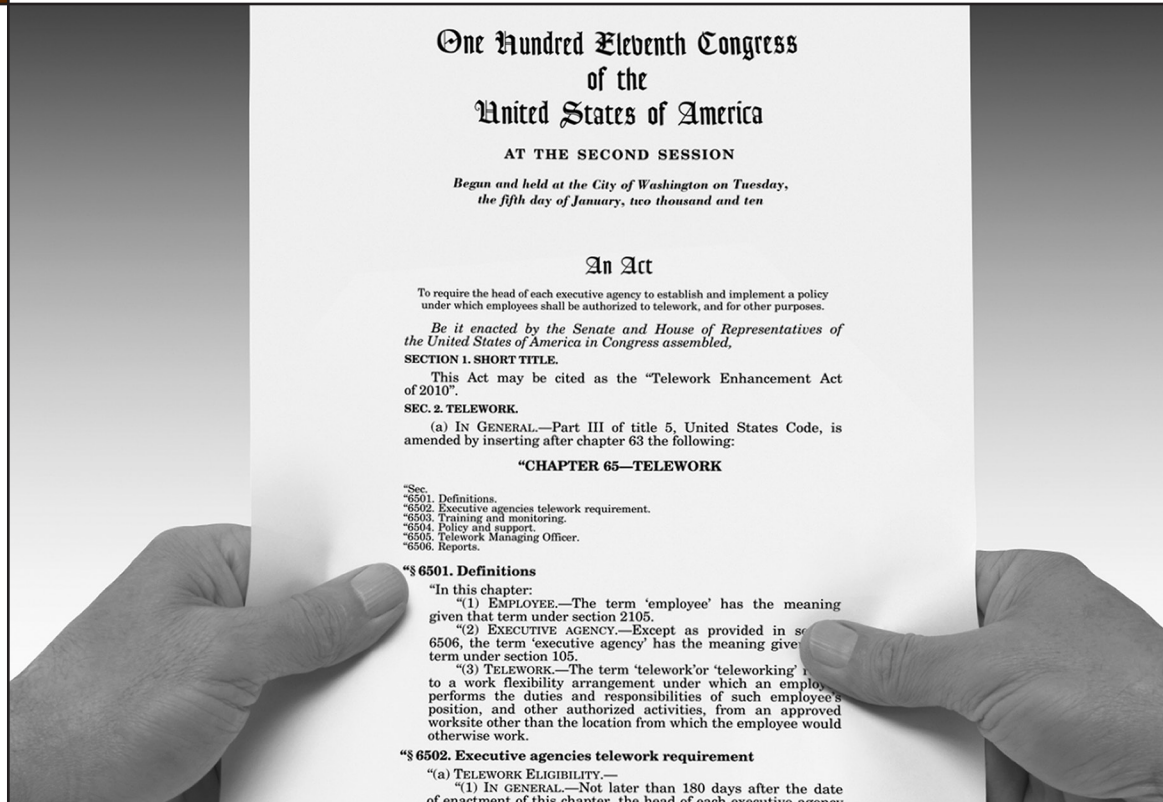# Implementing Telework: Lessons Learned from Four Federal Agencies

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IBM Center for
**The Business of Government**

# Implementing Telework:
## Lessons Learned from Four Federal Agencies

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# F O R E W O R D

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *Implementing Telework: Lessons Learned from Four Federal Agencies*, by Professor Scott P. Overmyer, Baker College.

This report offers practical implementation advice to agency leaders and front-line managers faced with implementing the newly-enacted law expanding telework opportunities to over one million federal workers, "The Telework Enhancement Act of 2010."

Telework has been touted as a winning strategy for government. A study by the Telework Research Network claims potential savings for the federal government of nearly $3.8 billion as a result of reduced real estate costs, electricity savings, reduced absenteeism, and reduced employee turnover.

Jonathan D. Breul

However, the adoption of telework by the federal government has been slow in recent years. According to the U.S. Office of Personnel Management, only 102,900 federal employees were teleworking in 2008. That figure represented only a fraction of the 1.2 million who were estimated to be eligible to do so.

Dr. Overmyer describes the technological, social, operational, and management risks that face managers in implementing a telework strategy. He then presents case studies of how four cutting-edge federal agencies addressed these issues and successfully implemented telework in their organizations.

Understanding the practical challenges and the steps that some agencies have already taken in implementing telework will be very useful as government leaders face the six-month implementation timeframe required under the recently signed legislation.
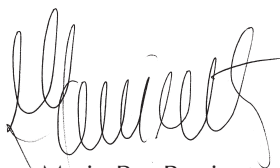
Maria-Paz Barrientos

We hope this report serves as a useful guide to federal managers as they implement the provisions of "The Telework Enhancement Act of 2010."

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# EXECUTIVE SUMMARY

The recent passage of "The Telework Enhancement Act of 2010" substantially changes the status of telework throughout government. Instead of each agency developing its own telework policies and procedures, the legislation sets forth a government-wide framework which both endorses and encourages the use of telework throughout the government. Case studies were developed of telework practices and experience at: the Defense Information Systems Agency (DISA), the Federal Deposit Insurance Corporation (FDIC), the United States Patent and Trademark Office (USPTO), and the National Institutes of Health (NIH).

This report, through these case studies, as well as survey and other research, offers recommendations on how to implement the Act. The following recommendations represent a summary of our findings that should be of immediate interest to federal managers:

## Establishing Plans and Policies

- Recommendation One: Agencies should develop a Comprehensive Telework Plan for their organization by July 2011.

- Recommendation Two: Agencies should develop clear, written telework policies and telework agreements.

- Recommendation Three: Agency training for employees and managers should receive high priority in implementing the new law.

## Managing in a Telework Environment

- Recommendation Four: Agencies must develop effective measures of performance.

- Recommendation Five: Managers should base individual evaluations on performance, not on presence.

- Recommendation Six: Agencies should place increased attention on "managing for results," and managers will have to manage proactively.

- Recommendation Seven: Managers should review employee performance based on measurable outcomes.

- Recommendation Eight: Managers should embrace a more proactive and "inclusive" management style.

## Providing Technology to Teleworkers

- Recommendation Nine: Agencies should include telework technologies in agency budgets, but allow employees to use their own equipment when practical.

- Recommendation Ten: Agencies should focus on security issues while implementing new telework policies.

# Understanding Telework in Government

## The Telework Enhancement Act of 2010

On December 9, 2010, "The Telework Enhancement Act of 2010" was signed into law by President Obama (Public Law No: 111–292).

