



*Achievements  
and Challenges:*

A FIVE-YEAR REPORT  
ON THE STATUS OF THE  
NATIONAL SUPPORTED  
EMPLOYMENT INITIATIVE

*1986-1990*

Rehabilitation Research and Training Center  
School of Education  
Virginia Commonwealth University

*ACHIEVEMENTS AND CHALLENGES:  
A FIVE-YEAR REPORT ON THE STATUS OF THE  
NATIONAL SUPPORTED EMPLOYMENT INITIATIVE*

*FY 1986 -1990*

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## *Executive Summary*

Since 1988, the Virginia Commonwealth University Rehabilitation Research and Training Center on Supported Employment (VCU-RRTC) has conducted an ongoing investigation of supported employment funding and implementation in state vocational rehabilitation (VR) systems. The purpose of the investigation is to (1) gauge the progress that has been made in incorporating supported employment into the existing rehabilitation service system; (2) identify national trends regarding major policy issues such as the availability of ongoing support services, the effect of supported employment on existing services, and the extent to which supported employment programs are serving individuals with the most severe disabilities; and (3) identify the amount and sources of funds that states have obligated to operate supported employment programs. The purpose of this report is to present results from the FY 1990 survey, along with a five-year longitudinal analysis of the national supported employment initiative.

The study respondents consisted of representatives from the vocational service provider agencies from the 50 states and the District of Columbia, with data obtained in FY 1990 from all 51 systems. The investigation focused on each state's VR agency or other agency responsible for administering supported employment programs. Because supported employment by statutory definition encompasses both time-limited services funded by the VR agency and extended services funded by non-VR sources, the scope of the study also included other state-level agencies known to be involved in providing or funding supported employment services.

A number of major findings and trends were identified from the 1990 survey and the subsequent comparisons made to the results from prior surveys:

1. For FY 1990, state VR systems identified a total of 74,657 supported employment participants, of whom 30,872 (41.4%) were receiving time-limited services and 43,785 (58.6%) were receiving extended services. These should be considered as minimum numbers, as several states were unable to provide data for individuals known to be involved in supported employment, for example those receiving extended services. The overall supported employment program increased by 43.5% over the FY 1989 totals. In relation to overall state population, the largest numbers of supported employment participants were in the Connecticut, Minnesota, Alaska, and Vermont systems.
2. Persons with mental retardation and mental illness continue to be the primary groups involved in supported employment. The percentage of persons with long-term mental illness has increased dramatically over the course of two years, with relative percentages of persons with other primary disabling conditions decreasing.
3. Nationally, persons with mild mental retardation constituted 48.8% of all persons with mental retardation in supported employment, those with moderate mental retardation 36.0%, severe or profound mental retardation 12.2%, and borderline retardation 3.0%. From FY 1988 to FY 1990, relative percentages across severity levels have changed little. Persons with mild mental retardation continue to be the primary recipients of service among those with a primary diagnosis of mental retardation.

4. Nationally, a total of 10,667 Status 26 closures were reported, and 2,779 Status 28 closures. Status 26 and 28 case closures increased by approximately 60% from FY 1989 to FY 1990, mirroring the overall growth of supported employment participants.
5. A total of 2,647 provider agencies were reported for FY 1990. Most provider agencies had expanding services to include supported employment (59.9%), followed by those which were downsizing or terminating other day services (21.2%), those with no prior history of providing traditional day services (16.1%), and others (2.9%). From FY 1988 to FY 1990, the growth rate of new provider agencies has declined to approximately 16% annually after the initial surge of program development that occurred from FY 1986 to FY 1988.
6. Of all supported employment participants for whom a program model could be specified, 73.1% were in individual placement, 17.1% were in enclaves, 8.6% were in mobile work crews, and the remaining 1.3% were in small business or other types of supported employment programs. From FY 1988 to FY 1990, the relative percentage of persons in individual placements has increased dramatically (approximately 21 percentage points), while the percentage of persons in group employment alternatives (particularly mobile crews) has decreased substantially.
7. As in prior surveys, most state systems had identified extended service funding sources for supported employment participants with mental illness (42 states) and mental retardation (47 states). Fewer states reported extended services sources for persons with cerebral palsy, TBI, sensory impairments, and members of other disability groups. Compared to prior surveys, there was an apparent decrease in the number of systems reporting the availability of extended services funding for participants with mental illness, TBI, and hearing impairment.
8. A weighted mean hourly wage of \$3.87 and a mean weekly wage of \$102.34 for all participants in supported employment were calculated. Nationally, 80.9% of all supported employment participants work at least 20 hours per week. In comparison to the FY 1988 survey, these findings indicate a very small increase in the average hourly wage of supported employment participants in relation to the prevailing minimum wage, and an increase in the percentage of supported employment participants working at least 20 hours per week.
9. Reported annual costs for supported employment were highly variable across states. There was also considerable variability in the relative obligations of the VR agency and extended service funding agencies. However, cost data across models and across time-limited and extended services were limited, precluding estimates of national averages of supported employment costs.
10. A total of \$73,026,438 of RSA funds were known to have been expended by the states in FY 1990 for supported employment services. Of this total, \$7,615,813 was attributed to Title III systems change grants, \$29,512,919 to Title VI, Part C funds, and \$35,897,706 to Title I funds. Title III funding decreased from FY 1989 to FY 1990 because only 17 states received Title III grants in FY 1990 compared to 27 in FY 1989; however, the use of Title I Basic State Grant funds for supported employment doubled from FY 1989 to FY 1990.

11. Identified non-RSA funds totaled \$216,654,363, or roughly three times the amount of RSA expenditures. The majority of state systems utilized and provided specific expenditure amounts for state VR general revenue funds (including state match to Title I), mental retardation/developmental disability agency funds, and mental health agency funds, with these sources accounting for approximately 84% of all non-RSA expenditures. Fewer than half of the state VR systems used funds from Medicaid, education, DDPC's, or other sources.
12. An analysis of identified expenditures for supported employment as a function of state wealth revealed that Vermont, New Hampshire, Connecticut, North Dakota, and Wyoming had the highest expenditure rates. However, because many states could not specify the amounts of money from various funding sources, the rankings of state systems should be viewed as relative rather than absolute indicators of state fiscal effort.

A number of achievements were identified by the RSA and state VR systems in the supported employment initiative. These include:

Increasing numbers of individuals in supported employment, and states are continuing to improve on supported employment participant tracking;

Increasing participation by persons with disabilities other than mental retardation, most notably individuals with mental illness, in supported employment programs;

Increasing numbers of provider agencies;

Continuing growth in successful case closures (Status 26) that outpace unsuccessful closures (Status 28) by nearly a 4-to-1 margin;

- Increasing use of individual placement approaches rather than group placement options;
- Increasing proportions of supported employment participants working at least 20 hours per week;

A continuing increase in the amounts of non-RSA funds being used to fund supported employment services.

Although the supported employment initiative has made significant progress in transforming vocational services for persons with severe disabilities, a number of challenges remain:

- Increased participation by persons with more severe disabilities, and in particular those with severe and profound mental retardation;  
Encouraging provider agencies to shift resources from segregated day programs to integrated work options;
- Increasing the financial remuneration for supported employment participants;
- Finally, developing extended services funding sources for all supported employment participants, and particularly those with disabilities other than mental retardation and mental illness.

# *Introduction*

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## *Introduction*

### *Overview of the RSA Supported Employment Initiative*

The 1980's witnessed the evolution and expansion of a vocational service technology for persons with severe disabilities known as supported employment. The national proliferation of supported employment services has been fueled by consumer and advocacy group efforts, changing attitudes about the roles and capabilities of persons with disabilities in the work force and in their communities, research and demonstration projects, and federal policy and funding initiatives.

The Rehabilitation Services Administration (RSA) of the Department of Education has directed policy and funding initiatives to promote the development of supported employment service opportunities in all 50 states and the District of Columbia (DC). In 1985 the RSA awarded five-year discretionary grants to 10 states and to an additional 17 states in 1986. These projects were designed to foster systems change from readiness oriented, segregated pre vocational services for persons with severe disabilities to paid, community integrated employment opportunities with ongoing job site supports. These grants from Title III of the Rehabilitation Act were followed in 1987 by the Title VI, Part C formula grants available to vocational rehabilitation (VR) agencies in all 50 states and DC to provide funds for the provision of supported employment services. The continuing federal initiative has resulted in the establishment of a substantial number of supported employment provider agencies, increased funding of services by state VR and non-VR agencies, and the inclusion of thousands of persons with severe disabilities in the VR service system (Kregel, Shafer, Wehman, & West, 1990; Rehabilitation Research and Training Center on Supported Employment, 1990, 1991; Shafer, Kregel, Wehman, & West, 1990; Shafer, Revell, Kregel, Wehman, & West, in press).

Since 1988, the Virginia Commonwealth University Rehabilitation Research and Training Center on Supported Employment (VCU-RRTC) has conducted an ongoing investigation of supported employment funding and implementation in state VR systems. The purpose of the investigation is to: (1) gauge the progress that has been made in incorporating supported employment into the existing rehabilitation service system; (2) identify national trends regarding major policy issues such as the availability of ongoing support services, the effect of supported employment on existing services, and the extent to which supported employment programs are serving individuals with the most severe disabilities; and (3) identify the amount and sources of funds that states have obligated to operate supported employment programs. In this report results from the FY 1990 survey will be presented, along with a five-year longitudinal analysis of the national supported employment initiative.

### *Definition of Supported Employment*

The intent of the survey is to move beyond a simple accounting of the individuals served through the Title VI-C program and identify all supported employment activity occurring in each state regardless of funding source or administering agency. As such, persons in supported employment were defined as those individuals who were employed at some point in time during FY 1990 and receiving either time-limited transitional employment services or extended support



services in accordance with the Title VI-C regulations pertaining to competitive work, integrated work setting, and extended services. The state VR system was the funding source for time-limited services through the Title I or Title VI-C programs and the state mental health and mental retardation/developmental disability (MR/DD) agencies were the primary funding sources for extended services.

However, some situations were found which did not fit this overall pattern. For example, several states had supported employment participants receiving extended services who had received time-limited training from educational systems or other non-VR agencies. In addition, some states had confirmed supported employment participants who were receiving extended services through unconventional funding or service delivery routes, such as insurance companies, private businesses, or non-profit organizations. In determining a state's supported employment population in these types of situations, two criteria were considered. First, the supported employment services must have been provided in accordance with the federal supported employment regulations. That is, persons performing volunteer work, group employment options with more than eight people, and persons not receiving on-going extended services were specifically excluded from the total. Second, individuals served through these types of arrangement were only included if the state was capable of providing precise totals of the number of persons participating and other specific information about these individuals. General estimates were not accepted for inclusion in the survey totals.

A different definition was employed for the survey item pertaining to new vocational rehabilitation clients served in FY 1990. "New clients" were identified as those individuals for whom a supported employment outcome was planned as a component of the Individualized Written Rehabilitation Plan (IWRP). New clients were not necessarily employed or directly receiving supported employment services during the reporting period.

### *Overview of the Supported Employment Policy Analysis Study*

*Respondents.* The study respondents consisted of representatives from the vocational service provider agencies from the 50 states and the District of Columbia, with data obtained in FY 1990 from all 51 systems. Because of data system anomalies, no state was capable of responding to every question. Thus, the survey sample for each item was smaller in number than the total respondent pool. In presenting aggregated data in this report, the number of states capable of responding to the specific question will be given along with the totals.

The investigation has focused on the state VR agency or other agency responsible for administering supported employment programs. Because supported employment by statutory definition encompasses both time-limited services funded by the VR agency and extended services funded by non-VR sources (*Federal Register*, August 14, 1987), the scope of the study also included other state-level agencies known to be involved in providing or funding supported employment services.

*Instrument development and modification.* The *Survey of Supported Employment Implementation* was used to collect data on a wide range of supported employment issues and practices. This instrument was initially developed by the VCU-RRTC in 1988 with collaboration with officials from the National Institute on Disability and Rehabilitation Research (NIDRR) and

the RSA, who provided insight into critical issues for future federal and state policy formulation. A draft instrument was sent to a group of 20 key professionals, 12 of whom were project directors of systems change projects, to assess content and format. Federal officials from NIDRR, RSA, and the Department of Education Office of Planning and Budget made recommendations for modifications to the draft instrument. The Employment Network at the University of Oregon and the Illinois University Affiliated Program and the state Mental Retardation agencies in Connecticut and Virginia also provided technical assistance regarding the survey design. Finally, valuable input and support was provided by the Supported Employment Task Force and Research Committee of the Council of State Administrators of Vocational Rehabilitation (CSAVR).

Based upon input from these officials, a final version of the survey instrument was prepared for dissemination. Information pertaining to Fiscal Years 1986 through 1988 were collected from the 27 states receiving Title III statewide systems change grants in the fall of 1988 and from the remaining 23 states in the spring and summer of 1989. In subsequent years, data collection has occurred annually. The *Survey of Supported Employment Implementation* has undergone a number of evolutionary refinements based on the data that projects are able to provide and to keep pace with emerging issues and practices in supported employment (see Table 1). However, key data elements have been consistently requested, including:

1. The number of persons in supported employment positions across service models;
2. Annual cost per individual participant across service models;
3. The number of persons served in alternative day programs such as work activity centers or psychosocial rehabilitation programs;
4. The number of new VR clients for whom a supported employment outcome was planned as a part of an Individualized Written Rehabilitation Program (IWRP);
5. The number of supported employment participants closed successfully (status 26) or unsuccessfully (status 28) by the VR agency;
6. The total number of authorized providers of supported employment services and type of providers, and their strategy for providing services (i.e., conversion to supported employment, expansion of services to include supported employment, no prior vocational service history, and other);
7. The number of supported employment participants across primary disability classifications;
8. The numbers of supported employment participants across levels of mental retardation (MR) for those persons carrying a primary MR disability classification and type of long-term mental illness (LTMI) for those persons with a primary mental illness disability classification; and
9. The source and amounts of funds for time-limited and extended services.

Table 1

*Summary of VCU-RRTC State Supported Employment Surveys and Corresponding Publications*

Survey Period	States Surveyed	Publications
FY 1986 - 1988	27 Title III recipient states	Wehman et al., 1989 Kregel et al., 1989 Shafer et al., 1990
FY 1986 - 1988	All states	VCU-RRTC, 1990 Shafer et al., 1991
FY 1989	All states	VCU-RRTC, 1991 Wehman et al., 1990 Shafer et al., in press

*Instrument revisions for FY 1990.* Based upon response patterns from prior years, a number of revisions were made for the 1990 survey:

1. For participants and costs across program models and disability classifications, state representatives were requested to provide separate information for those participants in time-limited services and for those in extended services.
2. Items related to mean hourly wage and availability of ongoing support across disability classifications, which had been dropped in the FY 1989 version of the survey due to low response rates, were restored for the FY 1990 survey.
3. Prior surveys requested that states provide the total number of supported employment provider agencies and identify those agencies (a) converting to supported employment from alternative types of day services, (b) expanding services to include supported employment without a corresponding reduction of alternative types of day programs, (c) having no prior history of providing alternative day programs, and (d) others. It was believed that these definitions were overly restrictive and did not adequately allow states to report providers who were converting resources to provide or expand supported employment, but which did not intend to cease providing other types of day services. Therefore, the definition for "converting" agencies was altered to include those which were *downsizing* traditional day services and allocating those resources to supported employment, as well as those which had terminated or were planning to terminate other types of day services.
4. Prior years' surveys requested respondents to indicate use and amounts of funds allocated under the Job Training Partnership Act (JTPA) by Private Industry Councils (PICs) used for supported employment. For the FY 1990 survey, JTPA funding was not specifically requested due to low response rates in prior years. Respondents could, however, include JTPA funds for FY 1990 in the "other" funding category.

5. Finally, respondents were asked to provide the total case expenditures for all VR services during FY 1990 to help determine relative levels of state effort in funding supported employment services.

*Procedure.* The data for FY 1986-1988 were obtained in two stages. First, the project managers of the 27 Title HI systems change grants were surveyed during the summer and fall of 1988. The remaining 23 states and DC were surveyed in mid-1989. Within each state, information was collected from state agencies of vocational rehabilitation, mental retardation/developmental disabilities, mental health, and other state-level agencies responsible for funding or providing vocational and/or day support services to individuals with disabilities.

