## IT'S ALL IN A DAY'S WORK: AN INSTITUTIONAL ANALYSIS OF THE REHABILITATION SYSTEM

by

DEBORAH RUTH SCHREIBER

B.A., Goucher College (1974)

Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements of the Degree of

DOCTORATE IN PHILOSOPHY

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1983

© Deborah R. Schreiber 1983

The author hereby grants to M.I.T. permission to reproduce and to distribute copies of this thesis document in whole or in part.

Signature	of	Author:	Depa				Studies and ry 31, 1983	
			P		1.	$\neg$	J .A	
Certified	by:	~ /	<b>-</b>	ν-	Thes	is Sup	ervisõr	-

> Rotch MASSACHUSETTS INSTITUTE OF TECHNOLOGY JUL 21 1983

> > LIBRARIES

### IT'S ALL IN A DAY'S WORK: AN INSTITUTIONAL ANALYSIS OF THE REHABILITATION SYSTEM

By

Deborah Ruth Schreiber

Submitted to the Department of Urban Studies and Planning on January 31, 1983 in partial fulfillment of the requirements for the Degree of Doctorate in Philosophy in Urban Studies and Planning

#### ABSTRACT

This case study analysis of the vocational rehabilitation (VR) system serving handicapped individuals tested the empirical generalization that successful program outcomes - job placements - occur more often by clients themselves than by the VR The data analysis was based on a three-year system. research and demonstration grant funded by the U.S. Department of Health, Education and Welfare and administered by the City of New Haven, Connecticut, in conjunction with the Greater New Haven Chamber of Commerce and the Easter Seal Goodwill Industries Rehabilitation Center. Two program interventions with the objective of increasing job referrals and placements of the disabled served as the experimental group; the control group consisted of disabled individuals applying for city government jobs. The key finding was that service agencies, particularly the state vocational rehabilitation agencies, are not actively referring or placing clients in jobs and, therefore, that many clients will do as well in the job hunt on their own as they will by using the system.

The primary implication is that legislators who utilize data from assessments focusing only on before- and after-service earnings, as benefit/cost analyses do, mistakenly attribute VR program success to the federal-state system rather than to the clients (or to other resources that clients use). The recommendation is made that the service system could be more effective if organized differently by providing only two types of services: (1) assistance in developing the rehabilitation plan and (2) restoration. Job training and placement services might be better provided outside of the system, at the client's request.

Thesis Superviser: Dr. Leonard G. Buckle

Title: Associate Professor of Urban Studies and Planning

#### ACKNOWLEDGEMENTS

This dissertation, like most others, was possible because many people contributed their time and support to the endeavor. I am especially indebted to my thesis committee, Professors Leonard G. Buckle, Suzann Thomas Buckle, and Gary T. Marx, for their insights, their work, and their faith that this could be accomplished. In addition, I would like to thank all of those who worked on the New Haven project - researchers, interviewers, and respondents, without whose work and guidance this product would not have been possible. My colleagues at Booz, Allen & Hamilton deserve a special thanks for their support, particularly in Corporate Personnel and Report Production.

Finally, I am deeply grateful to my family:

- To my sister, who provided much encouragement;
- To my parents, who instilled in me a sense of the value of education and of the utility of trying one's best to make a contribution; and
- To my husband Jay, whose love, companionship, support, and astute insights were a constant source of strength.

-4-

## TABLE OF CONTENTS

	Page
Table Of Contents Index Of Appendixes Index Of Exhibits Index Of Figures Index Of Tables	5 10 11 12 13
INTRODUCTION	15
CHAPTER I: LEGISLATION	19
Section 1. Vocational Rehabilitation (VR) Legislation	21
A. Expansion Of The Population Eligible For VR Services	23
B. Expanded Services	27
B.l. New Programs And Services B.2. State Plan Requirements	28 32
Section 2. Summary And Questions	34
Chapter Exhibits	37
CHAPTER II: REHABILITATION POLICY AND THE VR PROGRAM	60
Section 1. Federal-State VR Program: 1965 To 1975	64
Section 2. Questioning The Facts	71
<ul> <li>A. Receipt Of Services</li> <li>B. Program Expansion</li> <li>C. Benefit/Cost Analyses</li> <li>D. Summary</li> </ul>	72 83 85 87

-5-

TABLE OF CONTENTS (cont'd)

Page

CHAPTER		METHODOLOGICAL SUMMARY AND CASE STUDY DESCRIPTION	91		
Section	1.	Methodological Summary	91		
A. B.	-	nizing The Research es	94 98		
Section	2.	Case Study Description	101		
Α.	Over	view	101		
В.		New Haven Project Objectives And 104 Organization			
c.	Proj	ect Participants and Activities	110		
	C.1.	Projects With Industry (PWI)	112		
	C.2.	Division Of Vocational Rehabilitation (DVR)	113		
	C.3.	Connecticut Mental Health Center (CMHC)	113		
D.	Summ	ary	122		
CHAPTER	IV: D	ATA ANALYSIS	126		
Section	1.	Who Are The Handicapped?	126		
Α.	Tota	cted Characteristics Of The 1 U.S. Disabled Population: To 1976	128		
	A.1.	Definitions	128		
	A.2.	Demographic Characteristics Of The Total U.S. Disabled Population	131		

-7-

TABLE OF CONTENTS (cont'd)

## Page

	A.3. Occupations Of Disabled Popul		140
	A.4. Disability Typ U.S. Disabled		145
В.	Selected Characteri New Haven Labor Mar Population		146
	B.l. Household Surv tionalized Han Population - C		146
	B.2. Demographic Ch Of The New Hav		151
	B.3. Occupations Of Labor Market D		153
	B.4. Disability Typ Haven Labor Ma		156
	B.5. Summary		157
с.	Selected Characteri Service Agency Clie		158
	C.l. Demographic Ch Selected New H Clients		160
	C.2. Summary		162
Section	2. New Haven Prog The "Experimen	ram Interventions: t"	163
Α.	Purpose And Design	Of Experiments	163
	A.l. Job-Ready Clie ("Client List"	nt Listing )	164

TABLE OF CONTENTS (cont'd)

		Page
	A.2. On-The-Job Training Linkage ("OJT Link")	165
В.	Distribution Of Referrals: Selected Characteristics	166
с.	Development Of Projections	172
	C.l. General Service Process	173
	C.2. Analysis Of FY77-FY80 State DVR Data	175
	C.3. New Haven Agency Clients: Vocational Status	176
	C.4. Projected Number Of "Available" Clients	178
D.	Results Of Referrals	181
Section	3. The "Control Group"	185
Α.	Description Of The Posting Project	185
В.	Selected Characteristics Of Job Seekers	187
с.	Results	195
	C.l. Disabled Versus Nondisabled: Actual	195
	C.2. Results Against Projections	197
Section	4. Control Versus Experiment	198
А. В.	Comparison Of Results Local Employer Questionnaire	198 203

TABLE OF CONTENTS (cont'd)

		Page
Section	5. Explanatory Data And Observations	211
Α.	Service Experiences And Needs	211
В.	Counselor Feedback And Process Observations	218
С.	State DVR Client Service Statuses	226
Section	6. Summary	234
Chapter	Figures	239
Chapter	Tables	250
CHAPTER	V: FINDINGS AND CONCLUSIONS	265
Section Section Section Section	<ol> <li>Experiment And Control</li> <li>Results</li> </ol>	266 270 278 291
APPENDIX	XES	307
SELECTED	D BIBLIOGRAPHY	364

INDEX OF APPENDIXES

## CHAPTER III

Appendix A. Example Of Client List Newsletter

## CHAPTER IV

Appendix	Α.	Occupational Classifications
Appendix	в.	New Haven Labor Market Survey
Appendix	с.	New Haven Self-Registration Questionnaire (English Version)
Appendix	D.	State VR Agency Case Service Statuses
Appendix	Ε.	Classification Of Disabling Conditions
Appendix	F.	List Of Agencies Receiving City Government Job Postings
Appendix	G.	Posting Project Data Card
Appendix	Н.	Selected Characteristics Of New Haven Self-Registration Questionnaire Respondents
Appendix	I.	Practitioner Evaluation Questionnaires

## INDEX OF EXHIBITS

#### CHAPTER I

- Exhibit I. Vocational Rehabilitation Legislation
- Exhibit II. Key Legislative Provisions To Expand Service-Eligible Handicapped Population
- Exhibit III. Key Legislative Developments In Service Provision

### CHAPTER III

- Exhibit I. Vocational Rehabilitation Grant: Disabled Worker Mini-Profile
- Exhibit II. Client Referral To Central Job Development Unit: Vocational Rehabilitation Grant

## INDEX OF FIGURES

## CHAPTER I

Figure 1. Basic Rehabilitation Process: 1918 To 1973

## CHAPTER III

Figure 1. Functional Relationships: New Haven Project

## CHAPTER IV

Figure	1.	Job-Ready Client Listing
Figure	2.	On-The-Job Training Linkage
Figure	3.	Closures (Statuses 00,02,06,28,30)
Figure	4.	Rehabilitants (Status 26)
Figure	5.	Closures Versus Certifications
Figure	6.	Active Statuses (10 To 24)
Figure	7.	Statuses 10 To 12
Figure	8.	Status 14
Figure	9.	Statuses 16 To 18
Figure	10.	Statuses 20, 22, 24 (Active Cases)
Figure	11.	Percent Change Over Time

#### INDEX OF TABLES

#### CHAPTER II

- Table I. Percent Of Disabled With Physical And Mental Condition And By Receipt Of Services: Adult Noninstitutionalized Population
- Table II. Involvement In Rehabilitation Services: Sponsor, Provider, Type Of Service

#### CHAPTER IV

- Table I.Selected Characteristics Of The<br/>Disabled: Percentage Distribution
- Table II. Adults Age 20 To 64 Employed At Disability Onset And In 1974: Occupation In 1974
- Table III. Percent Of Disabled With Physical And Mental Condition: Adult Noninstitutionalized Population
- Table IV. Selected Characteristics Of The New Haven Disabled: Percentage Distribution
- Table V. Current And Latest Occupations Of New Haven Disabled Population: Percentage Distribution
- Table VI. Proportion Of New Haven Labor Market Employed
- Table VII. New Haven Disabled Population: Percent Distribution Of Physical And Mental Conditions
- Table VIII. Selected Characteristics Of New Haven Agency Clients: Percentage Distribution

INDEX OF TABLES (cont'd)

- Table IX. Percent Of Disabled With Physical And Mental Condition: Selected New Haven Agencies
- Table X. Caseload Percent Distribution: Connecticut Department Of Vocational Rehabilitation
- Table XI. Caseload Percent Distribution: Connecticut Department Of Vocational Rehabilitation - Total Remaining Active Cases (Statuses 10 To 24)
- Table XII. Comparison Of Selected Characteristics: Experimental And Control Groups

#### INTRODUCTION

This is a case study analysis of the system of services provided to assist medically impaired individuals to obtain employment. The analysis is based on data gathered as part of a three-year research and demonstration grant funded by the U.S. Department of Health, Education and Welfare's Rehabilitation Services Administration and administered by the City of New Haven, Connecticut. My role was the Project Director.

The structure of this study reflects what I believe are important elements that make up our picture of what this system is supposed to do, what we think it does, and what it really does:

#### 1. The Legislation

Chapter I is devoted to a detailed analysis of the federal statutes concerned with vocational rehabilitation of "handicapped" individuals. It presents the background by which one understands the extent to which the VR program has grown and for what services it is mandated to provide. Based on this information, I developed several questions, all of

-15-

which focus on one basic concept - whether the VR system is producing the positive outcomes for which it is accountable.

## 2. The Literature

Over the past 60 years, the VR system has enjoyed much acclaim. It has flourished during times when other programs - most notably the federal manpower programs (Levitan and Taggart, 1977) - have had trouble maintaining funding. Only recently have its accomplishments been called into question.

In Chapter II, I provide a summary of some important research in the field. The thrust of the chapter is to provoke skepticism about what the data really tell us about the program. Two types of data are called into question: First, data that is generated by the program itself and used to indicate enormous expansions in the number of clients served, the number "rehabilitated" (i.e., placed in jobs), and in the amount of federal expenditures. These data also indicate that, relative to expenditures, the number of clients served and reha- bilitated may not be increasing as much as we would expect. Second, data generated by benefit/cost analyses that are used by legislators to document substantial

earnings increases due to the VR program do not, nor do they pretend to, speak to the program itself they speak only to pre- and post- employment earnings, the chief concerns of the economist. This is especially important for legislative policy because such data generally indicate enormous earnings gains; what is not known is whether these gains are achieved by the program itself. My concern in this dissertation is to explore whether VR program outcomes are achieved primarily by the program or by other means, such as by the participants themselves.

## 3. The Methodology And Case Study Description

Chapter III describes the basic methodology used in the case study and accounts for the key methodological issues - such as selectivity and generalizability - that social scientists who are involved in this type of research usually face. The specific elements of the federal project upon which the case study is based are also presented.

### 4. Case Study Analysis

This study is particularly complex because it deals with a heterogeneous population that is broadly defined and, therefore, is enormously difficult to serve. The basic thrust of the analysis is to

-17-

utilize data gathered over a three-year period in order to examine whether the system is referring and placing its clients.

## 5. Findings And Conclusions

-

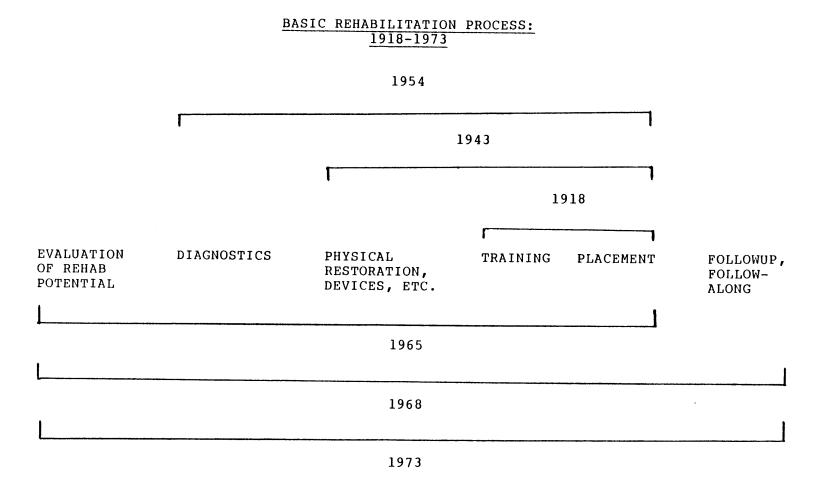
Chapter V presents the study's key findings and conclusions. It focuses primarily on the potential impact of the findings for legislative policymaking, the organization of services, and for the VR program.

### CHAPTER I LEGISLATION

Over the past 60 years, legislative policies and programs have made important additions to the concepts of vocational rehabilitation - those services that will aid in rendering a medically impaired individual employable - and the "employable" handicapped individual - i.e., one for whom such services are likely to result in job placement. While the rehabilitation process was once limited to job training and placement, the addition of restorative services, such as surgery or prosthetic devices that remove or ameliorate an impairment, and other programs has considerably expanded this process (Figure 1). Similarly, those individuals who were once considered to be unemployable, primarily because they required services not offered in the early, limited state vocational rehabilitation program, could now be considered potential rehabilitants. Τn this sense, rehabilitation experts and their legislative counterparts have become more sensitive to the "total needs package" of a disabled individual; that

-19-

FIGURE 1



-20-

.

is, they are concerned with ensuring that the state vocational rehabilitation program will provide any services that will enable the highest number of disabled individuals to obtain employment.

However, the legislative policies and programs in the area of rehabilitation remain bounded within the framework of a state service system accessible only to a defined group of "employable" handicapped individuals. This chapter articulates the most important legislative developments in the statewide system of vocational rehabilitation in order to provide the background for determining how this system copes with its responsibilities to assist handicapped individuals to achieve their employment potential.

### SECTION 1. VOCATIONAL REHABILITATION (VR) LEGISLATION

The federal government's concern with the employment problems of the disabled has shaped legislation that directs the formal service sector to utilize broad, differentiated methods for integrating a large proportion of disabled individuals into society as economically productive citizens. Exhibit

-21-

I\* summarizes the purposes of key vocational rehabilitation legislation since 1918 and serves as the framework for the expansion of both the serviceeligible population and the types of services to be provided:

Over the years the vocational rehabilitation services available grew from training, counseling, and placement to include medical and other physical restorative services, sheltered workshops, services to families, and "any services necessary to render a disabled individual fit to engage in a remunerative occupation." Recipients' eligibility expanded to include persons with mental illness or retardation, old age and survivors disability insurance beneficiaries, juvenile offenders, migrant workers, and, in general, those with disabilities so severe that their employment prospects were not immediately evident.<sup>1</sup>

These expansions impact all service providers, particularly the state vocational rehabilitation (VR) agencies, which are authorized and directed by the legislation to provide and to coordinate rehabilitation services. It is important to examine how these expansions have affected the state vocational

<sup>\*</sup> All exhibits are provided at the end of the chapter.

<sup>(1)</sup> Susan M. Olson, "Affirmative Action Laws For People With Handicaps: Problems of Enforcement," presented at the national meeting of the Law and Society Association, May 18-20, 1978: Minneapolis, Minnesota, p. 8.

rehabilitation service systems by establishing and increasing their responsibilities for directing service provision with the goal of resolving the employment problems of the disabled through placement in a competitive job. Exhibits I to III, at the end of this chapter, provide the legislative detail upon which Sections A and B draw.

# A. <u>Expansion Of The Population Eligible For VR</u> <u>Services</u>

The Congressional mandates to expand the population eligible for participation in the statewide program of vocational rehabilitation services specified changes in five areas:

The groups of people to be served (e.g., veterans, migratory workers).

- The types of people to be served (e.g., the disadvantaged and severely handicapped).
- The disability types to be covered (e.g., the mentally retarded).
- The reason or cause of the disability (e.g., by accident or disease) as a determinant of service eligibility.

-23-

The timing of disability onset (e.g., during military service).

The primary impact of these changes on the state system, and a key issue area in this thesis, was to increase both the number and the type of people served. However, the goal of placement remained unchanged, as did the assumption that, in order to enable the disabled to achieve their economic potential, a specialized system of services and placement must be responsible for solving their employment problems. Finally, the expansion of the defined categories "disabled" and "service-eligible" adds considerably to earlier legislation, which was much more limited in the scope of services to be provided and, therefore, to the state's responsibilities to meet such needs.

Exhibit II summarizes the legislative provisions to expand the service-eligible population, which are highlighted below:

> The groups of people to be served and the cause of disability - the early legislation entitled a <u>specific group of people</u> (i.e., disabled World War I veterans) who

-24-

incurred their disabilities <u>at a particular</u> <u>time</u> (i.e., while in service to the U.S. military forces) to rehabilitation services as specified by the Federal Board for Vocational Education. Benefits were provided to <u>additional</u> veterans in 1919, if they were released or resigned from service in the U.S. military or naval forces <u>under</u> <u>honorable conditions</u>. The <u>timing of dis-</u> <u>ability onset</u> was expanded from "disabled while in service" to include eligibility if a pre-existing disability was aggravated during service or if a disability that occurred after service could be traced to prior service.

<u>The groups of people served and the cause</u> of disability - an additional group, the civilian industrially disabled, obtained VR service eligibility in 1920, as long as the <u>cause</u> of the physical defect was, if not congenital, acquired by "accident, injury, or disease" and not by the individual's own misconduct.

-25-

The disability types to be covered - additional disability types, i.e., the mentally ill and retarded, were added in 1954 under the term "physically handicapped," as long as the handicap was a barrier to employment and the person could be expected to work after services were provided.

The groups of people to be served - disabled migratory workers and members of their families were extended benefits by state and other nonprofit agencies in 1967.

.

The types of people to be served and the cause of disability - emphasis on serving additional people, i.e., the "severely handicapped," took precedence in 1973 as a result of testimony during public hearings indicating that such individuals were underserved and could often be rehabilitated. Moreover, regulations promulgated to enforce sections of the 1973 legislation extended discrimination protection to alcoholics and drug abusers.

#### B. Expanded Services

In addition to increasing the service-eligible population, state VR agencies were directed to expand services to be provided. These added responsibilities occurred as a result of both increased technological capabilities - increasing the number of disability types that could be modified by surgery or prosthetic devices - and testimony reflecting the view that those most in need should be served. This testimony was particularly concerned with the severely disabled, who were considered to be the neediest and who were not being served.

In general, legislative changes focused on two areas:

- Added programs/services whether provided directly by the state agency or by another local agency.
- Added state plan requirements, i.e., the requirements to be met, through annual plan submission, in order to receive federal funding.

-27-

Exhibit III summarizes legislative enhancements in service provisions since 1918.

## B.1 New Programs And Services

Over the past 60 years, both the number and type of programs funded have expanded considerably, as has the concept of vocational rehabilitation. Legislation passed in 1918 provided for vocational rehabilitation services that were limited in scope primarily to training and placement. Once the state program to provide VR services to civilians was established, in 1920, the concept of rehabilitation began to expand, although it did not include additional services until 1943, when states were permitted to use funds for physical restoration services, prosthetic devices, transportation, and occupational licenses and tools. At this point, vocational rehabilitation services were redefined to include "any services necessary to render a disabled individual fit to engage in a remunerative occupation" (Exhibit III-4).

The 1954 amendments authorized three additional types of appropriations in the form of grants to:

-28-

- Assist states in meeting VR service costs.
- Assist states in initiating projects to extend and improve their VR services.
- Assist states and other organizations in meeting costs for research, demonstration, training and traineeships, and special projects (III-5).

In addition, an added emphasis in placement required that the U.S. Department of Health, Education, and Welfare and the U.S. Department of Labor provide states with policies and procedures to facilitate placement of disabled individuals who received services under the state program. Vocational rehabilitation services were again redefined (III-7) to include diagnostics and restoration, and financing for the President's Committee on Employment of the Handicapped (established in 1949) was increased from \$75,000 to \$225,000.

The 1965 amendments extended and expanded the grants to states, emphasizing funding for services to groups of disabled individuals, such as the severe,

-29-

and establishing state responsibility for construction and other costs even when such projects were not directly undertaken by the state VR agency (III-8). Special programs and comprehensive planning requirements at the state level were also established, mandating that state agencies develop a comprehensive, statewide VR program "with a view to achieving the orderly development of vocational rehabilitation services in the State (including vocational rehabilitation services provided by private nonprofit agencies..." (III-10). Services were expanded in other ways, i.e., by raising the prior limitations on training, deleting the "economic need" service requirement, establishing special services for the blind and deaf, and adding the determination of rehabilitation potential in the definition of VR services (III-10).

Other legislative developments from 1967-1968 added new programs and facilities, e.g.:

A National Center for Deaf-Blind Youths and Adults was established (1967).

Grants were made available to extend services to migratory workers (1967).

.

- The requirement that potential clients live within a specific geographical area was deleted (1967).
  - Funds for Projects With Industry (PWI) were made available for initiating special programs to expand services, to prepare individuals for competitive employment, and to provide for training and recruitment (1968).
  - VR services were redefined to include evaluation of service eligibility, reader and interpreter services, recruitment and training services for employment in specialized fields, extended restorative services, and "any other goods and services" (1968).
  - Funding for a new vocational evaluation and work adjustment program was added for

"disadvantaged" handicapped individuals, as long as the state agency provides such services in cooperation with other public agencies (1968).

The 1973 Act replaced prior legislation and expanded services; for example, grants for VR services were provided "to assist states to meet the current and future needs of handicapped individuals" (III-14). The concept of vocational rehabilitation services was also extended, including "any goods and services necessary to render a handicapped individual employable" (III-15).

#### B.2 State Plan Requirements

State plan requirements, which are met through annual plan submissions, reflect the expansion of funding to absorb additional VR costs to a greater number of disabled individuals. In 1920, the federal-state program to provide VR services to the civilian disabled was first established and, with it, the requirement that states submit plans for approval by the Federal Security Administrator. Plan requirements were relatively narrow, emphasizing methods for

-32-

rehabilitation and placement and for administration of the plan (Exhibit III-1). The 1943 amendments expanded plan requirements to include provisions such as designating a single state agency as the plan administrator, making services available only to "employable" handicapped individuals, and establishing maximum fees for training, restoration services, and prosthetic devices (III-2,3).

The 1954 amendments expanded plan requirements further, particularly by:

- Providing that the plan be effective in all political subdivisions in the state.
- Requiring that a selection priority for services be established, if necessary.
- . Requiring provision of restoration services.
- Requiring that the state VR agency cooperate with and utilize the services of other public institutions, particularly employment services (III-5,6).

The 1968 plan requirements also included extended provisions for evaluation of rehabilitation

potential, counseling and guidance, personal and vocational adjustment, training, restoration, placement, and follow-up (III-11,12). An emphasis on serving the severely disabled was added in 1973.

### SECTION 2. SUMMARY AND QUESTIONS

The legislative policies impacting disabled people over the past 60 years reflect enormous changes in the classes of people who are designated as handicapped for the purposes of receiving publicly funded rehabilitation services. Consequently, substantial increases have occurred in the type and in the number of rehabilitation services, thereby expanding the scope of the rehabilitation process and the responsibility of publicly funded service providers, particularly the state VR agencies. These changes do not reflect differences in service goals: we saw that the rehabilitation goal of employment has remained static. Rather, the legislation expanded services for a larger number of people in order to attain maximum earnings productivity for this population through employment. Thus, the key empirical questions to be addressed in this thesis

reflect the concern with understanding how the mandates have been reflected in the operation of the VR system:

- Does the broadly defined system described above provide the full spectrum of services in its mandate? Does it prioritize the placement goal?
- Has the VR program responded to the goal of increasing the number of both rehabilitants and people served?
- How valid is the assumption that clients will do better by using the VR system, particularly the state agency, for job placement than they would by searching for jobs on their own? How are the "program outcomes" (i.e., increased earnings through employment) achieved?

Chapter II summarizes several important issues in the conventional studies that assess the vocational rehabilitation program of services, presents some key findings that differ from the generally accepted evaluations, and poses the key empirical generalization with which this case study is concerned. Its key objective is to encourage skepticism about our belief in conventional studies that assess VR program outcomes by presenting research that suggests such outcomes should be more closely examined. The case study analysis presented in Chapter IV attempts to accomplish this objective by answering the questions raised here.

## Exhibit I(1)

### VOCATIONAL REHABILITATION LEGISLATION\*

Year/Public Law	Purpose**
1918/PL 65-178	Provide Vocational Rehabilitation and return to civil em- ployment of disabled persons discharged from miltary or naval forces.
1920/PL 66-236	Promotion of Vocational Rehabilitation of persons disabled in industry or otherwise and their return to civil employ- ment.
1943/PL 78-113	Amends PL 66-236. Differentiates costs to be reimbursed for war disabled versus civilian disabled.
1954/PL 83-565	Amends Vocational Rehabilitation Act to promote and assist in extension and improvement of Vocational Rehabilitation services; provides more effective use of federal funds.
1965/PL 89-333	Amends Vocational Rehabilitation Act to provide more flex- ibility in financing and administration of State programs and to expand and improve services and facilities of such programs, <u>particularly for the retarded and other groups</u> <u>presenting special vocational rehabilitation problems</u> .

\* Legislative acts chosen on the basis of legislative history to PL 93-112.
\*\* Summarized or paraphrased from the legislation.

Exhibit I(2)

VOCATIONAL REHABILITATION LEGISLATION\*

Year/Public Law	Purpose**
1967/PL 90-99	Amends Vocational Rehabilitation Act to extend and expand grants to states for rehabilitation services, to authorize assistance in establishment and operation of National Center for Deaf-Blind Youths and Adults, and to provide assistance to migrants.
1968/PL 90-391	Amends Vocational Rehabilitation Act to extend authoriza- tion of grants to States for rehabilitation services, and to broaden scope of goods and services available.
1973/PL 93-112	<u>Replaces</u> Vocational Rehabilitation Act, to extend and re- vise authorization of grants to States for vocational re- habilitation services with special emphasis on services to the most severely handicapped, to expand federal responsi- bilities and research and training programs, and to estab- lish special responsibility in the Secretary to coordinate handicapped programs within DHEW.

\* Legislative acts chosen on the basis of legislative history to PL 93-112.
 \*\* Summarized or paraphrased from the legislation.

Exhibit II(1)

## KEY LEGISLATIVE PROVISIONS TO EXPAND SERVICE-ELIGIBLE HANDICAPPED POPULATION

Year/Public Law	Provisions
1918/PL 65-178	A disabled person is one who is "disabled under circum- stances entitling him, after discharge from the military or naval forces of the United States, to compensation, and who, after his discharge, in the opinion of the [Federal Board for Vocational Education], is unable to carry on a gainful occupation, to resume his former occu- pation, or to enter upon some other occupation is unable to continue the same successfully, shall be furnished by the said board, where vocational rehabilitation is feas- ible, such course of vocational rehabilitation as the board shall prescribe and provide."
1919/PL 66-11	Additional persons to be benefitted: "[E]very person enlisted, enrolled, drafted, inducted or appointed in the military or naval forces, including members of training camps authorized by law, who, since April 7, 1917, has resigned or has been discharged or furloughed therefrom under honorable conditions, having a disability incurred, increased or aggravated while a member of such forces, or later developing a disability traceable in the opinion of the board to service with such forces, and who, in the opinion of the[board], is in need of vocational re- habilitation to overcome the handicap of such disability, shall be furnishedsuch course of vocational rehabilita- tion as the board shall prescribe and provide."

-39-

Exhibit II(2)

.

## KEY LEGISLATIVE PROVISIONS TO EXPAND SERVICE-ELIGIBLE HANDICAPPED POPULATION

•

Year/Public Law	Provisions
1920/PL 66-236	Nonmilitary persons were added as service-eligible: "Any person who, by reason of a physical defect or in- firmity, whether congenital or acquired by accident, in- jury, or disease, is, or may be expected to be, totally or partially incapacitated for remunerative occupation."
1954/PL 83-565	Broader definition in this legislation includes the men- tally disabled: "The term 'physically handicapped indi- vidual' means any individual who is under a physical or mental disability which constitutes a substantial handicap to employment, but which is of such a nature that voca- tional rehabilitation services may reasonably be expected to render him fit to engage in a remunerative occupation."
1967/PL 90-99	Benefits extended to migratory workers and their fam- ilies: "The Secretary is authorized to any State [Voca- tional Rehabilitation] agency, or to any local agency participating in the administration ofa [State Voca- tional Rehabilitation] plan, for the provision of voca- tional rehabilitation services to handicapped individuals who, as determined[by] the Secretary of Labor, are migratory agricultural workers, and to members of their families (whether or not handicapped) who are with them"

Exhibit II(3)

## KEY LEGISLATIVE PROVISIONS TO EXPAND SERVICE-ELIGIBLE HANDICAPPED POPULATION

.

Year/Public Law		Provisions
1973/PL 93-112	(1)	"The term 'handicapped individual' means any indi- vidual who (A) has a physical or mental disability which for such individual constitutes or results in a substantial handicap to employment and (B) can reasonably be expected to benefit in terms of employ- ability from vocational rehabilitation services pro- vided pursuant to titles I and III of this Act."
	(2)	"The term 'severe handicap' means the disability which requires multiple services over an extended period of time and results from amputation, blind- ness, cancer, cerebral palsy, cystic fibrosis, deaf- ness, heart disease, hemiplegia, mental retardation, mental illness, multiple sclerosis, muscular dystro- phy, neurological disorders (including stroke and epilepsy), paraplegia, quadriplegia and other spinal cord conditions, renal failure, respiratory or pul- monary dysfunction, and any other disability speci- fied by the Secretary in regulations he shall pre- scribe".

Exhibit II(4)

### KEY LEGISLATIVE PROVISIONS TO EXPAND SERVICE-ELIGIBLE HANDICAPPED POPULATION

Year/Public Law Provisions
----------------------------

1974/PL 93-516 (1) A handicapped individual is one who, for the purposes of titles IV and V (Administration, Evaluation, and Miscellaneous), "(A) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (B) has a record of such an impairment, or (C) is regarded as having such an impairment." (Therefore, vocational rehabilita-tion service agencies should continue to use the 1973 definition.)

# Exhibit III(1)

Year/Public Law		Provisions
1918/PL 65-178	(1)	Federal Board for Vocational Education empowered "to make rulesas necessary" about who should be served and what types of services, specifically training and placement, are necessary.
	(2)	"Medical and surgical work or other treatment neces- sary to give functional and mental restoration to disabled persons prior to their discharge from the military or naval forcesshall be under the control of the War Department and the Navy Department, re- spectively."
1920/PL 66-236	(1)	States provided with funding to promote vocational rehabilitation for civilians.
	(2)	State Plan requirements were established (for Voca- tional Rehabilitation) to be submitted to the Federal Security Administrator, including: "(a) the kinds of vocational rehabilitation and schemes of place- ment; (b) the plan of administration and super- vision [of the State Plan]; (c) courses of study; (d) methods of instruction; (e) qualification of teachers; (f) plans for training of teachers"
	(3)	Rehabilitation was defined as "[t]he rendering of a person disabled fit to engage in a remunerative occu- pation."

Year/Public Law	Provisions

State Plan requirements/responsibilities expanded as 1943/PL 78-113 (1)follows: "(1) designate the State board of vocational education...as the sole agency for the administration, supervision, and control of the State blind commission, or other agency which provides... services to the adult blind is authorized to provide them vocational rehabilitation, the plan shall provide for administration by such...[blind agency] the part of the plan under which vocational rehabilitation is provided the blind...; (2) provide that the State treasurer...be appointed as custodian of funds received under this Act from the Federal Government...; (3) show the plan, policies, and methods to be followed in carrying out the [plan]...; (4) provide that vocational rehabilitation under the plan shall be made available only to classes of employable individuals defined by the [Federal Security] Administrator; (5) contain such provisions as to the qualification of personnel for appointment in administering the plan as are necessary...; (6) provide... methods of administration...; (7) provide that the State board will make...reports [as necessary to the Administrator]...: (8) provide that no portion of any money...shall be applied...to the purchase, preservation, erection or repair of any building...or for the purchase or rental of any land for administrative

Year/Public Law	<u> </u>	Provisions
(1943 cont.)		purposes; (9) provide such rules, regulations, and standards with respect to expendituresunder sec- tion 3(a) as the Administrator may find reasonable and necessary, including (A) provisions designed to secure good conduct, regular attendance, and cooper- ation of trainees and reduction of allowance in the case of on-the-job training; (B) maximum fees which may be paid for training and maximum duration of training; (C) maximum schedules of fees for surgery, therapeutic treatment, hospitalization, and medical examination, and for prosthetic devices; and (D) maximum rates of compensation of personnel; and (10) provide that vocational rehabilitationshall be available,to any civil employee of the United States disabled while in the performance of his duty and to any war-disabled civilian"
	(2)	Payments to States differed, depending upon the clas- sification of individual served: "(l) the necessary costof providing vocational rehabilitationto disabled individuals certifiedas war disabled civilians; (2) one-half of necessary expenditures for rehabilitation training and medical examinations where necessary to determine eligibility for voca- tional rehabilitation, the nature of rehabilitation services required, or occupational limitations, in

i i

Exhibit III(4)

.

Year/Public Law	Provisions
(1943 cont.)	the case of other disabled individuals; and (3) one- half of necessary expendituresfor rehabilitation services specified in subparagraphs (A), (B), (C), (D), and (E), to disabled individuals (not including war-disabled civilians) found to require financial assistance with respect thereto (A) corrective surgery or therapeutic treatment necessary to correct or substantially modify a physical condition which is static and constitutes a substantial handicap to employment, but is of such a nature that such correc- tion or modification should eliminate or substan- tially reduce such handicap within a reasonable length of time; (B) necessary hospitalization[in connection with (A)]; (C) transportation, occupa- tional licenses and customary occupational tools and equipment; (D) such prosthetic devices as are essential to obtaining or retaining employment; (E) maintenanceduring training"
(	3) Vocational rehabilitation and rehabilitation services defined as: any services necessary to render a dis- abled individual fit to engage in a remunerative occupation."

#### Exhibit III(5)

Year/Public Law	Provisions
1954/PL 83-565	(1) Authorizes appropriations for grants, in Section 1

- for "the purposes of assisting the States in rehabilitating physically [sic] handicapped individuals so that they may prepare for and engage in remunerative employment to the extent of their capabilities, thereby increasing not only their social and economic well-being but also the productive capacity of the Nation... " Funds were made available for: "(1) grants to States...to assist them in meeting the costs of vocational rehabilitation services; (2) grants to States...to assist them in initiating projects for the extension and improvement of their vocational rehabilitation services; and (3) grants to States and to public and other nonprofit organizations and agencies...to assist in meeting the costs of projects for research, demonstrations, training, and traineeships, and special projects..."
  - (2) State plan requirements were made more flexible in some areas and more extensive in others, e.g.: "(1) [the plan must] designate the State agency administering...vocational education...or a State rehabilitation agency (primarily concerned with vocational rehabilitation) as the sole state agency to administer the plan...except [in the case of a State blind commission, which will administer the part of the

Year/Public Law	Provisions
(1954 cont.)	plan concerned with vocational rehabilitation ser- vices for the blind]; (3)provide that the plan shall be in effect in all political subdivisions of the State; (4) show the plan, policies, and methods[to carry out the plan], and in case vocational rehabilitation services cannot be provided all eligible physically [sic] handicapped individuals who apply for such services, show the order to be followed in selecting those to whom vocational rehabilitation services will be provided;(7) provide that, in addition to training, maintenance, placement, and guidance, physical restoration ser- vices will be provided under the plan;(9) provide for cooperationwith, and utilization of the ser- vices of, the State agency administering the State's public assistance program, and the Bureau of Old-Age and Survivors Insuranceand of other Federal, State, and local public agencies providing services relating to vocational rehabilitation services; (10) provide for entering into cooperative arrangements with the system of public employment officesand the maximum utilization of the job placement and employment counseling services and other services"

Year/Public Law		Provisions		
(1954 cont.)	(3)	A new section was added for "Promotion of Employment Opportunities" and required that the Secretaries of Labor and HEW "cooperate in developing, and in recom- mending to the appropriate State agencies, policies and procedures which will facilitate the placement in employment of handicapped individuals who have re- ceived rehabilitation services under State vocational rehabilitation programs"		

(4) Vocational rehabilitation services were redefined as "diagnostic and related services (including transportation) incidental to the determination of eligibility for and the nature and scope of services to be provided; training, guidance and placement services for physically handicapped individuals; and, in the case of any such individual found to require financial assistance with respect thereto, after full consideration of his eligibility for any similar benefit by way of pension, compensation, and insurance, any other goods and services necessary to render such individual fit to engage in a remunerative occupation (including remunerative homebound work), including the following physical restoration and other goods and services[:] (1) corrective surgery or therapeutic treatment necessary to correct or substantially modify a physical or mental condition...;

Year/Public Law		Provisions				
(1954 cont.)		(2) necessary hospitalization; (3)prosthetic devices; (4) maintenance (5) tools, equipment, initial stocks and supplies; and (6) transporta- tionand occupational licenses[;] (7) the acqui- sition of vending stands or other equipmentfor use by severely handicapped individuals; and (8) the establishment of public and other nonprofit rehabil- itation facilities"				
	(5)	The President's Committee on Employment of the Handi- capped, approved in 1949, was given a substantial increase in funding (from \$75,000 to \$225,000).				
	(6)	U.S. Employment Services were required to add the handicapped in employment counseling and placement services (29 U.S.C., sec. 49b).				
1965/PL 89-333	(1)	Funds available for: (1) grants to States for voca- tional rehabilitation services; (2) grants to States for "innovation of vocational rehabilitation services "under the State plan which (A) provide for the de- velopment of methods or techniquesfor providing vocational rehabilitation services, or (B) are especially designed for development of, or provision for, new or expanded vocational rehabilitation ser- vices for groups of handicapped individuals having				

Year/Public Law	Provisions
(1965 cont.)	disabilities which are catastrophic or particularly severe"; (3) grants to assist in staffing and in con- struction costs for public or other nonprofit work- shops and rehabilitation facilities (new), which must be approved by the appropriate State agency; (4) grants to States and public and other nonprofit organizations for projects that provide training ser- vices for handicapped individuals in nonprofit work- shops and rehabilitation facilities (Section 13)* if the purpose of such project is to "prepare handi- capped individuals for a gainful occupation" [my em- phasis], and if "the individuals to receiveser- viceswill include only individuals who have been determined to be suitable for and in need of such training services by the State agency [my emphasis]; grants to public or other nonprofit workshops for projects to analyze, improve, and increase profes- sional services.

