

Telework for Workers with Disabilities Pilot Projects

SYNTHESIS REPORT

**U.S. Department of Labor
Office of Disability Employment Policy**

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A U T H O R S :

Jane Anderson, MA, Director, Midwest Institute for Telecommunication Education

Frank Douma, MA, JD, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota

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TELEWORK SYNTHESIS REPORT

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EXECUTIVE SUMMARY

Workers with disabilities are an important and insufficiently tapped resource for employers. In recent years the federal government has strengthened its efforts to promote telework (also known as telecommuting) to help achieve increased employment opportunities for people with disabilities. To this end, the U.S. Department of Labor's Office of Disability Employment Policy (ODEP) funded three separate pilot research projects in 2004 to investigate, develop, and validate strategies likely to yield the largest number of telework positions for people with disabilities. The pilot sites selected were: 1) The Workplace, Inc. in Connecticut; 2) Virginia Commonwealth University; and 3) Project STRIDE (Strategic Telework Research on Innovative Disability Employment), a collaborative effort led by the Midwest Institute for Telecommuting Education, and the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Each pilot project was required to address at least two of the following priorities:

- Using telework as a return-to-work strategy specifically for people with disabilities receiving federal and state workers' compensation,
- Using telework as an alternative strategy for increasing competitive employment for veterans and disabled service members returning from tours of duty, and
- Surveying federal and state public and private employers to identify conditions and strategies necessary to effectively implement and sustain telework for people with disabilities.

This report synthesizes the findings and recommendations from the above-referenced projects into one concise report. It is intended to provide direct input into the practices, policies and legislation that will be developed to assist people with disabilities move back into the workforce. Detailed findings from each project are contained within the individual project reports.

GENERAL FINDINGS

Overall, the pilots confirmed that telework provides proven benefits as an alternative employment option, serving both employers and employees. For employers, telework can decrease certain overhead costs and satisfy fluctuating facility demands. For employees, it lessens or eliminates commutes, reduces workplace distractions, and helps workers balance work and family demands. In general, telework has been shown to improve employee loyalty and productivity, and increase the likelihood of retention.

For persons with disabilities, telework can sometimes provide the most viable work option. While the pilot projects found that telework is perhaps not a long-term solution to the employment barriers encountered by persons with disabilities, it can be an effective way of bringing persons with disabilities into the workforce for the first time, or for transitioning them back into the workforce after an injury.

No particular industry is more likely to hire new teleworkers with disabilities. However, the pilots found that employers with existing telework programs ("telework-friendly employers"), companies that have customer service departments, and virtual call center providers are most likely to hire this population. It is not the industry per se that encourages successful telework for persons with disabilities; instead, successful telework arrangements are achieved through effective policies and implementation strategies.

The pilot projects confirmed a low incidence of available jobs for newly hired teleworkers with disabilities, as is true for newly hired teleworkers without disabilities.

Although telework opportunities do exist there is a need for a strong partnership between employers and service providers to maximize the job pools available to persons with disabilities. To expand opportunities for teleworkers with disabilities, federal and state governments should target and partner with employers currently offering telework and/or customer service functions, and offer these employers alternatives to develop successful and innovative employment models.

While telework is an innovative work solution for persons with disabilities, it does not fit everyone's needs. Indeed, individuals with disabilities drawn to telework often face additional barriers beyond transportation or access to communication technology. Other barriers include inability to maintain an eight-hour work day, fatigue and stamina limitations, and pain issues. Specific to returning service members and veterans with disabilities, the Connecticut project found:

- The interest and skill for telework jobs increased with education level; and, as those with higher educational levels tended to be older, interest was also higher among those aged 35 and older,
- Nearly all were “interested” in returning to work and most were “very interested”,
- A large majority reported having access to a computer and the internet at their homes, and
- Potential telework benefits cited were saving time, saving money, feeling less stress than other employment options, and having more quality time with family.

Teleworkers who have disabilities *and* their employers need to be properly prepared prior to telework implementation. Proper preparation can be supported through the use of workforce intermediaries, which are organizations that proactively address workforce needs using a dual customer approach – one which considers the needs of both employees and employers. Within a telework model, an intermediary provides services to ensure successful entrance into telework jobs by persons with disabilities and to implement effective telework supports, programming, and active employer engagement strategies. An intermediary agency can be a government agency, a non-profit organization, or even an arm of a private disability insurer. In all cases, to ensure the desired outcome, the intermediaries must be adequately funded and supported to fulfill their roles.

The research also noted conditions that could lead employers to adopt telework. For example, employers not utilizing telework indicated potential incentives to adopt telework included financial assistance for 25% of the costs of implementing telework and a one-time tax credit of \$1,000 per teleworker. Respondents also indicated that they would need solid evidence that telework met business needs such as reduction of office overhead costs, improvement of community image, and increased employee retention efforts before adopting a telework model. Written materials, such as a

***Case Example:
Realizing Business Incentives
Through Telework***

Arise broke new ground as a leading provider of virtual call center services in North America. The company collaborated with the STRIDE project to offer training, support, and call agent jobs for 26 newly hired teleworkers with disabilities. This employer/rehabilitation collaborative came together to deliver breakthrough 24x7 customer service results for the customers of America's premier brands. Business incentives included reductions in overhead and occupancy costs, call center employee turnover, and recruitment expenses.

“how-to” telework implementation manual, and adequate funds for information technology support and training were also seen as necessary to mitigate liability issues.

Pilot project employers expressed a desire to have the business case for telework outlined for them. Various performance measures are utilized by employers as a means of tracking progress and analyzing telework processes. However, most of this information is considered proprietary and is not shared. Research conducted by the Midwest Institute for Telecommuting Education has identified several performance measures and associated specific metrics, which are included in this report. This information could prove to be useful to employers who are seeking to implement a new or expanded telework program.

Although the best practices described in this report are tailored to employment of teleworkers with disabilities, they are also likely to have utility extending to the general population. With this in mind, several recommendations follow.

SUMMARY OF RECOMMENDATIONS

Note: The recommendations below are presented in no particular order of importance.

GENERAL RECOMMENDATIONS

- Identify and target “telework-friendly” companies. Employers that offer existing telework programs typically have an infrastructure to support telework job functions, including a business model, technology, management, and organizational culture that support telework. Employer groups with the highest potential to offer telework currently include:
 - Employers with job classifications in which there is high employee turnover,
 - Employers that operate virtual call centers,
 - Employers with company-based customer service departments,
 - Employers willing to collaborate to replicate or create successful telework models, and
 - Employers seeking to recruit talent from rural areas.
- Establish strong relationships with intermediary telework organizations to serve as liaisons between employers and new teleworkers.
- Design and develop effective teleworker pre- and post-job supports. These include: (a) pre-assessing benefits and disadvantages for potential teleworkers; (b) offering effective teleworker training; and (c) ensuring guidance and support for potential teleworkers.
- Educate workforce development centers, One Stop Career Center agencies, and employers about telework.
- Create recruitment and referral processes for returning service members and veterans.
- Offer transitional telework jobs for injured workers.
- Promote existing ODEP telework tools, developed by pilot projects for employers, teleworkers, and rehabilitation personnel. These resources include: Telework Toolkit Website Utilization Training Program; Telework Assessment Tool; Teleworker Discussion Application; Teleworker Basic Training; Home Office Evaluation; QuickStart Telework Agreement; and Telework Web Sites: ODEP (www.dol.gov/odep/); Telework USA

(www.teleworkusa.net); Midwest Institute for Telecommuting Education (www.mite.org) and Telework Tools (www.teleworktools.org).

- Showcase the successes of telework-friendly employers.
- Promote telework and flexible work for existing employees with disabilities.
- Foster collaboration for workforce development agencies with employer flexible work programs to explore opportunities for people with disabilities.
- Provide adequate funding to ensure effective implementation.

VETERAN-SPECIFIC RECOMMENDATIONS

- Establish the credibility of telework across the entire veterans affairs system (e.g., federal and state VA, veterans health, vocational rehabilitation, etc.), military-related organizations, and workforce centers.
- Take action to address the systems barriers to telework that exist across agencies serving veterans.
- Utilize the support of veterans who telework to spread the word about the benefits of telework to other veterans.
- Use various agencies that serve veterans to promote telework as a viable work option that offers tangible opportunities for veterans with disabilities to meet with employers and learn about telework options.

POLICY RECOMMENDATIONS

- Eliminate disincentives to part-time telework.
- Consider part-time telework as a viable placement option.
- Underwrite the cost of telework contracting positions for persons with disabilities.
- Establish an Executive Order for veteran-related telework jobs.
- Coordinate telework efforts with Assistive Technology Loan Programs.
- Involve One Stop and Workforce Development Centers as key players in telework efforts.
- Provide employer incentives for hiring teleworkers with disabilities.
- Expand the focus of the Employment and Training Administration to include e-training programs to train and employ teleworkers, with and without disabilities, into high industry demand positions.
- Encourage federally funded Projects With Industry programs to adopt telework as one of their critical functions and to place a specific percentage of persons with disabilities into telework jobs.
- Define telework as a supported employment option for those individuals who are receiving Social Security benefits to enable their successful re-entry into the workplace.
- Enact policy that supports telework as a transitional, return-to-work opportunity for injured workers to increase long term job outcomes.
- Conduct and coordinate research on the advantages, disadvantages and outcomes of telework; teleworker satisfaction, wages and benefits; and return on investment for teleworker training and placement.

- Replicate successful telework employment models by utilizing a multi-state collaborative approach.

INTRODUCTION

BACKGROUND

In recent years the United States Executive Branch and Congress have strengthened their efforts to promote telework as a means of achieving increased employment opportunities for people with disabilities. As such, the U.S. Department of Labor's ODEP is committed to ensuring appropriate skills development and training opportunities, and supporting and encouraging the creative use of alternative employment strategies and employment supports for people with disabilities.

Following the belief that telework can increase available employment options for individuals with disabilities, in 2002 Congress expressed its intent to set up three pilot telework programs for individuals with significant disabilities that would include "all appropriate positions, whether the work is performed in-house, contracted, or outsourced in the types of jobs which can be performed from home, such as customer service/call contact centers, and claims, loan or financial transaction processing operations."¹ Integral to these pilot projects were tailored/individualized training, appropriate technology, and supportive mechanisms including reasonable accommodations, job coaching, mentoring, and customized employment.

Consistent with Congressional intent, ODEP funded one cooperative agreement. This agreement established three pilot demonstration projects to generate viable telework models within federal agencies, with replication in two additional federal agencies. Federal contractors implemented telework employment models for each participating agency. Through an evaluation research component implemented at pilot sites, data was generated on the benefits and the challenges encountered in creating home-based telework options for people with significant disabilities in federal agencies.

In 2003, Congress again called for pilot research projects focusing on telework for people with disabilities², appropriating \$2.5 million within ODEP to "continue the telework efforts already initiated by ODEP. This can include expansion of pilot programs already underway and/or initiation of new telework pilots. ODEP should proceed in an expeditious manner to create telework positions in cooperation with federal and state agencies. Priority should be given to strategies judged likely to yield the largest number of telework positions for people with disabilities."³ As a result, from 2004 to 2007 ODEP funded three separate pilot research projects to investigate, develop, and validate strategies likely "to yield the largest number of telework positions for people with disabilities in cooperation with federal and state agencies."⁴

REPORT ORGANIZATION

This report synthesizes the findings from the above-referenced projects into one coherent and concise report. To accomplish this task, this report is outlined in the following manner:

House Conference Report No. 107-342, 107th Congress, 1st Session, 2001.

² House Conference Report No. 108-401, 108th Congress, 1st Session, 2003.

³ House Conference Report, No. 108-401, 108th Congress, 1st Session, 2003, p. 731.

⁴ House Conference Report No. 108-401, 108th Congress, 1st Session, 2003.

- Introduction of the research areas,
- Outline of the three projects and the methods employed by each one,
- Summary of findings that were either common to all three projects or found by one or two and supported by the other(s),
- Report of findings specific to questions posed by the Department of Labor in its Solicitation for Grant Applications (SGA) (these questions were designed to meet the Congressional goal stated in the legislation funding these grants, which was to identify strategies most likely to yield telework positions for people with disabilities), and
- Conclusion and recommendations for action resulting from these findings.

REPORT USES FOR SPECIFIC AUDIENCES

While specific methods and detailed findings from each project are contained in the individual project reports,⁵ the details of this synthesis are intended to provide direct input into the practices, policies and legislation to assist moving people with disabilities back into the workforce for the following audiences:

Federal Executive Branch. This synthesis identifies several opportunities for further research, as well as best practices that can be implemented in the immediate future. Consequently, the Executive Branch is well-positioned to highlight and promote best practices, sponsor new collaborations between employers and rehabilitation and workforce development agencies that implement them, and promote investigation into new research areas.

Department of Labor. The Department of Labor can utilize this report's strategies and recommendations to pursue further funding and build the capacity of the Employment and Training Administration (ETA) and the Veterans' Employment and Training Administration (VETS), and other workforce development agencies to identify and encourage the creation of an increased number of telework jobs for job seekers with disabilities.