The FY 1990 update was forwarded to the 50 states and DC representatives in late 1990. As in previous years' surveys, a primary representative in each VR system, typically the supervisor or director of supported employment programs, served as the primary point of contact, with secondary sources from other agencies contacted as needed to provide or verify data. Again, for states with a VR agency for persons with visual handicaps separate from the general VR agency, the responses for both VR agencies were combined into one state system response. Data received from each state were clarified via telephone contact with the primary and secondary respondents, and a state profile was returned to the primary respondent for final verification.

## *Summary of Major Findings*

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### *Introduction to the Section*

The ability of individual state systems to report data specific to their supported employment activities improved considerably during the five fiscal years surveyed by the VCU-RRTC. Management information systems for supported employment programs vary substantially across states. State vocational rehabilitation agencies are now able for the most part to report the number of participants and dollars expended in the time-limited component of their supported employment program. Many extended service funding agencies have not yet developed reporting systems that match their VR counterparts. Reporting capacity on supported employment implementation continues to evolve. The supported employment implementation outcomes described in this report reflect both real growth in a number of key areas, such as the numbers of participants, programs, and funding amounts, and also reflect the continually evolving capacity of state systems to collect and report data on other types of outcomes, including wages, work hours, the availability of extended service funding agencies, and differential outcomes across supported employment program models.

Within each of the areas of study, findings from the FY 1990 survey will be presented, followed by a comparison of the FY 1990 results with those of prior state surveys conducted by the VCU-RRTC. Illustrative tables and graphs will follow each section.

## 1. Number of Individuals Served by Supported Employment Programs

### a. Supported employment participants in FY 1990

For FY 1990, state VR systems were able to identify a total of 74,657 supported employment participants, of whom 30,872 (41.4%) were receiving time-limited services and 43,785 (58.6%) were receiving extended services. Table 2 contains each state's total number of participants in time-limited and extended service phases. These totals should be considered as the minimum number of participants across the two service phases, as several state systems were unable to provide complete counts of supported employment participants. For example:

1. Some states (i.e., Alabama, Wyoming, Nebraska) were unable to supply information regarding individuals receiving extended services. Neither the VR service system nor the state mental health or MR/DD system had tracking mechanisms in place for determining the numbers of persons receiving extended services or other basic information for this group.
2. In some states, information could be supplied for only a limited number of persons receiving extended services. Typically in such cases, the states were developing mechanisms for tracking those participants. For example, Texas was able to provide information on extended service participants served by the VR blind agency, and not for those served by the general VR agency.
3. In a few states, information was available for only a portion of the states' supported employment participants receiving either time-limited or extended services. Other persons had previously been placed into supported employment programs prior to the states' incorporation of supported employment into the states' reporting systems.
4. One reporting state, Iowa, was unable to provide a count of either time-limited or extended service participants.

It would be logical that states with large populations (and presumably a potentially larger population of persons with disabilities) would have a larger pool of potential supported employment participants. To compare states on the relative size of their supported employment projects, it would therefore be necessary to adjust each to a standardized measure that counterbalances disparities in overall state population. Following the example of Braddock and his colleagues (Braddock & Fujiura, 1987, 1991; Braddock, Hemp, & Fujiura, 1986), the VCU-RRTC calculated each state's known supported employment population per 100,000 members of the total state population. The results of this calculation are presented in Table 3. Table 3 shows that four states had over 100 supported employees per 100,000 members of the general population, namely Connecticut (129.32), Minnesota (123.36), Alaska (106.35), and Vermont (100.58). Five states which were able to supply counts of supported employment participants (Ohio, Tennessee, Nevada, DC, and New Mexico) had fewer than 10 supported employees per 100,000 population. It should be noted, however, that because of incomplete reporting of supported employment participants by some states, the rankings presented here are based upon *known* supported employment participants. Because of the reporting difficulties of a number of states described previously, the rankings presented in Table 3 should be viewed as general indicators of the relative "sizes" of the state supported employment programs, and not as

indicators of absolute program effort. The median participation rate was 26.7 supported employees per 100,000 state population.



Table 2

*Supported Employment Participants by State for FY 1990:  
Time-Limited and Extended Services*

State	Time-Limited Svcs	Extended Svcs	Total
Alabama	711	0	711
Alaska	164	421	585
Arizona	714	266	980
Arkansas	242	112	354
California	5,216	2,463	7,679
Colorado	1,015	871	1,886
Connecticut	143	4,108	4,251
Delaware	56	132	188
DC	13	25	38
Florida	1,811	2,441	4,252
Georgia	612	1,040	1,652
Hawaii	49	226	275
Idaho	351	147	498
Illinois	776	1,306	2,082
Indiana	471	538	1,009
Iowa	NA	NA	NA
Kansas	282	335	617
Kentucky	374	424	798
Louisiana	286	259	545
Maine	235	63	298
Maryland	837	600	1,437
Massachusetts	1,263	2,452	3,715
Michigan	1,651	876	2,527
Minnesota	700	4,697	5,397
Mississippi	441	293	734

State	Time-Limited Svcs	Extended Svcs	Total
Missouri	516	500	1,016
Montana	281	57	338
Nebraska	197	NA	197
Nevada	26	51	77
New Hampshire	150	657	807
New Jersey	553	622	1,175
New Mexico	47	0	47
New York	1,522	6,344	7,866
North Carolina	649	727	1,376
North Dakota	109	335	444
Ohio	760	250	1,010
Oklahoma	400	75	475
Oregon	570	1,300	1,870
Pennsylvania	705	599	1,304
Rhode Island	176	578	754
South Carolina	141	1,153	1,294
South Dakota	337	65	402
Tennessee	343	93	436
Texas	1,772	4	1,776
Utah	121	305	426
Vermont	158	408	566
Virginia	1,050	2,193	3,243
Washington	774	1,000	1,774
West Virginia	76	286	362
Wisconsin	876	2,088	2,964
Wyoming	150	NA	150
Totals	30,872	43,785	74,657
Systems Reporting	50	48	50

Table 3

*Supported Employment Participants for FY 1990 per 100,000 Population*

State	State Rank	SE Participants/100,000
Connecticut	1	129.32
Minnesota	2	123.36
Alaska	3	106.36
Vermont	4	100.58
Rhode Island	5	75.14
New Hampshire	6	72.75
North Dakota	7	69.51
Oregon	8	65.79
Wisconsin	9	60.59
South Dakota	10	57.76
Colorado	11	57.25
Virginia	12	52.41
Idaho	13	49.47
New York	14	43.72
Montana	15	42.30
Massachusetts	16	38.16
South Carolina	17	37.11
Washington	18	36.45
Wyoming	19	33.07
Florida	20	32.86
Maryland	21	30.05
Mississippi	22	28.33
Delaware	23	28.22
Michigan	24	27.19
Arizona	25	26.74

State	State Rank	SE Participants/100,000
California	26	25.80
Georgia	27	25.04
Kansas	28	24.90
Hawaii	29	24.81
Utah	30	24.73
Maine	31	24.27
Kentucky	32	21.65
North Carolina	33	20.76
West Virginia	34	20.18
Missouri	35	19.86
Illinois	36	18.21
Indiana	37	18.20
Alabama	38	17.60
New Jersey	39	15.20
Oklahoma	40	15.10
Arkansas	41	15.06
Louisiana	42	12.91
Nebraska	43	12.48
Pennsylvania	44	10.97
Texas	45	10.46
Ohio	46	9.31
Tennessee	47	8.94
Nevada	48	6.41
DC	49	5.79
New Mexico	50	3.10
Iowa	NA	NA

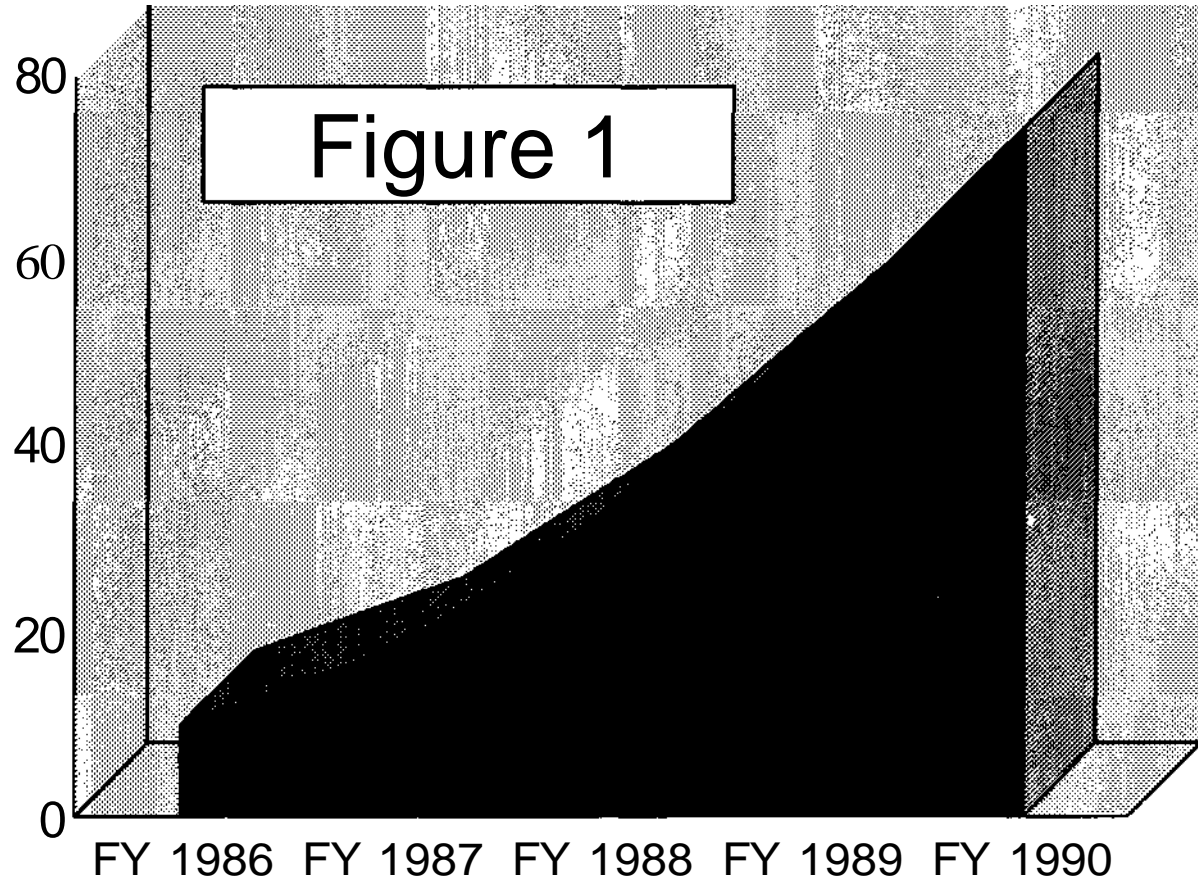
*1. Number of Individuals Served by Supported Employment Programs*

*b. Growth in the number of supported employment participants, FY 1986-1990*

Figure 1 presents total supported participants from FY 1986 to FY 1990, along with the number of states providing this information each year. The total number of supported employment participants in FY 1990 increased by 43.5% over the 1989 total. In contrast, prior annual growth rates had been 60.8% (FY 1988 to 1989), 80.6% (FY 1987 to 1988), and 81.3% (1986 to 1987). Predictably, during the early years of a program the number of participants shows the most rapid growth, and supported employment is not an exception. For the first two reporting years, the number of supported employment participants increased by 227%. This explosive growth rate can be attributed in part to increased reporting capacity by the states to identify supported employment clients, and in part to the incentive of new federal monies to initiate and expand services. Over time, the supported employment program would be expected to stabilize at a steady growth rate.

# Total Number of Participants in Supported Employment (FY 1986 - FY 1990)

Thousands



16

Systems reporting	21	36	48	49	50
Total (thousands)	9.882	17.915	32.36	52.023	74.657

## *2. Primary Disability of Supported Employment Participants*

### *a. Primary disability data for FY 1990*

Figure 2 presents primary disability information for supported employment participants in both time-limited and extended services. To determine the percentages within each diagnostic category, only those supported employees for whom a primary disability could be specified were included. For individuals in time-limited services, the total disability group sample was 27,444 or 88.9% of all reported participants in time-limited services, and 34,141 (78.0%) for those in extended services. Persons with mental retardation and mental illness continue to be the primary groups involved in supported employment, accounting for 65.0% and 24.4% of all supported employment participants in either time-limited or extended services. These groups were followed by persons with sensory (i.e., hearing and visual) impairments (2.2%), cerebral palsy (1.9%), and traumatic brain injury (TBI) (1.1%). Persons with other disabilities not otherwise specified (i.e., autism, learning disabilities, other physical disabilities, neuromuscular disorders, etc.) accounted for 5.5% of all supported employment participants.

The majority of supported employment participants with mental illness and mental retardation were receiving extended services during FY 1990, yet most participants in other disability groups were receiving time-limited services during the same period. This may reflect the increasing involvement of persons with various disability classifications in supported employment programs. If more new participants have primary disabilities other than mental retardation or mental illness, then they would likely be involved in time-limited services during the reporting period. In contrast, "old clients," predominantly persons with mental illness or mental retardation, would more likely be involved in extended services rather than time-limited services.

Table 4 presents each state's percentage of supported employment clients across major disability groups during FY 1990. This table underscores the diversity across states in the types of individuals who are receiving supported employment services. While some states have high participation by persons with mental illness in their supported employment programs (i.e., Arizona, Connecticut, Maine, Nebraska, Oklahoma), other states serve almost exclusively persons with mental retardation (i.e., Georgia, Mississippi, New Mexico, South Carolina). While a few states offer services to a diverse group of persons with disabilities (Idaho, Illinois, Montana, Wisconsin), others serve virtually none with disabilities other than mental retardation or mental illness (i.e., Rhode Island, Alaska, Connecticut, Oregon).

# Primary Disability of Supported Employment Participants (FY 1990)

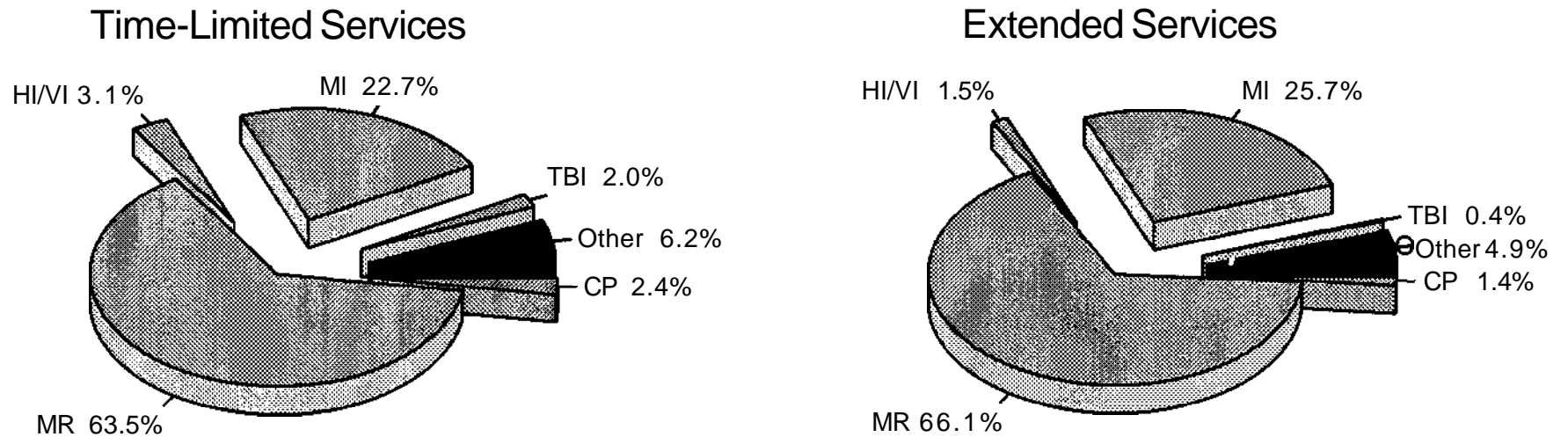


Figure 2



Table 4

*Supported Employment Participants by State for FY 1990:  
Relative Percents Across Primary Disability Groups  
(49 Systems Reporting)*

