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REHABILITATION RESEARCH AND TRAINING CENTER ON VOCATIONAL REHABILTATION RESEARCH

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UNIVERSITY OF MASSACHUSETTS BOSTON

INTRODUCTION

The programs and services available to assist people with disabilities (PWD) achieve employment have been expanding dramatically in the last decade resulting in a widening array of systems now involved in employment policy and practices affecting citizens with disabilities. In this context, Vocational Rehabilitation (VR) retains the key capacity to assist persons with significant disabilities achieve employment. As a system, VR is based on a structure that is fundamentally healthy and, in fact, is being emulated by many other systems. Through the Rehabilitation Act of 1973, VR pioneered a concept crucial to all current human service systems: individualized planning for services with measurable objectives mutually agreed to by client and counselor. VR's focus on outcome measures was established years before social service systems were subject to any kind of quantifiable accountability. Combining employment and counseling skills at the counselor level has been a model adopted by all manner of human service systems.

Since its inception, VR has been a microcosm of the quintessential U.S. social welfare dilemma of the 20th century: Are resources better devoted to serving the needs of those "most in need" or those "most able to benefit?" As an eligibility, rather than entitlement system, VR must balance accountability while ensuring people in need are not inappropriately excluded. The success of VR has inspired those working in the education, community mental health and developmental disabilities arenas over the last decade, to recognize that the inclusion of employment, economic engagement, and career aspirations among the wide variety of broad based services they have historically offered is not only feasible but essential.

Given this impressive pedigree, why is the system under pressure? The explosion in interest and demand for employment services to all PWD as well as concomitant understanding that people formerly assumed to be unable to benefit from vocational services are now entering the workforce and the limitations in resources to the public VR system have meant that the demand for services is challenging the available supply of resources. Assisting people to achieve vocational success is now seen as a key social policy goal for many agencies not formerly associated with the employment field.

One clear shift in the policy landscape for disability issues and employment over the last decade has been the increasing need to address disability and employment policy from the perspectives of systems other than public VR. What was in the past solely the province of the federal-state VR system must now be attended to in the context of other public systems. Public VR must build on the strengths it has nurtured over the last 80+ years. But to do so, it must show no fear and on the contrary create a more open environment encouraging outsiders to honestly evaluate its operations, welcome new entrants (new systems, new people and new partners) into the VR field, and challenge itself to deliver appropriate, responsive services to a wide array of citizens with disabilities. VR must continuously seek out best practices and modify policies and approaches so that the emerging principles of self determination and the growing focus on integrated employment are part of the core operational designs of the VR system at all levels.

To this end the Institute for Community Inclusion (ICI), a University Center for Excellence in Disabilities at the University of Massachusetts Boston (UMB), the nationally recognized Center for the Advancement of Persons with Disabilities and InfoUse, a woman-owned business, have come together to develop a response for the establishment of a Rehabilitation Research and Training Center in Vocational Rehabilitation Research. The considerable expertise in VR, public policy, research, program development and program evaluation uniquely qualify the ICI and its partners to address the priorities presented by NIDRR in this RFP. Our efforts are directed at assisting the VR system in meeting the challenges of tomorrow by building upon the best practices of today and designing partnerships with other agencies, consumers and employers so that persons with significant disabilities are included in the workforce of the future.

SECTION A: IMPORTANCE OF THE PROBLEM

NEED AND TARGET POPULATION: VR administrators face a complex multi-faceted environment in which to pilot a public employment program. Their mission is clearly a focus on employment and independent living of individuals with significant disabilities. It has become an entity uniquely positioned to partner with the multitude of public systems serving PWD such as the state mental health (MH) agency or the state developmental disabilities (DD) agency, or public systems delivering or brokering employment systems such as state welfare agencies and state workforce development (WD) systems. In 2002, the ICI studied collaboration patterns among seven state agencies engaged in disability and/or employment services finding that the VR program was more often cited as a partner than any other of the listed state agencies (Foley, 2002).

Multiple researchers and policy makers have been vexed by the stability of the unemployment figures for PWD as indicators suggest that despite substantial public investment and civil rights legislation, the employment rate has remained level (c.f. Burkhauser & Stapleton, 2004). While the econometrics and public policy analyses have been important contributions, the knowledge base on best practices and the consequences of operational and programmatic decisions is severely constrained. This explains the frequent call by administrators for more relevant research specifically addressing decisions faced in the operation of a public employment program dedicated to the advancement of people with significant disabilities. The ICI has chosen to focus on the administrators, managers, counselors and direct staff of the VR system as the target population. This RRTC will supply the research, training, and technical assistance (TA) directly to VR personnel and others as indicated so that they may directly affect employment outcomes of PWD.

In each of the 50 states, District of Columbia, Puerto Rico and the U.S. territories, a state VR agency provides public VR for individuals who have significant disabilities. States may elect to provide services in one agency, termed "combined" or may divide services into general and blind. There are 32 combined agencies, 24 general agencies, and 24 commissions for the blind. In FY2005, the Rehabilitation Services Administration (RSA) reports staff resources at a total of 24,977 total person years across all states with 3,506 administrative staff, 10,560 counselors, 9,980 support staff and about 931 other staff (Rehabilitation Services Administration [RSA], 2006). These numbers indicate that the VR program is largely composed of counselors and support staff providing direct services to PWD. Both NIDRR and RSA have considerable investment in preparing and retaining rehabilitation counselors as evidenced by their respective portfolios.

RSA (2006) reports VR expenditures for FY2005 totaled 3.48 billion dollars with the majority of dollars attributable to services provided to individuals (1.75 billion) or counseling and guidance services (1.25 billion). Of the nearly 2 billion for services provided to individuals the majority was for training (nearly 800 million) with physical and mental restoration at a distant second (244 million) and eligibility and needs assessment third (176 million). Expenditure data point to a bias toward direct service delivery largely in the area of human capital development (i.e., training) befitting a public employment service system. In FY2005, there were 1,594,678 individuals considered open cases and 1,393,279 were considered eligible cases in the public VR system. During that same time period, 206,695 individuals achieved an employment outcome. RSA reports that expenditures per employment outcome were $16,486. Demand for services continues to be high as there were 590,291 new applicants with 82% determined eligible and 330, 212 new individual plans for employment developed (RSA, 2006).

For this proposal, the ICI examined the RSA 911 FY2005 dataset to report that the total number of closures out of VR (combined, general, and blind) was 616,879. RSA (2006) summary tables of RSA 2 and RSA 113 indicate that the rehabilitation rate across all agencies was .58 with .58 for general/combined and .69 for blind agencies. A review of this table gives an indication of range of rehabilitation rates across states and territories. In looking at combined/general agencies, rehabilitation rates ranged from .79 in American Samoa and to .37 in

Oklahoma. Among the Blind agencies, the range was .83 in Arkansas to .46 in Minnesota. These numbers are extremely difficult to interpret or attribute to exemplary service practices as mitigating factors may explain the numbers. For example, small states or territories may fluctuate widely year to year depending upon the particular individuals served that year. Economic conditions (e.g., loss of a major industry) or significant events (e.g., Hurricane Katrina) in particular states may have catastrophic implications for the labor market. These variables, however, are easily incorporated into research activities. What remains elusive are structural and process variables such as interagency patterns of service delivery, use of funding mechanisms, emphasis on professional development, VR staffing patterns, and the like that may explain part of the difference in outcomes and indicate paths for improvement. To suggest that a ranking of outcomes alone can be used as an indicator of high quality services is an oversimplification.

BENEFICIAL IMPACT ON TARGET POPULATION: This proposal is a response to activities requested by a partnership between NIDRR and the RSA detailing priorities that will provide the description necessary to launch a *descriptive applied research agenda* directly addressing the needs of VR administrators and their respective programs. As such, we have invested a substantial effort in the required descriptive research that includes an exhaustive use of available data and information, additional intensive data collection that builds off of the research literature and previous studies, and efforts to include VR as experts, decision-makers, and partners. Training and TA activities seek to create feedback loops between the RRTC and the VR system. Through the life of the RRTC, multi-modal training events will be paired with knowledge dissemination and provide ample interactive discussion, brainstorming and guidance.

Issues raised by VR administrators during training, TA, and dissemination activities will be folded into the research activities and may result in changes such as modifications of research literature search criteria, amendments to surveys and case study protocols, nominations of best practices, changes in interpretations or recommendations for future activities. The TA objectives are aligned to nurture a network of experts and VR administrators, managers, and counselors that can respond to ad hoc questions posed, offer a menu of intensive on-site and on-line TA across policy relevant areas, and respond to policy and practice dilemmas as they arise. Dissemination efforts were designed to offer a menu of products integrated into the channels in which VR administrators are accustomed. We will meet obligations to publish in peer-reviewed journals and connect with researchers. The RRTC will provide interactive databases that will allow researchers to review literature and conduct secondary data analysis. We will invest substantial efforts in reaching disability and advocacy organizations through a wide range of channels, particularly in dissemination and training.

The ICI is well-positioned for this RRTC as we have long-standing and intensive relationships with multiple state systems and community rehabilitation providers (CRPs). We not only understand the complex policy and practice dilemmas faced by each agency but also cross-system dilemmas encountered within the context of disability and public employment services provision. The VR system will benefit greatly from a *third-party* RRTC that provides objective and systematic research, training, and TA integrating new knowledge acquired through research into policy and operations decisions. We were approached by the Council of State Administrators of Vocational Rehabilitation (CSAVR) to partner on a proposal. We declined as we felt strongly that the RRTC must be operated by an entity that is not politically engaged or has obligations as the trade association. We anticipate that research findings, best practices analyses, and RRTC recommendations may be in conflict with the efforts of a trade association. Such an RRTC must remain neutral, offer services that are based upon evidence, and potentially raise challenging issues that must be addressed for improved outcomes.

SECTION B: RESPONSIVENESS TO ABSOLUTE OR COMPETITIVE PRIORITY

ADDRESSES ALL REQUIREMENTS OF ABSOLUTE PRIORITY: The RRTC meets all of the requirements of the absolute priority. The NIDRR RFP lists the priorities that a successful proposal must attend to in the design of its activities. These are listed here with commentary about how the ICI proposal intends to fully address each, the location in the proposal narrative where more specific detail can be found, and any barriers to each.

The RRTC must contribute by conducting a literature review and creating a synthesis of previous research on the system-level characteristics of the VR program, and outcomes associated with those characteristics. The RRTC will conduct a comprehensive literature review as described in Priority A, Study 1 of the research design section (pg. 33). We have modeled the literature review after research synthesis methodologies used by the Campbell Collaboration (C2). Our anticipation is that we will collect literature on system-level characteristics but do not anticipate that this literature is mature enough to warrant data analysis on effect sizes nor is it mature enough to describe all system-level characteristics and definitively relate those to outcomes. The ICI is a frequent contributor to this literature but will cast a very broad net to collect articles and other products that relate to the VR program. Outputs from this effort include a database of abstracted articles, publication of the research synthesis in the C2 database of systematic reviews and in the online Registry of Systematic Reviews of research on disability and rehabilitation topics maintained by National Center for the Dissemination of Rehabilitation Research (NCDDR), multiple products summarizing the literature, and recommendations for variable definitions to external researchers as well as an incorporation of these variables into subsequent data collection efforts.

The RRTC must contribute by researching and providing a detailed State-by-State description of the larger employment services network and the role of the VR program within it. In order to accomplish this outcome, the RRTC will collect available data from reputable sources (e.g. RSA 911, administrative data sets, state policy manuals, official documents), collect additional data as necessary, and create a portfolio of employment services for each state including the D.C., Puerto Rico and the territories. Outputs for this outcome will include a searchable database, written products tailored for target audiences, and key variables for inclusion in other research activities both external to the RRTC and for subsequent RRTC activities. Research activities that correspond to this effort include Priority B, Study 2 (pg. 37).

The RRTC must contribute by researching and providing a detailed description of the key characteristics of each states VR system. The RRTC will conduct an intensive in-depth effort to assemble information from multiple sources to create detailed descriptions on key characteristics identified on the RFP, from the research synthesis, from expert panels, and from feedback provided through training and TA efforts with the target population. Data sources such as those mentioned in the above priority will be examined first prior to additional new data collection efforts. However, we anticipate that additional survey and interview data are warranted. VR directors will be interviewed by telephone with protocols that are developed using the state-by-state detailed descriptions and finely tuned to understand the nuances of particular characteristics. These interviews will be analyzed to help the RRTC develop additional survey efforts that drill down further into the key characteristics of each states VR system. The research design includes a description under Priority C, Study 3 (pg. 46). A challenge for this outcome is that key characteristics may not be reliable over time and fluctuate as agencies adjust to day to day practices. We will prioritize characteristics that are more stable but also recommend at least two waves of data collection to determine the degree of change likely to occur across important key characteristics. This effort will also inform and be informed by the State of the Science conference and our TA activities as we recommend proposing a technical working group on data collection efforts that brings together RSA, NIDRR, CSAVR, the RRTC, and other relevant entities that can discuss possibilities of incorporating key characteristics and important variables into ongoing data collection efforts.

The RRTC must contribute by conducting research on the administration and implementation of an order of selection (OOS) in serving individuals with the most significant disabilities (MSD) by their respective state VR programs. The RRTC will use three strategies for addressing this outcome. The first one is to include OOS as variables in all previous studies from the research synthesis, to the activities listed in Priorities B and C. We will document which state VR agencies are using the OOS, how they are utilizing it, for what reasons, and how they define MSD. Interviews with VR directors, particularly in states in OOS, will seek companion documents describing the policy, practice and decision-making guidance on OOS throughout the agency (from administrator through to the counselor). The second strategy will employ an extensive Delphi process to identify best practices across the nation (pg. 50). Once practices are identified intensive case studies will be conducted to search for evidence of correlation with outcomes (service provision) and rank the practices. The third strategy will be to incorporate feedback from training and TA efforts. OOS policies are likely to be subject to yearly changes that are in response to internal state issues such as legislative budgets, changes in demand for services, and labor resources. As we approach implementation of this study, we will seek feedback from VR directors on issues arising that are not likely to have been identified in previous research to date.

The RRTC must contribute by conducting research to determine best practices for placing or retaining individuals with DD or MH conditions in jobs. The RRTC will address this outcome similarly to the OOS outcome detailed above. A substantial literature on evidenced base practices (EBP) is available on employment services for the MH population. However, this literature calls for research that addresses how EBP can be transferred from bench to practice. The National Institute on Mental Health (NIMH), the Centers for Medicaid and Medicare, and the State Association for Mental Health Services Agencies (NASMHPD) have had multiple conferences and RFPs on the dissemination and utilization of this EBP. One area of need is to determine the role of the VR system, its actions, and its relationship with the state MH authority in implementing employment services. The VR system also serves individuals with MH conditions not served by the state MH agency, such as individuals with anxiety and depression. These groups are not included in the EBP supported employment (SE) populations. Therefore, we will search broadly for practices applicable across all MH populations relevant to the VR system. We will prioritize research and practices (such as, but not limited to, contracting procedures, professional development efforts, and quality monitoring) that engage the VR system in the effort to improve return to or entering work or job retention of people with MH issues. The DD research is less mature and does not definitively support any specific employment practice as an EBP. We will broaden our efforts to include practices that are aimed at identifying service delivery strategies as well as those that engage VR as an actor in administering, brokering, or monitoring that practice. The research design includes a description under Priority E, Study 5.1 (pg. 55) and Study 5.2. (pg. 58).

The RRTC must enhance the knowledge base of 1) state and federal VR program personnel; 2) personnel of other employment programs for PWD; and 3) PWD by disseminating research results and providing training and TA based on the new knowledge. The proposal provides a detailed description of the Dissemination Activities in Section E (pg. 69), the Training Activities in Section D (pg. 60), and the TA Activities in Section F (pg. 75). Dissemination activities use a knowledge transfer approach, customize products for target audiences, and utilize channels familiar to specific intended audiences. Training activities are interactive, multimodal events that match the significant expertise of the intended audience with subject matter, method, and objectives. TA activities are based in part upon a community of practice approach defined in the literature and in use by NCDDR that utilize a network of experts to assist the target population transfer knowledge into action and outcomes and connect knowledge brokers across the states. The combined purpose of these activities is to ensure that the RRTC engages all stakeholders and actors in its activities, keeps them informed of our progress and findings, and is an earnest partner in the effort to improve implementation of the VR program.

Additional Requirements: The NIDRR RFP lists additional requirements of the RRTC to collaborate with RSA's TA mechanisms and coordinate its research, dissemination, training, and TA efforts with grantees in NIDRR's employment domain, as appropriate. During the first 30 days of the award, the RRTC will work with the NIDRR project officer to request names and information of grantees in the employment domains. We are frequent partners with the other employment RRTC and have worked for many years with Cornell University, and Virginia Commonwealth University. Mr. John Halliday, PI, is on the advisory group to the Cornell University RRTC. Dr. William Kiernan, Co-PI has had multiple partnerships with Virginia Commonwealth University's RRTC on Workplace Supports and Job Retention, the Beach Center's RRTC on Policies Affecting Families of Children with Disabilities, the University of

Minnesota’s RRTC on Community Living, and the University of Kansas’ RRTC on Independent Living. Dr. Susan Foley is currently PI of a Disability Rehabilitation Research Project (DRRP) in the NIDRR employment domain.

Must conduct a State of the Science Conference in Year 3 and publish a comprehensive report: The RRTC will conduct a State of the Science Conference in Year 3. We will host this conference in a major city convenient to attendees in an accessible venue. We propose to coordinate our effort with the CSAVR annual conference. The conference will include experts internal and external to the RRTC who will be required to submit a response to a call for papers. VR administrators and other employment services personnel will be expected to be presenters and have an active role in the design and creation of the conference. We will also work in concert with other NIDRR funded projects that may have related activities. Description of the conference is offered in Section D (pg. 63) and Section E (pg. 73).

Involve PWD in planning and implementing its research, training, and dissemination activities and in evaluating the RRTC: PWD will be involved as partners in the research, training, and dissemination activities of the RRTC through the following ways: 1) the RRTC staff include PWD in leadership roles; 2) the RRTC will form the disability organization and advocacy expert panel that will provide guidance on the conduct of all research, training, and dissemination activities; and 3) the ICI has a wide network of disability advocacy organizations with which it routinely works with to seek advice and input on the design of projects, products, and curricula.

Identify anticipated outcomes linked to stated objectives: Outcomes are linked to stated activities and objectives as indicated in Table 1. For the sake of reviewer ease, we included a similar table in the evaluation section that links measures and indicators to the outcomes and objectives. This proposal will have direct beneficial effect on VR administrators and staff and indirect benefits to PWD.

ACTIVITIES LIKELY TO ACHIEVE PURPOSES OF PRIORITY: Performance targets and outcome indicators are clearly delineated in Section I: Evaluation. Table 1 provides a comprehensive model of performance for the RRTC including activities, outputs, and short and intermediate term outcomes based on a logic model framework.

Table 1: Model of Performance: Activities, Outputs, and Outcomes

Priority A. Research Review and Synthesis	**Activities** Research Activity 1 Training Activity 1-8 Dissemination Activity (all) Technical Assistance Activity 1,2,3	
Activities	**Outputs**	**Outcomes**
A systematic research review of existing evidence on VR and synthesis of findings. Training of 400 VR agency staff, 200 service providers, and 150 consumers on VR and the employment services network. Dissemination strategies developed to reach target audiences. Dissemination of materials tailored to target audiences. Provide TA to VR and service providers including custom data analysis and evaluation support	Research synthesis will be published in C2-RIPE online database and NCDDR's online Registry of Research Synthesis. Accessible online research and synthesis database will be developed. List of research variables will be developed for subsequent RRTC activities. Peer-reviewed journal articles and conference presentations. 400 VR agency staff, 200 service providers, and 150 consumers will participate in RRTC trainings. Training materials for VR and other service providers will be created.	VR staff, service providers, and researcher will have access to information on VR to guide policymaking and programming. 400 VR staff, 200 service provider staff, and 150 consumers will increase their knowledge about VR and the employment service network. State VR agencies will increase their capacity to serve PWD. *New knowledge gained about:* The status of supports and outcomes of VR agencies and consumers. Existing (research) evidence on VR program characteristics and outcomes, and consumers.

Priority B. Employment Services Constellation	**Activities** Research Activity 2 Training Activity 1-8 Dissemination Activity (all) Technical Assistance 1,2,3	
Activities	**Outputs**	**Outcomes**
Review and evaluation of existing data collection efforts on employment service systems and outcomes. Surveys of state VR, MR/DD, MH, welfare/TANF agencies and CRPs. Training of 400 VR agency staff, 200 service providers, and 150 consumers on VR and the employment services network. Dissemination strategies to reach target audiences. Dissemination of materials tailored to target audiences. Provide TA to VR and service providers including custom data analysis and evaluation support	Online database of state-by-state profiles will be developed. Online data “hub” on state and local employment service systems and outcomes data will be developed. Compendium of technical guides to use data sources will be developed. List of research variables will be developed for subsequent RRTC activities. Peer-reviewed journal articles and conference presentations. 400 VR agency staff, 200 service providers, and 150 consumers will participate in RRTC trainings. Training materials for VR and other service providers will be created.	VR staff, service providers, and researcher will have access to information on VR to guide policymaking and programming. 400 VR staff, 200 service provider staff, and 150 consumers will increase their knowledge about VR and the employment service network. State VR agencies will increase their capacity to serve PWD. *New knowledge gained about:* State-by-state key characteristics of state and local employment service providers (VR, MD/DD, MH, One-Stops, CRPs) and welfare/TANF. The role of the VR program in the constellation of policies and programs.
Priority C. VR Key Characteristics	**Activities** Research Activity 3 Training Activity 1-8 Dissemination Activity (all) Technical Assistance 1,2,3	
Activities	**Outputs**	**Outcomes**
Survey module integrated into VR survey and follow-up surveys (semi-structured and close-ended interviews) with VR directors. Training of 400 VR agency staff, 200 service providers, and 150 consumers on VR and the employment services network. Dissemination strategies to reach target audiences. Dissemination of materials tailored to target audiences. Provide TA to VR and service providers including custom data analysis and evaluation support	State-by-state profiles on the VR program, its characteristics, and outcomes will be developed. List of recommendations for future research will be developed. Peer-reviewed journal articles and conference presentations. 400 VR agency staff, 200 service providers, and 150 consumers will participate in RRTC trainings. Training materials for VR and other service providers will be created.	VR staff, service providers, and researcher will have access to information on VR to guide policymaking and programming. 400 VR staff, 200 service provider staff, and 150 consumers will increase their knowledge about VR and the employment service network. State VR agencies will increase their capacity to serve PWD. *New knowledge gained about:* Key characteristics of each state VR system and differences across states.

Priority D. Best practices for order of selection (OOS)	**Activities** Research Activity 4 Training Activity 1-8 Dissemination Activity (all) Technical Assistance 1,2,3	
Activities	**Outputs**	**Outcomes**
Nomination of best practices in VR OOS in serving people with MSD and investigation of best practice evidence through case study. Training of 400 VR agency staff, 200 service providers, and 150 consumers on VR and the employment services network. Dissemination strategies to reach target audiences. Dissemination of materials tailored to target audiences. Provide TA to VR and service providers including custom data analysis and evaluation support	Online database of best practices will be developed. Best practice guidelines based on research findings data will be developed. Peer-reviewed journal articles and conference presentations. 400 VR agency staff, 200 service providers, and 150 consumers will participate in RRTC trainings. Training materials for VR and other service providers will be created.	Adoption of VR OOS best practices targeted at people with MSD will by other state VR agencies. 400 VR staff, 200 service provider staff, and 150 consumers will increase their knowledge about VR and the employment service network. State VR agencies will increase their capacity to serve PWD. *New knowledge gained about:* Best practice definition linking Delphi process with correlation with outcomes. Best practices in VR OOS selection in serving individuals with MSD.
Priority E. Best practices in DD and MH employment service delivery	**Activities** Research Activity 5.1, 5.2. Training Activity 1-8 Dissemination Activity (all) Technical Assistance 1,2,3	
Activities	**Outputs**	**Outcomes**
Nomination of best practices in serving people with DD and MH and investigation of best practice evidence through case study. Training of 400 VR agency staff, 200 service providers, and 150 consumers on VR and the employment services network. Dissemination strategies to reach target audiences. Dissemination of materials tailored to target audiences. Provide TA to VR and service providers including custom data analysis and evaluation support	Online database of best practices will be developed. Best practice guidelines based on research findings data will be developed. Peer-reviewed journal articles and conference presentations. 400 VR agency staff, 200 service providers, and 150 consumers will participate in RRTC trainings. Training materials for VR and other service providers will be created.	Adoption of DD best practices by state and local VR and MR/DD agencies, and CRPs. Adoption of MH best practices by state and local VR and MH agencies, CRPs and CMHCs. 400 VR staff, 200 service provider staff, and 150 consumers will increase their knowledge about VR and the employment service network. State VR agencies will increase their capacity to serve PWD. *New knowledge gained about:* Best practice definition linking Delphi process with correlation with outcomes. Best practices in serving people with DD and MH.

Priority F. Knowledge dissemination, Training and TA	**Activities** Training Activity 1-8 Dissemination Activity (all) Technical Assistance 1, 2, 3	
Activities	**Outputs**	**Outcomes**
Training of 400 VR agency staff, 200 service providers, and 150 consumers on VR and the employment services network. Dissemination strategies to reach target audiences. Dissemination of materials tailored to target audiences. Provide TA to VR and service providers including custom data analysis and evaluation support	Knowledge Translation Team will be formed. Utilization of research findings in reports, briefings, policy and procedures, and personnel training. Peer-reviewed journal articles and conference presentations. Peer-reviewed journal articles and conference presentations. 400 VR agency staff, 200 service providers, and 150 consumers will participate in RRTC trainings. Training materials for VR and other service providers will be created.	400 VR staff, 200 service provider staff, and 150 consumers will increase their knowledge about VR and the employment service network. State VR agencies will increase their capacity to serve PWD. *New knowledge gained about:* Effective strategies for dissemination knowledge gained under R1-R5.2 among target populations. Effective strategies for information sharing and knowledge translation for VR managers and policy personnel, other employment service providers staff, and practitioners

SECTION C: RESEARCH DESIGN

LITERATURE REVIEW: The purpose of this review is to provide a brief overview of the public employment service system in general and the role of VR within that system, as well as the outcomes of those who benefit from it. As the hub of employment services for individuals with disabilities, VR is in the unique position of needing to consider a wide range of individual and system level issues. To understand the complete picture of the research in these areas, the review considers:

- The current status of employment for individuals with disabilities and the disparity of employment rates across gender, ethnic and disability categories as well rates compared to individual without disabilities.
- The impact of unemployment and under-employment of individuals with disabilities in terms of economic self-sufficiency and independence.
- The role that the current provider system plays in contributing to limited community employment and low incomes.
- The role of the VR and other state systems in the provision of employment services to individuals with disabilities.