Department of Veterans Affairs. Veterans Affairs could use this report to identify potential agency partners at the state and federal level. In particular, it may find this report quite useful in learning specific practices for using telework as a method for returning disabled service members to the workforce.

Department of Defense. The Department of Defense may find this report to be useful in its efforts to maintain morale and productivity for disabled service members returning from active duty. While these individuals may not be able to handle the physical rigors to return to service in Iraq and Afghanistan, technology now exists to allow them to continue to serve from a distance, in a telework capacity (e.g. logistics, supply, finance, IT, etc.).

United States Congress. This synthesis includes specific stories indicative of barriers encountered by potential teleworkers and their employers. (Full case studies can be found in individual pilot project reports.) The stories bring to the forefront a number of legislative strategies Congress could

⁵ See www.TeleworkUSA.net for specific references to each pilot project report referenced in this document.

consider for addressing barriers to telework, including: promoting and facilitating use of assistive technologies; supporting greater access to broadband connections to the internet; and providing tax credits for employers of teleworkers. In addition, Congress should recognize that although teleworking employees with disabilities are a narrow slice of all potential teleworkers, the legislative strategies described above could benefit all persons who telework, thus having profound positive impacts on the entire American workforce.

State Agencies. State employment agencies are prime avenues to implement a number of legitimate best practice strategies in this synthesis. These agencies can be used to encourage employees receiving workers' compensation and other persons with disabilities to consider telework. In addition, they are aptly positioned to promote telework as an employment option to employers. The best practice data identified in this report outlines the most critical skills needed by potential teleworkers, recommends training in key skill areas, and provides strategies for approaching potential employers. State agencies are prime funders and connectors to other non-profit disability employment agencies, which could become stakeholders in collaborative telework efforts. State agencies are also more likely to provide supportive funding for effective telework programs for persons with disabilities.

Employers. This report provides specific, replicable strategies and models which have been used to successfully implement telework. In most cases, employers had strong collaborations with rehabilitation and workforce development agencies, as well as telework-focused intermediaries to train and employ teleworkers for specific jobs in high-demand industries. Employers can use these proven telework models to introduce or to provide greater integration of telework into their business agendas.

Employees. Workers will be able to identify key conditions required to be successful in telework. This report delineates where teleworker expectations and telework realities may not intersect, and suggests strategies for addressing potential misunderstandings in regard to the skill requirements and nature of telework jobs.

Intermediary Telework Organizations. Several organizations currently provide intermediary services to employers and persons with disabilities to ensure their successful entrance into telework jobs. These organizations can benefit from this report by utilizing the recommended strategies and processes to engage employers and increase the number of teleworkers.

Researchers. Despite the passing of more than 30 years since telework was proposed as a new way to do work, successful telework continues to be more of an art than a science. This report contributes hard data regarding the types of work that can be effectively conducted remotely, barriers employers and employees face in creating successful telework programs, and how some of those barriers can be overcome. It also suggests new questions that need to be addressed through further research.

RESEARCH PROGRAM AREA OVERVIEW

In general, there is no universally accepted definition of telework. This research program defined telework as, "a collective term for a wide variety of work arrangements in which paid full- or part-time workers carry out all or part of their work away from a normal place of business. Workers

telework from various locations, including their homes, while on travel, at client sites, and from telecenters, which are shared off-site offices specifically designed for teleworking.”

The research synthesized in this report focused on three areas of telework: 1) the impact of telework on workers’ compensation costs; 2) the impact of telework on returning service members with disabilities and veterans; and 3) the employer perspective on telework. Discussion of each of these research areas follows.

IMPACT OF TELEWORK ON WORKERS’ COMPENSATION COSTS

There is a growing interest in state and federal agencies to identify ways to lower the cost of workers’ compensation benefits. Federal workplace injuries, when measured by workers’ compensation losses, cost more than \$2 billion and result in the loss of more than two million production days each year. In soliciting projects for this research, ODEP noted that in federal fiscal year 2003, the federal workforce was almost 2.7 million persons, and more than 168,000 injury claims were filed.⁶ In 2007, the claims dropped another two and one-half percent. However, while claim frequency was down, indemnity and medical severity continued to rise.⁷

In January 2004, the federal Safety, Health and Return-to-Employment (SHARE) Initiative⁸ was introduced. SHARE directs federal agencies to establish goals and track performance in four major areas: 1) lowering of workplace injury and illness case rates; 2) lowering of lost-time injury and illness case rates; 3) timely reporting of injuries and illnesses; and 4) reducing lost days resulting from work injuries and illnesses. The pilot research projects described in this report support the second and fourth SHARE goals, as they explored and validated telework strategies as viable options to accelerate the return to employment of federal and state employees.

TELEWORK FOR RETURNING SERVICE MEMBERS WHO ARE DISABLED AND VETERANS

The Department of Defense reported the number of injured soldiers has increased from 12,000 to nearly 33,000 from September 2004 to September 2008, with almost 50% of these soldiers so seriously wounded that they were unable to return to duty within 72 hours.⁹ Many will need to be re-trained for new careers and employment opportunities when they return home. The research outlined in this report was funded in part to test telework models as an alternative strategy for increasing competitive employment for veterans and disabled service members returning from tours of duty.

THE EMPLOYER PERSPECTIVE

A final research area of governmental interest is in filling the knowledge gap that exists amongst employers on the use of telework by people with disabilities, with a specific emphasis on federal and

⁶ Presidential Memorandum, January 9, 2004.

⁷National Council on Compensation Insurance. http://www.ncci.com/nccimain/IndustryInformation/ResearchOutlook/Pages/Claim_Frequency_Down_Again_in_2007.aspx. Updated Summer 2008. Accessed September 11, 2008.

⁸ Additional information about the SHARE Initiative can be located at: <http://www.dol.gov/esa/owcp/dfec/share/>.

⁹ <http://www.defenselink.mil/news/casualty.pdf>. Data as of September 4, 2008. Last accessed September 5, 2008.

state agency employers. A 2001 Cornell University study found that supervisors of employees with disabilities were more likely to report that they would be able to make current positions either home-based or have employees with disabilities split their time between the home and office.

When asked about the ability to develop full-time positions that could be performed from home or another office location, respondents indicated it would be easier to split such positions (e.g., on-site and off-site), rather than to develop full-time positions dedicated specifically for off-site employment. Supervisors of employees with disabilities viewed the development of new full-time telework positions as easier than those without experience employing workers with disabilities.

The Cornell study also found that approximately half of the white-collar supervisors indicated that it would be easy to accommodate an individual with a chronic illness or disability by providing an opportunity for the employee to work at home for one or two days each week or intermittently. Blue-collar supervisors were far less likely to say that this arrangement would be easy or even possible. Finally, respondents indicated that off-site technology support, guidelines for performance assessment of off-site workers, and formal flex place agreements between off-site employees and supervisors would be helpful in creating or supporting home-based or off-site/telecommuting employee positions.¹⁰

METHODOLOGY OF PILOT PROJECTS

The three pilot sites whose evaluation results are outlined in this report include: 1) The Workplace, Inc. in Connecticut; 2) Virginia Commonwealth University; and 3) Project STRIDE (Strategic Telework Research on Innovative Disability Employment), a collaboration of several entities led by the Midwest Institute for Telecommuting Education, and the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Each pilot project addressed at least two of the following priorities:

- Using telework as a return-to-work strategy specifically for people with disabilities receiving federal and state workers' compensation,
- Using telework as an alternative strategy for increasing competitive employment for disabled service members returning from tours of duty and veterans, and
- Surveying federal and state public and private employers to identify supporting conditions and strategies that are necessary to effectively implement and sustain telework for people with disabilities.

In addition, the projects were required to: 1) collaborate with federal and state agencies to identify positions that will yield the greatest number of telework opportunities for people with disabilities and ensure the recruitment of research participants so that each sample population was appropriate and of sufficient size; 2) identify the impact of telework on productivity, performance, and cost-benefits; 3) disseminate research findings to stakeholders, using accessible formats; and 4) evaluate

¹⁰ Bruyere, S., Erickson, E., & Horne, R. (2002) Disability Employment Policies and Practices in U.S. Federal Government Agencies: EEO/HR and Supervisor Perspectives. Report by the Presidential Task Force on Employment of Adults with Disabilities. Ithaca, NY: Cornell University.

the impact of research findings on increasing employment opportunities for people with disabilities using telework strategies validated through the research.

The three pilot sites each focused their research to tease out three main employer populations: 1) telework-friendly companies; 2) disability-friendly companies; and 3) those that had never offered telework. In addition, each demonstration site focused on hiring new employees with disabilities directly into telework positions.

A broad range of disabilities was represented during the pilot demonstration phases, including physical, sensory, emotional and mental health disabilities. Physical and chronic conditions represented the greatest number of disabilities.

THE WORKPLACE, INC.

The Workplace, Inc. defined telework as, “working from home full-time or several days out of the work week. Someone who telecommutes may be an independent contractor, an entrepreneur, or an employee of an organization that has telecommuting work options.” It investigated two of the three ODEP priorities. Strategies included: 1) conducting research and then developing creative solutions for using telework as an alternative strategy for increasing competitive employment for disabled service members returning from tours of duty and veterans; and 2) conducting a national survey of 1,002 private and public businesses that did not offer telework to identify supporting conditions and strategies necessary for effectively implementing and sustaining telework for people with disabilities. The random sample of employers ranged over all industries, including retail stores, restaurants, and small businesses. In performing this work, The WorkPlace, Inc. conducted a comprehensive literature review; designed, developed and launched TeleworkTools.org; designed materials for and conducted three TeleworkTools.org training workshops for workforce service providers in Connecticut and Westchester-Putnam and Yonkers Counties, New York; and launched an extensive marketing campaign that included media coverage, billboards and online advertisements.

VIRGINIA COMMONWEALTH UNIVERSITY

Virginia Commonwealth University (VCU) defined telework as, “working at home or at a remote location during normal hours or shift, anywhere from one to five days per week, excluding occasional or after-hours telework.” The definition excluded telework conducted by mobile workers or those employees who were part of a sales force.

The University partnered with several organizations to conduct its project. One partner was the Virginia Business Leadership Network in Richmond, Virginia, a state chapter of the U.S. Business Leadership Network, which is comprised of businesses that advocate for employing individuals with disabilities. Working together, these two organizations conducted a national employer survey seeking information on existing telework practices, opportunities, and obstacles, as well as characteristics of employers with disabled workers. The initial source of respondents was the U.S. Business Leadership Networks. 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 Business Leadership Network sample.

A data collection instrument was developed using results from focus groups of public and private employers. It 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. Respondents had the option of terminating the process after completing the two initial sections or proceeding to the final, more in-depth section of the questionnaire, which was based on how they responded to the three triage items.

In project years two and three, VCU partnered with eAdvantage and Expediter Corporation to implement its demonstration project. eAdvantage, based in Bethesda, Maryland, is a disabled veteran owned business that provides training and consultation to public and private employers regarding recruitment, hiring and training. Expediter Corporation, based in Pittsburgh, Pennsylvania, assists individuals with disabilities, primarily workers' compensation clients, to obtain telework positions. Using the results of research gathered in year one of the project, these partners designed a job development and placement demonstration plan for workers' compensation candidates. The demonstration plan placed 106 injured workers into mostly entry-level telework positions.

PROJECT STRIDE

The Midwest Institute for Telecommuting Education and the University of Minnesota's Hubert H. Humphrey Institute of Public Affairs conducted Project STRIDE (Strategic Telework Research on Innovative Disability Employment). Other project partners included the Minnesota Resource Center, the University of Wisconsin-Stout Vocational Rehabilitation Institute, the University of Texas, Minnesota and Wisconsin Veterans Affairs, Wisconsin Bureau of Risk and Minnesota and Wisconsin Business Advisory Councils. Project STRIDE's partners defined telework as, "working at home or at a remote location during an employee's normal hours or shift, anywhere from one to five days per week." The definition excluded occasional or after hours telework, sales forces and mobile workers.

Project STRIDE objectives were to: gather information on telework practices; identify job types that are conducive to telework; and identify success factors, barriers and job supports in regard to telework. Research populations included returning service members and veterans with disabilities, workers' compensation beneficiaries, and other persons with disabilities. Research distinguished data differences in two populations: 1) current employees with disabilities transitioning into telework; and 2) individuals newly hired into telework jobs.

During the first year of the project, research was conducted to gather the quantitative and qualitative dimensions of telework as an employment option for persons with disabilities. To this end, a national survey was conducted among an employer population likely to be implementing telework. The goal was to document job types, employer conditions and strategies to more effectively implement telework in public, private and non-profit sectors.

Research was conducted in two phases: a pre-questionnaire; and a full questionnaire completed by a subset of the employers who completed the pre-questionnaire. The pre-questionnaire was distributed to 15,782 human resource professionals, telework coordinators, and managers from small and large businesses, federal, state, county and city governments, universities, hospitals and non-profit agencies. 463 employers responded to the pre-questionnaire. The research sample was not intended to be representative of all U.S. employers, but rather was used to qualify potential employer respondents for the full questionnaire.