State	MR	LTMI	CP	TBI	Sensory	Other
Alabama	57.4%	23.6%	1.9%	3.1%	6.2%	7.9%
Alaska	57.1%	39.8%	0.8%	0.8%	0.6%	0.8%
Arizona	40.2%	47.0%	1.9%	3.9%	6.7%	0.2%
Arkansas	61.0%	33.1%	0.0%	0.0%	0.0%	5.9%
California	76.5%	9.5%	3.0%	1.6%	1.0%	8.4%
Colorado	66.6%	19.5%	3.1%	3.3%	2.2%	5.2%
Connecticut	56.1%	43.2%	0.1%	0.0%	0.1%	0.6%
Delaware	76.1%	13.8%	0.0%	4.3%	5.9%	0.0%
DC	51.4%	48.6%	0.0%	0.0%	0.0%	8.6%
Florida	59.9%	29.4%	4.7%	0.4%	2.1%	3.6%
Georgia	86.9%	6.6%	0.0%	0.4%	2.2%	3.9%
Hawaii	32.2%	63.4%	0.0%	1.8%	0.0%	2.6%
Idaho	61.3%	26.4%	1.6%	0.6%	6.6%	3.5%
Illinois	64.8%	20.9%	4.2%	1.0%	7.1%	2.1%
Indiana	79.7%	15.3%	1.0%	0.0%	0.8%	3.2%
Iowa	NA	NA	NA	NA	NA	NA
Kansas	68.2%	19.6%	0.0%	1.0%	4.9%	6.3%
Kentucky	59.8%	27.0%	1.1%	2.2%	2.5%	7.4%
Louisiana	74.2%	16.0%	1.4%	3.1%	1.0%	4.4%
Maine	40.2%	41.2%	0.0%	2.7%	5.1%	10.8%
Maryland	NA	NA	NA	NA	NA	NA
Massachusetts	65.0%	33.3%	0.1%	0.2%	1.2%	0.3%
Michigan	67.8%	24.4%	2.3%	1.1%	1.9%	2.6%
Minnesota	56.5%	23.5%	2.0%	0.0%	2.2%	15.7%

State	MR	LTMI	CP	TBI	Sensory	Other
Mississippi	92.3%	3.4%	0.7%	0.0%	1.0%	2.7%
Missouri	75.5%	14.9%	2.2%	5.1%	0.0%	2.3%
Montana	52.7%	28.5%	0.0%	8.2%	3.2%	7.5%
Nebraska	51.3%	48.7%	0.0%	0.0%	0.0%	0.0%
Nevada	68.8%	3.9%	2.6%	7.8%	7.8%	9.1%
New Hampshire	59.1%	37.7%	0.0%	0.0%	0.6%	2.6%
New Jersey	51.0%	25.7%	0.0%	7.1%	8.3%	0.7%
New Mexico	90.0%	0.0%	2.5%	0.0%	0.0%	7.5%
New York	59.8%	25.8%	1.4%	0.5%	2.4%	10.0%
North Carolina	65.3%	18.3%	2.8%	3.1%	3.9%	6.6%
North Dakota	74.6%	21.8%	0.7%	2.7%	0.2%	0.0%
Ohio	44.5%	37.4%	3.1%	0.0%	0.0%	15.1%
Oklahoma	56.8%	43.3%	0.0%	0.0%	0.0%	0.0%
Oregon	79.2%	16.4%	1.8%	0.0%	1.2%	1.4%
Pennsylvania	55.0%	26.1%	5.2%	3.6%	4.6%	5.4%
Rhode Island	70.8%	29.2%	0.0%	0.0%	0.0%	0.0%
South Carolina	96.5%	2.8%	0.0%	0.0%	0.7%	0.0%
South Dakota	66.2%	16.0%	3.0%	1.2%	7.4%	6.2%
Tennessee	76.2%	16.1%	0.7%	0.5%	0.7%	6.0%
Texas	54.7%	24.5%	2.2%	2.2%	10.7%	5.8%
Utah	77.2%	6.2%	4.4%	0.7%	4.4%	7.3%
Vermont	59.1%	32.3%	1.6%	2.2%	0.4%	4.5%
Virginia	73.7%	22.3%	0.5%	1.7%	1.8%	0.0%
Washington	55.2%	32.4%	1.9%	0.5%	1.0%	8.9%
West Virginia	71.0%	23.5%	1.4%	0.0%	3.9%	0.3%
Wisconsin	56.4%	22.5%	1.7%	4.9%	2.4%	12.1%
Wyoming	54.8%	34.8%	5.8%	0.0%	4.5%	0.0%
Totals	65.0%	24.4%	1.9%	1.1%	2.2%	5.5%

## *2. Primary Disability of Supported Employment Participants*

### *b. Primary disability trends, FY 1988 to FY 1990*

Figure 3 shows relative percentages of all persons identified as supported employment participants in FY 1988 and FY 1990. These pie charts underscore a continuing trend first reported by the VCU-RRTC following the FY 1989 survey. The percentage of participants with long-term mental illness has increased dramatically over the course of two years, with relative percentages of persons with other primary disabling conditions decreasing. It is unlikely that artifacts of reporting systems can account for much of this rapid growth. It is apparent that persons with mental illness are entering supported employment at rates exceeding that of individuals with other disabling conditions.

# Primary Disability of Supported Employment Participants (FY 1988 vs FY 1990)

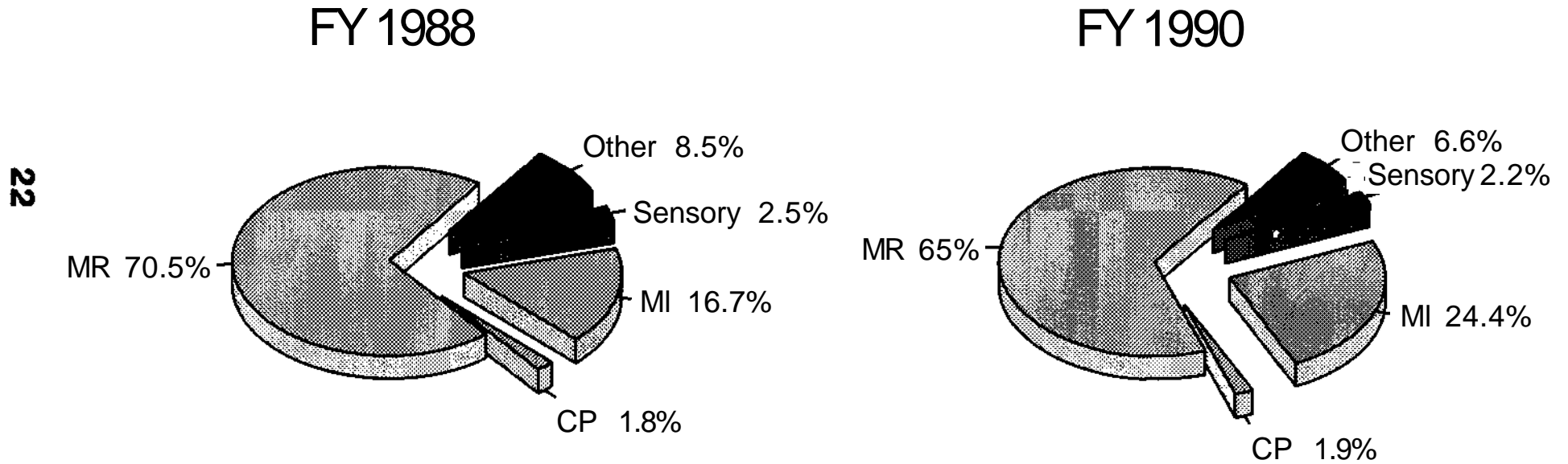


Figure 3

### *3. Severity Levels of Participants with Mental Retardation*

#### *a. Severity level data for FY 1990*

Of all persons with mental retardation in supported employment, those with mild and moderate mental retardation continue to be the primary recipients of supported employment services. Nationally, persons with mild mental retardation constituted 48.8% of all persons with mental retardation in supported employment, those with moderate mental retardation 36.0%, severe or profound mental retardation 12.2%, and borderline retardation 3.0%. For comparison purposes, the prevalence of individuals across severity levels among the population of persons with mental retardation are 85% mild, 10% moderate, 4% severe, and less than 1% profound (Sarason & Sarason, 1989, p. 464).

Table 5 indicates each state's percentages across severity levels for supported employment participants with mental retardation. In calculating these percentages and the national aggregates, only those participants whose severity levels could be identified were included in the calculations. As indicated by the relative percentages displayed in Table 5, there was considerable variation across states in their participation rates across levels of severity. While most states were representative of the national picture, some states reported a substantial percentage of persons with severe and profound mental retardation in their supported employment programs (over 20%). Those states include Alabama, Connecticut, Delaware, DC, Louisiana, Oregon, Pennsylvania, and South Carolina.

Table 5

*Supported Employment Participants by State for FY 1990:  
Relative Percentages Across Levels of Mental Retardation*

State	Borderline	Mild	Moderate	Sev/Prof
Alabama	0.0%	35.5%	42.5%	22.0%
Alaska	0.0%	22.8%	68.4%	8.9%
Arizona	11.9%	72.2%	14.5%	1.4%
Arkansas	0.0%	50.5%	41.7%	7.8%
California	0.0%	38.1%	51.0%	10.9%
Colorado	0.0%	66.9%	25.1%	8.0%
Connecticut	0.0%	31.0%	47.6%	21.4%
Delaware	1.4%	52.4%	24.1%	22.1%
DC	0.0%	0.0%	66.7%	33.3%
Florida	0.0%	45.0%	38.0%	17.0%
Georgia	6.3%	51.4%	33.2%	9.0%
Hawaii	NA	NA	NA	NA
Idaho	0.0%	59.0%	30.8%	10.3%
Illinois	0.0%	66.1%	25.4%	8.5%
Indiana	NA	NA	NA	NA
Iowa	NA	NA	NA	NA
Kansas	NA	NA	NA	NA
Kentucky	29.0%	49.8%	21.2%	0.0%
Louisiana	1.8%	36.7%	33.0%	28.4%
Maine	0.0%	56.3%	41.2%	2.5%
Maryland	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA
Michigan	6.4%	31.3%	48.3%	13.9%
Minnesota	0.0%	48.8%	33.7%	17.5%
Mississippi	0.0%	68.0%	25.9%	6.1%

State	Borderline	Mild	Moderate	Sev/Prof
Missouri	20.0%	53.4%	22.7%	3.9%
Montana	12.8%	59.5%	26.4%	1.4%
Nebraska	NA	NA	NA	NA
Nevada	20.8%	50.9%	28.3%	0.0%
New Hampshire	0.0%	15.8%	79.2%	5.0%
New Jersey	11.7%	58.7%	23.7%	6.0%
New Mexico	NA	NA	NA	NA
New York	0.0%	67.4%	25.4%	7.3%
North Carolina	1.9%	60.0%	26.1%	12.0%
North Dakota	21.3%	51.5%	19.6%	7.6%
Ohio	0.0%	60.0%	35.2%	4.8%
Oklahoma	7.1%	33.0%	44.9%	15.0%
Oregon	1.7%	33.5%	40.3%	24.5%
Pennsylvania	0.0%	32.9%	42.2%	24.8%
Rhode Island	NA	NA	NA	NA
South Carolina	0.0%	40.1%	31.1%	28.8%
South Dakota	0.0%	3.1%	83.0%	13.9%
Tennessee	7.5%	64.4%	25.5%	2.5%
Texas	18.6%	69.0%	10.5%	2.0%
Utah	13.2%	48.8%	25.8%	12.2%
Vermont	20.3%	42.1%	35.8%	1.8%
Virginia	0.0%	24.2%	57.0%	18.8%
Washington	0.0%	57.9%	35.4%	6.8%
West Virginia	25.3%	54.5%	18.3%	2.0%
Wisconsin	0.0%	30.0%	55.7%	14.4%
Wyoming	0.0%	85.9%	11.8%	2.4%
Totals	I 3.0%	48.8%	36.0%	12.2%

### *3. Severity Levels of Participants with Mental Retardation*

#### *b. Severity level trends, FY 1986 to FY 1990*

Figure 4 presents nationally aggregated percentages of supported employment participants across levels of mental retardation. This chart shows that over the course of two years, relative percentages across severity levels have changed little. Persons with mild mental retardation continue to be the primary recipients of service, and in fact have increased their rate of participation relative to persons with other levels of mental retardation by nearly three percentage points during the FY 1988 to FY 1990 period. Despite increasing perceptions and documentation that persons with the most severe disabilities are being underserved in supported employment programs (i.e., Kregel & Wehman, 1989; VCU-RRTC, 1991), the percentage of supported employment participants with severe and profound mental retardation has declined in relation to participants with less severe mental retardation.



# Levels of Retardation for Participants with Mental Retardation as Their Primary Disability (FY 1988 vs FY 1990)

27

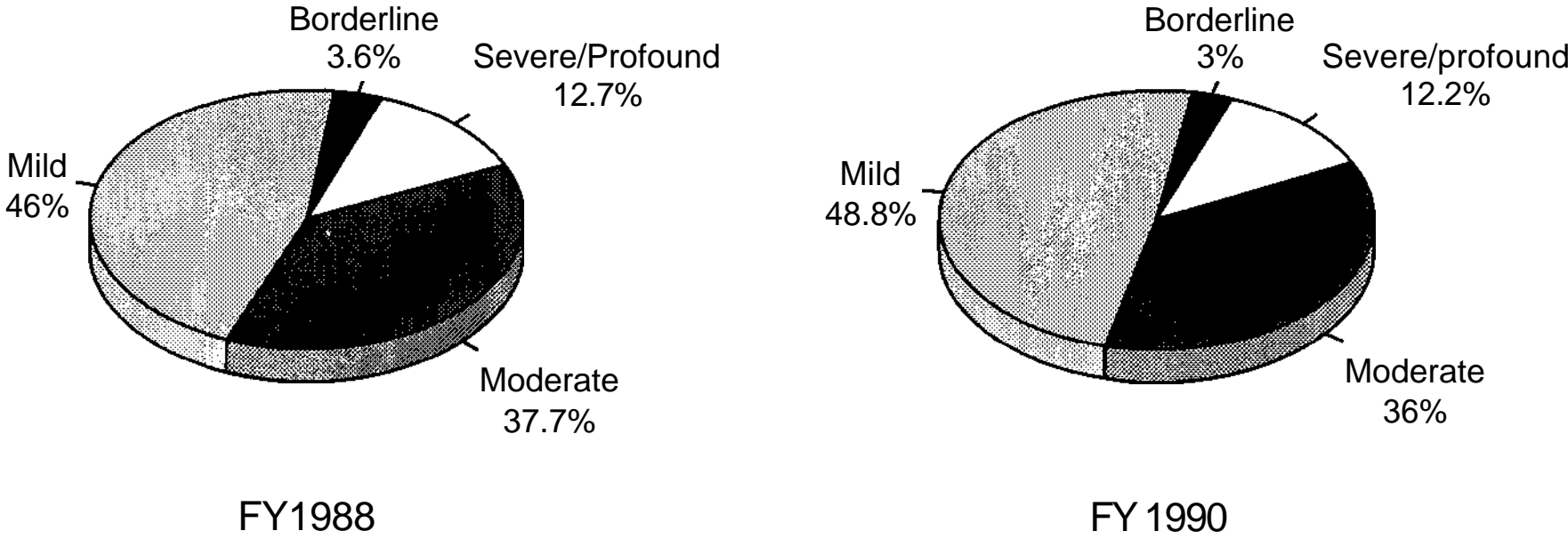


Figure 4

#### *4. Impact of the Supported Employment Program on the Service System*

##### *a. New clients in supported employment, FY 1990*

State VR systems reported a total of 13,427 new clients entering the service system with supported employment outcomes specified as a component of their IWRP. Table 6 presents state totals of new clients for FY 1990. The national total of new supported employment clients decreased from the FY 1989 total of 14,693. The decline in new supported employment clients would seemingly be inconsistent with the overall growth of supported employment programs as a whole. From FY 1989 to FY 1990, fewer states were able to identify new supported employment clients for FY 1990 than in past survey years. In FY 1989, 43 states were able to provide a number of new clients, compared to 39 in FY 1990.

