

FINAL REPORT

**Telework/Telecommuting Pilot Research Project
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In 2004, the U.S. Department of Labor's Office of Disability Employment Policy (ODEP) funded three projects to help recently disabled veterans and workers compensation clients with disabilities to get the training and equipment that they need to find telecommuting jobs. The purpose of the three research projects was to expand the understanding of the full dimensions of telework as an employment option for people with disabilities with emphasis on newly returning veterans with disabilities and individuals on workers compensation. The work scope included investigating, developing and validating strategies likely to yield the largest number of telecommuting positions for people with disabilities. All three projects will employ two complimentary research phases. In Phase One, the individual research teams will investigate and develop strategies likely to yield the largest number of telework positions through national studies of federal, state and private employers. Phase two will involve validation of the national survey data through telework implementation in several pilot sites and conduct of case studies.

Virginia Commonwealth University was funded as one of those projects. Our partners in the project included:

- The Virginia Business Leadership Network (VABLN) in Richmond, VA. The VABLN is a state chapter of the U.S. Business Leadership Network, which is comprised of businesses that advocate for employing individuals with disabilities.
- eAdvantage based in Bethesda, MD. eAdvantage is a service-disabled veteran owned business that provides training and consultation to businesses and government agencies regarding recruitment, hiring and training.
- Expediter Corporation based in Pittsburgh, PA. For approximately 12 years, Expediter has been assisting individuals with disabilities, primarily workers compensation clients, to obtain telework positions.

This report describes the outcomes from the VCU project. It includes (a) a summary of the national employer survey regarding telework and employers with disabilities, (b) a description of outcomes from the job development and placement activities of the

project, (c) success stories of teleworkers with disabilities, (d) other complementary activities in which project staff engaged, and (e) lessons learned from the project.

National Employer Survey

The methodology and findings from this survey were previously reported in the document *Telework & Disability: What Employers Say* (December 2007). The data collection instrument was developed from focus groups of public and private employers, and was organized into three sections: (1) Respondent demographics; (2) three triage questions related to history of (a) telework, (b) hiring employees with disabilities, and (c) using telework for employees with disabilities; and (3) an in-depth questionnaire. For the purposes of this research, "telework" was defined as home-based work for some of all of an employee's workweek. Respondents had the option of terminating the process after completing these two initial sections or proceeding to the final, more in-depth section of the questionnaire that was based on how they responded to the three triage items (see Figure 1). For triage question 3, respondents completed the full questionnaire regardless of their answer. Although the three questionnaires varied based on the respondent's situation, there were some consistent items across the three surveys to allow for aggregation across groups.

The primary methodology for data collection was through a web-based interface. Respondents also had the option of completing the questionnaires by telephone if they chose to do so, or could not complete the web-based version due to technical difficulties. The initial source of respondents was the U.S. Business Leadership Networks, representing over 5,000 businesses in 32 states. A snowball sampling approach was also used that included public and private educational institutions, government agencies, non-profit organizations, as well as other businesses outside of the BLN sample.

Respondents' Experience with Telework and Disability

A total of 1,168 respondents from 18 states completed the initial two sections and 315 completed one of the in-depth sections. Table 1 presents information

regarding the respondents' experience with disability and telework. Over three-fourths of respondents had employees with identified disabilities and nearly one-fourth had employees who teleworked. However, only 8.4% had employees with disabilities who teleworked.

Table 1. Respondents' Current Experiences with Telework and Employees with Disabilities	
Have employees with identified disabilities	78.9%
Have employees who telework	22.8%
Have employees with disabilities who telework	8.4%

Table 2 shows a breakdown of the types of disabling conditions that were represented among the respondents' current employees. This item included examples of diagnostic labels within each category to enable accurate responses. As this table shows, respondents had experiences with a wide range of disability groups, particularly physical disabilities and hearing and visual impairments. A smaller number indicated that they currently had employees who had cognitive disabilities, which included mental retardation, traumatic brain injury, and autism. Respondents also reported already having a wide range of accommodations for their employees and customers with disabilities, including wheelchair ramps, elevators, accessible restrooms, accessible parking, materials in alternative formats, and adaptive furniture and office equipment.