The new law substantially changes the status of telework throughout government. Instead of each agency developing its own telework policies and procedures, the legislation sets forth a government-wide framework which both endorses and encourages the use of telework throughout the government.

Specifically, the legislation addresses the items discussed below.

### Telework Eligibility

The law requires that no later than 180 days after enactment of the law, the head of each agency shall:

- Establish a policy under which eligible employees of the agency may be authorized to telework

- Determine the eligibility of all employees of the agency to participate in telework

- Notify all employees of the agency of their eligibility to telework

The law also puts several limitations on eligibility. An employee is not eligible for telework if:

- An employee has been officially disciplined for being absent without permission for more than five days in the any calendar year

- The employee has been officially disciplined for viewing, downloading, or exchanging pornography

The legislation also stipulates two types of employees whose official duties require daily on-site presence. Employees *not* eligible for telework are those who:

- Directly handle secure materials determined to be inappropriate for telework

- Engage in on-site activities that cannot be handled remotely or at an alternate worksite

### Written Agreements

A key component of the new legislation is that each teleworker must sign a written agreement with his or her agency. The goal of the written agreement is to ensure that telework does not diminish employee performance or agency operations. The written agreement between the agency manager and employee outlines the specific work arrangement that is agreed to by the two parties. The written agreements are mandatory in order for any employee to participate in telework. Employees may become ineligible for telework if their performance does not comply with the terms of the written agreement.

### Training

Another key component of the new legislation is the requirement that training be provided for all teleworkers and their managers. Employees will not be eligible for telework until training has been completed. Training must be completed before an employee can enter into a written agreement with his or her manager.

### Equal Treatment of Teleworkers and Non-Teleworkers

The legislation states that teleworkers and non-teleworkers should be treated equally for purposes of:

- Periodic appraisals of job performance

- Training, rewarding, reassigning, promoting, reductions in grade, retaining and removing employees

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### Development of New Policies and Support of Telework

"The Telework Enhancement Act of 2010" requires the Office of Personnel Management and the Office of Management and Budget to oversee the implementation of its provisions.

- **Office of Personnel Management (OPM):** OPM will provide policy and policy guidance for telework in areas of pay and leave, agency closure, performance management, official worksite, recruitment and retention, and accommodations for employees with disabilities. OPM is also required to assist agencies in establishing appropriate qualitative and quantitative measures and teleworking goals. It is required to continue to maintain its central telework website, as well as to conduct research on the utilization of telework by public and private sector entities and identify best practices and recommendations for the federal government. OPM is tasked with reviewing the outcomes associated with the increase in telework, including the effects of telework on energy consumption, job creation and availability, urban transportation patterns, and the ability to anticipate the dispersal of work during periods of emergency.

  Eighteen months after date of enactment, OPM is required to submit a report addressing the telework programs of each executive agency, which is to include the degree of participation by employees of each executive agency in teleworking. Specifically, the report will include the total number of employees in the agency, the number and percent of employees in the agency who are eligible to telework, and the number and percent of eligible employees who are teleworking.

- **Office of Management and Budget (OMB):** The legislation requires that OMB issue guidelines by July 2011 to ensure the adequacy of information and security protections for information and information systems used while teleworking. No later than 120 days after enactment, OMB is required to issue policy guidance requiring each executive agency to purchase computer systems that enable and support telework.

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- Work requirements, or other acts involving managerial discretion

### Telework Managing Officer

The legislation requires that the head of each executive agency designate an employee of the agency as the Telework Managing Officer (TMO) within the Office of the Chief Human Capital Officer. The new Telework Managing Officer will be responsible for agency policy development and implementation of agency telework programs. The TMO will also serve as an advisor to agency leadership, a resource for managers and employees, and the primary agency point of contact for OPM on telework matters.

After passage of the legislation, bill co-sponsor Congressman Frank Wolf (R-VA) said, "This legislation will bring the federal government into the 21$^{st}$ century. Increasing the number of federal employees who telework will not only improve their quality of life, but will also take cars off the roads, improve air quality and provide relief to commuters tormented every day by traffic congestion in our region. Telework is good government policy." (Losey)

## Defining Telework

Definitions of telework are many and varied. While some include detailed descriptions of the conditions and information, telecommunications, and computing (ITC) equipment required, others give a broader set of conditions involving proximity to the primary office or place of work. For the purpose of this report:

> Telework is defined as any work conducted away from the primary workplace, part-time or full-time, which is facilitated or aided in some way by information and telecommunications technology.

"The Telework Enhancement Act of 2010" definition of "telework" or "teleworking" includes a work flexibility arrangement under which employees perform the duties of their position, and other authorized activities, from an approved worksite other than the location from which the employee would otherwise work.

## Understanding Benefits from Telework

There have been many reports on the benefits of telework, the earliest appearing from about 1990. According to Washington State University's Division of Governmental Studies and Services (2009), telework offers significant benefits to both employers and employees, as well as to the community and society.

In addition, telework contributes to business continuity and process security (ITAC, 2005; WorldatWork, 2009). Table 1 gives an overview of the most commonly recognized benefits of telework, as well as some lesser-known benefits.

**Table 1: Recognized Benefits of Telework**

| For the Organization | |
|---|---|
| **Continuity of Operations (COOP)** | Organizations with significant telework capabilities can maintain operations during major weather events, pandemics, terrorist attacks, or other disruptive events. |
| **Improved Employee Retention** | Employers with telework programs tend to have lower employee turnover than those without such programs. One Denver-based company reported going from 60 percent to 0 percent turnover by initiating a telework program, which now has 20 full time and 4 part-time teleworkers among a staff of 44 (Silva, 2007). Similar results have been reported by a number of other organizations. |
| **Real Estate Cost Savings** | Organizations that support full- or part-time telework can realize office and real estate cost savings. For example:<br>"At IBM, 40 percent of the company's 355,000 employees are classified as mobile and do not have an office space of their own, because they either work from home, work at a customer's office or are on the move most of the time. IBM provides eMobility centers—suites of temporary offices that mobile workers can use. The company estimates that its mobile workforce reduces its real estate requirements by at least 2 million square feet, saving IBM about $100 million a year." (Kelly, 2007) |
| **Improved Employee Productivity** | In a Cisco Systems (2009) study, teleworkers were asked about productivity issues. Of the 1,992 teleworkers surveyed, 83 percent said they experienced an equal if not better ability to communicate and collaborate with co-workers than their ability to do so on-site. Sixty-seven percent of workers reported improved quality of their work, 75 percent reported an improvement in the timeliness of their work, while 69 percent of those surveyed reported greater productivity. Particularly interesting is the fact that teleworkers reported that 60 percent of the time they saved by not having to commute were used to work on office tasks, while 40 percent applied that time for personal tasks. |
| **Increased Organizational Flexibility** | Telework makes it possible for an employee to be in two places at once.. A teleworker can be sent across the country or overseas on a "firefighting" mission, and still be productive in their regular duties when not directly interacting with customers, clients, or colleagues. In addition, an organization that employs both full and part-time teleworkers may have the flexibility to adjust to the "ebb and flow" of workload by bringing on employees (with their consent, of course) on a moment's notice. |
| **Reduced Health Care Costs** | Teleworkers use fewer sick leave days, and take advantage of preventative medical care more often. This is primarily due to the convenient access home-based teleworkers often have to medical care facilities, and the fact that they are able to schedule appointments during the work day with much less disruption to the normal work schedule. Office workers, on the other hand, are more likely to have to take several hours off from work in order to have a brief medical appointment. |