Table 6

*New Clients in Supported Employment for FY 1990 by State*

State	New Clients	State	New Clients
Alabama	219	Nebraska	160
Alaska	NA	Nevada	23
Arizona	714	New Hampshire	46
Arkansas	242	New Jersey	NA
California	2,500	New Mexico	NA
Colorado	500	New York	321
Connecticut	80	North Carolina	375
Delaware	30	North Dakota	NA
DC	13	Ohio	265
Florida	700	Oklahoma	NA
Georgia	125	Oregon	NA
Hawaii	70	Pennsylvania	339
Idaho	NA	Rhode Island	NA
Illinois	381	South Carolina	375
Indiana	905	South Dakota	NA
Iowa	90	Tennessee	343
Kansas	134	Texas	51
Kentucky	469	Utah	130
Louisiana	165	Vermont	117
Maine	63	Virginia	1,000
Maryland	NA	Washington	302
Massachusetts	33	West Virginia	94
Michigan	652	Wisconsin	365
Minnesota	486	Wyoming	NA
Mississippi	137	Totals	13,427
Missouri	306	Systems Reporting	40
Montana	107		

*4. Impact of the Supported Employment Program on the Service System*

*b. Successful and unsuccessful case closures, FY 1990*

Table 7 presents totals of rehabilitated (Status 26) and non-rehabilitated (Status 28) case closures in supported employment for FY 1990. Nationally, a total of 10,667 Status 26 closures were reported, and 2,779 Status 28 closures.

Table 7

*Supported Employment Closures for FY 1990 by State*

State	Status 26	Status 28
Alabama	247	43
Alaska	58	23
Arizona	328	58
Arkansas	65	42
California	1,742	791
Colorado	276	57
Connecticut	127	16
Delaware	22	4
DC	8	0
Florida	403	130
Georgia	122	5
Hawaii	31	4
Idaho	135	52
Illinois	398	51
Indiana	155	45
Iowa	NA	NA
Kansas	97	24
Kentucky	NA	NA
Louisiana	125	15
Maine	67	40
Maryland	359	60
Massachusetts	300	1
Michigan	352	156
Minnesota	370	34
Mississippi	64	56

State	Status 26	Status 28
Missouri	173	38
Montana	58	18
Nebraska	66	14
New Hampshire	120	4
Nevada	NA	NA
New Jersey	74	NA
New Mexico	9	1
New York	684	50
North Carolina	371	91
North Dakota	NA	NA
Ohio	250	26
Oklahoma	NA	NA
Oregon	181	21
Pennsylvania	91	40
Rhode Island	49	5
South Carolina	51	27
South Dakota	111	34
Tennessee	125	76
Texas	524	172
Utah	831	NA
Vermont	102	37
Virginia	440	152
Washington	263	153
West Virginia	56	19
Wisconsin	117	59
Wyoming	70	35
Totals	10,667	2,779
Systems Reporting	46	44

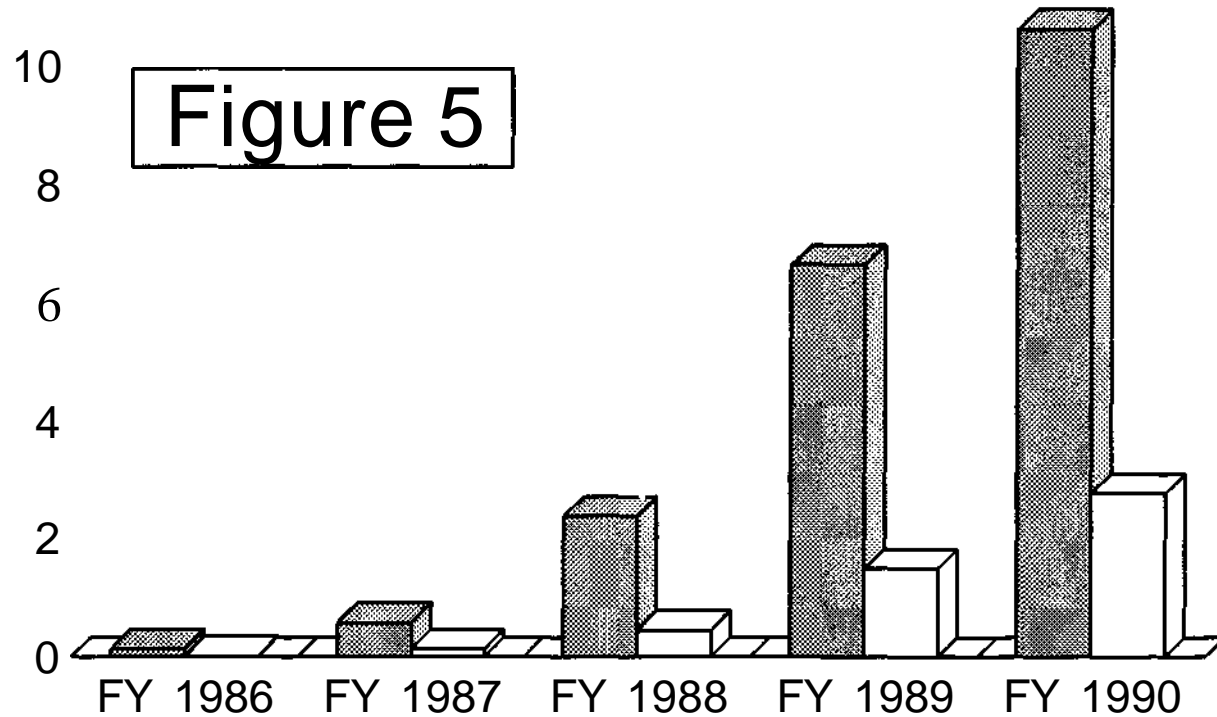
#### *4. Impact of the Supported Employment Program on the Service System*

##### *c. Growth in case closures, FY 1986 to FY 1990*

Figure 5 shows five-year totals of case closures in supported employment nationwide. Status 26 case closures have continued to grow at a steady pace (approximately 60%), mirroring the overall growth of supported employment participants.

# Case Closures in Supported Employment (FY 1986-FY 1990)

Closures (1000s)



34

Status 26	•	0.138	0.582	2.384	6.672	10.667
Status 28	•	0.02	0.134	0.451	1.505	2.779
Systems Rpt. 26s		30	33	36	42	46
Systems Rpt. 28s		29	27	28	41	44



#### *4. Impact of the Supported Employment Program on the Service System*

##### *d. Supported employment provider agencies, FY 1990*

A total of 2,647 provider agencies were reported for FY 1990. Table 8 presents totals of each state system's supported employment provider agencies for FY 1990. Of the total provider agencies, the respondents were able to classify 2,139 (80.8%) as to the method of providing services. As in previous survey years, most provider agencies had expanded services to include supported employment (59.9%), followed by those which were downsizing or terminating other day services (21.2%), those with no prior history of providing traditional day services (16.1%), and others (2.9%).

Table 8  
Supported Employment Provider Agencies for FY 1990 by State

State	Agencies	State	Agencies
Alabama	30	Nebraska	18
Alaska	NA	Nevada	3
Arizona	55	New Hampshire	34
Arkansas	32	New Jersey	20
California	190	New Mexico	22
Colorado	71	New York	180
Connecticut	92	North Carolina	73
Delaware	17	North Dakota	17
DC	2	Ohio	45
Florida	112	Oklahoma	21
Georgia	71	Oregon	97
Hawaii	8	Pennsylvania	49
Idaho	14	Rhode Island	14
Illinois	97	South Carolina	4
Indiana	40	South Dakota	30
Iowa	35	Tennessee	50
Kansas	37	Texas	106
Kentucky	44	Utah	28
Louisiana	55	Vermont	47
Maine	18	Virginia	59
Maryland	90	Washington	153
Massachusetts	40	West Virginia	13
Michigan	95	Wisconsin	75
Minnesota	140	Wyoming	13
Mississippi	32	Total	2,647
Missouri	40	Systems Reporting	50
Montana	19		

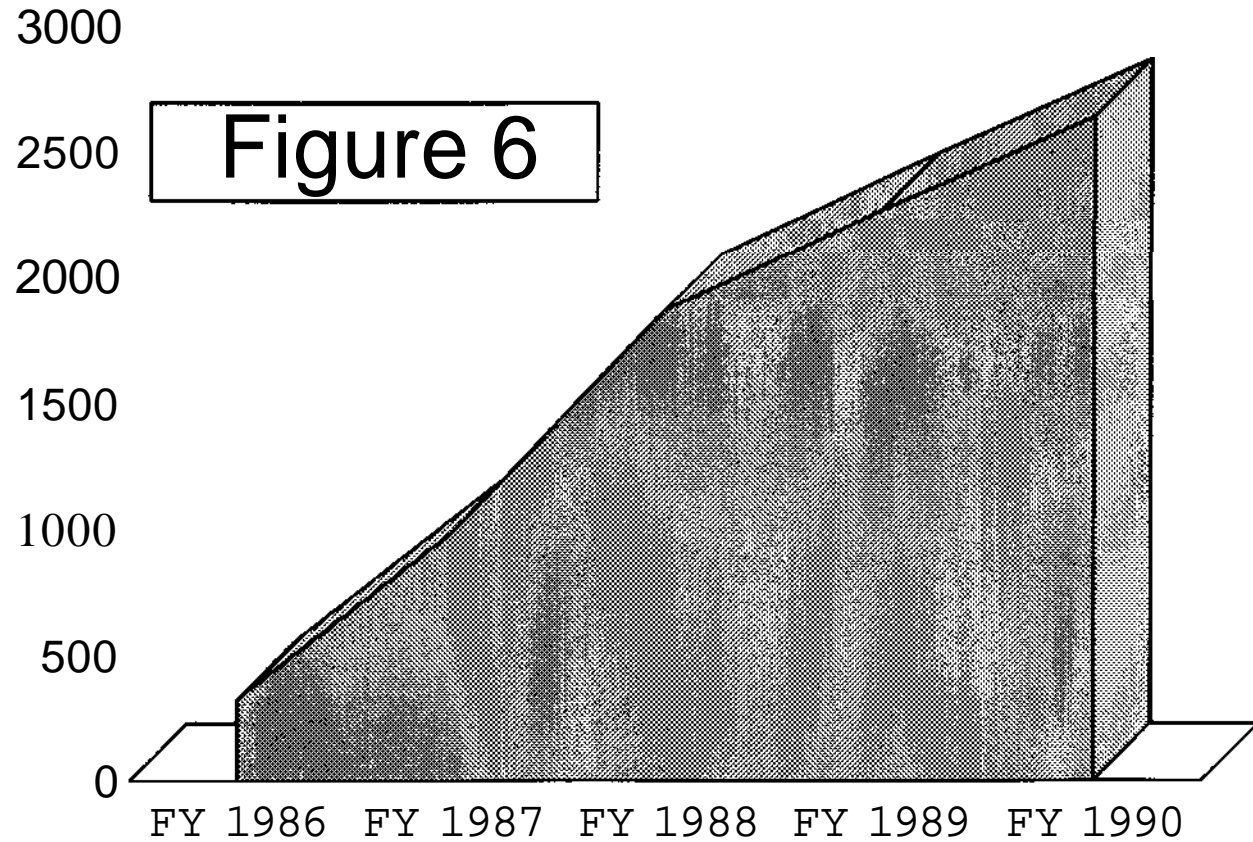
#### *4. Impact of the Supported Employment Program on the Service System*

##### *e. Growth in the number of provider agencies, FY 1986 to FY 1990*

Figure 6 indicates the number of reported supported employment provider agencies from FY 1986 to FY 1990. This chart shows the rapid vendorization of agencies during the 1986 to 1988 time period, during which time states were generally building their capacity to provide services. As reported in prior analyses (VCU-RRTC, 1990; 1991), most of this rapid growth occurred in the 1985 and 1986 Title III recipient states. For the time period from FY 1988 to FY 1990, the growth rate of provider agencies has declined to approximately 16% annually.

# Total Identified Supported Employment Provider Agencies (FY 1986 - FY 1990)

Agencies



38

Total agencies	324	986	1877	2273	2647
Systems reporting	18	23	34	49	50

#### *4. Impact of the Supported Employment Program on the Service System*

##### *f. Supported employment model utilization, FY 1990*

Nationally, respondents were capable of specifying supported employment models for 43,130 participants. Percentages of clients involved in the individual and group models for each state are listed in Table 9. The percentage of clients for whom a program model could be specified within each state appears in the first column. A number of states (Alaska, Georgia, Idaho, Maine, Minnesota, and Washington, to name a few) were not able to specify models for all or most of their supported employment participants. Of all supported employment participants for whom a program model could be specified, 73.1% were in individual placements, 17.1% were in enclaves, 8.6% were in mobile work crews, and the remaining 1.3% were in small business or other types of supported employment programs.

Table 9

*Supported Employment Model Utilization for FY 1990 by State:  
Relative Percentages of Participants Across Models*

State	Model Known	Indiv	Enclave	Work Crew	Small Business	Other
Alabama	95.5%	100%	0.0%)	0.0%)	0.0%	0.0%
Alaska	0%	NA	NA	NA	NA	NA
Arizona	12.7%	96.0%	3.2%	0.8%	0.0%	0.0%
Arkansas	68.4%	65.5%	0.0%	2.8%)	0.0%	0.0%)
California	100%	60.6%	29.3%	10.1%	0.0%	0.0%
Colorado	95.0%	66.4%	14.0%	15.6%	2.0%	2.1%
Connecticut	58.0%	66.3%	16.9%	6.0%)	10.8%	0.0%
Delaware	100%	44.1%	30.9%	25.0%)	0.0%)	0.0%
DC	100%	100%	0%	0%	0%)	0%
Florida	96.5%	60.7%	19.9%	18.6%	0.0%	0.8%
Georgia	1.9%	100%	0.0%	0.0%	0.0%)	0.0%)
Hawaii	48.7%	95.5%	4.5%	0.0%)	0.0%	0.0%
Idaho	0%	NA	NA	NA	NA	NA
Illinois	99.0%	62.8%	31.3%	6.0%)	0.0%)	0.0%
Indiana	100%	89.2%	5.6%	5.3%	0.0%)	0.0%)
Iowa	NA	NA	NA	NA	NA	NA
Kansas	17.8%	65.5%	29.1%	5.5%	0.0%	0.0%
Kentucky	100%	97.0%	0.0%)	3.0%)	0.0%)	0.0%
Louisiana	100%	56.5%	10.3%	33.2%	0.0%	0.0%
Maine	0%	NA	NA	NA	NA	NA
Maryland	0%	NA	NA	NA	NA	NA
Massachusetts	53.5%	44.5%	55.5%	0.0%	0.0%	0.0%
Michigan	34.7%	59.4%	32.4%	7.4%	0.0%	0.8%
Minnesota	0%	NA	NA	NA	NA	NA
Mississippi	100%	100%	0.0%	0.0%	0.0%)	0.0%
Missouri	100%	72.5%	17.7%	9.7%	0.0%	0.0%

State	Model Known
Montana	66.9%
Nebraska	100%
Nevada	100%
New Hampshire	94.1%
New Jersey	100%
New Mexico	100%
New York	76.2%
North Carolina	97.1%
North Dakota	100%
Ohio	0%
Oklahoma	100%
Oregon	0%
Pennsylvania	98.4%
Rhode Island	24.0%
South Carolina	11.8%
South Dakota	0%
Tennessee	38.1%
Texas	2.3%
Utah	0%
Vermont	100%
Virginia	97.6%
Washington	0%
West Virginia	100%
Wisconsin	100%
Wyoming	100%
Aggregates	57.8%

Indiv	Enclave	Work Crew	Small Business	Other
93.8%	4.4%	1.3%	0.0%	0.4%
100%	0.0%	0.0%	0.0%	0.0%
100%	0.0%	0.0%	0.0%	0.0%
62.2%	19.2%	6.7%	2.1%	9.7%
83.2%	10.1%	4.9%	1.9%	0.0%
95.7%	4.3%	0.0%	0.0%	0.0%
74.3%	9.4%	12.1%	4.2%	0.0%
78.9%	14.8%	6.1%	0.2%	0.0%
84.9%	2.5%	12.6%	0.0%	0.0%
NA	NA	NA	NA	NA
100%	0.0%	0.0%	0.0%	0.0%
NA	NA	NA	NA	NA
94.9%	1.2%	3.9%	0.0%	0.0%
48.6%	39.8%	8.3%	0.0%	3.3%
100%	0.0%	0.0%	0.0%	0.0%
NA	NA	NA	NA	NA
86.7%	8.4%	3.0%	0.0%	1.8%
100%	0.0%	0.0%	0.0%	0.0%
NA	NA	NA	NA	NA
81.1%	2.3%	16.6%	0.0%	0.0%
81.0%	12.1%	6.3%	0.6%	0.0%
NA	NA	NA	NA	NA
53.0%	8.0%	36.7%	2.2%	0.0%
100%	0.0%	0.0%	0.0%	0.0%
64.7%	8.7%	24.7%	2.0%	0.0%
73.1%	17.1%	8.6%	0.9%	0.4%

#### *4. Impact of the Supported Employment Program on the Service System*

##### *g. Trends in supported employment model utilization, FY 1988 to FY 1990*

Figure 7 presents comparative data on participants in supported employment for whom a program model could be specified by their respective state VR systems, for FY 1988 and FY 1990. During this two-year period, the relative percentage of persons in individual placements increased dramatically (approximately 21 percentage points). During the same period, persons in enclaves increased by approximately 2 percentage points. Persons in other models, including work crews, small businesses, and other models, decreased substantially. Although these data should be viewed cautiously due to the number of individuals for whom program models could not be specified, it appears that state VR systems and provider agencies are utilizing individual placements with greater frequency than in past years, and are utilizing group and other types of placements less frequently.