The 463 employers who responded to the pre-questionnaire were then asked to consider responding to the full questionnaire, which gathered information on: telework practices; pockets of telework activity; types of industries; types of jobs; work hours, schedules and employee status; challenges; strategies to support and enhance telework; and future telework trends. Of the 463 employers, 232 completed the full questionnaire. Of these 232 employers, 47.9% had employed teleworkers with disabilities, including 10% that hired staff with disabilities directly into telework jobs.

In project years two and three, 72 individuals with disabilities were recruited and offered telework training and placement services in metropolitan areas of Minnesota and in rural Wisconsin. Hiring employers included Arise, SERVICE 800, Alpine Access, United Way 211 and University of Wisconsin-Stout. The research sample group was composed of veterans, injured workers and other persons with disabilities. The demonstration sites utilized a quasi-experimental study design involving teleworkers with disabilities, their supervisors, and coworker control groups. Research topics included teleworker productivity, barriers and expectations, job satisfaction and loyalty.

Telework Employer Partners

- *Arise: www.arise.com*
- *Expediter: www.expediter.org*
- *IT Employer: prefers anonymity*
- *Lift: www.lift.com and www.lift-inc.org/about.html*
- *SERVICE 800: www.service800.com*
- *State of Arizona: www.telework.arizona.com*

Also during this time, STRIDE prepared seven case studies involving telework by persons with disabilities to obtain qualitative information to illustrate: 1) the organizational dynamics of telework for individual employees and employers; and 2) that despite challenges, both employers and employees have benefited from teleworking by people with disabilities. The majority of employers were drawn from the national survey conducted by STRIDE in 2005, but additional employers were selected by project staff based upon public information obtained during the project period or by contacting employers known to have teleworkers with disabilities. To access full case studies, please link to www.mite.org.

GENERAL FINDINGS

This section describes and summarizes the common findings shared among the three national employer surveys, three demonstration projects, and employer case studies. The synthesized findings address both the general use of telework by current employees and telework as a work option for persons with disabilities. Individual project findings are available in separate documents outside of this Synthesis Report.

TELEWORK OPPORTUNITIES AND CHALLENGES

Employer telework surveys were typically completed by company representatives in positions of human resources, management, operations, telework coordination, or business owner (for small businesses). These pools of respondents generally had some leadership responsibilities in their respective companies.

The national surveys conducted by all three projects indicated that telework initially appears to be a logical option for employing workers' compensation candidates and returning service members with disabilities. The Workplace, Inc. found that while approximately 87% of employers reported never

having discussed telework, 40% would be open to an employee request if the employee was deemed reliable. Almost half of the employers surveyed reported that some of their jobs could be done via telework, including information processing and software development. These results are consistent with STRIDE's finding that 46% of its "likely to have telework" respondents either have or had employees who telework. Virginia Commonwealth University reported about 23% of respondents utilized telework.

The employers surveyed were quite open to employing people with disabilities. Both STRIDE and the VCU projects reported nearly 80% of respondents employed persons with identified disabilities. Employers that have advocated for or have active practices to hire persons with disabilities appeared to be more open to telework. This was especially true amongst employers affiliated with the Business Leadership Network. In comparison to a random sampling of employers, disability-friendly employers were more likely to have moved existing employees with disabilities into some telework capacity and had adequate awareness of telework as an ADA option. The Business Leadership Network employers appeared to be more receptive to telework as compared to the random U.S. sample of employers.

However, the national survey data also identified multifaceted barriers to telework that could exist in several areas of an organization. Some of the barriers are described below.

- Organizational culture. In the national employer studies of telework- and disability-friendly organizations, one third of employers (33.5%) reported a lack of priority placed on telework by management, 24.7% reported that telework did not fit into their organizational structure, and 27% reported there was no need for telework positions. As evidenced or reported by telework-friendly companies, telework may need to be part of a larger organizational change in which more than one department or division participates. If telework is recognized company-wide as a legitimate work option, then there is more likelihood of company supports being in place for teleworkers. In addition, organizational conditions must support overall telework implementation with the same degree of planning and coordination that goes into other cultural or procedural changes. Telework may require pervasive management, appropriate technology, and an accommodating organizational culture to support teleworkers. In addition, coordination amongst several operational areas were cited as necessary to support the wide use of telework, including human resources, information technology, facilities and specific manager and executive approval and support.
- Manager and supervisor issues. The human resource professionals and managers surveyed indicated that major challenges associated with hiring new employees with disabilities as teleworkers included difficulty in assessing teleworker skills and work habits, supervisor resistance and uncertainty (reported by 33% of respondents), reported difficulty in measuring performance (reported by 42% of respondents), and the perception that new employees need to work in-house before teleworking.
- Other concerns. Additional widespread concerns reported by employers included: lack of teleworker knowledge on how the organization conducts business; uncertainty about the best practices for employing new workers into telework positions; and job supports needed to train and retain teleworkers. Other less common barriers, with less than 40% of employers reporting,

were: difficulties with employee selection and fairness; concerns about employee isolation and communications; cost of technology and accommodations; and legal and safety issues.

Virginia Commonwealth University and STRIDE further noted that employer openness to telework did not extend to new employees with disabilities. Few employers appeared willing to hire individuals with disabilities who were currently unemployed and seeking home-based work with a new employer. A small number of telework-friendly employers (10%) and disability-friendly employers (8.4 percent) reported using telework as an employment option for newly hired workers with disabilities. As shown in Table 1, STRIDE found that just 25% of its “likely to offer telework” respondents currently had employees with disabilities who teleworked, and Virginia Commonwealth University found that only 8.4 percent of respondents had employees with disabilities who teleworked.

Table 1

RESPONDENTS' CURRENT EXPERIENCES WITH TELEWORK AND EMPLOYEES WITH DISABILITIES		
	STRIDE	VCU
Have employees with identified disabilities	79%	78.9%
Have employees who telework	46%	22.8%
Have employees with disabilities who telework	25%	8.4%

Finally, Virginia Commonwealth University’s national employer survey showed a general reluctance on the part of mainstream employers to hire new teleworkers with disabilities. STRIDE found similar results, with only 10% of its respondents indicating a willingness to hire new employees with disabilities as teleworkers. Of the employers that hired new employees directly into teleworking jobs, a higher percentage of private sector employers (17%) reported this practice in comparison to the government sector (four percent).

These more restrictive practices bore themselves out as Virginia Commonwealth University and STRIDE moved to implement their findings in demonstration projects. Both projects proposed a “virtual office” model to employers who would hire persons with disabilities directly into telework positions. Prospective participants were to have been individuals receiving workers’ compensation and disabled veterans. Both STRIDE and VCU offered employers full support in implementing the model by assuming responsibility for training and accommodation of the new teleworkers with disabilities and assuring ongoing support to enhance job retention. Despite the research conclusion that telework options would not be uncommon and would be fairly well accepted, both projects had difficulty recruiting employers to take part in their projects.

Virginia Commonwealth University was not able to convince employers of the benefits of the model. Contacts with more than 200 employers indicated a universal unwillingness to hire employees with disabilities in total virtual office arrangements. Employers insisted on two main compromises: they asked that teleworkers work a portion of their hours in the office; and, they wanted teleworkers to begin their employment in-office and then move to home-based work after proving their skills and their ability to work unsupervised. So, to implement its model, VCU developed a partnership with Expediter, an employment placement company with a primary

customer base of workers' compensation insurance providers and a core set of employers who hire clients for home-based positions. During the second and third year of the project, Expediter received 332 workers' compensation client referrals and located telework jobs for 104 of those clients (31.3%).

STRIDE had a similar experience. Project staff met face-to-face with more than 50 companies in Minnesota and Wisconsin who had expressed interest in pursuing telework. All large organizations (1,000 or more employees) declined to participate, reasoning that it would be too complicated to proceed with telework options due to a variety of implementation concerns. These concerns included: 1) supervisor and management resistance; 2) difficulty in measuring performance; 3) concerns with ensuring teleworkers would be skilled and proficient at the job; 4) lack of necessary technology infrastructure; and 5) insufficient knowledge to incorporate the practice into their business models.

Eventually, several employers did concur that their call centers had the potential to employ new hires as teleworkers. These employers also suggested other customer service outsourcing companies as potential employers for the model. Ultimately, two national and four local employers were interested in hiring teleworkers primarily for inbound and outbound call agent jobs. Seventy-two individuals were recruited to participate as teleworkers. Of this group, four were veterans with disabilities and eight were workers' compensation beneficiaries. The remaining participants were recruited through the state vocational rehabilitation system.

Another challenge to implementation was the perspective of the potential teleworkers with disabilities themselves. For example, individuals with disabilities returning to work did not want to lose their current disability benefits or income. Consequently, as long as they were considered injured, resuming a new job was likely to pose more risk to their financial stability as existing income or benefits could be reduced or jeopardized. As a result, telework may not be an effective strategy for immediately placing injured workers into full-time career positions.

The pilot projects found that injured workers often consult with legal counsel, which plays an important role in whether the workers' compensation candidate accepts re-employment or a disability settlement. It typically behooves attorneys to attempt to obtain the highest settlement for clients, as they can receive compensation of approximately one third of each client's final monetary settlement. Unfortunately, legal realities represent a systems barrier that impedes the re-employment process of the injured worker, acting as a disincentive for injured workers to return to positions that pay less than former job wage or benefits, such as the telework positions offered to them.

***Case Example:–
Successful Outsourcing in the
USA***

Expediter Corporation, based in Pittsburgh, Pennsylvania, assists individuals with disabilities, primarily workers' compensation clients, to obtain telework positions. Expediter acts as the employer and pays the wages of teleworkers. Its revenues are obtained through contracts with companies that are outsourcing their customer service functions. This has been a sound alternative that provides jobs for the labor force in the United States, in lieu of global outsourcing.

The demonstration sites had greatest success placing candidates in customer service positions. In STRIDE's project, 72 individuals were recruited and 38 completed training provided as part of the project. Of the 31 that found employment, 29 were hired in call agent positions. Virginia Commonwealth University's employers identified through Expediter, also offered customer service-related positions. Their call center agents were hired primarily by hotel chains and airlines to handle

reservations via phone; banking and credit companies to field customer service calls; and national survey organizations to make survey calls. However, these customer services positions did not meet the career or salary expectations of many teleworkers.

As shown in Table 2, the majority of VCU’s teleworkers met their sponsor’s criteria for success (ranging from 90 to 180 days of continuous employment). However, after reaching this milestone, follow-along contacts indicated that retention rates fell sharply.

Table 2

Job Retention - Virginia Commonwealth University Demonstration		
	Yes	No
Met sponsor’s success criteria	65.4%	34.6%
Employed at last contact (90 to 180 days)	29.4%	70.6%

Telework may best be considered as a transitional work option that helps workers with disabilities develop new skills, move back into employment, experience less isolation, and feel increasingly productive. As reported by each of the three research projects, telework training and work try outs provided teleworkers the opportunity to practice office and customer skills before going “live” into a new job, decreasing their overall apprehension in returning to work. In essence, telework served as a safety net before individuals pursued new employment options.

The findings from the pilot projects indicate that telework is a not a long-term solution to employing persons with disabilities. However, it can be a new and important piece of the puzzle. This is especially true for employees who are early in the return-to-work process and are still on short-term disability status. These individuals could still receive their employer-paid income and medical benefits, yet be able to explore other occupations.

SUCCESSFUL SUPPORT STRATEGIES

The demonstration projects revealed that successful telework implementation for persons with disabilities requires support to train employees and address employer concerns. Several key strategies necessary to ensure the greatest placement success include:

Ongoing staff liaison and intervention. Intermediary staff is necessary to: 1) help telework candidates with disabilities to successfully obtain telework employment; 2) ensure job applicants meet employer skill requirements; and 3) develop strong relationships with committed telework employers. Workforce development, One Stop Career Centers or third-party disability employment organizations could fill this role, as they understand the very specific needs of individuals with disabilities. Many of these agencies can also provide supplemental funding for teleworker needs such as technology, training and other ongoing supports. These organizations are also very knowledgeable about wage and benefit issues surrounding persons with disabilities. For example, some persons with disabilities wish to be employed full-time to obtain health and other benefits, some wish to earn less than a certain amount per month to maintain current disability income benefits, and some are free to alter their schedules as they have benefits provided by spouses.

One-on-one support. One-on-one coaching and support was critically needed by the majority of teleworkers with disabilities placed into employment. Types of support required included assistance in mastering computer operations, suggestions on developing a home office, and general guidance in helping teleworkers reach their vocational goals. Each pilot project had budgeted for job coaching to provide post-placement support to teleworkers, which greatly facilitated overall job retention,

Technology funding. The provision of technology funds helped to avert unexpected costs and overcome barriers unique to telework. Most of the teleworkers in the demonstration projects were employed as contractors, and many were classified as low income. Thus, they required financial assistance to support their home-based business. During the pilots, ODEP funding was made available to teleworkers during the first three months of employment to assist them to pay for costs of establishing a home business. Funds were used to establish business bank accounts, and to pay for initial Internet and phone costs. In addition, some teleworkers experienced unexpected emergencies such as housing eviction, phone service debt, hard drive breakdown, and incompatibility with telecommunication providers, and the pilot project funds helped to address some of these issues. Assistive technology funding (authorized under the Assistive Technology Act of 1998, as amended) is available to qualified applicants in many states, and is potentially valuable resource for telework.