<sup>\*</sup> Training services in the subsection include: training in occupation skills; related services (e.g., work evaluation, testing, providing tools and equipment); weekly allowances.

Year/Public Law	<u> </u>	Provisions		
(1965 cont.)	(2)	A National Policy and Performance Council was estab- lished to advise the Secretary regarding policies for grants and workshop improvements.		
	(3)	The National Commission on Architectural Barriers to Rehabilitation of the Handicapped was established.		
	(4)	Special programs and comprehensive planning to expand vocational rehabilitation services were added, so that grants became available "(A) to States and public and other nonprofit organizations and agencies for paying part of the cost of planning, preparing for, and initiating special programs to expand voca- tional rehabilitation services in those States where, , such action holds promise of yielding a substan- tial increase in the number of persons vocationally rehabilitated,, and (B) to Statesto meet the cost of planning for the development of a comprehen- sive vocational rehabilitation program in each State, with a view to achieving the orderly development of vocational rehabilitation services in the State (in- cluding vocational rehabilitation services provided by private nonprofit agencies)"		

(5) Limitations on training were raised.

-52-

# Exhibit III(11)

# KEY LEGISLATIVE DEVELOPMENTS IN SERVICE PROVISION

•

Year/Public Law	Provisions			
(1965 cont.)	(6)	The "economic need" requirement for services was deleted.		
	(7)	Special services for the blind and deaf were provided.		
	(8)	Services to determine rehabilitation potential were added in the definition of vocational rehabilitation services (Sec. 10) and for a period of up to 18 months (for the retarded and others designated by the Secretary) or 6 months (for other disability groups).		
1967/PL 90-99	(1)	A National Center for Deaf-Blind Youths and Adults was established to be funded by the Secretary for any public or nonprofit private agency.		
	(2)	Grants to State agencies, or to local agencies "par- ticipating in the administration of such a plan" were to be made for provision of vocational rehabilitation services to handicapped migratory agricultural workers.		
	(3)	The residence requirement was deleted.		
1968/P1 90-391	(1)	Projects With Industry (PWI) funds were made avail- able: "[for grants] to States and public and other nonprofit organizations[for projects in] planning, preparing for, and initiating special programs to expand vocational rehabilitation services,		

Year/Public Law		Provisions					
(1968 cont.)		(B) [for contracts or jointly financed arrangements with employers] to prepare handicapped individuals for gainful employment in the competitive labor mar- ket under which handicapped individuals are provided training and employment in a realistic work setting and such other servicesas may be necessary for such individuals to engage in such employment, (C) [for grants] to State vocational rehabilitation agen- cies and other[nonprofit] agenciesto enable them to develop new programs to recruit and train"					
	(2)	State plan requirements for services were expanded (Section 5(a)): "[State plans must] provide that evaluation of rehabilitation potential, counseling and guidance, personal and vocational adjustment, training, maintenance, physical restoration, and placement and follow-up services will be provided under the plan [.]"					
	(3)	Vocational Rehabilitation services were redefined as "(A) evaluation, including diagnostic and related services, incidental to the determination of eligi- bility for and the nature and scope of services to be provided; (B) counseling, guidance, and placement services for handicapped individuals, including follow-up services to assist such individuals to					

### Exhibit III(13)

### KEY LEGISLATIVE DEVELOPMENTS IN SERVICE PROVISION

Year/Public Law	Provisions
والمحاجب والمراجب والمراجب والمرجوب والمرجوب والمرجوب والمرجوب والمراجب والمراج والمراج المراجب والمراجب والمراجع والمراجع	

(1968 cont.) maintain their employment; (C) training services for handicapped individuals, which shall include personal and vocational adjustment, books, and other training materials; (D) reader services for the blind and interpreter services for the deaf; and (E) recruitment and training sevices for handicapped individuals to provide them with new employment opportunities in the fields of rehabilitation, health, welfare, public safety, and law enforcement, and other appropriate service employment." Other services included under this term are: "(A) physical restoration services, including, but not limited to, (i) corrective surgery or therapeutic treatment necessary to correct or substantially modify a physical or mental [disability] ..., (ii) necessary hospitalization..., (iii) prosthetic and orthotic devices, (iv) eye glasses and visual services...; (B) maintenance,... during rehabilitation; (C) occupational licenses, tools, equipment, and initial stocks and supplies; (D) in the case of any...small business operated by the severely handicapped..., the provision of [necessary management services and supervision by the State agency]...; (E) the construction or establishment of... rehabilitation facilities; (F) transportation...; (G) any other goods and services necessary to render a handicapped individual employable; (H) services to the families of handicapped individuals..."

## Exhibit III(14)

Year/Public Law	Provisions
(1968 cont.)	(4) A new vocational evaluation and work adjustment pro- gram was added (Section 15) in which federal payments were made to States for "evaluation and work adjust- ment services furnished to disadvantaged persons, including the cost of anyservices furnished by the designated State vocational rehabilitation agency for other agencies providing [such] services"* Such State programs would be approved when the State agency is designated to provide such services in cooperation with other agencies serving disadvantaged individuals.
1973/PL 193-112	(1) <u>Replaces</u> the Vocational Rehabilitation Act and estab- lishes the Rehabilitation Services Administration in the Department of Health, Education and Welfare.
	(2) Grants for vocational rehabilitation services pro- vided to "assist States to meet the current and future needs of handicapped individuals, so that such individuals may prepare for and engage in gainful employment to the extent of their capabilities."

<sup>\*</sup> See definition of "disadvantaged" in Exhibit II.

Year/Public Law	Provisions

- (1973 cont.) (3) State plan requirements emphasize services to the severely handicapped\* - those who are "most in need," as stated in Section 5(a): "[State plans must] contain the plans, policies, and methods to be followed in carrying out the State plan..., including a description of the method to ... expand and improve services to handicapped individuals with the most severe handicaps; and, in the event that vocational rehabilitation services cannot be provided to all eligible handicapped individuals who apply..., show (i) the order to be followed in selecting individuals..., and (ii) the outcomes and service goals..., which order ... shall be determined on the basis of serving first those individuals with the most severe handicaps..." (4) The State plan requirement for interagency cooperation was expanded: "...[the plan must] provide for entering into cooperative arrangements with, and the
  - utilization of the services and facilities of, the State agencies administering the State's public assistance programs, other programs for handicapped individuals, veterans programs, manpower programs,

<sup>\*</sup> See definition in Exhibit II.

Year/Public Law	Provisions				
(1973 cont.)		and public employment offices, and the Social Secur- ity Administration of the Department of Health, Edu- cation, and Welfare, the Veterans' Administration, and other Federal, State, and local public agencies providing services related to the rehabilitation of handicapped individuals [.]"			
	(5)	A new State plan requirement was added for an indi- vidualized written rehabilitation plan to be devel- oped jointly by the vocational rehabilitation coun- selor and the handicapped individual (Section 102): "Such written program shall set forth the terms and conditions, as well as the rights and remedies, under which goods and services will be provided to the individual."			
	(6)	Vocational Rehabilitation services are "any goods or services necessary to render a handicapped individual employable, including, but not limited to, the fol- lowing: (1) evaluation of rehabilitation poten- tial; (2) counseling, guidance, Referral, and placement services, including follow-up, follow- along, and other postemployment services; (3) vocational and other training services; (4) phys- ical and mental restoration services; maintenance during rehabilitation; (6) interpreterand			

Year/Public Law	Provisions	
(1973 cont.)		reader services; (7) recruitment and training ser- vicesto providenew employment opportunities; (8) rehabilitation teaching services and orientation and mobility services for the blind; (9) occupational licenses, tools, equipment, and initial stocks and supplies; (10) transportation [during service pro- vision]; and (11) telecommunicationsand other technological aids and devices."
	(7)	Other grants and funding for special projects and research were continued (e.g., in vocational train- ing), as well as the National Center for Deaf-Blind Youths and Adults.
	(8)	Provisions for nondiscrimination in employment and in federally funded programs or schools were also added.

-59-

### CHAPTER II REHABILITATION POLICY AND THE VR PROGRAM

In Chapter I, we saw that the legislative policy for rehabilitation of the disabled has greatly expanded both the types of services offered and the number of potential rehabilitants. Services offered increased to include restoration as well as training and placement; the number of eligible participants increased to include both civilians (as well as veterans) and any disability type. These broad mandates reflect current social policy trends to invest public funds in people who have the potential to return the assistance in increased future earnings and taxes.

This chapter summarizes several important findings of studies on VR program effectiveness, presents other empirical research that suggests problems with these findings, and ties the resulting issues to the three questions posed in Chapter I and to the basic empirical generalization with which this thesis is concerned. The remainder of this section highlights the key points in the chapter; Sections 1 and 2 describe the empirical studies and findings; and Section 3 summarizes the key issues within the

-60-

context of the empirical generalizaton to be tested in this case study.

\* \* \* \* \*

Most assessments of the federal-state VR program indicate that program benefits significantly outweigh costs (Collignon and Dodson, 1975; Worrall, 1978; Bellante, 1972; Levitan and Taggart, 1977; Burkhauser and Haveman, 1982). These benefit/cost analyses, as well as the "official" program statistics from state and federal agencies (covering the number of people served, the number of rehabilitants, and program expenditures) are used in VR legislation to argue for continued federal support of the program.<sup>1</sup>

However, other empirical work challenges the finding that the VR program is as effective as these studies have suggested. These research efforts and interpretations provide the basis for arguments against the "conventional wisdom" primarily because they use data generated by federal and/or state VR agencies as the framework for analyzing VR program

-61-

<sup>(1)</sup> See "Legislative History to P.L. 93-112," The Rehabilitation Act of 1973, U.S. Congressional Code and Administrative News, 93rd Congress, p. 2085.

effectiveness without relying on discount rates or other present/future value assumptions to assess the impacts of the VR system on increased productivity through employment.

- Treitel (1977) and Levitan and Taggart (1977) point out that, in 1972, only 25% of the disabled reported ever receiving rehabilitation services; moreover, most services that were received were either arranged or provided by a physician or a private hospital and not by the state VR agency.
  - From 1965 to 1975, both the number of clients served and the federal expenditures for the VR program substantially increased (Levitan and Taggart, 1977). However, a close look at the numbers shows that, <u>on a</u> <u>compounded basis</u>, much greater increases occurred in expenditures than in the number of clients served. In addition, the number of rehabilitants is not increasing as quickly as the number of clients served.

-62-

-63-

Almost all benefit/cost analyses of the VR program (e.g., Bellante, 1972; Conley, 1966; Worrall, 1978) agree that the benefits far outweigh the costs. However, the range of benefits to costs in these studies varies widely (due to methodological differences). As a result, two important issues surface: (1) which clients should be served first - the least or most likely to succeed? (2) the focus of these analyses is on outcomes -- i.e., on whether increased productivity or earnings (through employment), is achieved, and if so, to what degree -- but they do not inform us about equally important area, namely, whether benefits are achieved by the program or by the participants on their Thus, legislators need more than own. benefit/cost data in order to assess the VR program itself.

These results tie to the questions raised in Chapter I: is the system providing the services in its mandate (either directly or indirectly, as a "resource" of where to go for services), are the number of rehabilitations and the number of people served increasing, and is the system is helping clients to achieve employment gains that they cannot achieve on their own?

### SECTION 1. FEDERAL-STATE VR PROGRAM: 1965 TO 1975

In Chapter I, we saw that the federal-state VR program was mandated to expand its scope of responsibilities for enabling disabled individuals to obtain employment. This section presents findings from several studies that utilize one of two mechanisms to assess whether the VR program is working to increase the number of people served, the number of rehabilitants, and the earnings of disabled individuals through employment.

One method of assessing increases in service provision is to look at "official" program statistics (i.e., data from federal/state agencies) on the number of clients served and the federal/state expenditures. From 1965 to 1975, these statistics indicate that increases occurred both in the number of clients served and in federal expenditures.

### VR Activity

	Fisca	1 1965	Fiscal 1975	
Federal/State	Clients Served*	Expendi- tures**	Clients Served*	Expendi- tures**
Total VR Activity	616	<b>\$</b> 262	1,837	\$1,740
Federal/State VR Program	441	182	1,265	1,022

\* Reported in thousands. \*\* Reported in millions.

Source: Levitan and Taggart (1977), op. cit., p. 29

Most interpretations of this type of data suggest that program expansion has been substantial (Burkhauser and Haveman, 1982; Levitan and Taggart, 1977; Sussman and Haug, 1967; Sussman, 1976), e.g.:

> Expansion has been rapid on all fronts in the last decade. In fiscal 1975, rehabilitation programs served 1.8 million persons, nearly triple the figure of a decade earlier. ...Expenditures rose over this period from \$262 million to \$1.7 billion, or 3.7 times after adjusting for cost of living increases.<sup>1</sup>

(1) Levitan and Taggart (1977), op. cit., p. 28.

In addition, benefit/cost analyses are a key assessment mechanism for justifying future congressional allocations. While these studies are not confined only to the VR program, the VR programs were likely to have yielded much higher payoffs:

> A number of benefit/cost studies in the 1960s purported to demonstrate the effectiveness of manpower programs for the disadvantaged. These varied in their scope, focus, technical sophistication, and assumptions; some used control groups, others did not; but the results were generally favorable, most frequently yielding benefit/cost ratios between 1:1 and 4:1 under standard assumptions....

> In contrast, benefit/cost analyses of vocational rehabilitation yielded payoff rates so high that few questioned the profitability and value of these efforts... A 1965 study by Ronald Conley ...found that... the benefits were 14 to 17 times the costs. [Even at lower discount rates] the benefit/cost ratios were between 10:1 and 12:1.<sup>1</sup>

<sup>(1)</sup> Levitan and Taggart, op. cit., pp. 76-77.

Such favorable findings are not unusual in VR benefit/cost analyses. Using 1966 data, the Rehabilitation Services Administration estimated that "each \$1 spent on vocational rehabilitation returned \$36 in benefits;" the Michigan Department of Education reported benefit/cost ratios of 33:1 and 26:1 for 1968 and 1969, respectively. More recent studies yield ratios of over 10:1 and Abt Associates computed ratios for fiscal 1970 ranging from 7:1 to 10:1 under conservative assumptions.<sup>1</sup>

Interestingly, there have been severe methodological criticisms of benefit/cost studies of VR programs (Levitan and Taggart, 1977; Burkhauser and Haveman, 1982) suggesting that at least some of the positive outcomes of VR programs are due more to the methodologies employed than to actual performance of the programs.<sup>2</sup> Most of the early studies used standard measures of client earnings before and after training, with future projections. Gains were evaluated using discounted present values for program

-67-

<sup>(1)</sup> Ibid, pp. 77-78.

<sup>(2)</sup> Ibid, p. 81. See also Richard Burkhauser and Robert Haveman, <u>Disability and Work: The</u> <u>Economics of American Policy</u> (Baltimore: The Johns Hopkins University Press, 1982), pp. 68-71.

costs and earnings; no control groups were used; suspect earnings comparisons were employed.<sup>1</sup> However, most analysts have agreed that, probably because of the apparent enormity of the payoff, the VR program is a worthwhile public investment.

> What can be concluded from these studies? First, in terms of a social benefit/cost criterion, the vocational rehabilitation program does appear to yield substantial net benefits. Although the available studies are methodologically flawed, it seems unlikely that improved procedures and data would overturn the results. However, because the benefit/cost calculations yield average rather than marginal benefit/cost estimates, little evidence exists on the efficiency of expanding the program beyond its present size. Second, although the evidence is not strong, it appears that concentrating rehabilitation activities on younger, less disabled, and more productive [individuals] is likely to be more efficient than focusing on the less productive of the disabled group.<sup>2</sup>

(2) Ibid, p. 70.

Burkhauser and Havemen (1982), op. cit., pp. 68-69.

This last issue, i.e., who should be prioritized for services, is usually raised in the context of how to meet the needs of disabled individuals in an economy with scarce resources. Three key reasons for prioritizing services to the less severely disabled have been made, and are described below.

First, it is more "efficient" to provide services to those who are more likely to succeed the younger, married, and less severely disabled (Bellante, 1972; Worrall, 1978; Berkowitz and Rubin, 1977). They are more likely to increase their earnings at higher rates than are the severely disabled, and can more often utilize the available services.

Two other reasons that argue for prioritizing services to the less severely disabled reflect labor market trends and use of the income support system. The latter encompasses income maintenance services, e.g., Social Security Disability Insurance (SSDI), for those medically impaired persons whose earnings are severely limited and who are unable to work (that is, unable to "engage in substantial gainful activity for 12 months"). Such a support system has the latent consequence of providing a significant disincentive for the return to work, particularly for the most severely disabled who could attain only marginal financial benefits from employment. In this sense, because it is geared towards the more severely disabled, income support tends to be an important factor in the argument for prioritizing VR services for the less severely disabled.

The status of the economy and its impact on the labor market has also been a factor in determining rehabilitation program success (Burkhauser, <u>et al</u>, 1982) and can provide some guidance for prioritizing services, particularly because disability is defined in work-related terms. Burkhauser and Haveman, for example, argue that in a low demand, high unemployment economy, training for the most severely disabled is less likely to generate employment and earnings gains than in a high demand economy. Thus, in a low demand situation, it might be less advisable to concentrate resources on rehabilitation services rather than on "job creation" strategies, such as employment subsidies, sheltered workshops (usually

-70-

for those disabled who are not likely to be employable in the competitive labor force), and public service employment (by funding for direct employment of the structurally unemployed).<sup>1</sup> It would also be more advisable to focus employment and training resources on the less severely disabled.

### SECTION 2. QUESTIONING THE FACTS

This section presents an interpretation of the research described above and suggests that there are problems with these VR program assessments that have, generally, been accepted as accurate gauges of program effectiveness. Three interpretations are presented:

> A summary of Social Security Administration data analyzing the receipt of rehabilitation services and suggesting (Treitel, 1977) that services are not received by a vast majority of the disabled (Part A)

<sup>(1)</sup> Burkhauser and Haveman (1982), op. cit., pp. 35 and 71.

- An interpretation of the data on both the number of clients served and federal expenditures presented in Section 1 suggesting that program expansion has not been as great as the raw data suggests (Part B)
- An analysis of why benefit/cost analyses are, in general, inadequate as a "stand alone" mechanism for determining VR program effectiveness and service priorities (Part C).

#### A. Receipt of Services

The prevalence of disability has only recently become a focal point for research (Albrecht, 1976; Wan, 1974; Haber, 1971 and 1973). However, U.S. survey data are now used in many such studies (Haber, 1973; Levitan and Taggart, 1977) to estimate incidence and program effects. Although prevalence rates will vary depending on the survey, I have selected the Social Security Administration's surveys and other federal census data for their completeness and detail.

-72-

The Social Security Administration's 1972 follow-up survey found that the relatively few individuals who reported receiving rehabilitation services differed markedly from the general disabled population. Greater proportions of disabled persons receiving services were younger (one out of three persons under age 35 reported receiving services, compared to one out of five persons aged 55 to 64), male, employed at some time, and with a continuing disability.<sup>1</sup> They were also more likely to be in the musculoskeletal, nervous system, and mental illness diagnostic groups (Table I); to have hearing or back impairments or missing limbs; and to receive Social Security Disability Insurance (SSDI) or other public assistance.<sup>2</sup> In addition, those with a higher degree of functional loss, but not so severe that services would not help, were more likely to seek out services.<sup>3</sup>

(1) Treitel (1972), p. 3.

-73-

<sup>(2)</sup> Ibid, p. 3.

<sup>(3)</sup> Ibid, p. 6.

#### TABLE I(A)

#### PERCENT OF DISABLED WITH PHYSICAL AND MENTAL CONDITION AND BY RECEIPT OF SERVICES: ADULT NONINSTITUTIONALIZED POPULATION

	1972*			
Condition	Percent Of Total Disabled**	Percent Of Severely Disabled***	Percent Of Total Received Services	Percent of Severe Received Services
Musculoskeletal	35.9%	30.4%	36.8%	38.9%
Arthritis, Rheumatism	9.9	-	23.7	-
Back or Spine Trouble	17.7	-	41.7	-
Missing Limbs	0.6	-	66.3	-
Chronic Stiffness	-	-	-	-
Cardiovascular	20.8	24.8	13.3	13.7
Rheumatic Fever	-	-	-	-
Heart Attacks/Trouble	10.8	-	12.8	-
Stroke	1.5	-	33.0	-
Hardening of Arteries	-	-	-	
High Blood Pressure	5.0	-	10.3	-
Varicose Veins, Hemorrhoids	-	-	-	
Respiratory	9.1	7.8	18.9	23.6
Tuberculosis	-	-	-	
Bronchitis	-	-	-	-
Emphysema	2.1	-	30.3	-
Asthma	3.1	-	15.2	-
Allergies	-	-	-	-
Digestive	4.9	3.9	14.8	16.2
Gall Bladder	-	-	-	-
Stomach Ulcer	1.4	-	11.5	-
Hernia	-	-	-	-
Mental	7.7	11.3	26.4	20.7
Mental Illness	1.8	-	33.2	-
Mental Retardation	1.5	-	34.6	-
Alcohol/Drugs		-	-	-
Chronic Herves	4.1	-	16.6	-
Nervous System	2.7	3.9	42.4	44.1
Epilepsy	1.3	-	33.3	-
Multiple Sclerosis	0.4	-	58.6	-

\* Source: Social Security Administration, "Percent of Disabled Adults Who Ever Received Services By Selected Demographic and Disability Characteristics," <u>1972 Survey</u> of the Disabled, in Treitel (1977), p. 22.
\*\* N = 15,550,000.
\*\*\* N = 7,717,000.

:

#### TABLE I(B)

# PERCENT OF DISABLED WITH PHYSICAL AND MENTAL CONDITION AND BY RECEIPT OF SERVICES: ADULT NONINSTITUTIONALIZED POPULATION

		1972*			
Condition	Percent Of Total Disabled**	Percent Of Severely Disabled***	Percent Of Total Received Services	Percent of Severe Received Services	
Urəgenital Kidney	2.0%	2.0%	6.5%	8.0% -	
Neoplasm Tumor or Cyst Cancer	2.2	2.8 _ _	24.3	27.2	
Endocrine Diabetes Thyroid	2.1	2.2	13.6	11.2	
Sensory Hearing Vision	3.3 1.0 2.0	2.8 0.5 2.3	32.2 55.8 21.4	41.3 24.9 16.4	
Other/Unknown	9.4	8.1	15.2	16.7	

\* Source: Social Security Administration, "Percent of Disabled Adults Who Ever Received Services By Selected Demographic and Disability Characteristics," <u>1972 Survey</u> of the Disabled, in Treitel (1977), p. 22.
\*\* N = 15,5550,000.
\*\*\* N = 7,717,000.

Equally important was the finding that most people reported receiving medical rather than vocational services. About 70% reported receiving physical therapy or special devices, such as braces or wheelchairs.<sup>1</sup> More young disabled than older disabled individuals reported receiving vocational services - about 13% of those under 35 reported receiving job training or placement, compared to 3% of those from 55 to 64.<sup>2</sup>

(1) Ibid, p. 7. (2) Ibid, p. 8.

# Type of Service Received By Age

Type Of		Age	Range		
Service	Total	20-34	35-44	45-54	55-64
Percent Received*	25.1%	34.0%	26.0%	24.7%	20.1%
Job Counsel- ing And Guidance	4.8	9.8	4.9	4.1	2.6
Job Train- ing And Placement	7.0	13.4	8.1	6.9	3.1
Physical Therapy And Special Devices	17.7	19.3	16.8	18.9	16.3
Other	2.2	3.1	3.8	2.0	1.1

\* Percents include multiple services per client.

Source: U.S. Department of Health, Education and Welfare, Social Security Administration, <u>Rehabilitation of Adults - 1972</u>, by Ralph Treitel (Report No. 3, May 1977), p. 8. In general, medical sources (e.g., physicians) were the most important sources of services and the most predominant providers of rehabilitation services.<sup>1</sup> Only small proportions of <u>both</u> the least and most severely disabled reported receipt of services from vocational rehabilitation agencies, and many who "traditionally get into the VR system" are those with congenital or chronic conditions (e.g., mental retardation).<sup>2</sup> When considering both sponsorship and provision of services, rehabilitation "specialists" play a large part, specifically in the areas of counseling and training (Table II).

Most disabled (over 76%) reported that the rehabilitation services received did help, particularly in terms of self-care, getting around, and self-confidence.

(1) Ibid, p. 9. (2) Ibid, p. 10. -78-

## TABLE II

## INVOLVEMENT IN REHABILITATION SERVICES: SPONSOR, PROVIDER, TYPE OF SERVICE

## Active Clients - Age 16-64

	Percent Of Total Disabled Population	Percent Of Those Received Services
Sponsor		
VR Agency	2.7	10.6
Public Welfare	1.5	6.1
Veterans Administration	2.6	10.2
Doctor	12.8	51.0
Private Person	1.1	4.3
Employer	1.7	6.7
Private Agency	0.5	2.1
Other Agency	1.6	6.5
Self	3.8	15.1
Unknown	0.4	1.5
Provider		
VR (Agency)	3	13.9
Public Welfare	2	6.2
Veterans Administration	3	10.2
School	2	6.8
Doctor	5	21.0
Hospital (or Rehab. Center)	11	43.5
Private Person	1	5.3
Employer (on job)	2	6.0
Private Agency	1	5.9
Other Public Agency	2	9.1
Unknown	*	1.6
Type of Service		
Job Counseling (and guidance)	5	19.0
Job Training (and placement)	7	27.9
Physical Therapy And Special Devic	es 18	70.7
Other	2	8.7

\* Less than 0.5 percent.

Source: U.S. DHEW, Social Security Administration, Rehabilitation, pp. 19, 24.

# Service Recipients And Results

Total Disabled	Severe	Occupa- tional	Secondary
76.7%	72.3%	79.5%	82.1%
11.2	5.5	16.2	17.3
5.9	2.4	8.2	10.5
7.6	3.8	8.2	14.0
25.8	32.1	23.6	16.0
42.8	46.9	42.0	36.1
25.7	26.9	26.2	23.0
14.6	10.9	15.4	20.8
23.3	27.7	20.5	17.9
	Disabled 76.7% 11.2 5.9 7.6 25.8 42.8 25.7	DisabledSevere76.7%72.3%11.25.55.92.47.63.825.832.142.846.925.726.914.610.9	DisabledSeveretional76.7%72.3%79.5%11.25.516.25.92.48.27.63.88.225.832.123.642.846.942.025.726.926.214.610.915.4

Source: U.S. Department of Health, Education and Welfare, Social Security Administration, Rehabilitation Of Adults - 1972, op. cit., p. 27. A similar proportion of women and men reported that services helped, although proportionately more women reported help in terms of self-care and getting around than in getting a job.<sup>1</sup>

In addition, few disabled reported a need for rehabilitation services (about one in five never receiving services expressed interest), and there was "little difference in the proportions interested in services by degree of severity." Of those interested, most wanted job placement and training services - about 70% of the currently disabled who had not received services <u>and</u> were interested. The less severely disabled were the most interested in direct job aid - about 80% of those with occupational and secondary disabilities.<sup>2</sup>

In summary, the Social Security Administration's 1972 survey found that relatively few disabled individuals reported receipt of rehabilitation services and that those who did receive services were younger, had been employed at some time, and had a continuing disability. This is not entirely

(1) Ibid, p. 12.
 (2) Ibid, p. 13.

surprising, because others have suggested that the "cream skimming" phenomenon occurs for other groups, as well as for this one (Levitan and Taggart, 1977). More important, however, were the findings that respondents reported receiving medical rather than vocational services (e.g., physical therapy or special devices) and that medical sources, such as physicians, were the most important sources of services. This is where we should have expected to see the state VR system as responsive: while they may not provide direct services, it is surprising that clients do not report them as a source for services. In addition, clients reported that services helped in areas other than training and placement, and the few disabled who expressed interest in future receipt of services wanted job training and placement. Those who did receive services were helped in terms of mobility and personal aid, rather than in job placement, but these individuals were still in the minority. It may be that many of the disabled were too limited or not limited enough with respect to work  $^{\perp}$  to require

(1) Ibid, p. 21.

-82-

services or that many are not interested, either because of their disbelief that such help is fruitful or because the financial disincentives - particularly for the older and more severely disabled (<u>supra</u>, Section 1) - are too great.

These survey findings, particularly the finding that few of the disabled who were helped by a rehabilitation counselor reported job placement, are important because they provoke suspicions about whether the VR program, is providing the broad spectrum of services in its mandate, (<u>supra</u>, Chapter I). In addition, while clients may underestimate their own participation in the VR program, either because of dissatisfaction or because they do not correctly attribute the VR agency with providing or referring them for services, these data on program use conflict with the federal/state VR data presented in Section 1.

## B. Program Expansion

In Section 1 we saw that from 1965 to 1975 both program expenditures and the number of clients served had substantially increased. Levitan and Taggart (1977) estimated that expenditures rose 3.7 times

-83-

after adjusting for cost of living increases and that the number of people served had tripled.

However, a closer look at these numbers shows that, overall, the number of clients served increased by one-half as much as the expenditures on a compounded basis. Even if we use an inflation factor of 43%,<sup>1</sup> expenditures increase slightly faster than the number of clients served. In addition, the number of rehabilitations - i.e., successful job placement efforts - is increasing at a slower rate (8.5%) than the number of clients served in both the basic VR program (10.0%) and overall (11.5%). (See chart below.)

## VR Activity

	Compound Annual <u>Growth Rates: 1956 To 1975</u>
Clients Served: Total Basic Program Rehabilitations	11.5% 10.0 8.5
Expenditures: Total Basic Program	20.8 18.4

Source: Calculations performed using data on number of clients served and expenditures from Levitan and Taggart (1977), op. cit., pp. 29, 33.

 I developed this number on the basis of the previous statistics provided by Levitan and Taggart (1977).

-84-

This interpretation suggests that, relative to program expenditures, the VR program is not substantially increasing either the number of clients served or the number of rehabilitations. We saw in Chapter I that such increases have been important goals of the legislation over the past 60 years; the interpretation provided here suggests that the conventional answer to the question concerning whether the program is achieving these goals is suspect. The case study analysis presented in Chapter IV will pursue this question further.

## C. Benefit/Cost Analyses

Section 1 summarizes several VR program assessments that use the benefit/cost approach. The purpose of these analyses is to provide a basis for evaluating whether, and to what extent, the VR program achieves its goal of increased earnings. While methodological criticisms have been raised, most people agree that the benefits outweigh the costs and that improved methodologies are not likely to overturn these results (Burkhauser & Haveman, 1982). However, one key criticism that is not likely to be answered by benefit/cost analyses is whether

-85-

the program outcomes are, in fact, achieved by the VR program or by other means--such as the participants themselves. This is especially important in view of the 1972 SSA survey findings presented earlier indicating that many service recipients are the "most productive" subset of the disabled population to begin with -- and are not likely to be the "neediest." Identification of how job placement --the key program outcome-- is accomplished will be important, first, for determining the validity of the legislative assumption that the VR program is necessary to enable and to maximize placements/increased productivity. It will also be important for determining how services might be more efficiently and effectively organized, particularly in the area of prioritizing services in an economy with scarce resources.

In summary, there are two basic reasons for pursuing the question concerning whether the VR system is responsible for successful outcomes:

> To determine the validity of the legislative assumption that disabled individuals need the system for placement.

-86-

To begin to resolve the apparent conflict between the legislation that mandates emphasis on serving the severely disabled and recent benefit/cost analyses that suggest the focus be on the less severely disabled.

## D. Summary

This chapter presents data and findings of federal/state agencies and cost/benefit analyses concerning VR program effectiveness. It suggests that the "conventional" assessments are suspect, in terms of how much expansion has actually occurred in the VR program, in terms of the utility of benefit/ cost analyses that do not account for <u>how</u> program outcomes are achieved -- which is an important fact for legislators concerned with program effectiveness and not only with earnings increases -- and in their conclusion that service priority favor the less severely disabled.

Several key points were made about VR service provision that reinforce the questions raised in Chapter I:

-87-

Program data indicates that the number of clients served, the number of rehabilitations/job placements, and federal expenditures have all increased substantially; however, a closer look at the numbers indicates that expenditures have increased at higher rates than the number of clients served or rehabilitated, and that rehabilitations are also growing at a slower rate than the number of clients served. Is the VR program achieving its goal of increased services to an expanded population?

Survey data on service experiences and client needs suggest that at least one subgroup of the disabled, the severe, have not received services, and that the less severe do not receive training and placement services. Yet the program data (Levitan & Taggart, 1977) indicate that rehabilitations continue to occur, to some degree. How? Does the system provide the broad spectrum of services in its mandate? Does it prioritize placement?

-88-

Benefit/cost analyses used in the congressional appropriation process for the VR program indicate that post-program earnings are substantially greater than pre-program earnings, relative to program costs (Burkhauser and Haveman, 1982). These findings are not likely to be overturned, even with improved methodologies, and recent analyses suggest focusing service efforts in the high potential, less severely disabled group. Other arguments for prioritizing the less severe are that the income support programs provide a disincentive for the severely disabled person's return to work and that in a low demand, high unemployment economy the less severe will do better at obtaining work. These studies do not, however, address the question of how program outcomes are achieved, and, therefore, legislators cannot fully assess whether the program itself is responsible for the successes that result. How valid is the legislative assumption that clients will do better by

using the VR system for job placement than they would on their own?

These data and the resulting questions provide the basis of the empirical generalization in this thesis, i.e., that positive outcomes for many rehabilitation clients are not produced by the system itself, particularly the state VR system. The case study that follows is an attempt to answer the questions raised earlier within the framework of this generalization; it is based on an experiment to establish "linkages" between different parts of the community to achieve increased job opportunities for the disabled.

The following chapter describes the government intervention that will serve as this case study and provides the methodology undertaken. Chapter IV presents the case study analysis, and Chapter V presents the study's findings and conclusions.

-90-

## CHAPTER III METHODOLOGICAL SUMMARY AND CASE STUDY DESCRIPTION

## SECTION 1. METHODOLOGICAL SUMMARY

This case study analysis questions the view that in order to help the disabled, it is necessary to get them into a "rehabilitation system" (Safilios-Rothschild, 1976). It is based on my experience as the director of a three-year research project in New Haven, Connecticut.

In 1976, I was hired to direct a three-year research and demonstration grant funded by the U.S. Department of Health, Education and Welfare's Rehabilitation Services Administration; after this experience, I began to question some of the basic premises upon which both rehabilitation legislation was enacted and services were offered. These assertions dealt primarily with solutions to the problem of handicapped unemployment that focused on eliminating employer discrimination (the "big evil") and enhancing job opportunities through remedying client problems (the "big sell"). While I do not

-91-

dispute that such discrimination exists and that it encourages both unemployment and underemployment among the disabled, I also observed some identifiable patterns that client-serving agencies use to keep their positions in the service sector unchanged, and that effectively force clients to produce the outcomes that are credited to the VR system. These observations formed the basis of my empirical generalization, i.e., that positive outcomes for many rehabilitation clients are not produced by the system itself, particularly the state VR system.

Much of the data in this case study points to the role of client-serving agencies in the job referral and placement process rather than to identifying issues in employer discrimination. For this reason, I was prompted to develop several questions after the research was completed, the answers to which would describe several key pieces of the client agency role in the job hunt. In this sense, I performed what Merton has described as "post factum sociological interpretation,"<sup>1</sup> where "the data do not have 'sense' built into them - that is, they were not collected to test specific hypotheses [in my case they were collected to test other research questions] ..., [where] the analysis is an attempt to make sense of them after the fact."<sup>2</sup>

Insofar as my analysis rests on data grouped into "experimental" and "control" classifications, it is also a natural experiment, in which "a sociologist [as social scientist] seeks an existing situation in which two or more groups of people are similar in important respects but have undergone...different experiences."<sup>3</sup> Like Deutsch and Collins,<sup>4</sup> I was

Robert K. Merton, <u>Social Theory and Social</u> <u>Structure</u>, pp. 93-95, in Eliot Liebow, <u>Talley's</u> <u>Corner</u> (Boston: Little, Brown, 1967), p. 12.
 Eliot Liebow, Talley's Corner, ibid, p.12.

<sup>(3)</sup> Reece McGee, et al., Sociology: An Introduction, second edition (New York: Holt, Rinehart and Winston, 1980), pp. 545 ff.

<sup>(4)</sup> Morton Deutsch and Mary Evans Collins, "Interracial Housing," in William Peterson, editor, <u>American Social Patterns</u> (New York: Doubleday Anchor Books, 1956), pp. 7-61, cited in McGee, ibid.

interested in explaining the experiences of two groups of similar people, in my case examining job referrals and placement of the disabled.

Because the study involves several groups, I draw upon the results of structured questionnaires and surveys, interviews, observations, and quantitative program data summarizing the experiences of disabled individuals seeking jobs.

## A. Organizing The Research

Like many social science studies, this one began with the "feeling" that something was missing in conventional research concerning the disabled - namely, the impact, positive or negative, of vocational rehabilitation (VR) agencies, particularly the state agency, in providing job referral and placement services. Based on my experience in New Haven, I began with the idea that the low number of placements that resulted from our interventions could not be attributed solely, or possibly even primarily, to employers or to clients themselves. I began by culling the data generated during the three-year project. I found that while most of the disabled job seekers that we studied used rehabilitation service agencies for some kind of service provision, most of those who applied for jobs at the city government (my "control" group) and most who were employed did not use the agencies as job referral sources.\* This, then, was my departure point - it would be important to discover whether relatively low referral rates in my "experimental" group occurred and, if so, why.

I was interested in providing both a "quantitative analysis" of the job referral and placement experiences of the disabled and an understanding of the key aspects for their success or failure. Therefore, the study is structured on two levels. First, I gleaned all available demographic data on the populations of the disabled clients in the agencies studied, using several different sources of information to produce a picture of the clients

-95-

<sup>\*</sup> See <u>supra</u>, Chapter II and <u>infra</u>, Chapter IV. This finding coincides with those of the Social Security Administration in its 1972 survey of the disabled.

involved in the service process. Questionnaires completed by participating client agencies, data generated by the program interventions and the control groups, and a general survey of the New Haven handicapped population served to provide baseline demographic information.

These data were helpful in convincing me that in the most important respects - the type of job being sought, education level, sex - my "control group" (all disabled applicants for city government jobs) and my "experimental group" (clients at the participating service agencies) were similar. Thus, a primary assumption was that while other demographic variables (such as race and disability type) could be determining factors in obtaining a job, they would not be critical in the process of <u>referring</u> clients for jobs. In other words, I assumed what rehabilitation experts have stated is the basis for job referral - namely, job readiness as determined by individual <u>abilities</u>, not <u>disabilities</u>. At this point, I was able to analyze the job referral

-96-

experiences of both groups on the basis of several factors:

- . Use of agencies for services other than job referral.
- . Use of job referral sources.
- . Type of job sought.
- . Educational level.

Since both groups used agencies for services other than job referral, the key was the job source referral data. Moreover, to show that job referral sources of the control groups did not include service agencies to a large degree would be important in arguing that disabled individuals who do not use rehabilitation agencies as job referral sources are no worse off than those who do.

Other data sources were used to validate sample population characteristics and to explain low referral rates for the "experiments"/interventions:

- U.S. survey data confirm that intervention participants were no worse off than the total U.S. disabled population estimates indicated.
- State VR agency data over several years provided information about the rehabilitation status of clients.
  - Local labor market data provided demographic data on employed and unemployed handicapped individuals.