- The challenge for the whole service system to respond to needs of individuals with the most significant disabilities and within the VR system managing the demand through order of selection.
- The under-performance of the employment system in meeting the needs of individuals with Mental Illness and Developmental Disabilities.

Employment Outcomes of People with Disabilities (PWD)

The current emphasis on employing PWD cannot be denied. Nearly every organization that works with people with disabilities now states that its mission focuses on getting people with disabilities employed (Half the Planet, 2002). Yet despite this strong effort, recent studies show that employment rates for people with disabilities continue to be substantially lower than rates for people without disabilities. Existing research provides evidence that PWD are less often employed than people without disabilities and there are significant disparities across subpopulations of PWD. One third of PWD report working full or part time compared to three quarters of those without disabilities (National Organization on Disability, 2004). Smith and Gilmore (2007), based on data from the 2005 American Community Survey (ACS), estimate that 37% of working-age adults with disabilities are employed compared with 74% of people without disabilities.

Employment differences are even more pronounced when looking at differences in type of disability, gender, race and ethnicity. Among those with disabilities, employment rates are lower for women than they are for men (Burkhauser & Stapleton, 2004), are disparate among racial and ethnic groups (Maag, 2006), and are lower for those with less education (Weathers II, 2005). The highest employment rates are for people with sensory disabilities and the lowest are for people with self-care disabilities (Maag, 2006). Whites and Asians with disabilities have the highest rates of employment among racial and ethnic subgroups (57.4% and 56.5%, respectively) and are followed by Native Americans (45.1%), Hispanics (43.7%), and Blacks (35.4%) (Maag, 2006). (Note: Differences in rates across studies may be attributed to different definitions of disability and employment.) People with psychiatric disabilities, cognitive disabilities, and chronic health issues tend to have lower rates of employment and fewer earnings from work than people with other types of disabilities (Trupin, Sebesta, Yelin, & LaPlante, 1997). The consensus is that people with disabilities and those with significant disabilities, MR/DD, and MH particularly still have not realized the full economic benefits of community inclusion and citizenship.

Limited Economic Self-Sufficiency and Independence for PWD: The consistent message is that PWD are living with less earned income and are much more frequently living below poverty levels. Maag (2006) reports significant difference in median family income for those with a disability versus those without a disability ($26,100 versus $39,700). Among disability subgroups, median family income was lowest for those with a type of mobility disability (as defined by “going outside the home”) at $18,100 and highest for those with a sensory disability at $29,700 (Maag, 2006). RSA (2006) reports FY2005 earnings data for individuals who closed during the year. The average weekly earnings for all VR closures exited with an employment outcome were $322. Average weekly earnings were significantly lower for individuals with mental illness ($288) and individuals with MR/DD ($198). Earnings increased an average of 286% from the time of application to VR to the time of closure from VR for all persons who exited with an employment outcome. Earnings increased an average of 267% from application to exit from VR for individuals with mental illness and increased an average of 272% for individuals with MR/DD who exited with an employment outcome (RSA, 2006).

U.S. Census 2000 data show that the poverty rate among working-age PWD is nearly twice that of people without disabilities, 18.8% versus 9.6% (Waldrop & Stern, 2003). This is reflected in 2005 American Community Survey where 21.1% of individuals having one or more disabilities are living below the poverty compared with 11.3% of individuals with no disabilities (U.S. Census Bureau, 2005). The poverty rate for whites with disabilities (17.8%) is much lower than that of persons with disabilities from other racial and ethnic groups (U.S. Census Bureau, 2005). Poverty rates among PWD are highest among American Indians and Alaska natives (35.2%) followed by Black or African-Americans (35.0%), persons from some other race not specified (30.5%), multiracial people (27.3%), Native Hawaiians and other Pacific Islanders (23.0%), and Asians (19.0%) (U.S. Census Bureau, 2005).

Employer Provider System Contribution to Under-employment: Individuals with MR/DD and mental illnesses primarily receive direct employment support from the national network of community rehabilitation providers (CRPs) who contract with VR, MR/DD, and MH agencies. CRPs typically offer multiple service options. However, the service most frequently offered is facility-based work, followed by individual supported employment and competitive employment (Metzel, Boeltzig, Butterworth, Sulewski, & Gilmore, 2007). Although data from CRPs on the employment of people with DD suggest that there continues to be a bias toward sheltered and non-work services in funding and service delivery, including a substantial continuing investment in sheltered employment services, a number of states have demonstrated the capacity to support higher percentages of people in integrated employment. In FY2004, 22% of MR/DD agency services to individuals with MR and closely related conditions were provided in integrated employment settings. There is wide state-to-state variability for the percentage of services provided in integrated employment settings ranging from 2% to 55% in FY2004. This creates a challenge for vocational rehabilitation programs as closure into sheltered work is no longer considered a successful rehabilitation.

While employment outcomes data from MR/DD and CRP agencies are available; data on outcomes of people served by state MH agencies is more difficult to obtain. Without the data to fully understand the employment provision system for individuals served through the Mental Health system, it is problematic to identify and address the problem. In FY2001 only 20 of 42 state MH agencies were collecting data on the percent in supported employment, and only 18 of 42 collected data on the percent in competitive employment (NASMHPD, Research Institute, 2002). A NASMHPD pilot of a state performance measurement system indicated that 24% of individuals served were employed (Lutterman, Ganju, Schact, Shaw, & Monihan, 2003). A recent National Alliance for the Mentally Ill (NAMI) Survey suggests that access to effective employment supports is a significant problem on a state systems level. Only 28 percent of the respondents had ever received supported employment services, and almost half of those who did receive them ranked their quality and accessibility as the poorest of all of the interventions included (Hall, Graf, Fitzpatrick, Lane, & Birkel, 2003).

Role of VR and Employment Service System: Collaborative relationships have been emphasized in disability legislation including the Rehabilitation Act of 1973 and its subsequent amendments and the PWD Education Act (IDEA). The Workforce Investment Act (WIA) of 1998 requires the development of cooperative agreements with mandated partners, including state Vocational Rehabilitation (VR) agencies, to develop a comprehensive one-stop approach to workforce development. VR agencies have the potential to be primary linkages in implementing collaborative service delivery models for the employment of PWD. The ICI National Survey on State Systems and Employment Outcomes (2001) found that state VR agencies were collaborating more with other state employment systems including poverty and labor than any other disability state agency, and have multiple collaborative activities with other disability state agencies including mental retardation/developmental disability (MR/DD) and mental health (MH) (Foley, 2002).

The VR program is a major player in cross-system policies and practices at the federal, state, and local level (Butterworth, Foley, Kiernan, & Timmons, 2006). In November 2002, the ICI hosted a state of the science conference for its RRTC on State Systems and Employment themed “Improving Employment Outcomes: Collaboration across disability and workforce development systems.” Papers, panel presentations, and discussants agreed that the VR system is uniquely positioned to partner with welfare, workforce, developmental disability, mental health, and Medicaid systems as VR administrators are knowledgeable across multiple policy domains, often more so than either public employment or disability systems personnel. Foley, Gilmore, Dreilinger, Sullivan & Bose (2002) reported that states with high performance in VR outcomes tend to report a greater number of state agencies stating that employment is a priority goal and have a greater number of agencies co-locating physically. States that have high performance across multiple employment outcomes (MR/DD, One-Stop, Welfare, and VR) appear to have a shared mission, employment or collaboration working groups at the central office level, and have invested in interagency training (Foley et al., 2002). Mr. John Halliday, then the Director of the Connecticut Bureau of Vocational Rehabilitation and discussant at the conference responded to the findings and questioned whether coordination should be considered a quality measure and whether or not specific structural issues relate to the ability to coordinate (Halliday, 2002).

Welfare System: Women receiving welfare benefits are very likely to have some level of disability with estimates of disability prevalence nearly one half to two thirds of the welfare population (Foley, Marrone, & Simon, 2002; U.S. General Accounting Office (GAO, 2001). Reports from the Center on Budget and Policy Priorities and the Urban Institute estimate the number of people receiving welfare who have a serious mental health problem to be between one fourth and one third of the population (Sweeney, 2000; Zedlewski, 2003). Approximately one-fifth of those who have left TANF and are not working have mental impairments and almost half of parents in this group either said that they were in poor general health or scored low on a standard mental health scale (Sweeney, 2000). As many as one-fourth to one-half of the parents no longer receiving TANF due to a sanction in the early implementation phase of PRWORA indicated an inability to comply because of a disability, health condition, or illness (Zedlewski, 1999). State welfare agencies have been challenged by whether or not to exempt PWD from work requirements, assist individuals to enroll on to social security, or to collaborate with other state agencies such as VR to pursue employment services (Marrone, Foley, & Selleck, 2005). Program and operations level challenges between highly individualized VR services and highly structured rule based welfare programs create challenges for VR counselors, welfare case workers, mental health case workers, and community rehabilitation providers serving women with disabilities (Marrone, Foley, Selleck, 2005).

Workforce Development Services: Workforce development services, represented by One-Stop Career Centers (One-Stops) are the most readily available employment resource for the general population. In PY2001, approximately 10.1% of the customers at One-Stop Career Centers identified themselves as PWD. Of these, 67% entered employment compared to 77% of customers without disabilities (Parker & Hoff, 2004). Implementation of the Workforce

Investment Act (WIA) has certainly caused many state agencies to examine partnerships and methods for integrating services. Fesko, Cohen and Bailey (2002) reported that many disparate localities reported substantial difficulty in creating an effective plan for cost allocation and partnership as they tried to respond to WIA requirements but also adhere to their own program guidelines. Such issues as how to share office space, share staffing, navigate contradictory guidelines particularly fiscal mandates, were very time consuming and complex (Fesko, et al, 2002). Operational issues such as data sharing present enormous challenges across agencies. In ICI's National Survey of State Systems, VR agencies were significantly less likely to share data with other partners because of concerns about confidentiality and disclosure of disability status (Foley et al., 2002).

Responding to the Needs of Individuals with Most Significant Disabilities: In 1973, the Rehabilitation Act required a focus on people with significant disabilities and to prioritize those with the most significant disability. The Survey of Income and Program Participation (SIPP) data, mid 2002, indicate that 51 million people in the nation (or 18.1%) have any disability and about 33 million having a severe disability (Steinmetz, 2006). Steinmetz (2006) reports additional numbers by subpopulation to show that rates vary by age, gender, race, and ethnicity. Increasing age is positively correlated with both any and severe disability status, and of interest, people age 45 to 54 (or mid to late career) have higher rates than the national average (19.4% versus 18.1%). Adult women have higher disability rates than adult men (19.5% versus 16.7%) and this gap widens for ages 45 to 54 to (21.9% versus 16.7%). Racial and ethnic differences are more apparent in looking at those with severe disabilities, with non-Hispanic blacks having higher rates (14.0%) than non-Hispanic whites (11.8%), Hispanics of any race (8.8%) and Asian and Pacific Islanders (7.2%). Non-Hispanic Black women have the highest rates of severe disability (14.6%) of any subpopulation.

VR agencies and other public employment systems must address the demand for services. Disability agencies such as MH and MR/DD look to VR to provide some or all of the employment supports necessary. Individuals served by these agencies are likely to have significant disabilities and in large proportion may qualify as “most significantly disabled.” Workforce development systems serve the general population but look toward the VR partner as the source for employment supports for PWD. A major challenge for the VR program has been to determine how to partner in the One-Stop system as either a referral source or as source of expertise in providing integrated services to PWD (Fesko et. al, 2002)

The American Community Survey estimates that over 23.5 million people (over 10% of the U.S. population) are individuals with two or more disabilities (U.S. Census Bureau, 2005). Over 485,000 individuals (79% of all closures) who exited VR services in FY 2005 were persons with a significant disability, meaning they were individuals with a physical or mental impairment that seriously limits one or more functional capacities in terms of an employment outcome and were expected to require multiple VR services over an extended period of time. The GAO (2007) determined that much of the variation across states VR agencies in employment outcome measures for social security beneficiaries could be attributed to state differences in economic variables and demographic characteristics of the beneficiaries themselves. The report implies that poverty issues, employment, and disability factors intersect and play a role in VR performance measures. Other factors such as state certification of counselors, interagency collaboration, and the percentage of expenditures spent on vocational training and education, and strong relationships with businesses were related to increased earnings for SSA beneficiaries served by VR (GAO, 2007). However, the GAO also commented on the limitations of data suggesting additional items for data collection like severity of disability indicators, historical earnings data, reconsideration of self-report as the mechanism for gathering earnings data, and that Education should consider ways to include state level economic data in monitoring and performance indicators (GAO, 2007). SSA challenged methodological issues in the report disputed by GAO but the discussion raises the dilemmas that researchers face using administrative data for research. While these data and subsequent analyses have limitations, independent data collection on such large numbers of individuals at the required detail is cost prohibitive. VR administrators are thus left with a quandary: what level of evidence exists to support investment in system change and where should attention most be paid?

VR directors may exercise numerous policy tools to control the case flow of individuals and respond to the requirement that they prioritize individuals with “most significant disabilities.” Definitions of “ability to benefit,” definition of most significant disability, the use of order of selection policies and outreach mechanisms can be used to respond to demand for services. GAO (2005) reported that 39 out of 80 VR agencies were in order of selection in fiscal year 2003 and 40 were in fiscal year 2004. According to the Rehabilitation Act of 1973 and subsequent amendments and regulations, an order of selection assigns eligibility based on significance of disability using categorized selection criteria and gives priority to persons with the most significant disabilities (Section 101(a)(5)(C) of the Rehabilitation Act of 1973 Act and 34 CFR 361.36(a)(iv)(A). The definition of an individual with a significant disability is threefold (Section 7(21(A) of the Act). The first part of the definition regards employment outcomes and whether an individual is limited in one or more functional capacities due to a severe physical or mental impairment. The second regards the expected requirement of multiple VR services over an extended amount of time for an individual. The last criterion is that an individual is determined, based on an eligibility and vocational rehabilitation assessment, to have one or more physical or mental disabilities, another disability or combination of disabilities that cause comparable functional limitation. No other factors but the statutory definition can be used by State VR agencies to define, determine and assign an individual with a significant disability (34 CFR 361.36(d)(2).

To date the research on order of selection has generally been population specific rather than considering the needs of the whole system. Bellini and Royce-Davis (1999) found that when State VR agencies were under an Order of Selection it increased impediments to collaborative transition planning for student with learning disabilities. Anderson, Boone, and Watson (2003) found that there was a need for better understanding of OOS policies that affect the eligibility and participation of deaf and hard of hearing consumers in VR programs. Hager (2004) explored the Order of Selection option and assessed the financial circumstances that tended to lead a state to select this option and the alternatives for states. Hager (2004) recommended that to decrease the impact of Order of Selection on VR service availability to beneficiaries, advocates should work with VR agencies to utilize alternatives.

The GAO (2005) reported that state VR agencies using OOS has “slightly lower” rates of employment than those state VR agencies not in OOS (32% and 35%, respectively). However, the within group distribution was quite large for both the OOS and non-OOS states making the finding difficult to interpret. The GAO report also stated that “agencies with orders opened and closed their priority service categories at varying points during the year, depending on their available resources and population projections, thus affecting the proportion of individuals being accepted into their programs with most significant disability” (GAO, 2005, p. 25). VR administrators appear to be actively engaging multiple procedures to manage demand for services in the context of fiscal realities and regulatory mandates. A challenge for researchers is to determine ways to measure the effect of OOS policies and other procedures for managing case flow when there is significant state by state variability in the use of the procedures, the temporal nature of policy actions, and as the GAO (2005) report documents, substantial state by state variation in the definition of most significant disability. Given the state by state variability, case study research that provides an in-depth examination of the use of OOS in the context of other demand control procedures employed by administrators, the effect of these policies on outcomes for VR agencies such as case flow and outcomes for people with the most significant disabilities such as access to services is justified.

Employment of Individuals with Mental Illness and Developmental Disabilities

People with mental illnesses and people with developmental disabilities constitute large and very diverse populations served by the Vocational Rehabilitation System Many, but not all, of these individuals are served by both the public VR program and either MR/DD and/or the MH agency.

People with mental illnesses: The U.S. Centers for Disease Control (CDC) estimates that 8% of the U.S. adult population experience ``frequent mental distress'' (defined as being in poor mental health for more than 14 days out of the previous 30) at any point in time (CDC, 1998). Such individuals are more likely to possess one or more of the following characteristics: unemployed, poor, female, separated, and poorly educated (CDC, 1998). The President's New Freedom Commission on Mental Health pointed out that mental illnesses come with devastatingly high financial and personal costs (President's Commission, 2003). According to the 1999 Surgeon General's Report, the annual economic, indirect cost of mental illnesses in the United States is estimated to be $79 billion. Most of that amount—approximately $63 billion—reflects the loss of productivity as a result of illness. Additional costs include almost $4 billion in productivity losses for incarcerated individuals and for the time family caregivers lost (U.S. Public Health Service, Office of the Surgeon General, 1999).

The unemployment rate for people with psychiatric disabilities is 85% to 92% (Anthony, Cohen, Farkas, & Gagne, 2002). Nearly 70% of those with long-term psychiatric experiences are almost entirely dependent upon Social Security programs for financial and medical support and few ever leave the rolls for competitive employment (U.S. General Accounting Office, 1996). Numerous studies and meta-analyses demonstrate people with psychiatric disabilities successfully participate in the labor market in a multitude of competitive employment settings (Bond, et al, 2001; Cook & Razzano, 2000; Crowther, Marshall, Bond, & Huxley, 2001; Gervey & Kowal, 1995; Marrone & Gold, 1994; Marrone, 1993).

Supported employment is one of the six adult mental health evidenced based practices endorsed by SAMHSA with the Individual Placement and Support (IPS) model considered the exemplar within the SE paradigm (Bond, et al., 2001; Drake et al., 1994) supported by evidence from numerous experimental and non-experimental studies (Bond, 2004; Drake, Becker, Clark, & Mueser, 1999; Drake, Becker, Biesanz, & Wyzik, 1996). Bond (2004) summarizes the research literature providing credence to the evidence basis for SE services for people with serious mental illness. Findings from the Employment Intervention Demonstration Program funded by SAMHSA demonstrated that models that were more effective shared the evidenced based components of SE (Cook, Leff, Blyler, et al. 2005). Key components include: a) competitive employment stated as an explicit goal; b) use of rapid job search strategies; c) individualized job finding; d) continuous follow-along supports and assessment; e) use of a "No Reject Model"; and f) integration of MH treatment and employment services (Bond et al., 2001; Bond, 1998). A seventh component, benefits counseling, has been added.

State level implementation: Direct employment service delivery design has been predicated on interagency working relationships between public VR and MH systems. These two public systems have long histories of interagency collaboration and rely upon multiple collaboration activities (i.e., joint service delivery, funding initiatives, structural links, and task-specific working groups) to serve joint populations (Foley, Butterworth, and Heller, 2000). The National Association of State MH Program Directors data indicate that some form of SE is being implemented in over 40 state MH systems of care. National data on fidelity of these programs is non-existent and in many of the states the programs are either not statewide or collectively serves a small percentage of the eligible population (Hall, Graf, Fitzpatrick, Lane & Birkel, 2003). In most states, the state VR agency is the funding agency for public employment services for people with significant disabilities. In some states, the state MH authority complements funding but still works with the state VR agency. Providers of MH services specialize in this population but may or may not provide employment services.

Provider level implementation: Bond, Campbell, Evans, Gervey, Pascaris, Tice, Bene, and Revell (2002) determined that provider type matters in fidelity achievement demonstrating that CMHC-based programs had higher levels of fidelity than programs in psychosocial or comprehensive rehabilitation centers. Gowdy et al. (2003) identified characteristics of high and low performing SE programs for people with mental illness originally designed to respond to the public VR definition of SE for funding. The authors determined that successful programs mirrored the IPS model but not all programs intentionally set out to implement EBP SE. The good news is that the evolutions of SE in MH and VR may have spun out similar practices. The challenge is that coordination, at a minimum, is required for providers to implement employment services for people with psychiatric disabilities.

Bond et al. (2004) indicated that the different types of provider programs had significant difficulty in integrating clinical and vocational services. Cook, Lehman, Drake, McFarlane, et al (2005) found that programs with high levels of service integration had better employment outcomes. Individuals who received more hours of vocational services were more likely to have better outcomes (Cook et al, 2005). However, they qualify this finding stating that those with more clinical services hours may have more significant disabilities.

Frontline worker implementation: Drake, Becker, Bond & Mueser (2003) combined ethnography and quantitative research and found that communication, the ability to engage clients, perceptions of client behavior, and perceptions of client motivation were all challenged when frontline workers from clinical and employment professions were not integrating their efforts to implement SE. With increasing integration, the authors observed clinicians promoting employment as an option and employment plans seemed to demonstrate more clinical understanding (Drake et al, 2003).

Individuals with Developmental Disabilities: There are an estimated 2,878,970 working age individuals with MRDD between the ages of 16 and 64 (Butterworth, Gilmore, Smith, 2006). Findings from ICI's FY2004-2005 Individual Employment Outcomes Survey show that the majority of individuals with DD work part-time predominantly in the entry-level service industry, have low annual income, and have limited access to employee benefits such as health care (Boeltzig, Timmons, Gilmore, & Butterworth, 2007). A longitudinal comparison of the quality of supported employment outcomes shows comparable results: Despite slight improvements in some areas such as worksite integration, work rate, and work quality, individuals obtaining jobs in the late nineties worked similar hours, earned similar wages, and held similar types of jobs compared to those obtaining jobs in the early nineties (Mank, Cioffi, & Yovanoff, 2003). Outcomes have actually declined for individuals with DD served by state VR agencies. Between 1991 and 2005 hours worked at closure declined from 29 to 25, and weekly wages declined from $195 to $179 in 2005 dollars after adjusting for inflation (ICI, n.d.).

State VR agencies provide services to over one million people annually with approximately 600,000 completing services and having their cases closed in each fiscal year. Approximately 72,000 (12%) of those case closures can be identified as individuals with DD (person with a primary disability of mental retardation, cerebral palsy, epilepsy). In an examination of national trends from 1995 to 2005 in VR outcomes among adults with DD, Migliore, Butterworth, and Gilmore (2007) found that although the total number of closures remained about the same, the number of successful closures in employment decreased by 15% from 32,915 in 1995 to 27,999 in 2005. Although weekly earnings at closure increased slightly over the period studied, they were still substantially lower than the general population. Time spent from application to closure for people with DD was 9% higher than other populations reaching 714 days in 2005. Such findings indicate a need for VR to improve in areas such as increasing the number of successful closures, boosting earnings at closure, and timelines for the rehabilitation process.

Although as a nation resources and priorities have not realigned to expand employment, there is substantial evidence that individual states and CRPs have been successful in expanding community employment. In FY2004 Connecticut, Idaho, Oklahoma, and Vermont all reported more than 50% of individuals receive day and employment services in integrated employment. Four other states reported more than 40% in integrated employment. More recently, as an outgrowth of ICI's Access to Integrated Employment project, 15 state MR/DD agencies have committed to expansion of integrated employment by joining the State Employment Leadership Network, a membership roundtable co-managed by ICI and NASDDDS.

While policy under the Medicaid Home and Community Based Waiver program requires that states refer individuals to VR for employment support prior to providing MR/DD agency supports under waiver funding, interagency employment initiatives are impeded by a wide range of systemic barriers including lack of agreement about target populations, differing commitment to the goal of employment, differences in language and culture, and differences in resource availability (Timmons, Cohen & Fesko, 2004). Despite such barriers collaborative initiatives between VR and MR/DD agencies are beginning to emerge (Boeltzig, Timmons & Marrone, In Press). Emerging practices include cross-agency awareness trainings, case conferencing, and cost sharing between VR and MR/DD (Butterworth, Foley, Kiernan & Timmons, 2006).

The challenge for VR for both MR/DD and MH populations is that they serve individuals with those disabilities who do not qualify for services from the state MR/DD or state MH agency. Therefore, interagency coordination is not the solution for services for the entire population of people with MR/DD or MH using VR services. Although SE is an evidenced based practice, there is a question about whether or not the employment service applies to people with other types of mental illnesses such as anxiety or depression. Best practice research for VR populations with MR/DD and MH should use a broad net to identify practices that may fall within the VR system, across multiple agencies, or within other systems to identify innovations to improve the employment outcomes of these populations.

Theoretical and conceptual model: Systems theory of organizations will provide the theoretical framework that guides this study. In the view of systems theory, organizations are viewed as living organisms composed of individual parts that interact and interrelate with one another; the interrelationships of these parts are based on exchange of information (Ritzer, 2000). It is these components, their interactions and interrelationships that make up the whole organism and help it sustain. "Organizations and programs evolve in the systems view; objectives and goals change and the principal focus of research and action is on improving the selection of objectives and problem definition as well as finding better ways of implementing programs" (Palumbo & Oliverio, 1989). Like organisms, organizations are not only dependent on their internal properties but also on their environment within which they compete with other organizations for resources.

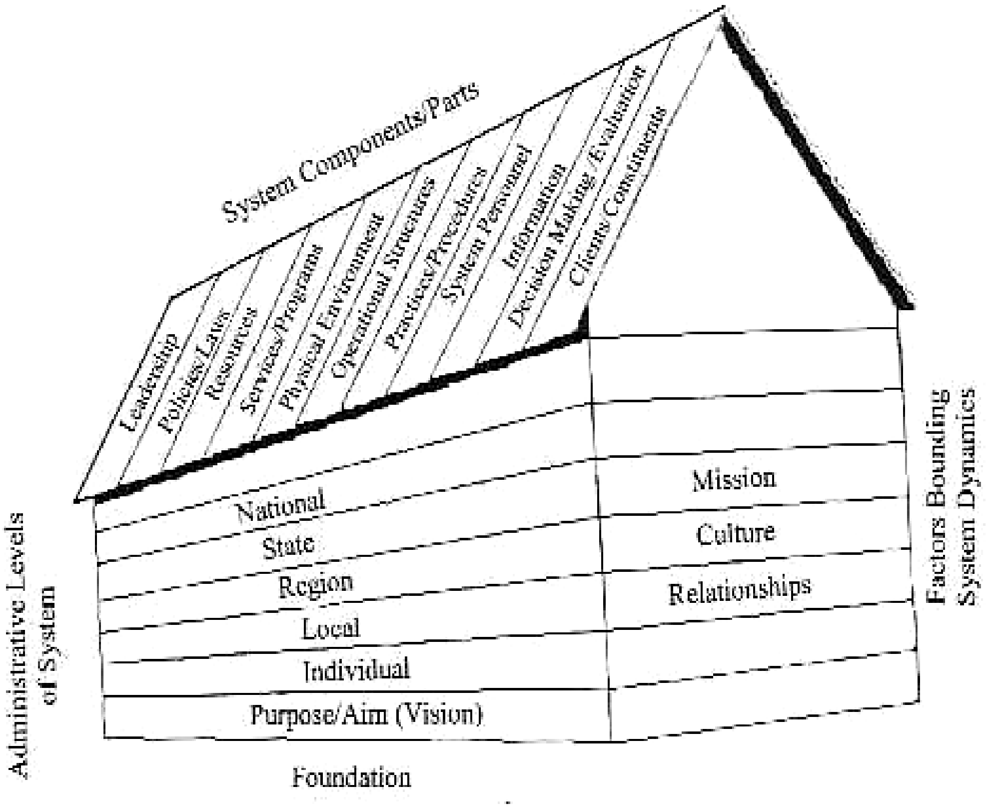

Figure 1: Modified Framework of Service Delivery Systems
Source: Schalock, Fredericks, Dalke, & Alberto (1994)
[Text description of figure: The figure depicted is a house. One side of the house symbolizes administrative levels of the system as national, state, region, local, individual levels in descending order. The front face of the house symbolizes factors bounding system dynamics including mission, culture and relationships. The roof of the house symbolizes system components or parts represented by the roof shingles which are listed in the text below with definitions. The house sits on a foundation defined as purpose, aim and vision of the system.]