Telework assessment prior to placement. Teleworkers' skills were measured prior to placement through assessments and/or vocational evaluations. These assessments helped to identify individual skills, strengths and limitations of potential teleworkers, and were critical in helping service members to establish a vocational goal commensurate with their skills and limitations. Virginia Commonwealth University developed and implemented an assessment protocol for telework candidates. This protocol included: a telephone interview to assess work interests and skills, including telephone skills; completion of three tasks that assessed email and internet skills; and indirect assessment of "soft" work skills such as attention to details, persistence in completing tasks, and time management. The STRIDE project developed a teleworker discussion assessment tool to help workers determine their receptivity and match with a telework job. In addition, a home office work evaluation was conducted to ensure compliance with company ergonomics and safety standards.

Customized, remote training. Customized, remote teleworker training prior to job placement was critical to help participants learn appropriate skills. This training helped to ensure that teleworkers acquired a core set of skills needed to successfully meet employer eligibility criteria. Topics included employer expectations, basic PC and internet operations, voice and email etiquette, customer service, following directions, listening, and problem solving. For one demonstration project, 75% of the trainees participated in remote training, or e-learning, at their homes, which eliminated the challenge of serving multiple participants across a two-state area. Making telework training web-based allows job seekers to learn the new skills for a job regardless of where participants are located in the United States.

SUCCESSFUL EMPLOYMENT MODELS

Case studies conducted by pilot sites revealed specific, replicable employment models which were successful for both the employers and for teleworkers with disabilities. These models were employed by Arise, Expediter, Service800, United Way 211 and LIFT. Common to all models was a positive fit

between three elements: 1) employer business needs; 2) employee skills; and 3) specific job tasks. Specific employment models are described below.

DISABILITY-CENTERED TELEWORK

This model is demonstrated when a targeted group of persons with disabilities is recruited from a workforce development agency to be employed in specific telework jobs, and the workers are provided specialized training and support by both. Together, the employer and the workforce development agency set mutual goals and implement a concerted plan to help the employer meet a specific business need. For example, LIFT and United Way 211 hired persons with disabilities exclusively for telework jobs in customer service and computer programming and collaborated with the local workforce development agencies to provide training

There is potential for this model to be successfully implemented and replicated through workforce development systems or One Stop Career Centers. Either the workforce development system or the company would be the hiring agent and serve as an employer. Workforce development systems would have an ample pool of potential job seekers to ensure a larger numbers of persons with disabilities could be served.

Case Example:

A Human Resource Service for Information Technology Workers

LIFT, a nonprofit in existence for 32 years, hires and trains teleworkers with disabilities to be IT professionals. LIFT provides e-learning, mentoring and other supports critical to teleworker success. Business partners hire the trained teleworkers as contractors for one year. In year two, successful teleworkers are hired as employees. More than 90% of trainees obtain full-time employee status with participating companies. A company supervisor reports that teleworkers with disabilities also supervise other workers, and that telework has improved LIFT's ability to recruit and retain qualified IT professionals.

BUSINESS-CENTERED TELEWORK

In the business-centered telework model, individuals with and without disabilities are targeted for telework employment that is designed to meet an employer's specific business need. This model is utilized by companies that offer virtual staffing solutions using sophisticated voice and Web technology. This strategy is successful because it decreases customer service costs (due to reduced occupancy and overhead costs versus in-house functions) and increases the company's ability to provide global coverage on a 24x7 basis. No matter what the industry, as long as there are customers, there will always be an abundance of telework customer service jobs. Examples of virtual companies using this model to provide customer services include SERVICE 800, Arise, and The Hartford Customer Service Group.

INCIDENTAL TELEWORK

The incidental telework model allows persons with and without disabilities to participate in telework. In this model, telework is incidental to the job task and is utilized to fulfill general corporate purposes. In many cases of incidental telework, there may be a formal telework program or policy. In most cases, the employee with a disability has transitioned into telework after being employed with the organization. A corporate strategy of incidental telework typically evolves over time. For instance, it might start with one or a small group of teleworkers and then the number of teleworkers and geographic distribution becomes more widespread. The advantage of this model 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.

EMPLOYMENT WAGES

Newly placed teleworkers at demonstration sites earned between \$8.74 per hour and \$10.22 per hour. The higher wage of \$10.22 per hour was found in contractual telework jobs, in which the teleworkers had additional monthly business expenses of approximately \$100 per month. These costs reduced the hourly rate by about 10% of take home wages. After six months of hire, contractors generally experienced increased wages of up to \$13 per hour, and some teleworkers advanced into group leader and e-mentor positions.

Telework did not always meet worker wage expectations. For example, workers' compensation candidates had high expectations that telework would provide them the same or higher wages as their previous positions. Thus, most injured workers who were placed into call agent or customer service positions found the wages did not meet their expectations or needs. Many of the workers' compensation candidates with disabilities appeared to enjoy their call agent positions. However, resuming employment at a lower-paid position often meant reduced income and/or lost opportunities to receive long-term disability settlements. For veterans and other persons with disabilities, average teleworker wages seemed to be satisfactory. This was especially true of the teleworkers who were working part-time, and using telework as a means to obtain supplemental income. The majority of potential teleworkers, across the pilot projects, had high expectations that telework would positively affect their lives. Before placement, 50% of participants believed they would have earnings comparable to or less than wages they had formerly earned. Survey data obtained from teleworkers after six months on the job indicated that their income was somewhat less than expected.

JOB SATISFACTION

Some of the major concerns that affected job satisfaction were: increased anxiety to perform (50%); lower income (37.5%); dissatisfaction over contacts with co-workers, team leaders or supervisors (37.5%); and issues with health and disability (37.5%). Telework coordinators documented that teleworkers would become more stressed when they experienced situations out of their control, such as equipment glitches, technology downtime, inadequate office equipment and lack of computer connectivity.

Of the 135 individuals who successfully entered telework, some decided they were not interested in telework; some found telework too challenging; some experienced disability-related fatigue, stamina or surgery complications and were unable to continue with employment; and some did not respond to telework coordinators' follow-up communication efforts.

TELEWORK PRACTICES

The following telework practices were identified by the research projects.

A majority of employers require previous experience prior to implementing telework.

According to two of three national employer surveys, employers were more likely to move existing employees with disabilities into telework, due to their familiarity with the employee's performance and knowledge of the job. The majority of employer respondents required the teleworker to have a work history in which work habits and performance were known prior to becoming a teleworker.

The largest majority of potential job openings for new teleworkers were from employers that needed to hire for customer service. Employers required job applicants to complete and pass Web assessments of their computer aptitude, business reasoning, personality characteristics and voice quality. The employer screening tests were difficult and few potential teleworkers with disabilities were able to become job-eligible.

Telework jobs offered alternative work options. While telework rarely provided full-time jobs with full benefits, telework provided some alternative work options that benefited teleworker candidates with specific needs, including:

- Part-time leading to full-time work. Most of the virtual call centers initially offered part-time employment to newly hired teleworkers. This finding held true for injured workers, veterans and for other persons with disabilities. However, injured workers proved to be most likely to move in to full-time telework positions. In both demonstration site projects, part-time work was beneficial because it allowed individuals with disabilities to return to work on a gradual basis. Candidates who had been unemployed for many years often found it overwhelming to move directly back into full-time work. Part-time work helped individuals with disabilities to develop independence, a feeling of competency and also an established work history. It helped injured workers to maintain their self-confidence and gave them a sense of productivity.
- Provision of supplemental income. For teleworkers with disabilities who already had health benefits or were receiving Social Security disability, telework provided additional income that helped them gain financial stability without jeopardizing existing and needed medical benefits and disability income.
- Transitional work opportunity. As injured workers participated in transitional work, they experienced a “work hardening” component, which gave them the opportunity to develop a new set of customer service skills. They learned about the customer service corporate environment, office procedures, customer protocol, listening, phone skills, and voice and email etiquette. This experience provided them an advantage in returning to the workplace, as “customer service” skills are needed and utilized in almost every type of job they would seek in the future.
- A spectrum of employment status. For the 135 teleworkers employed through the demonstration sites, the spectrum of employment options varied from independent contractor to traditional employment. For instance, Arise hired teleworkers with disabilities as independent contractors who assumed the risks as any private businessperson might assume, while Expediter directly hired teleworkers as employees with some benefits. Other employers fell in between the two extremes, retaining some conventional employment benefits such as offering health coverage, but offering perhaps only part-time work without the opportunity for paid overtime.

Employer concerns about job retention surfaced after six months of employment. After injured workers reached the milestone of six months of employment, job retention rates fell sharply. At last contact (90 to 180 days), only 29.4% of 106 injured workers placed into jobs were still employed in customer service positions. For other teleworkers with disabilities, including veterans, the support provided by the telework coordinator staff helped them to retain a much higher job

retention rate of 88%. Without this extra staff support and troubleshooting assistance, it is expected that the job retention rate would have plummeted.

In-depth telework knowledge is needed for Workforce Development and One Stop Career Center agencies. Pilot projects found that it was essential that workforce center agencies responsible for telework placement had an in-depth understanding of telework and flexible work options. In addition, the staff of these agencies had to thoroughly understand the nature and requirements of a teleworker. They also needed a good understanding about the wide range of wage and employment options so they could create a job situation that best fit each teleworker's needs.

BARRIERS EXPERIENCED BY TELEWORKERS WITH DISABILITIES

The barriers to telework employment listed below represent those that the majority of veterans, injured workers and other persons with disabilities experienced during demonstration projects.

LACK OF KNOWLEDGE ABOUT BENEFIT CHANGES

Teleworkers who participated in both Virginia and the Midwest demonstration sites expressed uncertainty about accepting a telework job, due to concern about the potential of jeopardizing their existing disability and medical benefit status. A review of relevant literature conducted by the researchers revealed that veterans who qualify for Veterans Affairs disability evaluations and assistance are also hesitant to seek employment through telework because it is perceived that telework might jeopardize their benefit status. However, just four percent of those studied believed that telework would negatively impact their Veterans Affairs benefits. Regardless, veterans referred for telework placement were often unsure of their total benefit packages and how work would affect the provision of their benefits.

OTHER LIFE PROBLEMS

Potential teleworkers experienced unexpected or emergency issues that interrupted the return-to-work process, such as falling behind in rent or house payments and dealing with health issues. Many injured workers, in particular, did not want to risk their current income (e.g., government benefits, workers' compensation, etc.) and move into the uncertainty of acquiring a new job, especially when they were experiencing instability in other areas of their lives.

START-UP REQUIREMENTS FOR TELEWORK

Candidates for telework call agent positions were often required to have a closed or separate work area, a computer and a high-speed internet connection. The internet requirement was a barrier for some potential teleworkers who lived in rural areas that were not wired for broadband usage. Even in rural areas where high-speed technology was possible, the initial installation costs of \$300 or \$400 were prohibitive.

JOB-RELATED STRESS

Despite appropriate matching of job qualifications and interest of potential employees in telework positions, telework can be extremely physically and mentally taxing for applicants with disabilities that have been out of the workforce for years. Likewise, individuals who choose telework contractor employment face new challenges and stresses as they assume responsibility for their own small

businesses. Teleworkers in the demonstration projects indicated that they experienced much more responsibility to take initiative and problem solve than they expected, resulting in more stress than anticipated.

FINDINGS RESPONSIVE TO CONGRESSIONAL INQUIRY

As noted earlier in this report, Congress called on ODEP to “continue the telework efforts already initiated by ODEP. This can include expansion of pilot programs already underway and/or initiation of new telework pilots. ODEP should proceed in an expeditious manner to create telework positions in cooperation with federal and state agencies. Priority should be given to strategies judged likely to yield the largest number of telework positions for people with disabilities.”¹¹ To meet this goal, ODEP asked each project to address at least two of the following priorities, which were stated as key priorities: 1) using telework as a return-to-work strategy specifically for people with disabilities receiving federal and state workers’ compensation benefits; 2) using telework as an alternative strategy for increasing competitive employment for disabled service members returning from tours of duty and veterans; and 3) surveying public (federal and state agencies) and private employers to identify supporting conditions and strategies that are necessary to effectively implement and sustain telework for people with disabilities. The following sections discuss findings that address these specific points.

CONDITIONS AND STRATEGIES FOR EFFECTIVE TELEWORK

Creating successful telework programs is not an impossible task. STRIDE and the Virginia Commonwealth University surveys of telework-friendly employers found that 100% of respondents had implemented telework in their general employee populations, with 88% having implemented telework for a minimum of one to five years. Telework-friendly employers used a wide variety of telework options, embracing remote work on an as-needed basis or through formal policies and programs. Almost 50% of respondents that offered telework expected its incidence to rise in the next five years, and nearly 33% reported that all challenges to finding telework opportunities within their companies could be overcome.

Surveys found that telework was most frequently offered on a part-time basis and was used to meet either employee or business needs. Full-time telework was most likely to be utilized as an option for workers already employed with the company. In almost all cases, telework tasks did not encompass an entire job description.