**Table 1: Recognized Benefits of Telework (continued)**

| | |
|---|---|
| **Accommodation for Americans with Disabilities** | The EEOC and the courts have ruled that, on a case-by-case basis, telework may be a reasonable accommodation for individuals with disabilities (Kaplan et al, 2006) |
| **Expanded Talent Pool** | According to the State of Virginia, an untapped talent pool of qualified potential employees is unable to drive. Teleworking can alleviate the need for transportation altogether, allowing companies to hire these employees. (Virginia.gov, 2010) In addition to the local benefits, it's possible to hire specialist help from anywhere in the world, thereby avoiding relocation expense and inconvenience for workers and their families, and allowing agencies to hire the best talent available. |
| **For the Employee** | |
| **Work-Life Balance** | In a study of 1,566 teleworkers at British Telecom (Maruyama et al, 2009), 74 percent of teleworkers surveyed reported a "good" or "very good" work-life balance. Specifically, the study revealed that while teleworkers reported working longer hours, they didn't seem to mind as long as they had control over the hours worked. Having this flexibility contributed to an enhanced work-life balance, they said. This finding also has some implications for teleworker productivity. In a similar study of 1,992 teleworkers at Cisco Systems (Cisco, 2009), 80 percent of participants reported an improved quality of life. Others caution, however, that for married women with school-aged children, the time saved by not commuting may translate into more domestic work and parenting, rather than in increased personal time (Hilbrecht et al, 2008). |
| **Increased Personal Flexibility** | If managed properly, teleworkers can have a great deal of flexibility in scheduling work, personal appointments, and family responsibilities during the day. As long as teleworkers are evaluated on work performed, rather than time expended, this personal flexibility can be very satisfying, contribute to job satisfaction, and increase retention. |
| **Employee Satisfaction** | In a survey of 355 federal IT professionals, CDW-G (2007) found that 41 percent of employees who had the option to telework reported that they were "very satisfied" with their job, as opposed to only 32 percent of those with no telework option. Ten percent of those with a telework option and 15 percent without reported that they were "unsatisfied" or "very unsatisfied" with their current job. Other studies have yielded similar results. However, it appears that job satisfaction reaches a plateau as telecommuting increases beyond about two days per week (Golden & Veiga, 2005). |
| **Fewer Sick Days** | Teleworkers tend to use fewer sick days than non-teleworkers. If teleworkers feel well enough to work, but do not want to expose co-workers to a potential infection, they may work a full day at home. |
| **For Society** | |
| **Increase Demand for Goods and Services** | Increased demand for communications, networking, and equipment required for telework. |
| **Reduced Dependence on Foreign Sources of Oil and Reduced Greenhouse Emissions** | Cisco employees participating in a telework study reported a cost savings of $10.3 million per year in fuel that would normally be used to commute. Cisco teleworkers reduced greenhouse gas emissions from commuting by approximately 47,320 metric tons. (Cisco, 2009) |
| **On-Site Energy Savings** | Agencies may cut energy costs along with the need for office space and real estate. The utility costs associated with teleworkers are typically borne by the teleworker, rather than the employer. |

## Understanding Risks Associated with Telework and Mitigation Strategies

Investment in telework is not without risks. However, for each risk, there is a mitigation strategy that can often reduce it to a manageable level. Table 2 discusses a number of well-known risks associated with telework investment, and mitigation strategies for each risk.

## Recent Trends in Telework

### Telework is on the Rise Nationwide

There has been an increase in the number of those telecommuting from 12.4 million in 2005 to 17.2 million in 2008, according to a survey published by WorldatWork (2009) with data from the Dieringer Research Group. According to the U.S. Office of Personnel Management (OPM), the overall number of teleworkers in federal agencies, increased from 94,643 in 2007 to 102,900 in 2008, an increase of nearly nine percent (OPM, 2009).

### An Increased Emphasis on Documenting the Potential Savings from Telework

Several federal agencies have documented that real long-term cost savings can be gained from short-term expenditure on implementing a telework pro-gram, from purchasing the necessary technological infrastructure to making organizational adjustments. In the past, a popular model for assessing telework costs was the Cost per Person Model (Kaczmarczyk, 2004). However, that model did not adequately account for the benefits of telework, creating the impression that telework implementation was primarily a cost without clear benefit.

More recently, in a study for the General Services Administration (GSA), Booz Allen gathered information from 20 different federal organizations in 11 departments, including Agriculture, Interior, Commerce, Justice, Education, Transportation, HHS, Treasury, HUD, Veterans Affairs, and the U.S. Coast Guard. The Equal Employment Opportunity Commission, National Science Foundation, General Services Administration, Securities and Exchange Commission, and National Aeronautics and Space Administration also participated in the study (GSA, 2006).

The study defined two telework approaches: "basic" and "ideal." Both of these approaches provide access to work applications for the teleworker through a 24/7, secure, and centralized connection to the teleworker's enterprise network. This gives the teleworker the same capabilities in the home office as at work.