## B. Issues

This analysis is essentially a cross between a case study and a natural experiment. In the sense in which my objective is <u>exploratory</u>, i.e., to understand the process by which successful or unsuccessful rehabilitation outcomes (i.e., job placements) are achieved, I am involved in a case study analysis of one intervention. Thus, the study has similar problems faced by other social scientists using participant observation as a key research method (Goffman, 1961; Whyte, 1961; Gans, 1962). The properties that I have selected to report about are selective, and the descriptive nature of the data analysis is problematic from the perspective of generalizability. However, this mode of research has come to be widely accepted (Buckle & Thomas Buckle, 1977; Marx, 1972; Riley, 1963), even with its methodological shortcomings, because of the wide range of detail and the hidden, latent, behaviors that it uncovers.<sup>1</sup>

This study descriptively analyzes the VR system, using quantitative data and supplemented by observations. Because the data are used descriptively, there is room for other interpretations; however, the data provide a strong basis for the view that the VR system is not operating as conventional legislators and policymakers think it is, and that legislators using benefit cost analyses to decide program impacts miss an important part of VR

-99-

<sup>(1)</sup> Matilda White Riley, <u>Sociclogical Research I: A</u> <u>Case Approach</u> (New York: Harcourt, Brace & World, Inc., 1963, under the general editorship of Robert K. Merton, Columbia University), p. 69.

system evaluation because they do not address the process by which VR outcomes are achieved.

In addition, my observations were influenced, to some extent, by my role as the project director on the study, primarily by my desire to achieve successful outcomes and the difficulty of working with organizations that differed drastically in their interests. Finally, as a case study, this analysis does not purport to be generalizable to all VR systems or state agencies. It is an exploration into how one intervention attempted to deal with the broad legislative mandate described in Chapter I. While the state VR system and the particular programs in this study are not totally representative of others, they are likely to share certain structural characteristics. This analysis attempts to look at whether, and to some extent understand the process by which, a specific set of legislated goals are achieved.

-100 -

SECTION 2. CASE STUDY DESCRIPTION

## A. Overview

This case study takes place in New Haven, Connecticut. It is based on the findings of a research and demonstration project funded by the U.S. Department of Health, Education and Welfare, Rehabilitation Services Administration, over a three-year period and at a total cost of approximately \$330,000. The grant was awarded to the City of New Haven under Mayor Frank Logue and was administered by the Human Resources Administration, headed by Hugh B. Price.<sup>1</sup> It was conceived in Washington as part of the effort to implement the 1973 legislation<sup>2</sup> and was one of three projects funded by HEW to develop "prototypical" models for involving different sectors of the community in affirmative action for the disabled. (This legislation was the first to bar

-101-

Former Mayor Logue currently teaches at Yale University. Mr. Price is now a senior vice president at Channel Thirteen in New York.
 See supra, Chapter I: Legislation.

discrimination - Section 504 - and mandate affirmative action - Section 503 - in the employment of disabled individuals.)

Each one of the projects was charged with developing, testing, and evaluating methods for involving different parts of the community in employing and retaining the disabled. The Amalgamated Clothing and Textile Workers Union, based in New York, was funded to develop a model for involving a labor union in employment opportunities for the disabled and focused primarily on the retention and reentry of disabled union members into the workforce.<sup>1</sup> The Washington State Division of Vocational Rehabilitation (DVR) was charged with involving private sector employers in affirmative action activities for the disabled through the state

-102-

<sup>(1)</sup> The focus on retention rather than job entry was apparently due to problems in working out union-based seniority provisions.

rehabilitation facility. (This agency lost its funding before the third project year.)

The City of New Haven, Connecticut, was funded to perform a relatively more complex task, to involve a local employer organization, the Greater New Haven Chamber of Commerce, in employing the disabled. The city government was funded as part of a "troika consortium" in New Haven, functioning as project administrator with two prime subcontractors: the Greater New Haven Chamber of Commerce and the Easter Seal Goodwill Industries Rehabilitation Center, each of which was funded at about 20% of the total budget, or at about \$20,000 per contract per year. Each member of this project was critical to the success of the funding application, particularly the Chamber of Commerce. As it turned out, however, the Chamber's style of involvement precluded any "grandiose" types of model development and, over the tenure of the

-103-

project, we decided to become more involved with enhancing public sector job opportunities through research at the city government. This focus, in addition to two programs tested with the Chamber's involvement, was accepted by the funding source during each of the second- and third-year application processes.

## B. New Haven Project Objectives And Organization

The New Haven Project was one of a larger "consortium" of the HEW/RSA-funded projects. In <u>Rehabilitation Literature</u>, it was cited as an example of a "leverage technique," focusing on the "use of assistive 'tools' to influence employers' hiring considerations...most often used in direct or 'selective' placement efforts by the counselor with particular clients."<sup>1</sup>

[An example of the leverage technique is] the consortium of projects involved in the development and testing of <u>affirmative action proto-</u> <u>types</u> [emphasis not mine], coordinated by the Columbia University Industrial Social Welfare

<sup>(1)</sup> Fraser, Robert T., PhD, "Rehabilitation Job Placement Research: A Trend Perspective," <u>Rehabilitation Literature</u>, Vol. 39, No. 9, (September 1978), p. 260.

The focus of these projects is the use Center. of different affirmative action prototypes to improve job recruitment, job maintenance, and upward mobility for the severely disabled. The Amalgamated Clothing and Textile Workers Union in New York is developing, testing, and promoting a viable model for union involvement in the hiring of the handicapped. Concurrently, the City of New Haven, the New Haven Chamber of Commerce, and the Easter Seal Rehabilitation Center (Projects With Industry) are modeling a cooperative approach to affirmative action. Target employers for the New Haven effort include the City of New Haven and Yale University; the focus is on the development of on-the-job training programs... The development of another model for the utilization of affirmative action legislation by state agency vocational rehabilitation counselors has been slowed due to certain research difficulties... The [projects] should define utilizable models of affirmative action interventions.<sup> $\perp$ </sup>

The New Haven "consortium" project had several general goals over the three-year period, includ-

Develop and analyze, based on New Haven's experience, a model to involve the local employer community through the Chamber of

<sup>(1)</sup> Ibid, pp. 260-261.

<sup>(2)</sup> Summarized and paraphrased from grant applications and progress reports, HEW/RSA contract 15-P-59030.

Commerce, a municipal government, and a nonprofit client-serving agency in job opportunities for handicapped individuals.

Research, at the local level, who are the disabled and what are their employment needs and experiences.

.

•

- Identify where a job-opportunities strategy is needed and test the strategy.
- Identify specific techniques to involve the community in identifying the disabled and enhancing their job opportunities.
- Develop information about the municipal government's experience in job accessibility and retention of handicapped workers.
- Structure techniques to involve the disabled in the design and implementation of a job-opportunities strategy.

Design methods to change or redirect municipal government policies or programs to ensure maximum nondiscrimination in the hiring, retaining, and upward mobility of handicapped individuals.

In fact, the project was most needed as a prototype "of successful affirmative action intervention and [method] of establishing firm linkages with such organizations as Chambers of Commerce...."

Each part of the consortium also filled a set of generic roles:

<u>City government</u> - to administer all grant activities; coordinate research and demonstration activities; report to local and federal project officials.

(1) Fraser, "Job Placement," 1978, p. 261.

- <u>Chamber of Commerce</u> to coordinate research and program activities with local employers and to provide guidance in strategy development and implementation with local business.
- Easter Seal Center to coordinate research and program activities with local clientserving agencies and to provide guidance on strategy development to promote job placement.

Figure 1 illustrates the basic functional relationships among project participants.

•

Much of the data collected during this project illustrated the role of the rehabilitation facility in the job hunt, particularly our experiences with the two interventions tested and evaluated during the second and third project years.

# FUNCTIONAL RELATIONSHIPS: NEW HAVEN PROJECT

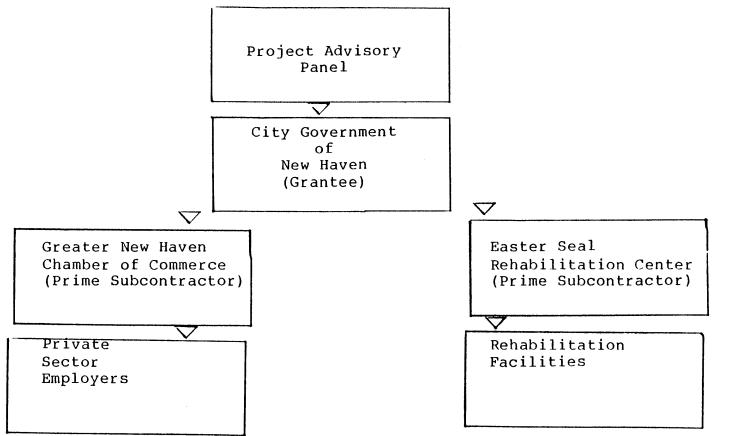


Figure 1

-109-

It is my hope that some of the findings can be generalized and that this case study will be useful in future hypothesis testing and policy analysis.

#### C. Project Participants And Activities

During the three project years, several datacollection and intervention activities took place. For the first project year, we concentrated primarily on gathering data about the local disabled population - who they were and what services they used and the service community. The overall objective was to gain a better understanding of the population itself, in order to develop appropriate models for enhancing job opportunities.

During the second and third project years, some of this basic research continued, but our key work tasks were devoted to testing and assessing two program interventions that would involve the city government, the Chamber of Commerce, and several local service agencies in the job entry of disabled individuals. These programs had two overall goals:

-110-

Implement and evaluate an "advocate" role for the Chamber of Commerce in promoting the job entry of handicapped individuals.

Establish and evaluate a link between the municipal CETA office and several agencies serving the disabled.

Because most service agencies had few, if any, direct links with employers, it was hoped that the establishment of such mechanisms would increase the job referral and placement of disabled clients. Three specific research questions guided development of our interventions:

- Does the establishment of a link between the Chamber and Easter Seal Center alert disabled job seekers to potential jobs?
- Do client-serving agencies respond to input about job opportunities?
- What are the reaction to disabled clients by local manpower counselors (i.e., at CETA)?

It should be remembered that the project was not just a "direct placement" program and therefore did not function to <u>create</u> jobs <u>per se</u> but, rather, to develop models that would indirectly enhance job placement success by integrating existing organizations and available resources.

Three service agencies were the key participants in the program interventions:

#### C.1. Projects With Industry (PWI)

PWI is a federally funded placement project for disabled job seekers. During fiscal year 1975-1976, the project had a goal of nine placements per month, or 108 for the year.<sup>1</sup> This program specializes in one-to-one job development, in which counselors work directly with employers to develop specific job openings for their clients.

(1) Summarized from the PWI grant application.

-112-

PWI also operates what is considered locally to be a highly successful job-seeking skills program to which clients are referred by other agencies; weekly classes are held to provide guidance in the job search process; clients are referred for placement.

This program was a part of the Easter Seal Center, which was a prime subcontractor under the New Haven Project, and was therefore encouraged to participate more fully than other agencies. However, staff were not provided with any "special treatment."

# C.2. Division of Vocational Rehabilitation (DVR)

The New Haven district office of the state agency receives local clients as referrals for rehabilitation services. Apparently, the counselorclient case load was higher than Hartford reported, at 1:150 (not 1:15); most PWI clients were DVR referrals.

#### C.3 Connecticut Mental Health Center (CMHC)

CMHC is a community-based mental health facility serving the local labor market population. Many of the clients are lower income individuals requiring shorter term treatment. Four units participated in the New Haven project, none of which was considered to be highly involved in the placement process.

- Acute Assessment/Treatment Unit (AAT) for short-term diagnosis and treatment.
- Community Support Services Unit (CSS) for long-term outpatient cases.
- Drug Dependence Unit (DDU), which serves drug-dependent clients on an outpatient basis.
  - Alcohol Unit (AU), serving alcohol users on an outpatient basis.

A fourth agency, Workmen's Rehabilitation (WR), was a program participant in so few cases that it has been excluded from the case study analysis.

For the purposes of this case study, three key project activities will be used to analyze several questions, presented earlier, concerning the role of rehabilitation agencies in the job hunt of the disabled. These activities are described in Chapter IV, Case Study Analysis, and are outlined below.

# 1. Mini-Profile Listing Of Job-Ready Clients

This program was implemented during the second project year for an eight-month period. Its primary objective was to provide local employers with brief resume-type descriptions of up to 20 job-ready clients per month for their review and follow-up. The list of clients was disseminated in newsletter form (Chapter Appendix A) by the Chamber of Commerce, as follows:

> . Each month, the project liaison at the Easter Seal Center distributed several copies of a "mini-profile form" (Exhibit I) to each participating agency.

(1) See infra, Chapter IV (Experiment).

-115-

- Agency counselors completed the forms for job-ready clients. (Information on vocational goals/occupations, education, licenses and certificates was included; for four months, disability type was also included.) Forms were then returned to the liaison.
- Completed forms were provided to the Chamber of Commerce, consolidated, and sent to approximately 1,000 businesses via a monthly "mailer."
  - Interested employers were referred to the liaison, who put the appropriate agency in contact with the employer.

# 2. On-The-Job Training Linkage<sup>1</sup>

In 1977, the Chamber of Commerce began to distribute job training orders developed by their CETA worker to the project liaison at the Easter Seal Center. These orders - OJTs - were developed by the

# (1) See infra, Chapter IV (Experiment).

Exhibit I(1)

#### VOCATIONAL REHABILITATION GRANT

#### DISABLED WORKER MINI-PROFILE

#### Note To Agency Counselor:

The client's name will not appear on the client listing when it is submitted to the Chamber of Commerce for dissemination to area employers. (Only a code will appear.) In addition, a maximum of two people, both staff members on this project, will know this code. Therefore, when providing information for inclusion on the listing for dissemination, please do not include any identifying information (such as name of a school attended or a particular company worked for). Besides including client disability, please expand on the client's well-being and mobility, so as to better inform the potential employer of this client's job readiness. Use the heading "Residual Capacities and Abilities of Client," for this purpose.

In addition, your name and your agency's name will not appear on the listing submitted to the Chamber. This information will be given to an

Exhibit I(2)

employer by Vocational Rehabilitation project staff if, and only if, interest is expressed in a particular client and the employer wishes to call your agency or client's counselor. The employer will obtain no information other than that distributed by the Mini-Profile on any particular client from project staff.

Please submit a Mini-Profile Form on <u>each</u> client you wish to have listed on the Mini-Profile disseminated to area employers by your agency's contact person. No client information will be put on the list to be submitted to the Chamber of Commerce without receipt by project staff of the original authorization form.

# Note To Agency Contact Person

Please rank the clients whose Mini-Profiles you receive from one to ten (please do not submit more than ten profiles in any one month to Vocational Rehabilitation project staff), with number one being the <u>highest level</u> job-ready client. <u>All</u> clients submitted must, however, be job ready.

Source: Grant submission, Figure 7, p.7, HEW contract #15-P-59030, July 1978.

CETA contract developer and individual employers for CETA-eligible clients, to give them on-the-job training, a marketable skill, experience, and, at the end of the training period, a potential job. Most employers were reimbursed by the federal government at 50% of the trainee's cost; the training period was usually less than one year, at which time the employer had the option of retaining the employee full time and at full cost.

Each OJT developed by the Chamber-based developer was distributed within 24 hours to the participating agencies by the liaison. Agencies then referred clients directly to CETA and submitted a client referral form (Exhibit II) to the liaison for data collection purposes.

# 3. Posting Project<sup>1</sup>

This activity focused on the job application process at the city government. Its goal was to

-119-

<sup>(1)</sup> See infra, Chapter IV (Control Group).

Exhibit II(1)

CLIENT REFERRAL TO CENTRAL JOB DEVELOPMENT UNIT Vocational Rehabilitation Grant

Explanatory Note: This form is to be filled out and retained by the client's counselor. After it is completed, it should be signed by the counselor and a copy given to the agency's contact person, to be picked up by a representative of the Vocational Rehabilitation Grant project staff.

Any questions may be directed to Judith Richter, Project Associate, at 389-4561 (extension 34 or 63), or Deborah Schreiber, Project Director, at 777-7491.

Please feel free to attach any additional information if necessary.
Referring Agency:\_\_\_\_\_\_Counselor:\_\_\_\_\_

Name of Client:	Client Identification # : (Office Use Only)
Disability	-
Job Order Code:	-
DOT Code:	Job Title:

	Exhibit II(2
Date Job Order Delivered to Agency:_	
Date Client Went to CJDU:	
Results of Intake: ( ) eligible	
Comments:	
Interview with Employer: Date:	
Result of Interview: ( ) hired	( ) not hired
Comments:	
Couns	selor

(Signature)

-121-

-

develop an information base from which to draw conclusions about who applied and who was hired for jobs (both disabled and nondisabled applicants).

The data collection procedures were based on information gathered from applicants on a Posting Project "Data Card,"<sup>1</sup> provided as part of the application materials. Responses were encouraged by the promise of confidentiality and the practice of not forwarding the data card to any potential employer. It was returned to the project researchers.

\* \* \* \*

These programs constitute the experimental and control groups in the case study. They were the key demonstration activities undertaken by project staff over the three-year period.

D. Summary

This is a case study analysis of two stages in the disabled population's job hunt process. The

(1) See infra, Chapter IV, Appendix G.

overall goal was to develop both "realistic" statements about what roles rehabilitation service agencies play in the job referral and placement process and, as a result, a few key policy recommendations.

Three overall objectives guided the analysis:

- Provide a frame of reference for the population we will call "disabled" that presents several key characteristic similarities and differences between the U.S. disabled population and the local, case study population.
- Compare the results of a two-pronged "experiment" designed to increase job referrals by service agencies with the results of a "control" group.

.

Formulate several hypotheses that will explain the differences between the results and that will serve as the basis for policy recommendations. The focus of this analysis was on the role of the service agency, particularly the state vocational rehabilitation (VR) agency, in job referrals and placement of the disabled. It is based on one case history: the New Haven Vocational Rehabilitation Project. Two types of data were used in the analysis:

> "Quantitative" - e.g., surveys, program evaluation results.

"Qualitative" - e.g., participantobservation notes, memoranda, and other archival materials.

The case study in Chapter IV is presented in six sections:

Section 1 answers the question, "Who are the disabled?" by analyzing several demographic variables at three levels:

- Total U.S. disabled population estimates.
- New Haven labor market estimates.

- Selected New Haven client service agency estimates.

Section 2 presents the quantitative results of two "experiments," designed and tested by the New Haven project, with the objective of increasing job referrals and placements by agencies serving the disabled.

- Section 3 presents the results of a major data collection activity that focused on monitoring the municipal government's job application process and that functions as the "control group" in this case study.
- Section 4 compares the results of the experimental and control groups and provides other data supporting these results.
- Section 5 presents explanatory data for the program results.
  - Section 6 summarizes key points in the analysis.

-125-

## CHAPTER IV DATA ANALYSIS

# SECTION 1. WHO ARE THE HANDICAPPED?

Considerable change in the definition of a disabled person covered under the law has occurred over the past 60 years.<sup>1</sup> Even now, there is significant ambiguity in the legal classification of disability, which is structured by a medical model of disability determinants and is bounded by the individual's potential to work. A key problem in defining disability is grounded in the fact that individuals with the same medical impairment can be affected in different ways. For example, two individuals may both incur a musculoskeletal impairment such as arthritis. The person who works behind a desk may not be significantly affected by

(1) See supra, Chapter I: Legislation.

this impairment, relative to his ability to continue to function on that job. The construction worker, on the other hand, will almost certainly have to change occupations. Thus, defining disability in terms of work will depend upon many individual characteristics, such as psychological state, the type of work performed before disability onset, the types of jobs available, and whether other, "secondary," disabilities are present.

This section provides the frame of reference for the population that we will call "disabled." Analysis of several demographic variables (e.g., age, sex, race) is performed at three levels: total U.S. population estimates; New Haven labor market estimates; New Haven client serving agency estimates. The purpose of this tri-level analysis is to define the local population from which the case study data are drawn and to show, first, how they are representative of the total U.S. population, and, second, where they are not representative, to show that they are no more "severely disabled" than most disabled population estimates and, therefore, are not at a disadvantage in the job hunt.

# A. <u>Selected Characteristics Of The Total U.S.</u> <u>Disabled Population: 1972 To 1976</u>

## A.l. Definitions

Table I\* provides data on selected characteristics of the adult noninstitutionalized population, derived from the U.S. Social Security Administration's 1972 Survey of the Disabled ("1972" columns) and from the U.S. Census Bureau's 1976 Survey of Income and Education ("1976" columns). These two sets of U.S. survey data are used for comparative, "trend analysis" purposes.

In order to establish congruent definitions of "disability," survey data were regrouped as follows:

<sup>\*</sup> All tables and figures are located at the end of the chapter.

#### 1972 Survey

In this survey, disability in adults aged 20 to 64 was defined as "a limitation in the kind or amount of work (or housework) - resulting from a chronic health condition or impairment lasting three months or longer."<sup>1</sup> Three categories of severity were established: "(1) severely disabled - unable to work altogether or unable to work regularly; (2) occupationally disabled - able to work regularly but unable to do the same work as before the onset of disability or unable to work full time; (3) with secondary work limitations - able to work full time, regularly, and at the same work, but with limitations in the kind or amount or work that can be performed."<sup>2</sup> In Table I, "Others" represents a combination of those individuals who are occupationally disabled and who have secondary work limitations.

-129-

Kathryn H. Allen, First Findings Of The 1972 Survey Of The Disabled: General Characteristics, Social Security Administration, Division of Disability Studies, Office of Research and Statistics, p. 2.

<sup>(2)</sup> Ibid, p. 2.

## 1976 Survey

For the purposes of this survey, the disabled included individuals 18 to 64 years of age who were "prevented from working, not prevented from working but not able to work regularly, and able to work regularly."<sup>1</sup> In Table I, under the column titled "1976," the severely disabled include individuals who are unable to work at all or not regularly, and "Others" include those who are able to work regularly. (This should provide congruence between population estimates in each of the two surveys.)

In addition, I weighted the percent distribution for the selected characteristics to reflect the number of individuals unable to work at all (N = 7.2 million) and those unable to work regularly (N = 2.1 million).

-130-

<sup>(1) &</sup>lt;u>1976</u> Survey Of Income And Education, U.S. Bureau of the Census, in Rehab Group, Inc. <u>Digest Of</u> <u>Data On Persons With Disabilities</u> (Library of Congress, OHDS 79-22009, May 1979), p. 17.

# A.2. Demographic Characteristics Of The Total U.S. Disabled Population

In the 1972 survey, "the young and the old, blacks, women, the unmarried and persons with limited education are overrepresented among persons without jobs or without stable employment as well as among the disabled."<sup>1</sup> The disabled, particularly the severely disabled, are generally older and less educated than the nondisabled but they are not significantly different from the nondisabled in terms of sex (although the larger number of disabled men in the 60 to 64 age range produced a higher median age of 55 for severely disabled men, compared to 52 for women).<sup>2</sup>

(2) Allen, <u>op cit</u>, p. 3.

Sar A. Levitan and Robert Taggart, "Employment Problems of Disabled Persons," <u>Monthly Labor</u> <u>Review</u> (March 1977), p. 5.

It is important to note, however, that this relationship between age and disability may reflect the general trend of decreased likelihood of returning to work as age increases.<sup>1</sup> It may also reflect the definition of disability in work-related terms: "Regardless of health, many people begin to work less in their late fifties and early sixties as a mode of preparation for 'retirement.' Several recent studies have shown that early retirement is a result of both health and financial considerations that are highly interactive. The availability of social security benefits reinforces the effects of ill health in encouraging retirement."<sup>2</sup> Other financial benefits for disabled individuals in need of costly medical or therapeutic services are provided on the basis of the inability to attain any level of gainful employment. Together, these considerations are likely to provide a significant

(1) Ibid, p. 3.

(2) Ibid, pp. 3-4.

disincentive for many individuals to return to work. They may also affect how practitioners categorize those who have the "potential" to achieve gainful employment. Most relevant in the present analysis, however, is the implication that there may not be as much difference as the numbers indicate between the older nondisabled and disabled populations.

Between 1972 and 1976, both the nondisabled and the disabled increased their representation in the younger age groups (Table I):

- The percent distribution of the nondisabled aged 45 to 64 dropped from 35.7% in 1972 to 30.6%, a reduction of 5.1%.
- The percent distribution of all disabled aged 45 to 64 fell 3.7%.
- The percent distribution of the severely disabled aged 45 to 64 fell 3.2%.

The percent distribution of other disabled individuals aged 45 to 64 dropped the most, at 6.7%.

The representation of women among the disabled also fell between 1972 and 1976 (Table I). In 1972, women were represented in slightly higher proportions among the disabled than the nondisabled. In 1976, however, their percent representation among all disabled compared to the nondisabled was about the same, and their percent representation of the severely disabled fell 3.5%.

Blacks and other nonwhites are overrepresented among the disabled in both the 1972 and 1976 surveys. In 1972, nonwhites represented about 10% of the nondisabled population, compared to 14% of the disabled population. By 1976, they represented 14% of the nondisabled and 19% of the disabled populations. Representation was greater among the severely disabled, at almost 17% in 1972 and 23% in 1976 (Table I). However, those nonwhites with less severe disablities approximated their representation among

-134-

the nondisabled. In addition, the black disabled are younger than their white counterparts, particularly for the less severely disabled: 32% of the white occupationally disabled were in the 55 to 64 age group, compared to 19% of the blacks: 23% of white individuals with secondary work limitations were in the same age group, compared to only 9% of black individuals.<sup>1</sup> More than half of the blacks with secondary work limitations were younger than 35 years of age.<sup>2</sup>

The disabled are less educated than the nondisabled (Table I). In 1972, 70% of the nondisabled had completed at least a high school education, compared to slightly less than half of the disabled. Four years later, both groups had increased their educational levels: by 1976, close to 76% of the nondisabled and over 47% of the disabled had completed at least a high school education. The greatest percent increase in educational achievement was by the severely disabled, from 32% to over 37%.

(1) Ibid, pp. 4-5. (2) Ibid, p. 5. -135-

In part, the differences between nondisabled and disabled education levels are explained by age differences,  $^{\perp}$  because "older adults tend to have less education than younger adults"<sup>2</sup> and the disabled are, as a group, older than the nondisabled. In another analysis controlling for age "increased education was associated with lower levels of disability and...differences in educational attainment were a major factor in explaining racial distribution among the disabled."<sup>3</sup> (The finding that the severely disabled are achieving higher education at a faster rate than other disabled and nondisabled adults could be important in setting up any expectations about their work potential and about the types of services needed by members of this group.)

(1)	Ibid,	p.	6.
(2)	Ibid,	p.	6.
(3)	Thid		

(3) Ibid, p. 6.

The compounding of physical and mental impairments with race, sex, and educational attainment are contributing factors inhibiting success in the job search and placement process. Even more inhibiting are multiple disabilities. In 1972, close to half of the adults surveyed reported suffering from one or more chronic conditions; however, only 30% of them had work impairments and 15% were unable to work at all.<sup>1</sup> More than half of the disabled with the most prevalent disabilities (arthritis, rheumatism, back or spine trouble, heart trouble, and nervous disorders) reported multiple impairments, which increase with age and reduce the capacity to function and may do the same with the motivation to work.<sup>2</sup> (Although the limitations were self-assessed, a study comparing physicians' and patients' assessments of physical capacity found agreement on the presence or absence of a limitation two-thirds to three-

(1) Levitan and Taggart, op cit, p. 6.(2) Ibid, p. 6.

fourths of the time,<sup>1</sup> with the employed overstating and the unemployed understating their capacities.)

Comparison of these two surveys provides some insights into this population's characteristic trends over the four-year period. Although both disabled and nondisabled persons without jobs or without stable employment are, in general, overrepresented among the very young and old, blacks, women, the unmarried, and persons with limited education, the disabled are worse off then the nondisabled. They are both older and less educated than the nondisabled, particularly those individuals reporting severe disabilities or multiple disablitities. (The relationship between age and disability, however, is somewhat limited because of the likelihood that most people in their late fifties and older tend to work less, regardless of their disability status, and because other financial considerations may reinforce the effects of their medical impairments, lowering the motivation to return to work.)

(1) Ibid, p. 6.

-138-

Employment opportunities for the disabled may be less limited also, for several reasons. First, the disabled are more heavily represented among the younger population than they were in the past. Second, a larger proportion of whites was represented in the older age group than were nonwhites with occupational disabilities and secondary limitations. Nonwhites with these types of work disabilities are younger than whites and are therefore likely to have increased job opportunities, offsetting the added problems of age and race.

Third, even though the nondisabled are more highly educated than the disabled, the latter group is increasing its education level at a faster rate than the nondisabled. In 1972, 40% of the nondisabled completed high school, compared to 30% of the disabled. However, the percent of nondisabled completing high school was slightly lower in 1976, while the percent of disabled at that level increased slightly overall.

			Compound Annual		
	1972	1976	Growth	1980	1984
Percent of Nondisabled	70.8%	75.7%	1.7%	81.0%	86.7%
Percent of Disabled	43.8	47.2	1.9	51.0	55.0
Percent of Severe	32.2	37.3	3.7	43.1	49.8
Percent of Others	55.1	60.0	2.2	65.5	71.5

Percent Completing High School And Over
---

Thus, by 1984 close to 50% of the disabled are likely to have completed at least a high school education.

# A.3. Occupations Of The Total U.S. Disabled Population

The extent to which a medical impairment affects work ability ranges from complete to marginal.<sup>1</sup> At the time of the 1972 survey, only 43% of the disabled were employed in any job, compared to 74% of the nondisabled. Of the total disabled, only 30% were employed full time, compared to 60% of the

(1) Ibid, p. 4.

nondisabled. However, those with occupational disabilities were better off than those reporting severe disabilities.

	Employment	Status Of	Adults	Aged	20 To 6	<u>4</u> 1
	Status	Able- bodie		bled	Severe	Occupa- tional
Perce Emp	nt loyed	73.7	<del>8</del> 42	.98	14.0%	71.4%
Perce Emp Tim	loyed Full	60.6	29	.3	5.7	45.0

Source: Social Security Administration, "1972 Survey Of The Disabled."

Other findings (Levitan <u>et al</u>, 1977) indicated that the disabled were subject to frequent work interruptions and that they accounted for a tenth of the workforce, a sixth of service workers, laborers, and farmers, and over one-third of all private household workers.<sup>2</sup>

(1) Ibid, p. 4. (2) Ibid, p. 4. One important variable in labor market success may be work status before disability onset. The Social Security Administration's 1971 survey of the recently disabled found that the disabled who work in the less prestigious, blue-collar positions such as service workers are likely to move into more prestigious positions, while professionals are more likely to move into less prestigious positions after disability onset. In addition, while the disabled are more heavily represented in service worker and laborer positions than are the nondisabled, most are represented in craft and operative positions, as are the nondisabled.

Adult Population And Recently Disabled				
Adults Aged 18 To 64 By Occupation				
······································				
	Occupation	Occupatio	n In	
	At Disability	1971		
Occupation	Onset	Nondisabled	Disabled	
Professional				
and Managerial	15.2%	26.28	16.5%	
Clerical and				
Sales	16.3	23.6	22.3	
Crafts and				
Operatives	34.4	30.1	30.2	
Farmers and				
Farm Laborers	5.3	3.0	6.9	
Service Workers				
and Laborers	27.6	17.2	23.9	
Not Reported	1.2	-	0.4	

Percent Distribution Of Noninstutionalized

In the Social Security Administration's 1974 follow-up survey, these findings are confirmed: 68% of the respondents reporting a disability (of which one-fifth reported severe disabilities and the remainder was almost evenly split between occupational

Source: U.S. Department Of Health, Education and Welfare, Social Security Administration, Office of Research and Statistics, General Characteristics Of The Recently Disabled, by Mildred Cinsky and Edward Steinberg, Report No. 4 (April 1976), pp. 36, 39.

and secondary disabilities) did not change occupations after onset.<sup>1</sup> After onset, 15% found more prestigious jobs, and service workers and laborers were the most likely to switch to a more prestigious occupation.<sup>2</sup> The severely disabled were, overall, as likely to obtain more prestigious jobs as they were to obtain less prestigious jobs.<sup>3</sup>

Unpublished data from this survey (Table II) indicate that most disabled were employed in the clerical and sales or crafts and operatives occupational categories, although almost 16% reported working in the most prestigious professional positions and 18% reported working in the least prestigious service worker and laborer occupations.

<sup>(1)</sup> Rehab Group, Inc., <u>Digest of Data on Persons</u> <u>With Disabilities</u>, under contract to the Congressional Research Service, U.S. DHEW 79-22009 (May 1979), p. 44.

<sup>(2)</sup> Ibid, p. 44.

<sup>(3)</sup> Ibid, p. 44.

# A.4. Disability Types Of The Total U.S. Disabled Population

Most disabled individuals report musculoskeletal and cardiovascular conditions, particularly arthritis, rheumatism, back problems, spinal cord injuries, heart trouble, and high blood pressure. This is not surprising for two reasons: first, because many disabled are older and are more likely to become disabled with these types of impairments and, second, because it is less likely that people will selfreport a mental disability (such as mental illness or alcohol and drug abuse) than a physical impairment. Table III presents data on disabilities reported in the Social Security Administration's 1972 survey.\*

<sup>\*</sup> An anomaly of these survey data is that the unpublished tabulations given in the leftmost columns (Levitan and Taggart, 1977) indicate that 20% of the disabled reported some kind of mental impairment, while the tabulations published under Social Security Administration research (Treitel, 1977) indicate that 7.7% of the disabled reported a mental impairment.

# B. <u>Selected Characteristics Of The New Haven Labor</u> Market Disabled Population

This section summarizes general characteristics of the New Haven disabled population, derived from one major survey performed as part of the New Haven Project's first year's work objectives.

## B.1. Household Survey of Noninstitutionalized Handicapped Population - City of New Haven

This door-to-door survey was performed on a subcontract basis by Southern Connecticut State College.<sup>1</sup> Its primary objectives were to identify the handicapped community and to determine its job-related needs, employment history, and experiences, specifically:

- To identify the magnitude of the handicapped community in New Haven.
- To identify the specific impairments which characterize this local population.
- (1) Joseph A. Polka, Final Report: Household Survey of Noninstitutionalized Handicapped Population -City of New Haven (Southern Connecticut State College under subcontract to City of New Haven, HEW/RSA Grant 15-P-59030/-01), November 1977. See copy of survey, infra, Chapter Appendix B.

- . To identify the neighborhoods in which they tend to be located.
- . To identify the job-readiness, work experiences, and needs of this population.

The methodology involved several steps<sup>2</sup>:

- Dividing New Haven into relatively homogeneous block groupings on the basis of 1970 Census data and the City's Welfare Department, in order to limit random sampling error.
- 2. Performing a factor analysis of eleven racial and socioeconomic variables available on the census tract level, resulting in a grouping of New Haven's census tracts into four socioeconomic levels (two extra block groupings consist of areas for which information was suppressed or missing).

<sup>(1)</sup> Ibid, p. 3.

<sup>(2)</sup> Summarized from Polka, <u>Report of Findings</u> (1977) pp. 3-24.

- 3. Performing a cluster analysis of over 200 blocks for each census tract quartile in order to further reduce available data at the block level into homogeneous sampling areas. Within each of the four quartiles eight divisions were made at the block level, resulting in 32 homogeneous strata.
- 4. Studying city plan maps and making site inspections in order to document housing units constructed and demolished since the 1970 Census. Housing estimates were also performed to eliminate specific blocks composed of nonresidential units from the strata.
- 5. Selecting blocks with probabilities proportionate to their size by listing each on IBM cards that were shuffled to "randomize" their order and constructing tables from the household estimate punched on the computer card. This resulted in the selection of 99 sampling blocks.

- Randomly selecting households from the 99 blocks and weighting the sample households.
- 7. Pretesting and reviewing the survey instrument by handicapped and nonhandicapped respondents, city and government officials, and the research coordinators of the New Haven Project at Columbia University.

In this survey, a household was classified as handicapped or containing a handicapped person under any one of four conditions:

- If a member utilized any one or more of 12 service agencies <u>for help</u> with a physical and/or mental health problem since June, 1976 [six months],
- (2) Received disability payments from a public agency or private insurance company,
- (3) Received treatment for a physical or mental health problem at least once every three months, and
- (4) Reported one or more physical health disorders in a listing.<sup>1</sup>

(1) Ibid, p. 27.

If an individual was less than 16 or greater than 64 years of age, the interview was terminated before the third question in Part II. If the person was between 16 and 64 years of age and employed or unemployed but looking for work or not looking because of discouragement, the interview was completed; otherwise, it was terminated before the eleventh question.<sup>1</sup> Interviewers received 3,640 questionnaires plus 10% for multiple-handicap households. The survey distribution results were as follows: 21% handicapped; 44% nonhandicapped; 6% refusals; 29% no contact.<sup>2</sup> Analysis was performed in detail for 256 of the 789 handicapped file, classified as the labor market handicapped, and included those who were identified as disabled and who were either working or looking for work (questionnaire items 19A1-4 and 19B5).

(1) Ibid, p. 28.
 (2) Ibid, p. 31.

# B.2. Demographic Characteristics Of The New Haven Disabled

In general, the New Haven disabled survey respondents were somewhat younger than U.S. population survey respondents (Table IV): 39.4% of the New Haven labor market disabled were between 46 and 64 years of age, compared to the most recent 1976 U.S. Census estimate of 61.7% (although the latter estimates included individuals from 45 to 64 years of age). More surprising, however, was the finding that disabled job seekers tend to be younger than their employed counterparts: 55% of the 1977 New Haven survey respondents seeking jobs were 35 years old or younger, compared to 41% of the employed disabled.

Women were also represented in slightly lower proportions than men in the New Haven labor market survey (Table IV) and lower than in the U.S. general population surveys described earlier. In the most recent 1976 U.S. Census survey, disabled women were almost equally represented among the disabled (at 51%). The 1977 labor market survey placed their representation at close to 47%. However, their representation among the unemployed was higher: 58% of the labor market unemployed were women, compared to about 42% men. This is close to the percent representation of women among the severely disabled in the 1976 survey (Table I).

Nonwhites were represented in lower proportions than whites in the New Haven labor market survey, although somewhat higher than in the 1972 and 1976 U.S. estimates. Even among the unemployed, whites outweighed nonwhites, although by far less than their total proportion of the disabled. This is similar to the findings of total U.S. disabled population surveys.

The local disabled population is more highly educated than the total U.S. population. Over 65% of the 1977 labor market survey respondents had completed at least a high school education, although

-152-

only 50% of the job seekers had done this. These percentages are relatively high compared to the percentages given in the 1972 survey (44%) and in the 1976 survey (47%).

In summary, the New Haven disabled are younger and more highly educated than the respondents in earlier U.S. surveys. However, close to 40% of the respondents are <u>older</u> and most differences are likely to be a result of the bias inherent in the household survey. In any case, such differences would put New Haven disabled job seekers in a better position to take advantage of "model" programs focused on job referral and placement.

# B.3. Occupations Of The New Haven Labor Market Disabled

The extent to which a medical impairment affects work ability will differ among disabled individuals, depending primarily upon the individual's psychological state, the presence or absence of other socioeconomic or medical impairments, and the type of work performed before disability onset.

-153-

Most of the New Haven labor market disabled respondents were employed at the time of the survey. Two of the three occupation categories with the highest percentages of employed and unemployed disabled were the same: Professional and Managerial, and Crafts and Operatives (Table V). A large proportion of service workers, however, was evident among job seekers. The presence of such large percentages of disabled in white collar positions should not be totally surprising, given their reported education levels; it is, however, somewhat of an anomaly because of the perceived problems of the disabled in gaining employment at these levels. This may explain why larger percentages of disabled job seekers look for lower level jobs such as service workers. (In a slack labor market, however, many job seekers are more likely to seek or accept jobs in which they might ordinarily be overqualified.)

Overall, the New Haven disabled work or have worked in either Crafts/Operatives or Service Worker/Laborer occupations, as did most of the disabled in the 1971 and 1974 surveys.<sup>1</sup> A relatively high proportion have also worked in Professional positions.