Table 2. Disabilities Among Respondents' Current Employees	
Sensory Disabilities	38.2%
Medical or Health Impairments	31.4%
Mental Illnesses	30.4%
Cognitive Disabilities	12.2%
Physical Disabilities	41.4%

Organizational Policies and Barriers Regarding Telework

One of the key items in this survey was the organizations' policies for allowing employees to telework. Table 3 provides a summary of those responses. As this table shows, sizable proportions of respondents had policies that would limit teleworking, such as a prior period of in-house employment, requirements for in-office work hours as well as home-based work, and a core work schedule that was required of all employees. The survey also found that only about one-fourth of respondents (25.3%) had positions that were dedicated for home-based workers; the majority converted positions and/or employees to telework as needs arose. Respondents were requested to indicate conditions that were a barrier to expansion of telework opportunities within their organization. The two most-frequently cited barriers were (a) the organization had no need for telework positions (26.7%), and (b) telework did not fit into their organizational structure (23.9%). No other barrier was cited by more than 10% of respondents.

Table 3. Organizational Requirements for Teleworkers		
	Absolute	Supervisor discretion
Prior probationary period	44.2%	5.0%
In-office work requirement	25.1%	16.0%
Core work schedule	46.9%	10.4%

Summary

The findings from this survey confirm that the respondents were generally amenable to accommodating employees with disabilities and those with other pressing needs. The high percentage that currently had employees with disabilities, the range of disabilities within their businesses, the accommodations provided, and the proportion that had teleworkers with disabilities suggest that the sample is atypical of the U.S. workforce but indicative of those organizations that would be more productive in terms of marketing telework as an accommodation for employees with disabilities.

A minority of the respondents had positions within their organizations that were dedicated as telework. Most organizations that allowed employees to telework did so on an ad hoc basis as individual needs dictate. In addition, respondents appeared to be more willing to allow home-based telework when the employee already had a work history in the organization and therefore work habits and dedication are known quantities. Together, these findings bode well for Workers Compensation clients who may be using telework as a return to work strategy and for Reservists and National Guard members who are attempting to return to their pre-disability employers. However, it is not encouraging for those individuals who are currently unemployed and

seeking home-based work with a new employer. Few employers appear willing to make this leap of faith with unknown risks.

Neither was it an encouraging finding that three-fourths of respondents required a core work schedule. Many individuals need to work from home due to episodic symptoms, fatigue, frequent appointments with doctors or therapists, and other reasons that require flexible scheduling, such as periods of work alternating with periods of rest or treatment.

One of the more encouraging findings from the survey related to barriers to expansion of telework opportunities. Few respondents indicated that cost, monitoring, management, or demand issues were barriers for their organization. The two primary barriers, lack of need and telework not fitting into the organizational structure, were reported by only about a fourth of respondents.

Participant Outcomes

VCU offered direct employment services through two avenues. First, our contract with Expediter included job development, placement, training, and retention services delivered to Expediter's public and private workers compensation clients, and submission of participant and outcome data to VCU. Because Expediter's primary customer base is workers compensation insurance, we believed that this route would be most effective in reaching this segment of the target populations. Second, we solicited employers directly for telework positions for prospective participants, both workers compensation and disabled veterans. We proposed a "virtual office" model, wherein we would provide training and accommodation of newly hired individuals with disabilities and provide ongoing support to enhance job retention.