# Supported Employment Model Utilization (FY 1988 vs FY 1990)

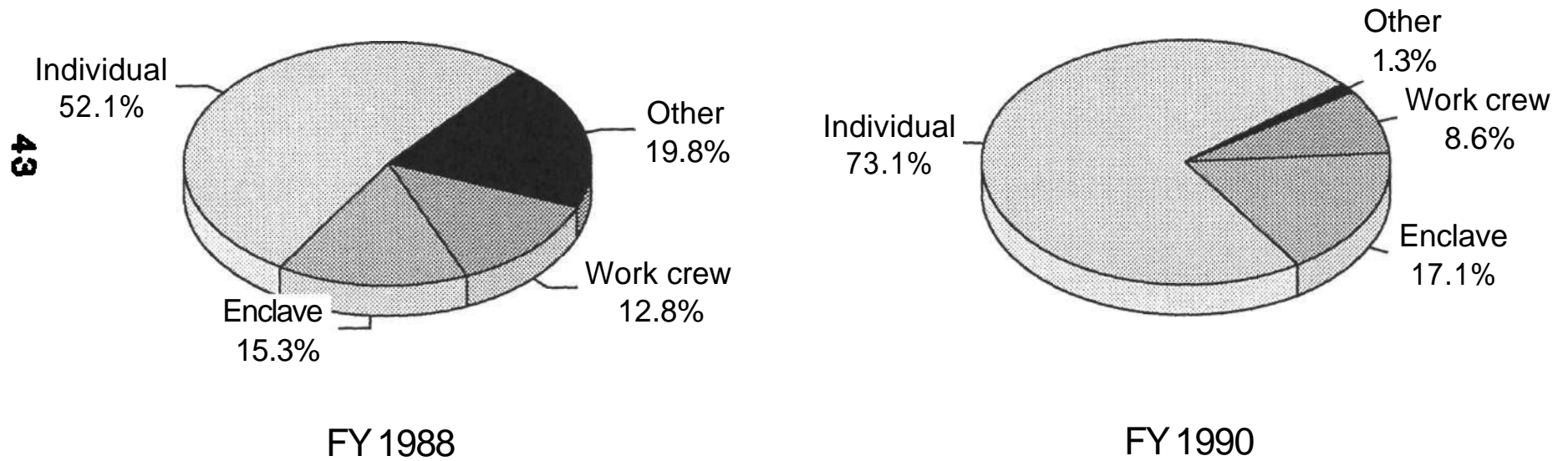


Figure 7

#### 4. Impact of the Supported Employment Program on the Service System

##### h. Availability of extended services funding

States were requested to provide information on the availability of extended services funding across primary disability categories. These responses are summarized in Table 10. In some states, information for some or all disability groups was not available (NA). The primary reason for NA designations was that the system had no persons in supported employment with a particular primary disability, and the respondents were unsure whether or not an extended services funding source could be located. In two cases (Iowa and Minnesota), no information regarding extended services funding was available across all disability groups. A state could be coded as "Yes" even though it had no supported employment participants from that specific disability group, as long as there was a designated funding agency for extended services for members of that group and extended services funding would be available.

A number of states reported that the availability of extended services funding was conditional or singularly limited. As an example, extended services funds might be available for an individual with a primary disability of visual impairment if he or she also had a diagnosis of mental illness or mental retardation, or if the visual impairment was evidenced prior to age 22. As another example, extended services funding may be available for members of a disability group, but the amount was insignificant, availability was sporadic, or funding was limited to unique situations or specific individuals (as in the case of funding of extended services by private insurance companies).

In these cases, for the sake of consistency across surveys (see Kregel, Shafer, Wehman, & West, 1989), two criteria were required to show availability of extended services funds. First, the state must have a formal policy and funding mechanism for providing extended services, and second, a *mandated* source of extended services funding was available for most or all members of a disability group. Based on those criteria, in virtually all conditional availability cases the researchers determined that an extended services funding source was *not* available for the groups in question.

As in prior surveys, most state systems had identified extended services funding sources for supported employment participants with mental illness (42 states) and mental retardation (47 states). Fewer states reported having an identified funding source for participants with cerebral palsy (31 states), hearing or visual impairments (19 states each), TBI (19 states), autism (26 states), or other types of disabilities (16 states). There were a number of states in which extended services funding was available across all disability groups. One state, Alabama, reported no funding available for extended services for persons in any disability group, citing the unstable nature of extended services funding for all supported employment participants.

Table 11 presents comparative data for FY 1988 and FY 1990 on the number of states in which extended services funds were available for the majority of supported employment participants (i.e., excluding states responding "No" or "NA"). Interestingly, there is an apparent decrease in the number of systems reporting the availability of extended services funding for three disability groups: mental illness (-3 states), TBI (-10), and hearing impairment (-2). Reasons for the discrepancies in individual systems' extended services availability from 1988 to 1990 were not requested of respondents.

Table 10

*Availability of Extended Services Funding by State*

State	CP	MI	HI	MR	TBI	VI	Autism	Other
Alabama	N	N	N	N	N	N	N	N
Alaska	Y	Y	Y	Y	Y	Y	Y	Y
Arizona	Y	Y	Y	Y	Y	Y	Y	Y
Arkansas	NA	Y	NA	Y	NA	NA	NA	N
California	Y	N	N	Y	N	N	Y	N
Colorado	Y	N	N	Y	N	N	Y	N
Connecticut	Y	Y	Y	Y	Y	Y	Y	Y
Delaware	NA	Y	NA	Y	N	N	NA	NA
DC	NA	Y	NA	Y	NA	NA	Y	NA
Florida	Y	Y	N	Y	N	N	N	N
Georgia	NA	Y	N	Y	N	N	N	N
Hawaii	NA	Y	NA	Y	N	NA	NA	N
Idaho	Y	Y	Y	Y	Y	Y	Y	Y
Illinois	Y	Y	Y	Y	Y	Y	Y	Y
Indiana	Y	N	N	Y	NA	N	Y	N
Iowa	NA	NA	NA	NA	NA	NA	NA	NA
Kansas	Y	Y	N	Y	N	N	N	N
Kentucky	Y	Y	N	Y	N	NA	NA	N
Louisiana	Y	Y	Y	Y	Y	Y	Y	Y
Maine	NA	Y	N	Y	N	N	NA	N
Maryland	Y	Y	N	Y	N	N	Y	N
Massachusetts	Y	Y	Y	Y	Y	Y	Y	Y
Michigan	Y	Y	N	Y	Y	N	Y	N
Minnesota	NA	NA	NA	NA	NA	NA	NA	NA
Mississippi	N	Y	N	Y	NA	Y	Y	Y
Missouri	N	Y	NA	Y	Y	NA	Y	NA
Montana	NA	Y	N	Y	N	N	NA	N

State	CP	MI	HI	MR	TBI	VI	Autism	Other
Nebraska	NA	Y	NA	Y	NA	NA	NA	NA
Nevada	Y	Y	Y	Y	Y	Y	Y	Y
New Hampshire	N	Y	N	Y	NA	N	NA	N
New Jersey	Y	Y	Y	Y	Y	Y	Y	NA
New Mexico	N	NA	NA	Y	NA	NA	NA	N
New York	Y	Y	Y	Y	Y	Y	Y	Y
North Carolina	Y	Y	Y	Y	Y	Y	Y	Y
North Dakota	Y	Y	NA	Y	Y	NA	NA	NA
Ohio	Y	Y	Y	Y	NA	NA	NA	NA
Oklahoma	NA	Y	NA	Y	NA	NA	NA	NA
Oregon	Y	Y	Y	Y	NA	Y	Y	Y
Pennsylvania	Y	Y	Y	Y	Y	Y	Y	Y
Rhode Island	Y	Y	N	Y	N	Y	Y	NA
South Carolina	NA	Y	NA	Y	NA	N	NA	NA
South Dakota	Y	Y	N	Y	N	N	NA	N
Tennessee	N	Y	N	Y	N	N	N	N
Texas	NA	NA	NA	NA	NA	N	NA	NA
Utah	Y	Y	Y	Y	Y	Y	Y	NA
Vermont	Y	Y	Y	Y	Y	NA	Y	Y
Virginia	Y	Y	Y	Y	Y	Y	Y	NA
Washington	Y	Y	Y	Y	N	Y	NA	Y
West Virginia	N	Y	N	Y	NA	N	N	NA
Wisconsin	Y	Y	Y	Y	Y	Y	Y	Y
Wyoming	Y	N	N	Y	NA	N	NA	NA
Totals	31	42	19	47	19	19	26	16

Table 11

*Availability of Extended Services Funding  
Across Primary Disability Groups*

Primary Disability	FY 1988	FY 1990
Mental retardation	46 states	47 states
Mental illness	45 states	42 states
Cerebral palsy	31 states	31 states
Traumatic brain injury	29 states	19 states
Hearing impairment	21 states	19 states
Visual impairment	19 states	19 states
Autism	Not requested	26 states
Other physical disability	29 states	Not requested
Other disabilities	Not requested	16 states

#### 4. *Impact of the Supported Employment Program on the Service System*

##### i. *Wages and work hours in supported employment*

In calculating supported employment participants' mean hourly and weekly earnings and the percent of participants working at least 20 hours per week, data from each state were weighted by the number of participants in each state. Weighted means and percents were used rather than the state reported means in order to adjust for the numbers of persons within each state who contributed to their respective state mean. Weighting the data gives a more precise estimate of the national situation.

A weighted mean hourly wage of \$3.87 and a mean weekly wage of \$102.34 for all participants in supported employment were calculated. Mean hourly wages reported by the VR agencies ranged from \$2.92 (Minnesota) to \$5.50 (Alaska), and mean weekly wages ranged from \$62.20 (North Dakota) to \$135.60 (Nevada).

States were also requested to provide the percentage of participants who were working 20 hours per week or more in supported employment. Nationally, 80.9% of all supported employment participants work at least 20 hours per week. Individual state percentages of persons in supported employment working at least 20 hours per week ranged from 37.6% (Rhode Island) to 100% reported by 11 states (Alabama, Delaware, DC, Maryland, Nebraska, Nevada, Ohio, Oklahoma, Pennsylvania, South Carolina, and West Virginia).

Similar information was requested from the states on the FY 1988 survey. Then, the weighted mean hourly wage was \$3.38 per hour, and 75.7% of supported employment participants were working at least 20 hours per week. During the two years between surveys, the minimum wage rates increased from \$3.35 per hour to \$3.80 per hour (April 1, 1990) and from \$3.80 to \$4.25 per hour on March 31, 1991. In relation to prevailing minimum wage rates, the average wage for supported employment participants in FY 1988 was \$.03 above minimum wage and the FY 1990 average wage was \$.07 above the minimum wage rate that was in effect through most of the survey period (October 1, 1990 to September 30, 1991). A greater proportion of supported employment participants were working above the minimum number of hours as specified by the applicable regulations (*Federal Register*, August 14, 1987).

#### *4. Impact of the Supported Employment Program on the Service System*

##### *j. Costs of supported employment*

As in previous surveys (VCU-RRTC, 1990; 1991) few states were able to report average supported employment costs across the array of program models for individuals receiving both time-limited and extended services. Consequently, any attempts to derive national estimates of supported employment costs would be spurious and misleading. However, 24 states were able to report mean costs of participants receiving time-limited services in individual placement, 15 reported annual costs for extended services for individual placement participants, and 13 provided annual costs for persons in *both* time-limited and extended services. The cost figures reported by those states will be reported here as illustrations of supported employment costs across states and across service phases, without assuming that the costs reported by those 13 states are nationally representative.

Table 12 provides the mean costs for time-limited and extended services for persons in individual placement for those 13 states which were able to report both cost figures. This table illustrates two factors related to supported employment costs: First, annual costs are highly variable across states. Of all states reporting both cost estimates, costs for time-limited services ranged from less than \$2,000 (North Carolina) to over \$9,000 (DC and Nevada), and costs for extended services ranged from \$1,618 (Massachusetts) to over \$11,000 (DC). Second, these cost estimates illustrate the variability across states in the relative obligations of the VR agency and extended services funding agencies. While in most states the VR agency bore a greater financial obligation for individuals in supported employment than did the extended services agencies, in several states the VR agency's share of costs was overwhelming (i.e., Massachusetts, Nevada, Pennsylvania). Other states reported an almost equitable sharing of supported employment costs (i.e., DC, Indiana, Vermont) between the VR agency and the extended services funding agency.

In addition to these states reporting costs for persons in individual placement, a number of states were able to report a mean cost of services for *all* persons in supported employment, without regard to model, for time-limited and extended services. Figure 8 provides a graph of selected states who were able to provide mean cost estimates for both time-limited and extended services. As with Table 12 above, Figure 8 illustrates both the dramatic range in costs for services and the relative financial obligations of the VR agency and the extended services funding agency.

Table 12

*Annual Mean Cost for Persons in the Individual  
Placement Model of Supported Employment in FY 1990*

State	Time-Limited Svcs	Extended Svcs
California	\$4,306	\$2,544
Delaware	\$7,583	\$3,500
DC	\$9,100	\$11,600
Indiana	\$3,000	\$2,600
Kentucky	\$3,673	\$2,550
Massachusetts	\$7,649	\$1,618
Missouri	\$4,970	\$1,920
North Carolina	\$1,956	\$3,264
North Dakota	\$6,300	\$3,600
New Jersey	\$5,278	\$2,650
Nevada	\$9,616	\$1,765
Pennsylvania	\$8,417	\$3,265
Vermont	\$5,490	\$5,378



# Time-Limited (T-L) vs Extended (Ext) Services Funding Across All Models (FY 1990)

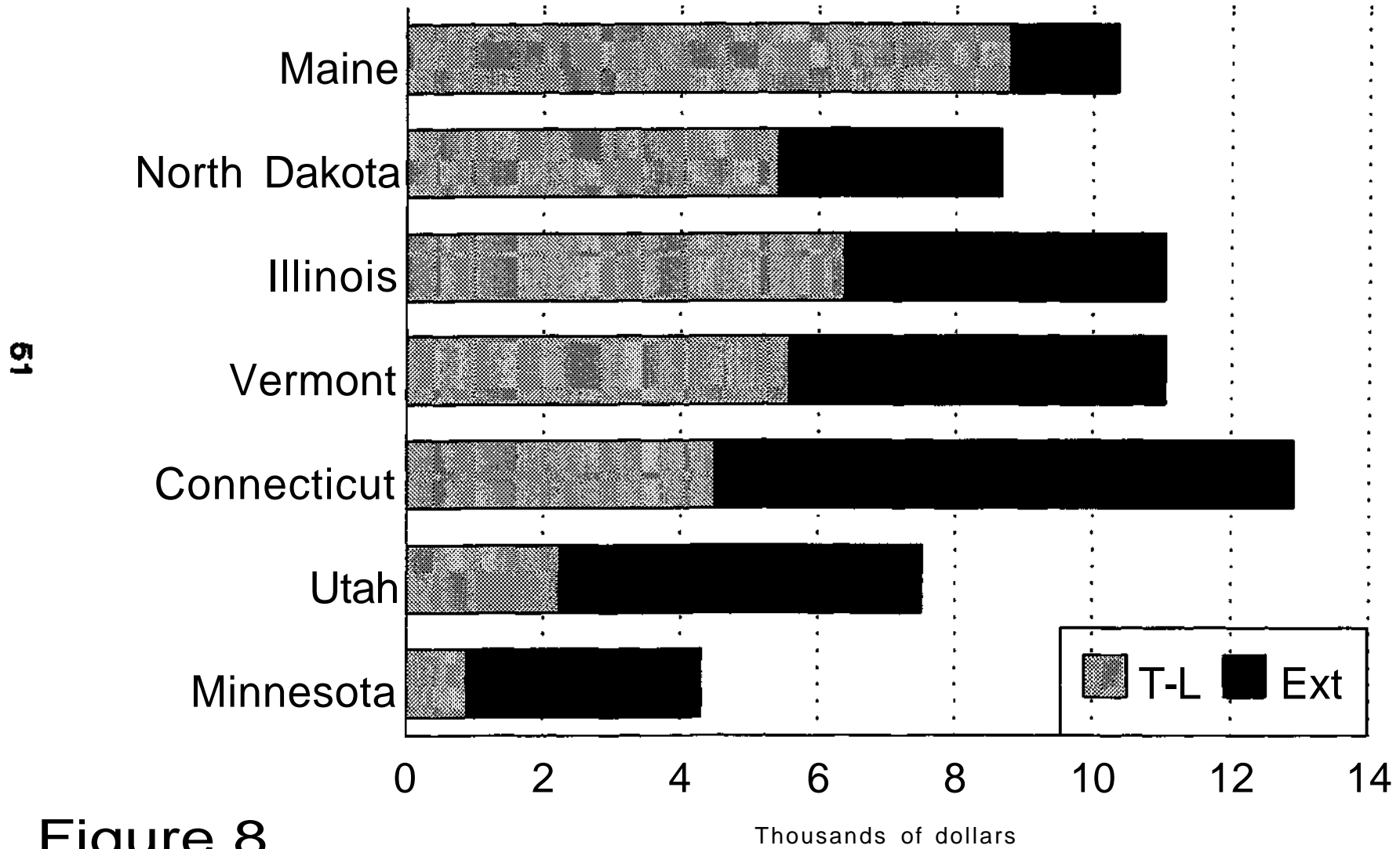


Figure 8

## *5. Funding of Supported Employment*

### *a. Description of funding sources*

Funding sources for supported employment services were broadly classified into two areas: (1) Federal monies contributed to the states by the RSA, which included Title HI systems change grants, Title VI, Part C formula grants, and Title 110 Basic State Grants, and (2) non-RSA federal, state, or local sources, which included state rehabilitation general funds, state mental retardation/developmental disabilities agencies, state mental health agencies, state education agencies, Medicaid, Developmental Disabilities Planning Councils (DDPCs), and other funds not otherwise specified. Table 13 presents a description of each of these funding sources.