We will use the conceptual model proposed by Schalock et al. (1994) to investigate the employment service systems and the VR system in particular. Using a conceptual framework in a cross-system comparison study is very important because it creates a shared language and methods for evaluation. The 11 domains that we will be using to guide RRTC research activities (instrument development, data collection, and analysis) are listed in Figure 1 above, which has been slightly modified to fit the content of the RRTC. The following is a short description of each domain: *Leadership* describes both technical and managerial aspects of a system; *Policies* are formal as well as informal guidelines developed for assisting in the implementation of theories/philosophies; *Services/programs* are the actual activities developed for meeting the consumers' needs; *Resources* are the ingredients that a system needs to perform its services; the *Physical Environment* in our project refers to the social and economic characteristics within which program operate and that may either enhance or thwart the intended outcomes; *Operational Structure* refers to the way systems and organizations articulate their activities to more efficiently accomplish their goals; *Practices/procedures* are activities designed to enhance efficiency and effectiveness of services delivery; *System personnel* is a subgroup of Resources described above. It is analyzed separately because it is one of the most important resources of systems. Schalock et al. (1994) define *Information* as the lifeblood of any systems because the flow of information assure that each component of a system operates accordingly with the rest of the components; *Decision-making/evaluation* is the function that allows systems to modify their behaviors to better accomplish their goals; *Constituents* are the consumers who receive services, but this domain also include consumers' families members, guardians, and the larger community. We found the systems theory and the model portrayed in Figure 1 very reflective of the current literature on the VR program as it offers a framework to categorize variables into domains (such as state certification of counselors into system personnel) and analyze the inter-relationships of these variables through domains. Should VR administrators invest in certification and how might that investment relate to other domains? Our aim is to use the theoretical model to assist in the translation of research findings to policy and practice and encourage other researchers to consider this option. Table 2 below provides an overview of the research activities of this RRTC.

Table 2: Overview of Research Activities

Study	Priority	Sample	Method	Data Collection and Measurement	Data Analysis
R 1: Systematic research synthesis	A	Articles meeting critical criteria for inclusion	Systematic research review method following the *Campbell Collaboration* model	A comprehensive search strategy (as part of the review protocol)	Coding and critical appraisal of the collected evidence
R 2: Survey of service providers (VR, MR/DD, MH, Welfare/TANF, CRPs)	B,C	Samples of State and Local service providers: VR (N=80), MR/DD (N=51), MH (N=54), Welfare/TANF (N=53), CRPs (sampling frame to be developed)	Cross sectional survey	Multi-modal (web, email, mail, telephone)	Statistical analysis and merged with RSA-911 and other relevant data sources
R 3: VR survey module and interviews	C	All Directors of State VR agencies (N=80)	Mixed method: survey research and semi-structured interview	Multi-modal survey and telephone interview	Statistical analysis of survey data and qualitative data analysis of interview data
R 4: Best practice case studies on VR order of selection in serving people with MSD	D	Nominated best practices with <u>at least two</u> sources of evidence (3≤N≥10)	Case study	Interview and document review,	Qualitative data analysis of interview and documentary data
R 5: Best practice case studies on: serving people with DD (Study 5.1.) and MH (Study 5.2.)	E	Study5.1.: Nominated best practices with <u>at least two</u> sources of evidence (3≤N≥10), Study 5.2.: Nominated best practices with <u>at least two</u> sources of evidence (5≤N≥15),	Case study	Interview and document review	Qualitative data analysis of interview and documentary data

PRIORITY A

Goal: Increase knowledge about the system-level characteristics of the VR program, and outcomes associated with those characteristics.

Research/Review Question: *What are the system-level characteristics and associated outcomes of the public Vocational Rehabilitation program?*

Method: We propose to conduct a systematic research review that is "a review of the evidence on a clear formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant primary research, and to extract and analyze data from the studies that are included in the review" (Kahn, Gerber, Glanville, Sowden, & Kleijnen, 2001, p.1). The literature lacks a comprehensive updated review and critical appraisal of information on the VR system. Implementation will start in Year 1 and completed in Year 2 and will provide the foundation for subsequent RRTC activities. Products are descriptive summaries ("descriptive maps") about what research is available; on more specific issues pertaining to Priorities D and E (best practices); a detailed list of research variables to be investigated in Priorities B; a synthesis of research findings; and outputs for training, TA, and dissemination efforts.

RRTC researchers will conduct a *Campbell Review* following the eight steps proposed by the Campbell Collaboration (C2) for conducting systematic reviews. These include: 1) formulating a review question, 2) defining inclusion/exclusion criteria, 3) locating studies, 4) selecting studies, 5) analyzing study quality, 6) extracting data, 7) analyzing and presenting results, and 8) interpreting results (Turner & Nye, 2007). C2 is an international organization, which prepares, maintains and disseminates high-quality systematic reviews in the social sciences. Through its review groups, C2 also provides free methodological guidance and advice to researchers. The study proposed under this priority intends to not only capitalize on the substantive and methodological expertise of C2 advisors but also to contribute to the C2 database of systematic reviews, specifically the online Register of Interventions and Policy Evaluations (C2-RIPE), which is part of the Campbell Library. The RRTC will seek inclusion of the review in the online Registry of Systematic Reviews of research on disability and rehabilitation topics maintained by NCDDR. Through the C2-RIPE database and the NCDDR Registry, researchers, policymakers, practitioners, and the public can access reviews and related documents free of charge. RRTC researchers will also use the resources provided by two other evidence-based centers located in the United Kingdom: the Cochrane Collaboration and the Evidence for Policy and Practice Information and Coordinating (EPPI) Centre is part of the Social Science Research Unit at the Institute of Education, University of London. The former specializes in systematic reviews in the area health care; EPPI focuses on systematic reviews in the public policy field.

Sample: *Screening:* The sample frame will consist of studies about the VR sector hat meet the following criteria: a) must focus on VR in the United States; b) must be written in English language; and c) it must be dated between 1970 (starting date) and 2007 (end date). Note that publication of the study will not be used as a criterion since the review will also be looking at unpublished or “grey” literature. These factors (geographic, linguistic, and temporal) will be used to constrain the sample frame and thus the scope of the review (Schlosser, 2007; White 1994). They will be used to screen studies to ensure fit for the review, a process referred to as “scoping” (EPPI, 2006). *Eligibility criteria* will be used to examine screened studies for inclusion in the final sample and justify exclusion. These are: a) must include PWD or related practices, policies and or perspectives regarding PWD; b) must address one or more components of the VR system; c) must include one or more outcomes related to VR service delivery employment, retention); and d) must employ acceptable research methods that meet the criteria for methodological quality specified in the protocol described below. Modifications to criteria will be based upon expert panel input and sampling issues encountered.

Data Collection and Measurement: Researchers will collect primary documents, both published and unpublished, targeting a wide variety of sources. Sources may include general-purpose databases, search engines, meta-search engines, journals, personal or published bibliographies, conference proceedings, book chapters, books, as well as grey literature (i.e. papers, reports, technical notes that are not published/distributed/indexed by commercial publishers). RTC researchers will use the Centre for Reviews and Dissemination (a C2 partner) comprehensive checklist of key sources and information tools when identifying studies for a systematic review.

Instrumentation. Review protocol: RRTC researchers will develop a review protocol for a Campbell Review following the Campbell Collaboration Guidelines for the Preparation of Review Protocols Version 1.0. C2 offers consultation on protocols to ensure rigorous implementation. The RRTC will take advantage of this option as one external quality control.

Implementation. RRTC researchers will design a search strategy that will use a combination of approaches targeting a variety of sources: electronic database searching, hand searching of key journals, searching of specialist websites, using general search engines on the Internet such as "Google" and "Google scholar." RRTC researchers will ask panel members, authors and experts in the field for their suggestions. Reviewers will maintain a "search log" detailing how and when searching was undertaken, and what search terms (and combinations thereof) were used. A professional librarian from the Healey Library at UMass Boston will assist with the search activities. Electronic records will be downloaded from the databases and imported into EndNote, a reference management software. Studies identified through other methods including hand searching will be inputted manually by RRTC staff.

InfoUse and ICI researchers are multi-disciplinary and this will ensure that the issue under study is covered from multiple perspectives. Having multiple staff review the evidence also provides an important reliability check on important aspects of the review including literature identification and search, critical appraisal of the evidence, data extraction, entry and analysis. The RRTC will recruit members of the research expert panel for Year 1 based upon content and methods area needs arising from the implementation of the research synthesis.

Data Analysis: RRTC researchers will conduct two stages of data analysis: coding the collected evidence (i.e. assigning labels to pieces of information of the study) and appraising the quality of the collected and coded evidence (i.e. scrutinizing and critically appraising the coded information). RRTC researchers will develop a *coding protocol* to code the characteristics of the studies. Coding categories will be based on the study inclusion/exclusion criteria (listed above) as well as key characteristics related to the topic. The coding protocol will be piloted and subjected to internal and external peer review before administration. At least two RRTC researchers will independently code to ensure reliability testing (20-30% of the sample will be tested for inter-rater reliability). The next step will be to organize the coded information into a "descriptive map," that is a descriptive summary about what research is available on VR system characteristics and outcomes, including a list of existing gaps in the literature. According to EPPI (2006), "a descriptive maps provides: (i) a resource in its own right, providing a systematic description of research activity in a topic area; (ii) a basis for narrowing of inclusion criteria where only part of the map is synthesized; (iii) a context for interpreting the results of the synthesis, including the nature of any need for further primary research." Additional maps will be developed for specific issues to be investigated under Priorities D and E (best practice studies). RRTC researchers will collect evidence on OOS and develop "descriptive maps" that will function as a source of and guide in the best practice case study proposed under Priority D.

The next level of analysis is a critical appraisal of the (coded) evidence and synthesis of findings. RRTC researchers will select an appropriate *appraisal instrument* from an existing online database of tools (http://ssrc.tums.ac.ir/SystematicReview/Critical-Appraisal.asp), many of which have already been examined for their efficiency and quality (see Schlosser, 2007). Only studies that meet the quality appraisal will be considered for inclusion in the final research synthesis. RRTC researchers will use a narrative approach for the research synthesis (EPPI, 2006). Both the descriptive maps and the narrative research synthesis will be subjected to a series of internal and external reviews. Internal reviewers will include other RRTC staff not involved directly in the review (e.g., Stoddard, Silverstein, Kiernan, Halliday, Marrone) and other peers (e.g., UMass faculty). External reviewers will include the members of the RRTC expert panels, specifically the research expert panel, as well as C2 staff. We also propose to present the findings to the Research Committee of the CSAVR. RRTC researchers will incorporate feedback into the research synthesis, finalize it and prepare it for submission to/inclusion in the C2-RIPE database and the NCDDR Registry, in addition to making it available for the subsequent research activities planned under Priorities B through E of this RRTC.

PRIORITY B

Goal: Increase knowledge about State-by-State key characteristics of Federal, State, and local government entities and community non-government organizations that either directly deliver or purchase employment services for PWD, and the role of the VR program within this constellation.

Research Questions:

- *What are the characteristics of State, Local, and community-non-governmental agencies that make up the employment services delivery network that provides services for PWD?*
- *What are the characteristics of the people served by these agencies?*
- *What is the role of VR in this larger employment services network?*

Methods: We propose: 1) to identify and review existing national data collection efforts including administrative datasets on state employment service providers (VR, MR/DD, MH, CRPs, workforce development/One-Stop Career Centers) and welfare/TANF service providers targeted at PWD including the type of information that is being collected as well as gaps in data collection; 2) to collect information on important data elements that are not yet being collected (through survey research); 3) to conduct analysis of these data and develop state-by-state profiles summarizing the key characteristics of the employment services system at the state level; and 4) to develop mechanisms to link and integrate those data collection efforts in a manner that is useful and accessible to VR administrators, managers, and researchers, as well as other service providers. During Year 1 we will begin planning and development, conduct the survey in Year 2, and complete reports in Year 3.

The goal of this effort is to create a clearinghouse or “hub” for data on the VR system and its network. ICI has already created such a centralized data hub for MR/DD data (www.statedata.info). This hub also includes access to the RSA-911, Census data, welfare data, and workforce data. The proposed effort will not only build on this effort but expand it to encompass multiple data sources targeting the continuum of employment services tailored for the VR. Products from this effort will include: data files that can be used by researchers for future, more in-depth analysis; an online data hub that allows access to data to perform simple data comparison within and across employment service systems, states, and target populations; state-by-state descriptions of key characteristics of employment service systems; as well as outputs for training, TA, and dissemination efforts.

Review of Existing Data Collection Efforts and Sources

The first step in this research effort will be to review existing data collection efforts and also to identify gaps in data collection within and across data sources. Using systems theory RRTC researchers will group the identified variables - on which data are being collected and on which data are missing into domains (see Table 2 below). These domains correspond to key features of service delivery systems. This and other information will be used to develop instruments to collect additional data and to guide data analysis. Following are examples of existing data collection efforts that will be reviewed.

- *Rehabilitation Services Administration (RSA) 911*. ICI has on hand RSA-911 data for Fiscal Years 1988, 1991, 1993, 1995, and 1997 through 2005. ICI maintains contact with RSA personnel and updates its catalogue of RSA-911 data files as they become available.
- *Post-Vocational Rehabilitation Experiences Study* is a five year longitudinal study of 8000 VR consumers who exited the program with or without employment outcomes. The study is being conducted by Westat with InfoUse.
- ICI's NIDRR funded *Emergent Disability Demographic Survey* which was a multi-modal survey of state VR agencies (general and combined), and state welfare agencies in the states, DC, Puerto Rico, and territories. Data collection items included: data collection methods, characteristics of population(s) served, socio-demographic changes in population(s) served, inter-agency collaboration, agency changes, and use of VR order of selection.
- ICI's *National Survey of Day and Employment Services for People with Developmental*

Disabilities is a longitudinal study (FY1988 to FY2004) commissioned by the Administration on Developmental Disabilities (ADD) to analyze community-based day and employment service trends for individuals with MR/DD, and includes number of individuals placed in integrated employment settings, community-based non-work settings, facility-based (segregated) work settings, and facility-based non-work settings.

- The Center for Mental Health Services (CMHS) *Uniform Reporting System (URS)* was developed in the late 1990s with the goal of generating uniform reporting of State-level data that illustrate the outcomes of the public MH system, and consists of standardized tables that state mental health agencies (SMHA) submit each December to CMHS. The variables reported in the tables include, adult employment status, implementation of evidence based practices, living situations, and hospital readmissions patterns.
- *Wagner-Peyser Data* provide a significant source of data regarding the performance of the One-Stop system, since One-Stop partners (VR is a mandated partner) are encouraged to register everyone they serve in the Labor Exchange Services funded by Wagner-Peyser. Wagner-Peyser funded activities data include state level information on the number registered jobs seekers who are persons with disabilities. Data for the Wagner-Peyser Act come from the publicly available data files on the U.S. Department of Labor, Employment and Training Administration website. Data for WIA comes from the Workforce Investment Act Standardized Record Data (WIASRD) file. ICI has on hand Wagner-Peyser funded activities data from 2002 to 2005 and WIA National Performance Data from 2000 to 2004.
- Funded by the ADD, *ICI' s National Survey of Community Rehabilitation Providers FY2002-2003* includes: a) organizational characteristics including type of organization, numbers served annually in employment and non-work, respectively, and in both settings combined; b) employment services, including funding source of services received, types of employment and non-work services provided, and numbers of individuals supported by service and setting; c) activities and goals of CRP non-work programs; d) CRP funding sources and annual operations budget for both employment and non-work; e) service trends over the past 3 years; and f) CRP

involvement with the Ticket to Work program, state and local Workforce Investment Boards and One-Stop Career Centers.

- ICI's *National Survey of Community Rehabilitation Providers, Individual Employment Outcomes Survey FY2004-2005*. The survey consisted of two parts: an organizational-level questionnaire and individual-level questionnaires. The organizational-level questionnaire gathered information about the CRP, including the entity's type, location, and size. The individual-level questionnaire collected demographic information about the individuals, the type of employment and day supports they received for the 12 months immediately prior to entering their new integrated job, and individuals' employment information (number of hours, wages, source of wages, benefits, and job type).
- ICI's *National Survey of State Systems and Employment Outcomes* was conducted in 2000 and 2001 as a national cross-sectional survey documenting existing structures and functions of seven state agencies including welfare/TANF agencies engaged in disability and/or public employment services. Survey items included structural variables, partnerships, communication channels, mission, employment services offered, and the nature of interagency collaboration. These items will be evaluated for use in the new effort and can be used as determinants of change over time.

In addition to existing disability employment and welfare data collection efforts, RRTC researchers will identify other data sources and data items to be used in the proposed data coordination and data analysis effort. These data sources include: the U.S. Census Bureau, the Bureau of Labor Statistics (BLS), and the Bureau of Economic Analysis (BEA). For example, BLS and the BEA provide state-level economic and labor market data that will add context to the state-level agency and outcomes data that will be analyzed and summarized in this effort.

Additional Data Collection

Through the research synthesis RRTC researchers will identify existing gaps in information and evidence on VR characteristics and associated outcomes. The result will be a list of variables to be used for additional survey research targeted at VR, MR/DD, MH, CRPs and welfare/TANF. The purpose of the survey research is to collect new data on the identified variables that allow for comparison across systems, states, and target populations. Data collection will consist of a) a survey of state VR agencies, b) a survey module targeted at MR/DD agencies; c) a survey of MH agencies; d) a survey module targeted at CRPs; and e) a survey of welfare/TANF agencies. With regard to the MR/DD and CRP survey modules, an existing grant from ADD funds periodic surveys targeted at MR/DD agencies and CRPs respectively. The timing of both efforts allows for coordination and subsequent reduction in respondent burden.

RRTC researchers will also collect data on workforce development agencies, specifically One-Stops, and how they serve PWD together with the One-Stop partners, both mandated partners (VR) and non-mandated partners (MR/DD, MH, CRPs). Because One-Stops are locally operated entities, data collection directly from One-Stops may be a challenge. An alternative may be to collect data from State and Local Workforce Investment Boards (WIBs) that oversee these One-Stops at the state and local levels respectively. However, these entities may not have access to the level of detail that the RRTC researchers are intending to collect (e.g., One-Stop operations, front-line service delivery practices). A contact list of these WIBs is publicly available from the National Association for Workforce Boards (NAWB). RRTC researchers will discuss this data collection option with internal experts and members of the RRTC expert panels and will make a decision about how to most effectively collect information on One-Stops. Each of the surveys and survey modules proposed under this Priority, however, will contain a section that will collect data on service coordination and partnership between employment and welfare/TANF service providers and the workforce development system/One-Stops.

Samples: *Sample for VR survey (N=80):* The sample frame for the VR survey includes the directors of the state VR agencies (general, blind, and combined) in all 50 states, D.C., Puerto Rico, and the territories. The ICI maintains a mailing list of state VR agencies (general, blind and combined) that was used in the NIDRR funded Emergent Disability Demographic Survey/Survey of State VR Agencies in July 2007. We achieved a response rate of 91% or 51 out of 56. Eliminating the territories from the sample gives a 92% response rate. Respondents included 36 directors, 14 designees, generally senior management, and one respondent did not report job title. For the next round of state VR agency survey proposed under this priority, we anticipate a response rate of at least 85%.

Sample for MR/DD survey (N=51): The sample frame for the MR/DD survey includes the directors of the state MR/DD agencies in all 50 states, D.C., Puerto Rico, and the territories do not currently have a corresponding agency. The 2001 MR/DD survey achieved a response rate of 82% or 42 out of 51; the 2004 MR/DD survey achieved a response rate of 88% or 45 out of 51. For the next round of MR/DD survey, we anticipate a response rate of at least 85%. The RRTC will create a module that can be either inserted into the MR/DD survey or conducted independently if necessary.

Sample for MH survey (N=54): The sample frame for the MH survey includes the directors of the state MH agencies in all 50 states, D.C., Puerto Rico, and the territories. The ICI surveyed state MH agency directors in 2000 through 2001 as part of the National Survey of State Systems and Employment Outcomes and achieved a response rate of 76%. RRTC researchers will update the mailing list using the one maintained by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention’s online list of *Mental Health Organizations By State* (http://www.cdc.gov/mentalhealth/state_orgs.htm). RRTC researchers will verify the information on the list prior to its use as a sample frame, and will anticipate an 85% response rate.

Sample for CRP survey: The sample frame for the CRP survey is the universe of CRPs (N=8,000). The CRP survey module would be integrated into the ADD CRP survey. Because there are no lists of CRPs currently being maintained at the national level, ADD research staff will develop a national database of providers to be used as a sampling frame. Research staff will use existing ICI mailing lists as well as other sources (e.g., state MR/DD agencies, state VR agencies, UCPA affiliates, Goodwill Inc., The Arc, United Cerebral Palsy, and the Rehabilitation Accreditation Commission) to develop this database. The survey will use a stratified random sampling strategy using geographic location and type of organization as factors. Response rates were 50% for the FY2002-2003 and 54% for the FY2004-05 CRP survey. We anticipate a response rate of at least 50%. The RRTC will create a module that can be either inserted into the CRP survey or conducted independently if necessary. The advantage of merging the efforts is to reduce burden on the CRP personnel.

Sample for welfare/TANF survey (N=53): The sample frame will consist of the Human Services agencies with the responsibility for administering TANF programs, including all 50 states, D.C., Puerto Rico, and the territories. Similar to VR and MR/DD, the ICI maintains a mailing list of welfare/TANF agencies that is updated regularly. The ICI surveyed welfare/TANF agency directors in 2000 through 2001 as part of the National Survey of State Systems and Employment Outcomes and achieved a response rate of 80%. Another survey is currently in week 2 of an 8 week field period. For the next round of welfare/TANF survey, we anticipate a response rate of at least 80%.

Data Collection and Measurement: *Instrumentation.* Based on a preliminary review, we created a list of key variables that align with domains from the systems theory (see Table 2 below). Survey item development will be an iterative process and will draw from the new knowledge gained from the research synthesis and review of existing data collection efforts, past ICI and InfoUse survey research, and expert panel input. Particular attention will be given to the development of items that allow for cross-system comparison such as measuring cross-agency partnerships so that we may capture the constellation of services by state. Drafts of all survey instruments (including the MR/DD survey module and the CRP survey module) will be subject to internal and external reviews. The instruments will also be subject to review by the CSAVR Research Committee and the RRTC expert panels. Survey instruments will be pilot tested prior to implementation with at least three members of the sampled population.

Table 2: List of Key Research Variables By Domain

Domains	Key variables
Leadership	Mission, vision, strategic planning, decision-making, leadership skills, change agents
Policies	Service delivery (e.g., order of selection, waiting lists, eligibility criteria), staffing, collaboration (e.g., use of cooperative agreements), consumer engagement
Services/programs	Service delivery structure and models (e.g. supported employment), internal and external service provision, service integration (e.g. VR and clinical services), service delivery mechanisms, service coordination (e.g., joint case management), means to address service duplication, means to address transportation and other employment-related barriers
Resources	Budget and resource allocation, human resources, technological infrastructure, partners, knowledge/information
Physical environment	Socio-demographics, (un)employment rates, labor market and economic trends, poverty levels, growth domestic product
Operational structure	Organizational structure and internal arrangements, formalization, specialization, differentiation, decentralization
Practices/procedures	Policy implementation (e.g. SE), operational definitions (e.g., MSD), implementation tools and instruments (e.g., SE fidelity scale), guidelines and regulations, barriers and facilitators, knowledge transfer
System personnel	Staffing, staff education/qualification, staffing changes (retention, turnover), staff training and professional development, staff reimbursement (wages, benefits)
Information	Data collection (e.g., outcomes, consumer satisfaction), monitoring, sharing, mechanisms, quality control, knowledge transfer
Decision-making/evaluation	Type and process (e.g., data-driven, outcome-based, customer-focused), consumer and staff engagement
Constituents	Demographics, employment status and outcomes, employment settings and level of integration, work-related barriers (e.g., transportation)

Implementation. Surveys and modules will be administered to state agencies (VR, MR/DD, MH, Welfare/TANF) and CRPs during Years 2 and 3 of the RRTC. The primary mode of data collection will be through an accessible web survey on a secure website. Other modes, including mail and telephone, will also be employed in an effort to increase survey response. All surveys will be available in alternative formats (e.g., large print, Braille, etc.). RRTC researchers anticipate an eight week fielding period for each survey and will use a “Total Survey Design” approach (Dillman, 1978) to achieve maximum response. Letters will be sent to all respondents summarizing the purpose of the survey, specify the web survey address and password for that particular respondent, and provide a toll-free number for requests for assistance. Follow-up will include a post-card reminder to non-respondents one week after the letters have been mailed. Phone follow-up will begin in week four and continue through week eight. Staff will collect survey data from non-respondents when completing telephone follow-up. Telephone follow-up will be conducted by a team of highly trained graduate assistants who have undergone both basic interviewer training, as well as training specific to this project. The surveys will be receipted on a daily basis by staff trained in survey methodology. Surveys received will be updated in a receipt database to ensure respondents do not receive additional follow-up.

Data Analysis: *Data preparation and data file development.* The following processing steps will be conducted after data collection is finished: coding, data entry, editing, and data analysis (Groves, Fowler, Couper, Leprowski, Singers, & Tourangeau, 2004). After designing a coding system, the researchers will review questionnaires to edit the answers and build numeric codes for open end responses. Paper responses, including results of telephone interviews, will be batched and prepared for entry. Batches will be entered once they have undergone quality control checks from senior ICI staff members. Data entry personnel will enter the data from the questionnaires into an electronic file. The researchers will inspect and, if needed, clean the data prior to statistical analysis. All electronic survey responses will be stored on a secure web server and, after extraction from the server, on a secure hard disk. Once all the data has been entered, data files will be prepared for analysis. The final data file for each survey will include responses from all modes. Survey data for each instrument will be integrated with data from secondary data sources to create a common data file for state-level quantitative analysis. To create these integrated state data files, disparate data files will be joined by state. Secondary data sources containing individual level data, such as the RSA-911 and U.S. Census Bureau data will be aggregated to the state level prior to being added to these integrated state-level data files. This will allow RRTC researchers to explore the correlation between agency operations, policies, partnerships and employment outcomes for PWD.

