Brothers, 1949.

Harold L. Sheppard and A. Harvey Belitsky, The Job Hunt, The W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan. Baltimore, Maryland: The Johns Hopkins Press, 1966.

Harold L. Sheppard, Louis A. Ferman, and Seymour Faber, Too Old to Work - Too Young to Retire: A Case Study of Permanent Plant Shutdown, Prepared for U.S. Senate Subcommittee on Unemployment Problems, Washington, D.C.: U.S. Government Printing Office, 1960.

Joseph C. Ullman and David P. Taylor, "The Information System in Changing Labor Markets," Industrial Relations Research Association, Proceedings of the Annual Eighteenth Winter Meeting, New York, December 28-29, 1965, Madison, Wisconsin, 1966.

Richard C. Wilcock, and Walter H. Franks, Unwanted Workers, New York: The Free Press of Glencoe, A Division of the Macmillan Company, 1963.

Richard C. Wilcock, and Irwin Sobel, "Secondary Labor Force Mobility in Four Midwestern Shoe Towns," Industrial and Labor Relations Review, Vol. 8, No. 4, (July 1955).