Table 13  
*Supported Employment Funding Categories*

Source	Type of Funds	Description
Title III	RSA funds	Award amounts authorized by Title in of the Rehabilitation Act Amendments of 1986, as reported by RSA and verified by project directors, from RSA to state agencies for the development of state-wide systems change projects.
Title IV, Part C	RSA funds	Funds authorized by Title VI, Part C of the Rehabilitation Act Amendments of 1986, to state general rehabilitation agencies and to state agencies for rehabilitation for individuals with visual impairments, for supported employment services.
Title I	RSA funds	Represents 76% of the obligated amounts from Title I of the Rehabilitation Act (the Basic State Grant Program) that was expended by state rehabilitation agencies for supported employment services. This proportion reflects the average RSA contribution to Title I programs operated by state rehabilitation agencies.
State Rehabilitation, General Revenue	Non-RSA federal, state, or local funds	Funds obligated by state rehabilitation agencies which have been expended for supported employment services. This total includes both the state match to the Title I program and any additional monies appropriated specifically for supported employment services.
State Mental Retardation/ Developmental Disability Agency	Non-RSA federal, state, or local funds	Funds obligated by state agencies responsible for the delivery of services to persons with mental retardation and/or developmental disabilities. Funds reported here were specifically attributed to supported employment and may represent funding for extended services, initial training and placement, or both.
State Mental Health Agency	Non-RSA federal, state, or local funds	Funds obligated by state agencies responsible for the delivery of services to persons with mental illness. Funds reported here were specifically attributed to supported employment and may represent funding for extended services, initial training and placement, or both.
Medicaid	Non-RSA federal, state, or local funds	Funds obligated by state Medicaid waiver and other programs that have been used to provide supported employment services.

Source	Type of Funds	Description
State Education Agency	Non-RSA federal, state, or local funds	Funds attributed to state departments of education that can be identified as directly supporting the placement of students into paid supported employment situations.
Developmental Disabilities Planning Council (DDPC)	Non-RSA federal, state, or local funds	Funds awarded through grants and contracts by state DDPCs for supported employment services and related activities. Funds were made available to state councils from the Administration on Developmental Disabilities under PL 98-527. Efforts were made to identify funds used to provide direct services, as opposed to general activities (i.e., staff development, public awareness, etc.). These funds reflect grant or contract award amounts from the state council and do not reflect any local match funds.
Other funds not specified	Non-RSA federal, state, or local funds	Other funds that had not been identified as originating from one of the previously identified sources, which also included inter-agency transfers from blind agencies and other federal grants awarded to the state general rehabilitation agency.

## 5. *Funding of Supported Employment*

### *b. Rehabilitation Services Administration funding, FY 1990*

Table 14 shows FY 1990 state totals of the three specific RSA funding streams and totals for supported employment. Where a funding source was known to be utilized by a state, but the amount of funds could not be determined, the source was coded as not available (NA). If sources were not utilized to the best knowledge of the state's primary and secondary respondents, then \$0 was entered. In two states (Alaska and Nebraska), the totals of identified RSA funds were \$0, but this does not indicate the absence of RSA supported employment funding for those two states. In both cases, no Title HI funds were received; however, Title VI, Part C and Title I funds were utilized but the amounts could not be specified.

Table 14 shows tremendous variability in the use of RSA monies by the states, even disregarding the Title HI systems change grants. Title VI, Part C funds, which could be used for a variety of supported employment services, ranged from less than \$200,000 (New Mexico) to over \$3 million (California), with an additional seven states using in excess of \$1 million each of Title VI, Part C funds. Title I funds for supported employment services ranged from \$0 (eight states) to in excess of \$10 million (California), with eight states using in excess of \$1 million.

A total of \$73,026,438 of RSA funds were known to have been expended by the states in FY 1990 for supported employment services. Of this total, \$7,615,813 was attributed to Title III systems change grants, \$29,512,919 to Title VI, Part C funds, and \$35,897,706 to Title I funds. Seventeen states received Title HI grants during FY 1990. The remaining 10 Title III state grants were completed in FY 1989 and those states did not receive Title III monies during FY 1990.

Table 14

*RSA Funding for Supported Employment by State: FY 1990*

State	Title HI	Title VI(C)	Title I	Identified RSA
Alabama	\$0	\$359,214	\$0	\$359,214
Alaska	\$0	NA	NA	\$0
Arizona	\$0	\$285,110	\$742,308	\$1,027,418
Arkansas	\$421,501	\$250,000	\$335,000	\$1,006,501
California	\$0	\$3,895,000	\$10,070,000	\$13,965,000
Colorado	\$469,732	\$327,908	\$4,000,000	\$4,797,640
Connecticut	\$429,836	\$320,530	\$3,567	\$753,933
Delaware	\$330,173	\$213,240	\$146,318	\$689,731
DC	\$0	\$200,000	\$0	\$200,000
Florida	\$500,992	\$1,614,000	\$1,234,000	\$3,348,992
Georgia	\$0	\$506,367	\$469,680	\$976,047
Hawaii	\$0	\$250,000	\$169,900	\$419,900
Idaho	\$0	\$248,771	\$128,651	\$377,422
Illinois	\$356,000	\$1,200,000	\$605,613	\$2,161,613
Indiana	\$0	\$550,000	\$2,680,000	\$3,230,000
Iowa	\$0	\$240,000	NA	\$240,000
Kansas	\$444,169	\$250,000	\$348,865	\$1,043,034
Kentucky	\$0	\$362,096	\$45,259	\$407,355
Louisiana	\$0	\$816,470	\$646,000	\$1,462,470
Maine	\$0	\$250,000	\$760,000	\$1,010,000
Maryland	\$0	\$459,131	\$0	\$459,131
Massachusetts	\$0	\$377,307	NA	\$377,307
Michigan	\$0	\$792,890	\$940,495	\$1,733,385
Minnesota	\$0	\$356,340	\$265,832	\$622,172
Mississippi	\$0	\$214,670	\$54,116	\$268,786
Missouri	\$429,433	\$444,000	\$1,440,000	\$2,313,433
Montana	\$0	\$250,000	\$212,587	\$462,587

State	Title HI	Title VI(C)	Title I	Identified RSA
Nebraska	\$0	NA	NA	\$0
Nevada	\$0	\$250,000	\$0	\$250,000
New Hampshire	\$477,840	\$230,731	NA	\$708,571
New Jersey	\$0	\$890,000	\$0	\$890,000
New Mexico	\$0	\$193,510	\$0	\$193,510
New York	\$601,616	\$1,915,358	\$1,410,794	\$3,927,768
North Carolina	\$505,787	\$1,405,000	\$493,240	\$2,404,027
North Dakota	\$411,998	\$250,000	\$246,558	\$908,556
Ohio	\$0	\$1,300,000	\$1,216,000	\$2,516,000
Oklahoma	\$451,483	\$314,000	\$1,140,000	\$1,905,483
Oregon	\$436,826	\$260,479	\$218,787	\$916,092
Pennsylvania	\$433,861	\$1,273,000	\$790,400	\$2,497,261
Rhode Island	\$0	\$226,618	\$90,038	\$316,656
South Carolina	\$0	\$278,579	\$0	\$278,579
South Dakota	\$0	\$250,000	\$0	\$250,000
Tennessee	\$0	\$880,000	\$380,000	\$1,260,000
Texas	\$0	\$1,672,919	\$1,387,221	\$3,060,140
Utah	\$0	\$237,500	\$83,676	\$321,176
Vermont	\$394,830	\$220,000	\$582,450	\$1,197,280
Virginia	\$0	\$710,443	\$768,315	\$1,478,758
Washington	\$0	\$474,534	\$823,889	\$1,298,423
West Virginia	\$0	\$250,000	\$0	\$250,000
Wisconsin	\$519,736	\$501,000	\$958,649	\$1,979,385
Wyoming	\$0	\$496,204	\$9,498	\$505,702
Totals	\$7,615,813	\$29,512,919	\$35,997,706	\$73,026,438

## *5. Funding of Supported Employment*

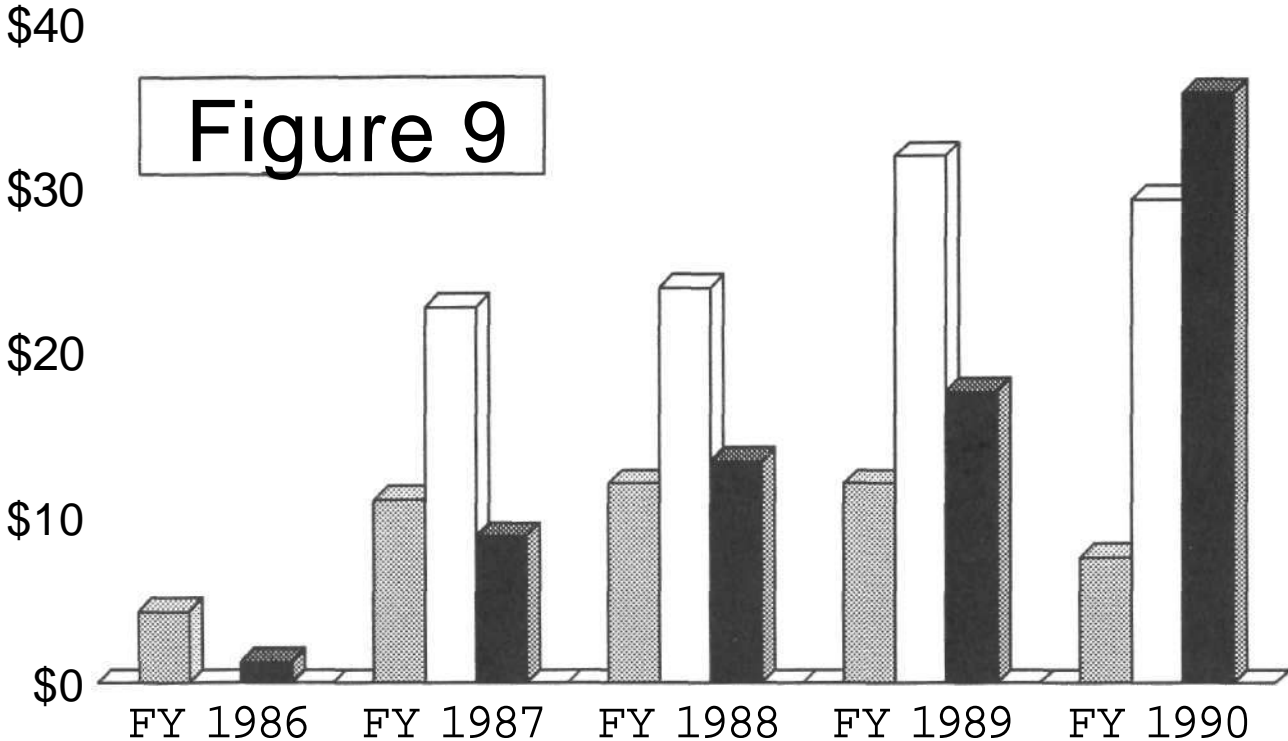
### *c. RSA Funding, FY 1986 to FY 1990*

Figure 9 shows RSA funding of supported employment from FY 1986 to FY 1990 across the three RSA funding categories. This chart reveals that Title III funding decreased by roughly \$4.5 million from FY 1989 to FY 1990, as a result of only 17 states receiving Title IE funds as opposed to 27 during previous years. Title VI, Part C funds also showed a decrease of approximately \$3 million. However, the use of Title I Basic State Grant funds doubled from the FY 1989 to FY 1990, from roughly \$18 million to \$36 million. This increased use of Title I Basic State Grant funds would indicate that the VR systems are using increasing amounts of general case service dollars to finance individuals in supported employment.






# RSA Expenditures for Supported Employment (FY 1986 - FY 1990)

Expenditures (millions)



69

<b>Title III funds</b>		\$4.35	\$11,141	\$12,107	\$12,106	\$7,616
<b>Title VI(C) funds</b>		\$0	\$22.88	\$24.07	\$32,111	\$29,513
<b>Title I funds</b>		\$1,312	\$8,929	\$13,476	\$17,757	\$35,898
<b>Total (millions)</b>		\$5,662	\$42.95	\$49,653	\$61.974	\$73,026

## *5. Funding of Supported Employment*

### *d. Funding by non-RSA agencies, FY 1990*

Reported totals of non-RSA funding identified by the states are presented in Table 15. As with Table 14, a funding source was coded NA if a state respondent indicated that the source was used to finance supported employment services, but the amount of funding could not be determined. Identified non-RSA funds totaled \$216,654,363, or roughly three times the amount of RSA expenditures.

Figure 10 shows the number of states indicating that specific funding sources were utilized, and the number of those able to specify specific funding amounts. The majority of states utilized and were able to specify the amounts of VR general revenue funds, MR/DD agency funds, and mental health funds. Fewer than half of the states reported using funds from Medicaid, education, DDPCs, or other sources.

As indicated by Figure 11, state mental retardation/developmental disability and mental health agencies contributed the overwhelming bulk of non-RSA funds for supported employment, accounting for roughly \$130 million and \$27 million, respectively. State VR agencies contributed another \$24.6 million through state matches to Title I and other funds obligated for supported employment services. Although Medicaid, education, DDPC, and other funding sources were used by a substantial number of state systems, few could specify the amounts expended. Notable exceptions were Alabama, California, Illinois, and Missouri, which reported comparatively high amounts of expenditures from "other" sources. These sources included local government agencies (Alabama and Missouri), a state fund for financing extended services (California), and a state project financed by the Department of Public Aid (Illinois).