Unfortunately, we were not able to convince employers of the benefits of our model. Our contacts in well over 200 businesses indicated that they are almost universally unwilling to hire employees in total virtual office arrangements. Respondents indicated that they wanted employees to telework a portion of the work

week or maintain a portion of their hours in office, or wanted employees to begin their employment within the office first and move to telework after proving their skills and their ability to work unsupervised. Our only success with our clients occurred after the end of the grant period, when two individuals were hired by a telecommunications company in Virginia Beach.

We were much more successful with the Expediter candidates. During Years 2 and 3 of the project, our projected time frame for job placements, Expediter received 332 referrals of workers compensation clients and located telework jobs for 104 (31.3%).

Expediter has a core set of employers who hire their participants for a core set of home-based positions. Their employers primarily include (a) hotel chains and airlines, who hire individuals to handle reservations via phone; (b) banking and credit companies, who hire individuals for customer service calls, and (c) national survey organizations (including university research organizations), who hire individuals to make survey calls. Expediter will also assist individuals to return to their prior employer in a position that is amenable to telecommuting.

Participants

Of the 104 individuals placed into telework jobs, 13 (12.5%) were public (federal or state) workers compensation cases and the remainder were private cases. Because workers compensation cases generally involve workplace injuries, Expediter's clients tend to have been engaged in positions requiring physical labor, such as building trades, trucking, warehouse/stocking, custodial work, and similar positions. Other frequently reported pre-injury positions included nursing assistants, cooks, and office workers.

Participants were predominantly male (59.6%). The average age at the time of injury was 31.4 (range 18 to 38) and participants were an average of 6.4 years post-injury (range 9 days to 23 years).

Earnings

Table 4 shows earnings of the 104 individuals at the point of hire. Hourly wages averaged \$8.74 and ranged from minimum wage to \$12.50. Work hours averaged 36.1 per week, with 72 individuals (69.2%) hired full-time. Total weekly wages averaged \$316.43 and ranged from \$50 to \$500 per week.

Table 4. Hourly wages and work hours		
	Mean	Range
Hourly wage	\$8.74	\$5.15 – \$12.50
Hours per week	36.1	10 – 40
Weekly wages	\$316.43	\$65.00 – \$500.00

Job Retention Measures

Table 5 presents information regarding job retention of participants. Expediter’s funding sources include a number of workers compensation agencies that have varying criteria for success, ranging between 90 and 180 days of continuous employment. As this table shows, nearly two-thirds of Expediter’s clients achieved their sponsors’ success criteria. However, after reaching this milestone, follow-along contacts indicated that retention rates fell sharply. Although not a requirement of their funding sources, Expediter maintains ongoing contact with clients to assess their employment status and need for additional services. When last contacted, only 29.4% of former clients placed into jobs were still employed at the point of last contact.

Table 5. Job retention		
	Yes	No
Met sponsor's success criteria	65.4%	34.6%
Employed at last contact	29.4%	70.6%

Pearson chi-square analyses were conducted to explore relationships within client demographic variables and between demographic variables and job retention variables.

Some relationships were found:

- Females were more likely than males to be public workers compensation clients as opposed to private ($F=4.3670, p<.05$);
- Older clients (age 55 and over) were also over-represented in the public workers compensation subsample ($F=18.4082, p<.001$); and
- Males were more likely to be placed into full-time positions than females ($F=16.0022, p<.01$).

Few relationships were found between demographic variables and job retention variables. Clients whose injuries occurred 10 years or more prior to services tended to be less likely to reach the sponsor's success criteria ($F=17.4561, p<.01$). A higher percentage of males than females were successful, but not to a statistically significant degree.

Summary

Because of Expediter's long history of assisting individuals with disabilities, particularly workers compensation clients, to achieve home-based employment, a total of 104 individuals were assisted to do so under the direction of this project. Most of the positions were full-time, but clients had the option of working part-time if their needs and desires dictated. Salaries and earnings were comparable to those served by other types of employment programs, such as Vocational Rehabilitation. Success rates, based

on the funding agency criteria for each participant, were high, with nearly two-thirds achieving initial employment success. This is a remarkably high return to work rate given the extended period of unemployment experienced by many of the participants and the frequently adversarial and litigious nature of workers compensation cases.