Research by The Workplace, Inc. also noted conditions that could lead employers to adopt telework. For example, employers not utilizing telework indicated potential incentives to adopt telework included financial assistance for 25% of the costs of implementing telework and a one-time tax credit of \$1,000 per teleworker. Respondents also indicated that they would need solid evidence that telework met business needs such as reduction of office overhead costs, improvement of community image, and increased employee retention efforts before adopting a telework model. Written materials, such as a “how-to” telework implementation manual and adequate funds for information technology support and training, were also seen as necessary to mitigate liability issues.

¹¹ House Conference Report, No. 108-401, 108th Congress, 1st Session, 2003, p. 731.

STRIDE telework-friendly respondents indicated they would consider telework for several reasons (Table 3). The majority (73%) indicated telework helped them respond to specific employee needs. Employee retention and increased productivity rated second and third, with other respondents identifying cost savings and reduced operations costs. These rationales were not necessarily exclusive of each other. For example, employers may have offered telework to both respond to specific employee needs and as means to retain valuable employees. The underlying fact was that telework, in most circumstances, enabled increased employee flexibility and more effective job performance, which directly and often indirectly, led to enhanced organizational productivity.

Table 3

Employer Rationales for Starting Telework – STRIDE	
Rationale (employers could identify multiple responses)	Response
Respond to specific employee needs	73%
Recruit or retain valuable employee(s)	57%
Increase productivity and/or customer service	51%
Reduce overall operations or occupancy costs	25%
Need to work with other remote teams	21%
Comply with ADA; increase workforce diversity	22%
Respond to emergency coverage or disaster recovery	16%
Respond to regional trip reduction requirements	15%

In addition, the demonstration projects revealed that a large driver for the use of telework was a shortage in the pool of entry-level customer service employees, a position that experiences high employee turnover rates.

The majority of telework- and disability-friendly respondents in the studies indicated that prerequisites to offer telework to current employees included a completed probationary period, in-office work experience and a core work schedule. Disability-friendly respondents also reported that their existing accommodations and company-wide supports for employees and customers with disabilities would be useful in managing telework. For those organizations that had utilized telework, employers reported the existence of several telework support strategies to enable supervisors to better manage teleworkers in general, as seen in Table 4.

Table 4

General Employer Strategies to Support Telework – STRIDE	
Strategy	Percent
Telework policies and agreements	78
Flexible work policies	75
Remote access technology guidelines	67
Formal training for supervisors/teleworkers	38

Existing telework policies helped to set parameters such as eligibility, work schedule, technology requirements, work processes and performance reporting. However, research concluded that having a telework policy did not necessarily ensure that telework would be aggressively adopted.

Telework-friendly employers identified supports that would be needed in order to move newly hired persons with disabilities into telework (Table 5). The top strategies suggested were the use of job supports and training or work experiences that can lead to telework. Almost 50% of the employers

from two national employer surveys indicated training programs for both teleworkers and their supervisors might be needed in order to ensure supervisor comfort and confidence in managing remote workers.

Table 5

Strategies to Ensure Success for Newly-Hired Teleworkers with Disabilities		
Strategy (could select more than one)	%	# (64 total)
Ensure job supports are in place	66	42
Implement training or work experiences for job-readiness	48	31
Implement training programs for teleworkers and their supervisors	45	29
Provide telework job try-out experiences on a temporary basis	42	27
Develop amenable human resource policies	41	26
Recruit persons with disabilities for telework positions	38	24

During the demonstration site phase, intensive recruitment efforts were initiated to secure employers that would offer telework to newly hired persons with disabilities. At least six to nine months of consistent employer development by telework coordinators was needed to ensure participating employers. There were several problems encountered by pilot sites in locating employers willing to participate: 1) many companies did not offer telework to any new employee, regardless of disability status; 2) it was very difficult to convince employers of the benefits of telework employment in a short period of time; and 3) offering telework requires longer periods of job development for potential employers.

In addition, organizations with 1,000 or more employees reported several complications in implementing telework for persons with disabilities. These factors, also documented in the national employer survey, included supervisor and management resistance, difficulty in measuring performance, and ensuring the teleworker was skilled and proficient at the job.

Maximum recruitment and placement outcomes occurred when the employer and workforce systems had a specific collaboration and employment model to follow. This model assisted them in filling positions resulting in lower employee turnover. In addition, virtual call center employers with sophisticated remote work technology were the most promising recruiters as they had regular and continuing experience in telework practice and the hiring of new teleworkers.

As described earlier in this report, employers who do not currently offer telework indicated attractive recruitment incentives that might persuade them to adopt telework. These employers wanted solid evidence that telework meets other business needs such as reduction of office overhead costs, improvement of community image, and increased employee retention efforts. Written materials and adequate funds for information technology support and training were also seen as needed to mitigate liability issues.

National employer survey results point to the need for a “how to” telework manual and tools that could be utilized to promote hiring of persons with disabilities into telework. The Workplace, Inc. responded to this need by creating a comprehensive Web site toolkit that addresses telework education for teleworkers with disabilities, employers, workforce centers, and nonprofit agencies. Training for Connecticut workforce center professionals was conducted to pilot the content and

receive feedback on toolkit effectiveness. Toolkits and other resources are available at www.TeleworkTools.org.

POSITIONS YIELDING THE GREATEST NUMBER OF TELEWORK OPPORTUNITIES

Survey results indicate that employers had two basic prerequisites for enabling telework job opportunities: 1) the job fit; and 2) whether the job duties entail a substantial amount of computer work, analysis and customer service. Positions that required face-to-face interaction or were perceived as needing more visual communications were deemed as inappropriate for telework. Employers who were reliant on incoming and outgoing paperwork, and did not have the technological capacity to automate their data, were less likely to support telework. Almost half of respondents (47.7%) reported difficulty in identifying jobs that would appropriately fit telework. Similarly, The WorkPlace Inc. found that U.S. companies with a significant proportion of jobs involving information processing or software usage were most receptive to offering telework.

The STRIDE survey found that telework opportunities existed in a wide number of sectors. While there was some variation between the types of telework functions between public and private employers, several job functions were listed by respondents as being conducted by teleworkers.

Table 6

Teleworker Job Function by Sector				
Job Functions	Government (136 resp.)		For-profit (78 resp.)	
	#	%	#	%
Office tasks	39	29	28	36
Research and Analysis	39	29	18	23
Administrative	37	27	19	24
Customer Service	19	14	21	27
Technician, non-Supervisor	28	21	16	21
Programming	22	16	14	18
Claims review	17	13	4	5
Call Centers	5	4	5	6.4
Medical Transcription	5	4	4	5
Dispatch	2	1	2	3

The majority of the jobs listed in Table 6 were provided to employees with existing company-related work histories. Most of the telework opportunities for employees who transitioned into telework were in the areas of claims review, research and analysis, office or administrative positions, customer service.

Research indicated which jobs were most often full-time opportunities or had the capacity for full-time telework. Findings show that telework positions were somewhat limited in the types of jobs that would be offered to newly hired teleworkers with disabilities. The national surveys, demonstration sites and case studies all found similar types of jobs could be available for newly hired teleworkers with disabilities, including call

***Case Example:
Contracted Telework Meets Demand
for 2nd and 3rd Shift Call Coverage***

The Minnesota Resource Center (MRC), a rehabilitation agency, employs part-time teleworkers. United Way 211 contracted with MRC to utilize seven teleworkers as service representatives. Each teleworker worked 20 to 25 hours per week to preserve disability benefits, and received no medical benefits. The telework “team” provided backup to each other and ensured 24x7 coverage – fulfilling 211’s continual need for 2nd & 3rd shift customer service representation.

agent, service representative, and programmer. Telework-friendly employers at demonstration sites primarily provided inbound and outbound call agent jobs, ranging from 15 to 40+ hours per week. Employer examples were SERVICE 800, Alpine Access, United Way 211, Expediter and Arise. The demonstration sites generally did not place persons into telemarketing jobs, in which sales or cold calls are conducted over the phone. Of the 135 teleworkers placed through the projects, more than 95% were call agents.

Employers were more likely to hire newly hired teleworkers as contractors, thereby reducing the employers' health and benefit costs and easing their liability for remote employees. Several employers did hire teleworkers as employees, but typically did not offer full health or other insurance benefits. Only one case study employer, LIFT, provided full benefits for teleworkers with disabilities in the first year of employment.

MEASURES OF PRODUCTIVITY AND PERFORMANCE

This section addresses the inherent difficulties in measuring productivity and performance. Measurement is often unique to each employer, making it difficult to compare observed results and predict future results. Respondents to the national telework employer surveys offered several qualitative benefits, but few specific measures of productivity and performance. While some quantitative data was obtained in the demonstration projects, this section deals mainly with the stories of productivity changes that were found in all parts of the research, including the survey, the demonstrations, and the case studies.

STRIDE's national telework employer survey revealed that 51% of respondents were motivated by expectations of increased productivity and/or customer service prior to starting telework programs. The survey also indicated that employee retention was a major factor for 57% of respondents. Anticipation of decreased interruptions has also been identified as an appealing attribute of telework. Despite these positive perceptions, few companies measure specific deliverables since employee performance factors are multi-faceted and more complex.

This positive, but somewhat amorphous, attitude was also found in STRIDE's demonstration survey. According to the teleworker at-placement survey of demonstration site supervisors, none of the respondents anticipated that telework would contribute to a decline in productivity. Similarly, the majority of supervisors indicated an expectation that telework arrangements would not have negative effects on teleworker job satisfaction, ability to maintain health, quality relationships with coworkers or promotional opportunities.

In a demonstration site survey of four STRIDE supervisors who supervised a total of 30 teleworkers six months after their placements, respondents indicated continued satisfaction with productivity. Three of four participating supervisors indicated that teleworker productivity either increased somewhat or remained unchanged over the time span. At the same time, three of four supervisors suggested that the teleworkers' level of job satisfaction had increased somewhat. Two supervisors strongly agreed that telework had increased the level of trust between supervisor and teleworker. Three of four supervisors either disagreed or strongly disagreed that telework had negative effects on morale among coworkers or non-teleworking staff. Specifically, one Arise supervisor noted,

“Once teleworkers successfully complete the admissions process [and] basic training, and have the confidence to complete the certification course and begin servicing, they are a wonderful asset

to the organization. Since they work independently - their lack of self-confidence gets in the way. Once that is overcome - they are on their way to success.”

Supervisors with Arise, one of STRIDE’s employers, reported after six months of telework employment, more than 90% of teleworkers with disabilities had reached or exceeded productivity standards for call agent positions. Productivity measures used by Arise include commitment or adherence to work schedule, and specific metrics for each corporate customer such as: 1) customer satisfaction; 2) amount of talk time; 3) number of customers converted to new services; and 4) number of sales or completions. Each of Arise’s more than 75 corporate customers has its own set of metrics for determining quality services.

It can be mistakenly perceived that cost and quality of services are two major and equal business success criteria. However, Arise is not able to compete equally on the cost factor for global outsourcing, because the use of overseas workers has already been proven to be less costly, due to wage differences. Instead, the ultimate qualifier for external call center competitiveness is the *quality* of customer service provided in comparison to internal customer service departments and overseas call centers. Arise’s success is driven by the outstanding performance of each of their teleworkers, which in total results in undisputed top performance stature.

Arise provided a somewhat less flexible work schedule. Difficulties arose when this schedule was combined with the stress of technical problems. To combat this, STRIDE telework coordinators remained in contact with the participants after placement, and began holding weekly conference calls with Arise supervisors. Under a normal working arrangement, progress reports could only be shared with the remote worker but, because of the existence of STRIDE’s unique telework coordinators, Arise was also able to share the information with the coordinators as well.

STRIDE surveyed eight teleworkers who remained in their positions for at least six months and found that 75% of respondents reported that the quantity of work produced either “increased significantly” or “increased somewhat” while teleworking. Similarly, 62.5% indicated an improved ability to get work done on time, while 87.5% reported improved time management skills emanating from telework.

Although there is evidence that telework employers utilize various performance measures as a means of tracking progress and analyzing telework processes, determining specific metrics each employer uses for gauging such performance is another matter. While performance measures are no doubt centered on productivity and mechanisms for weighing program benefits against program costs, scant documentation of actual metrics is available. Unless productivity measures are expressly posted publicly by employers, this information is often considered proprietary information. Fortunately, however, the Midwest Institute for Telecommuting Education offers the following performance measures and specific metrics as provided in Table 7 and found on the www.mite.org Web site.