	U.S. 1	Total	New Haven Labor Market		
Professional &	1971 Disabled	1974 Disabled	Total Disabled	Last Job Of Seekers	
Managerial	16.5%	15.7%	30.1%	18.5%	
Clerical & Sales	22.3	19.4	18.3	14.8	
Crafts & Operatives	30.2	36.9	27.7	31.5	
Farmers & Farm Laborers	6.9	4.6	-	-	
Service Workers & Laborers	23.9	18.4	21.1	33.3	
Not Reported/ Unknown	0.4	-	2.8	1.9	

Occupational Classification

Further, by assuming a relatively stable occupational structure in New Haven from 1970 to 1977 and

(1) Mildred Cinsky, op cit, pp. 36, 39 and supra, p. 15. (See also supra, Table II.) adjusting 1970 Census data to correspond to the labor market survey frame, the proportional distribution indicates that handicapped and nonhandicapped are employed in similar occupations (Table VI): Professional, Clerical, Crafts/Kindred, and Service Workers.

# B.4. Disability Types Of The New Haven Labor Market Disabled

Most disabled individuals in the local labor market survey reported musculoskeletal, cardiovascular and respiratory conditions, particularly arthritis, high blood pressure and asthma (Table VII). This finding is very similar to the 1972 SSA survey, although higher percentages of individuals with endocrine and sensory impairments were reported in New Haven. In addition, the low percentage of individuals reporting a mental disability can be partly attributed to the fact that it was not included in the list of physical disabilities,<sup>1</sup> but was asked as a separate question and was not analyzed at all.

(1) See survey form, intra, Chapter Appendix B.

B.5. <u>Summary</u>

New Haven individuals are similar to the total U. S. disabled population in several ways: (1) primary disability types (e.g., musculoskeletal and cardiovascular conditions such as arthritis and high blood pressure), probably because (2) a large proportion of disabled individuals are in the older age groups; (3) the percent distribution of women is slightly lower among the New Haven disabled than in the 1976 total U.S. disabled population surveys. However, some fluctuation due to sample size should be expected; (4) nonwhites were represented in lower proportions than whites among the disabled in all surveys, although they are overrepresented among the disabled compared to the nondisabled; (5) many disabled work in Crafts/Operatives and Service Worker/ Laborer positions, although high proportions of the New Haven disabled also report employment in the Professional/Managerial occupations. This difference is probably due to the higher education level of the

New Haven disabled relative to the total U.S. disabled population survey estimates. This anomaly can probably be attributed, at least in part, to survey bias, since most of the disabled were located in higher socioeconomic areas in the city, and to sampling differences.

In any case, such differences between the labor market and total U.S. population estimates indicate that New Haven individuals who are disabled should be in a better position to take advantage of special job opportunities.

# C. <u>Selected Characteristics Of New Haven Service</u> Agency Client Population

The New Haven Project worked with four client serving agencies to encourage job referrals and placement.<sup>1</sup> This analysis will focus on the three

(1) See supra, Chapter III: Case Study Description.

primary agencies: (1) the local office of the state VR agency ("DVR"); the federally funded placement project at the Easter Seal Rehabilitation Center ("PWI"), which also served as one of the two prime subcontractors under the New Haven Project; (3) the Connecticut Mental Health Center ("CMHC"), a large mental health clinic in which three units participated: Acute Assessment and Treatment (AAT); Drug Dependence (DDU); Alcohol (AU); Community Support Services (CSS). This section summarizes demographic data of these agencies' total client populations in order to compare population estimates with the earlier survey estimates and to provide a framework for analyzing the case study programs.

# C.l. <u>Demographic Characteristics Of Selected New</u> <u>Haven Agency Clients</u>

Clients at the three agencies were, overall, younger than respondents in the U.S. and local labor market surveys, particularly CMHC clients (Table VIII and below):

## Age Distribution: 36 And Older

Age	1976 U.S.	New Haven Labor	Easter Seal	DVR	CMHC
36-64	76.7%	55.8%	49.4%	33.8%	25.5%

Men are also more highly represented in the three agencies than in the earlier survey estimates, except for CMHC clients:

## Gender Percent Distribution

Sex	1976 U.S.	New Haven <u>Labor</u>	Easter Seal	DVR	CMHC
Male	48.5%	53.5%	64.5%	57.4%	48.5%
Female	51.5	46.5	35.5	42.6	51.5

Because of the relatively large percent of missing data for DVR clients, it is not possible to draw any conclusions about race and education characteristics (Table VIII). However, if the relationship between age and education cited in the U.S. surveys holds, it is likely that DVR clients are more highly educated than the available data indicates because they are younger.

In addition, the relatively low education level of Easter Seal clients can be attributed to the large proportion of mentally retarded clients who participate in that agency's sheltered workshop. PWI clients (program participants) are likely to be more highly educated than the entire population at this agency.<sup>1</sup>

<sup>(1)</sup> See infra, description of PWI-placed clients. In addition, there is likely to be some overlap of clients, since we were told that 90% of PWI clients are referred by DVR (see Chapter III -Case Study Description). We were unable to confirm these statistics, but they are likely to be a good estimate.

Most agency clients are categorized as having mental, musculoskeletal, and nervous system disorders (Table IX). All three agencies indicated that high proportions of their clients were mentally disabled. Easter Seal had a disproportionately high proportion of mentally retarded clients, probably because of their specialized facilities.

# C.2. Summary

The agency clients in this study are, in general, representative of the labor market disabled with respect to the selected characteristics presented in this chapter. They tend to be younger, male, and to have musculoskeletal or mental disabilities. They are also predominantly white and, on the average, have at least a high school education (although the large number of mentally retarded clients at the Easter Seal Center lowers that agency's education level). For those characteristics that are not congruent with U.S. total estimates, the clients at agencies are likely to be in a more advantageous job-seeking position. (In addition, although some overlap between PWI and DVR clients exists, the small number of PWI clients should not significantly influence outcomes.)

# SECTION 2. <u>NEW HAVEN PROGRAM INTERVENTIONS: THE</u> "EXPERIMENT"

#### A. <u>Purpose and Design Of Experiments</u>

During the New Haven Project's second year, two program "linkages," designated here as "experiments," were designed and tested. The overall purpose of the interventions was "to bring together the New Haven municipal government, the major employer organization (the Greater New Haven Chamber Of Commerce), the employer community, and the rehabilitation community."<sup>1</sup> Figures 1 and 2 summarize the key elements of both programs.<sup>2</sup>

## A.1. Job-Ready Client Listing ("Client List")

This experiment (Figure 1) was designed to provide local employers with updated listings of jobready disabled individuals seeking employment. The list was prepared by a senior project research associate located at one of the participating agencies (the Easter Seal Center) from a list of clients and "mini-resumes" provided to her by service agency "contact persons." The researcher summarized key characteristics of the clients and provided the list to a Chamber staff member, who disseminated it in newsletter form to over 1,000 area employers.

<sup>(1)</sup> New Haven Consortium, "Fall 1978 Preliminary Assessment: OJT Linkage and Job-Ready Listing Linkage" (prepared by Judith Richter, HEW Grant 15-P-59030), November 1979, p. 1.

<sup>(2)</sup> See also <u>supra</u>, Chapter III: Case Study Description.

This program was tested for eight months, from February 1978 to October 1978 (two months were not included). During the first four months, in addition to education, vocational goals, experiences, and licenses/certificates, the client's disability type was listed; during the second four months, disability type was not listed. At no time was the client name listed. The employer's contact was the senior researcher at the Easter Seal Center, who put the client's counselor (available through a coding system) in touch with an interested employer.<sup>1</sup>

#### A.2. On-The-Job Training Linkage ("OJT Link")

This intervention (Figure 2) was designed to link the Central Job Development Unit (CJDU) of the city government's CETA office with the participating rehabilitation agencies through use of OJT contracts developed with private employers by a Chamber of Commerce-based CETA job developer. In this program,

<sup>(1)</sup> New Haven Consortium, "Fall 1978 Assessment," p. 1.

the job developer provided copies of job orders to the project liaison at the Easter Seal Center, who forwarded these job orders to the participating agencies within 24 hours. Clients were then referred directly to the CJDU office. This experiment was tested from February 1978 to June 1978.<sup>1</sup>

# B. <u>Distribution of Referrals:</u> Selected Characteristics

The relatively high proportion of PWI referrals is reflected in the disability types of clients referred, which were musculoskeletal, mental, and sensory disorders. The higher prevalence of these disabilities is similar to those of the general service agency client populations.<sup>1</sup> In order to verify these frequencies, I deleted referrals from the specialized service agencies (CMHC and CCFD), shown as n=74 (Client List), n=7 (OJT link), and n=81 (both interventions). The result was that musculoskeletal and mental disorders continued to be most prevalent, along with nervous system disorders.

(1) See supra, Table IX.

# Percent Distribution Of Referrals By Selected Disabilities

					Во	th
<u>Condition</u>		<u>List</u>		JT		entions
	n=74*	n=125	n=7*	n=19	n=81*	n=144
Musculoskeletal	29.7%	17.6%	14.3%	5.3%	28.4%	16.0%
Cardiovascular	2.7	1.6	-	-	2.5	1.4
Respiratory	4.1	2.4	-	-	3.7	2.1
Mental	24.3	52.0	42.8	78.9	25.9	55.6
Mental Illness	17.6	26.4	28.6	10.5	18.5	24.3
Alcohol/Drugs	4.1	24.0	14.3	68.4	4.9	29.9
Nervous System	10.8	6.4	14.3	5.3	11.1	6.2
Neoplasm	1.4	0.8	-		1.2	0.7
Endocrine	5.4	3.2	-	-	4.9	2.8
Sensory	6.8	7.2	-	-	6.2	6.2
Other/Unknown	14.9	8.8	28.6	10.5	16.1	9.0

\* Excludes CMHC, CCFD. Source: New Haven Consortium "Preliminary Assessment" (November 1979).

The distribution of Client List referrals by occupation indicates a relatively high level of vocational aspiration<sup>1</sup> and a corresponding

<sup>(1)</sup> Because the Client List provided resume-type data such as goal and education on all referrals, I was able to categorize vocational goals by OIC code and to summarize educational data for the 71 clients.

education level similar to, although somewhat higher than, the education level of the overall client populations in the participating agencies.<sup>1</sup> This is not surprising because "job-ready" clients are likely to be the "best" agency clients. (The match between high vocational goal and education is also a good test of the reliability of the occupation classification estimates.)

	the second	b. CIICHC HIDC
	Occupation n=85*	Education n=71
Professional and Managerial		Than
Clerical and Sales	34.2	gh School 14.1% School 47.9
Crafts and Operatives		Than gh School 38.0
Service Workers and Laborers	9.4	<u>J. JO.01</u>
Other	3.5	

Percent Distribution of Referrals: Client List

\* Includes multiple vocational goals.

(1) See supra, Table VIII.

An analysis of referrals relative to the number and type of offerings indicates that, first, referrals to the OJT program were low. Out of the 31 job orders developed, only 19 referrals were made by all agencies - less than one referral per job order. CMHC made most of the referrals (12), several of which were for one job order; DVR made only one referral, which was only 5% of all referrals made and 3% of the total number of OJTs developed.

While the relatively low number of OJTs does not permit more than descriptive statistics, it is clear that (1) <u>many of the OJT offerings matched the voca-</u> <u>tional goals exhibited in the Client List</u> and (2) the <u>distribution of OJT referrals as a proportion of the</u> <u>OJT offerings by occupation</u> indicates a disproportionate number of referrals in the <u>less</u> prestigious occupations. (The total number of positions in the service workers category was four, or 12.9% of the 31 total OJTs, and the number of referrals was six, 31.6% of the 19 referrals. Therefore, the actual proportion of referrals was 150%.)

		OJT				
Occupation	Client List <u>Goals</u> n=85		% Of Total Refer- red n=19	Referrals (19) As % Of Offerings (31) By Occupation		
Professional and Managerial	24.7%	6.5%	5.3%	50.0%		
Clerical and Sales	34.2	19.3	26.3	83.3		
Crafts and Operatives	28.2	61.3	36.8	43.8		
Service Workers and Laborers	9.4	12.9	31.6	150.0		
Other	3.5	-	-	-		

Percent Distribution Of Referrals By Occupation

These data suggest two things about the referrals:

 The distribution of referrals is not proportional to the number of clients at each agency. (2) The number of OJT referrals is disproportionately large in the lower level occupations, relative to both the vocational goals exhibited in the Client List and the number of OJT offerings.

In order to pursue this line of analysis further, I have developed a set of "projections" in two areas to be used as a framework for quantifying the results of both experiments:

- The number of "job-ready" clients available for referral.
- (2) The maximum number of potential openings and referrals for each experiment.

# C. Development Of Projections

The three primary service agencies in the case study worked with over 5,000 clients.<sup>1</sup> Analysis of the state VR agency cumulative reports for Fiscal Years 1977-1980 indicates a fairly stable proportion of clients distributed throughout all service statuses and a relatively small percentage of "jobready" clients in any given year. If the data of the state VR agency clients are at all representative of rehabilitation agencies' problems in job placement, the actual number of job-ready clients will be small, relative to the total number of clients in any given agency. In order to develop some estimates of the number of "available," job-ready clients in the participating agencies, I have made the above assumption.

-172-

<sup>(1)</sup> The PWI program at the Easter Seal Center provided all referrals for this agency (regardless of where clients were based). Estimates in the analysis are based on the total 375 agency clients, of which PWI will represent a subset. In addition, we were told that 90% of PWI clients are referred by DVR, so some overlap is likely to exist, although we could not confirm the extent to which this occurs.

#### C.l. General Service Process

The formal DVR service process, recorded on the "Quarterly Cumulative Caseload Reports" (form number SRS-RSA-101) is divided into four parts, in which clients are placed into one of 30 "statuses"<sup>1</sup>:

#### (1) Referrals (Status 00)

This section records the number of clients "on hand" at the beginning of the period; those received during the period; those "available;" placed in applicant status (02); closed from referral (status 08); total processed; and total remaining at the end of the period.

# (2) Applicants (Status 02)

This section includes the number "on hand" at the beginning of the period; the number placed in applicant status (02); total available; certified for VR services

See description of caseload statuses, <u>infra</u>, Chapter Appendix D.

(status 10); certified for "extended evaluation"<sup>1</sup> (status 06); closed (not certified for VR services or extended evaluation) - status 08; total processed; and total remaining.

# (3) Extended Evaluation (Status 06)

This section includes the number "on hand"; the number certified during the period; total available; the number certified for VR services (status 10); those closed, not certified (status 08); total processed; and total remaining.

# (4) Active Cases And Cases Closed (Statuses 10-30)

This section reports the number on hand; accepted; available; closed rehabilitated (status 26); closed not rehabilitated (status 28); closed not rehabilitated (status 30); total closed; total remaining, by status.

<sup>(1)</sup> See discussion of "extended evaluation," <u>supra</u>, Chapter I: Legislation.

#### C.2. Analysis of FY77-FY80 State DVR Data

While each year about 85% of referrals are placed in applicant status (02), less than 37% of the applicants in any fiscal year are actually certified for VR services; moreover, only about 25% of the total available clients are rehabilitated (Table X). Close to 60% of the clients are in the "active" statuses (10-24).

Of these remaining clients, close to 80% in any given year are in the "in-service" statuses, 10-18 (Table XI). Over 50% are in statuses 16-18, which include physical and mental restoration (16) and training (18). The remaining clients are in statuses 20-24, with about 10% per year in status 22 (placed in employment) but not rehabilitated ("suitably" employed for at least 60 days), and <u>less than 8%</u> are in status 20, ready for employment.

It is important to note that even though only 25% of the active cases are "closed-rehabilitated" in a given year, over 60% of all closed cases are

#### -175-

rehabilitations (status 26) and over 50% are categorized as "severe":

# Percentage Distribution Of Total Closed Cases

Fiscal _Year	(N) Total Closed	Percent Severe	Status 26 As % N	Percent Severe
1977	3,904	51.9%	62.0%	50.0%
1978	4,239	56.6	63.3	55.0
1979	3,967	62.2	65.0	59.2
1980	3,954	61.0	63.0	59.8

Thus, although less than 8% of the total caseload in any given year is "job ready," most of these clients will be rehabilitated. Moreover, a FY78 analysis performed by the University of Michigan estimated that of all status 26 (rehabilitation) closures, close to 85% are competitively employed.

# C.3. New Haven Agency Clients: Vocational Status

As the chart below indicates, a large proportion of the clients at the participating agencies are ultimately competitively employable. The fairly high percent of "sheltered" environment and "not employable" individuals in the Easter Seal Rehabilitation Center most likely reflects the large proportion of mentally retarded clients. The CMHC data are probably influenced by bias in the small sample drawn and analyzed. Most surprising is the relatively high percent of "unemployable" and "permanently unemployed" clients at the DVR, primarily because its clientele is mandated to include only individuals who are ultimately employable and who will benefit from rehabilitation services. Even so, over 80% of the clients would be competitively employable with training or restoration, and this corresponds with the large percent of DVR clients statewide who were reported in statuses 16-18.

If we were to use only the data concerning ultimate vocational status to derive an estimate of the total available clients eligible for referral, it would probably be too high, because it is unlikely that all of the "ultimately competitively employable" were job-ready at the time of the programs:

					nal Statu Of Clier	
		A	В	C	D	E
			Tempo-		Perma-	
		Em-	rarily	Under	nently	Other/
	Total	ploy-		Em-	Unem-	Un-
Agency	<u>Clients</u>	ed	ployed	ployed	ployed	known
Easter Seal						
Rehab	375	9	237	3	59	67
DVR	1,369	185	527	26	290	474
CMHC	3,707	663	794	-	2,250	-

Source: New Haven Consortium, "Tier 2 -Agency Survey," op cit. See also supra.

Subtracting columns A, C, and D from the totals would give us the following "best case" labor pools:

Easter	Seal	Rehab	Center:	375	-	71	=	304
DVR			:	1,369	-	501	=	868
CMHC			:	3,707	-	2,913	=	794

Given the relatively large number of "unknown" clients, a more accurate "worst case" or "lowest number of job seekers" can be derived as follows:

- . Take the total number of clients in each agency.
- Multiply by the "percent ultimately competitively employable" to obtain the "number remaining."
- . Multiply by the average percentage of "job-ready clients," provided by state DVR data.

	Active Clients During	Estimated Percent Ulti- mately Competi- tively Employ-	Competitive Number Remain-	Labor Pool Estimated 7.5% Job-
Agency	Period	_Able	ing	
Easter Seal Rehab				
Center	375	52.3%	196	15
DVR	1,369	44.2	605	45
CMHC	3,707	39.3	1,457	109
Total	5,451	-	2,258	169

(1) See <u>supra</u>, discussion of state DVR client statuses.

Using 169 as a baseline number of available clients to participate in the interventions results in 3.1% of all service agency clients - clearly a "worst case" estimate, even if there is considerable overlap between DVR and PWI (Easter Seal). The expected distribution of referrals to the interventions would therefore be:

	Expected	Distribution
Agency	#	<u> </u>
Easter Seal Rehab Center DVR CMHC	15 45 <u>109</u>	8.9% 26.6 _64.5
Total	169	100.0%

Two additional assumptions relative to the number of potential agency referrals per intervention have been made to serve as the analytical framework:

> The Client List was designed to provide a maximum of 20 client resumes on each monthly newsletter, or a <u>total of 160</u> <u>resumes for eight months</u>. Each agency was instructed to provide as many clients as possible to the coordinator at the Easter Seal Center, who would, if necessary,

select the first six to seven clients per agency, per month. (It should be noted that one month a newsletter was not printed at all, due to the low number of referrals from all agencies, and that the coordinator never had to select resumes.)

The OJT intervention produced a total of 31 job orders during the period covered. The agencies were free to refer as many clients as they desired for each job order; for the purposes of this analysis, a target of one referral per job order per agency was assumed. This results in a total of 31 openings and 93 possible referrals.

### D. Results Of Referrals

The results of the experiments against these projections are clear: in each case, the number of referrals fell below expectations and was distributed in markedly different proportions than projected.

	Distribution of Referrals Versus Availability			
Intervention	Number Of Available Clients	Number Of Open- ings	Number "Avail- able" Clients Per Opening	Number Of Referrals Per Opening
Client List	169	160	1.1	0.79ª
OJT Link	169	31	5.5	0.61 <sup>b</sup>

a n = 126 referrals b n = 19 referrals

Distribution Of Referrals

	By Agency			
	Expected	Actual		
Agency	#/ <b>%</b>	Client List #/%	OJT Link %	
PWI/Easter Seal	15/8.9	54/42.9	5/26.3	
DVR	45/26.6	13/10.3	1/5.3	
СМНС	109/64.5	47/37.3	12/63.2	

Over the eight-month period covering the Client List, the availability-to-referral ratio was less than 1:1, even though the ratio of available clients to projected openings was over 1:1. Even more pronounced was the ratio of OJT referral to openings, at 0.61, relative to over five available clients per opening.

Because placements will obviously reflect such low referral rates, it is not surprising that both interventions yielded only three placements, two from the OJT link and one resulting from the Client List. Overall, with the total number of referrals at 145, the placement rate was 2.1%. For the Client list, the placement rate was less than 1% and for the OJT link the placement rate was 10.5%. These rates are reduced somewhat when compared to either the total number of expected hires (OJT) or opportunities (Client List). In this case, the OJT placement rate (2 divided by 31) was 6.5% and the Client List was 0.6% (versus 0.8% of referrals). Compared to the total number of potential referrals for the OJT (93), the placement rate was 2.2%.

However, referral and placement rates cannot be examined in a vacuum; even though these rates are

-183-

substantially lower than expected, based on the assumptions provided, they may still be substantially higher than could be accomplished without the use of agencies as job resources and special programs designed to encourage job opportunities. It is this assumption upon which the federal-state VR program of services has been based and continues to operate.

Section 3 describes the data collection activity that will function as the "Control" group in this case study. Sections 4 and 5 compare the results of the experiments against those resulting largely from "other-than-service-agencies" resources (i.e., the Control Group), and provide data that will contribute to our understanding of why the results occurred. SECTION 3. THE "CONTROL GROUP"

## A. Description Of The Posting Project

This section summarizes data collected as part of one major activity undertaken by the New Haven Project: the "Posting Project." During the second project year, a job entry monitoring effort was undertaken by project staff at the city government. This task focused on researching the application and hiring patterns of disabled individuals in the municipal government, "in order to develop a system to make information describing employment opportunities in city government more accessible to handicapped members of the community."<sup>1</sup> Its major component consisted of collecting job applicant information, in order to document characteristics of both disabled and nondisabled applicants. A substantial number of positions were monitored during

-185-

<sup>(1)</sup> City of New Haven, Human Resources Administration, "Internal Review: Posting Project" (Draft Working Paper, prepared by Michael Paul Thomas, consultant, under HEW/RSA Grant 15-P-59030, January 1979), Abstract, p. 1.

the November 1977 to June 1978 period, including all job openings with the city government except for certain temporary or summer positions (e.g., CETA), the Police and Fire Departments, and openings with the city's Board of Education. All openings are normally "posted" in various locations, including client-serving agencies, throughout New Haven.<sup>1</sup> Data collection procedures were focused on the city's Personnel Office and Civil Service Department as follows:

> Applications for the posted job openings were distributed at the Personnel Office for the City of New Haven. Included with the applications were information cards designed for the data collection purposes....[These cards] requested the following information from the applicant: the source of information used by the applicant to find out about the job opening applied for, the applicant's utilization of service agencies, treatment facilities and disability funding sources, and the applicant's handicapped status (i.e., whether or not the

(1) Ibid, p. 2. See also infra, Chapter Appendix F. applicant felt that he or she fit the federal definition of a "handicapped person," and, if so, what type of handicap was involved.)... These cards were distributed to all applicants for city government job openings, including both handicapped and nonhandicapped applicants. The [cards] were not included in the material used to select among applicants for hiring purposes.

Completed applications and data cards were returned to the Personnel Office [and] included the general application form..., a resume..., and the Posting Project card. Information from these sources was then compiled by [project] researchers...[I]nformation was [also] collected describing the outcome of the hiring process for the posted jobs.<sup>1</sup>

## B. <u>Selected Characteristics Of Job Seekers</u>

In our attempt to identify the disabled members of our sample population, we were immediately confronted with two problems:

 Categorizing applicants either too narrowly or too broadly, relative to their approximate representation in other labor force estimates.<sup>2</sup>

<sup>(1)</sup> Ibid, p. 3. See copy of data card <u>infra</u>, Chapter Appendix G.

<sup>(2)</sup> See e.g., Polka, op cit.

(2) Using methods of identification that were so radically different from those used in other research efforts that any future comparisons would not be possible.

The data card distributed to all city government employees therefore collected several "disabled identifiers":<sup>1</sup>

- Sources of assistance used by the applicant during the six months prior to application:
  - Department of Vocational Rehabilitation
  - Easter Seal Rehabilitation Center
  - Connecticut Mental Health Center
  - St. Raphael's or Yale New Haven Hospital Physical Therapy Department

<sup>(1)</sup> Thomas, op cit, pp. 5-6.

- State Board of Education (Services for the Blind)
- RESPOND (an advocacy center for the disabled)
- Veterans Administration Hospital
- New Haven Regional Center (serving the retarded)
- Other

.

•

.

Types of treatment received on a regular or continuing basis:

- Psychological or mental health
- Physical health
- Disability payments received:
  - From public agency
  - From private agency
- Self-identification as a handicapped person under the terms of the federal definition.

Using only self-identification as the identifier resulted in a sample of 22 disabled applicants (3.3% of the total 667 population), which is likely to be an underestimate relative to all other survey data.<sup>1</sup> Using a definition that would categorize as disabled an applicant who responded affirmatively to any one of the four identifiers above resulted in a sample of 87, 12.1% of the total applicant pool, which is probably too high and which includes identifiers that are probably not indicative of a person's handicap status (e.g., a person who is handicapped may use Yale New Haven Hospital but someone using that hospital may not be handicapped).<sup>2</sup>

The final indicators of disability (any one of which placed the person in the handicap sample) were:<sup>3</sup>

. Department of Vocational Rehabilitation

- . Easter Seal Rehabilitation Center
- Connecticut Mental Health Center

(3) Ibid, p. 6.

See U.S. population and local labor market estimates, <u>supra</u>, Section I.
 Thomas, op cit, p. 6.

- . New Haven Regional Center
- . Public Disability Payments
- . Private Disability Payments
- . Self-Identification

Under this definition, 47 sample members were identified, or 7.0% of the total applicant pool.

In general, the disabling conditions of our job seekers resemble those of the experimental group and included mental, musculoskeletal, cardiovascular, and sensory impairments.

	Conditions Of Job Seekers ccent Distribution Disabled Posting Project
Condition	Applicants N=22
Musculoskeletal Cardiovascular Mental Endocrine Sensory Other/Unknown	9.0% 4.5 22.7 9.1 13.6 81.8
Total Percent Disabled Applicants	7.0%
Source: Thomas, "Posting	g Project Report" (1979).

The distribution of applicants by occupation indicates that most individuals either apply for or are employed in white collar positions (although a relatively large proportion apply for service worker positions). These data are in line with earlier reports of the local labor market and U.S. population estimates as well as Client List vocational goals, and are therefore useful in analyzing differences between experimental and control group referral and placement rates. Education levels of disabled job seekers match the occupation levels, and gender distribution is weighted heavily towards men, which is similar to the clients in participating agencies.

		istribution g Project
	Employed N=20	Total Seekers N=41
<u>Occupation</u> Professional and		
Managerial	45.0%	26.8%
Clerical and Sales	15.0	31.7
Crafts and Operatives Service Workers and	20.0	12.2
Laborers	20.0	29.3
Riugation		N = 3.9
Education Less Than High		
School		7.78
High School More Than High		23.1
School		69.2
Sex		
Male		71.0%
Female		29.0

Similarities between clients in Control and Experimental groups are not surprising, since use of an agency for some type of assistance was a handicap identifier. Over 70% of the handicap sample utilized at least one source of assistance; however, only 10% reported using a service agency for job referral/ placement assistance. The 42 handicap applicants (47-10.6%) who were, therefore, <u>not</u> referred by service agencies represented 6.3% of the total applicant pool, compared to the 0.7% represented by service agency referrals.

## C. <u>Results</u>

# C.l. Disabled Versus Nondisabled: Actual

At the time of the Posting Project analysis, very few actual placements had been made. Many of the clients were still in active status:

N Row &	Active	Hired	Not Hired	Row Total Row %
Disabled	20 70.7	1 2.4	11 26.8	41 6.7
Non-				
disabled	281 49.3	41 7.2	248 43.5	570 93.3 Missing 56
Column				
Totals Column %	310 50.7	42 6.9	259 42.4	611 100.0

## City Government Jobs Status Of Applicants

Source: Michael Paul Thomas, "Posting Project" (1979), p. 17.

Thomas (1979) points out that the disparity between the disabled and nondisabled hiring rates is well within the range of statistical fluctuation, given the relatively small number of disabled applicants and the low hiring rate overall. In addition, "the proportion of handicapped applicants 'Not Hired' [i.e., rejected] is substantially lower than the comparable proportion of nonhandicapped applicants (26.8 percent, compared with 43.5 percent). Similarly, we can be more certain still that the proportion of handicapped applicants on Active Status is higher than the comparable proportion of Active nonhandicapped applicants."1 Thus, these disabled applicants apparently do no worse than the nondisabled in the job search, relative to the smaller number of disabled.

(1) M. P. Thomas, "Posting Project" (1979), p. 17.

•

•

Additional analysis reinforces these results by projecting the final number of hires on the basis of the actual hire and rejection rates cited above, i.e.,:

- One out of every 12 disabled applicants is hired.
- 41 out of every 289 nondisabled applicants is hired.

Using these guidelines, the <u>projected</u> placement rates for disabled city government job applicants are not likely to be significantly lower than the proportion of nondisabled hires.

Actu	al and 1	Projected	Hire	Rate	s: Posting	g Project
	Actual			Dr	ojected	Projected % Appli- cants Placed
Total	Hired	Rejected	H H	lred	Rejected	
41	1	11		3	38	7.3%
570	41	248		81	489	14.2

## SECTION 4. CONTROL VERSUS EXPERIMENT

#### A. Comparison Of Results

Clients in both the experimental and the control groups were similar with respect to the three characteristics covered: disability type, occupation, and education. Most were categorized as having mental impairments, over 50% were interested in more prestigious occupations, and over 80% had completed at least a high school education (Table XII).

Although more control group participants were applying for less prestigious positions, this is likely to be at least partly a function of labor market demands rather than of lower level aspirations than disabled experimental participants. The table below illustrates this point: both disabled and nondisabled control group participants have similar education levels (most have at least a high school education) and applied for similar positions, including a relatively large proportion of service workers and laborers.

-198-

		nd Positions ntrol Group Nondisabled #/%
Professional and Managerial	11/26.8	202/35.9
Clerical and Sales	13/31.7	199/35.3
Crafts and Operatives	5/12.2	51/9.1
Service and Laborers	12/29.3	111/19.7
Less Than High School	3/7.7	22/4.2
High School	9/23.1	117/22.5
More Than High School	27/69.2	382/73.3

When comparing the results of the control and experimental groups, it is important to remember that our control group disabled applicants applied for civil service positions, which are awarded generally on the basis of test and interview results. The OJT positions, however, are usually targetted for "underprivileged," special needs groups. In this sense, the disabled in our experimental group should have had a better chance of placement. In addition, they should have had a better chance of placement relative to "walk-ins" at the CETA office, because the agencies were provided with copies of the OJT job orders within one day after delivery to the New Haven project liaison, immediately after the job order was developed.

While no data are available on the total number of applicants for the 31 OJTs developed, we do know how many disabled referrals and placements were made relative to the projections:

> Overall, the referral rate for both the experiments was 57%, based an 160 client listings (20 per month for eight months) and 93 OJTs (based on one referral per agency for 31 OJTs, for the three agencies): 145 (total referrals) divided by 253 (total potential referrals) = 57%.

The control group disabled application rate was 56%, which is not statistically different from experimental results: 47 (disabled applicants) divided by 84 (projected hires) = 56%.

The placement rate relative to the number of referrals in the experimental group was 2.1% : 3 placements divided by 145 referrals = 2.1%.

The control group placement rates were 2.4% (actual) and 7.3% (projected):

- Actual: 1 placement divided by 41 applicants\* = 2.4%.
- Projected: 3 placements divided by 41 applicants\* = 7.3%.

\* Missing six observations.

(Even if we assumed the same number of placements and 47 applicants, the difference between control and experiment would not be that different.)

Furthermore, the difference between projected placements in the control and experimental groups, using just the OJT data, is not great, given the relatively large number of control group projected hires in the control group:

•

- OJT: 2 (placements) divided by 31 (jobs) = 6.5%
- Control: 3 (placements) divided by 84
  (jobs) = 3.6%

Although this data is not statistically conclusive, it provides strong support for the views (1) that job referral and placement are not performed by agencies for at least one subgroup in the disabled population (i.e., the more highly educated, regardless of disability type) and (2) that the low job referral rates by service agencies, even when encouraged as part of a special demonstration project, is likely to inhibit higher placement rates than would occur without their assistance.

Other data collected as part of this case study effort support this view and provide some perspective for analyzing why these results occur. The remainder of this section provides some summary descriptive statistics from local employers - gathered during the first project year, before the experimental programs were tested - that further support the data analysis presented.

## B. Local Employer Questionnaire

During the first project year, the Chamber of Commerce administered a 17-page questionnaire to several local employers. This questionnaire was developed by the New Haven Project's research coordinators at Columbia University's Industrial Social Welfare Center (the Regional Rehabilitation Research Institute, or RRRI) and was designed to gather data on the general characteristics of the employed disabled and on specific elements of the job entry and maintenance process. For the purposes of this analysis, selected data from four of the employer sites will be used:

- . Size of total workforce during the period covered.
- . Size of the disabled workforce.
- . Disability types.
- . Information on methods for estimating the number of disabled applicants.
- . Information on recruiting procedures and disabled versus nondisabled applicants.

In general, both the applicants and the employed disabled workforces at the three employer sites were identified by several methods:

- . Application forms (three out of four sites)
- . Employment forms (3)
- . Medical exams (3)
- . Utilization of disability plan (2)
- . Questionnaire (1)
- . Direct observation (3)
- . Referral from state VR agency (1)
- . Referral from rehabilitation agency (1)
- . Referral from special education (1)
- . Employee benefit claim forms (1)
- . Company medical records (1)
- . Post-employment health interview (1)

The sole employer with referrals from a rehabilitation agency and the state VR agency was not able to provide detailed characteristics of the 304 employed disabled (2.4% of the total workforce). The other three employers provided data on disability type and occupational classification. In general, the three disabled employee workforces represented a large proportion of the total workforces. This is likely to be because of the high number of employees with cardiovascular impairments who were classified as disabled;<sup>1</sup> other impairments representing a large proportion of the disabled were musculoskeletal, mental, and sensory, which is similar to the local agency and labor market clients.

<sup>(1)</sup> In addition, many of these employees were probably not hired as disabled, but became disabled during employment. For example, employer 3011 (with 23% of the total workforce categorized as disabled and 23% of the disabled having cardio-vascular impairments) reported a minimum of 22% of disabled employees hired as disabled; employer 6324 reported 32% of disabled employees hired as disabled.

Condition	Employer #6324 N=101	Employer #3011 N=204	Employer #3714 84
Musculoskeletal Cardiovascular Respiratory Mental Nervous System Sensory Other/Unknown	3.0% 37.6 5.0 8.0 3.0 6.9 36.6	52.9% 23.5 1.5 14.2 0.5 6.4 16.2	21.4% 38.1 - 27.4 2.4 9.5 1.2
Total percent disabled	15.8%	23.18	11.1%
Occupations o	of Employed	Disabled	
Occupation	#6324	<u>#3011*</u>	#3714
Professional and Managerial Clerical and	35.6%	15.7%	20.0%
Sales Crafts and	51.5	2.0	8.4
Operatives Service Workers and	-	52.9	61.9
Laborers	12.9	40.2	9.5

## Selected Impairments of Employed Disabled

\* Multiple disabilities reported.

4

Source: City of New Haven, Human Resources Administration, "Employer Questionnaires" (prepared by the Industrial Social Welfare Center, Columbia University), 1977. Most of the disabled were employed in white-collar positions, both professional/managerial and crafts/ operatives. Only one employer reported a high percentage of service workers and laborers.

Some detailed analysis is possible for three employers (3011, 6324, and 4811). During the period covered, these employers provided applicant flow information indicating that, even though they provide some incentive for referrals from VR agencies (e.g., direct job listings with DVR and other private service agencies), very few applicants are reported to be referrals from such sources. Even so, of the 204 disabled employees at employer 3011, over 21% were hired as disabled - 5% of the total workforce. At employer 6324, a minimum of 32 out of 101 disabled employees were reported to be hired as disabled, 32% of the disabled workforce and 5% of the total workforce. At employer 4811, 11 of the 504 disabled workforce (2.2%) were known to be disabled at hire, less than 1% of the workforce; this employer was the sole employer reporting referrals from the state VR and private rehabilitation agency as a basis for estimates.

Two employers were able to provide estimates of the disabled applicant pool, based on rehabilitation agency referrals:

> Employer 6324 reported that five of the total 1070 applicant pool were disabled (referred by a rehabilitation agency). This represents less than 1% of the total applicant pool and, with one placement, less than 1% of all hires (N = 139). This finding is interesting from the perspective of our experimental group's experience: in the Client List where there were resumes sent (for no specific job) the placement rate by selected agencies was also less than 1%.

Employer 4811 estimated that less than 1% of the total applicant pool was disabled, based on referrals from rehabilitation agencies. Of the total 67 disabled applicants, 11, or 1.5%, were hired, compared to an overall hire rate of 3.3%.

These results substantiate the finding that service agencies do not actively refer clients for jobs, even with employer outreach and special "experimental" programs.

#### SECTION 5. EXPLANATORY DATA AND OBSERVATIONS

This section summarizes three other elements of the research that contribute to an understanding of why the results in the case study occurred. These data are descriptively useful for "making some sense" out of the case study experiences. Two of the three groups of data were gathered during the period of the interventions, (1) Service Experiences and Needs and (2) Counselor Feedback and Process Observations; the third, a summary of state DVR client case statuses for fiscal years 1977 through 1980, was obtained after the New Haven Project ended.<sup>1</sup>

#### A. Service Experiences And Needs

In 1977, a citywide self-registration questionnaire of the New Haven handicapped population was

Some of the state DVR data was used in an earlier section of the case study analysis (<u>supra</u>, Section 2) to help develop the projection models.

undertaken by project staff. Analysis of the returns was performed on a contract basis by a doctoral student in political science at Yale University.<sup>1</sup> The overall objective of the mailer was to "develop a research base for facilitating affirmative action for the New Haven handicapped population "by" testing ... a self-registration technique to identify disabled individuals residing in the City of New Haven and to survey their attitudes towards employment, training and services. $^2$ 

The questionnaire was designed by New Haven Project participants and sent to each of the 43,787 households in the city. A total of 1,233 questionnaires, or 2.8%, were returned, of which 483 were provided by or for a handicapped person. Analysis was directed towards these responses, of which approximately 63% were completed by a family member

(2) Ibid, p. 1. -212-

Joseph J. Houska, "Report of Findings: (1)Self-Registration Survey of the Handicapped," ed. D. Schreiber, City of New Haven (HEW/RSA grant 15-P-59030/1-01), October 1977. See copy of survey, infra, Chapter Appendix C.

and 5% were completed by a non-related household member. While these responses are not likely to be totally representative of the entire disabled population, the data is presented for both descriptive purposes and to provide general information concerning the characteristics and service attitudes of at least a fairly sizeable proportion of New Haven's handicapped population.