The low incidence at last contact is a concern warranting further investigation. Workers compensation clients have historically been difficult return to work cases. Did those who left their jobs do so voluntarily or involuntarily? Were there issues of social isolation, lack of supervision, or inadequate supports?

The key finding from the chi-square analyses was that participants who were 10 years or more post-injury were less likely to be successful in telework. This is consistent with other studies that show the benefit of rapid intervention to successful return to work. However, it is notable that other factors that are frequently shown to predict success were not factors in this population. For example, age at injury and sex were not predictors, nor were client earnings.

Telework Success Stories

The following case studies were selected from the participants that were placed into employment by Expediter Corporation during Years 2 and 3 of this grant project. All are Workers Compensation clients referred to Expediter for job development and placement. Each of these individuals received training, support, and home office modifications funded by the VCU project, in addition to contributions from the individuals' funding organizations.

Diane, Ohio

Diane was a certified nursing assistant for several years before suffering multiple back and neck injuries. She was also being treated for bilateral carpal tunnel syndrome. She had been off work for almost 5 years when she was referred to Expediter for job development and placement services.

Diane accepted a home-based telework position from a national business as a Customer Service Representative making business to business calls collecting data. The

position offered was full-time and offered flex-time as well as vacation benefits. Quickly Diane moved into a computer-based job entering data and market information for the same employer.

She is very grateful that she is able to work again and has a flexible schedule that allows her to work when her conditions allow her to do so. This was the only accommodation required for her. She stated that she feared that the statistics that she heard about returning to work after 5 years would affect her and that she would never find suitable employment. She also stated that the work that Expediter does is vitally important for individuals like her.

Elaine, DC

Elaine was a janitorial supervisor for many years. She suffered a debilitating injury to both knees requiring multiple surgeries. She was prevented from working for seven years. She uses an electric wheel chair to get around her small apartment and requires assistance with daily living skills in order to live on her own.

Through a home-based telework opportunity that offered training, Elaine was able to return to work as a Customer Service Representative/Surveyor. She required a small desk and a chair with lumbar support as she did not have the necessary furniture to work comfortably. She currently is working part-time in her new job and was excited to have gone through the on the job training successfully.

Ralph, IL

Ralph worked as a janitor prior to sustaining an induced bronchial reactive injury from inhaling fumes from a toxic cleaning solution. He was out of the workforce for almost 2 years prior to referral to Expediter.

Due to the severity of his breathing problems, Ralph was unable to acquire employment through standard means. Through Expediter's at-home program for individuals with disabilities, he was offered and accepted a part-time home-based Customer Service/Surveyor position. Utilizing the flex-time available to him he is able to successfully complete his expected hours each week. Ralph has successfully

completed his on-the-job training and continues to strive to achieve all of his work commitments and goals.

Other Grant-Funded Activities

During the three-year course of the VCU project, opportunities arose which were outside of our contractual work scope but which nonetheless contributed to its goals and outcomes.

First, we contracted with CORA Works in a major telework employment endeavor. CORA and its founder, Ilene Morris-Sambur, were primarily involved in consulting with businesses and other organizations on increasing telework opportunities for workers with disabilities within their organizations. In early 2007, CORA expanded its mission to employing individuals with disabilities to perform home-based work. Ms. Morris-Sambur obtained contracts with several large national organizations to perform phone and computer work. Using an employee-leasing model, CORA uses individuals with disabilities (primarily disabled veterans) as independent contractors.

When CORA initiated this endeavor, VCU was requested to develop and implement an assessment protocol for telework candidates. This protocol included (a) a telephone interview to assess work interests and skills, including telephone skills; (b) completion of three tasks that assess use of email and the web; and (c) indirect assessment of "soft" work skills such as attention to details, persistence in completing tasks, and time management.