Table 7

Midwest Institute for Telecommuting Education Performance Measures	
Measure Category	Specific Metrics
Comparison of Teleworker and In-House Work Station	<ul style="list-style-type: none"> • Occupancy • Furniture • Administrative/Clerical Supplies

Midwest Institute for Telecommuting Education Performance Measures	
Measure Category	Specific Metrics
Costs of Telework Offices and Technology	<ul style="list-style-type: none"> • Equipment • Furniture • Supplies
Effect on Utilization and Space	<ul style="list-style-type: none"> • Office Space • Number of Cubicles
Impact on Building Requirements	<ul style="list-style-type: none"> • Lease/Purchase Agreements • Parking Spaces
Effect on Employee Job Performance	<ul style="list-style-type: none"> • Project Completion Rate • Error Rate • Absenteeism
Effect on Supervisor Performance	<ul style="list-style-type: none"> • Amount of 1:1 Supervision Necessary • Communication Efficiency
Effect on Employee Recruitment/Retention/Training	<ul style="list-style-type: none"> • Recruitment Cost Per Employee • Employee Retention Rate • Employee Satisfaction/Morale
Effect on Travel Behavior and Costs	<ul style="list-style-type: none"> • Monthly Commuter Mileage • Employee Travel Time • Total Business Travel Costs
Effect on Others in the Organization	<ul style="list-style-type: none"> • Time/Communication Efficiency • Use of Support Staff Time
Effect on Job/Life Balance	<ul style="list-style-type: none"> • Employee Perception of Control • Food/Clothing Costs • Time Spent with Family
Effect on Customers/Clients	<ul style="list-style-type: none"> • Customer Service Coverage (Hours) • Customer Complaint Rate • Number of Customers Served
Effect on Department Averages/Productivity	<ul style="list-style-type: none"> • Time to Transfer/Batch File • Time to Schedule Teleworkers • Use of Outside Vendors
Effect on Disaster Recovery Plan	<ul style="list-style-type: none"> ▪ Option/Flexibility to Continue Customer Service in Time of Disaster

FINDINGS FOR SPECIAL POPULATIONS

INJURED WORKERS

The workers' compensation research population tended to have been engaged in positions requiring physical labor, such as building trades, trucking, warehouse/stocking, custodial work, and similar positions prior to sustaining their injuries. 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 years. Participants were an average of 6.4 years post-injury. Females were more likely than males to be public workers' compensation clients as opposed to private clients. Older clients (age 55 and over) were also over-represented.

Expediter was used as the sole employer for injured workers referred for telework placement. The company received 332 referrals of workers' compensation clients and located telework jobs for 104 of those individuals (31.3%). Expediter hired injured worker participants for a core set of home-based positions, including surveying, research, and phone work and data entry. Of the 104 individuals placed into telework jobs, the majority assumed full-time positions. Hourly wages

averaged \$8.74, ranging from minimum wage to \$12.50 per hour. Work hours averaged 36 hours per week.

The researchers found that nearly two-thirds of individuals placed achieved initial employment success (e.g., entered employment, earnings, retention, etc.). A higher percentage of males than females was successful, but not on a statistically significant degree. In lieu of retaining customer service positions for extended time periods, many injured workers went on to look for other career options, remained in litigation, or received a disability settlement.

“Real Life Case”: Ralph from Illinois. Ralph worked as a janitor prior to sustaining an induced bronchial reactive injury from inhaling fumes from a toxic cleaning solution. He had been out of the workforce for almost two years. Due to the severity of his breathing problems, Ralph was unable to acquire employment through standard means. He was offered and accepted a part-time telework customer service/surveyor position. Utilizing the flex-time available to him, he was able to successfully complete his on-the-job training and continues to strive to achieve all of his work hour commitments and goals.

“Real Life Case”: Diane from Ohio. Diane was a certified nursing assistant before suffering multiple back and neck injuries. She was also treated for bilateral carpal tunnel syndrome. Diane had been off work for almost five years before accepting a telework position as a customer service representative making business-to-business calls collecting data. Diane is very grateful that she is able to work again and has a flexible schedule that allows her to work when her medical conditions allow her to do so. Flexible scheduling was the only accommodation Diane required. She had heard dismal stories about returning to work after five years, and feared she would never find suitable employment. Telework is vitally important for individuals like Diane.

As noted in the above case studies, injured workers hired into telework positions experienced many benefits, including the fact that telework:

- Presented a transitional opportunity to bridge the gap between unemployment and a full return to the workforce, easing injured workers back into the workforce;
- Served as a temporary solution to build teleworker skills;
- Provided opportunities for injured workers to feel productive;
- Lessened feelings of isolation and resentment of not feeling valued as an employee;
- Stopped the cycle of learned helplessness that can occur with long-term unemployment;
- Served as a safety net before individuals pursued new employment; and
- Decreased the overall apprehension experienced in returning to work.

One interesting finding was that telework was best used as a work option for injured workers who had been out of the work force for less time: participants who were injured fewer than 10 years ago more likely to be successful in telework. Beginning telework earlier in the return to work process, when persons were on short-term disability status, was found to be an effective strategy. During this transitional period, employees still receive their income and medical benefits paid by the employer, but may be able to use telework to explore other occupations. It should be noted that some employees who are placed on short-term disability leave may not be able to immediately begin telework due to the nature of their injuries.

Injured workers also experienced a barrier related to legal implications of resuming work. As discussed earlier in this report, injured workers typically sought assistance of legal counsel to make a decision on whether to accept re-employment or a disability settlement from the employer. As the legal entity can receive as much as 33% of the employee's final monetary settlement, the employee may be advised to take actions that will result in the highest settlement, rather than being advised to focus on re-employment. Other barriers included employees' accurate or inaccurate perceptions about low wages for telework positions, and a desire to maintain disability benefits and incentives.

VETERANS AND RETURNING SERVICE MEMBERS

The Connecticut project conducted surveys of returning service members and veterans with disabilities (N=152) to determine their interest in and skill for telework positions. These positions required such skills as problem solving, conflict resolution and solid ability to communicate via email and phone. General findings are as follows:

- The interest and skill for telework jobs increased with the education level of veterans. Veterans with higher educational levels tended to be older, so interest in telework was higher among those who were at least 35 years of age than among younger respondents,
- Nearly all respondents were "interested" in returning to work and most were "very interested",
- A large majority of respondents reported having access to a computer and the internet at their home, and
- Respondents reported potential telework benefits as saving time, saving money, feeling less stress than other employment options, and having more quality time with family.

In rating their skill levels, the majority of returning service members (70%) rated themselves as "excellent" or "very good" at email and instant messaging. Fewer than 50% rated themselves as highly skilled in any other personal computer skill area.

When rating themselves in other skills areas, 68% of veterans saw themselves as highly skilled at multi-tasking and 57% preferred working independently. These characteristics mirrored those of persons for whom telecommuting is considered a feasible work option. Interviewees reported that their military training and work taught them how to work both as part of a group and independently. They also expressed the opinion that their active military experience provided good work skills and qualities such as integrity, leadership, and ethics.

Benefits. Veterans stated one benefit of telework was an increased opportunity to work after leaving the armed services. This was also true for returning service members, since telework may mean increased opportunity to obtain work upon return from active duty. In addition, part-time guard members who incurred a disability while on duty, but wished to return to their previous employer, could potentially do so through a telework accommodation.

Telework can also be a significant benefit for service members and veterans with higher disability ratings. These individuals, who are considered to have more extensive disabilities, can utilize part-time telework jobs to accrue supplemental income without jeopardizing veteran benefits. The part-time status also permits them to better maintain their health.

Barriers. The research projects discovered that one of the main barriers to supporting telework as a strategy for increasing competitive employment for veterans was navigating the system of services designed to support veterans. The federal veterans affairs system has a complex administrative structure, which many rehabilitation vendors found it difficult to penetrate and understand. In addition, the system is multi-faceted and includes medical, rehabilitation, independent living skills and employment services, which may or may not be delivered in an integrated fashion. Vendors expressed concern that unless an entity already has a contract with veterans affairs, it is often difficult to develop relationships and determine service boundaries. For this reason, it becomes imperative that telework programs are offered directly through the veterans affairs system, to capitalize on opportunities for collaboration with other rehabilitation system programs that currently offer telework for persons with disabilities.

Recruitment. It was difficult for the demonstration sites to recruit returning service members from Iraq and Afghanistan as well as veterans for telework. Respective Veterans Affairs agencies reported that the reason for this problem was that many returning service persons with disabilities were not yet ready to return to work because they were still in the medical rehabilitation process.

Demonstration sites also partnered with disabled veteran groups for referral purposes. However, they received few referrals from these groups for veterans who had the skills required for typical telework positions. For example, when Alpine Access began hiring within Arizona, the project facilitated online screenings for a large number of disabled veterans with existing contacts in that state. However, none of the veterans were able to successfully complete the screening process to meet Alpine's employment criteria.

“Real Life Case”: Jay, a veteran, had originally been employed in sales. As his disability worsened and he experienced heart and respiratory conditions, he could no longer be in an active job. Jay was provided telework training, which helped to update his computer skills and assisted him to become more confident in applying for a job. He also required one-to-one support during his training period in order to build his skill base. Jay successfully obtained a call agent job in customer service and has been rated as one of ARISE's most productive teleworkers.

EMPLOYERS

Overall, all three employer samples had some awareness and knowledge of telework. Employers that had already utilized telework or had made major strides in accommodating persons with disabilities had greater potential for considering and implementing telework as a viable option for persons with disabilities. The majority of employers that implemented telework did so for employees who had a history with the company and needed increased accommodations for their disabilities. There were more opportunities for part-time rather than full-time telework.

National employer telework studies reported a general reluctance on the part of mainstream employers to hire new teleworkers with disabilities. Many more opportunities for accommodation via telework were offered to current employees with disabilities. In

**Case Example:
Home-based Telework Options
Prove Profitable for Large Business**

The Hartford, one of the largest investment and insurance companies in the U.S., implemented telework for 215 full-time employees who take calls from their homes. Approximately 25% of these employees have special needs or disabilities. Senior management reported that all traditional metrics (handle time, quality and sales) are superior for at-home workers. In all cases, employees with disabilities performed better once deployed to their homes. The Hartford case study reported employee teleworker turnover rate to be in the single digits - 90% less than their in-house workforce call center employees. This low turnover rate reduced recruitment and training costs.

general, it was more difficult to implement telework sight-unseen for employees with or without disabilities.

In spite of the overall reluctance, the three national surveys did identify some employers that offer telework opportunities for newly hired workers with disabilities. Results from these employers were critical in helping the demonstration sites to identify the best pools of telework opportunities for new hires. The sites were able to identify the situations in which it best works and the specific conditions or supports utilized to make it successful.

Employers reported that offering telework had several benefits to the business and for the employees. The following benefits were reported across the board from two national surveys, demonstration site employers and case studies.

Cost Savings. Telework-friendly and disability-friendly employers indicated cost savings through telework, in areas such as reduced staff recruitment and training costs. In some cases, lower occupancy costs were also reported because there was no need for the employer to maintain internal office space for teleworkers who worked off-site full-time. The Hartford, one of the employer case studies, reduced occupancy costs by a minimum of 30,000 square feet due to the employment of over 200 full-time teleworkers.

Improved Performance and Customer Service. Increases in employee productivity occur with telework. Such increases may be attributed mainly to the lack of disruptions that occur when the teleworker is working outside of the office environment. The national surveys reported that roughly half (50.7%) of respondents stated they added telework to increase productivity and/or customer service. The demonstration site employers experienced increased customer service coverage and an expanded pool of workers providing more efficient 24x7 coverage. Employers were able to increase their business coverage hours while, at the same time, allowing workers to have more flexible schedules. In addition, staffing for second and third shifts and peak customer call times was easier to obtain.

Employee Recruitment and Retention. Employers reported that they used telework as an incentive for retention of excellent performers when they did not want to lose valuable employees. In one study, an overwhelming majority of employers (73%) indicated the main reason they began offering telework was to respond to specific employee needs. About half of respondents noted the ability to retain valuable employees and recruit new job seekers as a reason to implement telework.

Reduced Fuel Expenses and Elimination of Long Employee Commutes. At the time the national employer surveys were conducted, fuel prices and long employee commutes were cited as reasons for offering telework. These were not reported as major, but supplemental, benefits. However, at the time of this report, the trend is increasing for employers to look at telework as an option for reduced gas use and lower fuel expenses for employees. The Hartford employer case study has reported teleworkers' ability to reduce driving time and fuel costs for work commutes.

Employer Barriers. National survey data also reported several barriers to telework. These barriers were multifaceted and could exist in several areas at an organization, particularly at the executive and supervisory levels. This finding was not particularly encouraging for individuals with disabilities who are currently unemployed and seeking home-based work with a new employer. Few employers

appeared willing to enter into such employment arrangements, unless certain job conditions or supports existed to overcome barriers inherent in telework implementation.

The research also uncovered several challenges related to hiring new employees with disabilities as teleworkers, including difficulty assessing teleworker skills and work habits (33%); supervisor resistance and uncertainty (33%); difficulty measuring performance and the perception that new employees need to work in-house before teleworking (42%). Other common concerns and barriers included:

- In the national employer studies of telework- and disability-friendly companies, one third of employers (33.5%) reported a lack of priority was placed on telework by management; 24% reported that telework did not fit into their organizational structure; and 27% reported there was no need for telework positions.
- As evidenced or reported by telework-friendly companies, telework may need to be part of a larger organizational change in which more than one department or division participates. If it is recognized as a legitimate work option companywide, then there is more likelihood to have company supports in place.
- Telework was found to require pervasive management, adequate technology, and a flexible organizational culture. To be successful, organizational conditions must support telework implementation with the same degree of planning and coordination that would be applied to other cultural or procedural changes. Several operational areas must support telework for it to be widely implemented, including human resources, management, information technology, facilities and executive approval.
- The lack of teleworker knowledge on how the organization conducts business; uncertainty about telework best practices; and concern about lack of job supports to train and retain teleworkers.