Table 15

*Supported Employment Funding from Non-RSA Sources in FY 1990*

State	Gen Rev*	MR/DD Agency	MH Agency	Medicaid	Education	DDPC	Other
Alaska	NA	NA	NA	NA	NA	NA	NA
Alabama	\$0	NA	NA	NA	NA	\$119,265	\$1,166,807
Arkansas	\$165,000	\$278,656	\$300,000	NA	\$0	\$0	\$0
Arizona	\$234,413	NA	\$337,167	\$34,762	\$0	\$0	\$0
California	\$2,417,000	NA	NA	NA	NA	\$0	\$11,270,000
Colorado	\$960,000	\$5,650,000	NA	NA	NA	NA	NA
Connecticut	\$43,085	\$24,964,710	\$9,700,000	NA	NA	\$0	NA
Delaware	\$46,205	\$1,523,348	\$0	\$0	\$0	\$48,498	\$0
DC	\$208,000	\$0	\$6,000	\$0	\$0	\$0	\$0
Florida	\$389,831	\$6,551,305	\$275,000	NA	\$500,000	\$275,000	NA
Georgia	\$148,320	\$6,447,840	NA	\$0	\$0	\$160,000	\$0
Hawaii	\$53,653	NA	NA	\$0	\$0	\$0	\$62,000
Iowa	NA	NA	\$0	\$0	\$0	NA	\$0
Idaho	\$40,626	\$400,000	\$150,000	\$0	\$0	\$0	\$0
Illinois	\$1,041,246	\$4,569,336	\$0	NA	NA	\$0	\$2,583,333
Indiana	\$670,000	\$2,110,000	\$990,000	\$0	\$0	\$0	\$0
Kansas	\$110,168	\$1,060,000	NA	NA	\$0	NA	\$0
Kentucky	\$24,292	\$551,365	\$50,000	NA	NA	\$78,000	\$0

State	Gen Rev*	MR/DD Agency	MH Agency	Medicaid	Education	DDPC	Other
Louisiana	\$204,000	NA	NA	\$0	\$0	\$0	\$0
Massachusetts	\$4,268,951	\$9,622,716	\$160,471	NA	NA	\$0	\$0
Maryland	\$0	\$7,000,000	\$800,000	\$0	\$0	\$161,792	\$0
Maine	\$340,000	\$461,170	\$1,000,000	NA	\$40,000	\$0	\$24,000
Michigan	\$296,998	\$1,665,650	\$316,750	NA	\$0	\$0	\$691,813
Minnesota	\$3,965,427	\$4,000,000	NA	NA	NA	\$0	\$0
Missouri	\$360,000	\$100,000	\$150,000	\$100,000	\$50,000	\$100,000	\$2,000,000
Mississippi	\$17,089	\$369,800	\$10,000	\$0	\$0	\$0	\$0
Montana	\$67,133	\$410,725	NA	\$0	\$0	\$0	\$0
North Carolina	\$155,760	\$2,105,280	NA	NA	\$0	\$114,745	\$0
North Dakota	\$1,400,214	\$0	\$0	\$203,591	\$0	\$0	\$235,000
Nebraska	NA	NA	NA	NA	NA	NA	NA
New Hampshire	NA	\$5,847,692	\$3,438,498	\$550,000	\$0	\$0	\$0
New Jersey	\$450,000	\$2,300,000	\$0	\$0	\$0	\$0	\$0
New Mexico	\$0	\$557,334	\$0	\$0	\$0	\$0	\$0
Nevada	\$0	\$0	\$0	\$0	\$0	\$60,000	\$30,000
New York	\$3,258,293	\$7,852,000	\$5,889,188	NA	NA	\$0	\$763,024
Ohio	\$384,000	\$37,700	\$40,000	\$0	NA	\$350,000	NA
Oklahoma	\$360,000	\$250,000	\$300,000	NA	NA	NA	\$600,000
Oregon	\$145,959	\$5,259,011	\$384,298	\$1,694,423	\$50,000	\$0	\$0
Pennsylvania	\$1,148,600	\$424,116	\$500,000	\$600,000	\$0	\$0	\$0

State	Gen Rev*	MR/DD Agency	MH Agency	Medicaid	Education	DDPC	Other
Rhode Island	\$29,380	\$650,000	\$524,208	\$0	\$0	\$0	\$0
South Carolina	\$0	\$1,449,703	NA	\$0	\$0	\$0	\$0
South Dakota	\$0	\$176,566	\$40,766	\$0	\$0	\$0	\$22,946
Tennessee	\$120,000	\$267,840	NA	\$0	\$0	\$0	\$0
Texas	\$62,700	NA	NA	NA	\$5,000,000	\$1,387,509	\$0
Utah	\$26,424	\$1,538,396	\$90,800	\$0	\$0	\$0	\$0
Virginia	\$564,391	\$8,415,000	\$842,000	NA	NA	NA	\$400,000
Vermont	\$145,613	\$556,647	\$374,093	\$2,000,000	\$500,000	\$0	\$565,730
Washington	\$205,972	\$6,000,000	NA	NA	NA	\$0	NA
West Virginia	\$0	\$135,000	\$170,000	NA	NA	\$125,000	\$0
Wisconsin	\$362,731	\$7,510,161	NA	\$0	NA	\$0	\$0
Wyoming	\$2,375	\$1,050,000	\$85,000	\$0	\$0	\$0	\$0
Totals	\$24,893,849	\$130,119,037	\$26,924,239	\$5,182,776	\$6,140,000	\$2,979,809	\$20,414,653

\* Includes state match to Tide I program.

# Funding Source Utilization (FY 1990)

Number of VR systems

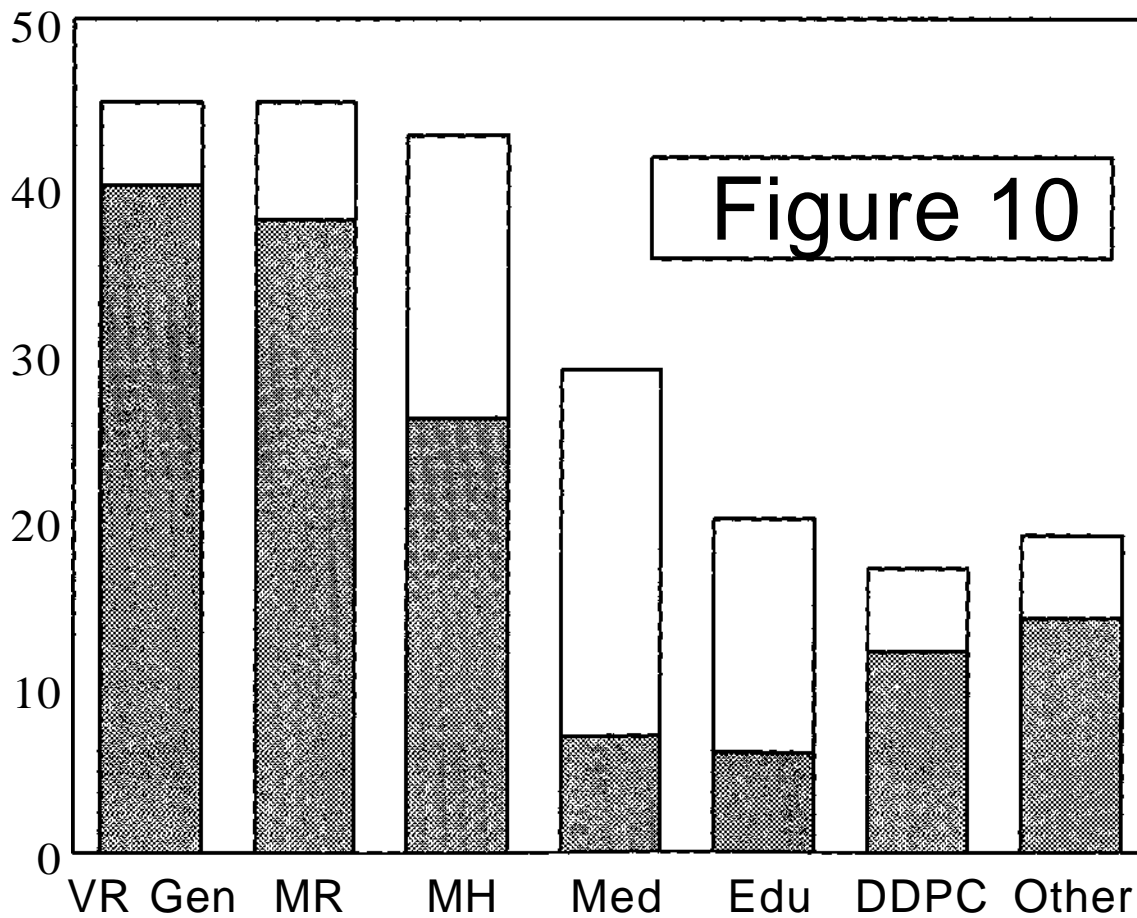
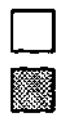


Figure 10

64

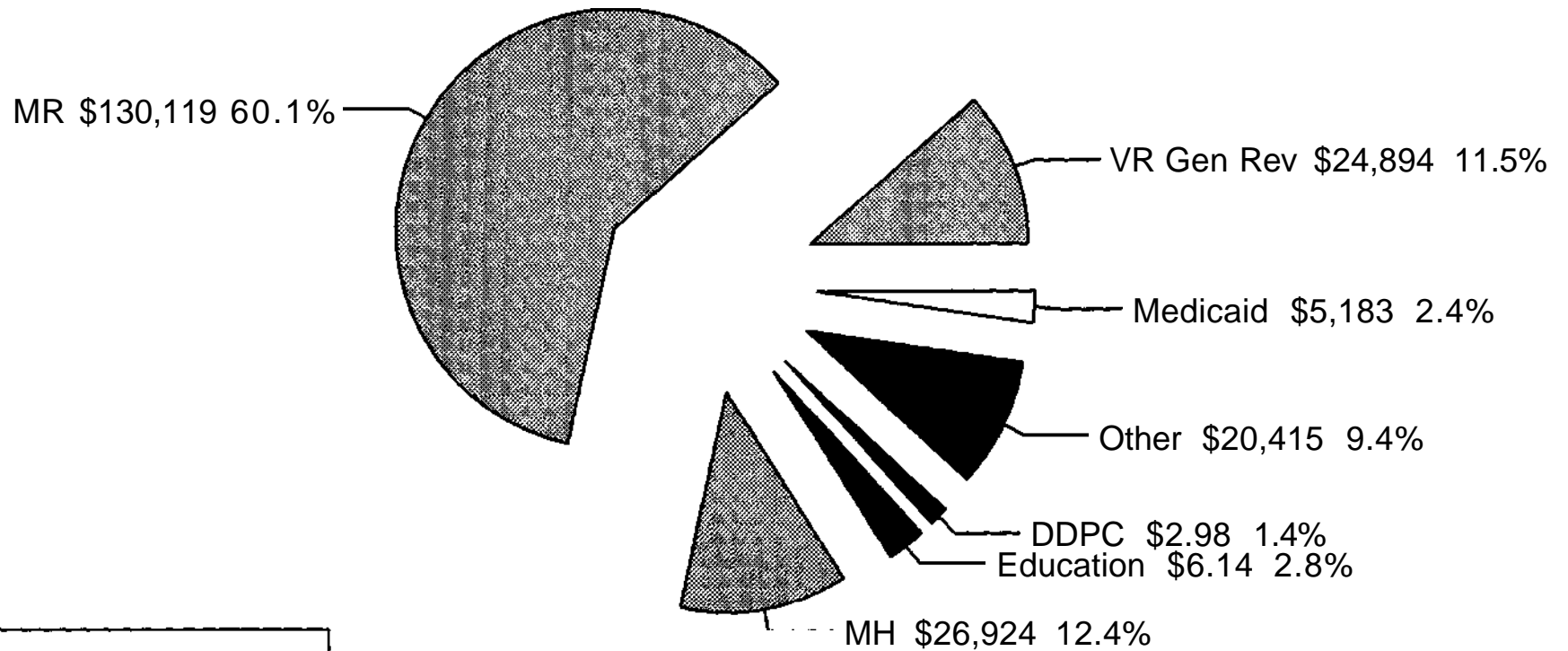
Used/amount unknown  
Used/amount reported



5	7	17	22	14	5	5
40	38	26	7	6	12	14

# Funding of Supported Employment from Non-RSA Sources for FY 1990 (in millions of dollars)

65



**Figure 11**

Note: VR General Revenue includes state match to Title I

## *5. Funding of Supported Employment*

### *e. Non-RSA funding, FY 1986 to FY 1990*

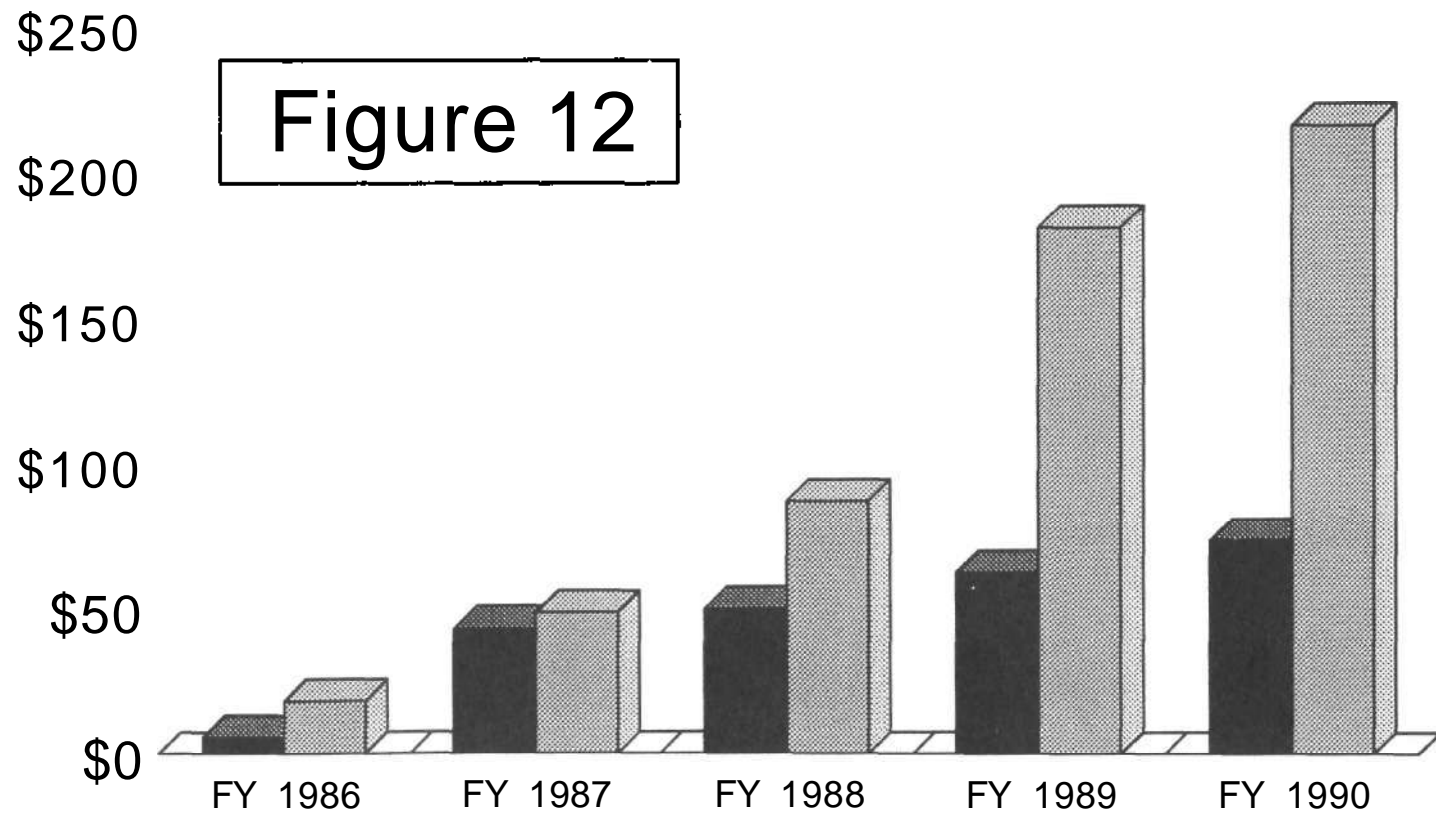
Figure 12 shows levels of funding for supported employment from federal and state non-RSA sources. RSA funding levels are also given for comparison purposes. Non-RSA spending increased by over 75% from FY 1988 to FY 1990. From FY 1989 to FY 1990, non-RSA funding showed a more modest increase (19%), as did RSA funding (17%). These findings indicate that both RSA and non-RSA supported employment expenditures continued to grow from 1989 to 1990. The *rate* of growth, however, has slowed significantly.