At the end of the VCU telework project, we had completed 106 assessments for CORA. Follow-up contacts with Ms. Morris-Sambur indicated that all of the individuals assessed had been offered positions and all had accepted. We have not been able at the time of this report to obtain information from CORA regarding salaries, work hours, benefits, job retention rates, and other key indicators of work quality.

Second, with our partner organization eAdvantage, we developed an online résumé bank that allows individuals with disabilities to post their résumés for employers to review. We spent considerable time in getting this web-based application functional,

secure, and ADA-compliant with regards to disclosure of disability. We have been directing individuals with disabilities to this resource. We have an agreement with eAdvantage to continue their maintenance of the site beyond the period of our contract.

Finally, In December 2006, we began a collaboration with Mr. Ed Turner who works as the Governor's Assistant for People with Disabilities to help disabled veterans to obtain employment. Mr. Turner set up a meeting that included Amy Davis, himself and Anne Atkins from the Department of Veterans Services. It was immediately apparent that a larger group needed to be included in our efforts as we discovered that all three offices had the same agenda for helping disabled service members after they returned from Iraq. Other organizations that were invited to participate included TecAccess, a major employer of home-based workers based in Richmond, and Amy Davis from VCU-RRTC. Future plans include the following:

- The need to identify disabled veterans from Virginia that are ready to return to work;
- The need to hold a job fair for Virginia's disabled veterans and employers;
- The need to explore current projects from VDOT, TecAccess and VCU regarding home-based work;
- The need to write an inclusive plan for Executive Order 19 which sets aside state positions for Virginia's disabled veterans;
- The need to include telework in this Executive Order; and
- The need to make connections between all of the different agencies to combine a vision for the future and create tangible opportunities

To date, this activity has not resulted in increased hiring or increased use of telework within state agencies, but Ms. Davis' involvement in this effort will continue.

Lessons Learned

Our experiences with the project have increased our knowledge and understanding of telework as an employment option for individuals with disabilities. Specifically:

- There is a tremendous demand for home-based work from individuals with disabilities. Throughout the course of the project, we received hundreds of telephone calls and emails from individuals with disabilities or family members who had been unsuccessful in locating a legitimate home-based position. Many noted that they had encountered fraudulent employers and jobs along the way.
- Both our employer survey and our direct experiences with employers revealed that they are unwilling to hire employees in virtual office arrangements from the point of hire. They either want employees to telework a portion of the work week while maintaining a portion of their hours in office, or to begin work within the office first and move to telework after proving their capabilities and motivation.
- The more successful models were those employed by Expediter and CORA. Expediter's model is based on providing their business clients with individuals who can perform a defined set of telephone and internet-based work skills. The CORA model is closely related to an employee leasing arrangement, where CORA is the employer providing contract work to teleworkers with disabilities. The advantage for both of these models is that it takes the risk off of the employers who may feel uneasy about hiring individuals, often sight unseen, to perform unsupervised work from their homes.
- Because of the nature of our participant pool, we had few referrals from the disabled veteran groups who had the skills required for typical telework positions. For example, when Alpine Access began hiring within Arizona, we facilitated online screenings for a large number of disabled veterans with our contacts in that state. However, none were able to complete the screening process to Alpine's criteria.
- While there are a large number of positions that could potentially be performed from home, those that are more typically performed (such as those developed by

Expediter, CORA, Alpine Access and others) involve phone and internet work and therefore the range of prospective jobs is somewhat limited.

- Through our collaboration with Expediter, we were able to place a sizable number of individuals into employment, with the majority in full-time employment. However, long-term retention appears to be less than satisfying, perhaps because of the workers compensation environment. However, other possible causes could include dissatisfaction with the work, or unsatisfactory work performance. Further investigation is warranted on causes and solutions to this issue in order to make telework a viable and satisfying work arrangement for individuals with disabilities.