Although precise data on services received is unavailable for the local labor market, thereby precluding direct comparison with the findings in the Social Security Administration's 1972 Survey (Chapter II), 34% of the self-registration questionnaire respondents answering the question on whether they were registered with any service agencies indicated that they were registered: 15.5% were registered with the DVR, 3.5% with the Easter Seal Goodwill Industries Rehabilitation Center, 4.0% with another of the listed agencies, and 11% with some other agency.<sup>1</sup> Most respondents who were interested in

(1) Ibid, p. 6.

-213-

obtaining additional services indicated the need for clinical services, insurance, employment assistance, public awareness programs, and educational services. (See chart.)

## Additional Services

Service Type	Percent Responses
Employment Agency	9.38
Additional Medical Benefits or More Insurance	5.6
Public Information And Awareness Program	8.1
Crisis Intervention Recreational Opportunities	1.2 4.1
Job Bank Clinical Services	6.6 10.5
Educational Services Other None	7.7 12.0 60.2
None	60.2

Source: Joseph Houska, "Report of Findings: Self-Registration Survey of the Handicapped," ed. D. Schreiber, City of New Haven, (HEW/RSA Grant 15-P-59030/1-01), 1977, p. 8.

The finding that many survey respondents mention employment-related services as necessary clearly

(1) See Treitel, op cit, supra, Chapter II.

agrees with those found in the SSA's earlier 1972 follow-up survey.<sup>1</sup> Further, the finding that clinical services are of interest to the New Haven self-registrants is also not surprising, given the nature of their disabilities, although it is somewhat unexpected, given the relatively high percentage of respondents registered with the DVR. Respondents seeking work were the most likely to mention the need for employment-related services (26.1% of the job seekers versus 19.6% of the employed).<sup>1</sup>

One important measure for determining the involvement of rehabilitation agencies in job search and placement is how the services received by clients helped (Treitel, 1972).<sup>2</sup> Another is to determine the resources that employed clients or job seekers have used or plan to use in order to obtain work. Because the two New Haven surveys have identified as "handicapped" many clients who are likely, or who do,

-215-

Houska, op cit, p. 12. Primary disabilities reported by the questionnaire respondents were mental illness, sensory and cardiovascular. Other characteristics are provided in Chapter Appendix H).

<sup>(2)</sup> See supra, Chapter II.

have some involvement with service agencies (the self-registration survey responses indicated 34% affiliated with an agency) we would also expect, based on the mandate of state VR and other agencies, to see a more substantial level of job <u>referral</u> and placement involvement than was evident in the SSA 1972 follow-up survey.

The New Haven survey findings, however, do not indicate that any substantial level of involvement exists. Most handicapped individuals, whether employed or seeking jobs, use friends or themselves as job referrals sources; even in the selfregistration questionnaire, the percent of special services referral sources (13.4%) is much lower than the 34% agency usage cited earlier.

## -217-

.

# Job Referral Sources

		ven Labor Survey(a) Unemployed	Self- Registration Question- naire(b) Employed
Employer Re- cruitment	2.6%	1.8%	4.9%
Employment Agency	4.7	9.1	4.9
Service Agency	N.A.C	N.A.	13.4
Friends	25.9	29.1	23.2
Alone	N.A.C	N.A. <sup>C</sup>	47.6
Other	47.7	47.3	6.1
Ad	13.0	12.7	N.A.
Other Referral	6.2	-	-

(a) Source: Polka, op cit, 1977.
(b) Source: Houska, op cit, 1977, p. 15.
(c) Not on survey form.

### B. Counselor Feedback And Process Observations

In order to assess the success of the interventions, two questionnaires were administered to practitioners at each participating agency in the Fall, 1978.<sup>1</sup> The results of these questionnaires are useful in developing some explanations for the case study results described on the preceding page. Most of the counselors at the three participating agencies responded to the questionnaire (79%), but there were many questions that were not answered, probably because the low number of referrals and placements meant that few relationships with other agencies were established.

In general, counselor feedback on the OJT link was negative with regard to both interventions. Few relationships were established with job specialists at the city government's manpower office, which is not surprising, given the few OJT referrals. Most

-218-

<sup>(1)</sup> Copies of the forms are provided as Chapter Appendix I.

counselors did not respond to a questionnaire item regarding the suitability of OJT openings. The majority of respondents indicated the openings were not suitable or plentiful enough. DVR was most concerned about the federal financial eligibility requirements for these jobs and whether their public assistance recipients would be disqualified. This concern was not ameliorated even after they were informed that the requirements were flexible and not always strictly adhered to. PWI conselors wanted a greater variety of OJTs with less sophisticated skills; some felt the procedure for referral was too complex, that the intervention duplicated the PWI effort and that their job placement strategy remained unchanged. They also indicated that they would like the financial eligibility requirements but that having them would not affect their referrals.

CMHC counselors were mixed in their reviews. Many had little or no contact with the interventions; the substance abuse counselors were the most involved and established some good relationships with CETA job specialists although they felt hampered by their own confidentiality concerns that apparently precluded contact with CETA counselors.

Several respondents, however, indicated that they wanted a closer working relationship with CETA and that they viewed the OJT intervention as an additional placement tool - according to the respondents, some clients felt that "at least there are some real openings somewhere."<sup>1</sup>

Overall, the Client Listing elicited more positive responses. Respondents were equally divided between the positive and negative impacts of the listing, but almost half of all counselors indicated that their job placement strategies were not changed. Half said they would continue to refer clients.<sup>2</sup>

<sup>(1)</sup> Judith Richter, "Fall, 1978 Preliminary Assessment: OJT Linkage and Job-Ready Listing Linkage," New Haven Consortium (HEW/RSA grant 15-P-59030, November 1979), p. 13.

<sup>(2)</sup> In fact, PWI started its own Client Listing subsequent to this experiment.

In addition, over the eight month implementation period, the coordinating researcher at the Easter Seal Rehabilitation Center kept a "process account" of all meetings and interactions with the test site agency staff."<sup>1</sup> These notes provide some insight into the intervention's results. For example, PWI clients, who consitituted a relatively large proportion of referrals, were probably more successful at getting into the programs for administrative reasons:

...[I]t eventually worked out that each new client coming out of his [job seeking skills] course was given the necessary forms to be submitted to the listing upon being assigned a PWI counselor. Putting these forms together with other PWI entry forms undoubtedly contributed to the large number of referrals from PWI to the listing, since a client was automatically submitted upon admission to PWI.<sup>2</sup>

<sup>(1)</sup> Richter, op cit, p. 25. (2) Ibid, p. 26.

A content analysis of the notes on agencyinteractions revealed four basic reasons for low referrals:

## 1. Low Priority Of The Interventions Relative To Other Counselor Duties Or Placement Resources

Two citations by the project researcher were located that reflect this issue, the first for PWI and the second for DVR:

> From casual interaction with PWI staff members the research liaison received the impression that the Project had low priority on the PWI discussion agenda, and that this especially affected the orientation of new counselors as they came onto the staff...1

According to a memo from the [DVR] contact person to the Project Director dated May 3, 1978, this linkage was simply one of many priority items for DVR and just couldn't be "Number One."<sup>2</sup>

(1) Ibid, p. 26.
 (2) Ibid, p. 29.

## 2. <u>Bureaucratic Procedures Of Either The CETA</u> Office Or The New Haven Project

Several counselors found it difficult to deal with either CETA office procedures or those of the Project:

> Casual interaction with PWI staff during April and May revealed general disillusionment with the [OJT] CETA link. The main complaint concerned problems in dealing with CETA bureaucracy and with the [Project's] referral and release forms. [However,] only a few clients were referred to CETA and the attitude towards the agency was based upon this limited experience.

> [The DVR contact] felt his counselors would be less than enthusiastic about utilizing the two links because as part of a staff agency with a very large caseload they are already heavily overburdened with forms to fill out...

> ...DVR counselors found the number of counselors and the bureaucracy difficult to deal with. They proposed that one CETA counselor should become the DVR contact person, to furnish information on the status of the new [OJTS] and the clients referred there.<sup>1</sup>

(1) Ibid, pp. 26-30.

# 3. <u>Preference For Other Techniques Or "Fear" Of</u> <u>Duplication</u>

PWI counselors were concerned that the interventions were unnecessary because they did not conform to their own placement mechanism. At the same time, they were concerned that the OJT intervention duplicated their own efforts:

> ...[T]hey prefer to develop specific job openings with employers through direct contact with the employer...Specific job development, as well as direct and repeated employer contact, are the PWI techniques [that] have resulted in a high placement rate...The counselors prefer not to use a technique [that] precludes these two elements.1

DVR was concerned about duplication of referrals by PWI:

The [DVR] counselors feared duplication of referrals by PWI counselors, who service a caseload of DVR clients, with very few exceptions.

However, they did not pursue the likelihood that this would in fact occur.

(1) Ibid, p. 26.

4. The Feasibility Of Success

All three agencies expressed doubts about the potential success of the interventions. PWI felt that the OJTs were an "unsafe bet" in terms of client eligibility and because they thought the openings would close before their clients got there. They also felt that skills and job specifications would not often match. DVR counselors indicated that they see clients too infrequently (less than once a month on the average) to refer them and get release forms signed; they also indicated that few clients are "job-ready":

> Only a small number of clients (approximately 60 out of several thousand, according to an analysis of the statistics for one fiscal period) are in Status 20 (services to client completed) at any one time. Of this small number, roughly 50% are actually suitable for employment. The rest have received all the necessary and appropriate DVR Services but are not yet job-ready according to the DVR. Most of these remaining clients have emotional disabilities, or are not committed to working. There is another group of clients who come out of Status 18 (training) and go

-225-

into Status 20, but are placed or place themselves in jobs almost immediately. These clients never have a chance to be referred and may not even need to be assisted...<sup>1</sup>

In general, many referrals occurred during the start-up period of the interventions. Many counselors were afraid that their clients would be "set up" for disappointment because the interventions did not guarantee jobs; others were concerned that the linkages were "political" in nature. Morale improved each time an employer response was received; however, subsequent referrals were still not as great in number as expected.

# C. State DVR Client Service Statuses

Each year, several thousand individuals apply for services at DVR. Records are maintained on each client's progress through the system, from "00" (Referral) through closure (status 26, 28, or 30).

(1) Ibid, p. 29.

From 1977 to 1980, less than 30% of the "active and closed" clients in the Connecticut State VR agency were rehabilitated; most appear to remain in the active service stage. The following data reflects the Quarterly Cumulative Caseload Report, Connecticut State DVR (Form SRS-RSA-101), Fiscal Years 1977-1980.<sup>1</sup>

There are four categories of clients reported to HEW/RSA:

- Referrals (Status 00) Represents any individual referred to the agency.
- Applicants (Status 02) Occurs when a referral signs a document requesting VR services.

.

Extended evaluation (Status 06) - Represents applicants certified for extended evaluation before determination of rehabilitation potential.

(1) See also <u>supra</u>, and Chapter Appendix D for a detailed description of the client statuses.

- Active cases and cases closed Includes the following:
  - Statuses 10-12: Development and approval of individualized Written Rehabilitation Program (IWRP).
  - Status 14: In-service counseling and guidance only.
  - Statuses 16-18: Physical and mental restoration (16) and training (18).
  - Status 20: Training completed, ready for employment.
  - Status 22: Placed in employment.
  - Status 24: Service interrupted when in any one of Statuses 14, 16, 18, 20, or 22.
  - Status 26: Closed rehabilitated.

- Statuses 28-30: Closed after IWRP initiated (28) and closed other reasons before IWRP initiated (30).

These four categories provide detailed data on the number of clients in the state VR system, and on how many of them progress through the service statuses. From year to year, it does not appear that a significant change occurs in the number of clients going into and leaving the system; the data summarized below reflect annual growth rates compounded over the four-year period in four areas:

- . Closures
- . Number "available" for services
- . Certifications for VR services
- . The number of "remaining" at the end of each period

1. Closures

From 1977 to 1980, the net decrease (i.e., the compound annual growth rate) in the total number of closed cases (statuses 00, 02, 06, 26, 28, and 30) was .52%, about one-half of one percent. The decrease in all nonrehabilitated closures (statuses 00, 02, 06, 28, and 30) was 1%, and the net change in rehabilitations (status 26) was 1% (Figures 3 and 4).

> Between 1977 and 1978, closures at referral decreased 13% and applicant closures decreased 3%.

Between 1978 and 1979, closures at referral increased 32% and applicant closures continued to decrease.

From 1979 to 1980, closures at referral decreased 14% while closures at the applicant stage increased 5%.

The number of closures from statuses 28-30 (nonrehabilitants) increased 5% from 1977 to 1978, decreased 11% between 1978 and 1979, and increased 5% between 1979 and 1980.

The number of rehabilitants increased 11% from 1977 to 1978 but then began to decline through 1980.

## 2. Available For Services

The total number of clients available at the end of each reporting period decreased about 1.3% per year, compounded.

- The number of referrals decreased about one-half of one percent from 8,283 to 8,157 between 1977 and 1980.
- Available applicants also decreased less than one-half of one percent during this time.
- However, those placed in extended evaluation decreased the most, at 4.5% per year.

3. Certifications

Overall, the number of clients certified for services decreased 1.9% during the 1977-1980 period. However, significant variation occurred from year to year (Figure 5):

- . Between 1977 and 1978, certifications fell less than 1%.
- From 1978 to 1979, certifications increased
   3%.
  - From 1979 to 1980, a drop of 8% occurred.

## 4. Remaining

At the end of each period, some individuals are not processed through the system or, once certified, remain in active service statuses. In the latter group - those remaining in active statuses 10 to 24 the net yearly decrease was 2.4% (Figure 6):

> The number in statuses 10 to 12 increased 3.6% per year, compounded over the 1977-1980 period (Figure 7).

The number of status 14 clients increased over 6%, compounded annually (Figure 8).

The net annual decrease in the number of in-service (physical restoration and training) clients was 4.7% (Figure 9).

The net annual decrease in the number of clients ready to be placed (status 20) was 9%; the net decrease in the number placed (status 22), was about 1%; the decline in the number of clients in status 24 (services interrupted) was 3.5% (Figure 10).

The overall decrease is somewhat surprising because the net annual change in remaining applicants increased over 2%; however, the 1.9% net drop in certifications from 1979 to 1980 described earlier is likely to account for these findings. Thus, while the overall net annual change in the number of clients entering and leaving the system is marginal, the acceptances, closures and certifications vary significantly from year to year; in some instances the system appears to operate symmetrically (Figure 11), where individuals enter and leave the system in such a way that the "bottom line" number of clients in the system stays within a narrow range.

## SECTION 6. SUMMARY

In general, the New Haven labor market disabled population are less severely disabled than U.S. survey estimates would lead us to expect. They are younger, better educated, and are either employed in or aspire to higher level occupations than the total U.S. disabled workforce. To the extent that the local survey data are accurate, the local disabled workforce should have fewer problems obtaining employment than most other disabled, and special job opportunities should have been used more often than they were in this case study.

-234-

U.S. labor force estimates compare the disabled to the nondisabled - and in these comparisons the disabled look worse. However, more recent estimates indicate that the trend, described in Section 1, towards higher educational achievement and more prestigious occupations of the disabled will continue, relative to their past performance:

## Disabled Working Age Population, 1978

Education	Disabled	Nondisabled		
Less Than High School High School	24.7% 55.4	8.9% 53.8		
More Than High School	19.9	37.3		

Source: Social Security Administration's Survey of Disability and Work, 1978. In Burkhauser and Haveman, Disability and Work (1982), p. 10.

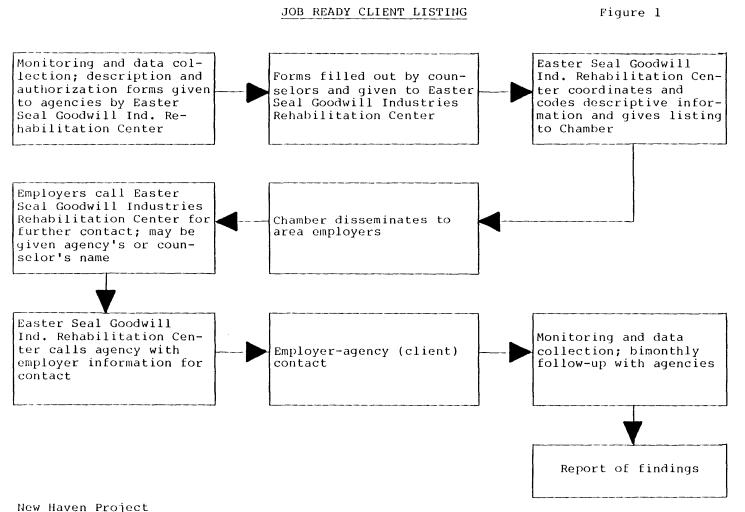
In fact, the education gap appears to be closing quickly; in 1972, the difference between nondisabled and disabled who completed at least high school was 27%; in the 1978 survey the difference dropped to 16.6%. In this case study, disabled clients of the selected agencies were somewhat less well-educated, which is due in part to the relatively high number of mentally retarded clients at both the Easter Seal Center and DVR. However, many of those referred to the special programs had relatively high education levels and occupational aspirations. They did not do well in terms of being referred for potential jobs and, therefore, did not do particularly well in terms of placement relative to both my projections and control group results.

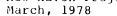
The data presented in this case study indicate, first, that elements of the cream-skimming process are at work, primarily because (1) most service recipients tend to be less disabled (Taggart and Levitan (1977), and (2) most of the clients referred by the agencies participating in this study are better educated and have higher vocational aspirations than we would expect from total U.S. population estimates. This is not totally

-236-

surprising: these types of clients are most likely to be categorized as the "job-ready" clients by the state rehabilitation system. Interestingly, the data also indicate that referrals are not differentiated from nonreferrals on the basis of medical impairment; that is, agencies do appear to refer clients for jobs on the basis of their abilities rather than on the basis of some "acceptable" impairment. Thus, creamskimming appears to occur at the level of who is easiest to place, relative to occupational abilities. Counselors do not appear to weed out the more obviously medically impaired as nonviable job applicants.

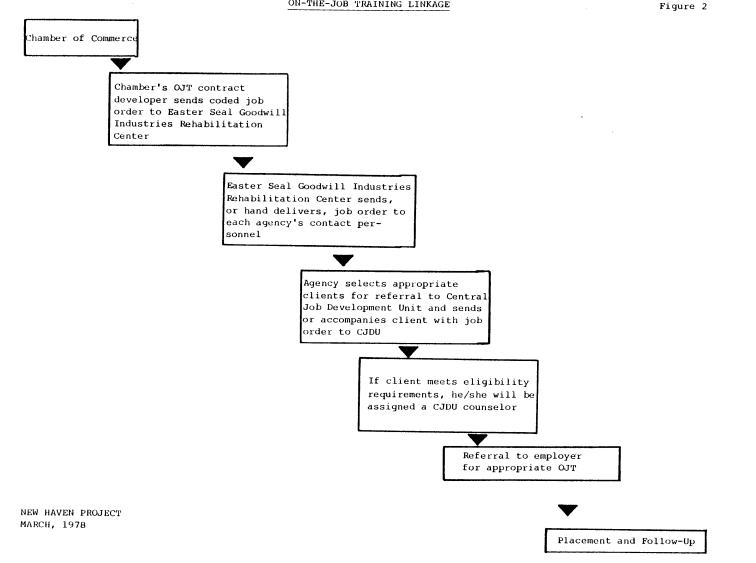
In the more recent survey findings summarized above, we also find that the gap between disabled and nondisabled individuals may be closing; that is, more disabled individuals are attaining higher levels relative to the nondisabled, which should put them at an advantage in the labor market. Thus, for at least some subset of the disabled, the need for vocational guidance may be limited. Chapter V describes these findings in more detail and discusses their implications for legislative policy and future research.



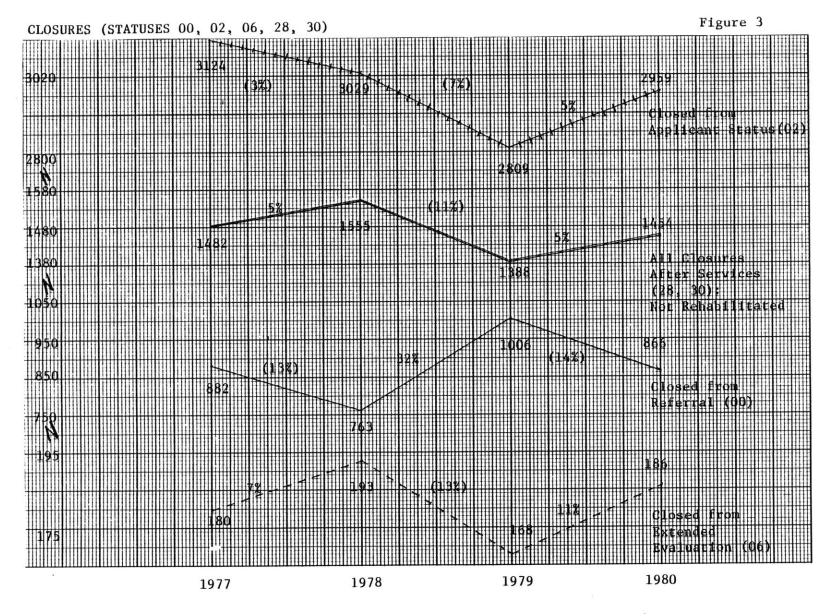


ON-THE-JOB TRAINING LINKAGE

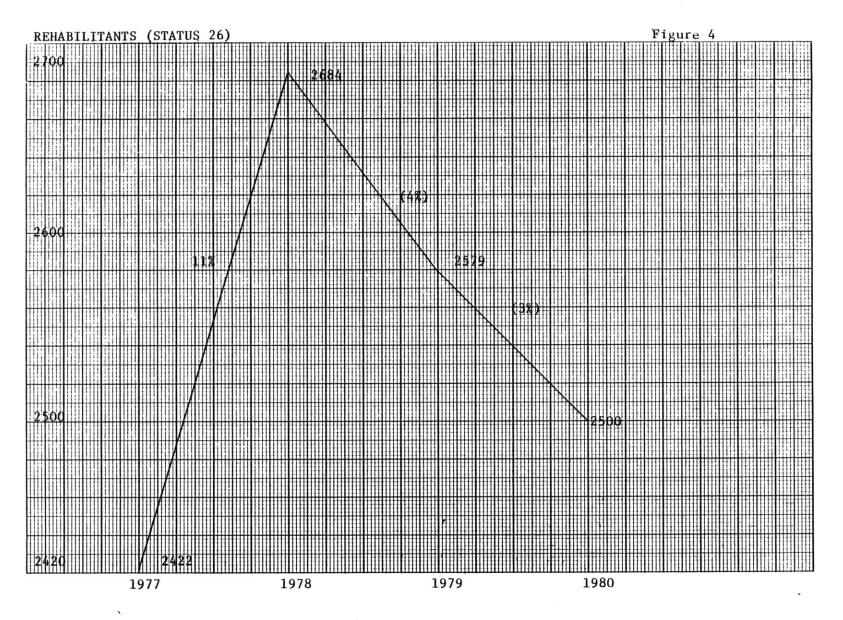
.



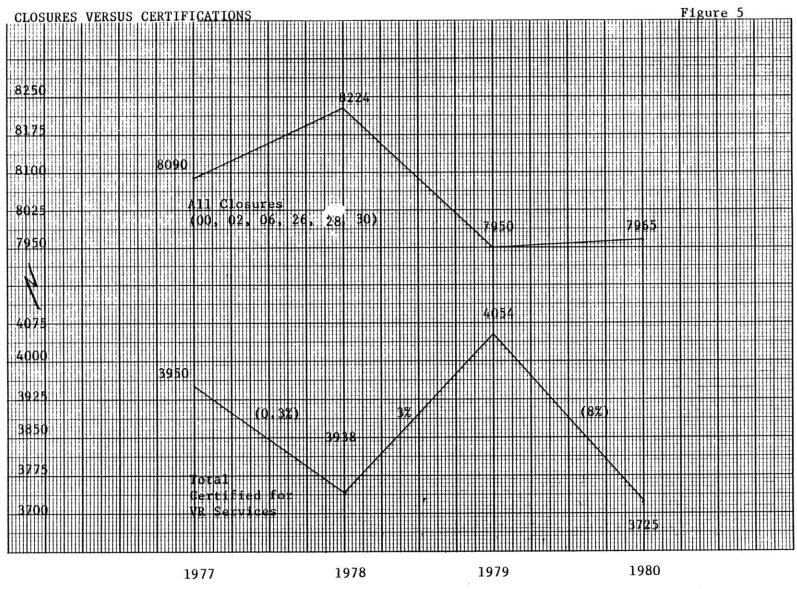
1 .240. 1



1 -241-



1 N 42-

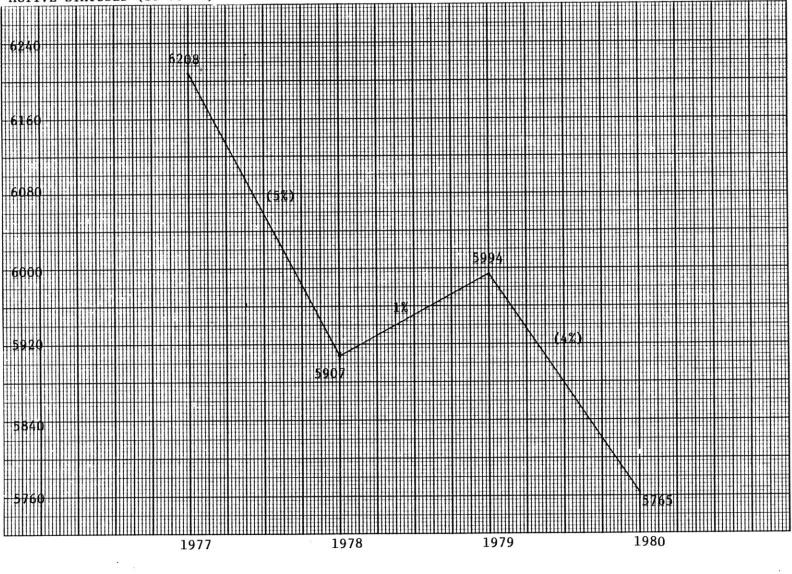


-243-

,

ACTIVE STATUSES (10 TO 24)

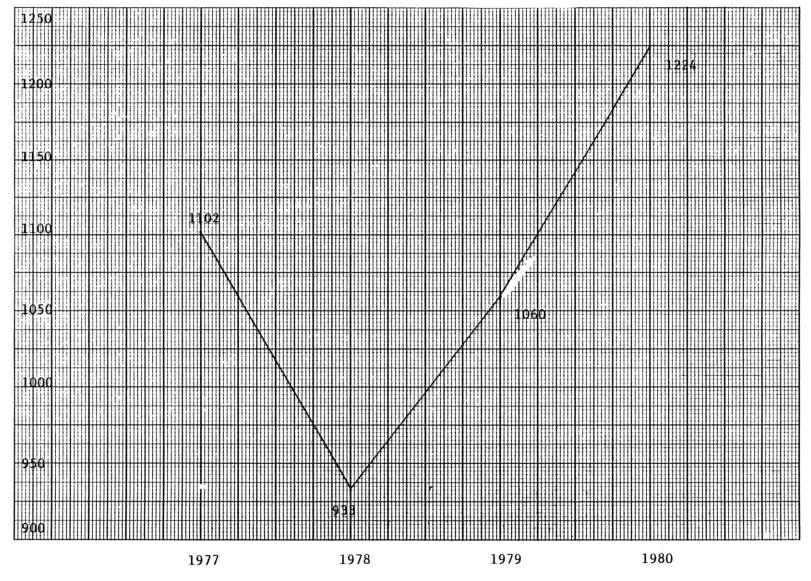




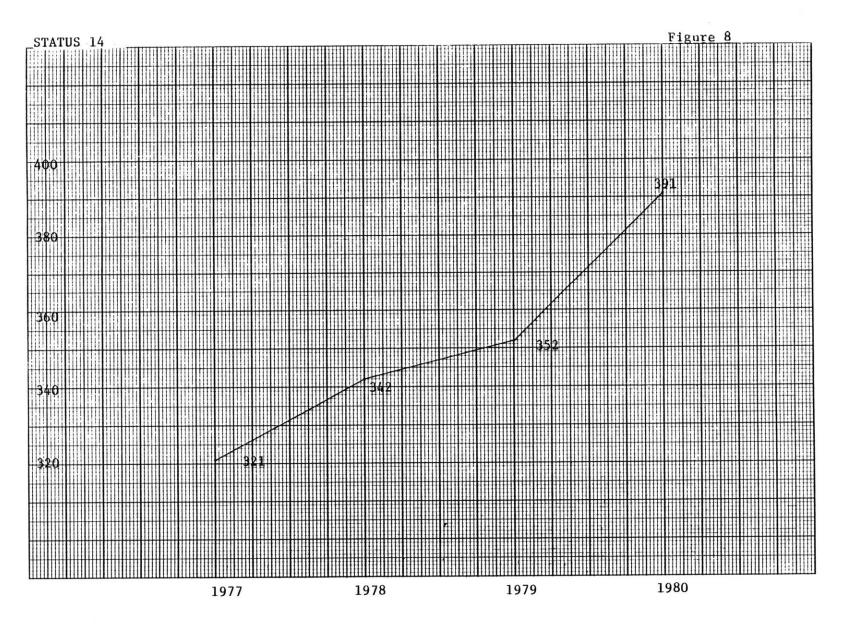
-244-

STATUSES 10 TO 12





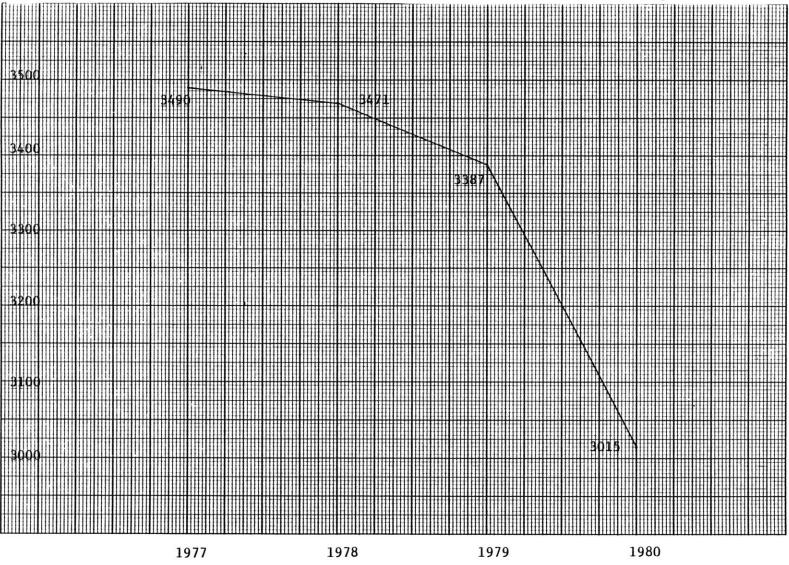
-245-



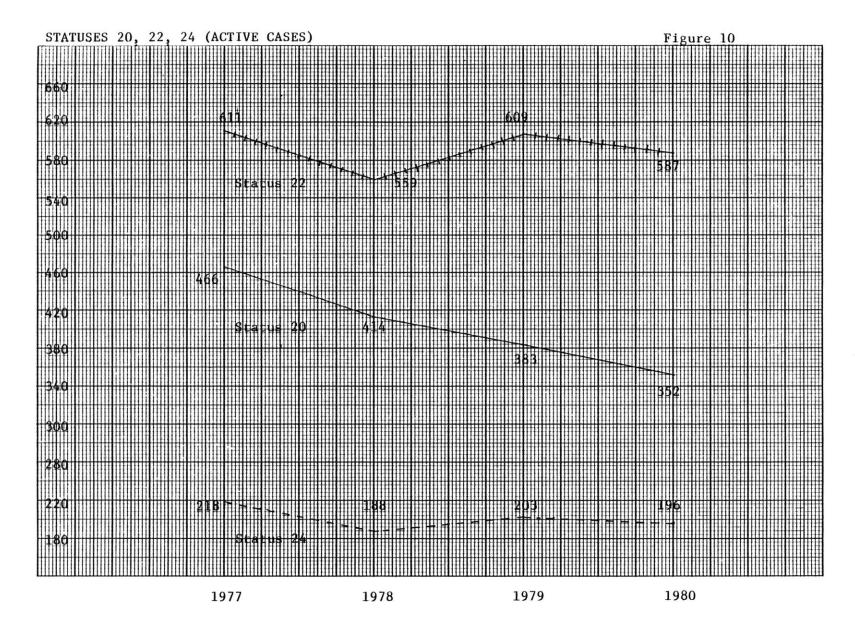
-246-

STATUSES 16 TO 18

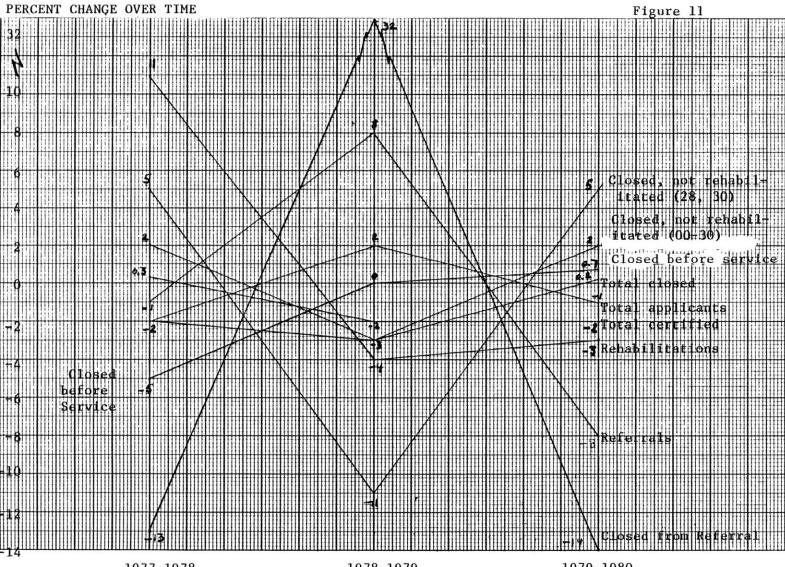




-247-



L -248 1



1 -249-

1977-1978

1978-1979

1979-1980

#### TABLE I

#### SELECTED CHARACTERISTICS OF THE DISABLED: PERCENTAGE DISTRIBUTION

#### (Numbers In Thousands)

		1972(a)				1976(b)			
		Total Work				Total Work	_		
Characteristic	Nondisabled	Disabled	Severe	Others	Nondisabled	Disabled	Severe	Others	
	90,718	15,550	7,717	7,833(c)	108,052	16,576	9,347	7,229	
<u>Age</u> 20-24							5 28 ( ]	14 20(4)	
	15.78	6.7%	3.5%	9.5%	23.7%(d)	9.2%(d)	5.2%(d,e)	14.38(d)	
25-34	27.1	12.5	8.5	16.5	26.9	14.1	11.2	18.2	
35-44	21.5	15.4	14.2	16.6	18.8	15.0	13.4	17.3	
45-49	10.6	14.6	12.1	17.0					
50-54	10.4	14.8	15.0	14.6	17.7	26.5	27.4	25.3	
55-59	8.5	16.4	19.2	13.7					
60-64	6.2	19.6	27.5	11.6	12.9	35.2	43.2	24.9	
Total	100%	100%	100%	99.5%	100%	100%	100.4%	100%	
Sex									
Male	47.8	45.2	38.5	51.9	49.0	48.5	42.0(e)	56.3(j)	
Female	52.2	54.8	61.5	48.1	51.0	51.5	58.0	43.7	
Total	100%	100%	100%	100%	100%	100%	100%	100%	
Race									
White	89.4	85.2	82.8	87.6	86.0(f)	81.0(h)	77.3(i,e)	85.9(k)	
Non-White	10.1	14.4	16.9	11.9	14.0	19.0	22.7	14.1	
Unknown/Missing	0.5	0.4	0.3	0.5	-		-	-	
Total	100%	100%	100%	100%	100%	100%	100%	100%	
Education									
Less Than High School	28.3	55.3	66.8	44.2	24.3(q,e)	52.8(e)	62.7(e)	40.0(e)	
High School	41.7	29.6	23.6	35.5	40.3	30.3	26.0	35.6	
More Than High School	29.1	14.2	8.6	19.6	35.4	16.9	11.3	24.4	
Unknown/Missing	0.9	0.9	1.0	0.7				_	
Total	100%	100%	100%	100%	100%	100%	100%	100%	

(a) Source: U.S. Department of Health, Education, and Welfare, Social Security Administration, First Findings of the 1972 Survey of the Disabled, p. 4.

 (b) Source: U.S. Bureau of the Census, <u>Survey of Income and Education</u>, 1976, in Rehab. Group, Inc. (1979) p. 17.
 (c) Percentages reflect weighted percent distributions calculated from SSA statistics on the categories of occupational limitations (N = 3, 473) and secondary limitations (N = 4, 360).

(d) Ages 18-24 included.

.

(e) Percentages reflect weighted percent distributions for this characteristic, calculated from U.S. Census statistics in all relevant categories.

(f) N = 111,318 for this characteristic.

(g) N = 108,068 for this characteristic.

(h) N = 17,028 for this characteristic.

(i) N = 9,636 for this characteristic. (j) N = 7,196 for this characteristic. (k) N = 7,391 for this characteristic.

## TABLE II

### ADULTS AGE 20-64 EMPLOYED AT DISABILITY ONSET AND IN 1974:

### OCCUPATION IN 1974

### (Numbers In Thousands)

	All Di	sabled	Severely	Disabled	Occupat	tional	Seco	ndary
Category	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Professional and Managerial	984.0	15.7%	157.4	14.0%	383.8	14.3%	433.0	18.2%
Clerical and Sales	1,215.0	19.4	206.6	18.3	425.3	15.8	583.2	24.5
Craftsmen and Operatives	2,316.0	36.9	370.6	32.9	1,111.7	41.3	833.8	35.1
Farmers and Farm Laborers	291.0	4.6	81.5	7.2	122.2	4.5	87.3	3.7
Service Workers and Laborers	1,154.0	18.4	288.5	25.6	565.5	21.0	300.0	12.6
Total*	6,260	<b>9</b> 5%	1,126.8	988	2,691.8	96.9%	2,378.8	94.1%

\* Absolute numbers and percentages do not total due to survey rounding. Estimated standard error ranges from 1% to 5%.

Source: Social Security Administration, unpublished data from the <u>1974 Follow-up Survey of the Disabled and</u> Nondisabled, in Rehab. Group, Inc. (1979), p. 45.

#### TABLE III(A)

#### PERCENT OF DISABLED WITH PHYSICAL AND MENTAL CONDITION: ADULT NONINSTITUTIONALIZED POPULATION

		1972(a,b)				
Condition			Percent Of	1972(c)		
	Percent Of Nondisabled With Condition	Percent Of Disabled With Condition	Severely Disabled With Condition	Percent Of Total Disabled(d)	Percent Of Severely Disabled(e)	
					20.44	
Musculoskeletal	131	61 %	61%	35.9%	30.4%	
Arthritis, Rheumatism	7	33	37	9.9	-	
Back or Spine Trouble	6	33	29	17.7	-	
Missing Limbs	-	1	1	0.6	-	
Chronic Stiffness	2	12	14	-	~	
Cardiovascular	15	50	59 r	20.8	24.8	
Rheumatic Fever	-	2	2	-		
Heart Attacks/Trouble	1	20	29	10.8	-	
Stroke	-	3	4	1.5	-	
Hardening of Arteries	-	4	6	-		
High Blood Pressure	5	22	27	5.0	-	
Varicose Veins, Hemorrhoids	10	19	20		-	
Respiratory	8	27	29	9.1	7.8	
Tuberculosis	-	1	2	-	-	
Bronchitis	1	7	9	-	_	
Emphysema	ĩ	5	6	2.1	-	
Asthma	2	8	8	3.1	-	
Allergies	4	10	9	-	-	
Digestive	6	22	25	4.9	3.9	
Gall Bladder	ĩ	4	6	_	_	
Stomach Ulcer	1	8	10	1.4	_	
Hernia	1	5	4	-	-	
Mental	2	20	29	7.7	11.3	
Mental Illness	-	1	6	1.8		
Mental Retardation	-	2	3	1.5	-	
Alcohol/Drugs	_	ĩ	ĩ	-	-	
Chronic Nerves	2	15	22	4.1	-	
Nervous System	_	4	6	2.7	3.9	
Epilepsy	_	2	Ă	1.3	-	
Multiple Sclerosis		-		0.4		

(a) Source: Social Security Administration, U.S. Department of Health, Education & Welfare, <u>1972 Survey of the Disabled</u>, unpublished tabulations. In Sar A. Levitan and Robert Taggart (1977), pp. 12-13.
 (b) Incidence <0.5 not included.</li>
 (c) Source: Social Security Administration, "Percent of Disabled Adults Who Ever Received Services By Selected Demographic and Disability Characteristics," <u>1972 Survey of the Disabled</u>, in Treitel (1977), p. 22.