GENERAL RECOMMENDATIONS

Opportunities for future telework employment for persons with disabilities rely heavily on the abilities of workforce development agencies, Veterans Affairs and other non-profit employment organizations coupled with the assistance of committed employers. The recommendations below are suggested for government and public sectors in order to accomplish two directives:

1. Increase and expand general employer acceptance and use of: teleworkers with disabilities; and telework with the general employee population.
2. Expand the use of telework in the customer service and IT industries for persons with disabilities.

IDENTIFY AND TARGET “TELEWORK-FRIENDLY” COMPANIES

Employers that offer existing telework programs typically have an infrastructure to support telework as an option for workers with disabilities. This structure generally includes an appropriate business model, technology, management, and organizational culture. Employer groups with the highest potential to offer telework for employees with disabilities are outlined below.

Employers with pockets of jobs in which there is high employee turnover. Targeting private sector data processing, customer service and information technology firms could potentially yield the most telework jobs for persons with disabilities. These employers are often actively seeking a larger entry-level workforce and will frequently consider different and more innovative arrangements, such as telework, to expand the labor pool. The types of entry-level positions offered by these employers typically require straight-forward training with little job experience in a specific job function.

Employers that provide virtual customer service call centers. Rather than focusing on specific employer industries, it may be more effective to target the customer service function. Customer service is an ever-present job function that is critical to most types of companies, whether it be insurance, manufacturing or service-related employers. All companies, large and small, require some level of customer service. Virtual customer service can be easily provided from a home-based office, as many of the functions are Web-based and are easily accomplished through a strong broadband connection.

Employers willing to collaborate with the workforce development system. The successful telework employment models outlined earlier in this report had varying degrees of employer collaboration and experienced success with specific job types. They all had a mutual goal to solve a business need, whether it was to hire quality computer programmers or to fulfill their need for call agents. The collaborations are most effective when both the employer and the rehabilitation vendor or workforce development agency had designated roles in the screening, recruitment, training, placement and job supports for teleworkers. It was also helpful to guarantee an employer-funded liaison position, whose role was discussed earlier in this report. Successful telework employment models are summarized throughout this document and available online at www.mite.org.

Employers seeking to recruit talent from rural areas. According to Cornell University, a broad pool of workers with disabilities can be found in larger geographic and rural areas (www.disabilitystatistics.org). Both demonstration sites provided telework placement for workers from rural areas of Minnesota, Wisconsin, and many eastern states, providing new and increased job options for persons with disabilities.

CREATE INTERMEDIARY TELEWORK ORGANIZATIONS

Establish intermediary telework organizations. Intermediary organizations are agencies that have a history of working with teleworkers with disabilities such as Expediter, Midwest Institute for Telecommuting Education, National Telecommuting Institute, Working Solutions, CORAworks, and Alpine Access. The organizations have expertise in helping employers and workforce centers to set up effective telework employment models. They can: 1) serve as direct links to virtual call center opportunities; 2) offer efficient practices and supports to ensure teleworkers with disabilities obtain and retain their jobs; and 3) connect Americans with disabilities to employers willing to hire employees and contractors for home-based assignments. Intermediary organizations also have strong relationships with call center providers and offer recruitment staff assistance in helping teleworkers to navigate their systems. As such, they can be an excellent resource for many workers with disabilities.

DESIGN AND DEVELOP EFFECTIVE TELEWORKER PRE- AND POST-JOB SUPPORTS

To ensure effective implementation of telework programs for workers with disabilities, it is imperative that employees are provided effective supports, both prior to beginning a job and after the job has started.

Pre-assess benefits and disadvantages for potential teleworkers. Individuals with disabilities in the demonstration sites experienced several barriers to telework employment, including: long periods of unemployment; fatigue and stamina constraints; lack of fundamental job skills; unrealistic employment expectations; and the need for assistance and support as they re-enter the workforce. In addition, teleworkers with disabilities were concerned about jeopardizing their current disability and health benefits obtained through federal medical assistance programs. Before attempting to place an individual with a disability into a telework position, a full assessment should be conducted to provide each worker with a realistic view of their work options, along with the benefits and disadvantages associated with employment. If the job does not offer medical benefits, teleworkers must decide how they will maintain current social security benefits, and will often require support to make such decisions.

Offer effective teleworker training. One of the most critical supports that teleworkers with disabilities require is effective training. Intermediary agencies can serve as ideal sources for training and support in the areas of writing, editing, phone etiquette, work simulation, customer service, problem solving, and computer training. One promising model for training teleworkers who are geographically dispersed is the use of specialized remote training. Remote teleworker training uses various electronic media to offer uniform instruction to participants who are located in various remote settings. Users can connect to the training through the internet, videoconferences, or teleconferences to receive training in a variety of areas, including the skills needed for call agent jobs. This training helps expand the candidate pool by providing opportunities for individuals who have been outside of the workforce for longer periods of time and may require an introduction to or “refresher” on various office practices. In the absence of such training, the candidate pool will be limited to individuals with recent civilian office jobs or more highly skilled individuals. Training works best when it is co-designed by both the employer and the rehabilitation vendor to ensure that teleworkers receive up-to-date and relevant corporate training.

Ensure that guidance and support is available through Workforce Centers and other employment agencies. Workforce Centers and other agencies involved in vocational rehabilitation need to offer a comprehensive range of short-term and ongoing supports. Staff must be trained to view each case holistically, taking into consideration specific elements of each potential teleworker’s case, such as the impact of telework on the individual’s current benefits. Other support should include: an explanation of available telework options; a teleworker self-assessment; a technology assessment for skills related to basic PC operations and equipment; and identification of telework jobs appropriate to the potential teleworker’s skill level. Employment counselors should stress key characteristics required by any telework position, such as the ability to work independently, Web-based and internet skills, and the ability to communicate effectively. Job seekers should also be introduced to appropriate job search tools and resources (such as the TeleworkTools.org Web site). In addition, for service members, Veterans Affairs and other vocational rehabilitation agencies need to coordinate these support services to ensure maximum outcomes for the teleworker. Post-job supports includes reducing isolation by facilitating communication electronically, promote electronic networking among the telework employees, providing performance incentives, etc.

In addition, these agencies should consider each potential teleworker's financial situation. Potential teleworkers with limited incomes may require financial support to set-up home offices and to acquire the appropriate equipment required for telework. These considerations must be taken in to account prior to beginning a telework job search.

EDUCATE WORKFORCE DEVELOPMENT AGENCIES

Staff from workforce development agencies must be trained on the process of telework placement. The need for a Department of Labor strategy for the facilitation of such training cannot be understated. For example, the Connecticut pilot project surveyed the telework awareness of One Stop Career Center staff and disability service providers, and found that counselors were very skeptical, and often very negative, about offering telework as a viable employment option. The staff was simply not knowledgeable enough about telework to offer it as a useful back-to-work transition vehicle for part- and full-time employment. In addition, agencies lacked reference information and knowledge of available referral resources. Without such information, they may be unable to champion telework and obtain buy-in from their consumers and participating employers.

The Department of Labor could undertake the task of developing and providing comprehensive telework training for workforce development agencies. Staff from these agencies could be trained on the basics of recruiting employers and implementing effective telework models. Once a successful training model is developed, the Department could offer "Train the Trainer" sessions for the agencies to ensure effective replication of the model within the employer community. This training would assist these agencies in understanding the employer perspectives and hiring processes surrounding telework.

INCREASE EMPLOYER TELEWORK KNOWLEDGE

Many employers have a limited familiarity with telework in general, and are even less familiar with the use of telework for employees with disabilities. Topics of importance to employers include managing teleworkers, legal and liability issues, and performance measurement. Human resource representatives and managers must understand policy development, employee selection criteria, work safety, and co-worker relations. This information is useful when making a case for telework and seeking buy-in from upper level management. Telework training for either the entire organization or the individual managers can ease uncertainty about the telework topics above. The Department of Labor could conduct and host telework training sessions for employers nationwide. In addition, Arise Vice President Mary Bartlett suggested the use of tax incentives for employers who conduct ongoing training to assist their teleworkers in maintaining and enhancing their customer service skill sets and to qualify for promotional opportunities.

CREATE RECRUITMENT AND REFERRAL OPPORTUNITIES FOR RETURNING SERVICE MEMBERS AND VETERANS

To effectively support returning service members, Veterans Affairs and its various support systems should promote telework as a viable transitional employment option. Because of its current role, the VA has a prime opportunity to develop coordinated strategies to effectively recruit returning service members for employers that offer telework. This model could also be used as an effective approach for veterans with long-term disabilities who desire to return to the workplace. Veteran-to-veteran communication about telework is recommended as one of the best modes to lend credibility to telework.

OFFER TRANSITIONAL TELEWORK JOBS FOR INJURED WORKERS

Pilot project research demonstrated that injured workers are ideal candidates for transitional telework opportunities. These temporary positions can provide injured workers with valuable customer service and office training, which will help them transition in to other jobs or career opportunities. While call agent/entry-level telework jobs did not appeal to most injured workers as long-term career choices, these options did enable them to earn income, gain a sense of productivity, and supplement disability income, while searching for permanent employment.

PROMOTE EXISTING ODEP TELEWORK TOOLS

Each of the three projects developed telework tools for audiences, including employers, teleworkers, workforce development, and One-Stop Center personnel. These resources, which provide valuable education on telework for persons with disabilities, are outlined below. The ODEP and Department of Labor need to publicize and disseminate information on these Web sites to bring awareness and heighten interest in telework implementation as an effective option for employing individuals with disabilities.

The **TeleworkTools.org** Web site is a user-friendly, *replicable* telework information and referral source for job seekers, employees, job development and employment professionals, and employers. It provides links to specialty sites, and it increases the odds of a customer who is surfing the Web to discover new knowledge about the possibilities of telework as a job. After training on the Web site, positive changes in attitudes and behaviors were observed by the training team in their discussion of telework with employment counselors, job developers, rehabilitation counselors, and public and private employers. (See www.TeleworkTools.org.)

The **Telework Toolkit Website Utilization Training Program** is a CD-based training for telework jobseekers, employers and disability providers on the benefits, barriers, and “how-to” of telework employment. Training modules offered to help job placement counselors include telework basics, outreach tools, and disability and veteran support materials. Employers can learn about benefits, program models, job tasks, concerns and incentives. Jobseekers are trained on how to determine their suitability for telework through a self-assessment, and learn about possible jobs, skills and resources needed to work from home. (See www.TeleworkTools.org)

The **Telework Assessment Tool** is an instrument developed by the Virginia Commonwealth University that can be used to determine teleworker interest, computer aptitude for remote work and other ideal teleworker traits. (See www.teleworkusa.net)

The **Teleworker Discussion Application**, developed by the Midwest Institute for Telecommuting Education, is a widely-used tool that assesses teleworker interest, aptitude and challenges as they consider telework as a work option. (See www.mite.org)

Teleworker Basic Training is a 30-hour work readiness training, conducted remotely by the Midwest Institute for Telecommuting Education. Content for potential teleworkers with disabilities includes employer expectations, computer aptitude, customer service, communications skills, problem-solving and email and voice etiquette. (See www.mite.org)

Home Office Evaluation is a brief survey developed by the Midwest Institute for Telecommuting Education that can be used to assess the teleworker home office set-up to ensure safety, ergonomics, and an effective home office environment. (See www.mite.org)

The **QuickStart Telework Agreement**, developed by the Midwest Institute for Telecommuting Education, is a sample agreement and guide that can be used to help a teleworker and supervisor navigate and plan an effective telework arrangement. It covers liability, equipment use, employer property, family interruptions, work space, hours and schedule, communications, and work duties. (See www.mite.org)

Telework Employer Case Studies. This report was developed by the Midwest Institute for Telecommuting Education and Dr. James Jarrett of University of Texas-Austin. The document showcases seven employer case studies and provides details of employment models and successful program elements to hire teleworkers with disabilities. (See www.mite.org)

Telework Web Sites include: ODEP (www.dol.gov/odep/); Telework USA (www.teleworkusa.net); Midwest Institute for Telecommuting Education (www.mite.org) and Telework Tools (See www.teleworktools.org)

SHOWCASE THE SUCCESSES OF TELEWORK-FRIENDLY EMPLOYERS

Employers seeking a competitive edge will often explore new and innovative employment solutions. Demonstrating the success that other employers have had with telework could be an effective way of attracting other employers to implement telework programs. The demonstration research pointed to examples of employers that have had success in hiring new teleworkers with disabilities through creative employment collaborations. These employers have tracked results and cost savings regarding the utilization of telework, which can be a critical advertisement to employers considering the use of telework. For-profit company stories are often most persuasive, because they speak the same language in their respective industries, whether that is retail, technology, finance, etc.