**Table 2: Telework Risks and Mitigation Strategies**

| Risk Category | Specific Risk | Mitigation Strategy |
|---|---|---|
| Technology Risks | Nonexistent or insufficient technology to support teleworker job duties and expectations | Strategic Technology/Telework Planning, technology checklists and guidelines |
| | Technology failures/operational issues | Technology support/help desk, peer communications |
| Operational Risks | Teleworker underperformance | Goal-setting, performance evaluations, clear telework agreements and teleworker expectations |
| Social Risks | Poor work-life balance/low job satisfaction | Performance monitoring and measurement, goal-setting, appropriate teleworker selection, ability to withdraw from telework |
| | Adverse reactions from co-workers | Regular communications, monitoring and distribution of all workloads, teleworker training for non-teleworkers |
| Organizational Risks | Management resistance | Pilot programs, education, training, peer pressure, disciplinary action |
| | Lack of face-to-face communication | Teleconferencing, regular on-site meetings |
| | Lack of teleworker visibility to management | Career development, regular communication between teleworkers, on site peers and managers, engagement in office activities and recreational opportunities |

The "basic" approach includes all the key components and services that teleworkers have in their base office, while the "ideal" approach provides network performance and productivity enhancements. In both cases, the government covers all hardware and services costs with no cost to the teleworker. In the "basic" approach, the government does not provide broadband access.

The Booz Allen study divides telework support needs into three categories:

- **Home office support:** Includes equipment such as personal computer and a combination fax/printer/copier

- **Telecommunications services:** Includes equipment such as voice conferencing, phone service, home office network connectivity

- **Enterprise support:** Includes Secure Network Access and access to Applications and Administration.

The study included Business Case Analyses (BCA) for three organizations of varying size in order to illustrate the potential return on investment (ROI) for telework in various situations.

The Booz Allen study concludes that the cost of implementing a "basic" teleworker solution for a "home office support" scenario can result in over $36 million of benefits over a three-year period, at a cost of approximately $16 million. This is based on a cost-savings scenario for an organization with 100,000 employees (with 50,000 teleworking at least part time). The cost savings scenario for providing

"telecommunications services" (for an organization of 50,000 of which 25,000 are teleworking) shows an additional savings of $16 million over three years. Cost savings for providing "enterprise support" services (for an organization of 10,000, of which 5,000 are teleworking) shows an additional savings of $3.2 million for a total savings of $35.2 million over three years (GSA, 2006). Table 3 shows an overview of these results, including Net Present Value and Return on Investment.

## Management Resistance Remains a Primary Concern

A major challenge to successfully implementing telework in the federal government is management attitude and organizational culture. A 2009 survey of federal executives and decision makers indicated that while 83 percent personally support telework, 42 percent felt that their direct manager, and 31 percent felt that their agency leadership were not supportive of telework programs and alternative work arrangements (Government Business Council, 2009a). A 2008 survey showed that only 35 percent of government managers actually endorsed telework (Huang et al, 2008).

In our 2010 survey, nine of the 15 federal telework coordinators who responded said that some form of management resistance was the primary impediment to increased levels of telework in their organization. Overcoming this kind of resistance is essential if telework is to become standard practice and widespread in the federal sector. In a report on a conference on telework, Gross (2006) recorded a number of comments among participants regarding management

**Table 3: Costs/Benefits Comparison of Telework Investments (GSA, 2006)**

| Business Cases (50% of staff teleworking) | Total Investment (Millions)* | Total Benefits (Millions)* | Net Present Value (Millions) | Return on Investment |
|---|---|---|---|---|
| **Home Office** (Illustrative example of organization with 100,000 total staff) | $16.0 | $36.2 | $20.2 | 225% |
| **Telecommunication Services** (Illustrative example of an organization with 50,000 total staff) | $15.6 | $31.1 | $15.1 | 200% |
| **Enterprise Services** (Illustrative example of an organization with 10,000 total staff) | $0.22 | $3.4 | $3.2 | 1,500% |

*Totals provided in net present dollars*

resistance to telework. For example, some managers suggested that the manner in which federal budgets recapture excess funding may be an impediment to the realization of cost savings from telework, while others questioned productivity studies that support telework. These concerns should be considered when implementing "The Telework Enhancement Act of 2010."

Management resistance can be overcome by first addressing managers' concerns, secondly educating managers on how to manage teleworkers (and educating teleworkers on how they are to be managed), and finally, supporting telework in the federal workforce with executive champions such as Office of Personnel Management Director John Berry, an ardent supporter of telework. Research has shown that key elements of overcoming management resistance include management supported pro-telework initiatives, pilot programs, and support from professional organizations (Peters & Heusinkveld, 2010).

Telework is not without detractors, and some telework coordinators and federal managers have legitimate issues with the concept of telework and how it has been practiced in the federal government to date. These attitudes and risks must be dealt with in a meaningful way if telework is to be successfully expanded and implemented throughout government in compliance with "The Telework Enhancement Act of 2010."

In summing up the management challenges facing telework, OPM Director Berry said, "Managers who believe that unless they have the employee in front of them, and are stuck in a sort of 19th century, 20th century mindset that someone needs to be at their desk to be working, I would put as our largest barrier." (As reported by Suzanne Kubota, Senior Internet Editor, FederalNewsRadio.com, March 26, 2010)

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## Survey Results

The author conducted a short e-mail survey as part of this study. The survey was sent in March 2010 to Federal Agency Telework Coordinators, and 15 e-mail replies were received. The survey included five short, open-ended questions. While the sample size is not valid for generalizing results to the larger population, these replies provide a snapshot into the perceptions of federal telework coordinators.

**What is the greatest challenge for teleworkers in your organization?** Of the 15 responses:
- Nine coordinators reported management support as a major challenge to teleworking in the organization (60 percent)
- Four coordinators reported equipment as a major challenge (27 percent)

**What is the greatest challenge for managing teleworkers in your organization?** Telework coordinators cited the following two management challenges:
- Monitoring and measuring staff performance (three coordinators, 20 percent)
- Management attitude and training (three coordinators, 20 percent)

**What is the primary benefit for your organization that telework provides?** Of the 15 responses:
- Five coordinators cited increased productivity by the organization (33 percent)
- Four coordinators cited increased employee satisfaction (27 percent)

**What is the primary benefit that teleworking provides to employees in your organization?** Telework coordinators cited the following major benefits to individuals who telework:
- Increased productivity (seven coordinators, 47 percent)
- Better work/life balance (six coordinators, 40 percent)
- Decreased commuting time/travel cost savings (five coordinators, 33 percent)

# Case Studies of Telework in the Federal Government

**DISA**

## Defense Information Systems Agency (DISA)

### History of Telework at DISA

The Defense Information Systems Agency (DISA) is one of the pioneers in implementing telework within the federal government and the Department of Defense (DoD). DISA is a DoD combat support agency. The mission of DISA is to provide IT and computer policy and support to war fighters, program managers, and the president. According to Aaron Glover, Special Assistant to the Director of Manpower Personnel and Security Telework Coordinator for DISA, "In layman's terms, we like to distinguish ourselves as the AT&T, the AOL, the OnStar and Google for the Department of Defense." As of May 2010, there were about 7,000 DISA employees around the world, with 5,822 civilian employees and 1,000 military. Nearly 50 percent of DISA employees are located in the metropolitan Washington, D.C. area.