(d) N = 15,550,000. (e) N = 7,717,000.

1

#### TABLE III(B)

#### PERCENT OF DISABLED WITH PHYSICAL AND MENTAL CONDITION: ADULT NONINSTITUTIONALIZED POPULATION

		1972(a,b)		107	N/ - N
Condition	Percent Of Nondisabled With Condition	Percent Of Disabled With Condition	Percent Of Severely Disabled With Condition	1972 Percent Of Total Disabled(d)	2(c) Percent Of Severely Disabled(e)
Urogenital Kidney	2 8 2	7 % 6	8 % 8	2.0%	2.0%
Neoplasm Tunor or Cyst Cancer	2 1 -	7 4 3	9 5 4	2.2	2.8
Endocrine Diabetes Thyroid	4 1 2	10 7 4	1 3 8 4	2.1	2.2 - I - N 5
Sensory Hearing Vision	3 2 1	11 5 6	12 5 7	3.3 1.0 2.0	2.8 W 0.5 I 2.3
Other/Unknown	-	-	-	9.4	8.1

(a) Source: Social Security Administration, U.S. Department of Health, Education & Welfare, <u>1972 Survey of the Disabled</u>, unpublished tabulations. In Sar A. Levitan and Robert Taggart (1977), pp. 12-13.

1

.

 (b) Incidence (0.5 not included.
 (c) Source: Social Security Administration, "Percent of Disabled Adults Who Ever Received Services By Selected Demographic and Disability Characteristics," 1972 Survey of the Disabled, in Treitel (1977), p. 22.

(d) N = 15,550,000.

(e) H = 7,717,000.

#### TABLE IV

#### SELECTED CHARACTERISTICS OF THE NEW HAVEN DISABLED: PERCENTAGE DISTRIBUTION

	1977 New Haven Survey(a,b)			
Age	Labor Market Disabled	Employed	Seekers	
16-20 21-25 26-35 36-45 46-64 Unknown/Missing/Other	5.5% 13.7 25.0 16.4 39.4	5.6% 11.2 24.0 15.3 43.9	5.08 21.7 28.3 20.0 25.0	
Total	100%	100%	100%	
Sex				
Male Female Unknown/Missing	53.5 46.5 	57.1 42.9 	41.7 58.3	
Total	100%	100%	100%	
Race				
White Non-White Unknown/Missing	73.3 26.7 	79.1 20.9	54.2(c) 45.8 	
Total	100%	100%	100%	
Education				
Less Than High School High School More Than High School Unknown/Missing	31.6 42.2 23.0 3.2	27.6 42.3 27.6 2.6	45.0 41.7 8.3 5.0	
Total	100%	100%	100%	

(a) Source: Joseph A. Polka, Final Report: Household Survey of Noninstitutionalized Handicapped Population - City of New Haven (Southern Connecticut State College under subcontract to City of New Haven, HEW/RSA Grant 15-P-59030/1-01), 1977. (Data also derived from computer printouts and cross-tabulations.)
 (b) N = 196 for employed disabled; N = 60 for unemployed disabled seeking work; N = 16 for unemployed disabled not seeking work. Analysis performed for N = 256, the labor market handicapped population.
 (c) N = 59 for this variable.

•

.

I. Ν ப 4-

#### TABLE V

# CURRENT AND LATEST OCCUPATIONS OF NEW HAVEN DISABLED POPULATION: PERCENTAGE DISTRIBUTION

	1977 New Haven Survey(a,b)			
	Labor Market Disabled	Current Job Of Employed	Last Job Of Seekers	
Professional and Managerial	30.1%	33.38	18.5%	
Clerical and Sales	18.3	19.3	14.8	
Craftsmen and Operatives	27.7	26.5	31.5	
Farmers and Farm Laborers	-	-	-	
Service Workers and Laborers	21.1	17.7	33.3	
Other	2.8	3.2	1.9	
Total	100%	100%	100%	

(a) Source: Joseph A. Polka, Final Report: Household Survey of Noninstitutionalized Handicapped Population - City of New Haven, (Southern Connecticut State College under subcontract to City of New Haven under HEW/RSA Grant 15-P-59030/1-01), 1977. (Data derived from computer printouts and cross-tabulations.) See also intra, Chapter Appendix A.
 (b) Ten observations missing for this variable; N = 246; employed = 192; seekers = 54. See also infra, Chapter Appendix A.

1 -255-

#### TABLE VI

#### PROPORTION OF NEW HAVEN LABOR MARKET EMPLOYED

	Adjusted 1970 Occupational Census Total Employed Over Age 15	1977 Survey Employed Handicapped Age 16-64
Professional, Technical, And Kindred	0.190	0.283
Managers And Administrators	0.055	0.060
Sales	0.056	0.053
Clerical And Kindred	0.191	0.144
Crafts And Kindred	0.111	0.128
Operatives, Except Transport	0.174	0.112
Transport Operatives	0.033	0.037
Nonfarm Laborers	0.045	0.054
Farm Laborers	0.001	0.000
Service Workers	0.128	0.128
Private Household	0.015	0.000
Self-Employed	0.050	0.031

Source: Joseph A. Polka, Final Report: Household Survey Of Noninstitutionalized Handicapped Population - City of New Haven (Southern Connecticut State College under subcontract to City of New Haven under HEW/RSA Grant 15-P-59030/1-01), 1977, p. 49. .

#### TABLE VII(A)

# NEW HAVEN DISABLED POPULATION: PERCENT DISTRIBUTION OF PHYSICAL AND MENTAL CONDITIONS

	1977 New Haven Survey(a,b)			
Condition	Labor Force Disabled	Employed	Seekers	
Musculoskeletal	12.9%	11.7%	16.7%	
Arthritis, Rheumatism	11.3	10.2	15.0	
Back or Spine Trouble Missing Limbs	-	-	-	
Chronic Stiffness	1.6	1.5	1.7	
chronic stillness	-	-	-	
Cardiovascular	35.2	35.7	33.3	
Rheumatic Fever	0.4	0.5		
Heart Attacks/Trouble	8.2	8.2	- 8.3	
Stroke	-	-	-	
Hardening of Arteries	-	-	-	
High Blood Pressure	26.6	27.0	25.0	
Varicose Veins, Hemorrhoids	-	-	-	
Respiratory	13.3	12.8	15.0	
Tuberculosis	0.8	1.0	-	
Bronchitis	-	-	_	
Emphysema	2.0	2.6	-	
Asthma	10.5	9.2	15.0	
Allergies	-	-	-	
Digestive	-	-	_	
Gall Bladder	-	-	-	
Stomach Ulcer	-	-	_	
Hernia	-	-		
Mental	3.5	2.0	8.3	
Mental Illness	(c)	(c)	(c)	
Mental Retardation		_	-	
Alcohol/Drugs	3.5	2.0	8.3	
Chronic Nerves	-	_	-	
Nervous System	3.9	3.1	6.7	
Epilepsy	3.9	3.1	6.7	
Multiple Sclerosis	-	-	_	

(a) Source: Joseph A. Polka, Final Report: Household Survey of Noninstitutionalized Handicapped Population - City of New Haven (Southern Connecticut State College under subcontract to City of New Haven under HEW/RSA Grant 15-P-59030/1-01), 1977. (Data also derived from computer printouts and cross-tabulations.)
 (b) Ten observations missing for this variable; N = 246; employed = 192; seekers = 54.
 (c) Mental illness and retardation were not on the list of disability types (see Survey Form <u>infra</u>, Chapter Appendix B).

#### TABLE VII(B)

#### NEW HAVEN DISABLED POPULATION: PERCENT DISTRIBUTION OF PHYSICAL AND MENTAL CONDITIONS

	1972 New Haven Survey(a,b)			
Condition	Labor Force Disabled	Employed	Seekers	
Urogenital Kidney	3.5% 3.5	3.6% 3.6	3.38 3.3	
Neoplasm Tumor or Cyst	2.3	2.6	1.7	
Cancer	2.3	2.6	1.7	
Endocrine	11.7	13.8	5.0	
Diabetes Thyroid	11.7	13.8	5.0 -	
Sensory	10.2	10.7	8.3	
Hearing Visual	3.9 6.3	4.6 6.1	1.7 6.7	
Other/Unknown	29.3	25.5	41.7	

(a) Source: Joseph A. Polka, Final Report: Household Survey of Noninstitutionalized Handicapped Population - City of New Haven (Southern Connecticut State College under subcontract to City of New Haven, NEW/RSA Grant 15-P-59030/1-01), 1977. (Data also derived from computer printouts and cross-tabulations.)
 (b) Ten observations missing for this variable; N = 246; employed = 192; seekers = 54.

#### TABLE VIII

#### SELECTED CHARACTERISTICS OF NEW HAVEN AGENCY CLIENTS: PERCENTAGE DISTRIBUTION

Age	Easter Seal Rehabilitation Center(a)	New Haven DVR (b)	Connecticut Mental Health Center(c)
16-20 21-25 26-35 36-45 46-64 Unknown/Missing/Other	12.58 16.0 22.1 17.6 31.8	16.9% 19.6 27.2 18.6 15.2 2.5	12.6% 28.1 33.8 13.2 12.3
Total	100%	100%	100%
<u>Sex</u> Male Female Unknown/Missing	64.5 35.5 	57.4 42.6 	48.5 51.5 I
Total	100%	100%	
Race			
White Non-White Unknown/Missing Total	61.1 37.3 <u>1.6</u> 100%	46.5 24.3 29.2 100%	55.4 42.2 <u>2.4</u> 100%
Education		1000	
Less Than High School High School More Than High School Unknown/Missing Total	72.5 11.7 13.9 1.9 100%	35.3 18.7 13.9 <u>32.1</u> 100%	44.5 27.4 24.1 4.0 100%

(a) N = 375 (includes PWI, sheltered workshop, all other clients). (b) N = 1,369.

(c) N = 3,707.

Source: "Working Paper: Tier 2 - Agencies" (prepared by New Haven Consortium for HEW/RSA Grant 15-P-59030/1-01), July 1977.

-259-

# TABLE IX(A) PERCENT OF DISABLED WITH PHYSICAL AND MENTAL CONDITION: SELECTED NEW HAVEN AGENCIES

# Active Clients - Age 16-64

	Easter Seal	
	Rehabilitation Center	New Haven DVR
Condition	N = 375	N = 1,369
Musculoskeletal	12.8%	
Arthritis, Rheumatism	2.1	_
Back or Spine Trouble	1.9	_
Missing Limbs	7.2	_
Chronic Stiffness	-	_
Other	1.6	-
Cardiovascular	6.7	
Rheumatic Fever	0.7	_
Heart Attacks/Trouble		_
Stroke	-	_
Hardening of Arteries	-	-
High Blood Pressure	-	
Varicose Veins, Hemorrhoids	-	-
Respiratory	1.3	4.4
Tuberculosis	-	
Bronchitis	-	-
Emphysema	-	-
Asthma	-	-
Allergies	~	-
Digestive	-	_
Ğall Bladder	-	
Stomach Ulcer	-	_
Hernia	-	-
Mental	60.5	55.8
Mental Illness	23.2	38.3
Mental Retardation	21.3	8.7
Alcohol/Drugs	16.0	8.8
Chronic Nerves	-	-
Nervous System	10.1	1.6
Epilepsy	2.1	1.6
Multiple Sclerosis	-	-

-260-

#### TABLE IX(B) (continued)

#### PERCENT OF DISABLED WITH PHYSICAL AND MENTAL CONDITION: SELECTED NEW HAVEN AGENCIES

Condition	Easter Seal Rehabilitation Center (N = 375)	New Haven DVR (N = 1,369)
Urogenital Kidney	Ξ	-
Neoplasm Tumor or Cyst Cancer	- - -	- -
Endocrine Diabetes Thyroid	0.3 0.3 -	- · · ·
Sensory Hearing Vision	4.3 1.1 3.2	5.0 3.1 1.9
Other/Unknown	<b>4.</b> 0(a)	32.4(b)

Active Clients - Age 16-64

Source: "Working Paper - Tier 2: Innovative Job Opportunities for the Disabled," (prepared by New Haven Consortium for HEW/RSA Grant 15-P-59030/1-01), July 1977. (a) Physical disabilities.

(b) Physical disabilities; agency was unable to provide breakdown by condition (includes one unknown).

#### TABLE X

# CASELOAD PERCENT DISTRIBUTION: CONNECTICUT DEPARTMENT OF VOCATIONAL REHABILITATION

Closed, Not
Rehabili- tated (28-30) Remaining
14.78 61.48
15.3 58.2
13.9 60.2
15.0 59.3
a)

Source: Calculated from U.S. Department of Health, Education and Welfare, Social and Rehabilitation Service, National Center for Social Statistics, "Quarterly Cumulative Caseload Report," Fiscal Years 1977, 1978, 1979, 1980, Connecticut State Department of Vocational Rehabilitation.

.

#### TABLE XI

#### CASELOAD PERCENT DISTRIBUTION: CONNECTICUT DEPARTMENT OF VOCATIONAL REHABILITATION TOTAL REMAINING ACTIVE CASES (STATUSES 10 TO 24)

Fiscal Year	Total Remaining(N)			Status At	End Of Per	iod	
		10-12	14	16-18	20	22	24
1977	6,208	17.8%	5.2%	56.2%	7.5%	9.8%	3.5%
1978	5,907	15.8	5.8	58.8	7.0	9.5	3.2
1979	5,994	17.7	5.9	56.5	6.4	10.2	3.4
1980	5,765	21.2	6.8	52.3	6.1	10.2	3.4

Source: Calculated from U.S. Department of Health, Education and Welfare, Social and Rehabilitation Service, National Center for Social Statistics, "Quarterly Cumulative Caseload Report," Fiscal Years 1977, 1978, 1979, 1980, Connecticut State Department of Vocational Rehabilitation.

# -264-

# TABLE XII

# COMPARISON OF SELECTED CHARACTERISTICS: EXPERIMENTAL AND CONTROL GROUPS

1.	Disability	Client List & OJT N=144	Posting Project N=22
	Musculo- skeletal Cardio- vascular Respiratory Mental Nervous System Neoplasm Endocrine Sensory Other/Unknown	16.0% 1.4 2.1 55.6 6.2 0.7 2.8 6.2 9.0	9.0% 4.5 
2.	Occupation	Client List & OJT N=104	Posting Project N=41
	Professional and Managerial Clerical and Sales Crafts and Operatives Service and Laborers Other/Unknown	21.2% 32.7 29.8 13.5 2.9	26.8% 31.7 12.2 29.3
3.	Education Less Than High School High School More Than High School	Client List & OJT N=85 14.1% 47.9 38.0	Posting Project N=39 7.7% 23.1 69.2

# CHAPTER V FINDINGS AND CONCLUSIONS

This case study attempted to determine whether the vocational rehabilitation system, particularly the state VR agency, is responsible for the positive outcomes in increased earnings through employment or if these outcomes are achieved by other means, e.g., the clients themselves. Three basic questions were addressed:

- Does the broadly defined VR system provide the full spectrum of services in its mandate? That is, does it prioritize the placement goal?
- Has the VR program substantially increased the number of clients served and the number of rehabilitations, as mandated and as "official" program statistics from 1965 to 1975 suggest?

How valid is the assumption that clients will do better by using the system for job

-265-

placement than by searching for employment on their own?

These questions address how and whether the legislative emphasis on placement as the key measure for rehabilitation success is accomplished. This chapter presents the findings and conclusions in four sections:

- Section 1 Who Are The Handicapped?
- . Section 2 Experiment And Control
- . Section 3 Results
- . Section 4 Conclusions And Implications

# SECTION 1. WHO ARE THE HANDICAPPED?

In order to provide a frame of reference for the population to be called "disabled," an analysis of several demographic variables was performed using several data sources at three levels: total U.S. population estimates; New Haven labor market estimates; New Haven client-serving agency estimates (for three agencies participating in the case study). The analysis defined the local population from which the case study data were drawn and described the population as largely representative of the total U.S. population. Where representation did not appear to exist, the argument was made that the New Haven population is not likely to be more severely disabled than other disabled individuals. Therefore, they should not have been at a disadvantage in the job hunt and in this study.

In general, the total U.S. disabled population is worse off than the nondisabled. (Treitel, 1972; Levitan and Taggart, 1977; Burkhauser and Haveman, 1982). They are older, nonwhite, less educated, and work in less prestigious occupations. New Haven individuals are similar to the total U.S. disabled population in several ways:

- Primary disability types e.g., musculoskeletal and cardiovascular conditions.
- . Age most are in older age groups.
- . Sex primarily women, although New Haven survey findings indicate a somewhat lower distribution of women.

Race - most disabled are white, but nonwhites are overrepresented relative to their proportion in the nondisabled population.

New Haven disabled individuals appear to have higher education levels than the total population, which accounts for the higher than expected proportions employed in more prestigious occupations. While these findings are probably best attributed to survey bias, they would not in any case put the local population at a disadvantage in the job hunt.

Three local agencies provided the basis for the case study:<sup>1</sup> the local office of the state VR agency ("DVR"); the federally funded placement project at the Easter Seal Rehabilitation Center ("PWI"); the Connecticut Mental Health Center ("CMHC"), a large mental health clinic in which three units participated. Some client overlap existed, primarily between PWI and DVR, since an estimated 90% of PWI clients are referred by DVR for services (but

(1) See supra, Chapter III: Case Study Description.

-268-

may reside on DVR's caseload). However, the models provided a "worst case" estimate of available clients, which should partly account for this problem.

In general, clients at the three agencies were representative of the labor market disabled. They tend to be younger, male, and to have musculoskeletal and mental impairments. They are also predominantly white and, on the average, have at least a high school education. (However, the large number of "unknowns" at DVR precludes any conclusions about race and sex, and Easter Seal's specialized facilities for the mentally retarded lowers the agency's educaton level.) For those characteristics that are not representative of the total U.S. population, the agency clients are likely to be in a more advantageous position to participate in specialized job opportunities. Thus, the argument was made that the intervention would not be inherently biased against achieving VR program goals.

-269-

# SECTION 2. EXPERIMENT AND CONTROL

The two "program linkages" designated as experiments in this case study took place during the New Haven Project's second year. Their primary goal was to establish relationships among several "sectors" of the community - i.e., the municipal government, the major employer organization (the Chamber of Commerce), the employer community, and the rehabilitation community.

> The Client List was a monthly newsletter distributed to area employers by the Chamber of Commerce. Similar to the "Echols mailer" in earlier federal research, this newsletter attempted to enhance job opportunities by furnishing employers with client information. This newsletter summarized key client characteristics such as education, vocational goals and work experiences, and certificates/licenses. For the first four months, disability type was listed; for the

-270-

second four months, it was not. (This technique was tested to determine whether employer response - particularly towards the mentally ill or substance abusers would change if they did not know the disability type.) At no time was the client's name provided, either on the list or by the coordinator at the Easter Seal Center. Clients were introduced to employers through their counselors.

The OJT link was designed to link the city's CETA/CJDU (job development) office with rehabilitation agencies. One of CETA's several OJT contract developers was based at the Chamber of Commerce; her OJTs were provided to the participating agencies (as well as to CETA) for client referral. Only the name of the employer was removed to ensure that clients would go to the CETA office. Eligibility criteria (federal income requirements) were "flexible," we

-271-

were told, and therefore should not be provided outright (although agencies could always demand them).

The number of referrals to the Client List indicated a relatively higher level of vocational aspiration and a correspondingly high level of education. This is not surprising since we would expect that "job-ready" clients would be the best agency clients.

The number of referrals to the OJT list were low. Out of 31 job orders only 19 referrals were made, less than one per agency. Most of the referrals were made by CMHC (12); DVR made only one, 5% of all referrals and 3% of the 31 job orders. In addition, even though many of the OJTs matched the occupational goals in the Client List, the distribution of OJT referrals as a proportion of offerings by occupation was disproportionately high in the less prestigious positions (i.e, out of four service worker job orders, six referrals were made, or 150%, compared to 44% of those in crafts positions in which more agency clients would be expected to respond).

-272-

In order to develop a framework for quantifying (and testing) the results of both experiments, I developed two sets of projections:

- . The number of job-ready clients we could expect to be available for referral.
- . The maximum number of potential openings and referrals for each experiment.

The "worst case" projections resulted in a baseline of 169 (out of 5,000) clients "available" for referrals, distributed as follows:

Estimate Of Available Clients

Agency	Percent
Easter Seal/PWI DVR	15 45
CMHC	109
Total	169

Estimate Of Expected Distribution Of Referrals

Agency	<u>Estimate</u>
Easter Seal/PWI DVR	8.9% 26.6
CMHC	64.5
Total	100.0%

.

The maximum number of openings was assumed to be:

- . Client List a total of 160 for the eightmonth period.
  - OJT for the 31 openings, I assumed that each agency could make one referral per opening, or 93 possible referrals.

The results of the experiments against these projections were that, in each case, the number of referrals fell below expectations and distribution was disproportionate against projections:

Distribution Versus Availability

Intervention	Clients Per Opening	Referrals Per Opening
Client List	1.1	0.79
OJT Link	5.5	0.61

# Distribution By Agency

		Actual*		
Agency Expected	Client List	OJT		
PWI	8.9%	42.9%	26.3%	
DVR	26.6	10.3	5.3	
CMHC	<u>64.5</u>	<u>37.3</u>	63.2	
Total	<u>100.0%</u>	<u>90.5</u> %	94.8%	

\* Percents do not total to 100% because of other agencies' referrals not included in this analysis.

These low referral rates resulted in three placements, two from the OJT link and one from the Client List. The overall placement rate was 2.1%, less than 1% for the Client List and 10.5% for the OJT link. Compared to the total number of <u>potential</u> referrals (93), the OJT placement rate was 2.2%.

However, because these rates may still be substantially higher than could be accomplished without the use of agencies as a job referral source - the basic assumption under which the federal and state VR program operates - I compared these results against those of municipal government job seekers (the "control" group).

The control group was based upon one activity of the New Haven case study, the "Posting Project." 1 This job entry monitoring effort focused on understanding the job application and hiring patterns of disabled individuals in the municipal government. Data was collected about all job applicants for city jobs except certain temporary or summer positions, the Police and Fire Departments, and the Board of Education. A "data card" was developed by project staff<sup>2</sup> and was included with application materials. Completed cards were returned to the research staff before application materials were forwarded to job supervisors. Using seven identifiers, including four local agencies, 47 applicants were identified as disabled or 7% of the total applicant pool.

In general, the disabling conditions of the job seekers resembled the experimental groups (although the numbers were too small to perform any statistical

-276-

<sup>(1)</sup> See supra, Chapter IV, Section 3.

<sup>(2)</sup> See supra, Chapter IV, Appendix G.

tests). Most applicants were either interested in or employed in white-collar or service worker positions, as were earlier population estimates. Education levels matched occupational classifications, and gender distribution was heavily weighted towards men, as was that of agency clients. Such similarities (between experiment and control) are not surprising since use of an agency was a disability identifier. Indeed, over 70% of the handicap sample utilized at least one source of assistance; however, only 10% reported using a service agency for job referral or placement assistance. Thus, service agency referrals represented 0.7% of the total applicant pool, compared to the 6.3% represented by independent disabled applicants.

Based on my projections for final hire rates, the projected placement rates for disabled city government job applicants would be slightly less than half of the nondisabled placement rate. The next section discusses these results within the context of the questions raised earlier.

-277-

### SECTION 3. RESULTS

Participants in both the experimental and control groups were similar with respect to the three characteristics covered in the study: disability type, occupation, and education. The finding that more control group participants applied for less prestigious positions is most likely attributable to labor market demands, rather than aspirations, particularly in view of the finding that both disabled and nondisabled control group participants applied for similar positions.

A key finding in this study was that experimental group participants in the OJT link should have done better than control group participants and other disabled CETA applicants:<sup>1</sup>

-278-

<sup>(1)</sup> See <u>supra</u>, Chapter IV, Section 3 ("The Control Group"), Part C.2. ("Results Against Projections").

Control group applicants applied for civil service positions that were awarded on the basis of test and interview results. OJTs are targetted toward underprivileged groups; the competitive labor pool is likely to be smaller and they therefore should have had a better chance at placement.

Because experimental group participants had copies of the job orders, they should have done better than other "walk-ins" to the CETA office. We discovered later on, however, that the eligible pool of CETA applicants effectively functioned to exclude our new, experimental group of CETA applicants from pursuing job orders. (This, however, would have impacted their placement rates for these job orders, not their potential placements once in the CETA system.)

-279-

Thus, referral and placement results indicate that, relative to my projections, the disabled are not using the VR system for job referral and placement and that they do as well as - and sometimes better than - the disabled who do use these resources.

- The applicant rate/referral rates (for control and experiment, respectively) were 56% and 57%, respectively - not a large difference.
  - The placement rate (relative to the number of referrals) was better in the control group (2.4% actual and 7.3% projected) than in the experimental group (2.1%).

The difference between projected placements in the control and experimental groups (<u>using only OJT data</u>) is not likely to be significantly different, given the relatively large number of projected hires in the control group: 6.5% for the OJT link and 3.6% for the control group.

-280-

This case study strongly supports the view that job referral and placement is <u>not</u> the focus of VR efforts, particularly for the less "severely" disabled (i.e., the better educated, regardless of disability type). Thus, the primary legislative mandate of placing people in jobs is not the key focus of these practitioners, with the exception of those in agencies/programs such as PWI, which is a specialized placement project. Moreover, job placement appears to occur largely as a result of the client's own resources (whether self or friends, for example) and not because of involvement in the placement function of the system.

These findings answer the empirical questions raised in the study:

The VR system in this study appears to provide limited direct or indirect placement assistance. In addition to our selfregistration survey, which indicated that relatively few clients are receiving any services, we also found that the interven-

-281-

tions produced very few referrals from the state agency and that the state agency's caseload statistics indicate a higher volume of clients in the rehabilitation plan development and in-service statuses, rather than in the training and placement statuses. If anything, there appears to be a focus primarily on the early service stages, and not on the broad spectrum of services in the legislative mandate.

According to the state's caseload statistics, the volume of clients remains fairly static from year to year; there is no great "push" for increasing the number of clients served. In addition, the percentage of rehabilitants appears to be static, or close to dropping. At least part of the reason for this is likely to be due to the high client-to-counselor ratio reported by "unofficial" sources (i.e., other counselors and, most recently, by an adminis-

-282-

trator at the state agency who was the prior researcher on the New Haven Project.)

The legislative assumption that clients will do better by using the system than they would by searching for employment on their own does not appear to be valid. While "parts" of this service system - in particular, developing and organizing the services necessary for an individual's rehabilitation and restoration - may be necessary for some disabled individuals, it does not appear that counselors are committed to, or can prioritize, searching for jobs for their clients. Based on this case study, it appears that many clients even if they are to be considered the "high productivity" group - can do just about as well on their own.

In summary, the case study data strongly suggest that the outcomes achieved by the VR program are due

-283-

less to VR program performance than to the efforts of the most productive clients, and that the number of clients served is, at best, static.

There are several possible reasons that these interventions themselves did not significantly increase the number of competitively employed disabled individuals. In the first place, the interventions had as their espoused goal the achievement of coordination among the different sectors of the community, not the achievement of many placements. Although this focus changed somewhat over the course of the experiment, we - the researchers - did not push the agencies as much as we might have. However, the fact that agencies were not self-motivated to participate in these programs as much as they could have - for reasons they provided to us during meetings and conferences 1 - is likely to be key for policymakers examining demonstration methods to enhance job referral and placement.

(1) See supra, Chapter IV, Section 5.

-284-

Other data presented in Chapter IV support these findings and provide some explanations for the results.

# 1. WHILE VR AGENCIES DO NOT ACTIVELY PURSUE THE ACHIEVEMENT OF THEIR MANDATED GOAL OF PLACEMENT, SOME PLACEMENT PROGRESS HAS BEEN MADE

Limited data from three local employers indicated that, while few disabled applicants appear to have been referred by rehabilitation agencies, they had a relatively high proportion of individuals hired as disabled:

- Of 204 disabled employees, one employer reported that 21% were hired as disabled, or 5% of the total workforce.
  - At least 32 out of 101 disabled employees at a second employer site were hired as disabled - 32% of the disabled workforce and 5% of the total workforce.
  - At the one employer site reporting referrals from the state VR agency and other private rehabilitation agencies, ll

.

of the 504 disabled employees were known to be disabled at hire (2.2% of the disabled workforce and less than 1% of the total workforce).<sup>1</sup>

Thus, this case study data supports the finding that conselors at service agencies, particularly the state VR agency, do not actively refer clients for jobs and not likely to be actively involved in job referral and placement.

2. SERVICE RECIPIENTS ARE LIKELY TO REFLECT A SMALL PROPORTION OF THE ELIGIBLE SERVICE POOL; MOREOVER, THEY DO NOT, IN GENERAL, RECEIVE VOCATIONAL SERVICES, AND MANY RECEIVE ONLY LIMITED CLINICAL RESTORATION SERVICES

The 1972 Social Security Administration found that 25% of the disabled report receiving services, even though significant VR program expansion has occurred. While these findings may be partly

<sup>(1)</sup> This finding appears to support the agency perspective that knowledge of their involvement i.e., of a client's disability - encourages employer discrimination. However, it does not explain the above findings that employers do know they hire the disabled.

attributed to a growing client population, it does not explain the limited services received by clients reporting involvement in the VR system. Moreover, questionnaire respondents in New Haven, 34% of whom reported registration with a service agency, indicated the need for clinical services as well as for employment assistance.

Survey respondents in 1972 (Treitel, 1972) indicated that services helped primarily in non-jobrelated areas (e.g., self-care). New Haven respondents also indicated limited involvement with service agencies in the job hunt process, even though a fairly sizeable proportion were registered with a service agency.

These findings indicate that the job hunt process is likely to involve rehabilitation agencies only on a limited basis, particularly for general service agencies such as DVR rather than for special job placement programs such as PWI.

-287-

# 3. IN GENERAL, COUNSELORS INVOLVED IN "MULTISERVICE" ROLES (THAT IS, ROLES IN WHICH MORE THAN PLACE-MENT IS PROVIDED) ARE LESS LIKELY TO PARTICIPATE IN JOB REFERRAL AND JOB PLACEMENT

Feedback on the interventions elicited few specific criticisms. A few counselors were concerned about federal CETA eligibility requirements, thought the OJTs did not match client skills, or felt the Client List would not work because employers would discriminate. CMHC counselors indicated during at least one meeting that the offerings set their clients up for failure, because there were no job quarantees and their clients would be too upset by failure. This may have some impact for future research on defining "job readiness" criteria; more generally, it may be helpful for these clients to seek jobs through specialized "one-to-one" (clientemployer) job development programs such as PWI, in which clients obtain job-seeking skills and work directly with employers to develop openings. These types of counselors, involved in specialized placement programs, are more likely to focus on placement.

DVR was most concerned about the appearance of their success, although they referred the fewest clients to both interventions. They indicated a concern with "duplication of referrals" by PWI (since a large proportion of PWI clients were initially from DVR) and wanted "credit" for PWI placements. At another point, we were told that the client-tocounselor ratio was probably close to 150:1, much higher than the 15:1 to 20:1 ratios in official program statistics.

The low priority of the interventions, apparently overwhelming "bureaucratic" procedures of the OJT link and at the CETA office, the preference for other techniques (or none at all), and the lack of belief that the programs would be successful contributed to low referral rates. The key finding is that counselor perceptions regarding placement viability did not change; nor were they encouraged to incorporate more fully new job placement resources. Even though job placement is the rehabilitation goal, its achievement appears to occur more by chance than by concerted

-289-

planning, except in specialized programs such as PWI. Moreover, if the experience of this case study is at all generalizable, some of the most productive clients achieve the placement outcome without substantial guidance from the state VR program itself.

The finding that outcomes are achieved by resources other than the state VR program and that the underlying reasons for such nonparticipation are likely to have a great deal to do with both the legislative assumptions versus the "real world" and the organization of services (i.e., how they are "disbursed" to the clients) are important for legislative policy development and for the future organization of the VR system. In addition, the fact that less than 30% of the active cases are actually rehabilitated each year provides the basis for future VR program research.

In this sense, the legislature fails to examine how outcomes occur and what process of rehabilitation actually takes place. In other words, legislators that use data from benefit/cost analyses, which

-290-

focus on earnings growth, fail to understand the success or failure of the VR program in terms of how many clients actually move through the system, how the "mirror effect" functions to maintain almost the same number of people in the system, and whether the services provided have any substantial impact on rehabilitation outcomes. The legislature does not appear to know how the "real system" operates - and therefore cannot change the way in which services are organized to achieve more effectively the outcome of rehabilitation. In the next section, I will present some conclusions and implications of the study for both future research and program development.

## SECTION 4. CONCLUSIONS AND IMPLICATIONS

Since 1920, the federal-state system providing employment-related services to the physicially and mentally impaired has significantly expanded. While services in the early legislation authorizing the VR system were limited to training and placement, the current mandate provides virtually unlimited services, from surgery and prosthetic devices to follow-up programs for the employed. The number of

-291-

people covered under this system's mandate has also increased: services that were once provided only to veterans and the civilian industrially disabled are now authorized for any handicapped individual designated by the system as having "employment potential."

The broad mandate of current legislation focuses on two key areas:

- . Rehabilitation, that is, placement in a job.
- . Increasing both the number of people served, particularly the severely disabled, and the types of services provided.

This case study probed the accomplishment of these goals by the New Haven, Connecticut system of VR services. It focused on the empirical generalization that successful program outcomes - i.e., rehabilitations - may not be produced by the system itself but instead occur for other reasons. Three questions were raised:

Does the system focus on placement as the key to rehabilitation success? Does it

provide the broad spectrum of services in its mandate?

Has the VR program of services substantially increased the number of clients served and placed, as official program statistics suggest and as is mandated?

How valid is the legislative assumption that clients will do better by using the system for job placement than they would on their own?

The analysis found that the VR system is not achieving these goals:

U.S. Social Security Administration survey data indicated that relatively few disabled individuals receive VR services and that of those who do, relatively few reported receiving job training or placement. Moreover, this data showed that service recipients tend to be the most productive of the disabled population and that services are most often provided (either directly or indirectly) by medical sources, and not the VR agency. A more recent questionnaire mailed to New Haven residents confirmed these findings: relatively few clients receive <u>any</u> services, particularly job training and placement, even though they may be affiliated with an agency (<u>supra</u>, Chapters II and IV).

Program statistics on the number of clients served and rehabilitated by the basic federal-state VR program, on the total VR program (including all services), and on the amount of federal expenditures, indicated that, from FY65 to FY75, program expansions may not have been as great as reported (<u>supra</u>, Chapter II). A summary of recent (FY77-FY80) Connecticut state DVR data indicated that the number of clients served and rehabilitated by the basic VR program remained fairly static, although some increase in the number of severely disabled clients was reported (<u>supra</u>, Chapter IV). However, increases were reported primarily in the early service statuses (e.g., development of the rehabilitation plan).

A comparison between the experimental and control groups in the study indicated that overall, clients are not likely to do any worse in job referral and placement on their own than they would by using the system and, in some instances, will do better.

In summary, these findings indicate that the system of VR services for the disabled does not operate as the legislation intends. The resulting conclusions fall into two areas that have important implications for policy, organization of the service network, and future research:

Service priority - To whom should services be targetted?

Service mix - How could services be organized to "fit" reality?

### Service Priority

This study found that many clients are likely to do just as well, and sometimes better, in job referral and placement by not using the state VR system than they are by using the system. Many of these clients could be considered the "high productivity" group (Burkhauser and Haveman, 1982) because of their education levels and relatively high vocational aspirations. In fact, recent benefit/cost analyses recommend that services be prioritized for this group, particularly because income support programs offered to the more severely disabled tend to function as a disincentive to work and because labor market trends put the disabled at the end of the queue, especially the most severely disabled (supra, Chapter II). This type of argument attempts to justify cream skimming during a time of scarce resources, that is, it attempts to justify prioritizing services for those who are more likely to succeed when resources are limited. The problem

-296-

with this line of thinking is that the less severely disabled get placed in jobs either by themselves or by others outside of the basic VR program. It may be that the broad spectrum of services mandated in the legislation is needed by the most severely disabled and that the less severely disabled need only limited counseling, restoration, and training services.

#### Service Mix

There are two findings that, because they differ so radically from the legislative intent, suggest the need for change in both the types of services offered and the mechanism by which they are provided:

> The disabled are becoming more educated, have vocational aspirations that are in line with those of the nondisabled, and achieve employment in similar ways; thus, their need for and dependence on a specialized service system may not be as great as legislators assume.

-297-

Counselors do not actively pursue the placement goal, for many reasons: they are too overburdened with cases; are focused on "entry" services such as development of the rehabilitation plan and restoration; have little confidence that their clients are job-ready or can maintain job-ready status; and are concerned with maintaining a certain number of clients in the system and not with getting clients out of the system and into jobs.

In this sense, clients are effectively forced to become independent in the job hunt, or they are likely to be unsuccessful in placement. Several specific recommendations for policy and future organization of VR services that respond to these findings are presented below.

## Policy Considerations

We have seen that the VR system fails to operate in line with the primary legislative intention of maximizing earnings potential, through employment, of

-298-

a group of people designated as "disabled"; this case study has suggested several reasons why the reality does not fit with this intent. In addition, there are other "tangential" systems, such as income support, that provide monetary benefits to disabled individuals who "cannot" work. The key problem with this is that as the system to promote employment (the VR system) relaxes its definitions of "employable," there are many people who "fall between the cracks": they're disabled enough to receive income support but are also likely to be eligible for the VR program and if they enter the VR system and achieve employment, they will lose the income needed to support their basic physical needs. This is a particularly important issue area for severely physically impaired persons whose medical costs will be covered only through SSDI. In such cases, the financial disincentive to work is great.

The reality of VR system operation tells us that the system of VR, mandated to provide a broad spectrum of services for a broad-based population, actually focuses less on employment gains than on "equalizing" the service level in the state system.

-299-

One issue not explored in this study, which is important for future research, is how changes in funding levels by the federal government impact the types of services provided and the number of clients served.

In addition, we found that a state system that attempts to serve all eligible applicants - and not prioritize the severely disabled - ends up focusing on "entry" services, such as rehabilitation plan development and restoration. As clients become more "normalized," they are expected to do more for themselves, thereby lessening the burden on the counselors.

Finally, the disabled themselves operate differently than the legislation assumes. Although many place themselves in jobs, the legislation continues to assess the VR program using data that do not reflect the program efforts in that area. Many people place themselves because they have received other services (such as restoration) from the state system; this conclusion has implications for the types of services that a state VR system should

-300-

provide rather than for how well the state system operates to increase the number of job placements. These service issues are rooted in an inherent conflict in the legislation, namely the achievement of both humanitarian and economic goals. The humanitarian basis for the VR system of services is to enhance the well-being of disabled individuals through their ability to function and to contribute to society, i.e., to be independent. However, as a publicly funded system, the VR program's "mission" is to reduce the number of people on public assistance through competitive employment. (The objective of increasing services to the severely disabled is rooted in early testimony preceeding the 1973 Act, which argued that it is important to enhance the independence of all disabled, even those without competitive employment potential; the 1973 Act was a compromise measure reflecting both the desire to service a larger population and the need to maximize the return on public investments.) The result is an enormously broad system that does not provide the full spectrum of services for which it is accountable. If the findings from this study are at all

-301-

generalizable, we can conclude that, first, many disabled are not as dependent on the system as we believed; second, that the state system might serve its less severely disabled clients better by focusing only on the services that they need, such as development of the rehabilitation plan and restoration; and third, that this "segmented" service approach should include more specialized agencies for clients to use <u>directly</u> on an "as-needed" basis, much as other selfhelp centers operate.