Analysis of all data files will be done using SPSS Version 15.0 for PC, a statistical software tool. Descriptive statistical analysis will be conducted to assess the descriptive nature of the data from all surveys (e.g., histograms of responses on individual items and inter-correlations among items), and to determine the internal consistency of the items (Cronbach's α). Research staff will also conduct analysis across surveys to test for correlations among answers to related items within a state, e.g. if a state's MR/DD agency reports having a formal partnership with the VR, is that statement validated by the VR survey data. Descriptive analysis will explore the relationships between agencies within a state's employment services network. RRTC staff will also conduct comparative analysis of key characteristics of employment services agency practices and outcomes across states using the integrated state-level data files described above. RRTC staff will develop a template that will be used to develop state-by-state descriptions of the employment services network that serves PWD. Templates will guide researchers in summarizing the survey findings by state and will include organizational charts and tables. Drafts of study findings will be subjected to internal and external reviews. Feedback will be incorporated as part of finalizing the products. RRTC staff will also conduct basic statistical analysis across surveys. More advanced statistical analysis of data will be conducted at the request of training and TA staff. The development of the data "hub" is explained in detail in the dissemination section.

PRIORITY C

Goal: Increase knowledge about key characteristics of each State's VR system and providing a base upon which researchers can analyze the operational consequences and outcomes of different internal arrangements and agency decisions.

Research Questions:

- *What are the key characteristics of each State's VR system, and how can they be used for analyzing variation in operations and outcomes within state and across states?*

Method: We propose to conduct a data collection effort that will consist of three components or waves: The first wave is a survey module integrated into the state VR agency survey described under Priority B that collects VR specific information on key characteristics. These include but are not limited to VR service delivery structure and practices, patterns of resource allocation, patterns of internal and external provision of services, the use of cooperative agreements by VR for joint service delivery, operational definitions (e.g., definition of MSD), characteristics of clients, employment outcomes and settings, the level of integration of work settings, the use of home-based employment, and means of addressing transportation barriers. The second wave is open-ended semi-structured qualitative interviews with VR directors to follow up on the survey module and collect "thick" descriptions on the key characteristics. The third is a second survey with the same state VR directors; RRTC researchers will use the thick descriptive data obtained in wave two, "distill" it to its key components as the basis for developing a standardized telephone survey that is more detailed in content compared to the VR survey module of Wave 1 and consistent across states. By measuring how state VR agencies do in respect to key variables, the third wave will assist in building a comprehensive picture of the VR system across states. Each wave will add a detailed layer of description of state VR agency characteristics. Products will include a state-by-state description - both quantitative and qualitative - of the key characteristics of VR agencies; a synthesis of findings of variations (similarities and differences) in those characteristics and issues across states; the data file of the survey module for public use; recommendations for future research; and outputs for training, TA, and dissemination efforts.

Wave 1 (VR survey module): The methodology for the VR survey was described in the previous section and will be implemented in Year 2 of the grant. *Wave 2 (semi-structured interviews)* will consist of open-ended semi-structured interviews that delve further into the key characteristics examined in the VR survey module. Interviews will be tailored to each state VR agency exploring not only key characteristics, but also other issues such as local dynamics, and intention to change specific policies or practices. *Wave 3 (standardized interviews)* will use the descriptive data obtained in Wave 2 and standardize some of this "individualized" information so that it can be used for telephone surveying all state agencies. The survey method will be employed in conjunction with the telephone mode to make it more convenient for state VR directors to respond. The follow-up surveys (semi-structured and close-ended qualitative surveys) will be implemented in Year 3 of the grant. Findings from the first survey effort will allow us to further refine variables and values in order to get more descriptive and contextual detail in the second wave. The data collection burden for each state VR director will be approximately 8 to10 hours spread over a period of 2 to 3 years. Given the focus of this RRTC, we assume this level of engagement to be appropriate. We will revisit the response burden issue with the expert panels prior to implementation of the proposed study.

Sample (All Waves): The sample includes all of the state VR directors of general, blind, and combined agencies for a total of 80 agencies. RRTC researchers will make every effort to interview the director for all three waves. If the VR director is not available, then we will request a member of the senior management team to participate in the effort. Previous ICI survey efforts have had remarkably high response rates from state VR directors. Given the relevance of the RRTC and high likelihood of beneficial impact, we anticipate a response rate close to 100%.

Data Collection and Measurement: *Instrumentation* will follow the same strategy outlined under Priority B and include incorporation of research synthesis findings, expert panel input and review, pilot testing, and implementation. *Survey instrument (Wave 1)*: Data collection was described in priority B. *Interview protocols (Waves 2 and 3):* ICI and InfoUse staff will develop the Wave 2 protocol using a semi-structured open-ended format and will use findings from Priority B surveys, the research synthesis and additional research published after the Priority A search date The draft will be subjected to both internal and external review, amended after field testing, and finalized. Interviewers will be given a summary sheet of the main Wave 1 findings for each state. The interviewers will be instructed to use this information to tailor the interview process to the respective state VR agency and obtain thick descriptive data on their survey responses. RRTC researchers will develop Wave 3 protocols as a standardized close-ended survey. Questions will be similar to Wave 1 but at a much more detailed level. The survey questionnaire will be reviewed internally and externally, field tested and finalized.

Implementation. Implementation of Wave 1 is described in Priority B. The follow up surveys (Wave 2 and 3) are scheduled for Year 3. Specifically, Wave 2 will be conducted in the third quarter following IRB and CSAVR Research Committee approval and Wave 3 in the fourth quarter. Wave 2 interviewers will be senior staff at ICI and InfoUse with extensive knowledge of VR practices and policies. RRTC staff conducting Wave 3 interviews will be research staff trained in survey implementation in general and in this survey in particular. Surveys will be given *a priori* to directors so that they may compile all the necessary information for the interviews or conduct the interview as a conference call with designees. All Wave 2 and 3 interviews will be tape recorded. Wave 2 interview tapes will be transcribed and entered into qualitative software. Wave 3 tape recordings will be used as quality checks to ensure that interviews coded responses accurately.

Data Analysis: *Wave 1 data (VR survey module):* Analysis is described in Priority B. *Wave 2 data (semi-structured open-ended interviews):* There will be two stages of analysis of the interview data collected in this wave. RRTC researchers will use findings from the interviews to contextualize the survey findings summarized in form of state-by-state profiles, and add descriptive information to the state-by-state reports that result from Wave 1. The second stage of analysis will consist of a more in-depth investigation of key characteristics of VR agencies *across* states including similarities and differences. This information will be summarized but also provide the basis for the development of Wave 3.

Data analysis steps include: data reduction, data display, and conclusion drawing/ verification (Miles and Huberman, 1984). Data reduction refers to the process by which researchers prepare raw data. We will use two techniques of data reduction, *coding* (attaching meaningful labels that denote concepts, actions, or recurrent themes to data or pieces of data) and *memo-writing* (systematic writings of the researchers that occur during the coding process), to condense the collected interview data. Data will be organized into categories and emerging themes (data display) that provide the main direction and clarify missing links in the data analysis. The qualitative data analysis software package ATLAS.ti Version 5.2 for PC will be used for sorting, organizing, and coding data. We will meet on a regular basis to compare specific incidents, refine concepts, and explore relationships (conclusion-drawing). Drafts will be compiled using themes organized during the memo-writing process. In this way, the memos will serve as an outline for the summary report. Conclusion-drawing is intricately connected with verification, which will be achieved by sharing findings with respondents and with other internal and external experts.

Wave 3 data (standardized close-ended interviews): The data collected through the standardized interviews will be predominantly quantitative in nature. The same data preparation and data analysis procedures as in Priority B will be used.

PRIORITY D

Goal: Increase knowledge about best practices for order of selection (OOS) administration and implementation.

Research Question:

- *What are the best practices for administering and implementing an OOS in serving people with MSD?*
- *What are the key features of these practices and to what extent can they be applied to and transferred to other states/contexts?*

Method: We propose to identify, study, and disseminate formal and informal best practices related to VR OOS for serving individuals with MSD. ICI and InfoUse will use multiple sources and evidence to identify OOS best practices, including national experts, and a highly structured nomination process to create a sample of best practices. A multiple-case study design was chosen because as Lofland and Lofland (1995) suggest case study design is most useful when conducting a "holistic investigation of some space- and time-rooted phenomenon." Implementation of these activities will start in Year 3 (nomination of best practice) and will be completed in Year 4 (investigation of best practices). Products from this effort will include an in-depth description of the practice in situ; a synthesis of the findings across the identified best practices including key features and their transferability to other contexts; suggestions for future research confirmation of best practice status; and outputs for training, TA, and dissemination efforts.

Sample: Our intention is to study at least 3 but no more than 10 nominated practices in the intensive case study design. NIDRR RFP defines "best practices broadly as current practices, interventions, or service-delivery structures that are associated with achievement of a particular goal" (NIDRR RFP; Federal Register: June 28, 2007, Volume 72, Number 124). To be considered as a best practice, an OOS policy or practice needs to be related to at least one of the following domains: a) effectively pursuing outreach emphasizing individuals with MSD, b) increasing access to services for individuals with MSD, and/or c) managing case flow within the constraints of available resources, with an emphasis on serving individuals with MSD. A nominated order of selection practice must have at least two sources of evidence suggesting a positive relationship to outcomes and no evidence that it is negatively related to outcomes. Sources of evidence may include, but not limited to the following:

- Nomination by RRTC expert panel members;
- Self-nomination that includes quantitative data supporting the assertion;
- Findings from previous studies in Priorities A (research synthesis), B (survey), or C (survey) which suggests a practice related to VR order of selection;
- RRTC Senior Training, Technical Assistance, and Policy Staff nomination resulting from field knowledge of practices; and
- Nomination by the experts involved in the Delphi process described below.

ICI and InfoUse researchers will review the evidence provided, make preliminary assessments of inclusion, and identify at least two key informants associated with the practice to interview for more information. Based on the preliminary information, RRTC researchers will submit recommendations for inclusion to the expert panels and the Delphi group for review and discussion (explained below). The expert panel and Delphi group findings will be considered final nominations. There are no published indicators that would give us a sense of how many practices would pass the nomination process. We anticipate that the process will be fluid depending upon the state of the art and field practicalities in identifying outcome data linked to the practice. For each practice that is included in the final sample, we will conduct a site visit and may identify additional informants. We anticipate that informants will be public officials, state VR agency staff, provider agency staff, advocates, PWD and/or family members.

Data Collection and Measurement: We divided the data collection section into data sources and collection activities for the nomination process and data collection activities for the investigation process.

<u>Nomination Process: Data Sources and Collection Activities</u>: We will use two internal RRTC sources and two external sources to identify a pool of practices. The internal include analysis of RRTC research data to date, and preliminary review by RRTC expert panel members. The external include a self-nomination process and an extensive expert review using the Delphi method.

1) Findings from RRTC research efforts to date. Data from the research synthesis ("descriptive maps" on available evidence related to VR order of selection) conducted under Priority A and the survey efforts conducted under Priorities B and C will inform the nomination process. As part of the research synthesis and based on survey research findings, RRTC researchers will identify a list of pre-defined criteria that will function as a set of indicators of best practices related to VR order of selection. The list of pre-defined selection criteria together with a rating sheet will be sent to all expert panel members with the request to evaluate the usefulness of the criteria and to provide additional comments. The panel will then meet online to discuss the criteria; the discussion will be facilitated by RRTC research staff. Prior to the online discussion, all panelists will receive the summary of the ratings (aggregated for each criterion) and comments. This phase will result in a revised list of criteria that can then be used for screening practices for inclusion/exclusion during the nomination process.

2) RRTC expert panel review. Each expert panel will be asked to nominate best practices of VR order of selection in serving people with MSD.

3) Self-nomination process. In the beginning of the project year, the RRTC will announce the effort to identify best practices and create a self-nomination process. A self-nomination process will enable us to identify practices that may be very new or not known by external parties. The process will require that the nominee provide confirmatory evidence related to the VR order of selection best practice. We will distribute the self-nomination application widely through CSAVR, RSA, NIDRR, NCDDR, NARIC, NASDDDS, NASMHPD, AUCD/UCEDD network, ICI mailing lists, relevant national and local disability organizations such as the National Council on Disability, American Association on Intellectual and Developmental Disabilities, Society for Disability Studies. We will also require that the VR director of the state in which the practice was nominated provide a supporting email or letter indicating agreement with nomination.

4) Delphi Process. ICI and InfoUse staff will employ a modified Delphi method, which is a "systematic procedure for obtaining the opinions and, if possible, a consensus from a panel of experts on a particular issue" (Helmer, 1967a, p. 2). Dalkey, Brown, and Cochran (1969) point out that the method is most appropriate when precise information and knowledge on the issue(s) under study is not available (see also Brown, 1968; Linstone & Turoff, 2002). Dalkey, Brown, and Cochran (1969) describe implementation of Delphi as a three step process consisting of "obtaining individual answers to pre-formulated questions either by questionnaire or some other form of communication technique; iterating the questionnaire one or more times where the information feedback between rounds is carefully controlled by the exercise manager; taking as the group response a statistical aggregate of the final answer" (p.1; see also Dalkey, 1967).

We will recruit a minimum of 10-15 individuals not associated with the RRTC to join a cross-disciplinary group of experts with knowledge about VR order of selection. The purpose is to recruit experts in the same field or related fields, thereby covering other aspects of the same problem. The study will employ a simplified version of the Delphi method (Helmer, 1967a) that will consist of three rounds of Delphi arguments. In the first round, Delphi group members will receive a set of materials together with a rating form with the request to rate the information and to justify their ratings. RRTC researchers will then summarize the response distribution, the justifications of the panelist ratings, and any additional comments they made. This information will be fed back to the Delphi members with a request to participate in a web conference (second round). The web conference will be facilitated by ICI and InfoUse staff; its purpose will be to engage the Delphi members in a group discussion about the nominated practices, and to what extent each practice meets the indicator criteria. The web conference will be followed by another rating exercise (third round). Delphi group members will receive a summary of the feedback from the web conference prepared by the RRTC researchers together with a rating sheet. Delphi members will be asked to reevaluate their initial responses using the additional information provided. RRTC researchers will summarize the quantitative and qualitative information panelists provided. A statistical aggregate (e.g. median) will be used as an index of the group's decision to include a nominated practice in the final sample of best practices.

Investigation Process: Case Studies of Best Practices: Semi-structured interviews and document review will be the primary methods employed in this case study research. *Semi-structured interviews:* We will identify and recruit through a snowball method at least five individuals who are knowledgeable about the best practice selected for case study. The interviews will be in-depth and conducted on an individual basis, following a semi-structured format that will last approximately 1–1.5 hours. Interviews will be digitally taped with the permission of the interviewee and transcribed by a professional transcription service. *Document review:* Interview data will be supplemented by documents, which provide "a rich source of secondary, and in some cases even primary, research material" (Jorgensen, 1989, p. 91). We will collect a variety of documents related to the identified order of selection best practice, including annual and other official reports; strategy-planning/policy-planning documents setting out the objectives, theoretical bases, and values of the service system, agency, program, policy and/or practice; guidelines for implementing the policy, regulations, and related materials; publicly available minutes from meetings; and agency websites that included a description of the services available.

Instrumentation. Interview protocol: In order to guide the (on-site and telephone) interview process, we will develop an interview protocol that delves into the nature, implementation, challenges, effectiveness, and transfer recommendations associated with the practice. The interview questions and process will allow for and encourage wide-ranging and free-flowing conversation, and will not be used as formal interview queries. Thus discussions will have different emphases based on local conditions and the role of the staff person interviewed at the site. The protocol will be pilot-tested with a sample of VR staff; amended and finalized for field administration. *Document checklist:* We will develop a checklist of types of documents for site visitors to use for data collection. This checklist will also be shared with the best practice sites to assist site visitor staff with the identification and collation of relevant documents.

Data Analysis: *Analysis of interview data:* RRTC researchers will conduct two levels of data analyses: single case analysis and cross-case analysis. Researchers will develop a template for ICI and InfoUse staff to use for developing a description of individual best practices. In other words, the single case studies will take the format of a descriptive case study (Yin, 1994). The cross-case analysis will involve a more in-depth investigation of themes that are similarities and differences emerging across the collected best practice cases. Specifically, we will identify the key features of each practice and assess their applicability in and transferability to other contexts. Findings from previous research conducted will be used as a way to contextualize best practice findings. Specifically, we will use data collected under Priority A through C to determine if there are key characteristics that need to be in place or are related to the implementation of the best practice. This background information will be incorporated in the cross-case analysis report. For the purpose of the cross-case analysis, RRTC researchers will use the same data analysis techniques described under Priority C (i.e. coding and memo-writing). Members of the expert panels including the Delphi expert panel and research participants will be given an opportunity to comment on the draft of the research findings (individual case studies and synthesis of best practices) and to provide feedback. RRTC researchers will then incorporate the feedback and finalize the case studies and the final report. *Analysis of documentary data:* Textual or content analysis will be used for analysis of the collected material (Scott, 1990).

PRIORITY E

Goal: Increase knowledge about best practices for assisting individuals with developmental disabilities (DD) and individuals with mental health (MH) issues obtain and retain employment.

We propose to conduct two studies: Study 5.1. will focus on identifying and investigating best practices in serving people with DD; Study 5.2. will concentrate on best practices that have emerged/are emerging in the area of service delivery to people with MH. The NIDRR RFP definition of best practices mentioned under Priority D also applies to this priority. This priority will use the same method as Priority D with some modifications as explained below. Priority D and E activities will be implemented simultaneously and there will be many activities that will be conducted in tandem across both priorities.

STUDY 5.1. BEST PRACTICE CASE STUDY ON SERVING PEOPLE WITH DD

Research Questions:

- *What are the best practices in serving individuals with DD?*
- *What are the key features of these practices and to what extent can they be applied to and possibly transferred to other contexts?*

Method: Unlike MH, for individuals with DD there is little or no rigorous experimental research that confirms an employment service as evidenced based. Therefore, we will cast the net broadly and identify both VR agency implementation practices and employment services practices related to getting and retaining a job. Similar to Priority D, the methodology employed in this study will consist of a two step process: 1) nomination of best practices and screening for inclusion in the final sample followed by 2) an investigation of the final sample of best practices using a case study design (qualitative interviews and documentary review). Overall, these processes will be conducted in the same manner as under Priority D with some modifications (see Data Collection and Measurement). Implementation of these activities will start in Year 3 (nomination of best practice) and will be completed in Year 4 (investigation of best practices) of the RRTC. Products are the same as those listed under Priority D.

Sample: Our intention is to study at least 3 but no more than 10 nominated practices in the intensive case study design. Practices may or may not be based solely at a VR agency; they may be implemented by more than one agency (VR and MR/DD) at multiple levels (policy, provider, frontline); they may be formal or informal in nature. For the DD best practices sample, we will require that the nominated practice includes at least two sources of evidence as listed in Priority D. The screening process will be the same as described in Priority D.

Data Collection and Measurement: Nomination Process: Data Sources and Collection Activities: We will use multiple data sources and collection activities to solicit nominations for best practices in serving people with DD and to screen nominated practices for inclusion in the final sample of best practices for case study research. These include:

1) Findings from RRTC research efforts to date as well as other relevant research. Data from the research synthesis (Priority A) and review of existing data collection efforts and additional survey research (Priorities B and C) will inform the nomination process. We intend on including variables related to employment service provision targeted at people with DD in the research synthesis and survey efforts. RRTC researchers will use data sets such as the MR/DD state agency survey data, RSA-911, and the CRP survey data to identify states and localities with outcomes one standard deviation above the mean. We will identify a list of pre-defined criteria that will function as a set of indicators of best practices. The list of pre-defined selection criteria together with a rating sheet will be sent to all expert panel members. The expert panel members will then meet online to discuss and revise the criteria to be used for screening good practices for inclusion/exclusion as case studies.

2) RRTC expert panel review. Same as Priority D.

3) Self-nomination process. Same as Priority D.

4) Delphi group and process. RRTC researchers will employ a modified Delphi method described under Priority D. We will recruit a minimum of 10-15 individuals not associated with the RRTC to join a cross-disciplinary group of experts with specific knowledge about DD related employment services. Panel membership will be drawn from state and local VR and MR/DD systems, services providers (CRPs), practitioners, research, academia, and disability advocate organizations.

Investigation Process: Case Studies of Best Practices: Same as priority D.

Data Analysis: Same as Priority D.

STUDY 5.2. BEST PRACTICE CASE STUDY ON SERVING PEOPLE WITH MH

Research Questions:

- *What are the best practices in serving individuals with MH?*
- *What are the key features of these practices and to what extent can they be applied to and possibly transferred to other states/contexts?*

Method: Supported employment (SE) is one of the six adult MH evidenced based practices endorsed by SAMHSA with the Individual Placement and Support (IPS) model considered the exemplar within the SE paradigm (Bond, et al., 2001; Drake et al., 1994). Moreover, at the state level, direct employment service delivery design has been predicated on interagency working relationships between the VR and MH systems. These two public systems have long histories of interagency collaboration and rely upon multiple collaboration activities to serve joint populations (Foley, Butterworth, and Heller, 2000). There is a significant call from multiple research, academic, and policy fronts to research ways in which an evidenced based practice can be translated into practice. The purpose of this study is to identify and study best practices in serving people with MH resulting in improved employment outcomes. It is important to note that not all individuals with MH served through VR are MH clients. Thus, the study proposed under this priority will take a broad approach to identifying best practices going beyond EPB SE as described in the literature review. This study will be conducted in the same manner as under Priority D with some modifications. Implementation of these activities will start in Year 3 (nomination of best practice) and will be completed in Year four (investigation of best practices) of the RRTC. Products are the same as those listed under Priority D.

Sample: Our intention is to study at least 5 but no more than 15 nominated practices in the intensive case study design. We will prioritize those practices in which VR is a central actor and those with confirmatory outcome data. Practices may or may not be based at a VR agency; they may be implemented by more than one agency (VR and MH) at multiple levels (policy, provider, frontline). Differently from Priority D and Study 5.1., we included more practices (15) because we anticipate more nominated practices given the research literature on MH, recent efforts by SAMHSA, NIMH, the Johnson & Johnson –Dartmouth Community MH Program, to improve the evidence for employment services for individuals with mental illnesses. For the best practices sample, we will require that the nominated practice includes at least two sources of evidence, one of which is confirmatory outcome data on either improved job placement or job retention. Sources of evidence may include, but not limited to the ones listed under Priority D.

Data Collection and Measurement: Nomination Process: Data Sources and Collection Activities: We will use the same procedures described above in Priority D:

1) Findings from RRTC research efforts to date as well as other relevant research. RRTC researchers will use administrative data sets such as RSA-911, data from NASMHPD, and the CRP survey to identify indications of effective practices. RRTC researchers will also be using the General Organizational Index (GOI) as a potential source for screening criteria. The GOI is a set of general operating characteristics of an organization hypothesized to be related to its overall capacity to implement and sustain evidence-based practice. This index contains 10 broad principles regarding elements such as program philosophy, training, supervision, and program monitoring. We propose to examine the survey data to determine where these GOI features exist, what the employment outcomes are for people with MH, and then use informational interviews to find out if a practice exists (Source: SAMHSA Website at: http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/cooccurring/goi/default.asp).

2) RRTC expert panel review. Same as Priority D.

3) Self-nomination process. Same as Priority D.

4) Delphi group and process. Same as Priority D.

Investigation Process: Case Studies of Best Practices: Same as Priority D.

Data Analysis: Same as Priority D.

SECTION D: TRAINING ACTIVITIES

ICI has a long history of providing training and consultation to rehabilitation counselors, CRPs, state systems personnel and PWD. These training activities include 20 years of implementing graduate level pre-service training in rehabilitation counseling and vision education, management of the New England Rehabilitation Continuing Education Program for CRPs, management of a doctoral level program in public policy and disability studies, training of advanced health care professionals to support individuals with disabilities at Children’s Hospital Boston, and TA and training to over 47 state VR, MR/DD, MH, welfare, and workforce development (WD) agencies. The current project will implement an interactive training and TA model that recognizes the expertise of core constituents and the emerging nature of knowledge in effective VR services.

Goal. Establish interactive opportunities to engage stakeholders in sharing expertise, framing knowledge and issues, and translating research to practice and policy development. The primary focus of the training efforts will be to influence strategy and policy at a state VR agency level, including collaborative relationships with sister agencies within the state that participate in employment support such as VR, MR/DD, MH, and WD. A secondary focus is to influence implementation of best practices that directly or indirectly impact direct customer support within the counselor-customer and CRP-customer relationship. This project will simultaneously implement knowledge sharing and research development in key areas of interest.

Conceptual framework for training and TA activities. This proposal will emphasize topical *communities of practice* as a model for engaging stakeholders in exploring and sharing information in critical areas. The National Center on the Dissemination of Disability Research (NCDDR) working with NIDRR is using this approach “to encourage researchers to expand their common understanding and to jointly address issues related to research quality, standards, and guidelines” (NCDDR, n.d). The community of practice model emphasizes participant-driven learning building on shared expertise and reaching closure on specific knowledge or recommendations that can be directly translated to practice. ICI has experience in convening cross-state communities of practice on state agency strategy and practice through the National Center on Workforce and Disability and the State Employment Leadership Network. ICI uses the WIMBA web conferencing platform as a primary tool, allowing facilitated presentation, discussion, and audience polling.

Areas of emphasis for training and TA activities will be finalized in collaboration with the RRTC expert panels and based upon research activities, examples include, but are not limited to, improving outreach, intake, and case flow management strategies, purchased services; utilization of other programs data for eligibility, best practices in order of selection, employment services for people with DD or MH, use of case performance criteria to improve access to VR by individuals with most significant disabilities; VR agency outreach strategies to ensure access to VR for individuals with most significant disabilities; strategies for supporting MH populations that are served by VR but not by the state public MH system; strategies for ensuring extended employment supports for MH consumers; strategies for serving individuals with intellectual disabilities who are not eligible for the state MR/DD agency.

METHODS ARE OF SUFFICIENT QUALITY, INTENSITY, AND DURATION: Table 3 summarizes the training objectives.