Telework at DISA started in 2001 after an appropriations bill was passed in 2000 (Public Law 106-346), which included a mandate that each agency establish a policy under which eligible employees may participate in telecommuting to the maximum extent possible. The provision applied to 25 percent of the federal workforce, with an additional 25 percent of the workforce eligible in subsequent years. In 2001, there were approximately 50 people teleworking at DISA, with a maximum allowable telework of one day per pay period.

The initial DISA telework program lasted from 2001 to 2005. In 2005, DISA initiated its annual employee survey. After reviewing the results of the survey, DISA established working groups to address issues such as work-life quality, communications, and leadership. Based on the recommendations of the work-life quality group, the telework program was expanded from one day per pay period to two days per week. This was approved by the then-director, Lt. Gen. Charles E. Croom, Jr., in December 2005 and put into effect in January 2006.

In early 2006, Jack Penkoske, then Director of Manpower, Personnel, and Security at DISA, convened a "SWAT Team" to examine telework practices in agencies outside DISA and make recommendations on policy, equipment, and implementation. He requested that the team prepare a report within 60 days, including recommendations. A senior IT specialist, Joe Ray, and a senior Human Resources specialist, Aaron Glover, were assigned to lead the SWAT Team. Representatives were also recruited from DISA directorates. The team met with the United States Patent and Trademark Office, the Treasury Department, and other federal agencies. They found few DoD agencies with telework programs from which to gather information. Based on their study, DISA decided to go with "locked down" laptops (i.e., no new information could be added) with docking stations, connections to the organizational, Virtual Private Network (VPN)-encrypted hard drives on laptops (to prevent data loss in case they were stolen), and reimbursement for a portion of high-speed Internet costs.

These recommendations were approved and put into place in March 2006, marking the beginning of the expansion of telework within DISA. Once the

decision was made to have a telework program, it was implemented quickly. Glover suggests that organizations " ... either have a telework program or not." In the case of DISA, it was decided to move ahead quickly rather than "over-analyze" the issue as one DISA staff member put it.

Initially, the application process for telework was not automated, so the exact number of early applications is unknown. It is estimated, however, that approximately 1,000-1,500 employees applied for telework. Today, there are approximately 3,500 approved applications for teleworking in DISA. This represents a significant expansion over the 50 initial workers in 2001. The current maximum telework schedule is now three days per week.

### Determining Eligibility for Telework
At DISA, eligibility for telework is determined by managers or supervisors of each position, depending on the responsibilities associated with the position being considered. In other words, managers first consider whether the position can be conducted from a remote location. Next, managers review the applicants to determine if they are likely to be successful teleworkers. In so doing, managers examine characteristics such as organization, self-motivation, and ability to work without close supervision. Applicants also must have a fully developed performance plan in place. DISA provided training classes for managers to train applicants on what to expect, and how to manage teleworkers, a very important component of any telework program.

Warehouse workers, drivers, help desk workers, and employees with regular access to a classified network on a daily basis were generally ineligible, since their physical presence is required. There are currently no telework centers in the Washington area in which classified work can be done. DISA is now encouraging the General Services Administration (GSA) to open at least one center locally.

Prior to 2005, the telework application process was on paper. Managers could keep applications in a drawer, or forward them to their human resources office (HR) at their own discretion. HR had no way of keeping track of who was or wasn't approved for telework. Today, there is a centrally managed, Web-based program for teleworkers to request a temporary or regular telework program, including the

safety checklist and telework agreement online. The employee completes the agreement and sends it electronically to the manager. The manager can then approve or disapprove the agreement or request a modification. Today, both HR and the telework program manager can see telework applications and approvals/disapprovals across the enterprise.

The automation process was a major improvement to the telework program. The system was developed by a DISA intern and was based on an Open Source software system. Other agencies throughout government might benefit from this Open Source architecture and modify it to suit their own organizations.

### Overcoming Technical/Equipment and Managerial Issues

#### *Equipment*
At DISA, employees must use a Government Furnished Equipment (GFE) computer to telework. To control costs of telework, computer acquisition policy changed to 90 percent laptops for all employees in 2006, thus making the same computer available for both in-office work and telework.

To successfully implement telework at DISA, agency management needed to make the financial commitment, which included purchasing equipment and services: VPNs, laptops, and security services. At DISA, printing while teleworking is not allowed since printers carry huge costs and DISA is reluctant to allow people to connect their home printers. Teleworkers can print to the office printers over the VPN and pick up the printed document the next time the employee is in the office. Most people read from the screen or print at work and take necessary reports home. This has resulted in decreased paper consumption. Electronic signatures are employed using a Common Access Card (CAC).

Desktop teleconferencing software such as the Defense Connection Online (DCO) allows teleworkers at DISA to remain in contact with other employees, teleworking or not. Branch chiefs often have their morning meetings via the instant messaging capabilities provided by Jabber (part of the DCO system). Employees are encouraged to use this system to communicate more efficiently than with email or other asynchronous communications. Keeping employees connected helps to build the

departmental community. Employees can also attend meetings using teleconferencing technology.

### *Management Resistance*

Establishing policy for equipment use was one of the easiest hurdles at DISA. A more difficult hurdle was the cultural change required for telework. A key to successfully implementing telework at DISA was that agency senior leadership, including the director, embraced telework and championed the practice. Based on their own previous experience in industry, several members of DISA's Senior Executive Service assuaged the concerns among some of their colleagues by sharing their experience of telework as a practice that works. They emphasized the importance of setting performance standards and ensuring employees know what is expected of them.

Glover reports, however, that some managers still worried that, "If I can't see them, how do I know what they're doing?" Glover points out, however, that even if an employee is in the office, it's not possible to watch them 100 percent of the time, to know their every action. In order to overcome this issue, DISA did extensive briefings to SES-level managers and their subordinates on performance measurement and management in a telework environment.

Training sessions with managers and with employees proved to be effective at DISA and are still being provided. Training is now an ongoing part of DISA's telework program. There is a list of telework training requirements for all personnel. Most of the training can be done online. The amount of time an employee spends on online training can now be measured, whether the individual is teleworking or not.