#### Research Implications

The misconceptions presented in this section are based on the idea of "differentness," i.e., that the disabled are sufficiently different from the nondisabled and other disadvantaged groups to require a specialized system of services (Levitan and Taggart, 1977). This study has pointed out that this may not be true; it is, therefore, important to look at ways in which these confusions could be clarified through new research.

-302-

There continues to be a paucity of information about how the disabled obtain employ-Future research efforts should focus ment. on the job hunt of a wide variety of employed disabled individuals, not only those discharged from rehabilitation facilities. One suggestion in this vein (Levitan and Taggart, 1977) focused on the issue of program assessments and the need for greater emphasis on ascertaining services provided, service needs, and actual barriers to employment. This type of research would also enhance efforts focusing on the differences between disabled and nondisabled employment needs.

The issue of how counselors perceive their clients, in terms of job readiness, confidence in their abilities, and how a client moves along the statuses in the state system, is an important factor in determining an individual's employability. Research in this area would also enable us to begin to assess whether the assumption

-303-

that employers and counselors differ in their perceptions of the disabled is valid.

This type of "perception" research is also important for the VR program itself because it could help explain why "linkage" programs similar to the one in New Haven don't Such programs don't produce referwork. rals in part because counselors don't appear to have much confidence in their clients. This might be changed by encouraging linkages within the rehabilitation community itself, i.e., enabling facilities to become involved in specialized services so that one counselor does not retain the full service burden. (This would not be the same as the current service organization in which the state VR system coordinates all services but is not "released" from responsibility.)

In summary, legislation that assumes handicapped people are dependent on a system to enable them to achieve their employment potential also assumes that

-304-

one system can effectively provide all necessary services to its clients. While the nondisabled use a variety of service organizations to obtain a particular service (e.g., we go to doctors for medical treatment and to headhunters for jobs), the handicapped are supposed to use one system for everything. The system is to take care of the "total needs package" of a handicapped individual, from restoration (e.g., amelioration of the medical impairment) to job placement - and often follow-up after placement. Yet, it is not apparent that the system can perform this myriad of functios; in fact, the system does not appear to perform the key placement function.

This study indicates that for some set of handicapped people, probably those who would be considered to be the most productive, the system is not necessary for job placement and that restorative services are probably the key services to continue offering. Many disabled individuals find jobs in the same ways that most of the rest of us do, i.e., by ourselves, through an employment agency, and through

-305-

friends or other contacts. For these people, the system does not appear to operate past the "entry" service stage; thus, future research should focus on discovering in more detail how the disabled in the primary labor market have obtained their jobs.

In this sense, the assumption of dependency on the system is probably the key error in legislative thinking. In addition, this study suggests that the state system of VR services for the handicapped has fallen prey to too many objectives. It has too much to do, for too many people, and it might be better organized to focus on the early stages of the rehabilitation process and to provide clients with other means to obtain training and placement services, if they need them. One method suggested elsewhere would be to enlarge the PWI concept to cover more clients; to support other "self-help" agencies; or, simply, to obtain support from the counselor. I've often heard and read that the handicapped just "want a chance" to be independent, productive citizens; perhaps what is needed is for the system to respond to this plea.

\* \* \* \* \*

-306-

## APPENDIXES

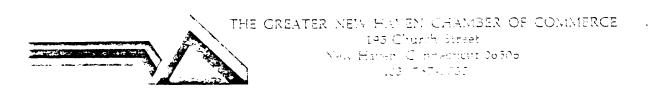
-308-

CHAPTER III

APPENDIX

## APPENDIX A

## Example Of Client List Newsletter



-310-

# HIRE THE HANDICAPPED

MARCH, 1978

This "Hire the Handicapped" bulletin lists certain handicapped persons in this region who have authorized their listing in our publication. It includes past job history and some information on how their handicap affects performance, if it does at all.

Many companies have excellent employees who suffer from some handicap. We suggest you review our listing and consider whether or not one of the persons listed might be an appropriate person to interview for an opening at your firm. Each of these persons have been considered "job worthy" by the interviewers at one of the participating agencies. We cannot guarantee them, of course, but we suggest that you look at it closely, whether your motive is just to obtain a good new employee, helping the handicapped or to comply with affirmative action regulations.

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION:

VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE: LICENSE, CERTIFICATE, ETC:

CLIENT: DISABILITY: RESIDUAL CAPACITY: EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

B.C. Emotional disorder Continuing out-patient treatment that does not interfere with work schedule. High school diploma; completed program in auto mechanics. Automobile mechanic. Plastic fabricator - four years. Certificate in auto mechanics.

L.S. Slow learner Will work well in job suited to limitation. High school diploma. Food service. Completed one year program in food preparation; worked as a dietary aid for 6 months.

P.A. Alcoholism. Individual has been completely sober since October, 1977. Two years college. Draftsman Electrical mechanical design two years; processing engineering material and plant engineering-10 years. Drivers license

(over)

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION:

VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION:

VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

N.K. Emotional disorder. Attends supportive therapy group which does not interfere with work schedule. High school diploma. Printer. Printing apprenticeship; security guard -2 years; policeman - 9 years. Drivers license

R.G. Alcoholism. Individual has been completely sober since March 1977; attends AA meetings regularly. Three years of college; two years college level training to be an accountant Accountant. Accountant 28 years - responsibility for EDP, payroll, taxes, ICC reporting, investments and cost accounting. Accounting certificate; will receive drivers license soon.

C.S. Drug abuse. Attends supportive therapy group, as an outpatient, which does not interfere with work schedule. High school diploma; 1½ years electronics school. Welder. Crane and fork lift operator in U.S. Navy -3½ years; welder one year. Welding certificate.

H.L.
Drug abuse.
Individual attends weekly supportive group therapy which does not interfere with work time.
High school diploma.
Store/office manager.
Sales, store management and bookkeeping two years; medical office six months; Crisis Intervention Center - work with teenage individuals one year.

A.L.
Drug abuse.
Attends weekly support group and schedule
will not interfere with work schedule.
8th grade.
Custodial/Housekeeping.
Custodial, housekeeping 5 years; counselor
in drug treatment program one year.
Certificate for completion of 30-hour training program in drug and alcohol counseling.

CLIDIT: DISABILIT:: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK ENPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK ENPERIENCE:

LICENSE, CERTIFICATE, ETC.:

Drug abuse. Attends support group which does not interfere with work time. High school diploma. Legal Aid/Sales. Legal Aid Counselor one year; director of teen center one year; salesman one year. Certificate received for successful completion of 6-week program in legal assistance. S.T. Emotional disorder. Out-patient therapy schedule will not conflict with work time. 14 years college. General office work. Quality control inspector - 2 months; assembler-1's years. Ξ.Χ. Diabetes Diabetic related visual problem is corrected with lens. BA Psychology. Social service work, counseling. Tutor, half-way house 6 months; pre-vocational skills teacher 6 months. C.D. Slow learner. Client will work well in job suited to limitations. High school diploma. Office work. Receptionist 1 year; bench work 6 months; retail sales 5 years. S.N. Emotional disorder. Continuing out-patient treatment, schedule will not conflict with work time. High school diploma. Food service. Cookware sales-6 months; grocery cashier a acatha. T.A. Emotional disorder. Individual attends bi-monthly supportive group therapy which does not interfere with work schedule. 3A English. Teaching clarical position. Taught high school English, Spanish-2 years; substitute teacher, clerical and sales work one vear. Drivers license.

(over)

CLIENT: DISABILITY: RESIDUAL CAPACITY: EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY: EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE: CERTIFICATE, LICENSE, ETC:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

CLIENT: DISABILITY: RESIDUAL CAPACITY:

EDUCATION: VOCATIONAL GOAL: TRAINING, WORK EXPERIENCE:

LICENSE, CERTIFICATE, ETC:

F.M. Sickle Cell Anemia. Has good physical tolerance. High school diploma. Assembler. Nurse's aide one year; sewing machine operator one year.

T.D. Psoriasis. Treated for this condition and it does

restrict individual work ability. High school diploma. Welding, machine shop work. Welding trainee 6 months; security guard one year.

R.M. Emotional disorder. Completed out-patient treatment successfully. BA Psychology. Social service work, counselor. Directed therapy group two years.

G.M. Alcoholism. Client has been completely sober for 10 months. 5th grade. Painter. Construction worker 20 years; painter 5 years. Drivers license.

F.F. Emotional disorder. Individual is continuing out-patient treatment, schedule does not interfere with work schedule.

Assembly work. Apprenticed in electrical component assembly; stock keeper and assistant foreman at fire alarm assembly company three years.

Y.S. Drug abuse. Individual attends supportive therapy group which does not interfere with work schedule. Finished 11th grade (with high honors). Clerical/receptionist Clerical work 1<sup>1</sup>/<sub>2</sub> years duties included cashier, computer work and filing. Store manager 1 year. Drivers license.

PLEASE CALL JUDY RICHTER AT THE EASTER SEAL GOODWILL INDUSTRIES REHABILITATION CENTER, 389-4561, FOR ADDITIONAL INFORMATION.

-314-

CHAPTER IV

APPENDIXES

APPENDIX A

## Occupational Classifications

-316-

APPENDIX A

<u>Note</u>: Occupational classifications in initial survey and questionnaire were regrouped to fit into Social Security Administration categories for analytical purposes, as follows:

01d	New (SSA)
Professional, Technical, and Kindred Managers and Administrators	Professional and Managerial
Sales Clerical and Kindred	Clerical and Sales
Crafts and Kindred Operatives, except Transport Transport Operatives	Craftsman and Operatives
Farmers, Farm Laborers	Farmers and Farm Laborers
Laborers, Nonfarm Service Workers, not Private Private Service	Service Workers and Laborers
Self-employed	Other

APPENDIX B

New Haven Labor Market Survey

HANDICAPPED POPULATION SURVEY CITY OF NEW HAVEN OFFICE OF HANDICAPPED SERVICES 161 CHURCH STREET NEW HAVEN, CONNECTICUT 06510 436-2690 Household Address:	Questionnaire       N?       3680         Tract #       1-4         Tract #       5-6         Block #       7-9         Cluster #       10         Strata #       11         Interviewer #       12-13         Validated       Yes 1. ()       14
Month /Day Time	: -
First Contact First Call Back Contact Second Call Back Contact Second Call Back No Contact	z 2. ( )
Interviewer: There are four places in the surve incerview may be complete. At one the person for his/her name and ph him/her that someone from The Offi will call to ask them if you were	e of these four points, ask none number and explain to the of Handicapped Services
Introduction: Hello, my name is survey for The Office of Handicar The purpose of this survey is to used to plan a program which will physical or mental health problem What we are trying to do with you (1) the number of people in the ( mental health problems, (2) their job-relaced work experience.	help people in New Haven with as have equal job opportunities. ar cooperation is find out City with either physical or
<ol> <li>Would you cooperate with us by answering you tell me will be confidential. Your r</li> </ol>	
Interviewer: X Response	
Yes, willing Yes, another time (specify:	) 2. ( ) 
Interviewer: Hand respondent flashcard A and in along as you read the agency name you receive a second, third, etc. 2-6 and 8, you must verify each to respondent is referring to the sam A household may contain more than If so, complete the interview on the repeat an interview on the second,	aloud. Check (X). Whenever "yes" response on questions me whether or not the as individual in the household. one person with a disability. the first person and then

-318-

• . •

•

.

.

	Yes No 1. D.V.R Department of Vocational Rehabilitation1. ( ) 2. ( )
	2. Easter Seal-Goodwill Industries Rehabilitation Center 1. ( )       2. ( )       22         3. New Haven Regional Center
	4. Yale-New Haven HospitalPhysical and Occupational Therapy Departments
	5. Veterans Administration Hospital (i.e. Blind Center)1. ( ) 2. ( ) 25
	6. RESPOND (advocacy) - Resource to Encourage Services to Provide for the Ongoing Needs of the Disabled 1. ( ) 2. ( ) 26
	7. New Haven Board of EducationSpecial Education 1. ( ) 2. ( )
	8. Mystic Oral School for the Deaf 1. ( ) 2( )
1. A.	9. CMHC - Connecticut Mental Health Center 1. ( ) 2. ( )
1	0. Commecticut Valley Hospital
1	1. St. Raphael Hospital - Physical Therapy Department 1. ( ) 2. ( )
1	2. State Board of Education - Services for the Blind 1. ( ) 2. ( )
, j	3. One or more
	4. Are (you) or (any member of this household) using the services of some other agency not on this list for help with a physical or mental health problem?
10	aterviewer: If possible leave the term (you) or replace ("does any member") in the following questions with reference to the relation
	<ul> <li>in the following questions with reference to the relation</li> <li>e.g. "does your son."</li> <li>3. Do (you) or (does any member of this household) receive disability</li> </ul>
	in the following questions with reference to the relation e.g. "does your son."
	<ul> <li>in the following questions with reference to the relation         <ul> <li>a.g. "does your son."</li> </ul> </li> <li>3. Do (you) or (does any member of this household) receive disability         psyments from a public agency?</li></ul>
	<pre>in the following questions with reference to the relation e.g. "does your son." 3. Do (you) or (does any member of this household) receive disability payments from a public agency? Yes 1. () Ho 2. () 35 4. Do (you) or (does any member of this household) receive disability</pre>
	<pre>in the following questions with reference to the relation e.g. "does your son." 3. Do (you) or (does any member of this household) receive disability payments from a public agency? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 5. Are (you) or (any member of this household) getting medical treatment for a physical health problem at least once every three months?</pre>
	<ul> <li>in the following questions with reference to the relation <ul> <li>a.g. "does your son."</li> </ul> </li> <li>3. Do (you) or (does any member of this household) receive disability payments from a public agency? <ul> <li>Yes</li></ul></li></ul>
	<pre>in the following questions with reference to the relation a.g. "does your son." 3. Do (you) or (does any member of this household) receive disability payments from a public arency? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 5. Are (you) or (any member of this household) getting medical treatment for a physical health problem at least once every three months? 6. Are (you) or (any member of this household) getting medical attention for a psychological or mental health problem at </pre>
	<pre>in the following questions with reference to the relation e.g. "does your son." 3. Do (you) or (does any member of this household) receive disability psyments from a public agency? 4. Do (you) or (does any member of this household) receive disability psyments from a private insurance company? 4. Do (you) or (does any member of this household) receive disability psyments from a private insurance company? 5. Are (you) or (any member of this household) getting medical treatment for a physical health problem at least once every three months? 6. Are (you) or (any member of this household) getting medical </pre>
	<pre>in the following questions with reference to the relation a.g. "does your son." 3. Do (you) or (does any member of this household) receive disability payments from a public agency? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 5. Are (you) or (any member of this household) getting medical treatment for a physical health problem at least once every three months? 6. Are (you) or (any member of this household) getting medical attention for a psychological or mental health problem at least once every three months? 7. Tes</pre>
	<pre>in the following questions with reference to the relation e.g. "does your son." 3. Do (you) or (does any member of this household) receive disability payments from a public agency? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 5. Are (you) or (any member of this household) getting medical treatment for a physical health problem at least once every three months? 6. Are (you) or (any member of this household) getting medical attention for a psychological or mental health problem at least once every three months? 7. Tes</pre>
	<pre>in the following questions with reference to the relation a.g. "does your son." 3. Do (you) or (does any member of this household) receive disability payments from a public agency? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 4. Do (you) or (does any member of this household) receive disability payments from a private insurance company? 5. Are (you) or (any member of this household) getting medical treatment for a physical health problem at least once every three months? 6. Are (you) or (any member of this household) getting medical attention for a psychological or mental health problem at least once every three months? 7. Tes</pre>

· · ·

.

8.	I am going to read you a list of physical health problems.
	If (you) or (any member of this household) now have any of
	these physical health problems, answer yes. If not, answer no.

1400	INTEMEL:	Hand respondent flashcard B and indicate that they can follow along as you read the health problem aloud. Check (X).	
		Yes No	
1.			40
2.		ss or Severe Vision Problem 1. ( ) 2. ( )	41
3.		L Palsy 1. ( ) 2. ( )	42
4.	Epilepsy	······································	43
5.	Diabetes	1. ( ) 2. ( )	44
6.	Loss of	Limb, e.g. arm or leg 1. ( ) 2. ( )	45
7.	Arthriti	s 1. ( ) 2. ( )	
8.	Muscular	: Dystrophy 1. ( ) 2. ( )	47
9.	Heart Di	.sease	48
10.	Rheumati	Lc Fever 1. ( ) 2. ( )	40
11.	Tubercul	losis 1. ( ) 2. ( )	
12.	Astima	······ 1. ( ) 2 <b>:</b> ( )	50
13.	Cystic F	Fibrosis 1. ( ) 2. ( )	51
14.	Kidney D	Disease1. ( ) 2. ( )	52
15.	Liver Di	sease 1. ( ) 2. ( )	53
16.	Cancer	1. ( ) 2. ( )	54
17.	Sickle C	Cell Anemia 1. ( ) 2. ( )	55
18.	Emphyzem	sa 1. ( ) 2. ( )	56
19.	<b>Bigh</b> Blo	nod Pressure 1. ( ) 2. ( )	57
20.	Drug Add	iiction 1. ( ) 2. ( )	58
21.	Alcohol	Addiction 1. ( ) 2. ( )	59
22.	Polio (P	Poliomyelitis)	60
23.	Paralysi	is of lower body (Paraplegia) 1. ( ) 2. ( )	61
24.	-	s of entire body (Quadraplegia) l. ( ) 2. ( )	62
25.		(s 1. ( ) 2. ( )	63
26.		insability, e.g. severe stuttering 1. ( ) 2. ( )	64
27.	-	s Sclerosis	65
28.	-	xore1.() 2.()	66
29.	Do (you) other ph	or (any member of this household) have some sysical health problem not on this list? l. ( ) 2. ( ) .fy, if yes:	67

i

i.

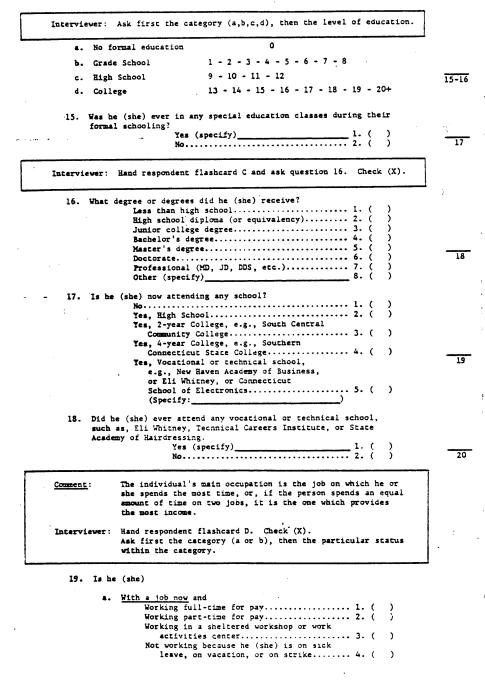
---

ź

Interviewer: If the respondent indicated that no one in the household has a
 disability, terminate the interview. That is, all responses
 to questions 2-6 and 8 were "no." Sincerely thank the person
 for their time and cooperation. Otherwise, continue the 72 interview. (full name) (phone #) . • • 80 Questionnaire NO 3680 1-4 BACKGROUND ATTRIBUTES .Interviewer: Use your common sense with respect to the necessity of asking questions 10 and 13 and using the pronouns he or she or you. Check answers (X). 10. This person with a physical or mental disability that concerns us, what is their sex? Male..... 1. ( Female..... 2. ( ) 9 11. How old is he (she) \_\_\_\_ ? 10-11 Interviewer: If the individual is less than 16 or over 64, <u>thank</u> the respondent for his time and cooperation. Otherwise, continue the interview. (full name) (phone #) 12 12. Is he (she) Now married..... 1. ( Ever married..... 2. ( Never married..... 3. ( ))) 13 13. What is his (her) ethnic identification? ) )) 14 • ,

.

#### 14. What is the highest grade or years of formal schooling that he (she) completed?



-322-

b. Without a job now and 21-22 Without a job now because they are ) Ś ) ) Other (specify)\_ 12. ( ) Interviewer: If the person is without a job because of reasons b7-b12, thank the respondent for his time and cooperation and · · :**T** terminate the interview. Otherwise, continue the interview. 23 (full name) (phone #) -Comment: The answers to the next questions are used to classify the person's occupation into one of a series of occupation groups. A job description that is clear, sufficiently detailed, and suitable for coding is not easy to obtain. The use of probes will help elicit adequate job descriptions. 20. What kind of work does (did) he (she) do on the job? . Comment: Occupational category is desirable here, e.g., engineer, mechanic, salesman, operative, ... Occupation: 21. What were some of the main duties of the job that he (she) does (did) at work? 24 Comment: Information about the actual job is desired to subcategorize. A repairman as an occupation might fix an auto, airplane, office machines, or a computer. **Obviously**, their work is qualitatively different. Again, a clerk might be an individual who is a cashier or a meter reader. Duties: -22. What does the business or industry do or make at the place where he (she) works (worked)? e.g. Do they make shoes? Do they educate people? Do they sell clothing? 25

-323-

	Interviewer: If the person got the job by several means, force a choice of only one.	· · · ·
	24. How did he (she) get the job? by answering a job advertisement 1. ( ) through a friend 2. ( ) through a referral by someone other than a friend 3. ( ) through an employment agency	
	Other (specify)6. ( ) 25. Architectural barriers, such as, a building constructed without wheelchair ramps, may often be a problem for the person with a physical disability. In addition, transportation barriers, such as, buses which cannot be used by people confined to wheelchairs, may present a problem for the person to get to work.	•
:	In the job experiences of the person who concerns us in this interview, are there any such things that are important to him (her) because of his (her) disability? 1. Yes ( ) 	29
	Interviewer: If no, go to question 27. If yes, probe to specify the barrier.	, · ·
•		30
	26. Have any of these things ever	
	Yes         No           prevented him (her) from getting a job 1. ( ) 2. (           prevented him (her) from keeping a job 1. ( ) 2. (	$\begin{array}{c} \begin{array}{c} & & \\ & & \\ \end{array} \\ \begin{array}{c} & \\ \end{array} \end{array}$
	Interviewer: Specify whether the barriers listed above prevented the person from getting a job (G), keeping a job (K), or getting a job promotion (P). Write simply G, K, or P before the barrier.	
	27. Often the attitudes of employers and other employees towards someone with a disability are greater than a building's construction. For example, some employers believe that someone with a physical or mental health problem will miss work more often than someone without such a problem. Co-workers might feel that they will have to carry the workload of someone with a disability.	·
	In the job experiences of the individual that we are speaking of.	

. .

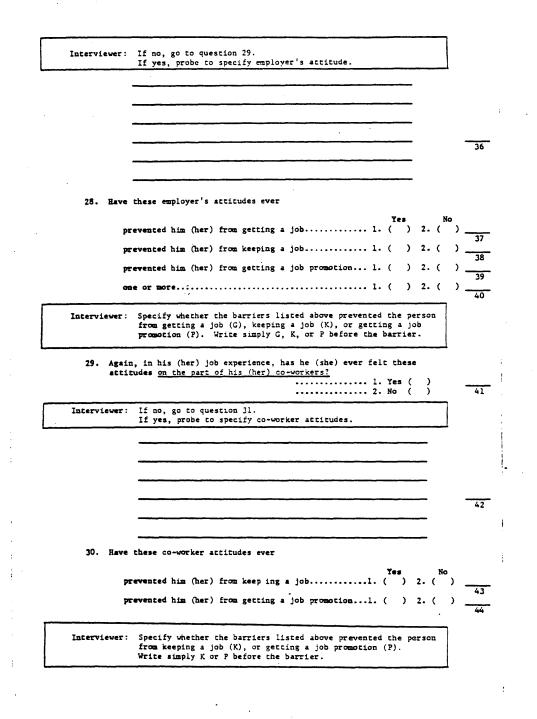
•

.

,

,

Υ.



31. Does he (she) have any special needs by virtue of his (her) disability that would require an employer to get special equipment for him (her) to satisfactorily perform a job? A secretary with a severe hearing problem might, for example, need an amplifier installed in a tetephone receiver.

32. Word he (she) require any changes in the duties of a job ordinarily expected by the employer? A salesperson with a spinal disorder, for exemple, may be able to perform all the duties of the job except lift heavy objects. 45

46

53

) 54

٤

,

55

Yes No 1. ( ) 2. ( ) \_

Yes 1 1. ( ) 2. (

)

)

.

Yes, full-time..... 1. ( Yes, part-time..... 2. (

No..... 3. (

-----

Interview		Tf	the	ie	unemploye	1 00	to	question	36.	
	·									 
				 		· · · ·				 

33. Does he (she) receive any of these job related services or benefits from his (her) current employer?

	•			Y	25		N	0	
	Medical (specify:	ر_	1.	(	)	2.	(	)	7
	Education (specify:	ر	1.	(	)	2.	(	)	<del>.</del>
•	Transportation (specify:	ر	1.	(	)	2.	(	)	-
	Housing (specify:	ر	1.	(	)	<b>z</b> .	(	)	-
	Income subsidies from federal, state or local governmental agencies (specify:	١	1.	ć	)	2.	(	ر ۱	Ū
	One or more							5	1
				•			•	5	2

34. Any other services or benefits not on this list that he (she) receives?

Specify, if yes: \_

28

35. Are there any other job-related services or benefits that he (she) needs that are not available?

Specify, if yes:

Interviewer: Go to question 37.

36. Before the job that he (she) is now without, was he (she) working for pay?

	Interviewer: If yes, go to question 38. If no, go to question 43.	
L.	37. Before his (her) present job, was he (she) working for pay?	-
	Yes, full-time 1. ( ) Yes, part-time 2. ( ) No 3. ( )	56
	Interviewer: If yes, go to question 38. If no, go to question 43.	
	Comment: The answers to the next questions are used to classify the person's occupation groups. A job description that is clear, sufficiently detailed, and suitable for coding is not easy to obtain. The use of probes will help elicit adequate job descriptions.	
	38. What kind of work did he (she) do on that job?	
	Comment: Occupational category is desirable here, e.g., engineer, mechanic, salesman, operative,	
	Occupation:	
• • •	39. What were some of the main duties of this job?	57
	Comment: Information about the actual job is desired to subcategorize. A repairman, as an occupation, might fix an auto, airplane, office machines, or a computer. Obviously, their work is qualitatively different. Again, a clerk might be an individual who is a cashier or a meter reader.	
-	Duties:	
		,
	40. What did the business or industry do or make at this place?	58
	41. How long had he (she) been working at this earlier job?	59-60
· · · · · · · · · · · · · · · · · · ·	Interviewer: If the person got the job by several means, force a choice of only one.	

.

•

42. How did he (she) get this job? by answring a job advertisement...... 1. ( through a friend..... 2. ( through a referral by someone other than ) a friend...... 3. ( ) ) 61 ) Other (specify)\_\_\_\_ 6. 0 43. If the City of New Haven was to offer job training programs tomorrow, what kind of jobs would you or the handicapped person in this household wish to be taught to do? 1. . . . . 2. 3. Interviewer: There exists a chance that more than one resident of the household has a physical and/or mental disability. You will already know this by virtue of your clarifications for every "yes" response on questions 2-6 and 8. Go to question 44 and make a validity check. 44. In addition to the individual that we described above as being handicapped, does any other member of this household between 16 and 64 years old: a. utilize one of the service agencies on flashcard A b. receive disability payments from a public agency or private insurance company
c. receive medical attention for a physical health or mental health problem at least once every three months d. have any of the physical health problems on flashcard B Yes..... 1. ( No..... 2. ( 62 Ś --- Interviewer: If no, sincerely thank the person for their time and cooperation. (full name) (phone #) 63 If yes, ask the person if they would give you an additional 20 minutes of their time. Yes, willing..... 1. ( ) ) Ì 64 (full name) (phone #) Interviewer: If the person was willing to do a second interview, code here the questionnaire number of this interview and completely fill-in a second interview schedule. 65-68 80 THE END

-328-

.

## APPENDIX C

New Haven Self-Registration Questionnaire (English Version)

SI TIENE ALGUN PROBLEMA, FISICO O MENTAL Y NECESITA AYUDA EN COMPLETAR ESTE QUESTIONARIO, FAVOR DE LLAMAR A LA OFICINA DE SERVICIOS PARA LISIADOS: TELEFONO 436-2590.

ARE YOU AWARE THAT FREE SERVICES ARE AVAILABLE IN OUR COMMUNITY FOR PEOPLE WITH PHYSICAL OR MENTAL HEALTH PROBLEMS THAT LIMIT JOB OPPORTUNITIES?

IF THERE IS MORE THAN ONE PERSON IN YOUR HOUSEHOLD WITH A PHYSICAL OR MENTAL HEALTH PROBLEM PLEASE CALL THE CITY OF NEW HAVEN'S OFFICE OF HANDICAPPED SERVICES AT 436-2690 FOR MORE FORMS.

(1) Do you, or does someone in your family or household, have a physical or mental health condition that does limit or will limit job 🗆 NO opportunities? 🔲 YES

IF YOU ANSWERED "YES" TO QUESTION 1, PLEASE CONTINUE WITH QUESTION 2, IF YOU ANSWERED "NO" TO QUESTION 1, PLEASE SKIP TO QUESTION 18.

(2) Is the person in question 1: (Check the one that applies)

🔲 Family Member 🔅 🔲 Household Member, not related You You

.

(3) Please describe the special physical or mental health condition of the person checked in question 2:

(4) In which age group does this person belong? ------ --

				•		
Under 16	16 - 20	21 – 25	26 - 35	36 - 45	46 - 64	Over 64

(5) What is the last grade completed by this person?

	ver 12
--	--------

(6) Has this person had any special job training (for example, technical training)? 🔲 YES 🛄 NO

If yes, what kind? (For example, machinist or programmer)

- (7) Is this person registered with any of the service agencies (for example, the Department of Vocational Rehabilitation)? 🗆 YES 🗖 NO If yes, which one (s)? \_\_\_\_
- (8) Are there enough of the following public services for people with physical or mental health problems?

		Enough	Not Enough	Don't Know
•	Education Skill Training Special Transportation Services Housing	( ) ( ) ( )	( ) ( ) ( ) . ( )	( ) ( ) ( )
9)	Please indicate which other services could be he	lpful		·····
(0)	Does this person have a job? 🔲 YES [	□ NO		an ann an
	If yes, is it part-time or full-time?			
	If yes, what is the job?			

if this person is out of work because of a health problem, is this person now looking for a job? 🔲 YES 🗔 NO (11)

If yes, what kind of job? \_\_\_\_

(12) If this person is not working, does this person's health problem permanently prevent him or her from working? 🗆 YES 🔄 NO

IF THE ANSWER TO QUESTION 12 IS "YES", PLEASE SKIP TO QUESTION 17. IF THE ANSWER TO QUESTION 12 IS "NO", PLEASE CONTINUE WITH QUESTION 13.

- (13) If this person has a job or is looking for work, what problems happen most often when working? (Check any that apply.)
  - difficult access to the building difficult access to and within the work station
    - difficult access to comfort stations, for example, cafeteria or rest rooms
  - no parking at the job site
  - no housing near the job site
  - poor co-worker attitudes
  - poor supervisor attitudes
    - other

(14) What transportation problems exist going to and from the place of work?

- None
  - public transportation problems (for example, poor bus service)
  - private transportation problems (for example, non-equipped company van)
  - other

(15) If this person has a job, has the employer tried to meet the needs of disabled workers by: (Check any that apply.)

1) 2) 3) 4)	restructuring jobs rescheduling work hours providing leaves of absence other accommodations		Yes Yes Yes Yes	0000	No No No	Not Necessary Not Necessary Not Necessary Not Necessary	0000	Don't Know Don't Know Don't Know Don't Know
If th	us person has a job, how did that person	ı learn ab	out th	e jobi	?			

	00000	recruited by the employer referred by employment agency referred by special services agency heard through friends found the job alone other	
(17)	Name of	f person with physical or mental health problem (if you wish)	

(18)Address (if you wish) \_

(16)

THANK YOU VERY MUCH FOR YOUR TIME. YOU NEED NOT PAY POSTAGE TO MAIL THIS FORM. PLEASE RETURN THIS FORM, IN THE ENCLOSED ENVELOPE, TO:

> VOCATIONAL REHABILITATION GRANT P.O. BOX 1445 NEW HAVEN, CONNECTICUT 06506

.

#### APPENDIX D

State VR Agency Case Service Statuses

•

---

#### STATE VR AGENCY CASE SERVICE STATUSES\*

Status 00. Referral. This status represents entrance into the vocational rehabilitation process. A referral is defined as any individual who has applied to or been referred to the vocational rehabilitation agency by letter, by telephone, by direct contact, or by any other means; and for whom the following minimum information has been furnished: name and address, disability, age and sex, date of referral, and source of referral;

Status 02. Applicant. As soon as the referred individual (Status 00) signs a document requesting vocational rehabilitation services, he is placed into Status 02 and is designated as an applicant. Generally, the document will be an agency application form, but a letter signed by an individual who provides the minimum basic referral information and requests service should also be considered as a basis for placing the individual in Status 02. This is important, since the applicant must be notified in writing if his request for vocational rehabilitation services has been denied, and the only certain basis for determining that the individual has knowledge of having been referred is by the existence of a document signed by the individual;

Status 06. Extended Evaluation. (i) An applicant should be placed in this status when the counselor has certified the applicant for extended evalu-

<sup>\*</sup> Note: The above listing was taken from the Federal Register, Vol. 40, No. 245 - Friday, December 19, 1975.

ation. Individuals placed in this status may not remain in the status longer than eighteen consecutive months from the date of certification but may be moved from this status to either Status 10 or 08 at any time prior to the expiration of the 18-month period if it is determined that, either (A) there is a reasonable expectation that the individual can benefit in terms of employability (Status 10), or (B) there is no reasonable likelihood that he can benefit in terms of employability (Status 08). No time allowances can be made for interruptions during this period regardless of the nature of, or reason for, the interruptions.

(ii) Prior to or simultaneously with acceptance of an individual for services for purposes of determination of rehabilitation potential (extended evaluation), there will be a certification of: (A) the presence of a physical or mental disability, (B) the existence of a substantial handicap to employment, and (C) the inability to make a determination that vocational rehabilitation services may benefit the individual in terms of employability. An individualized written rehabilitation program is required concurrently with or reasonably soon after execution of the certificate of eligibility for extended evaluation services.

Status 08. Closed From Referral, Applicant, or Extended Evaluation Statuses. This status has been provided to furnish a means for identifying all persons not accepted for vocational rehabilitation services, whether closed from referral status (00), applicant status (02), or extended evaluation (06). All persons processed through referral, applicant, and/or extended evaluation, and not accepted into the active caseload for vocational rehabilitation services, will be closed in this status. A certificate of ineligibility is required for a closure in Status 08, except when the client becomes unavailable for services. A copy of Form RSA-300, properly completed, dated, and signed is sufficient certification of ineligibility for these cases, provided case documentation includes specific detailed reasons for the closure action;

Status 10. Individualized Written Rehabilitation Program Development. While a client is in this status, the case study and diagnosis is completed to provide a basis for the formulation of the individualized written rehabilitation program. A comprehensive case study is basic to determining the nature and scope of services to be provided in order to accomplish the vocational rehabilitation objective of the individual. The counselor and client formulate and plan the rehabilitation services necessary to the solution of the client's problem, and those services are clearly outlined to him. The individual remains in this status until his rehabilitation program is written and approved;

Statuses 10-24. Active Caseload Statuses. Active caseload statuses begin with the development of the individualized written rehabilitation program (Status 10). A client is placed in Status 12 when his individualized written rehabilitation program has been approved. Statuses 14, 16, and 18 are the in-service statuses and are provided for case progress designations to indicate the kind or kinds of services given to the client to prepare him for employment. Status 14 indicates counseling and guidance only; Status 16 designates physical and mental restoration, and Status 18 is the training status. A client is placed in Status 20 when he has completed training and is ready for employment. Status 22 indicates the client has been placed in employment. Status 24, service interrupted, is recorded if services are interrupted while the client is in one of the Statuses, 14, 16, 18, 20, or 22;

Status 26. Closed Rehabilitated. Cases closed as rehabilitated must as a minimum have been declared eligible, have received appropriate diagnostic and related services, have had a program for vocational rehabilitation services formulated, have completed the program insofar as possible, have been provided counseling as an essential rehabilitation service, and have been determined to be suitably employed for a minimum of 60 days;

Status 28. Closed Other Reasons After Individualized Written Rehabilitation Program Initiated. Cases closed in this category must have been declared eligible, have received appropriate diagnostic and related services and have had a program for vocational rehabilitation services formulated, but have not completed the program and/or have not been provided counseling, and/or have not been determined to be suitably employed for a minimum of 60 days;

Status 30. Closed Other Reasons Before Individualized Written Rehabilitation Program Initiated. Cases closed in this category are those cases which, although accepted for rehabilitation services, did not progress to the point that rehabilitation services were actually initiated under a rehabilitation plan.

Source: <u>Analysis of 1978 Data on the Vocational</u> <u>Rehabilitation Standards</u>, Connecticut State Department of Education, D.V.R., prepared under HEW 105-78-4011, Rehabilitation Research Institute, School of Education, University of Michigan, pp. V-11-13.

## APPENDIX E

•

.

## Classification Of Disabling Conditions

#### APPENDIX E(1)

## CLASSIFICATION OF DISABLING CONDITIONS

.