Table 3: Training Objectives

Objective: Description	Intensity hours/ unit	Frequency	Related Priorities
T 1: Implement 2 topical COPs annually that address VR agency policy and strategy	4-20 hours	2 topics per year 10 total	A,B,C,D,E
T 2: Provide direct training to VR administrators at CSAVR meetings	1-2 hours	2 times per year 10 total	A,B,C,D,E
T 3: Provide topical web conferences for consumer and advocacy organizations	1-2 hours	2 per year, 10 total	B,C,D,E
T 4. Provide topical web conferences for rehabilitation counselors and CRPs	1 hour	4 per year, 20 total	B,C,D,E
T 5: Provide conference presentations for VR and other employment system partners	1-2 hours	6 per year, 30 total	B,C,D,E
T 6: Develop and test 3 curriculum modules for front line counselors or CRP personnel for use by RCEPs and Pre-service programs	Varied	3 total	All
T 7: VR Policy, Practice and Research Forum for Senior VR staff and researchers	1 to 2 days	4 forums	All
T 8. State of the Science Conference	2 days	Once	All

The multi-modal training interventions proposed are meant to affect a diverse pool of participants, including a primary but not sole focus on VR administrators and managers. Training approaches will include community of practice working groups, 1 to 2 hour web conferences/webinars, conference panel and workshop presentations, and research and policy forums. The project will develop and field test three curriculum modules for integration into existing training resources including RCEPs and rehabilitation counselor education. Each of those modes is explained briefly:

Communities of practice. Communities of practice provide a participant-driven model of learning and development that bridges the training and research elements of this project. Under a community of practice model, individuals with a common interest in a problem or topic collaborate over time to define the topic, share ideas, and develop solutions or strategies (Wenger et al, 2002). A community of practice may have as an outcome the creation of a strategy, standard of practice, or simply a consensus about body of knowledge. Once a topic is identified, VR agencies will be offered an opportunity to participate. The working group will define a goal or outcome, and the duration of the community of practice will depend on the complexity of the topic and the goal. It is anticipated that communities of practice will meet over a period of 3 to 12 months, with RRTC staff serving as organizer and facilitator and arranging for resources including research, documents, and experts to participate. Communities of practice will disseminate research findings, define and expand the understanding of current strategy and policy, and inform the ongoing develop of RRTC research activities. Research will serve as a vehicle to inform activities while the identification of best practices (in years 3 through 5) will support the community of practice discussions in those years. Director and other senior administrative staff roles and levels of experience are such that it is important to create opportunities for intellectual interaction and discourse (e.g., group feedback, problem-solving, brainstorming) rather than linear didactic events.

Web conferences. Web conferences or webinars provide a more tightly focused training opportunity, while facilitating cross-state discussion and information sharing. Webinars will be designed as 60-120 minute events that incorporate a 15 to 30 minute presentation on research findings or from an invited speaker such as a VR director involved in a promising practice with ample time for questions and discussion. The webinar format allows for integration of visuals, streaming video, and real time audience polling and surveys. The platform has the capacity for integrated captioning. All teleconferences and webinars will be recorded and available as audio, video files, or transcripts for future listening. Participants may elect to participate for the full two hours, call-in for shorter periods, or review recordings.

Conference presentations. Training workshops, panel presentations, and pre-conference institutes on the results of the research activities will be conducted at national and state meetings of professional organizations with relevance. The RRTC will conduct a State of the Science Conference on employment systems and outcomes described in the dissemination section.

VR Policy, Practice and Research Forum. The annual Policy, Practice, and Research forum provides an opportunity for in depth exploration of research approaches and findings and translation of research to strategy and policy. This event will be targeted at policy makers, researchers, and VR leadership personnel with emphasis on participant discussion, debate, consensus building, and suggestions for future research and policy development. The goal will be to assist VR Directors and Senior Managers to use and critically evaluate research, determine how much evidence exists about a practice, to develop research ideas in collaboration with researchers and to design policies that are reflective of evidence based and/or best practices. It is an opportunity for interested researchers to understand the perspective of VR administrators' priorities particularly on what current innovative practices need to be assessed and, if warranted, validated.

Curriculum module development. This objective will focus on training direct service personnel by developing modules and curricula that will be integrated into existing rehabilitation training programs. The ICI has for more than 15 years served as the program base for the pre-service training program in Rehabilitation Counseling at UMass and has developed an on-line master's pre-service training program that is CORE approved. RRTC staff will work with the academic staff to identify and pilot areas of promising practices that can be incorporated into curricula content. The curricula materials that are developed will be infused into existing course offerings as well as adapted for inclusion into the in-service training activities of the New England Regional Continuing Education Program (NERCEP) as well as the New England Job Development Training program (NEJDTP). Topics will emphasize areas of RRTC focus and training materials developed will be made available on the RRTC web page as well as distributed nationally to the 10 RCEPs providing training to CRPs and the VR RCEPs. Material will be shared with the network of training programs offering pre-service training in Rehabilitation Counseling.

Evaluation. The evaluation methodology describes procedures for *monitoring* the quality of each training session. Mr. Marrone, Training Director, will be responsible for tracking progress and documenting training outputs, audience attendance, and other applicable data on the Annual Performance Reporting system for NIDRR grantees. Each training output will be accompanied by an evaluation measure specifically tailored for that training and will include items related to four impact areas:

- Reaction (i.e., trainee satisfaction measures at conclusion of each event)
- Learning (i.e., the acquisition of the desired knowledge at conclusion of each event and subsequent retention)
- Behavior (i.e., the acquisition of the desired skill sets at conclusion of each event and subsequent use of these skills)
- Results (i.e., the training's impact on organizational performance).

COVERS ALL OF THE RELEVANT ASPECTS OF THE SUBJECT MATTER:

The community of practice activities with VR Directors and top administrators (T1), the presentations at the CSAVR conferences (T2), and the State of the Science Conference (T8) will integrate project research with system level and state-by-state strategy and policy development. The presentations to disability advocacy organizations, counselors, CRP personnel and personnel from partner systems will help them understand the broader context that the state-federal VR system must operate in as well as the individual issues within states that drive state-by-state variations (T3, T4, and T5). The research findings which will be proffered to disability advocacy groups and partner state disability systems will allow them to identify strategies each of them can use to effect a positive impact on policy decisions related to VR and their respective state VR systems' local policies and practices. The State of the Science Conference in Year 3 of the grant is another major venue that the RRTC will employ to share research findings as a platform to stimulate ongoing discussion and feedback from the different stakeholder groups on issues related to employment services provision to people with disabilities.

The training modules to be developed for use by VR and CRP RCEPs and CORE accredited academic programs in rehabilitation counseling (T6) will help ensure that both pre-service and continuing education curricula are able to stay current in the field and meet the on-going human resource development demands of their constituent VR systems. The modules will be self contained training packages (including PowerPoint slides, manuals for instruction, materials for use, and reading lists) that can be used as complements or additions to existing curricula. The evidence based VR Policy, Practice and Research Forums for VR administrators and researchers in the field (T7) offer a unique place for two disparate groups to engage in discourse on synthesizing research to determine how much evidence exists about a practice and concomitantly an opportunity for interested researchers to understand from the perspective of VR administrative staff what current innovative practices need to be assessed and validated. Thus the often lengthy process caused by the conundrum of overcoming "science to service" barriers in a short time can be somewhat short-circuited by giving these two distinct cohorts a vehicle where each can inform and learn from the other in a collegial fashion, moderated by the RRTC staff.

BASED ON NEW KNOWLEDGE DERIVED FROM RESEARCH ACTIVITIES:

The RRTC management structure emphasizes coordination between research, training, dissemination, and TA components. The emphasis on interactive training approaches including communities of practice, web conferences/webinars, a State of the Science Conference, and the policy forum will also create feedback loops between research activities and corresponding training and TA Research staff will not only be involved in research activities but will be also participate in training activities. This will tightly weave the responsible persons for Research, Training, TA, Dissemination, and overall Operations into an integrated Management Team that will communicate and collaborate regularly on project direction, sequencing, data collection strategy, outreach elements, curriculum design, and RRTC training/ TA service delivery. While each person will be committed to the specific elements under his/ her aegis, the RRTC oversight will be a joint process managed by the PI and Co-PI but involving continual cross fertilization of ideas and project updates.

Priorities A, B, C will drive research activities that will enable the RRTC to develop a compendium of VR characteristics and system elements nationally and with specificity for each of the 50 states, Puerto Rico and the U.S. Territories. The outputs for this research will include an accessible database of annotated literature as well as a database (or “hub”) of state agency characteristics that can be viewed or broken down by individual state or by federal RSA region. There will also be flow charts designed to graphically describe each agency’s operational characteristics. All of these products will be used separately and together in developing the training segments.

The communities of practice, the presentations at CSAVR, the State of the Science Conference, and the Policy, Practice and Research Forums will be used to get feedback on this data and review any case studies developed and to present interim as well as final findings. States will be offered the opportunity for multi-state discussions of differences and similarities across the U.S. as well as individual teleconference discussions for one particular state to examine that state’s data in depth. This information will also be used to create individualized TA plans that will be discussed in later sections of this proposal (Section F).

Priority B, C, D and E activities will directly inform the presentations (T2-T5) at a variety of venues (web conferences/webinars, national and state professional conferences, the RRTC’s State of the Science Conference, university sponsored in-service training events, VR or other public agency staff training days) involving personnel from partner systems (MR/DD, MH, Welfare One Stops, CRPs), and consumer and disability advocacy organizations. These sessions will highlight and gather feedback on and lead to further analyses of the results of the research activities under each of these priority areas. Training Objective 6 will incorporate these findings into curriculum modules that are designed for academic programs and RCEPs, with a particular emphasis on understanding how local characteristics influence system development, how VR structures have evolved in different states at different times, and how the state-federal VR system can establish national standards while still adapting to local culture and climate.

Similarly, Priority E efforts will expand on an already deep body of knowledge on best and evidence based practices in employment for people with developmental disabilities or facing barriers caused by mental illness. While considerable information exists from the DD and MH system perspectives, especially vis a vis “Supported Employment,” much less is readily available on the interface of these practices with traditional VR. The focus of the training elements arising from this aspect of the research agenda will be not just on reiterating information garnered over the last 20 years in DD and MH systems but more specifically on how the analysis the RRTC research team is able to provide can be framed to add to this already existing companion research base.

The Priority F goal is integrated into the various components of the overall training strategy. The synthesis of information gathered under the Priority A-E efforts will be adapted for the various audiences that will have access to teleconferences, web conferences/webinars, conference presentations, and the training modules developed. The information will be tailored to the appropriate educational methodology for maximum impact. VR audiences will be most interested in data that can be used for quality improvement, system redesign, staff training, and public information dissemination. Other public systems (such as DD, MH, Welfare, One-Stops) and rehabilitation providers (such as CRPs) will be most concerned with elements that can impact their collaboration on behalf of mutual clients. Researchers and policy makers will be most attracted to information sets that can assist them in further identifying best and evidence based practice standards. Consumer and disability advocacy groups will often be most drawn to data that can help them understand how to appropriately use existing resources and what areas that they might advocate for in terms of change and overall system improvements.

Priority F will inform Training Objective 7. This forum for VR administrators and researchers in the field would assist VR Directors/ Senior Managers on how to synthesize research and concurrently supply chances for interested researchers to understand the perspective of VR administrative staff on what current innovative practices need to be assessed and possibly validated by evidence. While these annual events would be more of a "think tank" format than didactic training, the RRTC staff's convening them would prepare discussion points and forum materials based on information garnered from the research activities cited in Priorities A-E. Such an event supplies a unique occasion for these two groups to inform the other's perspectives and provide "real time" analyses for discussion and debate based on research data that the RRTC will offer based on the variety of activities it will undertake under Priorities A-E.

MATERIALS AND METHODS ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES: ICI promotes physical, cognitive, electronic and programmatic access for all. It has been and will continue to be ICI practice to offer both in person and distance training activities in space and using tools that are fully accessible. ICI web experts have analyzed and selected the web conference/webinar platform to emphasize accessibility for screen readers and keyboard controls. All ICI sponsored event registrations include a section asking people what sorts of accommodations they may need (whether physical space, accessible formats for materials or content delivery, chemical sensitivity issues, sign language interpretation, learning styles, food issues, accommodation of service animals, etc.) This practice will be continued in any training events or meetings that the RRTC would host or sponsor as part of its overall work. The proposed RRTC will ensure that all training materials and instruction are available in alternative formats and languages, and that they are fully accessible to people with a broad range of disabilities and linguistic communities. This accessibility would include translations of written materials, use of interpreters CART translation or real time captioning, formats such as Braille, large print, and computer disks. Staff will also ensure that off site locations used are physically accessible to individuals with disabilities and wherever possible, easily accessible by public transportation.

SECTION E: DESIGN OF DISSEMINATION ACTIVITIES

QUALITY, CLARITY, VARIETY, AND FORMAT: ICI has a seven member Marketing and Communications (M&C) Team responsible for creating accessible venues and modalities to transfer knowledge to target audiences. The M&C team provides web development, all levels of copyediting support, marketing and outreach campaigns, and development of highly sophisticated eLearning portals using Breeze, Horizon WIMBA web conferencing, and WebCT. Table 5 (work plan) lists the specific activities proposed to demonstrate the wide variety and proficiency across many formats.

Quality control and evaluation mechanisms: Formal and informal research with partners from different audiences will gauge the content they need and the questions they have about the RRTC's subject matter. Mechanisms will include:

Expert panel review: ICI strives to enhance **knowledge transfer** by working with target audiences to ensure that materials meet information needs and make a positive impact. The RRTC expert panels will be actively involved in the planning and development of all dissemination activities to ensure this positive impact. Ongoing feedback and evaluation will regard: **Medium:** Is the material presented in a format that can be easily used and accessed? Are materials accessible? Are we using formats that the audience prefers? **Content:** Is the information clear, accurate, understandable, and interesting? **Audience:** Are we reaching the individuals and groups intended? **Effectiveness:** How effective is the material after it reaches the intended audience? Is the material being used? Is it making an impact? **Overall quality:** How can we improve our efforts?

Editing and Communications: All products undergo developmental editing (when appropriate) and an intensive copyedit by internal or outside editors. This procedure ensures that materials are cohesive, coherent, and professional. Editorial staff considers the language, jargon, and perspectives of the target audience. When providing materials for PWD directly, one must consider the type of disability in format, language, and practical application. ICI has access to translators and provides materials in the languages of relevance to the target audience.

Ultimately, all materials are available in a wide variety of formats and individual users determine their specific preference. See the *Accessibility* section below for more information.

Evaluation Cards: ICI uses a postage-paid response card to invite feedback on select print publications. This card includes a quantitative assessment of readability, interest, accessibility, format/design, and relevance to the reader, as well as a space for written comments. We generally receive 20-30% of these cards back from our audiences. Suggestions, such as using more graphics and reducing the number of pages in how-to publications, are valued and typically changes are made based on them.

Web-Based Feedback: Project websites offer several avenues for feedback. Every RRTC publication page will have a short "rate this article" box. We found a higher rate of feedback from this immediate online method than from postcards. Results are tabulated for each publication and used to guide changes in content, format, and design. These data are reviewed at project meetings and included in quarterly grant reports. We also monitor the number of monthly hits.

Other Feedback: Qualitative evaluation measures come from information shared from readers, web users, conference attendees, visitors, and individuals met through other ICI events. These comments are archived when possible and are used to either guide changes or to promote our materials to others. A high priority of this project is the dissemination of materials in a manner that is easily accessible and readily used, and that uses modalities preferred by target audiences.

Dissemination activities: Activities include:

Peer-Reviewed Journal Articles: The RRTC will submit at 11-12 articles to peer-reviewed research journals to disseminate research findings to other researchers and academics as well as practitioners and policymakers. These submissions will include at least one article about each proposed research study. Articles will be submitted to both disability and rehabilitation journals and journals in other related fields such education, public health, sociology, psychology, and public policy.

Other Print Methods: Print methods such as the ICI Research to Practice Brief series, brochures, newsletters, brief fact sheets, continue to be an important method of reaching stakeholders. They are especially useful when dealing with PWD and diverse communities—two groups that may not have adequate internet access. ICI has over 8000 people on its print mailing list in total. We plan to use existing and new community connections to increase our mailing lists and disseminate information. Projected number of print materials to be disseminated over the life of the grant: 13-16.

RRTC Website: The Word Wide Web will be used as primary dissemination venue. ICI M&C staff will create a web site with a specific link from the main ICI web site (www.communityinclusion.org). The ICI web site contains information about individual projects, ongoing research and training activities, the ICI publications catalog, and the majority of ICI's written products in fully accessible text as well as in portable document format (PDF). Links are maintained with numerous organizations, including other RRTCs, government agencies, advocacy groups, universities, RCEPs, UCEDDs, as well as useful resources such as text of disability-related legislation, definitions of various disability terms, and employment opportunities for PWD. Numerous other agencies and organizations, both disability and non-disability focused have links to the ICI. A link to the NIDRR funded National Center for Dissemination of Disability Research (www.ncddr.org) and NARIC will also ensure products are widely available.

Electronic Mailing Lists: A key method of reaching stakeholders will be through a dedicated electronic mailing list. We have found these to be highly effective ways of reaching stakeholders with new, relevant information. Our existing email lists have approximately 4000 subscribers. We will work with key organizations that target our audiences to increase our reach. E-announcements will highlight resources, publications, and events to be produced and disseminated over the life of the grant.

Web Conference Series: The RRTC will conduct a total of eight (8) web conferences with disability advocacy organizations over the life of the grant. A panel of specialists will share material and interact with participants alongside an ICI moderator who will triage questions. Content will be generated from research, training, and TA activities. All web conferences will offer accessible formats that include closed-captioning, commented slides, audio comments, and keyboard access to all features. Every web conference will be archived online for reference and training purposes.

Accessible online database of Research Synthesis and Research Findings: ICI has experience producing accessible and interactive databases online, both for the collection and display of information. A few examples are www.statedata.info, and www.disabilitymaps.org. Most all of our websites are driven by dynamic databases. The RRTC will build an online database of annotated literature from the research synthesis. \

Accessible online data "hub": The RRTC will build an accessible online data hub that will offer ready access to descriptive information on key characteristics of the employment services system at the state level (obtained through research conducted under Priorities B and C) through an accessible web-based system. ICI data collection efforts will be integrated with other data sources to create a comprehensive collection of quantitative employment services and outcomes data in each state. These quantitative data sets will allow users to compare data across employment services agencies within states, create summaries for and explore differences between different subpopulations of consumers, and allow users to link employment services information with employment outcomes data and state demographic data. Target audiences for this data hub include VR administrators and managers, other employment services agency personnel, researchers, and consumers. Hub users will be able to download summary spreadsheet tables for each data source included in the system. The "hub" will offer descriptive data on the key system-level characteristics of the employment services network in each state, such as agency organizational structure and partnerships. These data will allow users to compare system-level characteristics across states. RRTC staff will provide TA to hub users and prepare custom state employment services network data summaries as requested.

State of the Science Conference: In Year 3, the ICI, in conjunction with the Center for the Study and Advancement of Disability Policy and InfoUse will host a conference on the State-of-the-Science of the VR system. The conference will feature research presentations from both the RRTC and others in the field. In the latter part of Year Two, we will issue a call for papers from scholars in the various fields of relevant to the employment of individuals with disability. We will work with CSAVR, NASDDDS, NASMHAD, Regional Continuing Education Programs, the Association of University Centers of Excellence in Disability (AUCD), community based organizations, to spread the word about the conference. Papers, audio files, and findings will be widely available and archived on the RRTC website. Papers will be compiled into a monograph for widespread distribution and publication.

Multilevel Capacity-Building on How to Use and Benefit from New Web Technologies: To improve access to technology, the RRTC will assist our target audience and partners on how to use modern web technology forms through tutorials and published information. ICI has found that providing user support on these methods greatly increases people's comfort with and ability to benefit from new technologies.

ACCESSIBILITY OF MATERIAL TO PWD: RRTC will make its print materials, audiovisual materials, websites, conferences, multimedia elements, and instructional technology available to PWD in formats that provide equal access to information.

Web: Accessibility is not simply about providing alternatives for people with visual impairments. Other groups to consider include the deaf (using closed-captioning on video), people with cognitive disabilities (readable text, appropriate use of color), and people with mobility impairments (providing an effective way to navigate a site without a mouse or keyboard). The overall goal for our websites is to be accessible to anyone who connects. ICI makes every effort to achieve XHTML (Extensible HyperText Markup Language) compliance when coding our content. This ensures that our content is both backwards and forwards compatible and standard-based technologies (browsers) can access our documents. Using valid CSS (Cascading Style Sheets) with XHTML adds presentational value to newer technologies while not taking away anything from older ones. All browsers can access our site and get at the very least an accessible version of all our content. ICI follows commonly agreed upon accessibility standards, including the Web Accessibility Initiative (WAI) guidelines, the WebAIM Guide to accessibility, "Bobby" and other automated accessibility validations, and Section 508. ICI staff closely monitor emerging trends in web accessibility.

Print: Every effort will be made to make all documents produced available in alternate formats. RRTC will provide materials in the format most usable to the requestor, which can include but not limited to Braille, audiotape, large print, or electronic file on computer disk. All materials prominently display a notice that the material is available in an alternate format. Films/videotapes will be closed-captioned. All written materials that contain tables and graphics include a written description of the information contained therein. A small volume of Braille material can be produced in-house using a computer and Braille embosser. For larger requests, the RRTC sends documents to commercial printing houses. Every reasonable attempt will be made to respond to individual requests in a timely manner.

Multimedia and Training Materials: The RRTC will develop all instructional materials, much of which will be media-rich, with accessibility in mind. Examples include captioning training videos, podcasts, and audio recordings; providing accessible Powerpoint and Breeze presentations; using accessibility features within WebCT, our current eLearning platform; and compressing and optimizing videos for easy download for people without high-speed internet capabilities.

eLearning: The M&C team includes an instructional technology expert (Mr. Tobar). ICI is committed to providing and increasing accessible use of instructional technology that takes account of varying abilities, learning, and cognitive styles. ICI provides access to state-of-the-art leading technologies in course content management and delivery, including Macromedia Breeze, Horizon WIMBA and Adobe Connect for webcasts and web conferences. Courses are based on solid and accessible technologies through curriculum and technology integration. The result is interactive and dynamic content that not only serves the needs of PWD but also those of people with a variety of learning and cognitive styles. ICI is actively engaged in curriculum and technology integration in several projects, including the National Service Inclusion Project, the New England Regional Continuing Education Program, the New England Job Development Training Program, and the Northeast Regional Center for Vision Education.

Expertise: ICI achieves our usability goals and standards with the expertise of several staff members. ICI currently has three full-time employees who have a wealth of experience in access and usability issues. David Clark worked on the original version of the "Bobby” accessibility tool and currently sits on the OASIS Open Document Format for Office Applications Committee. He and Jeff Coburn have several years of experience evaluating sites and products for accessibility. Alvaro Tobar works with universities on accessible eLearning, and has worked with UMass Online to help them choose an accessible online eLearning system and asynchronous teleconferencing application. David Temelini, Dissemination Director, has expertise in the accessibility of all marketing and conference material.

SECTION F: DESIGN OF TECHNICAL ASSISTANCE ACTIVITIES

TA activities are an extension of and supplement to strategies defined in the training section. The RRTC emphasis on communities of practice (CoP) provides a framework for cross-state participant-driven problem solving and strategy development that serves state needs for TA within a dynamic social process. Significant resources will be placed in the CoP model as an efficient and effective approach to information sharing, learning, and influencing state strategy and policy. This section will address three additional activities designed to meet specific development, consultation and information requests from states in the form of data and evaluation to support strategic planning and policy development and remote as well as on-site TA to address specific state goals and implementation of new policies and or best practices. Through this TA effort it is anticipated that the project will provide direct support to about 60% of the VR agencies (General and Blind) over the five year period. Other training activities and dissemination efforts will reach all of the VR programs nationally over the five year period.

SUFFICIENT QUALITY, INTENSITY, AND DURATION: Table 4 summarizes the TA objectives, quality indicators, level of intensity and duration of activity.

Table 4: Technical Assistance Objectives

Objective: Description and target outcome	Quality (Indicators)	Intensity	Duration
TA 1: Annually provide on-site and distance TA to 3 state VR agencies to support innovation in strategy or practice and improve employment outcomes, Target outcome: three requests responded to annually: 12 over the life of the grant.	▪ Customer evaluation forms ▪ Strategy or policy changes ▪ Service delivery or employment outcome changes ▪ Summary products describing strategy and outcomes	Varied depending upon customer request	Years 2 to 5, 3 to 6 months in duration (up to 25 hours of TA per request)
TA 2: Provide distance and on demand TA to states addressing implementation of policies, practices or capacity building efforts within a state VR program, Target outcome: 12 requests responded to annually, 60 over the life of the grant.	▪ Policy, capacity or practice change ▪ Practice, policy or administrative change facilitating employment of VR customer ▪ Materials developed or redesigned to address skill needs in personnel at any level	Distance and materials or product design over several interactions	Years 1 through 5
TA 3: Provide custom data analysis or evaluation support, Target outcome: 60 requests over life of grant.	▪ Data cited in policy, strategic planning, or research documents ▪ Customer evaluation	Varied depending upon customer request	Years 1 through 5

TA 1: Annually provide TA to 3 state VR agencies to support implementation of research-based practices and improve employment outcomes. Beginning in year 2 and continuing through year 5, this objective will provide focused consultation and TA over an extended (3 to 6 month) period to 3 states to support implementation of an innovation in strategy or policy based on RRTC research activities. Sample activities might be implanting a strategy to increase engagement of individuals with the most significant disabilities in VR services, to improve employment outcomes for persons with the MSD, or to improve employment outcomes for persons with MH or MR/DD disabilities. Requests for TA will be received from the VR

agencies directly or through specific solicitations by RRTC staff based upon responses to the CoP webinars, and inquiries from other sources or knowledge of state practices from prior interactions. Annual selection of states to participate will be based upon input from the RRTC expert panels, consultation with CSAVR and/or nature of the request and the urgency of the need as expressed by the individual VR program. All requests will require an endorsement from the agency director as being a need area for that specific agency

The RRTC will adapt an established ICI protocol for state TA that includes: *1) Initial assessment.* ICI/InfoUse staff will complete a 1 day site visit to meet with key stakeholders as defined by the VR agency. This fact finding visit will serve to frame the goals of the TA, define the context using a structural framework that addresses key elements including agency goals, policy, organization and operation, funding and service contracting, training and TA resources, and performance measurement and quality assurance. *2) Development of an initial findings document.* TA staff will develop a brief summary of knowledge attained from the visit, including observations and recommendations. The findings summary will be used as a discussion document to guide the development of a TA plan. A TA plan will be developed that establishes goals, responsibilities, timelines and evaluation measures. *3) Development of a project leadership group*. A leadership group consisting of targeted stakeholders based on the established goals will be developed to guide implementation of the TA plan. The leadership group will also serve as the primary evaluation and feedback source. *4) Plan implementation.* The RRTC will draw on project staff and external experts including VR personnel from other states, RSA staff, disability advocates, and others in meeting the agency request. Consultation and support to the state on the implementation of the plan will be done utilizing distance formats including conference calls, webinars and other venues. *5) Evaluation of Plan:* The RRTC will collect data that tracks outcomes and impacts of the plan including policy changes, adoption of a specific practice, changes in staff level knowledge, and evidence of outcome improvement for PWD. Specific steps are described in the evaluation section.