Measuring performance can still be difficult, however. When output can be physically counted, measuring performance is easy. If the employee produces more during telework days than on office days, telework is obviously a more productive method. Currently, there is no overall policy for performance metrics at DISA; metrics are established in the performance plan for each individual employee. Performance tracking is delegated to individual managers, but is recommended that the same measures be used for both office and teleworking employees in similar jobs.

Customer support should be seamless between office and telework. Calls to office phones should be forwarded to the home office. The customer shouldn't know whether an employee is teleworking or not. "If you're teleworking, you're working," says Glover. "To date, there has been no negative feedback from customers."

## Benefits of Telework at DISA

There are a number of important benefits for teleworkers at DISA, including improved quality of life. For example, according to Glover, the average commute for employees in the D.C. metropolitan area is at least one hour each way. By not physically commuting, teleworkers regain at least two hours per day, as well as save on gas and transportation costs. There is also a "green" benefit as pollution is reduced.

"We see this as a recruitment and retention tool that we like to use," says Glover. For example, the Base Realignment and Closure Commission (BRAC) scheduled DISA headquarters to move to Fort Meade, Maryland (from its present location in Virginia) starting in January 2011. When the announcement was made, approximately 70 percent of the DISA workforce lived in northern Virginia. Coincidentally, the move was announced at about the same time that the telework changes were being instituted, enabling DISA to use telework as one factor in persuading employees to make the move to Ft. Meade, rather than seeking employment elsewhere. As a result of telework and other quality of life initiatives, staffing levels have remained at 100 percent, with an attrition rate of seven to eight percent, despite the impending move. Incidentally, there is no cost saving in real estate in the move, since DISA has decided to maintain equivalent space at the new location.

DISA conducts surveys of managers regarding productivity of teleworkers, asking them if productivity was worse, the same, or better than productivity in the office. According to Glover, in the most recent survey, 90 percent of managers surveyed indicated that teleworker productivity was the same or better than in the typical office. Teleworkers are therefore at least as productive as workers who remain in the office.

During the February 2010 snowstorms, DISA had 1,200 people working when most of the federal

government was essentially "closed." Across the federal government, it is estimated that 35 percent of federal workers were working from home during the storms. According to Glover, "I doubt if we will ever see the federal government close again in such a fashion, because we have the capability of being able to stay up and continue to run. Telework is a key enabler of the Continuity of Operations (COOP) program."

## Lessons Learned from the DISA Telework Experience

- **Support from top management was key:** This support was clearly transmitted to middle managers throughout the agency.

- **Training was essential:** Training sessions with managers and with employees were highly effective and are still ongoing on an annual basis at DISA.

- **Initiative was crucial:** As discussed in the case study, DISA performed a 60-day study, made recommendations, and then implemented the recommended policies. Once the decision was made to have a telework program, it was implemented.

- **Creating an automated application process is very helpful:** Prior to 2005, the telework application process was on paper. Managers could keep applications in a drawer, or forward to human resources at their own discretion. HR had no way of keeping track of who was or wasn't approved for telework. By automating the process, DISA has much better control of telework data, and employees find it easier to apply.

UNITED STATES PATENT AND TRADEMARK OFFICE

# United States Patent and Trademark Office (USPTO)

## History of Telework at USPTO

The United States Patent and Trademark Office is the agency within the Department of Commerce responsible for granting patents and registering trademarks. There are three major components of the USPTO:

- The Patent Office

- The Trademark Office

- The Corporate Business Units (e.g., Office of the General Counsel, Office of Public Affairs, Office of the Chief Financial Officer, Office of the Chief Information Officer, and Office of the Chief Administrative Officer)

As of July 2010, there were 5,654 teleworkers at the USPTO. Over 7,000 positions were deemed eligible for telework, approximately 75 percent of the 9,500 total positions in the agency. Currently, 80 percent of eligible positions are teleworking, with 4,464 patent teleworkers (80 percent of eligible positions) and 505 trademark teleworkers (90 percent of eligible positions). Of those, 2,230 patent teleworkers and 350 trademark teleworkers are teleworking four or five days per week.

Telework at USPTO started in 1997 in the Trademark Office with 18 examining attorneys who partnered to share offices on the campus and work from home a couple of days per week. Agency-wide the telework initiative has grown to over 5,500 people teleworking on a regular and recurring basis. When the program started, managers were initially skeptical of how the program could benefit the agency. In the Trademark Office, Deborah Cohn took on a project as one of the National Partnership for Reinventing Government's Reinvention Labs, and carefully designed a program with the 18 examining attorneys. In measuring their progress, she demonstrated the program's effectiveness.

The telework model established by the Trademark Office in 1997 has been the foundation for the expansion of telework throughout the agency and much of the federal government. The nature of patent and trademark work facilitates robust telework programs, but agency-wide, USPTO telework programs have an even broader impact. All business units at the USPTO now have formal telework programs in place.

## Overcoming Technical/Equipment and Managerial Issues

Based on experience implementing telework at USPTO, Danette Campbell, Senior Advisor for Telework in the Office of the Chief Administrative

Officer, believes that there were three major issues confronting telework at USPTO:

- Bandwidth

- Security

- Lack of training

At the USPTO, these issues were addressed before expanding the number of teleworkers in the agency. Appropriate resources were made available within USPTO to address the three issues. Today, no one teleworks without both IT and non-IT telework training, including training on security-oriented "Rules of the Road," communication, managing and setting clear expectations for performance. Training is also provided for the managers of remote workers.

Campbell says, "While it is a human capital strategy, the USPTO realizes that telework is also a business strategy that will help our business units reach their strategic goals." At USPTO, the telework programs come out of the specific needs of the business units within the agency. Telework at USPTO, emphasizes Campbell, is not a one-size-fits-all initiative. Rather, it is based on meeting the needs of the individual business unit, and achieving agency goals and mission. The patents and trademark offices within USPTO have each implemented telework differently.

### Equipment
Equipment from the office (except for furnishings) is replicated in the home office for those teleworkers who work from home four to five days per week. All telework employees receive training on assembling and troubleshooting equipment, and are provided with help desk support. Until recently, the standard equipment for teleworkers who work at home one to three days per week included a laptop, docking station, and headset. Some are also provided with printers, depending on their position.

Recently, the Enterprise Remote Access (ERA) Portal was established, which provides the ability for less frequent teleworkers to use their own equipment to connect from home. Currently, there are about 400 people using the ERA Portal.