RSA Code	Disabling Conditions
$\frac{1}{(1)}$	VISUAL IMPAIRMENTS
(10-)	Blindness, both eyes, no light perception, due to:
100 101 102	cataract glaucoma general infectious, degenerative, and other specified diseases, including ocular and local infections
106 107 109	congenital malformations accident, poisoning, exposure, or injury ill-defined and unspecified causes
(11-)	Blindness, both eyes (with correction not more than 20/200 in better eye or limitation in field within 20 degrees, but not code 10), due to:
110 111 112	cataract glaucoma general infectious, degenerative, and other specified diseases, including ocular and local infections
116 117 119	congenital malformations accident, poisoning, exposure, or injury ill-defined and unspecified causes
(12-)	Blindness, one eye, other eye defective (better eye with correction less than 20/60, but better than 20/200, or corresponding loss in visual field), due to:
120 121 122	cataract glaucoma general infectious, degenerative, and other specified diseases, including ocular and local infections
126	congenital malformations

RSA	
Code Disabling Condi	
127 accident, poisoning, expos	
129 ill-defined and unspecifie	
(13-) Blindness, one eye, other	eye good, due co:
130 cataract	
131 glaucoma	
132 general infectious, degene	erative, and other
specified diseases, includ	
local infections	-
136 congenital malformations	
137 accident, poisoning, expos	
139 ill-defined and unspecifie	
() These are not actual codes cation of major groupings.	
(14-) Other visual impairments,	
(11) Conce Vibaul impairmentedy	
140 cataract	
141 glaucoma	
142 general infectious, degene	
specified diseases, includ	ling ocular and
local infections	
146 congenital malformations	
147 accident, poisoning, expos 149 ill-defined and unspecifie	
(2) HEARING IMPAIRMEN	
(20-) Deafness, unable to talk,	
200 degenerative and other non	-infectious and
specified diseases of ear	
202 upper respiratory infectio	ons and other
infectious diseases	
206 congenital malformations 208 accident, poisoning, expos	uro or intury
208accident, poisoning, expos209ill-defined and unspecifie	
(21-) Deafness, able to talk, du	
210 degenerative and other non	-infectious and
specified diseases of ear	

RSA Code	Disabling Conditions
212	upper respiratory infections and other
216	infectious diseases
218	congenital malformations accident, poisoning, exposure, or injury
219	ill-defined and unspecified causes
(22-)	Other hearing impairments, due to:
220	degenerative and other non-infectious and
	specified diseases of ear
222	upper respiratory infections and other infectious diseases
226	congenital malformations
228	accident, poisoning, exposure, or injury
229	ill-defined and unspecified causes
(3)	ORTHOPEDIC DEFORMITY OR FUNCTIONAL IMPAIRMENT, EXCEPT AMPUTATIONS
(30-,31-)	Impairment involving three or more limbs or
(00 /01 )	entire body, due to:
300	cerebral palsy
301	congenital malformations or other and
202	ill-defined birth injury
303	other diseases, infectious and non-infectious, other infectious (including
	local), and other neurological and mental
	diseases (excluding code 630, epilepsy)
310	arthritis and rheumatism
312	intracranial hemorrhage, embolism, and
314	thrombosis (stroke) poliomyelitis
315	muscular dystrophy
316	multiple sclerosis
317	Parkinson's disease
318	accidents and injuries involving the spinal
210	cord
319	all other accidents, injuries, and
	poisonings

RSA	
Code	Disabling Conditions
(32-, 33-)	Impairment involving one upper and one
	lower limb (including side) due to:
320	cerebral palsy
321	congenital malformations and ill-defined
	birth injury
323	other diseases, infectious and
	non-infectious, other infections (including
	local), and other neurological and mental
220	diseases (excluding code 630, epilepsy)
330	arthritis and rheumatism
332	intracranial hemorrhage, embolism, and
334	thrombosis (stroke) poliomyelitis
335	muscular dystrophy
336	multiple sclerosis
337	Parkinson's disease
338	accidents and injuries involving the spinal
	cord
	COLU
339	all other accidents, injuries, and
	all other accidents, injuries, and poisonings
	all other accidents, injuries, and poisonings Impairment involving one or both upper
	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and
	all other accidents, injuries, and poisonings Impairment involving one or both upper
(34-,35-)	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to:
(34 <b>-,</b> 35-) 340	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy
(34-,35-)	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined
(34-,35-) 340 341	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury
(34 <b>-,</b> 35-) 340	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and
(34-,35-) 340 341	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including
(34-,35-) 340 341	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and
(34-,35-) 340 341	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including local), and other neurological and mental
(34-,35-) 340 341 343	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including local), and other neurological and mental diseases (excluding code 630, epilepsy)
(34-,35-) 340 341 343 350 352	all other accidents, injuries, and <u>poisonings</u> Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including local), and other neurological and mental diseases (excluding code 630, epilepsy) arthritis and rheumatism intracranial hemorrhage, embolism, and thrombosis (stroke)
(34-,35-) 340 341 343 350 352 354	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including local), and other neurological and mental diseases (excluding code 630, epilepsy) arthritis and rheumatism intracranial hemorrhage, embolism, and thrombosis (stroke) poliomyelitis
(34-,35-) 340 341 343 350 352 354 355	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including local), and other neurological and mental diseases (excluding code 630, epilepsy) arthritis and rheumatism intracranial hemorrhage, embolism, and thrombosis (stroke) poliomyelitis muscular dystrophy
(34-,35-) 340 341 343 350 352 354	all other accidents, injuries, and poisonings Impairment involving one or both upper limbs (including hands, fingers, and thumbs), due to: cerebral palsy congenital malformations and ill-defined birth injury other diseases, infectious and non-infectious, other infections (including local), and other neurological and mental diseases (excluding code 630, epilepsy) arthritis and rheumatism intracranial hemorrhage, embolism, and thrombosis (stroke) poliomyelitis

RSA	
Code	Disabling Conditions
358	accidents and injuries involving the spinal cord
359	all other accidents, injuries, and
	poisonings
(36-,37-)	Impairment involving one or both lower limbs (including feet and toes) due to:
360	cerebral palsy
361	congenital malformations and ill-defined
363	birth injury other diseases, infectious and
202	non-infectious, other infections (including
	local), and other neurological and mental
	diseases (excluding code 630, epilepsy)
370	arthritis and rheumatism
372	intracranial hemorrhage, embolism, and
	thrombosis (stroke)
374	poliomyelitis
375	muscular dystrophy
376	multiple sclerosis
377	Parkinson's disease
378	accidents and injuries involving the spinal cord
379	all other accidents, injuries, and
	poisonings
(38-,39-)	Other and ill-defined impairments
	(including trunk, back, and spine), due to:
380	cerebral palsy
381	congenital malformations and ill-defined
	birth injury
383	other diseases, infectious and
	non-infectious, other infections (including
	local), and other neurological and mental
390	diseases (excluding code 630, epilepsy) arthritis and rheumatism
392	intracranial hemorrhage, embolism, and
572	thrombosis (stroke)
394	poliomyelitis

RSA	
Code	Disabling Conditions
395	muscular dystrophy
396	multiple sclerosis
397	Parkinson's disease
398	accidents and injuries involving the spinal cord
399	all other accidents, injuries, and poisonings
(4)	ABSENCE OR AMPUTATION OF MAJOR AND MINOR
· - ·	MEMBER
(40-)	Loss of at least one upper and one lower
	major extremity (including hands, thumbs,
	and feet), due to:
400	malignant neerlagna
400 402	malignant neoplasms congenital malformations
404	diseases, infectious and non-infectious
404	(including peripheral vascular, diabetes,
	tuberculosis of bones and joints), and
	infections (including gangrene)
409	accidents, injuries, and poisonings
$\frac{409}{(41-)}$	accidents, injuries, and poisonings Loss of both major upper extremities
<u>409</u> (41-)	accidents, injuries, and poisonings Loss of both major upper extremities (including hands or thumbs), due to:
(41-)	Loss of both major upper extremities (including hands or thumbs), due to:
(41-)	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms
(41-) 410 412	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations
(41-)	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious
(41-) 410 412	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes,
(41-) 410 412	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and
(41-) 410 412 414	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes,
(41-) 410 412	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ-
(41-) 410 412 414	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings
(41-) 410 412 414 <u>419</u> (42-)	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ- ing hand or thumb), due to:
(41-) 410 412 414 <u>419</u> (42-) 420	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ- ing hand or thumb), due to: malignant neoplasms
(41-) $410$ $412$ $414$ $419$ $(42-)$ $420$ $422$	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ- ing hand or thumb), due to: malignant neoplasms congenital malformations
(41-) 410 412 414 <u>419</u> (42-) 420	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ- ing hand or thumb), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious
(41-) $410$ $412$ $414$ $419$ $(42-)$ $420$ $422$	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ- ing hand or thumb), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes,
(41-) $410$ $412$ $414$ $419$ $(42-)$ $420$ $422$	Loss of both major upper extremities (including hands or thumbs), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints), and infections (including gangrene), accidents, injuries, and poisonings Loss of one major upper extremity (includ- ing hand or thumb), due to: malignant neoplasms congenital malformations diseases, infectious and non-infectious

RSA	
Code	Disabling Conditions
429	accidents, injuries, and poisonings
(43-)	Loss of one or both major lower extremities (including feet), due to:
430	malignant neoplasms
432	congenital malformations
434	diseases, infectious and non-infectious
	(including peripheral vascular, diabetes,
	tuberculosis of bones and joints), and
439	infections (including gangrene)
$\frac{439}{(44-)}$	accidents, injuries, and poisonings Loss of other and unspecified parts
(44-)	(including fingers and toes, but excluding
	thumbs), due to:
440	malignant neoplasms
442	congenital malformations
444	diseases, infectious and non-infectious
	(including peripheral vascular, diabetes,
	tuberculosis of bones and joints), and
4.4.0	infections (including gangrene)
$\frac{449}{(5)}$	accidents, injuries, and poisonings MENTAL, PSYCHONEUROTIC, AND PERSONALITY
())	DISORDERS
(50 - )	Psychotic disorders:
	•
500 (51-)	psychotic disorders
(51-)	Psychoneurotic disorders:
510	
$\frac{510}{(52-)}$	psychoneurotic disorders Other mental disorders:
(32-)	other mental disorders:
520	alcoholism
521	drug addiction
522	other character, personality, and behavior
	disorders
(53-)	Mental retardation:
520	montol vetovástice mila
530	mental retardation, mild

CodeDisabling Conditions532Mental retardation, moderate534mental retardation, severe(6)OTHER DISABLING CONDITIONS FOR WHICH ETIOLOGY IS NOT KNOWN OR NOT APPROPRIATE(60-)Other conditions resulting from neoplasms (not elsewhere classified):600colostomies resulting from malignant neoplasms601laryngectomies resulting from malignant neoplasms	RSA	
534mental retardation, severe(6)OTHER DISABLING CONDITIONS FOR WHICH ETIOLOGY IS NOT KNOWN OR NOT APPROPRIATE(60-)Other conditions resulting from neoplasms (not elsewhere classified):600colostomies resulting from malignant neoplasms601laryngectomies resulting from malignant neoplasms	Code	
<ul> <li>(6) OTHER DISABLING CONDITIONS FOR WHICH ETIOLOGY IS NOT KNOWN OR NOT APPROPRIATE</li> <li>(60-) Other conditions resulting from neoplasms (not elsewhere classified):</li> <li>600 colostomies resulting from malignant neoplasms</li> <li>601 laryngectomies resulting from malignant neoplasms</li> </ul>		
ETIOLOGY IS NOT KNOWN OR NOT APPROPRIATE(60-)Other conditions resulting from neoplasms (not elsewhere classified):600colostomies resulting from malignant neoplasms601laryngectomies resulting from malignant neoplasms		
<ul> <li>(60-) Other conditions resulting from neoplasms (not elsewhere classified):</li> <li>600 colostomies resulting from malignant neoplasms</li> <li>601 laryngectomies resulting from malignant neoplasms</li> </ul>	(6)	
<ul> <li>(not elsewhere classified):</li> <li>colostomies resulting from malignant neoplasms</li> <li>laryngectomies resulting from malignant neoplasms</li> </ul>	1.00	
601 laryngectomies resulting from malignant neoplasms	(60-)	(not elsewhere classified):
601 laryngectomies resulting from malignant neoplasms	600	
	601	laryngectomies resulting from malignant
	602	leukemia and aleukemia
605 other malignant neoplasms	605	
609 benign and unspecified neoplasms	609	
(61-) Allergic, endocrine system, metabolic and nutritional diseases:	(61-)	Allergic, endocrine system, metabolic and
610 hay fever and asthma	610	hav fever and asthma
611 other allergies		
614 diabetes	614	-
615 other endocrine system disorders (except code 616, cystic fibrosis)	615	
616 cystic fibrosis		
619 and other metabolic diseases		and other metabolic diseases
(62-) Diseases of the blood and blood-forming organs:	(62-)	
620 hemophilia	620	hemophilia
621 sickle cell anemia	621	-
629 other anemia and diseases of the blood and	629	other anemia and diseases of the blood and
blood-forming organs (except code 602,		blood-forming organs (except code 602,
leukemia and		
aleukemia)		
(63-) Other specified disorders of the nervous system:	(63-)	
630 epilepsy	630	epilepsy
639 other disorders of the nervous system, not		
elsewhere classified	-	

RSA	
Code	Disabling Conditions
(64-)	Cardiac and circulatory system conditions:
640	congenital heart disease
641	rheumatic fever and chronic rheumatic heart disease
642	arteriosclerotic and degenerative heart disease
643	other diseases or conditions of heart
644	hypertensive heart disease
645	other hypertensive disease
646	varicose veins and hemorrhoids
649	other conditions of circulatory system
(65-)	Respiratory system conditions:
650	tuberculosis of the respiratory system
651	emphysema
652	and asbestosis
653	bronchientasis
654	chronic bronchitis and sinusitis
659	other conditions of respiratory system
(66-)	Digestive system conditions:
660	conditions of teeth and supporting structures
661	ulcer of stomach and duodenum
662	chronic enteritis and ulcerative colitis
663	hernia
664	
004	colostomies (from other than malignant neoplasms)
669	
(67-)	other conditions of digestive system
(0/-)	other conditions of digestive system Genito-urinary system conditions:
	Genito-urinary system conditions:
670	Genito-urinary system conditions: genito-urinary system conditions (except
670	Genito-urinary system conditions: genito-urinary system conditions (except code 671, end-stage renal failure)
	Genito-urinary system conditions: genito-urinary system conditions (except
670 <u>671</u> (68-)	Genito-urinary system conditions: genito-urinary system conditions (except code 671, end-stage renal failure) end-stage renal failure Speech impairments:
670 671	Genito-urinary system conditions: genito-urinary system conditions (except code 671, end-stage renal failure) end-stage renal failure

RSA	
Code	Disabling Conditions
682	stammering and stuttering
684	laryngectomies (from other than malignant neoplasms)
685	aphasia resulting from intracranial hemorrhage, embolism, or thrombosis (stroke)
689	other speech impairments (except code 685, aphasia resulting from stroke)
(69-)	Disabling diseases and conditions, not elsewhere classified:
690	diseases and conditions of the skin and cellular tissue
699	other disabling diseases and conditions

Source: Connecticut State Department of Education, Division of Vocational Rehabilitation, Counselor Manual, July, 1977.

#### APPENDIX F

List Of Agencies Receiving City Government Job Postings

## -349-

## JOB VACANCY NOTICE DISTRIBUTION LIST

,	
	· · · · · · · · · · · · · · · · · · ·
DEPT:	
DATE:	
MUNICIPAL DEPARTMENTS	OTHER MUNICIPAL DEPARIMENTS
ALRPORT	Mayor Frank Logue, 195 Church St. Mayor's Office
CITY CLERK	Ms. Barbara Geller, Attention Robin Krieger Mayor's Office 2
CONTROLLER	Mr. Kernedy Mitchell, Controller
EDUCATION	Chief Administrative Officer
HEALTH	Mr. Joseph Marci, Manpower
PARKS & RECREATION	Mr. Paul Eujalski, President Civil Service Board, 488 Whitney Ave 2
REDEVELOPMENT	Mr. Thomas Corso, Manpower Administrator2
SENIOR CENTER C/O Human Resources2 LAX OFFICE	Mr. Maurice Sykes, Fair Employment Officer 2
TREASURER	Mr. William Donahue, Redevelopment, 157 Church
TRAFFIC & PARKING	Mr. John McGuerty, City Plan, 157 Church St.
VEIGHTS & MEASURES	Library Reference Section, Mrs. Gianotti, 133 Elm Street
DEVELOPMENT ADMINISTRATION	Mr. Sam Franklin, New Haven Housing Authority 230 Ashmun Street
OTHER MUNICIPAL DEPARTMENTS	Mr. Donald Dimenstein, Central Job Development Unit, 650 Chapel Street
James R. Johnson, Fair Rent Commission 770 Chapel Street	Mr. Craig O'Connell, Liason to Board of Aldermen, 195 Church Street
Housing Authority, 360 Orange St2	
Commission on Equal Opportunity, 770 Chapel Street	
New Haven Visitors & Convention Bureau 155 Church Street	DELIVERY MAIL DATE:
Housing Conservation & Code Enforcement	City Budget
Agency, 157 Church St 2	Special Funded
11fice of Human Resources, George Musgrove 195 Church St 2	
Police Department, Lt. McNulty, Personnel Officer 9	

•

NEIGEORICOD CORPORATIONS

\_\_Dixwell Neighborhood Corp., 226 Dixwell Ave.

\_\_\_Fair Haven Neighborhood Corp., 339 Grand Ave. Newhallville Neighborhood Corp., 110 Sheffield Ave.
 West Rock Neighborhood Corp., 132 WI'mot Rd.
 Lovell Comm. Center, 37 Jefferson St., New Haven, CT East Shore Neighborhood Corp., 219 Farren Ave. East Rock Community Corp., 49 Cottage St., Att: Duff Leavitt OTHER AGENCIES \_\_Assoc. of Black Clergy, 150 Dwight St. \_\_ 5lack Coalition, 140 Goffe St. \_\_\_Black Women's Caucus, Mrs. Jacquelyn Bracey, 99 Rock Creek Rd. Business & Professional Men's Assoc., Mr. Richard Dowdy Jr., Mr. Samuel Jones, 226 Dixwell Ave. C.A.R.P. (Center for Advocacy, Research & Planning), 33 Whitney Ave. \_\_\_Career Advisory & Placement Center, 215 Park St. \_\_\_\_\_Information & Counseling Service for Nomen, Candace Farnell, 301 Crown St. \_\_\_\_\_Junta for Progressive Action, 622 Howard Ave. Carlos Rodriquez, Executive Director \_\_\_\_\_Yedic Program, Conn. State Health Dept., 79 Elm St., Hartford, CT \_\_\_\_\_\_New Haven Pretrial Services Council, 5 Elm St. \_\_ Opportunities Industrialization Center, 155 Shelton Ave., New Haven, CT. --- Puerto Rican Advisory Committee, c/o Maria Valentine, Pres., 54 Artizan St. \_\_\_\_\_Puerto Rican Youth Services, Fred Perez, Dir., 622 Howard Ave. Recruitment & Training Program, 156 Dixwell Ave. Rehabilitation Program for Alcoholics, 84 Norton St. \_\_\_Resume Bank Director Puerto Rican Center, U-188 Univ. of CT, Storrs, CT Second Star of Jocob, 244 Poplar St. Spanish Cultural Assoc., 312 Congress Ave., Celestino Cordova \_\_\_\_ Urban League of Greater New Haven, 1184 Chapel Street, New Haven, CT \_\_\_W.H.E.E. - Sage Advocate, 53 Wall St. \_\_\_Women's Liberation Center, 148 Orange St. Scone School of Business, 55 Church St. Connecticut State Labor Employment Service, 634 Chapel St. San Juan Festival, c/o Francesca Cruz, Fair Haven Library, 182 Grand Ave., New Haven, CT Department of Adult Probation, Mr. Flannigan Smith, 188 Bassett Street, New Haven, CT Chapel Haven, 1040 Whalley Ave., New Haven, CT \* Division of Vocational Rehabilitation, Conn. State Dept. of Education, One State St, New Haven ESPOID One State St., New Haven, CT ¥ Conn. Mental Health Center, Personnel Office, 34 Park St., New Haven, CT
 PSE Veteran's Program, 59 Whitney Ave., New Haven, CT
 Ceterans' Administration Hospital, Personnel Office, West Spring St., West Haven, CT — Aldermanic Minority Caucus, Andrea Scott, One Diswell Plaza
 — Ultra for Progressive Action, Ms. Josie Martinez, Employment Coordinator
 — St. Lakes Church, c/o Jeff Gorley, 11 Mhalley Ave., New Haven, CI Mr. Edward Fortes. New Haven Foundation, One State St., New Haven, CT Ismael R. Chavez, 270 Chapel Street, New Haven, CI

## JOB VACANCY NOTICE DISTRIBUTION LIST

•

. ·

.

OTHER AGENCIES (Cont'd)
The National Association of Black Social Workers, Inc., New Haven, CT Chapter, P.O. Box 1267, New Haven, CT 06505
New England Co-operative Training Institute, 216 Crown St., Rm. 404, New Haven, CT Mr. Kobina Bonney, PAC, 210 Davenport Ave., New Haven, CT The Arts Council of Greater New Haven, 110 Audubon St., New Haven, CT 06511
Hill Model Childrens Center, 34-B Cinque Green, New Haven, CT 06515
OIC, 232 North Elm Street, Waterbury, CT 06702 Ms. Orlaine Hartman, Field Worker, American Indians for Development, Box 117 Meriden, CI 06450
Mr. John Henyard, Director, Veteran's Assistance Assoc., 266 Dixwell Ave., New Haven C
Ms. Christine Hilton, Director, A. Phillip Randolph Institute, 316 Dixwell Ave., New Haven, CT
Policy Analysis, 195 Church St., (13th Floor) Att: Doris Zelinsky
Foote School Nothers Employment Workshop, c/o Mrs. Margaret Palmieri, 60 Rockwood Road, Hamden, CT 06514
Board of Education - Head Start Program, 197 Dixwell Ave., New Haven, CT
Elm Haven Community Head Start Program, 52 Webster Street, New Haven, CT
Dept. of Epidemicology/Public Health, Yale University/School of Medicine, 60 College Street, Room 105, New Haven, CT 06510
Atwater Senior Center, c/o Ann Cusano, Director, 26 Atwater St., New Haven, CT 06513
The Women's Employment Resource Center, 216 Crown St., Rm. 405, New Haven, CT 06510

•

## APPENDIX G

# Posting Project Data Card

#### CITY OF NEW HAVEN

The City of New Haven receives money from the federal government and must, therefore, provide equal employment opportunities for all people applying for jobs. As part of the City's work to promote affirmative action, we are asking that all applicants complete the questions below. Completing this information is voluntary and refusing to provide it will not affect your application. With your help, however, we hope to improve the ways in which our city meets the needs of qualified job applicants.

- 1) Please check ( $\checkmark$ ) which agency, if any, referred you for this job:
  - () DVR (Dept. of Vocational Rehabilitation)
  - () Easter Seal Goodwill Industries Rehabilitation Center
  - ()CMHC (Conn. Mental Health Center)
  - () RESPOND
  - () Projects With Industry
  - ( ) Other Agency. Please specify:

Do you consider yourself disabled? 2)

3) Do you have any physical or mental health condition which limits the kind of work you can do? () Yes () No Please explain:

(Please turn over)

-354-

#### (Side 2)

 4) Do you have any physical or mental health condition which limits the <u>amount</u> of work you can do? () Yes () No

-									•		٠		
μ		ρ	a	S	ρ	е	Y	n	1	а	٦.	n	•
-	-	$\sim$	ч	~	~	<u> </u>	~	~	-	u	-		•

5) If you answered yes to questions 2, 3 or 4, please explain what kind of health condition you have. Please also explain how your activities are limited. (For example, if you have a serious back problem, you should write down that you cannot lift heavy boxes.)

6) Do you think you might need help taking the civil service test because of your disability?
() Yes
() No

- 7) Do you need any information about the civil service test for the position for which you are applying? () Yes () No
- 8) If you think you need information or help on the civil service test, please write down your phone number below. If you do not have a phone, please give us another way of reaching you.

Name:		Date:
Position Applied Fo	or:	
Phone Number or Oth	ner Way to Reach	You:

City of New Haven, Human Resources Administration

## APPENDIX II

Selected Characteristics of New Haven Self-Registration Questionnaire Respondents

#### SELECTED CHARACTERISTICS OF NEW HAVEN SELF-REGISTRATION QUESTIONNAIRE RESPONDENTS: PERCENTAGE DISTRIBUTION

	1977 Self-Registration Questionnaire (a, b)				
Age	All Disabled	Employed	Seekers		
16-20	9.1%	9.8%	8.8%		
21-25	10.8	20.7	10.3		
26-35	20.9	26.1	25.3		
36-45	17.6	16.3	23.2		
46-64	28.4	21.7	26.8		
Unknown/Missing/Other	13.2	5.4	5.6		
Total	100.08	100.0%	100.08		
Education					
Less Than High School	41.8	31.9	39.2		
High School	20.9	19.8	27.5		
More Than High School	32.9	48.3	33.3		
Unknown/Missing	4.4	-			
Total	100.08	100.0%	100.0%		

(a) <u>Source</u>: Joseph J. Houska, "Report of Findings: Self-Registration Survey of the Handicapped," ed. Deborah Schreiber, City of New Haven (HEW/RSA Grant 15-P-59030/1-01), 1977.

(b) N = 483 for all disabled, including those not in labor force; N = 92 employed; N = 195 seeking work (59% of the respondents).

#### NEW HAVEN SELF-REGISTRATION QUESTIONNAIRE RESPONDENTS: PERCENT DISTRIBUTION OF CURRENT AND LATEST OCCUPATIONS

	1977 Self-Registration Questionnaire (a, b)DisabledEmployedSeekers				
Professional and Managerial	-	22.2%	23.48		
Clerical and Sales	-	25.9	28.1		
Craftsmen and Operatives	-	17.3(c)	17.0(e)		
Farmers and Farm Laborers	. –	-	- L	•	
Service Workers and Laborers	-	34.6(d)	ن 41.7(f) ب		
Other	-				
Total		100.0%	<u>110.2%(q)</u>		

(a) Source: Joseph J. Houska, "Report of Findings: Self-Registration Survey of the Handicapped," ed. Deborah Schreiber, City of New Haven (HEW/RSA Grant 15-P-59030/1-01), 1977. See also infra, Chapter Appendix A.

(b) N = 483 for all disabled, including those not in labor force; N = 92 employed; N = 195 seeking work. See infra, Chapter Appendix A.

(c) Includes semi-skilled (9.9%) and crafts (7.4%).

(d) Includes all unskilled workers (11.1%) and service workers (23.5%).

(e) Includes skilled (6.4%) and semi-skilled (10.6%).

(f) Includes unskilled (8.9%) and service (32.8%).

(g) Multiple responses included.

#### NEW HAVEN SELF-REGISTRATION QUESTIONNAIRE RESPONDENTS: PERCENT DISTRIBUTION OF PHYSICAL AND MENTAL CONDITIONS

Condition	1977 Self-Registration Questionnaire (a, b) All Disabled
Musculoskeletal	33.0%
Cardiovascular	11.4
Respiratory	3.5
Digestive	-
Mental	32.3
• Nervous System	3.7
Sensory Hearing Visual	12.4 5.8 6.6
Other and Unknown	32.8

(a) Source: Joseph J. Houska, "Report of Findings: Self-Registration Survey of the Handicapped," ed. Deborah Schreiber, City of New Haven (HEW/RSA Grant 15-P-59030/1-01), 1977.
 (b) N = 483 for all disabled, including those not in labor force; N = 92 employed; N = 195 seeking work.

-358-

APPENDIX I

Practitioner Evaluation Questionnaires

•

Agency Counselor Evaluation of On-the-Joh Training Linkage with C.J.D.U. Vocational Rehabilitation Grant City of New Haven/HRA 777-7491 Judith Richter, Associate Deborah Schreiber, Director

I. THE FOLLOWING QUESTIONS REFER TO JOB ORDERS FOR ON-THE-JOB TRAINING CONTRACTS.

Q: How were you made aware of the On-the-Job-Training Job Orders, as they were developed?
A:

Q: How were your clients informed of the On-the-Job-Training Job Orders? A:

 Q: If you referred a client to the Central Job Development Unit, how did you get feedback on what happened there?
 A:

 $\ensuremath{ \ensuremath{ 0} :}$  How did you get feedback on what happened with potential employers? A:

 Q: Did you have any clients who you referred to the Central Job Development Unit for specific Job Orders, but who never actually went to 634 Chapel Street? (Please give any ideas you have on why these individuals did not follow through.)
 A:

Q: With what Central Job Development Unit counselors have you had contact? What relationships have you established with them? (Please include all aspects, whether negative or positive.)

(Please turn over)

Q: How well does this linkage to the CJDU function for your clients who are trying to find jobs? Please include such areas as: how suitable the OJT openings are for your clients;
 how quickly you receive notice of the openings; (3) the eligibility of your clients for the openings (according to Federal Poverty Guidelines) at the Central Job Development Unit; (4) procedure to be followed by client when he/she goes to pursue an OJT opening;
 (5) services/assistance offered by counselors at 634 Chapel (Intake & Central Job Development Units); (6) Employer response to client(s) referred. A: . Q: What do you see now as the positive aspects of this linkage, as it now operates? Ă: Q: How has the linkage changed your job placement strategy for your clients? Ā: Q: What specific things could be done to improve this linkage? Ā: Q: What other kinds of aid from a Chamber of Commerce or a coordinating person. such as Judy Richter, could be useful to you in the job placement process? A: Would you like to be provided with the income criteria used by the City in determining a client's eligibility for OIT openings? YES NO
 Would having these criteria affect your referrals to the CIDU: YES NO

-361-

Agency Counselor Evaluation of Mini Profile Listing Vocational Rehabilitation Grant City of New Haven/HRA 777-7491 Judith Richter, Associate Deborah Schreiber, Director

11. THE FOLLOWING QUESTIONS REFER TO JOB READY CLIENT LISTING - "MINI-PROFILES".

Q: How did you decide which clients to refer for the listing (i.e., what criteria did you use)?
A:

Q: What, in your opinion, makes a client "job ready"? A:

 Q: If you have not referred any clients to the listing, describe your reasons. (Please be detailed and frank.)
 A:

Q: What do you see to be the uses and advantages of the listing, as it is now prepared? A:

Q: What are the drawbacks to the listing, as it is now prepared? A:

.

(Please turn over)

 Q: Please describe any negative experiences you and/or your clients have had with relation to the listing.

 R:

 Q: Did having the listing readily available as a placement aid change your job placement strategy for your clients in any way? Please describe how.

 A:

 Q: If no employer inquiries were received on the clients you referred to the listing, what do you suspect were the reasons?

 Q: What could be done to improve the listing's effectiveness and usefulness as a job placement tool for the disabled?
 A:

 $\underline{\varrho}{:}$  If the listing is continued, will you refer more clients in the future? A:

Q: How do you feel the Chamber of Commerce could further assist in the job placement process:
A:

Thank you for your cooperation!

.

Please describe any positive experiences you and/or your clients have had

.

with relation to the listing.

Q:

R:

A:

-----

#### SELECTED BIBLIOGRAPHY

- Becker, Howard. <u>Outsiders</u>. New York: The Free Press, 1963.
- Becker, Howard. The Other Side. New York: The Free Press, 1964.
- Becker, Howard. "Whose Side Are We On?" <u>Social</u> Problems 14 (Winter 1967), 239-47.
- Bellante, Donald M. "A Multivariate Analysis of a Vocational Rehabilitation Program." Journal of Human Resources (Spring 1972), 226-41.
- Berkowitz, Monroe; Johnson, William G.; and Murphy, Edward H. <u>Policy and the Determinants of</u> <u>Disability</u>. Princeton: Rutgers University Press, 1975.
- Berkowitz, Monroe, and Rubin, Jeffrey. "The Costs of Disability: Estimates of Program Expenditures for Disability, 1969-1975." Mimeographed. Bureau of Economic Research. Rutgers University. August 1977.
- Burkhauser, Richard, and Haveman, Robert. <u>Disability</u> and Work: The Economics of American Policy. Baltimore: The Johns Hopkins University Press, 1982.
- City of New Haven. Human Resources Administration. "Employer Questionnaires." Prepared by the Industrial Social Welfare Center, Columbia University, 1977.
- City of New Haven. Human Resources Administration. "Fall 1978 Preliminary Assessment: OJT Linkage and Job-Ready Listing Linkage." By Judith Richter. HEW/RSA Grant 15-P-59030. November 1979.
- City of New Haven. Human Resources Administration. "Innovative Job Opportunities for the Disabled: A Cooperative Effort of the City of New Haven, the Chamber of Commerce, and the Easter Seal Goodwill Rehabilitation Center." Revised Grant Application RD13-627. Federal Identification Number 15-P-59030/1-01. December 30, 1976.

- City of New Haven. Human Resources Administration. "Internal Review: Posting Project." Draft working paper prepared by Michael Paul Thomas under HEW/ASA Grant 15-P-59030. January 1979.
- City of New Haven. Human Resources Administration. "Report of Findings: Self-Registration Survey of the Handicapped." Prepared by Joseph J. Houska under HEW/RSA Grant 15-P-59030. October 1977.
- City of New Haven. Human Resources Administration. "Working Paper: Tier 2-Agencies." Prepared by New Haven Consortium for HEW/RSA Grant 15-P-59030/1-01. July 7, 1977.
- City of New Haven. Human Resources Administration. Grant Extension. Federal Identification Number 15-P-59030/1-01. July 7, 1978.
- Collignon, Frederick C., and Dodson, Richard. <u>Benefit-Cost Analysis of Vocational</u> <u>Rehabilitation Services Provided to Individuals</u> <u>Most Severely Handicapped</u>. Berkeley: Berkeley <u>Planning Associates</u>, 1975.
- Conley, Ronald. "A Benefit/Cost Analysis of the Vocational Rehabilitation Program." Journal of Human Resources (Spring 1966).
- Coute, Luca E. "Manpower Policy and the Disabled Person: An International Perspective." <u>Rehabilitation Literature</u> Vol. 43 No. 5-6 (May-June 1982), 130-135.
- Davis, F. "Deviance Disavowal: The Management of Strained Interaction by the Visibly Handicapped." <u>The Other Side</u>. Edited by Howard Becker. New York: The Free Press, 1964.
- Deutsch, Morton, and Collins, Mary Evans. "Interracial Housing." <u>American Social</u> <u>Patterns</u>. Edited by William Peterson. New York: Doubleday Anchor Books, 1956.

- Echols, F.H. "Work Inc.: A Demonstration of Personal Adjustment and Intensive Placement Techniques with Difficult to Place Disabled People in an Area of High Unemployment Incidence." Department of Vocational Rehabilitation, Tallahassee, Florida 32303. RD-1215.
- Erikson, Kai. "Notes on the Sociology of Deviance." <u>The Other Side</u>. Edited by Howard Becker. New York: The Free Press, 1964.
- Fraser, Robert T. "Rehabilitation Job Placement Research: A Trend Perspective." <u>Rehabilitation</u> Literature Vol. 39 No. 9 (September 1978), 258-264.
- Gans, Herbert. <u>The Urban Villagers</u>. Glencoe, Illinois: The Free Press, 1962.
- Goldberg, Richard T. "Current Issues in Rehabilitation Research." <u>Rehabilitation</u> Literature Vol. 37 No. 3 (March 1976), 66-70.
- Gove, Walter. "Societal Reaction Theory and Disability." <u>The Sociology of Physical</u> <u>Disability and Rehabilitation</u>. Edited by Gary Albrecht. University of Pittsburgh Press, 1976.
- Goffman, Erving. <u>Asylums</u>. New York: Anchor Books, 1961.
- Haber, L.D. "Disabling Effects of Chronic Disease and Impairment." Journal of Chronic Diseases, 24:469-487.
- Haber, L.D. "Disabling Effects of Chronic Disease and Impairment: II. Functional Capacity Limitation." Journal of Chronic Diseases, 26:127-151.
- Kitsuse, John. "Societal Reaction to Deviant Behavior: Problems of Theory and Method." <u>The</u> <u>Other Side</u>. Edited by Howard Becker. New York: The Free Press, 1964.

- Lemert, Edwin M. Human Deviance, Social Problems, and Social Control. Second Edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.
- Levitan, Sar A., and Taggart, Robert. "Employment Problems of Disabled Persons." <u>Monthly Labor</u> Review (March 1977), 3-13.
- Levitan, Sar A., and Taggart, Robert. Jobs for the Disabled: Policy Studies in Employment and Welfare. Number 28. Baltimore: The Johns Hopkins University Press, 1977.
- Liebow, Eliot. <u>Tally's Corner</u>. Boston: Little, Brown, 1967.
- McGee, Reece, et al. Sociology: An Introduction. Second Edition. New York: Holt, Rinehart and Winston, 1980.
- Mead, George. Mind, Self and Society. Chicago: University of Chicago Press, 1934.
- Merton, Robert K. "Social Structure and Anomie." American Sociological Review 3 (1938), 672-82.
- Merton, Robert K. <u>Social Theory and Social Structure</u>. Second Edition. Glencoe, Illinois: Free Press, 1957.
- Muckraking Sociology. Edited by Gary Marx. New Brunswick, New Jersey: Transaction Books, 1972.
- National Center for Health Statistics. <u>State</u> <u>Estimates of Disability and Utilization of</u> Medical Services. 1978.
- Olshansky, Simon. "Some Responses of Vocational Counselors to Job Placement." <u>Rehabilitation</u> <u>Literature</u> Vol. 42 No. 1-2 (January-February 1981), 23-25.

- Olsen, Susan M. "Affirmative Action Laws for People With Handicaps: Problems of Enforcement." Presented at the National Meeting of the Law and Society Administration. Minneapolis, Minnesota, May 18-20, 1978.
- Polka, Joseph A. <u>Final Report: Household Survey of</u> <u>Noninstitutionalized Handicapped Population -</u> <u>City of New Haven</u>. Southern Connecticut State College. Subcontract to City of New Haven, HEW/RSA Grant 15-P-59030/1-01. November 1977.
- Rehab Group, Inc. <u>Digest of Data on Persons With</u> <u>Disabilities</u>. Prepared under contract to the Congressional Research Service, Library of Congress. May 1979.
- Riley, Matilda White. <u>Sociological Research</u>. New York: Harcourt Brace, Inc., 1963.
- Rosenhan, D. L. "On Being Sane in Insane Places." Science 179 (January 19, 1973), 250-258.
- Safilios-Rothschild, Constantina. "Disabled Persons' Self-Definitions and Their Implications for Rehabilitation." <u>The Sociology of Physical</u> <u>Disability and Rehabilitation</u>. Edited by Gary Albrecht. University of Pittsburgh Press, 1976.
- Schon, Donald. "The Blindness System." <u>The Public</u> Interest No. 18 (Winter 1970), 25-38.
- Schur, Edwin. Labelling Deviant Behavior. New York: Harper and Row, 1971.
- Scott, Robert A. <u>The Making of Blind Men</u>. New York: Russell Sage, 1969.
- Sussman, Marvin. "The Disabled and The Rehabilitation System." <u>The Sociology of Physical Disability</u> <u>and Rehabilitation</u>. Edited by Gary Albrecht. University of Pittsburgh Press, 1976.
- Thomas Buckle, Suzann, and Buckle, Leonard G. Bargaining for Justice: Case Disposition and Reform in the Criminal Courts. New York: Praeger, 1977.

Tseng, M. S., and Zarega, W. Dennis. "The Intake, Process, and Outcome Performance of Vocational Rehabilitation in the Field." <u>Rehabilitation</u> <u>Literature Vol. 37 No. 11-12 (November-December</u> 1976), 343-346.

- U.S. Bureau of Census. <u>Survey of Income and</u> Education, 1976. In <u>Digest of Data on Persons</u> With Disabilities. Rehab Group, Inc., 1979.
- U.S. Department of Health, Education and Welfare. Rehabilitation Services Administration. "Job Development and Job Placement for the Severely Disabled." <u>R & E Strategy</u>, Fiscal Year 1976.
- U.S. Department of Health, Education and Welfare. Social Security Administration. Office of Research and Statistics. <u>First Findings of the</u> <u>1972 Survey of the Disabled</u>. By Kathryn H. Allan.
- U.S. Department of Health, Education and Welfare. Social Security Administration. Office of Research and Statistics. <u>General Characteris-</u> <u>tics of the Recently Disabled</u>. By Mildred Cinsky and Edward Steinberg. Report No. 4. DHEW Publication No. (SSA) 76-11716. April 1976.
- U.S. Department of Health, Education and Welfare. Social Security Administration. <u>Work Adjustment</u> of the Recently Disabled. By Edward Steinberg. Report No. 3. January 1976.
- U.S. Department of Health, Education and Welfare. Social Security Administration. <u>Rehabilitation</u> of Disabled Adults, 1972. By Ralph Treitel. Report No. 3. DHEW Publication No. 77-11717. May 1977.
- U.S. Department of Health, Education and Welfare. Social and Rehabilitation Service. National Center for Social Statistics. "Quarterly Cumulative Caseload Report" for Fiscal Years 1977, 1978, 1979, 1980. Connecticut State Department of Vocational Rehabilitation.

- U.S. Department of Health, Education and Welfare. Social Security Administration. Unpublished data from the <u>1974 Follow-Up Survey of the</u> <u>Disabled and Nondisabled</u>. In <u>Digest of Data on</u> <u>Persons with Disabilities</u>. Rehab Group, Inc., 1979.
- Wan, T.T.H. "Correlates and Consequences of Severe Disabilities." Journal of Occupational Medicine, 16:234-244.
- Ware, E.L. "Some Social Factors in Job Placement and Community Life of the Handicapped." RD-0035, 11533. Garden City, New York: Adelphi College, 1958.
- Whyte, William F. <u>Street Corner Society</u>. Chicago: University of Chicago Press, 1955.
- Worrall, John D. "A Benefit-Cost Analysis of the Vocational Rehabilitation System." Journal of Human Resources (Spring 1978), 285-98.