TA 2: Provide distance and on demand TA to states addressing implementation of

policies, practices or capacity building efforts within a state VR program. The RTTC will provide on line TA in support of state VR agencies addressing a range of topics. This TA will be single agency focused and will respond to concerns about policy formulation and development, replication of best practices, project modifications, capacity development or systemic change within a VR agency or about the interrelationship of the VR agency to other state agencies providing generic or specialized employment and training services (such but not limited to MOUs, shared administrative guidance, reciprocal eligibility determination procedures, blending and braiding of funds and/or shared data collection). It is also anticipated that requests addressing the interrelationship of the VR practices and policies to the purchase of service system in a state can be a focus for TA. Finally, assistance in addressing consumer directed concerns and or supports may lead to consultation in development of new administrative or program policies or practices within a state.

This TA will be designed to meet a VR state agencies needs as they arise both in the day to day activities of the agency as well as in the adoption and roll out of best practices. Support in the framing of state policies, practices and or program evaluation activities will be available to state VR agencies. This TA, while not providing on-site supports as noted in objective TA1, will provide technical support to agencies over a period of time and may involve a series of conference calls, materials development, data collection and or identification of related approaches in other VR or employment and training agencies. The products of this effort may include the development of a model policy, the design of an administrative guidance, the development of a data collection effort, the framing of a focus group or advisory committee, the identification or modification of training curricula or the development of a brief paper addressing a specific need of the VR agency. The range of topics that will be addressed may include those that are a result of the research activities of the RRTC or may be administrative or program concerns of a specific VR agency. The RRTC staff, consultants and or other experts will form the response team for these requests. The configuration of the response team will vary depending upon the nature of the request. For each request the RRTC will identify a primary contact in the

RRTC with the requesting VR agency identifying a lead contact within their agency. These contacts will serve as the coordinating mechanism for addressing the TA need in a timely fashion.

In response to each request a follow up questionnaire will be sent to the state agency director or his or her designee to assess the level of satisfaction with the TA services offered. The RRTC staff will monitor the impact of the TA activities through a data collection effort at 3 ad 6 months following the completion of the TA to assess the impact of this TA. These findings will be included in the report to NIDRR and become part of the RRTC overall evaluation effort. It is anticipated that on average 12 such requests will be responded to in this more intensive fashion. It is further anticipated that each TA request will take form 10 to 15 hours of RRTC staff time in completing the response and supporting the state agency.

TA 3: Provide custom data analysis or evaluation support. The project will develop a data clearinghouse designed to support direct access to evaluative and planning data by stakeholders. This clearinghouse will build on ICI's existing employment outcome data website at www.StateData.info including access to longitudinal (1988 to present) and cross state comparisons of data from the RSA-911 database. The project will respond to custom data or evaluation support requests in two forms, custom data analysis and evaluation support. It is anticipated that 60 such requests will be responded to over the course of the RRTC.

1) Data on demand. Both ICI and InfoUse staff will develop custom data summaries on request to support state agency (VR agencies) or other stakeholders (CRPs, researchers, or disability advocates) requests to support the development of strategy or policy or to evaluate services. Request forms will be available online, or requests can be made by phone. RRTC researchers will define and confirm the goals of the data request, and then develop a custom data summary. Data requests will be completed within 2 weeks of the request.

2) Program Evaluation support. RRTC staff will provide short term consultation to state agencies (VR agencies) and other stakeholders to conduct data based decision making in the implementation of strategies or initiatives related to VR services. RRTC will review the evaluation need, and provide consultation in the form of web or teleconference based meetings, written materials, or review of evaluation tools.

Evaluation: The RRTC will track TA requests, outputs, customer satisfaction, and utilization of information for changes in policies, practices, knowledge change, or outcome performance. This information will be synthesized at the end of each year and reviewed with the leadership groups that advise and guide implementation of TA. Both the evaluation results and group feedback on the results will be used by the RRTC TA staff to improve the quality of TA; the information will also be considered by the RRTC research staff when developing research agendas.

APPROPRIATE TO THE TARGET AUDIENCE: Focused TA on site as well as on line (TA1 and TA2) to state VR agencies will support the implementation of best practices in the real world of VR agency services. The TA will directly support state agency priorities, and will be provided in the framework of a detailed TA process to maximize adoption of the practice. The approach to TA is diverse in that it is designed to meet the needs of the state VR agencies primarily while recognizing that there are many other stakeholders who interact with the public VR system and can play a significant role in supporting the implementation of a best practice or the roll out of a new policy. The TA provided takes into consideration the need for both a focused as well as comprehensive response while regarding the time demands of the personnel within the VR system at a state and or local level. The use of limited on-site and more extensive on-line create a more efficient and timely way of supporting the VR agency in addressing its TA need. Data on demand and evaluation support will be provided in response to specific state agency and stakeholder requests to support strategic planning and data based decision making. This activity will develop agency and other stakeholder skills in translating research findings to practice.

ACCESSIBLE TO PWD: Persons with disabilities will have access to all TA activities, both as participants in state agency focused TA and as stakeholders requesting data or evaluation support. All materials will be available in accessible formats (Braille, disk, large print, audio) as well as in other languages when appropriate. The RRTC budget does provide for accommodation supports. Selected members of the TA team will also be PWD. The role of persons with disabilities will be varied including those of staff, focus group participant, consultant, local team member and/or external advocate in all the TA activities. The range of supports provided will reflect the individual needs of the consumers involved.

SECTION G: DESIGN OF PLAN OF OPERATION

ADEQUACY OF PLAN OF OPERATIONS; RESPONSIBILITIES, TIMELINES, AND BUDGET: This RRTC is a partnership between the ICI (an academic University Center of Excellence in Developmental Disability, UCED), the Center for the Study and Advancement of Disability Policy (CSADP, now based at Powers Pyles Sutter & Verville, P.C.) and InfoUse. The partnership formed for this RRTC is designed to ensure that the research activities of the center do not end up on the shelf in a spiral bound notebook, but rather that they inform policy, VR professionals and provider education and above all that they lead to new action on behalf of PWD. The **ICI** brings together research and training activities housed at UMB.

ICI departments include Special Projects in State Policy, School and Community Supports, Vision Training, Research, Employment and Community Service, and Academic Programs. Organizationally this RRTC will be in the Research Division of the ICI. The ICI members bring both a strong record of accomplishment in research and program planning as well as a large clinical base of operations. **CSADP**, directed by Mr. Bob Silverstein J.D., will be instrumental in assisting this project with activities such as training, TA, dissemination, project management, and panel experts. Mr. Silverstein will work directly with Senior Management in implementing RRTC efforts, and will be a member of the Leadership team and attend monthly management meetings. **InfoUse**, a woman-owned business consisting of four research staff that will be integrated as research team members across all RRTC research activities including in survey research, case studies, and data analysis. In addition, they will work with the Training Director in implementation training and TA objectives. Dr. Stoddard will also be on the Leadership team and attend monthly management team meetings.

RRTC Management and Leadership Team: The **overall direction** of the RRTC will be in the hands of Mr. John Halliday (PI and Project Director) and Dr. William Kiernan (Co-PI). This leadership team has worked successfully together in the past on both national projects as well as consulting with state service agencies to promote inclusion and participation for PWD. The PI and Co-PI are both heavily invested in the research and training mission of the ICI relating to VR and employment for PWD.

Mr. John Halliday (PI and Project Director) is a Senior Policy Analyst of the ICI. Mr. Halliday, the former director of the Connecticut Bureau of Rehabilitation Services, will contribute his expertise in VR to the Center and ensure the quality and accuracy of information developed for the field. He will have primary responsibility for the conduct of the RRTC and coordinating the training and research staff, chair the RRTC management team, and oversee the work plan for all the project activities including project flow, timelines, personnel loading, and progress reporting.

Dr. Kiernan (Co-PI), the director of the ICI, will contribute to the maintenance of the quality of research conducted in the center as well as being responsible for working with collaborators, coordination of the Leadership team and direct long range planning.

In addition to Mr. Halliday and Dr. Kiernan, the management team of the Center will consist of Dr. Susan Foley (the Director of Research), Mr. Joe Marrone (the Director of Training), Mr. David Temelini, (the Director of Dissemination), and Ms. Michelle Byrd (the Center Financial Manager). The management team will meet weekly for the first thirty to sixty days of the project, and then monthly thereafter.

Management Meetings will provide the structure for the oversight and coordination of all research and training activities. Directors of Research, Training/ TA and Dissemination will meet with the PI and Co-PI to coordinate activities. At each meeting, we will have a short report on each of the Research and Training activities so that there can be coordination across programs and the research and training can be informed by the lessons each group is learning. Each meeting will follow a prescribed agenda and will be chaired either by Mr. Halliday or Dr.

Kiernan. Meeting minutes will be posted on a password protected website for review by the team prior to the next meeting.

Each research and each training project will also hold a weekly **Project Work in Progress** meeting coordinated and chaired by the respective Project Director. The Research Director, Dr. Foley will attend all of the Research Project meetings and the research assistant will take minutes that will be posted on the password protected website to be reviewed by members of each Project group before the next weekly Work in Progress meeting. Mr. Joe Marrone, the Training Director, will attend all of the weekly training projects meetings and he (or a designated group member) will be responsible for recording the minutes of these meetings. Mr. Halliday and/or Dr. Kiernan will periodically attend each of these meetings.

The Leadership Team will include the PI, Co-PI, the Research Director, the Training Director and external partners represented by Bobby Silverstein for CSADP and Susan Stoddard from InfoUse. The Leadership Team will convene within thirty days of the start of the project and then meet monthly for the first six months and then quarterly thereafter. The Leadership Team will meet in person at least twice in the first six months and then by phone conference subsequently. Monthly meetings of the Leadership team will be coordinated using distance technology with a dedicated 800 calling card for the Center which allows prompt construction of conference calls. We have used this type of service for the coordination of national programs for the past three years and find that this type of service works beautifully for bringing together a working group from around the country. The Leadership team members will be encouraged to share resources and all scholarly references discussed during the meetings will be collated on the RRTC program password protected website for future use in scholarly papers and reports.

At the beginning of each project year, there will be a day-long face-to-face RRTC Center staff and Leadership team retreat. These annual RRTC team retreats will provide the collaborators with an intensive opportunity to review research designs, products and materials to be developed, modify and finalize the dissemination strategy for the first year, develop the outline for dissemination for the following years and review each of the roles of the collaborators.

Participants on the Expert Panel: In addition to the internal resources of the Center, we will be hosting three expert panels. Communication will occur in person, through teleconference, and through electronic means. The *VR Expert Panel* will meet in person at least yearly at the Fall conference meeting of the CSA VR. Mr. John Halliday routinely attends these meetings and will host a meeting of the RRTC Project VR Expert Panel as an open meeting. The *Research Expert Panel* will not meet in person but will meet quarterly through teleconference calls and email interactions. The *Disability Advocacy Expert Panel* will provide oversight and input into the relevance of the research at both the design and analysis phases, and support the translation of research into practice.

Timelines: Each research project will develop a work plan that has major activities connected to staff and project year. These tables provide an overall sequence of the research activities and will be the basis to judge the timeliness of implementation. Mr. Halliday will have primary responsibility to develop an overarching schedule of activities with clear staff responsibilities. Dr. Foley will develop work plans for each research activity. In previous projects, the ICI has used a matrix strategy that loads tasks by month for each project staff member per study. By setting the target goal for completion and working backwards, the RRTC Project members can determine whether or not they are on schedule. This strategy will be used for the RRTC project. Within the first 30 days, the RRTC team members will review the staff responsibilities and timelines collaboratively. Project meetings (bi-monthly), quarterly reports, internal evaluations, and evaluations will assist in monitoring the timeliness of objectives and budget issues. Reviewers are requested to review budget and budget justification for additional detail about tasks performed within budget. Table 5 provides the overall work plan, timelines, and responsibilities for the RRTC as a whole. Reviewers are requested to review the Section J, Project Staff for the Personnel Loading Table (pg. 108).

Relationship to VR Programs and CSAVR: The ICI and our collaborators have a long standing working relationship with CSAVR with both the PI and Co-PI assisting in the long range planning of CSAVR. Bobby Silverstein, the Director of the CSADP, has played a key role in the framing of the VR legislation and worked extensively in supporting the long range planning activities of CSAVR. Over the years staff of the ICI as well as the contractors have worked closely with CSAVR and its members individually and collectively to advance public VR programs. Recognizing the interest of CSAVR in the submission of their response to the RFP and acknowledging the intent of CASVR to direct the support of the individual state VR agencies to only their application, we made the decision to not place the individual state VR Administrators in a bind by not complying with CSAVR's request for exclusivity to their proposal. We are confident that given our strong historical relations to both CSAVR and many of the state administrators that their involvement with this application will be a reality should our application be funded.

RESOURCES, EQUIPMENT, AND PERSONNEL: The ICI conducts numerous related studies through which substantial computer, software, and technical support has been acquired. Other resources are available to us through the University or other departments within the ICI such as transcription, interpreter services (including ASL), video production, computer support, librarian services, materials production, secretarial support, database management and data entry support, graduate assistants, and undergraduate interns. In the event that timelines or resources require a re-prioritization of staff, the PI and the Co-PI will acquire the needed resources or re-allocate staff from one task to another. For example, junior ICI staff may need to take on different roles within anyone particular project until graduate fellow positions are filled. These decisions will be based upon timelines and objectives and will involve the input of the Management Team and partners as appropriate.

Table 5: Overall Work Plan, Timelines, and Responsibilities for the RRTC

KEY: PI (Principal Investigator); CP (Co-Principal Investigator); RD (Research Director);RAS (Research Associates); RDC (Research Data Coordinator); DD (Dissemination Director); DS (Dissemination Specialist); DBD (Database Developer) IT (Instructional Technology Manager); TTD (Training/TA Director); RA (Research Assistant); PDF (PostDoctoral Fellow); RF (Research Fellows) ADM (Administrative Manager); BS (Bobby Silverstein); IU (InfoUse).

Priority A: Increasing the knowledge about the system-level characteristics of the VR program, and outcomes associated with those characteristics.																																				
Activities	Responsible Personnel																Year 1				Year 2				Year 3				Year 4				Year 5			
	PI	CP	RD	RAS	RDC	DD	DS	DBD	IT	TTD	RA	PDF	RF	ADM	BS	IU	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Develop and refine protocol			✓	✓								✓				✓	●																			
Collect and Screen Studies			✓	✓	✓						✓	✓	✓			✓	●	●																		
Code studies			✓	✓	✓						✓	✓	✓			✓		●	●																	
Conduct critical appraisal and synthesis			✓	✓	✓						✓	✓	✓			✓			●																	
Review findings with expert panels	✓	✓	✓												✓	✓			●																	
Develop Products for Dissemination	✓		✓	✓	✓	✓	✓				✓	✓	✓		✓	✓			●	●																
Create research variables for use in subsequent studies		✓	✓	✓	✓							✓	✓			✓			●	●																
Priority B: Increase knowledge about the State-by-State key characteristics of Federal, State and local government entities and community non-governmental organizations that either directly deliver or directly purchase employment services for PWD, and the role of the VR program within this constellation of policies and programs.																																				
Activities	Responsible Personnel																Year 1				Year 2				Year 3				Year 4				Year 5			
	PI	CP	RD	RAS	RDC	DD	DS	DBD	IT	TTD	RA	PDF	RF	ADM	BS	IU	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Incorporate findings from research synthesis into research protocol			✓	✓												✓			●																	
Review existing data collection efforts and data sources			✓	✓	✓							✓	✓			✓			●	●																
Review System theory models to further categorize research variables into domains			✓	✓								✓	✓			✓			●	●																
Refine research plan with expert panels that includes surveys of multiple entities	✓	✓	✓	✓								✓				✓				●																
Acquire IRB and CSAVR approvals and external party approvals			✓	✓								✓	✓			✓					●															
Implement research plan to survey all states agencies and providers			✓	✓	✓			✓			✓	✓	✓			✓						●														

Analyze Data			✓	✓	✓						✓	✓	✓			✓						●	●													
Review Findings with Expert Panels	✓	✓	✓												✓	✓							●													
Develop Products for Dissemination	✓		✓	✓	✓	✓	✓				✓	✓	✓		✓	✓							●	●	●											
Develop research variables and protocols for subsequent activities		✓	✓	✓								✓	✓			✓							●													
Priority C: Increase the knowledge about the key characteristics of each State's VR system and providing a base upon which future researchers can analyze the operational consequences and outcomes of different internal arrangements and agency decisions.																																				
Activities	**Responsible Personnel**																**Year 1**				**Year 2**				**Year 3**				**Year 4**				**Year 5**			
	PI	CP	RD	RAS	RDC	DD	DS	DBD	IT	TTD	RA	PDF	RF	ADM	BS	IU	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Incorporate variables and protocols from previous activities		✓	✓	✓								✓				✓							●													
Refine research protocol based upon research synthesis and survey work		✓	✓	✓								✓				✓							●													
Review research plan with expert panels	✓	✓	✓												✓	✓							●													
Acquire IRB and external parties approvals			✓	✓								✓				✓								●												
Wave 2 interviews and Wave 3 survey		✓	✓	✓							✓	✓	✓			✓									●	●										
Analyze data			✓	✓	✓							✓	✓			✓									●	●	●									
Review findings with expert panels	✓	✓	✓												✓	✓											●									
Develop Products for Dissemination	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	✓											●	●	●	●						
Priority D: Increasing the knowledge about "best practices" of VR order of selection in serving individuals with the most significant disabilities.																																				
Activities	**Responsible Personnel**																**Year 1**				**Year 2**				**Year 3**				**Year 4**				**Year 5**			
	PI	CP	RD	RAS	RDC	DD	DS	DBD	IT	TTD	RA	PDF	RF	ADM	BS	IU	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Incorporate findings from preceding research initiatives into research plan		✓	✓	✓								✓				✓											●									
Refine research protocols			✓	✓								✓				✓											●									
Review research protocol with expert panels	✓	✓	✓												✓	✓											●									
Acquire IRB and external parties approvals			✓	✓												✓											●									
Solicit nominations for best practices	✓	✓	✓	✓		✓				✓					✓	✓												●	●							
Select best practices for case studies	✓	✓	✓	✓								✓				✓												●	●							
Intensive case study		✓	✓	✓								✓				✓													●	●						
Analyze data			✓	✓							✓	✓	✓			✓														●	●					
Review findings with expert panels	✓	✓	✓												✓	✓															●					
Develop products for dissemination	✓		✓	✓	✓	✓	✓				✓	✓	✓		✓	✓															●	●	●			

Priority E: Increasing the knowledge about “best practices” for helping individuals with developmental disabilities (DD) and individuals with mental health (MH) issues obtain and retain employment.

Activities	Responsible Personnel																Year 1				Year 2				Year 3				Year 4				Year 5			
	PI	CP	RD	RAS	RDC	DD	DS	DBD	IT	TTD	RA	PDF	RF	ADM	BS	BU	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Incorporate findings from preceding research initiatives into research plan		✓	✓	✓								✓				✓											●									
Refine research protocols			✓	✓								✓				✓											●									
Review research protocol with expert panels	✓	✓	✓												✓	✓											●									
Acquire IRB and external parties approvals			✓	✓												✓											●									
Solicit nominations for best practices	✓	✓	✓	✓		✓				✓					✓	✓												●	●							
Select best practices for case studies	✓	✓	✓	✓								✓				✓												●	●							
Intensive case study		✓	✓	✓								✓				✓													●	●						
Analyze data			✓	✓							✓	✓	✓			✓														●	●					
Review findings with expert panels	✓	✓	✓												✓	✓															●					
Develop products for dissemination	✓		✓	✓	✓	✓	✓				✓	✓	✓		✓	✓															●	●	●			

Priority F: Enhancing the knowledge base of: State and Federal VR program personnel, personnel of other employment programs for PWD, researchers, and PWD.

Activities	Responsible Personnel																	Year 1				Year 2				Year 3				Year 4				Year 5			
	PI	CP	RD	RAS	RDC	RDC	DD	DS	DBD	IT	TTD	RA	PDF	RF	ADM	BS	IU	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Develop and refine dissemination strategies with expert panels	✓		✓				✓	✓	✓	✓	✓					✓	✓	●				●				●				●				●			
Environmental scan of dissemination opportunities	✓						✓	✓			✓					✓	✓	●				●				●				●				●			●
Develop products for dissemination	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Expert panel review of materials	✓						✓	✓	✓	✓	✓					✓	✓				●				●				●				●	●	●	●	●
Community of Practice working groups web conferences/webinars	✓	✓					✓	✓	✓		✓				✓	✓	✓	✓	✓					✓	✓	●	●	●	●	●	●	●	●	●	●	●	●
Conference panel and workshop presentations	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Research and policy forums	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
State of the science conference	✓	✓	✓	✓			✓	✓	✓	✓	✓			✓		✓	✓						●	●	●	●	●	●	●								
Curriculum modules	✓						✓	✓		✓	✓															●	●	●	●	●	●	●	●	●	●	●	●
Onsite and distance technical assistance	✓	✓								✓	✓					✓	✓	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Custom data analysis & evaluation support	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓			✓	✓	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

SECTION H: ADEQUACY AND REASONABLENESS OF BUDGET

COSTS ARE REASONABLE IN RELATION TO THE PROPOSED PROJECT ACTIVITIES: This RRTC application includes a number of very labor intensive research and training projects to capture a true national picture of the VR system. These designs build upon the strength of the ICI and bring in the expertise of a former VR director and VR counselor. Activities are displayed in the Plan of Operations Table in the previous section which will be used to assist the Leadership Team and the Directors to allocate resources to ensure completion of activities. We have also invested in junior level staff as much of the research activities require substantial data collection efforts. The ICI is committed to supporting graduate students and junior researchers who are developing careers in disability. The ICI will work with subcontractors upon award and use the Plan of Operations table to develop the scope of work for the contracting process. Budget items include substantial support for expert panel members as they will also be critical actors in the RRTC effort.

BUDGET ITEMS ARE JUSTIFIED: The overall budget justification is presented in detail in the initial budget section of this application. The reviewers should refer to Budget Justification for a complete explanation of all major budget items. The overall design and the use of resources reflect the access to considerable expertise of the University in research, training and TA. A substantial percentage of the budget is dedicated to personnel costs as the RRTC activities are very labor intensive. We also include significant resources for expert panels and for accommodations for participants with disabilities and other needs. Adequate resources are budgeted for the State of the Science Conference. InfoUse and CSADP contracts reflect the scope of work. The careful selection of staff for this project reflects the applicant’s interest in assuring high quality research, strong strategies for dissemination, and interactive training and TA objectives that meet the needs of the target population. As a reflection of the University’s commitment has agreed to accept a reduced indirect, as required under the RFP, and the considerable un-recovered indirect to be a contribution to the accomplishments of the goals and objectives of this center.

SECTION I: PLAN OF EVALUATION

This evaluation section will outline both evaluation measures and strategies for assessing project success (Babbie, 1987). The evaluation plan has been developed using the principles of a Program Logic Model as a tool for conceptualizing evaluation activities (McLaughlin & Jordan, 1999; Unrau, 2001), and recognizes the importance of using objective measures to assess timely and effective implementation of center activities, the level of RRTC outputs, and achievement of both short and longer term outcomes. The first section of this narrative will address implementation of inputs or program activities (formative assessment) required to meet the project objectives. The second section will describe the overall project purpose and intended long-term outcomes, including the identified problems to which the project responds. The final section will discuss the assessment of outputs and short and intermediate-term outcomes.

PERIODIC ASSESSMENT OF PROGRESS TOWARD IMPLEMENTING THE PLAN OF OPERATION: Adherence to Task and Timelines. The formative evaluation will assess progress toward implementation of the plan of operation with specific focus on the appropriateness and efficiency of resource utilization, participation of key stakeholder groups, and timely implementation. Process measures are designed to improve performance of the project through feedback generated through periodic assessment. A summary of major process questions includes:

- Did the project activities operate according to timelines?
- Do principal stakeholder groups including VR managers and policy personnel, VR counselors and CRP employment support staff, staff of other public employment systems incl. MR/DD, MH and WD, researchers, and PWD participate in and value project activities?
- Are dissemination products being developed in a timely manner and reaching varied audiences (listed in the previous question)?
- Are RRTC training and technical assistance (TA) activities being used and valued?

The RRTC will maintain a variety of systems and strategies to support the assessment of the effectiveness and efficiency of project implementation. These include periodic review of RRTC master timelines and project flow charts and review of major project activities at critical points by project advisors prior to implementation, regular external review of project publications by stakeholders with Product Satisfaction and Utilization Surveys (e.g., Evaluations Cards, Web-Based Evaluation), and use of the Staff Information and Outreach Activity Log to track outreach activity. Criteria, measures, and mechanisms for documentation are provided in Table 6.

Table 6: Evaluation of Progress Toward Implementation of Plan of Operations

Area of Evaluation	Criteria	Measure	Mechanism for Documentation
Project activities are completed within work plan timelines and standards	Benchmark activities are completed by target dates. Corrective actions determined within 30 days if activities incomplete	Activities are complete 90% of the time Corrective action determined 100% of the time for tardy activities	Review of project work plan (Quarterly: PI. Co-PI)
Key Stakeholder Groups participate in and value RRTC	Advisory panels (VR directors, researchers, and disability advocates) represent the full membership of primary stakeholder groups Advisory groups value RRTC work	Membership of expert panel represents stakeholder groups. Panel reaches consensus on research questions, policy issues, and variables. Panel member rating of importance of RRTC work and responsiveness of RRTC to member and constituent input.	Panel minutes (Annual) Survey of Panel Members (Annual)

Area of Evaluation	Criteria	Measure	Mechanism for Documentation
RRTC knowledge and products reach target population and its community	Products disseminated to the following groups: At least 75% of products target VR managers and policy personnel directly, At least 33% of products target VR counselors and CRP employment staff and other service provider staff directly (briefs, trainings, manuals, etc). At least 33% of products target researchers directly At least 33% of products relate directly to issues encountered by PWD Project materials meet ICI accessibility standards	# products developed # products distributed # of conferences conducted # of presentations given # web site hits on RRTC website # podcasts and video blogs produced Recipients by stakeholder group Product formats available (text, large print, Braille, audio) Translation of products into languages other than English available % of products by target audience	Dissemination Tracking System (annual report) Product Satisfaction and Utilization Surveys Staff Information and Outreach Activity Log
RRTC training and TA activities are used and valued	Training and TA activities reach VR agencies, other service providers, practitioners, disability advocates Training and TA activities are high quality and valued by participants Training and TA activities are universally accessible	# of web conferences conducted # podcasts and video blogs produced # training events conducted # instructional materials (manuals, guides, reports, training videos, audio recordings) # TA activities conducted # participants by stakeholder group Participant rating of quality and value of training activities	Staff Information and Outreach Activity Log Training and TA evaluation form Training roster Presenter/Trainer list

Assessment of value of RRTC research, products and activities. An assertive management design includes: regular (monthly) meetings of Principal Investigators and lead training and dissemination staff; review of research designs and products by advisory groups including the VR Expert Panel, Disability Advocates Panel, and the Research Expert Panel. The

RRTC management will ensure the engagement of external stakeholders in research design and implementation using participatory action methodology. All publications will include an internal peer review of RRTC staff, internal peer review by non-RRTC staff, advisory panel member review, and review by external stakeholders prior to publication and submission. The ICI uses this strategy routinely and provides reimbursement for external review through administrative overhead. Effectiveness of the management plan will be assessed annually using both informal feedback from advisors as well as an annual survey. The value and utilization of RRTC activities and products will also be assessed through a comprehensive system for tracking project activities including publication dissemination, web site use, requests for information, technical assistance, and training. Key components include ICI's Dissemination Tracking System (publication requests, web site utilization); ICI's (Product) Evaluation Care; and the Staff Information and Outreach Activity Log (information and outreach, technical assistance, and training).