### Training
USPTO also placed great emphasis on management training. According to Campbell, "I believe that for

folks to be in management positions, whether they are managing teleworkers or not, there should be more in-depth training." PTO offers management training in an effort to increase the skills of managers of teleworkers. The nature of the training, mostly facilitated discussion, is primarily about managing people, whether or not they are teleworkers. The same kinds of management activities should be done in both bricks-and-mortar and virtual environments. Ongoing communication is critical, and perhaps the most important concept in managing teleworkers.

### Implementing Telework at the Trademark Office
The Trademark Office refers to their program as Trademark Work at Home (TW@H). Under the TW@H program, employees who work at home four or five days per week relinquish their regular office space, and use the hotelling system when on the Alexandria campus. The teleworker makes a reservation for hotelling space, comes into the campus, logs in to their virtual network, completes their work and goes home. The Trademark Office also has employees who telework one to three days per week.

There is a TW@H program in each work area in the Trademark Office. Each program is based on the needs of the unit and has its own program guidelines. A labor-management partnership was critical to the success of the Trademark telework programs. When the telework programs were designed, unions partnered with employees and manager representatives to create agreements that will best serve the employees, the agency, and management.

### Implementing Telework at the Patent Office
At the Patent Office, there is a Patent Hotelling Program (PHP), which is similar to the Trademark Office hotelling program. This program is primarily for patent examiners. Participants of this program give up their office and use hotelling rooms when on campus. Examiners are provided a full set of Enterprise Remote Access (ERA) equipment. For patent examiners to use this program, they must be GS-12 and above, have at least two years' service at USPTO, have at least a "Fully Successful" rating of record, have passed the appropriate Certification Exam or the Registration Exam, or have permanent Partial or Full Signatory Authority. All PHP participants must have cable or high-speed Internet connections at home.

There is also the Patents Hotelling program for NTEU 243 union employees (legal instrument examiners, paralegals, patent appeals group, etc.), as well as the Patent Telework Program (PTP) for patent examiners who can telework up to two days within each two week period. There is also a Patent Management Telework Program (PMTP) for non-bargaining unit employees. This array of programs has been tailored to meet the needs of each organizational unit.

## Benefits of Telework at USPTO

According to Campbell, "Our telework programs are a work-in-progress and the agency is continually assessing the progress. We started small and we measure everything." Support for telework is high, especially from the agency senior leadership, including David Kappos, the Under Secretary of Commerce for Intellectual Property and Director of USPTO. As seen in DISA, top-level executive support is critical to the success of a telework initiative.

A significant return on investment is achieved when employees relinquish office space. USPTO has approximately 2,700 employees who have given up their office space at the Alexandria campus to work from home four or five days per week.

At the USPTO, telework enables the agency to expand the workforce without adding real estate and parking facilities. Additional benefits include better retention, less sick leave usage, and less annual leave usage, all of which benefit the agency. Some teleworkers report that because of telework, they have decided to extend their years of service with the agency. This is a major benefit, since turnover is very expensive, especially for highly qualified employees.

While communication may be more challenging in a remote environment, measuring employee output is not. Managers should clearly define and communicate performance measures and expectations, including timeliness, clarity, and meaning, not just with teleworkers but with non-teleworking employees as well.

In building effective teams consisting of on-site and remote workers, the manager's challenge is to ensure the team members understand their focus while appreciating each other's differences, talents and expertise. This must be accomplished with employees who may never actually meet face-to-face.

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### Authority for Telework Travel Expenses Test Program

"The Telework Enhancement Act of 2010" includes approval for a test program allowing agency employees to voluntarily relocate from their pre-existing duty station. Under the provision, the employing agency will establish a reasonable maximum number of occasional visits to the pre-existing duty station. After this is established, an employee becomes eligible for payment of travel expenses to visit the home agency location.

The Patent and Trademark Office was tasked with conducting a test program under this authority. PTO may pay any travel expenses of an employee for travel to and from a PTO worksite or provide an employee with the option to waive any payment authorized under this authority. Under the new authority, an employee could choose to live anywhere in the United States in exchange for a willingness to return to Alexandria on a limited basis. The official duty station would be the teleworker's home, and the teleworker would travel to Alexandria four times per year with travel reimbursements to be negotiated between employer and employee.

Under this new authority, PTO would be able to seek out qualified employees nationwide and expand the agency's potential labor pool. Ms. Campbell considers this an excellent potential recruiting and retention tool. Prior to final enactment of this authority, Ms. Campbell speculated that if enacted "the authority would be an incredibly positive and innovative thing for this agency, and a tremendous work model for the federal government."

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### Lessons Learned from the USPTO Telework Experience

- **Performance management is essential:** USPTO was a leader in incorporating good performance management practices in their telework program. The agency ensured that performance standards were measurable, understandable, verifiable, equitable and achievable, and aligned with agency goals.

- **Communication with teleworkers was emphasized:** USPTO encouraged strong communication between supervisors, employees and their work teams. With experience, communication with teleworkers and among team members became as easy as communicating with those located in the office.

- **Documentation was key:** One key to the success of the USPTO telework program was clear and concise documentation, including, at a minimum:
  - Telework agreements
  - Telework guidelines
  - Asset management guidelines

  This documentation was as specific as possible, and was made available throughout the organization.

- **Investment in office environment and equipment:** USPTO provided a complete office environment for teleworkers, whether it is in a hotelling space or in the home working situation. The agency provided laptops instead of desktop computers, as well as high-speed Internet access.

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# FDIC

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## Federal Deposit Insurance Corporation (FDIC)

### History of Telework at FDIC

The Federal Deposit Insurance Corporation (FDIC) is an independent agency created by Congress to maintain stability and public confidence in the nation's financial system by:

- Insuring deposits
- Examining and supervising financial institutions for safety, soundness and consumer protection
- Managing receiverships

FDIC currently has more than 8,000 employees. In 2009, approximately 27 percent of these were recurring teleworkers (defined as teleworking once, twice, or three times per week). The number of episodic teleworkers (defined as those who telework on short, one-time type of projects) was also at 27 percent.

Telework at FDIC started in 2000-2001. The chairman at that time, Donna Tanoue, launched a diversity strategic plan. Part of the plan was to retain

highly trained employees, and to recruit and retain the best candidates in the marketplace. One outcome of this plan was an examination of work-life balance programs. This in turn provided the stimulus for the telework pilot programs. FDIC explored options that gave employees more control over their work environment.

FDIC undertook two nationwide pilot programs:

- **Home-based pilot program:** The home-based pilot program was limited to the bank-examining employees. They were allowed to work from home any time they weren't examining regulated banks.
- **Task-based pilot program:** The task-based program was for the balance of the FDIC workforce, including managers and supervisors.