# Funding for Supported Employment by RSA and Non-RSA Sources (FY 1986-FY 1990)

Expenditures (millions of dollars)

67



<b>RSA funds</b>		\$5,662	\$42.95	\$49,653	\$61,974	\$73,026
<b>Non-RSA funds</b>		\$18,004	\$48.43	\$86,896	\$181,105	\$216,654
<b>Total expenditures</b>		\$23,666	\$91.38	\$136,549	\$243,079	\$289,681

## 5. *Funding of Supported Employment*

### *f. Comparisons of state fiscal effort in supported employment*

Table 16 contains totals of identified expenditures for supported employment, RSA and non-RSA, for each state. Total expenditures across states showed tremendous variability, from \$240,000 (Iowa) to over \$35 million (Connecticut). As with the totals of supported employment clients discussed previously, expenditures were adjusted to a common yardstick (i.e., state wealth) for comparison purposes. In this case, expenditures in supported employment were calculated per \$100,000 in total personal income during the same period, as reported by the U.S. Census Bureau. Personal income is a commonly used measure of general state wealth, and expenditures as a function of wealth are a common measure of fiscal effort (Braddock & Fujiura, 1991). This adjustment of supported employment expenditures is also presented in Table 16. Expenditures as a function of state wealth revealed that Vermont, New Hampshire, Connecticut, North Dakota, and Wyoming had the highest expenditure rates for supported employment, each expending over \$20 per \$100,000 of personal income.

Because the state ranks on expenditures per \$100,000 of state wealth were based upon reported expenditures, it is imperative to note that state rankings are dependent on each state's ability to track and report expenditure amounts from specific funding sources. Because many states could not specify totals for some funding sources which were known to have been utilized, the actual expenditures and overall fiscal effort in supported employment would be higher than reported in Table 16. Thus, the rankings should be viewed cautiously and as a general but not absolute indicator of fiscal effort.

Table 16

*Expenditures for Supported Employment in FY 1990:  
Total and per \$100,000 of State Wealth*

State	Total Expenditures	Expenditures per \$100,000	Rank
Vermont	\$5,339,363	\$55.76	1
New Hampshire	\$10,544,761	\$46.38	2
Connecticut	\$35,461,728	\$43.30	3
North Dakota	\$2,747,361	\$29.64	4
Wyoming	\$1,643,077	\$22.97	5
Colorado	\$11,407,640	\$19.02	6
Oregon	\$8,449,783	\$17.97	7
Delaware	\$2,307,782	\$17.75	8
Maine	\$2,875,170	\$13.98	9
Wisconsin	\$9,852,277	\$11.87	10
Massachusetts	\$14,429,445	\$10.78	11
Minnesota	\$8,587,599	\$10.78	12
Virginia	\$11,700,149	\$9.82	13
Washington	\$7,504,395	\$8.52	14
Utah	\$1,976,796	\$8.50	15
Maryland	\$8,420,923	\$8.31	16
Rhode Island	\$1,520,244	\$8.21	17
Montana	\$940,445	\$8.05	18
Indiana	\$7,000,000	\$7.71	19
Oklahoma	\$3,415,483	\$7.26	20
Georgia	\$7,732,207	\$7.26	21
Idaho	\$968,048	\$6.62	22
Missouri	\$5,173,433	\$5.93	23
New York	\$21,690,273	\$5.63	24
Arkansas	\$1,750,157	\$5.42	25
Kansas	\$2,213,202	\$5.16	26

State	Total Expenditures	Expenditures per \$100,000	Rank
Florida	\$11,340,128	\$4.87	27
South Dakota	\$490,278	\$4.72	28
California	\$27,652,000	\$4.62	29
North Carolina	\$4,779,812	\$4.61	30
Illinois	\$10,355,528	\$4.58	31
New Mexico	\$750,844	\$3.61	32
DC	\$414,000	\$3.58	33
Texas	\$9,510,349	\$3.48	33
South Carolina	\$1,728,282	\$3.47	34
West Virginia	\$680,000	\$2.86	35
Louisiana	\$1,666,470	\$2.85	36
Alabama	\$1,645,286	\$2.83	37
Michigan	\$4,704,596	\$2.83	38
Arizona	\$1,633,760	\$2.82	39
Hawaii	\$535,553	\$2.49	40
Pennsylvania	\$5,169,977	\$2.40	41
Tennessee	\$1,647,840	\$2.20	42
Mississippi	\$665,675	\$2.09	43
Kentucky	\$1,111,012	\$2.09	44
New Jersey	\$3,640,000	\$1.93	45
Ohio	\$3,327,700	\$1.80	46
Nevada	\$340,000	\$1.53	47
Iowa	\$240,000	\$0.52	48
Alaska	NA	NA	NA
Nebraska	NA	NA	NA

# *Discussion*

## *Table of Contents*

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## *Discussion*

### *Summary of Major Findings and Trends in Supported Employment*

A number of major findings and trends were identified from the 1990 survey and the subsequent comparisons made to the results from prior surveys. These findings and trends follow:

1. For FY 1990, state VR systems identified a total of 74,657 supported employment participants, of whom 30,872 (41.4%) were receiving time-limited services and 43,785 (58.6%) were receiving extended services. These should be considered as minimum numbers, as several states were unable to provide complete data for all individuals known to be involved in supported employment. The overall supported employment program increased by 43.5% over the FY 1989 totals. In relation to overall state population, the largest numbers of supported employment participants were in the Connecticut, Minnesota, Alaska, and Vermont systems.
2. Persons with mental retardation and mental illness continue to be the primary groups involved in supported employment. The percentage of persons with long-term mental illness has increased dramatically over the course of two years, with relative percentages of persons with other primary disabling conditions decreasing.
3. Nationally, persons with mild mental retardation constituted 48.8% of all persons with mental retardation in supported employment, those with moderate mental retardation 36.0%, severe or profound mental retardation 12.2%, and borderline retardation 3.0%. From FY 1988 to FY 1990, relative percentages across severity levels have changed little. Persons with mild mental retardation continue to be the primary recipients of service among those with a primary diagnosis of mental retardation.
4. Nationally, a total of 10,667 Status 26 closures were reported, and 2,779 Status 28 closures. Status 26 case closures increased by approximately 60% from FY 1989 to FY 1990, mirroring the overall growth of supported employment participants.
5. A total of 2,647 provider agencies were reported for FY 1990. Most provider agencies had expanding services to include supported employment (59.9%), followed by those which were downsizing or terminating other day services (21.2%), those with no prior history of providing traditional day services (16.1%), and others (2.9%). From FY 1988 to FY 1990, the growth rate of new provider agencies has declined to approximately 16% annually after the initial surge of program development that occurred from FY 1986 to FY 1988.
6. Of all supported employment participants for whom a program model could be specified, 73.1% were in individual placements, 17.1% were in enclaves, 8.6% were in mobile work crews, and the remaining 1.3% were in small business or other types of supported employment programs. From FY 1988 to FY 1990, the relative percentage of persons in individual placements has increased dramatically (approximately 21 percentage points), while

the percentage of persons in group employment alternatives (particularly mobile crews) has decreased substantially.

7. As in prior surveys, most state systems had identified extended services funding sources for supported employment participants with mental illness and mental retardation. Fewer states reported extended services sources for persons with cerebral palsy, TBI, sensory impairments, and members of other disability groups. Compared to prior surveys, there was an apparent decrease in the number of systems reporting the availability of extended services funding for participants with mental illness, TBI, and hearing impairment.
8. A weighted mean hourly wage of \$3.87 and a mean weekly wage of \$102.34 for all participants in supported employment were calculated. Nationally, 80.9% of all supported employment participants work at least 20 hours per week. In comparison to the FY 1988 survey, these findings indicate a very small increase in the average hourly wage of supported employment participants in relation to the prevailing minimum wage, and an increase in the percentage of supported employment participants working at least 20 hours per week.
9. Reported annual costs for supported employment were highly variable across states. There was also considerable variability in the relative obligations of the VR agency and extended services funding agencies. However, cost data across models and across time-limited and extended services were limited, precluding estimates of national averages of supported employment costs.
10. A total of \$73,026,438 of RSA funds were known to have been expended by the states in FY 1990 for supported employment services. Of this total, \$7,615,813 was attributed to Title III systems change grants, \$29,512,919 to Title VI, Part C funds, and \$35,897,706 to Title I funds. Title III funding decreased from FY 1989 to FY 1990; however, the use of Title I Basic State Grant funds for supported employment doubled from FY 1989 to FY 1990.
11. Identified non-RSA funds totaled \$216,654,363, or roughly three times the amount of RSA expenditures. The majority of state systems utilized and provided specific expenditure amounts for state VR general revenue funds, MR/DD agency funds, and mental health agency funds, with these sources accounting for approximately 84% of all non-RSA expenditures. Fewer than half of the state VR systems used funds from Medicaid, education, DDPCs, or other sources.
12. An analysis of identified expenditures for supported employment as a function of state wealth revealed that Vermont, New Hampshire, Connecticut, North Dakota, and Wyoming had the highest expenditure rates. However, because many states could not specify the amounts of money from various funding sources, the rankings of state systems should be viewed with caution.

### *Limitations of the Study*

The VCU-RRTC supported employment policy analysis study relies upon participant reporting. Therefore, the potential was present for overestimates or underestimates of actual data by state representatives. A participant reporting approach is unavoidable in a national study

which includes the total population of 51 state systems which have diverse, complex, and interdependent agencies, methods, and funding schemes for a particular service or function. The VCU-RRTC research team emphasized cross-validation checks with the multiple agencies involved in providing and funding supported employment services within state systems, and final summary reports were returned to the primary supported employment representative for each system for review and validation.

A second limitation of the findings from this study is the evolving nature of the supported employment management information systems within state systems. The current study results clearly indicated the improvements that have taken place between FY 1986 and FY 1990 in the capacity of states to provide basic participant outcome and financial information for supported employment systems nationwide. Individual state systems had varying capacities to complete components of the survey, and therefore the number of systems responding has been noted by fiscal year for many of the data elements presented in this report.

### *Conclusions*

This section will outline the major achievements of the RSA and state VR systems in providing supported employment, and the challenges ahead for improving services and service delivery.

#### *Achievements of the RSA and VR Systems in Providing Supported Employment*

Since 1985, when the RSA initiated assistance to the states in developing supported employment options, the national supported employment initiative has increased both in size and scope. From 1986 to 1989, the number of VR systems which had supported employment clients and could provide basic data about them increased from 21 to 49. The number of supported employment participants has shown a steady increase since 1986, with a 43.4% increase from FY 1989 to FY 1990. In addition, state VR systems continue to improve their capacity to identify and track supported employment participants. Practically all VR systems are now capable of tracking supported employment clients through time-limited services, and in cooperation with state MR/DD or mental health agencies, most are capable of tracking supported employment participants through extended services as well.

There has been increasing participation by persons with disabilities other than mental retardation, particularly mental illness, in supported employment programs. In two years, the relative percentage of persons with mental illness has increased from 16.7% to 24.4%. The increasing use of supported employment for persons from diverse disability groups underscores the adaptability of supported employment models and methods across an array of unique characteristics, needs, and work-related impairments. It also is an indicator of the value being placed on integrated employment for all VR clients, regardless of disabling conditions.

With the growing number of participants has come an increase in the number of authorized supported employment provider agencies. Although the growth rate from FY 1989 to FY 1990 did not keep pace with previous years, a period of slow growth in provider agencies



would be expected following the rapid development of service capacity that occurred from 1986 to 1988.

Successful case closures (Status 26) outpaced unsuccessful closures (Status 28) by nearly a 4-to-1 margin. In addition, the rate of successful closures increased by approximately 48% from 1989 to 1990. The ratio of Status 26 to Status 28 closures attests to the vocational success that supported employment participants typically find in integrated work options. In short, for most persons involved in supported employment, the program works.

From 1988 to 1990, the relative percentage of supported employment participants receiving individual placement services increased dramatically, and the percentage of persons involved in most group placement options, particularly mobile work crews, declined sharply. In 1990, nearly three-fourths of all supported employment participants were placed using an individual placement approach. This trend away from work crews and other group options coincides with recent additions to the supported employment literature documenting that individuals in group options have limited opportunities for integration and lower financial remuneration than do individuals in individual placements (Kregel, Wehman, & Banks, 1989; Rusch, Johnson, & Hughes, 1990; West, Kregel, & Banks, 1990).

Nationwide, over 80% of all supported employment participants are employed at least 20 hours per week. In comparison with data from 1988, the FY 1990 percentage of supported employees meeting this criterion exceeds the FY 1988 percentage by approximately five percentage points. The 20 hour per week minimum criterion as specified by the current regulations has received considerable attention from provider agencies, VR and RSA agency staff, and advocacy groups. While more state VR systems appear to be taking this requirement more seriously for their supported employment participants, regulatory changes have been proposed making 20 work hours per week a rehabilitation goal rather than a service criteria, in order to promote participation by more severely disabled clients in supported employment.

RSA expenditures for supported employment have leveraged increasing amounts of funds from other federal, state, and local agencies. Indeed, known non-RSA expenditures for FY 1990 were three times that of RSA expenditures. The greatest contributors from this group were state mental retardation/developmental disability agencies and state mental health agencies. However, many states are developing broad-based and creative means of funding services.

One of the most significant findings of this year's survey is the dramatic increase in the rate at which states are using Title I Basic State Grant funds to operate their supported employment programs. In FY 1990, the Title I funds devoted to supported employment exceeded the entire Title VI-C appropriation. A number of factors appear to contribute to the increase in the use of Title I funds.

First, within the vast majority of states, supported employment continues to be accepted and incorporated into the overall vocational rehabilitation program. Supported employment has evolved into a proven rehabilitation alternative that has become a significant component of most states' array of services. Second, for the ten states awarded Title III systems change grants in FY 1985, 1990 was the first year in which they operated their supported employment program without this funding. A number of these states have replaced the original Title III funding with

increased use of Title I monies. Third, several states which in FY 1990 had not yet received a systems change grant (i.e. Indiana, Ohio) nevertheless operated sizable supported employment programs funded in large part by Title I monies. Finally, the substantial increase in Title I in FY 1990 may indicate that the current level of Title VI-C funding (approximately \$30 million) is simply insufficient to meet the demands of the ever growing national supported employment initiative.

### *Continuing Challenges to the RSA and VR Systems in Providing Supported Employment*

Although the supported employment initiative has made significant progress in transforming vocational services for persons with severe disabilities, a number of problems and issues must be addressed by VR systems before the promise of supported employment can be fulfilled.

Since its inception, the mission of supported employment has been to facilitate integrated employment for "those with the most severe disabilities." However, of persons with mental retardation in supported employment, the percentage of individuals with severe or profound mental retardation has remained at approximately 12% over the five-year span of the policy analysis study. Persons with mild retardation continue to be the major disability group engaged in supported employment. Although the 12% participation rate by those with severe and profound retardation exceeds the prevalence rate for this group, these individuals should be among the target groups of the program. It is evident, therefore, that persons with significant levels of mental retardation continue to be underserved by supported employment programs nationwide. A number of states, however, can serve as models for inclusion of persons with severe and profound mental retardation, including Connecticut, Delaware, Oregon, and Pennsylvania.

Although there has been growth in the number of supported employment provider agencies, the majority have added supported employment as a service option without decreasing funding, staff, or other resources to alternative segregated day services. Less than one-fourth of provider agencies have shifted resources and downsized alternative day services to any appreciable degree in order to offer supported employment. This finding would suggest that most provider agencies are filling available supported employment slots without abandoning segregated day service programs.

Even though a greater proportion of supported employment clients are working at least 20 hours per week, average hourly wages for participants continue to be very low. In both 1988 and 1990, the average hourly wages of supported employees were only cents above the minimum wage levels. Furthermore, the slight increase in average wage would appear to be inconsistent with the movement toward more individual competitive placements rather than group placements (where sub-minimum wages are more prevalent [Kregel & Wehman, 1989; VCU-RRTC, 1991]), and also inconsistent with the preponderance of individuals with mild mental retardation and mental illness. To some extent, long-term job satisfaction and retention in supported employment, and thus the success of the supported employment program, will depend on the financial remuneration that participants receive.

Finally, extended services funding continues to be a problematic issue in supported employment. In a small number of states extended services funding is questionable across virtually all disability groups. The major issue for most VR systems, however, appears to be extended services funding for disability groups other than mental illness and mental retardation. Many states have yet to identify funding sources for extended services for persons from other disability groups, including cerebral palsy, TBI, hearing and visual impairments, autism, and other types of severe disabilities. This problem threatens the inclusion of diverse and underserved groups in supported employment programs, and poses a significant barrier to further program expansion.

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