Quality Assurance. Role of advisory groups: By using a participatory action design, the RRTC structure provides considerable opportunity for input at all stages of project implementation. As mentioned before, the RRTC will establish three advisory panels (VR directors or former directors, disability advocates, and researchers). The roles and responsibilities of each of those panels are described in Section G (pg. 84). Broadly, the primary purpose of these panels is to provide ongoing feedback, input, and evaluation on research and dissemination efforts conducted by the RRTC. In doing so, the panels will provide an additional level of quality control. Research Expert Panel input specifically addresses the methodological rigor of research design and analysis through dedicated assignment of faculty and staff to projects in their area of expertise. Dr. Foley is the Research Director for the project and will report to Mr. Halliday 9PI) and Dr. Kiernan (Co-PI). Members of the VR Expert Panel and the Disability Advisory Panel will provide oversight and input into the relevance of the research at both the design and analysis phases, and support the translation of research into practice. Members from the three panels will work collaboratively with the RRTC on the mechanics of the research: wording of consent forms, process for recruitment, design of the interventions, interpretation of results, participation in presentations, co-authorship of papers, and guidance on practice changes. In addition, the RRTC will also engage panel members in providing ongoing feedback and evaluation on the center's dissemination efforts, specifically the type of media used for disseminating information and knowledge, product content, target audience, and effectiveness of efforts. Members will be paid for their time, reimbursed for costs incurred, supported for travel, and provided with accommodations (disability and linguistic, where requested). In addition, each project will form advisory panels or other structures for stakeholder input into the design, analysis, and utilization of research findings.

PERIODIC ASSESSMENT OF PROGRESS TOWARD ACHIEVING OUTCOMES AND IMPACTS: Project Purpose and Long Term Outcomes. The proposed RRTC is designed to develop an extensive and comprehensive understanding of VR that will inform and positively influence individual employment outcomes, employment support practice, and policy at the federal, state, and local levels. Specifically, it is designed to build the capacity of the state and local VR system and partnering organizations to provide more efficient and coordinated service delivery to PWD and their families. The uniqueness of this project is that the RRTC is investing substantially in research and translation of the research findings into training and TA efforts targeted at state and local VR Agencies and other service providers including community-based organizations. A community of practice approach will guide the development and implementation of training and TA efforts. The project estimates that at least 400 VR staff, 200 service provider staff, and 150 consumers will with have direct contact through one of the research studies or training activities and will receive concrete benefits that make a difference in the way in which services are being provided. The project estimates that about 60% of the VR agencies (General and Blind) will receive direct support and TA from the RRTC over the period of five years. We will measure this as part of our research, training, and TA activities (see Table 7). In addition, all activities emphasize translation of research to practice. The RRTC has invested in partnerships and collaborations with practitioners and associations that disseminate to practitioners in order to move research knowledge and outputs into practice changes in multiple disciplines (see Dissemination section).

Table 7: Long Term Outcomes

Long Term Outcome	Evidence and Data Sources
VR agency staff, service providers, and practitioners will improve policymaking and planning at the state and local levels	R1-3, Research synthesis, Development of online database of research synthesis findings RSA-911, ICI Survey of State VR Agencies, ICI National Survey of MR/DD Agencies, ICI National Survey of CRPs, WIASRD Data Census Data, BLS and BEA Data
VR agency staff, service providers, and practitioners will participate in training and TA and increase their capacity to serve PWD.	T1-6, T8, Development of a series of online trainings and TA efforts based on R1-5.2
VR agency staff , service providers, and practitioners participate in training and TA and increase coordination of service provision to PWD.	T1-6, T8, Development of a series of online trainings and TA efforts based on R1-5.2
The communities of practices for VR agency policy and strategy will include competent multi-disciplinary practitioners.	T1, Development of a series of online trainings and TA efforts based on R1-5.2
Improved training and professional development for front-line VR counselors and CRP personnel.	T7, Development of curriculum modules
Researchers will conduct more research on employment service delivery and outcomes.	R1, Development of online database of research synthesis findings R2-3, Development of integrated data files and list of recommendations for future research
Best practices on VR order of selection targeted at people with MSD will be adopted as standard practice by other state VR agencies.	R4, Development of best practice guidelines based on R4 data
Best practices in serving people with DD will be adopted by state and local VR and MR/DD agencies, and CRPs.	R5.1, Development of best practice guidelines based on R5.1 data
Best practices in serving people with MH will be adopted by state and local VR and MH agencies, CRPs and CMHCs.	R5.2, Development of best practice guidelines based on R5.2 data
PWD will increase their employment outcomes (wages and hours worked).	R2-3, Survey of VR, MD DD, MH, CRPs; secondary data sources listed above
PWD will increase their employment status (wages, hours worked, job types).	R2-3, Survey of VR, MD DD, MH, CRPs; secondary data sources listed above

While observable change in the long term outcomes for PWD may be beyond the time frame of this RRTC, we propose a significant effort to track and monitor employment outcomes of PWD who are served by this employment services network in the long-term. This will be achieved through the creation of an online data “hub” that allows to track and monitor employment services and consumer outcomes data across systems and states.

Anticipated Outcomes, Indicators and Measures: Short and Intermediate Term Outcomes. The anticipated outcomes of this project were provided in Table 8 and repeated here with the accompanying indicator and measures. For the reviewer’s convenience we divided the priorities into two sections: 1) contributions made to the knowledge base through our research findings (Priorities A-E), and 2) translation of knowledge gained into practice through training and TA (Priority F). It should noted that knowledge translation encompasses both the integration of findings into training and TA activities and the development of product (research, training and TA) to be disseminated among target group. In other words, Priority F activities are an integral part/important extension of the research efforts proposed under Priorities A- E

Table 8: Evaluation of Project Outputs and Impacts

Expected Outcome	Indicators	Measures
1. CONTRIBUTIONS MADE TO THE KNOWLEDGE BASE THROUGH OUR RESEARCH FINDINGS		
Priority A: Increase knowledge about the system-level characteristics of the VR program, and outcomes associated with those characteristics.		
New knowledge gained about: • The status of supports and outcomes of VR agencies and consumers. • Existing (research) evidence on VR program characteristics and outcomes, and consumers. • Existing gaps in research on VR program characteristics and outcomes, and consumers.	R1 research findings (research synthesis) provide documentation of the relationship between characteristics and outcomes. R1 research findings provide appraisal of existing evidence on VR characteristics and outcomes, and consumers. Research synthesis accepted for publication in C2-RIPE online database and NCDDR's online Registry of Research Synthesis. Online research review and synthesis database developed.	Research review and synthesis conducted and published. Counts of website hits on online research review and synthesis database. Counts of journal articles accepted. Lists of citations, quotes, and use of research in press. Number of testimonies and citations in policy briefs and testimonies. Number and reach of media reports. Counts of conference presentations.
Priority B. Increase knowledge about State-by-State key characteristics of Federal, State, and local government entities and community non-government organizations that either directly deliver or purchase employment services for PWD, and the role of the VR program within this constellation.		

New knowledge gained about: • State-by-state key characteristics of state and local employment service providers (VR, MD DD, MH, One-Stops, CRPs). • The role of the VR program in the constellation of policies and programs. • Compendium of technical guides to use data sources on state and local employment service system and provider data incl. administrative data.	R2 research findings provide documentation of characteristics of employment service providers at the state level. Online database of state-by-state profiles on employment service systems developed. Data files that integrate data from various sources on state employment systems developed. Online data "hub" on state and local employment service systems developed that allows access to integrated data files. Measures and data files developed are requested by researchers. Articles accepted in peer reviewed journal. Influence of research on policy and practice.	Counts of website hits on online state-by-state profiles database. Counts of website hits on online data "hub." Number of downloads of data files from data "hub." Number of data analysis requests received from state and local employment service providers and other entities. Counts of journal articles accepted. Lists of citations, quotes, and use of research in press. Number of testimonies and citations in policy briefs and testimonies. Number and reach of media reports. Number of conferences/webinars held. Number of conference presentations given.
Priority C. Increase knowledge about the key characteristics of each State's VR system and providing a base upon which future researchers can analyze the operational consequences and outcomes of different internal arrangements and agency decisions.		
New knowledge gained about: • Key characteristics of each state VR system and differences across states.	R3 research findings provide documentation of VR system characteristics and outcomes at the state and across state levels. List of recommendations for future research developed. Articles accepted in peer reviewed journal. Measures developed are requested by researchers. Influence of research on policy and practice.	List of recommendations for future research. Counts of journal articles accepted. Lists of citations, quotes, and use of research in press. Number of testimonies and citations in policy briefs and testimonies. Number and reach of media reports. Number of conference presentations given. Number of conferences/webinars held. Number of adoptions of RRTC tools.
Priority D. Increase knowledge about best practices for administering and implementation of an order of selection in serving individuals with the most significant disabilities (MSD).		

New knowledge gained about: • Best practice definition linking Delphi process with correlation with outcomes. • Best practices in VR order of selection in serving individuals with MSD. *Develop and test new processes that:* • Lead to the identification of best practice indicators.	R4 research findings provide documentation of best practices in VR order of selection in serving individuals with MSD. Online database of best practices developed. Best practice guidelines based on R5.1 data developed. Articles accepted in peer reviewed journal. Measures developed are requested by researchers. Influence of research on policy and practice.	Counts of journal articles accepted. Lists of citations, quotes, and use of research in press. Number of testimonies and citations in policy briefs and testimonies. Number and reach of media reports. Number of conference presentations given. Number of conferences/webinars held. Number of adoptions of RRTC tools.
Priority E. Increase knowledge about “best practices” for helping individuals with developmental disabilities (DD) and individuals with mental illness (MI) obtain and retain employment.		
New knowledge gained about: • Best practice definition linking Delphi process with correlation with outcomes. • Best practices in serving individuals with DD (Study 5.1.) • Best practices in serving individuals with MH (Study 5.2.) *Develop and test new processes that:* • Lead to the identification of best practice indicators.	R5.1. and 5.2. research findings provide documentation of best practices in serving people with DD and MH respectively. Online database of best practices developed. Best practice guidelines based on R5.1. and R 5.2. data developed. Articles accepted in peer reviewed journal. Measures developed are requested by researchers. Influence of research on policy and practice.	Counts of journal articles accepted. Lists of citations, quotes, and use of research in press. Number of testimonies and citations in policy briefs and testimonies. Number and reach of media reports. Number of conference presentations given. Number of conferences/webinars conducted. Number of adoptions of RRTC tools.
2.TRANSLATION OF KNOWLEDGE GAINED THROUGH TRAINING AND TA		
Priority F. Enhance knowledge base of: (1) State and Federal VR program personnel, (2) personnel of other employment programs for PWD, (3) PWD, and (4) researchers.		

New knowledge gained about: • Effective strategies for dissemination knowledge gained under R1-R5.2 among target populations. • Effective strategies for information sharing and knowledge translation for VR managers and policy personnel, other employment service providers staff, and practitioners	Knowledge Translation Team formed. Utilization of research findings in reports, briefings, policy and procedures, and personnel training. Research products developed and disseminated. Training and TA provided. Training materials developed through and used in T1-T6. TA materials developed through and used in TA1-3. Tools and training materials are requested by practitioners.	Number of communities of practices (T1) and forum (T7) developed and implemented. Number of direct trainings to VR administrators provided (T2). Number of conferences held (T3, T4, T8). Number of conference presentations given (T5). Number of curricula modules developed (T6). Number of training participants. Number of TA provided (TA1-3). Number of consultations requested of center staff (TA1-3). Number of adoptions of RRTC tools, strategies, and practices.

SECTION J: PROJECT STAFF

EXTENT ENCOURAGING APPLICATIONS OF TRADITIONALLY UNDERREPRESENTED GROUPS: Consistent with ICI policy, the RRTC is committed to staffing by persons from diverse cultures and by persons having a disability. The 2003 ICI Diversity Survey of the 100 member staff showed that 17% of ICI staff disclosed a disability, 47% said they had an immediate family member with a disability, and 36% indicated they had a significant care giving responsibility. Several of the proposed staff on this RRTC, supporting staff members in the research group, and members of the marketing and communication group are individuals with significant disabilities. In 2003 17% of ICI identified themselves as belonging to a diverse cultural or ethnic group. It should also be noted that the fellowships that are incorporated as part of this application will be focused upon individuals who have a disability or those coming from diverse backgrounds. Students for the fellowships will be recruited from UMB, the only public university in New England recognized by the National Institutes of Health as a minority serving institution. The UMass student body speaks over 80 languages at home and more than half of university students are the first in their families to attend college. The student body is racially and ethnically diverse but also predominately representative of lower income families, recent immigrants, and urban communities.

Currently the ICI has formal and informal contracts with 17 culturally diverse community agencies The University of Massachusetts Boston (UMB) includes three ethnic institutes, the Institute for Asian American Studies, The Mauricio Gaston Institute, and the Trotter Institute for the Study of Black Culture. Each Institute has relationships with UMB doctoral programs across multiple disciplines. The three institutes and the ICI have partnered previously on grant writing and projects. Announcements for open positions including research fellows and open positions will be sent to the ethnic UMB institutes and to their partners. ICI maintains several policies and practices that have resulted in successful recruitment of a diverse staff. These include:

- Informational interviewing all qualified candidates.
- Widespread posting in independent living centers, and One-Stop Centers and through culturally diverse, community-based media.

- ICI is a primary sponsor of the Gopen fellowship, a 12-month paid fellowship opportunity for individuals with developmental disabilities.
- All materials, training activities, and facilities accessible both internally and externally.
- Accommodations provided recently for training activities include providing materials in large print and Braille, and providing ASL and CART interpreters.

KEY PERSONNEL HAVE APPROPRIATE TRAINING AND EXPERIENCE IN DISCIPLINES REQUIRED: In combination, RRTC staff have hundreds of person years as experts across disciplines relevant for this RRTC. Disciplines include the following expertise areas: Rehabilitation Counseling, Social Welfare Policy, Rehabilitation and Special Education, Public Policy and Law, Marketing and Communications, Instructional Technology and Design, Accessibility, Web Design and Programming, Program Planning, Research Methods, Evaluation, Administrative Data Analysis, Qualitative Data Analysis, Disability Policy, and Public Human Services Administration. The PI is a former director of the Connecticut Bureau of Vocational Rehabilitation. The Co-PI directs a large institute specializing in policies, research, and training focusing on the employment of PWD. The Training Director worked in the Massachusetts Rehabilitation Commission, operated a vendor delivering employment services, and is an internationally known consultant on employment policy issues related to people with psychiatric disability. The Research Director has led multiple federally funded projects that have utilized participatory research designs across methodologies. Mr. Silverstein is an internationally recognized leading policy expert in disability and rehabilitation policy. Dr. Stoddard is a nationally recognized leader in disability research and public policy and directs a woman-owned business conducting large scale disability policy research and evaluation. Several key senior staff members are individuals with disabilities. Short biographies are offered to demonstrate knowledge, training, and experience.

John Halliday, M.Ed, PI, led the Bureau of Rehabilitation Services (BRS) in Connecticut to national recognition in the achievement of competitive employment outcomes for PWD. The innovative service delivery, purchasing and administrative structures designed and implemented by BRS lead to significant systems changes both within Connecticut as well as serving as models for other systems. He has a proven track record of leadership in program innovation and replication with particular emphasis on SSI/SSDI, transition, AT, benefits counseling and program financing. Over the last twenties years, he has chaired and served on a number of CSAVR committees related to policy, operations, and practice issues in VR.

William Kiernan, Ph.D., has a Master's in Rehabilitation Counseling and doctorate in Rehabilitation and Special Education, is the PI on the pre-service training in Rehabilitation Counseling at UMB. He has served as the President of the AAIDD and is the President Elect of the AUCD. Dr. Kiernan has served as the PI on the National Center on Workforce and Disabilities [NCWD]/Adults, a project that was funded by the U.S. Department of Labor supporting the involvement of persons with disabilities through the One-Stop and VR systems nationally. He has worked extensively with the public VR system and employers in expanding employment opportunities for person with disabilities nationally.

Susan Foley, Ph.D. holds a doctorate in Advanced Social Welfare Policy from the Heller School at Brandeis University and directs the research activities of the ICI. She is the PI of a NIDRR funded DRRP entitled Emergent Disability, Systems Change, and Employment Outcomes. The project which includes a survey of VR directors ends November 2007. She is also the co-PI of the RRTC on Children and Youth with Disabilities and Special Health Care Needs with responsibility for project management, oversight of subcontractors, performance reporting, and oversight of a randomized controlled design of a self-directed transition curriculum for youth with special health care needs and disabilities. Recent projects include an NIMH R21 grant assisting the Department of Mental Health in Missouri to translate evidenced based supported employment services into application; an evaluator on the RSA Projects with Industry grant awarded to the Louisiana Business Leadership Network; and a lead researcher on the RRTC on State Systems and Employment where she conducted the National Survey of State Systems collecting descriptive information on five state agencies in all states plus D.C.

Joseph Marrone is a Senior Program Manager for Public Policy at ICI. He provides training, TA and program consultation to public agencies and private providers in all 50 U.S. states, Puerto Rico, Canada, Europe, and Asia. He has lectured and published extensively on policy and program issues in employment services, marketing job applicants with disabilities to employers, workplace supports, psychiatric rehabilitation, program management, quality assurance and program accountability in human services, workforce development, community rehabilitation, welfare to work issues, and consumer empowerment.

Mr. Robert “Bobby” Silverstein, Esq. has over 30 years experience conducting policy-related research and providing training and TA regarding issues impacting the lives of PWD, particularly in the area of employment and economic self-sufficiency. Mr. Silverstein has served as a senior partner on two employment-related RRTCs. Currently he is a senior partner working with the NCWD/Adults. From 1997-2000, he served as an Associate Professor of Health Care Sciences, The George Washington University School of Medicine and Health Sciences. Mr. Silverstein gained considerable experience negotiating and drafting bipartisan, consensus legislation while serving in various staff capacities in the U.S. House of Representatives and the U.S. Senate between 1985 and 1997. Mr. Silverstein was the behind-the-scenes architect of more than 20 bills enacted into law, including the landmark Americans with Disabilities Act. Currently, Mr. Silverstein is a principal in the law firm of Powers Pyles Sutter & Verville, PC. He also serves as the director of the Center for the Study and Advancement of Disability Policy. Mr. Silverstein is the recipient of more than 10 national awards, including the Distinguished Services Award of the President of the United States.

Susan Stoddard, Ph.D., FAICP, Founder and President of InfoUse, has extensive experience in program planning and evaluation and policy research studies of VR, employment of people with disabilities, and independent living. Dr. Stoddard is the PI of the Post Vocational Rehabilitation Study (PVRES), working with Westat on this second longitudinal survey for the RSA, studying the extent to which community services and workplace accommodations are used by VR consumers who closed out of services. Other related work includes two major statewide needs assessment studies for the California State Independent Living Council (SILC), a study of Independent Living/Vocational Rehabilitation Collaboration at the RRTC on Independent Living Management, studies and evaluations conducted for RSA, and development of the InfoUse

Chartbooks on Disability. She has provided TA and training on the use of statistics and analytical methods in planning and on the development and implementation of the program review process in NIDRR.

Lita Jans, Ph.D., Senior Researcher at InfoUse, is a member of the design team on the PVRE Study currently underway with Westat. She is Project Director of an assessment of employers who have been reticent to make workplace accommodations for the Pacific Disability and Business Technical Assistance Center (DBTAC). Dr. Jans was Project Director of InfoUse's project to identify role models for employment for youth with disabilities and she authored Chartbooks on Disability Statistics for InfoUse's Center on Access to Disability Data. She was the subcontract Project Director on a project to design elements of a data collection system for RSA's State Assistive Technology Programs and was Senior Analyst for the California Statewide IL Needs Assessment, contributing to the survey design and quantitative analysis, and also conducting focus groups in Spanish and English.

Lewis E. Kraus, M.P.H., M.C.P., Vice President of InfoUse, is the director for training and dissemination for the RRTC for Personal Assistance Services and has the development of the state data website for that Center. He is leading the conceptual development of the dissemination website for the PVRE Study, has conducted interviews and case study analysis in other InfoUse VR-related projects for RSA, and has conducted web-based surveys and focus groups of individuals with disabilities. He is leading the research into personal assistance services in the workplace for the Center for Personal Assistance Services, which includes instrument design, interviews, case studies, and promising practice methods. He worked in the study with RTI on the study of Mental Illness and Rehabilitation. He has extensive experience in all aspect of training and dissemination and media development at InfoUse regarding PAS and disability.

Joan M. Ripple, Program Analyst, InfoUse, co-authored the report "Independent Living Needs Assessment" covering the needs of Californian's with disabilities for the California DR and SILC. Ripple conducted focus groups of individuals with disabilities throughout the state, and also key informant interviews regarding need for services and outcomes. For the PAS

Center, she is conducting structured phone interviews of employers and persons with disabilities using PAS at work that lead to the promising practices in workplace accommodations. She has evaluated the Easy Does It Emergency PAS program in Berkeley for the City of Berkeley. Ms. Ripple previously served as the disability rights policy staff for the California Senate.

Mr. David Temelini, M.S., J.D, is Director of ICI marketing and communications and web development and eLearning strategies, and is directly responsible for the design, production, and dissemination of print publications and materials. His areas of expertise include layout, graphic design, marketing, and web strategies.

Alberto Migliore, PhD, is a Postdoctoral research fellow at ICI. He assists ICI with research development, data collection, and data analysis of ongoing research and evaluation projects. He performs data analysis using the RSA-911 data file with a focus on employment outcomes of individuals with developmental disabilities. He was one of the founding members and a member of the executive board of a social co-operative in Italy where he worked for about 10 years involving individuals with intellectual disabilities in community work activities.

Frank A. Smith, MA, has a Master's in Applied Sociology and works on a number of research projects including www.statedata.info where he produces custom data summaries on employment and people with disabilities using a variety of data sources and provides TA in the use of RSA-911 and American Community Survey data files..

Heike Boeltzig, MS is a Research Associate and Doctoral student in Public Policy. She participated in a project funded by the U.S. DOL/ODEP that identified effective practices, barriers, successful strategies, and policy recommendations to better serve persons with psychiatric disabilities through the workforce development system. She is a lead researcher in a multi-year comparative policy study of One-Stops and Workforce Investment Boards identified as providing exemplary services to customers, including those with disabilities. Ms. Boeltzig is also involved in survey research as the project lead on the National Survey of Community Rehabilitation Providers funded by the U.S. Administration on Developmental Disabilities.

Mr. Alvaro Tobar, coordinates Instructional Technology at the ICI and provides assistance and consults for the ICI teams. He is responsible for the design and implementation of instructional technology strategies. His areas of expertise include education, technology integration, multimedia design, and video production.

Mr. Jeff Coburn, is the Senior Web Specialist and builds accessible, database-driven websites for publishing and collecting information. He comes to ICI from the commercial world, working as a designer and web builder for companies in Boston and London, England.

Mr. David Clark, is a database developer who specializes in end-to-end development of dynamic web applications for data collection and management. Mr. Clark creates solutions that are designed to be universally accessible to all. David architected The 2007 Survey of State VR Agencies that was conducted over the web as part of the NIDRR funded project. David has over ten years of experience in software development and accessibility including, and was on the original development team for "Bobby, " the first tool to assist web authors in checking for accessibility.

Ms. Soheila Lopopolo and Ms. Veronica Palmer Segal are Research Data Coordinators who work on multiple project supporting research activities such as data collection, analysis, and product development. Ms. Lopopolo is managing the data collection activities of the 2007 VR and TANF surveys and provides in-house TA on qualitative software (Atlas.ti). Ms. Palmer Segal, is the parent of an adolescent with disabilities and is supporting the work of the RRTC on Children and Youth with Disabilities and Special Health Care Needs transition to college project.

Ms. Michelle Byrd, is ICI's Finance Administrator and oversees the grants management, billing, and reporting responsibilities for more than 45 grants currently housed at the ICI.

EXTENT TO WHICH THE COMMITMENT OF STAFF TIME IS ADEQUATE TO ACCOMPLISH PROPOSED ACTIVITIES OF THE PROJECT: The Project allocates a total equivalent of 5.3 FTEs toward achieving project goals and objectives. With the added support of approximately 50 existing projects that can link to this grant coupled with the vast resources of the UMB (e.g., computer and media center), project staff will have no difficulty in achieving project activities of research, training/TA, evaluation and dissemination. **Table 9: Personnel Loading Chart** details personnel and days for accomplishing each goal and objective

Table 9: Personnel Loading Chart

240 days/48 week year for all staff except Research Fellows (RF) at 95 days/year full time.