Employers do observe and learn from others, and will consider changing their own policies, procedures, and approaches if there are potential benefits to be enjoyed. When communicating with employers, the focus should be on employer needs, rather than candidate and employee needs. Telework by persons with disabilities will only become widespread if employer needs and commercial principles are considered. Employers need to learn about the implementation processes, the costs and how telework benefits the organization. A “sugar-coated” perspective of telework is not advised. Rather, employers need to understand the realities of telework and the lessons learned from other telework employers. These realities should be clearly defined with full disclosure of advantages, disadvantages, wage levels, vocational supports, training, and outcomes.

PROMOTE TELEWORK AND FLEXIBLE WORK FOR EXISTING EMPLOYEES WITH DISABILITIES

In addition to exploring telework as an option for newly hired employees with disabilities, employers could be encouraged to consider the model for existing employees with chronic illness or disability. Such models could be implemented by initiating telework one to two days per week, or on an “as needed” basis. This effort could address decreased productivity, absenteeism, or potential loss of job that some employees experience due to disability-related challenges. In addition to considering full-time telework, employers should be encouraged to look at other flexible work options to retain valuable employees, including flexible hours and part-time telework.

COLLABORATE WITH EMPLOYER FLEXIBLE WORK PROGRAMS

Flexible work is a growing employer trend and employers, in general, are implementing flexible work programs to better meet business and employee needs. These same options can be offered as accommodations for employees with disabilities. Because these programs are already built into employer human resource systems, expanding them to employees with disabilities is a reasonable progression of the model. Workforce development centers could play a critical role in these expansions by inquiring and exploring the degrees of interest amongst their participating employers.

To ease in the transition to telework, strong collaboration was critical among the employer, teleworker, placement agency and the referring agencies during the pilots. For example, STRIDE collaborated with Arise and United Way 211 through memos of agreement that clearly specified employer and agency roles. Staff time to implement a project, recruit employers and develop employer partnerships is needed, either through workforce centers or other nonprofit agencies.

PROVIDE ADEQUATE IMPLEMENTATION FUNDING

To ensure the success of telework programs for workers with disabilities, dedicated funding is needed to conduct employer outreach and to disseminate telework tools to employers and disability employment service providers. Monies are also needed to expand the capacity of local workforce development agencies to develop their own telework-related programs, which will maximize the initial results of the demonstration projects. Targeting rehabilitation entities with strong histories and successful existing employer relationships has the potential to multiply the number of placement entities and capitalize on their invaluable employer alliances.

Case Example:

Memoranda of Agreement Define Roles and Responsibilities

Two employer case studies, Arise and United Way 211, designed memos of agreement with project collaborators, which defined roles and responsibilities of all parties. This process was beneficial as it documented each partner's collaborative staff roles and contingency plans for teleworkers if needed. This lent credibility to the agreement and ensured the project goals and regular communications were adopted. It also reinforced the telework project had business value and met employer business needs. Workforce development agencies provided funding to assist teleworkers into employment for training and technology.

VETERAN-SPECIFIC RECOMMENDATIONS

To best meet the needs of veterans, both existing and newly forming telework placement programs and employers have a critical need to establish relationships with the Veterans Affairs system and workforce development agencies. When establishing such relationships, telework opportunities should be clearly defined with full disclosure of advantages, disadvantages, wage levels, employment supports, training and outcomes. Telework is a relatively new concept and can be easily misunderstood when it is not properly presented. Proper explanation of the benefits of telework will ensure that this option is available to service members who currently do not have viable options for transitioning back in to the civilian workplace.

In addition to partnering with agencies that serve veterans, the research suggests that it is important to utilize veterans who telework to spread the benefits of telework to other veterans. Service members share a strong, common bond and often view each other as family. Due to this close connection, service members are more likely to respond positively to advice from other service

members or veterans. Service members who have been successfully placed into telework jobs can serve as the best examples for other veterans to explore this employment option.

Lastly, promotion of telework as a viable work option should take place through various Veterans Affairs and service member organizations. Veterans also appreciate tangible opportunities and referral options. For example, one demonstration site discovered veterans and disabled service members preferred to attend a job fair to connect with telework-friendly employers to learn about telework options.

POLICY RECOMMENDATIONS

FEDERAL EXECUTIVE BRANCH

INCORPORATE TELEWORK AS PART OF MULTI-FACETED SOLUTIONS

- Encourage telework as an instrumental strategy to utilize pools of American labor as opposed to the outsourcing of labor in foreign markets. Utilize tax incentives to engage private sector employers to utilize underemployed and underutilized pools of labor talent (such as persons with disabilities) as teleworkers.
- Assist the expansion of telework in the federal government employee pool to increase government customer service coverage (both within the federal government and those funded by the federal government) and quality for taxpayers.
- Integrate telework into public and private employer business practices to reduce total fuel consumption by commuting employees, and to reduce U.S. reliance on foreign oil markets.

FEDERAL AND STATE DEPARTMENTS

PROVIDE EMPLOYER INCENTIVES FOR HIRING TELEWORKERS WITH DISABILITIES

There are several policy options for providing employer incentives to hiring persons with disabilities into telework positions. For example, the federal and/or state government could provide: 1) a substantial employer tax credit for hiring a newly employed teleworker with a disability; 2) additional supports and incentives for employers that hire five or more new teleworkers with disabilities in a year; and/or 3) an employer tax credit and/or stipends for companies that commit to collaborate on a telework initiative to hire a minimum number of teleworkers with disabilities.

ELIMINATE DISINCENTIVES TO PART-TIME TELEWORK

One of the strongest disincentives to part-time telework by people with disabilities is the fear of jeopardizing their disability benefits and income. Elimination of this and other disincentives may result in a greater number of people obtaining part-time work. This may require improved interagency coordination, policy and/or regulation changes, and possibly legislation. Telework offers a flexible work option for the most vulnerable persons with disabilities who often have no other avenue to obtain a traditional job and who are often limited in their abilities to commute to work. For the most part, disability recipients live in poverty and have the need for extra income.

Working on a part-time basis from their homes is not only a strategy to generate a small amount of income, but it can also stimulate teleworker self worth and productivity, helping to better maintain overall health.

ENCOURAGE TELEWORK AS A PART-TIME WORK SOLUTION

Encouraging telework as a part-time work solution for persons with disabilities brings together various disability employment systems that may affect the ability of a potential teleworker to become and remain employed. These systems are listed below.

- The Social Security Administration (SSA) and US Department of Health and Human Services, Centers for Medicare and Medicaid Services can coordinate an informational and educational outreach approach and policy that supports teleworkers with disabilities who work part-time to supplement their Social Security Disability Income.
- SSA's Ticket to Work programs can expand the employment opportunities by including telework call agent jobs as employment opportunities through their voucher system. Ticket to Work could provide an advocacy and support role to assist persons with disabilities to determine the viability and recommendation of telework for individual applicants.
- The US Department of Labor, Employment and Training Administration (ETA) can broaden acceptance of telework as both a part-time and full-time job industry option. In addition, ETA can expand its focus to include remote training programs to prepare teleworkers, with and without disabilities, for high industry demand positions. ETA could also promote employer tax incentives, such as the Work Opportunity Tax Credit, for employers who offer ongoing remote training for teleworkers to improve current skills and to provide opportunities for career advancement.
- The US Department of Education can encourage Project With Industry programs to adopt telework as one of their critical functions and to place a specific percentage of persons with disabilities into telework jobs.
- The US Department of Labor and Workforce Development Systems can:
 - Encourage One Stop Career Centers to become the unifier in each state for telework initiatives involving disability employment agencies.
 - Coordinate the use of funds to implement effective telework programs and provide increased opportunities for service providers to develop specific telework employment models with committed employers. This would increase the engagement of a greater number of disability providers to accept and initiate telework employment models.
 - Encourage workforce systems to partner with the US Department of Veterans' Affairs (VA) to locate VA staff in One-Stop Career Centers to improve the ability to identify telework opportunities for unemployed veterans.
 - Replicate successful telework employment models by utilizing a multi-state collaborative approach to deliver remote telework training and to coordinate telework employment for persons with disabilities. This approach would expand telework not just in isolated states, but also to a more general and larger geographic region. Revise placement performance measures for states to include either part- or full-time telework as a viable job outcome for persons with disabilities. In some

states, part-time telework is not currently considered as a viable placement unless the job provides 20 or more hours per week. It would be advantageous to revisit these state policies to allow recognition of telework as a legitimate placement, even as part-time work, especially for teleworkers with disabilities who may have medical limitations of pain, fatigue, and stamina that prevent them from working full-time.

- Expand the acceptable range of Workforce System placement outcomes to include more geographically dispersed telework positions. As demonstrated in the project pilots, local or state employers may not hire teleworkers. However, if teleworkers with disabilities can be trained in positions that can be performed from remote locations (such as customer service), there is a much greater chance of successful employment for these individuals. As telework grows, common performance placement and retention outcomes will make it more necessary to coordinate Workforce System telework goals and deliverables at a multi-state or national level.
- Define telework as a supported employment option for those individuals who are on Social Security Disability Income to enable their successful re-entry into the workplace. This would ensure that placed teleworkers receive support for longer than the currently required 90 days following job placement. For individuals with disabilities who have been out of the workforce for extended periods of time, additional job coaching and support may be required to ensure that the worker retains the job.
- Underwrite the cost of telework contracting positions for persons with disabilities. In order to mitigate teleworkers' technology expenses, federal or state employment supports could offset certain costs for a period of time after the employee begins working (i.e., three months). When teleworkers accept contract positions, they are typically developing their own small business and often do not have the funds to purchase equipment and other technology needs.

ENCOURAGE TELEWORK AS A TRANSITIONAL WORK OPTION

State Workers' Compensation Systems should document and validate the use and benefits of telework as a transitional work option for injured workers. This validation process should include documenting the role of telework in meeting long-term career goals and successful reintegration into the workforce. In addition, the Systems should enact policy that supports telework as a transitional, return-to-work opportunity for injured workers to increase long-term job outcomes.

ESTABLISH A STATE EXECUTIVE ORDER FOR TELEWORK JOBS FOR VETERANS

Executive Order 19 in the state of Virginia sets aside specific positions for disabled veterans. Telework could be included as an employment option that is pursued as part of a state Executive Order to assist veterans toward full employment through telework. State orders could be adopted to provide telework jobs to returning service members who have no other job option.

UTILIZE ASSISTIVE TECHNOLOGY LOAN PROGRAMS

Assistive technology funding (authorized under the Assistive Technology Act of 1998, as amended) is available to qualified applicants in many states, and should be integrated into telework initiatives. Pilot projects found that these programs are an underutilized resource that could assist teleworkers with disabilities to obtain computer and related technology through a low-interest loan.

COORDINATE FUTURE RESEARCH

It is necessary to conduct coordinated federal interagency research on the impact of telework on disability benefits. The research should explore the impact of telework placement on the medical benefits, disability income, and Medicaid supports. Research factors could include the effects of telework on the uses of Social Security income; income limits set by the Social Security Administration; job satisfaction, job retention, health status; wage benefits and advantages and disadvantages to telework. In addition, the costs of telework should be assessed in comparison to its return on investment for worker training and placement.

In addition, the Department of Labor could coordinate collaborative research conducted by ETA and the workforce development systems to examine the relationship between effective remote training practices and telework placement outcomes. Effective telework is reliant on the effectiveness of remote training to expanded pools of workforce trainees.

The Department of Labor could also conduct research to assess supervisor satisfaction and to identify effective teleworker performance measures. Expansion of effective telework models requires the identification of sound employee performance measures that can be adapted for a broad range of industries. Measures should examine a wide range of factors, including customer service skills, customer satisfaction ratings, and productivity assessments.

CONCLUSIONS

While persons with disabilities do face a variety of barriers to securing employment, research supports the fact that telework is an innovative and practical work solution that can be an effective means of addressing issues such as transportation, stamina, and pain concerns. The findings highlighted in this report demonstrate the promise that can be achieved when effective telework models are implemented and replicated. The findings also signal the critical need for additional policy development to support the expansion of telework as an option for workers with disabilities.

Enhanced employer engagement is required to expand the range of employment opportunities for individuals with disabilities. Research has confirmed that there are very few opportunities for newly hired individuals, both with and without disabilities, to telework. Educating employers on ways to implement telework programs that adhere to productivity and performance expectations may be a way to expand opportunities for newly hired employees to telework. In addition, promotion of successful models will likely attract a broader group of employers and industries to adopt telework programs. If telework opportunities can be increased in the general workforce, then it stands to reason that the percentage of telework jobs would also rise for potential teleworkers with disabilities.

While acknowledging the need for expanded opportunities, the research also found that viable telework models do currently exist. These models provide a valuable roadmap for increasing the employment of workers with disabilities through telework. Current programs demonstrate the importance of a strong partnership between employers and workforce development agencies to maximize the numbers of job openings available to persons with disabilities. Existing programs also highlight the significance of training and support for both the teleworkers with disabilities and their supervisors. Many successful models incorporate the use of an intermediary, which is a funded

entity that serves as a liaison between employers and new teleworkers. In addition, current experiences suggest that federal and state agencies can play a major role in expanding telework options by targeting employers that currently offer flexible work programs and employers that have customer service components. By introducing these employers to the benefits of telework and by offering them incentives, such as tax credits, government agencies can encourage the development of additional successful and innovative employment models.

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