KEY: PI (Principal Investigator); CP (Co-Principal Investigator); RD (Research Director);RAS (Research Associates); DD (Dissemination Director); DS (Dissemination Specialist); DBD (Database Developer) IT (Instructional Technology Manager); TTD (Training/TA Director); RA (Research Assistant); PDF (PostDoctoral Fellow); RF (Research Fellows) ADM (Administrative Manager); BS (Bobby Silverstein); IU (InfoUse)

Activities	PI **.4**	**CP .1**	**RD .3**	**RAS .7**	**RDC 1.25**	**DD .2**	**DS .2**	**DBD .2**	**IT .2**	**TTD .2**	**RA .75**	**PDF .25**	**RF 1.5**	**ADM .35**	**BS**	**IU**
Year 1 Total	96	24	72	168	300	48	48	48	48	48	180	60	143	84	N/A	N/A
Expert Panel	6	2	5	2	2	1					15	5			X	X
Research Activities		5	21	110	226			10			155	50	43			X
Training Activities	25	2	9	5	10	2	18		24	24			30		X	X
TA Activities	26	2	10	12	10	2			24	24			30		X	X
Dissemination Activities	15		10	25	50	37	30	38			10	5	40		X	X
Evaluation	4	1	5	10	2											
Project Management	20	12	12	4		6								84	X	X
Year 2 Total	96	24	72	168	300	48	48	48	48	48	180	60	143	84	N/A	N/A
Expert Panel	6	2	5	2	2	1					15				X	X
Research Activities		5	30	115	256		4	40			165	60	83			X
Training Activities	25	2			10		18		24	24			30		X	X
TA Activities	26	2	10	12	10				24	24			30		X	X
Dissemination Activities	15		10	25	20	41	26	8							X	X
Evaluation	4	2	5	10	2											
Project Management	20	12	12	4		6								84	X	X
Year 3 Total	96	24	72	168	300	48	48	48	48	48	180	60	143	84	N/A	N/A
Expert Panel	6	2	5	2	2	2					15	5			X	X
Research Activities			17	100	246			10			155	50	68			X

Activities	PI .4	**CP .1**	**RD .3**	**RAS .7**	**RDC 1.25**	**DD .2**	**DS .2**	**DBD .2**	**IT .2**	**TTD .2**	**RA .75**	**PDF .25**	**RF 1.5**	**ADM .35**	**BS**	**IU**
Training Activities	31	2	15	20	20	17	23		30	30			40		X	X
TA Activities	21	2	8	12	10				18	18			20		X	X
Dissemination Activities	14	2	10	25	20	23	25	38			10	5	15		X	X
Evaluation	4	2	5	5	2											
Project Management	20	14	12	4		6								84	X	X
Year 4 Total	96	24	72	168	300	48	48	48	48	48	180	60	143	84	N/A	N/A
Expert Panel	6	2	5	2	2	2					15	5			X	X
Research Activities			16	110	226			10			155	50	43			X
Training Activities	25	2	9	5	10	2	18		24	24			30		X	X
TA Activities	26	2	10	12	10	2			24	24			30		X	X
Dissemination Activities	15	2	15	25	50	36	30	38			10	5	40		X	X
Evaluation	4	2	5	10	2											
Project Management	20	14	12	4		6								84	X	X
Year 5 Total	96	24	72	168	300	48	48	48	48	48	180	60	143	84	N/A	N/A
Expert Panel	6	2	5	2	2	2					15	5			X	X
Research Activities			16	90	176						115	30	23			X
Training Activities	20	2	9	5	10	2	8		24	24			30		X	X
TA Activities	26	2	10	12	10	2			24	24			30		X	X
Dissemination Activities	20	4	15	45	100	36	40	48			50	25	60		X	X
Evaluation	4		5	10	2											
Project Management	20	14	12	4		6								84	X	X

EXTENT TO WHICH KEY PERSONNEL ARE KNOWLEDGEABLE ABOUT METHODOLOGY AND LITERATURE OF PERTINENT SUBJECT AREAS: The groups brought together to create this RRTC have a combined experience of hundreds of person-years in the field of disability research, training and service. The team members are well versed in the literature and, in fact, have contributed many papers and books to the area of employment and disability policy. The overall direction of the RRTC will be in the hands of Principal Investigator, Mr. John Halliday and co-Principal Investigator, Dr. William Kiernan, who will be supported by Mr. Silverstein. Dr. Foley will provide oversight of research implementation and performance. She has successfully implemented multiple surveys of state agencies achieving high response rates and high quality data. Case study research is a well-documented strength of the ICI as evidenced by multiple publications accepted for publication in prestigious peer-reviewed journals. Dr. Foley and Ms. Boeltzig have completed multiple case study research projects. Dr. Migliore and Mr. Smith are well-versed in administrative datasets as evidenced by their publications and ongoing research activities. The Appendix contains the CVs of all staff members.

SECTION K: ADEQUACY AND ACCESSIBILITY OF RESOURCES

ADEQUATE AND ACCESSIBLE FACILITIES: All of the space occupied by the ICI is fully accessible. It has been and will continue to be the practice of the ICI to offer training activities only in space that is fully accessible. The equipment and resources of the Center will also be accessible. Currently, the ICI has the capacity to modify all equipment to accommodate access needs of all employees. Several individual accommodations have already been made to allow employees with specific access need to have equipment and resources available for them to complete their jobs. These include, but are not limited to, the conversion of work stations to accommodate wheelchair access, work stations and computers fully accessible to staff with visual impairments, environmental modifications to accommodate staff with a variety of disability and health issues, flexible schedules to accommodate those with chronic and episodic disabilities, and multi-media staff meetings to accommodate those with hearing disabilities, cognitive disabilities, and telecommuters. The ICI also maximizes physical office space to accommodate those who use service animals. The Institute has been proactive in identifying the accessibility resource needs of its staff and seeks to create a welcoming, more than minimally accessible, physical, electronic, and programmatic environment.

ADEQUACY OF RESOURCES: As part of UMB, the ICI has the full cooperation of the administrative and human resource services, staff development activities, research and librarian supports. Primary office space for this project will be at the UMB campus. The ICI has a state-of-the-art communication system (including e-mail, Internet access, voicemail and conference capacity). Office equipment including photocopiers, office supplies, fax machines and other materials will be made available through the ICI. The ICI has extensive computer and data analysis capability, with a local area network of 65 Apple Macintosh desktop computers (the majority running 0SX) and 10 desktop PCs (running XP). Notebook computers include 12 Apple Macintosh iBooks, 3 G4 Titanium PowerBooks (all with wireless airport technology installed), 4 PowerBooks, and10 Dell PC laptops (running XP). Available peripherals include 5 networked printers (including 2 HP 8000 series and 1 HP 4500 series color), 2 HP color scanners (for OCR and graphics), 1 Mirus slide maker, 2 Braille Blazer embossers, and an HP plotter. ICI's software library is extensive, and includes the Microsoft Office Suite (Word, PowerPoint, Excel), the Adobe suite (Photoshop 7.0, Illustrator 10.0, PageMaker 6.5, InDesign 2.0, Premier), Quark 6.0, Macromedia Dreamweaver, Final Cut Pro Express, SPSS11.0, FileMaker 6.0, voice access software (Jaws, Outspoken) and other assistive technology software. Other equipment includes 6 LCD projectors, 5 Canon digital cameras, and a Canon digital video camera.

For web production, the ICI publishes web content using the LAMP (Linux, Apache, My Standard Query Language (MySQL), PHP: Hypertext Pre-Processing) open source web platform. The IDE (Integrated Development Enterprise) we use to code our sites is Jedit, and ICI's main testing and validation tool is Mozilla; both are open source and free, like LAMP. The ICI posts video on its websites using the UMB streaming video server. In addition, the Institute has full access to the UMB Distance Learning Video Production Center, a facility capable of producing broadcast quality programming. The Center provides broadcast quality video production and post production equipment; C and Ku-Band satellite receiving equipment;

PictureTel and Polycom videoconferencing equipment; a 30' x 30' television studio; 145 seat teleconference auditorium, and a 25 seat multimedia distance learning classroom.

Relationship to Other Work Planned or Underway and Supported by Federal Assistance: The ICI has a long and respected history as a prominent research and training institute in the area of integrated employment for PWD. Current projects include Opening Doors for Youth with Disabilities and Special Health Care Needs, a five-year Rehabilitation Research and Training Center funded by NIDDR and the *National Center on Workforce and Disability for Adults* (NCWD/A) funded by the Office of Disability Employment Policy (ODEP) at the U.S. Department of Labor (U.S. DOL). The Opening Doors RRTC includes a randomized controlled study of a self-directed on-line curricula designed for urban youth with disabilities interested in attending college. This NCWD/A provides outreach, training, and research support on a national level. In addition to research and training, the ICI has directly assisted more than 900 persons with severe disabilities to enter integrated employment. Additional current employment-focused projects address both policy and practice issues including a 15 year study of trends in day and employment services for individuals with DD, an intervention study entitled College to Career Connections (C3) project funded through Office of Special Education (OSEP) that tests the effectiveness of a comprehensive transition planning activity for high school students with intellectual disabilities, a curriculum development and research project addressing the use of personal networking in the job search for individuals from culturally diverse communities, a multi-site demonstration project partnering with nine community organizations to address the wrap-around support needs of PWD who live in public housing and want to enter the labor force, and a NIDRR funded research project examining the employment needs of individuals with emerging disabilities.

In addition to our employment related work, the ICI currently manages a national project for the Corporation for National Service providing technical assistance and training to AmeriCorps, Learn and Serve America, and the National Senior Service Corps programs. ICI conducts pre-service training at UMB in education, rehabilitation counseling, and orientation and mobility instruction. The ICI also conducts doctoral level leadership training in public policy and urban education with a concentration in disability.

Bibliography

Aday, L. (1991). *Designing and conducting health surveys.* San Francisco: Jossey-Bass.

Anderson, G. B., Boone, S. E. & Watson, D. (2003). Impact of Federal Legislation and Policy on VR Services for Consumers who are Deaf or Hard of Hearing: Perspectives of Agency Administrators and Program Specialists. *American Annals of the Deaf*, 148(4) (Fall 2003), pp. 315-322.

Anthony, W.A., Cohen, M.R., Farkas, M.D., & Gagne, C. (2002). *Psychiatric Rehabilitation* (2nd ed.) Boston, MA: Center for Psychiatric Rehabilitation.

Babbie, E. (1987). *The Practice of Social Research*. Berkeley, CA: Wadsworth

Bellini, N., & Royce-Davis, J. (1999). Order of selection in vocational rehabilitation: implications for the transition from school to adult outcomes for youths with learning disabilities. *Work*, 13(1) (1999), pp. 3-11.

Boeltzig,. H., Timmons, J., Gilmore, D.S., & Butterworth, J. (2007). *The states in integrated employment: Current outcomes of people with developmental disabilities and implications for policy and practice*. Manuscript in preparation.

Boeltzig, H., Timmons, J.C., & Marrone, J. (in press). Maximizing potential: Innovative collaborative strategies between One-Stops and Mental Health Systems of Care. *Work: A Journal of Prevention, Assessment, and Rehabilitation.*

Bond, G. R. (1998). Principles of the Individual Placement and Support Model: Empirical support. Psychiatric Rehabilitation Journal, 22(1), 11 - 23.

Bond, G. R. (2004). Supported employment: Evidence for an evidence-based practice. Psychiatric Rehabilitation Journal 27(4), 345-359.

Bond, G. R., Becker, D. R., Drake, R., Rapp, R. E., Meisler, C. A., Lehman, N., et al. (2001). Implementing supported employment as an evidence-based practice. Psychiatric Services 52(3), 313-322.

Bond, G.R., K. Campbell, L.J. Evans, R. Gervey, A. Pascaris, S. Tice, D.D. Bene, and G. Revell (2002). A scale to measure quality of supported employment for persons with severe mental illness. *Journal of Vocational Rehabilitation, 17*, 239-250.

Brown, BB. (1968). *Delphi process: A methodology for the elicitation of opinions of experts.* Santa Monica, CA: RAND Corporation.

Burkhauser, R.V. & Stapleton, D.C. (2004). The decline in the employment rate for people with disabilities: Bad data, bad health, or bad policy? *Journal of Vocational Rehabilitation*. 20, 185-201.

Butterworth, J., Gilmore, D., & Smith, F. (2006). Estimates of Labor Force Participation, Public Benefits Participation, and Living Situation for Persons with MRDD. Institute for Community Inclusion, University of Massachusetts, Boston, MA.

Butterworth, J., Foley, S., Kiernan, W. E., & Timmons, J. C. (2006). Employment supports for persons with disabilities: Current practices in cross-agency collaboration and service integration. *Journal of Rehabilitation Administration, 30(*4*),* 253-267.

Butterworth J, Foley SM, Kiernan W, Timmons J (2007). Employment supports for persons with disabilities: Current practices in cross-agency collaboration and service integration. Journal of Rehabilitation Administration

Centers for Disease Control (1998). MMWR: Self-Reported Frequent Mental Distress Among Adults -- United States, 1993-1996. May 1, 1998. 47(16), 325-331. Atlanta, GA: CDC.

Cook, J. A., Leff, H. S., Blyler, C. R., Gold, P. B., Goldberg, R. W., Mueser, K. T., et al. (2005). Results of a multi-site randomized implementation effectiveness trial of supported employment interventions for individuals with severe mental illness. *Archives of general Psychiatry, 62*, 505-512.

Cook, J., Lehman, A., Drake, R., McFarlane, W., Gold, P., Leff, S., et al. (2005).Integration of psychiatric and vocational services: A multi-site randomized, controlled trial of supported employment. *American Journal of Psychiatry, 162*(10), 1948-1949.

Cook, J. A., & Razzano, L. A. (2000). Vocational rehabilitation for persons with schizophrenia: Recent research and implications for practice. *Schizophrenia Bulletin, 26*(1), 87-103.

Crowther, R. E., Marshall, M., Bond, G. R., & Huxley, P. (2001). Helping people with severe mental illness to obtain work: Systematic review. *British Medical Journal, 322*(7280), 204-208.

Dalkey, N. (1967). *Delphi.* P-3704. Santa Monica, CA: RAND Corporation.

Dalkey, N., Brown, B., & Cochran, S. (1969). *The Delphi method, III: Use of self ratings to improve group estimates.* RM-6115-PR. Report prepared for the U.S. Air Force project Rand. Santa Monica, CA: RAND Corporation.

Dillman, Don A. 1978. *Mail and telephone surveys: The total design method.* New York: John Wiley and Sons.

Drake, R. E., Becker, D. R., Biesanz, J. C., Torrey, W. C., McHugo, G. J., & Wyzik, P. F. (1994). Rehabilitative day treatment vs. supported employment: I. Vocational outcomes. Community Mental Health Journal, *30*(5), 519-532.

Drake, R. E., Becker, D. R., Biesanz, J. C., & Wyzik, P. F. (1996). Day treatment versus supported employment for persons with severe mental illness: A replication study. Psychiatric Services, 47(10), 1125-1127.

Drake, R., Becker, D., Bond, G., Mueser, K. (2003). A process analysis of integrated and non-integrated approaches to supported employment. Journal of Vocational Rehabilitation, 18, 51-58.

Drake, R. E., Becker, D. R., Clark, R. E., & Mueser, K. T. (1999). Research on the individual placement and support model of supported employment. Psychiatric Quarterly, 70, 289-301.

Evidence for Policy and Practive Information and Coordinating (EPPI) Centre (2006). Retrieved on August 15, 2007 from http://eppi.ioe.ac.uk/cms.

Fesko, S, Cohen, A, Bailey, W (2002) *Improving Employment Outcomes: Collaboration Across the disability and workforce systems.* A State of the Science Conference Proceedings, October 31, 2002 Institute for Community Inclusion, Boston:MA

Foley, S.M. (2002). Preliminary findings from national survey of state systems and employment. Paper presented at the Council of State Administrators of Vocational Rehabilitation, Bethesda, MD.

Foley, S., Butterworth, J., & Heller, A. (2000). Vocational rehabilitation interagency activity improving supported employment for people with severe disabilities. Focus on Autism and Developmental Disabilities, 15(1), 37-42.

Foley, S.M., Gilmore, D., Dreilinger, D., Sullivan, & J., Bose, J. (2002). Patterns of Collaboration among State Agencies and Employment Outcomes. In Center on State Systems and Employment Rehabilitation Research and Training Center, *Improving Employment Outcomes: Collaboration across the disability and workforce development systems*. Boston, MA: Institute for Community Inclusion, Boston, MA.

Foley, S., Marrone, J., & Simon, M. (2002) Cruise ships and kayaks: Welfare and rehabilitation approaches for women with disabilities in poverty. Behavioral Sciences and the Law. 20 (6), 659-680.

Gervey, R. and H. Kowal (1995). "Job development strategies for placing persons with psychiatric disabilities into supported employment jobs in a large city." Psychosocial Rehabilitation Journal 18(4): 97 - 113.

Gowdy, C., Carlson, G. A., Rapp, C.A. et al. (2003). "Practices Differentiating High vs Low Performing SE Programs." Psychiatric Rehabilitation Journal 26(3): 35-41.

Groves, R.M., Fowler, J. Jr., Couper, M.P., Leprowski, J.L., Singers, E., & Tourangeau, R. (2004). *Survey Methodology.* Hoboken, NJ: John Wiley & Sons, Inc.

Hager, R. (November 2004). *Order of selection for vocational rehabilitation services: An option for state VR Agencies who cannot serve all eligible individuals (Work Incentive Support Center Policy and Practice Brief).* Ithaca, NY: Cornell University. Source: http://digitalcommons.ilr.cornell.edu/edicollect/59, Retrieved on July 31, 2007.

Half the Planet Foundation (2002). *Disability policy in the 21st century: Moving on up.* Washington, DC: Half the Planet Foundation.

Halliday, J (2002) *Improving Employment Outcomes: Collaboration Across the disability and workforce systems.* A State of the Science Conference Proceedings, October 31, 2002 Institute for Community Inclusion, Boston:MA

Hall, A.C., Boeltzig, H., Hamner, D., Timmons, J.C., & Fesko, S. (2006). *Analysis of change: A four year longitudinal study of One-Stop systems serving adults with disabilities*. Draft report submitted to the Office of Disability and Employment (ODEP), U.S. Department of Labor.

Hall, L. L., Graf, A. C., Fitzpatrick, M. J., Lane, T., & Birkel, R. C. (2003). *Shattered lives: Results of a national survey of NAMI members living with mental illnesses and their families*. Arlington: VA: NAMI.

Helmer, O. (1967a). *Systematic use of expert opinions*. P-3721. Santa Monica, CA: RAND Corporation.

Jorgensen, D.L. (1989). Participant observation: A methodology for human studies. *Applied Social Research Methods, Vol. 15.* Newbury Park, CA: Sage Publications.

Kahn, K.S., Gerben ter Riet, Julie Glanville, Amanda Sowden, and Jos Kleijnen, 2001, Undertaking Systematic Reviews of Research on Effectiveness, CRD's Guidance for those Carrying Out or Commissioning Reviews. CRD Report Number 4 (2nd Edition). York, UK: York Publishing Ltd.

Linstone, H.A., & Turoff, M. (Eds.) (2002). *The Delphi method: Techniques and applications.* Available online at: http://is.njit.edu/pubs/delphibook/index.html, Retrieved on July 31, 2007.

Lofland, J., & Lofland, L.H. (1995). Analyzing Social Settings: A Guide to Qualitative Observation and Analysis. Belmont, CA:Wadsworth.

Lutterman, T., Ganju, V., Schact, L., Shaw, R., & Monihan, K. (2003). *Sixteen state study on mental health performance measures* (No. DHHS Publication No. (SMA) 03-3835). Rockville, MD: Center for Mental Health Services, Substance Abuse andMental Health Services Administration.

Maag, E. (2006). *A Guide to Disability Statistics from the National Health Interview Survey – Disability Supplement*, Retrieved July 17, 2006 from Cornell University, Rehabilitation Reseach and Training Center on Disability Demographics and Statistics Web Site: http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1178&context=edicollect

Mank, D., Cioffi, A., & Yovanoff, P. (2003). Supported employment outcomes across a decade: Is there evidence of improvement in the quality of implementation? *Mental Retardation*, *41*(3), 188-197.

Marrone, J. (1993). "Creating Positive Vocational Outcomes for People with Mental Illness." Psychosocial Rehabilitation Journal, 17(2): 43-62.

Marrone, J, Foley, SM, Selleck (2005) How mental health and welfare to work interact: The role of hope, sanctions, engagement and support. American Journal of Psychiatric Rehabilitation (8) 81-101

Marrone, J. & Gold, M. (1994). "Supported Employment for People with Mental Illness: Myths and Facts." Journal of Rehabilitation, 60(4): 38-47.

Mclaughlin, J. A., & Jordan, G. B. (1999). Logic models: A tool for telling your program's performance story. *Evaluation and Program Planning, 22*, 65-72

Metzel, D. S., Boeltzig, H., Butterworth, J., & Gilmore, D. S. (2004). *The National Survey of Community Rehabilitation Providers, FY2002-2003: Report 1, Overview of Services and Provider Characteristics* (Research to Practice). Boston: University of Massachusetts Boston, Institute for Community Inclusion.

Metzel, D.S., Boeltzig, H., Butterworth, J., Sulewski, S., & Gilmore, D.S. (2007). Achieving community membership through community rehabilitation providers services: Are we there yet? *Intellectual and Developmental Disabilities, 45*(3), 149-160.

Migliore, A., Butterworth, J., & Gilmore, D.S. (2007). *Trends in outcomes of Vocational Rehabilitation Services serving adults with Developmental Disabilities: 1995-2005.* Unpublished manuscript, University of Massachusetts Boston.

Miles, M., & A. Huberman (1984). *Qualitative Data Analysis.* London, UK: Sage Publications.

NASMHPD Research Institute. (2002). *Implementation of the NASMHPD framework of mental health performance measures by states to measure community performance: 2001*. Alexandria, VA: National Association of State Mental Health Program Directors.

National Organization on Disability (2004). Landmark Disability Survey Finds Pervasive Disadvantages. http://www.nod.org/content.cfm? Id=1537.

NIDRR RFP; Federal Register: June 28, 2007, Volume 72, Number 124

Palumbo, D. J., & Oliverio, A. (1989). Implementation Theory and The Theory-Driven Approach to Validity. *Evaluation and Program Planning* 12, pp.337-344.

Parker, D. R. & Hoff, D. (2004). The One-Stop system and people with Disabilities: Analysis of the Workforce Investment Act and Wagner-Peyser Act data from a Disability Perspective, Program Years 2000 and 2001. Boston: Institute for Community Inclusion (UAP), Children's Hospital.

President's New Freedom Commission on Mental Health (2003). *Achieving the promise: Transforming mental health care in America. Final report.* Pub. No. SMA-03-3832. Rockville, MD: Department of Health and Human Services.

Rehabilitation Act 34 CFR 361.36(d)(1)

Rehabilitation Services Administration (2006) Monitoring Tables 113 and 2 Fiscal Year 2005. accessed online: August 10, 2007: http://rsamis.ed.gov/choose.cfm?menu=spreadsheets

Ritzer, G. (2000). *Modern Sociological Theory.* Boston, MA: McGraw Hill.

Schalock, M.D., Fredericks, B., Dalke, B.A., Alberto, P.A. (1994). The house that traces built: A conceptual model of service delivery systems and implications for change. *Journal of Special Education, 28*(2), 203-221.

Schlosser, R. W (2007). Appraising the quality of systematic reviews. FOCUS Technical Brief No 17, Washinton, DC (check location for the center) : National Center for Dissemination of Disability Research (NCDDR).

Scott, J. (1990). *A matter of record: documentary sources in social research.* Cambridge, US: Polity Press.

Smith, F.A., & Gilmore, D.S. (2007). *Employment rates for people with and without disabilities* (Data Note No. 10). Boston: University of Massachusetts Boston, Institute for Community Inclusion.

Steinmetz, E. (2006). *Americans with Disabilities: 2002. Household Economic Studies*, Retrieved July 28, 2006 from the United State Census Bureau Web Site: http://www.census.gov/prod/2006pubs/p70-107.pdf

Sweeney, E.P. (2000) *Recent Studies Make Clear that Many Parents Who are Current or Former Welfare Recipients have Disabilities and other Medical Conditions.* Washington, DC: Center on Budget and Policy Priorities.

Timmons, J.C., Cohen, A, & Fesko, S.L. (2004). Merging cultural differences and professional identities: Strategies for maximizing collaborative efforts during the implementation of the Workforce Investment Act. *Journal of Rehabilitation, 70*(1), p.19-27.

Timmons, J.C., Fesko, S.F., & Cohen, A. (2004). Strategies of support: Increasing the capacity of one-stop centers to meet the needs of job seekers with disabilities. *Journal of Vocational Rehabilitation, 21*(1), 27-37.

Trupin, Sebesta, Yelin, A., & LaPlante, M. (1997). Trends in labor force participation among persons with disabilities, 1983-1994. San Francisco: University of California, Disability Statistics Rehabilitation Research and Training Center.

Turner, H. M. , and Nye, C. (2007). The Campbell Collaboration: Systematic reviews and implications for evidence0-based practice. FCUS Technical Brief 16. Washinton, DC (check location for the center): National Center for Dissemination of Disability Research (NCDDR).

Unrau, Y. A. (2001). Using client exit interviews to illuminate outcomes in program logic models: A case example. *Evaluation and Program Planning, 24*, 353-361.

U.S. Census Bureau, Office of Special Education, Department of Education (2005), U.S. Census Bureau Office of Special Education Database: Retrieved January 17, 2007, from http://www.census.gov/compendia/statab/tables/07s0251.xls

U.S. General Accounting Office (1991) Vocational Rehabilitation. Clearer Guidance Could Help Focus Services on Those with Severe Disabilities. Report to the Chairman, Subcommittee on Select Education, Committee on Education and Labor, House of Representatives. GAO/HRD-92-12, Retrieved on 5/31/07 from http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/25/f7/3d.pdf

U.S. General Accounting Office (1996, April). *SSA disability: Program redesign necessary to encourage return to work.* Report to the Chairman, Special Committee on Aging and the U.S. Senate. GAO/HEHS 96-62. Washington, DC: U.S. General Accounting Office.

United States General Accounting Office (GAO) (2001). Welfare reform: Moving hard to employ recipients into the workforce. GAO-01-368. Washington, D.C.

United States General Accounting Office (GAO) (2005) Vocational Rehabilitation: Better Measures and Monitoring Could Improve the Performance of the VR Program. Report to Congressional Committees GAO-05-865, Washington:D.C.

U.S. Public Health Service Office of the Surgeon General (1999). *Mental health: A report of the surgeon general.* Rockville, MD: U.S. Department of Health and Human Services, U.S. Public Health Service.

Waldrop, J. & Stern, S.M. (2003). *Disability Status: 2000*. Retrieved July 3, 2006 from the U.S. Census Bureau Web Site: http://www.census.gov/prod/2003pubs/c2kbr-17.pdf

Weathers II, R.R. (2005). *A Guide to Disability Statistics from the American Community Survey*, Retrieved July 3, 2006 from Cornell University, employment and Disability Institute Web Site: http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1123&context=edicollect

Wenger, E, McDermott, R & Snyder, W.M., *Cultivating Communities of Practice*, HBS press 2002.

White, H.D. (1994). Scientific communication and literature retrieval. In H. Cooper & L.V. Hedges (Eds), the handbook of research synthesis (pp.41-56) New York, NY: Russell Sage Foundation.

Yin, R.K. (1994). *Case Study Research: Design and Methods.* Beverly Hills, CA: Sage Publications.

Zedlewski, S. (2003). "Work and Barriers to Work among Welfare Recipients in 2002." *Snapshots of America's Families III Number 3*. Washington DC: The Urban Institute.

Zedlewski, S. (1999) *Work Activity and Obstacles to Work Among TANF Recipients*, Series B, No. B-2, Washington, D.C.: Urban Institute (http://www.newfederalism.urban.org/html/series_b/b2/anf_b2.html).