In 2003, FDIC surveyed managers and employees to see if the pilot programs were worth continuing. The results were positive, and the programs became permanent in 2003.

At the FDIC, all employees, including executives, are eligible to participate in the telework program. The exception is a small number of employees who are:

- Currently on a performance improvement plan
- Student interns
- On leave restriction

The FDIC does not limit the number of days that FDIC employees can telework.

"We have found ways to help employees telework," says Susan Boosinger, work-life program manager at FDIC. "Employees whose jobs do not appear telework friendly can sometimes have a report to complete or a special project that can be performed at an alternate work location. It doesn't mean that recurring telework is an option, but there could be an opportunity for the employee to telework and complete that project." At FDIC, managers are actively seeking out ways for employees to telework. Boosinger cautions, however, "Telework is not an entitlement. It has to be based upon the mission and needs of the organization."

## Overcoming Technical/Equipment and Managerial Issues

### *Equipment*

In order to telework, FDIC decided that each employee must be on a computer with Internet access with JavaScript enabled, and have a SafeWord token to provide security. This can be either on Government Furnished Equipment (GFE) or personal equipment. FDIC does not currently restrict teleworkers to GFE.

There is an annual requirement for teleworkers to submit a signed Telework Agreement and a Home Safety Self-certification to their managers. The Home Safety Self-certification is a self-assessment of the safety of the home workplace, including information on home safety considerations such as:

- Whether the space is free of asbestos

- Whether fire extinguishers are present

- Whether there is adequate electrical support for equipment

- Other home safety considerations

Although there is currently no central repository for telework-related information at FDIC, managers retain each employee's Telework Agreement, know who is teleworking, and where they can be reached. A centralized system is in development to provide a repository for this information.

### *Management Challenges*

From a telework program manager's perspective, Boosinger would like to find more ways to inspire reluctant managers to permit telework. Encouraging managers to try telework themselves can elicit the "ah-hah" moment when they recognize the benefits and develop into program supporters. There are still pockets of managers who believe that in order to work effectively, an employee must be at their office desk. Boosinger anticipates that in the next five to ten years, telework will become a mainstream practice, and management resistance will disappear.

To overcome this resistance, Boosinger cites the best three methods: "Education, education, and education!" Providing telework education teaches managers the benefits of telework and how to successfully manage teleworkers. Also, making managers accountable for supporting telework for their employees might be persuasive in increasing telework participation. In addition, the FDIC has designated the last week in October as Corporate Telework Week.

## Benefits of Telework at FDIC

According to FDIC telework surveys, the overwhelming majority of managers and employees view telework favorably. Over 90 percent of managers view telework favorably, and 70 percent believe that productivity either increased or remained the same. Telework survey respondents also returned 240 pages of written comments. Breaking the comments into categories, the FDIC found the following trends:

- 20 percent of the respondents highly valued reduced commuting time

- 19 percent saved on commuting costs

- 18 percent increased productivity

- 14 percent increased work-life balance

- 9 percent highly valued stress reduction attributed to telework

Commenting on the program itself, many employees characterized telework as a major asset or an extraordinary benefit. Managers at FDIC believe that it helps them accomplish the work of the organization. During the second great snowstorm of February 2010, FDIC was getting work done, even when the government was shut down and the office officially closed.

"The organization from the top down supports our Telework Program, and that's what makes all the difference for us: top-down buy-in," says Boosinger. "Young people approach the interview process with expectations about the availability of alternative work schedule options, and telework. New recruits for FDIC positions often put the desire for flexibility options ahead of the aspiration to earn large salaries."

While it is often difficult to assess the fiscal benefits of telework programs, the FDIC is able to directly calculate certain real estate cost savings. FDIC telework policy provides the opportunity for bank examiners in field offices to elect a full-time telework option upon the expiration of their office lease. The FDIC estimates a cost savings of approximately

$14,000 per employee over a five-year lease. This includes furniture, fixtures, equipment, and the leasing of office space.

## Lessons Learned from the FDIC Telework Experience

- **Policy development was crucial:** FDIC developed a telework policy that clearly outlined the expectations of telecommuting employee and the roles and responsibilities of managers and employees. The telework policy contained a clear statement emphasizing that telework is not an entitlement, and that the mission of the organization is paramount.

- **Measurement was emphasized:** At FDIC, the agency practices the adage, "What gets measured gets done." FDIC used surveys and evaluation tools to measure the success of the agency's program and to provide suggestions for improvement. FDIC tracked telework participation using software, such as a time and attendance systems.

- **Active management was practiced:** At the FDIC, performance plans for teleworkers are no different than for on-site employees. Good telework managers use the same leadership skills for all employees. However, managing a remote worker at FDIC required more deliberate and intentional communication. The agency created clear expectations up front and communicated to employees the importance of providing results-focused evidence to consider in their evaluations.

- **Team connectivity was emphasized:** At FDIC, a special effort was made to keep employees connected with the team. For example, teleworkers are connected and included in teleconferences, just as on-site employees are. Since communication was vital, phone time together was planned in advance.

# National Institutes of Health (NIH)

## History of Telework at NIH

The mission of the National Institutes of Health is "… to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce the burdens of illness and disability."

NIH has a central Office of the Director, and 27 Institutes and Centers. Within these Institutes and Centers, a composite of scientific, medical and technological research and operations are performed. Throughout the NIH, there are three communities of workforces. These communities are known as the intramural scientific research community, the extramural research program community, and the administrative management community. These three communities are distinctive and have different policies governing telework practice.

For NIH, the Department of Health and Human Services (HHS) issues telework policy, based on policy established by the Office of Personnel Management. NIH then establishes an agency-wide policy, and each Institute adapts that policy according to its own needs.

As of December 2009, there were 18,440 full- and part-time government employees working at NIH. As of May 2010, 30 percent (a total of 5,624 people) of eligible employees were teleworking. Of those teleworking:

- 4 percent were working at home three or more days per week

- 37 percent were working at home one to two days per week

- 18 percent were working at home at least one day per month

The remainder of teleworking employees at NIH do so on an ad hoc basis, but are trained and set up to work remotely during an emergency.

Telework at NIH started in 1995 as a flexible work-place benefit, primarily used as a short-term medical accommodation. At that time, less than one percent of employees used it. In 2001, NIH received a grant through Telework Partnership with Employers, spon-sored by the Maryland Department of Transportation and the Washington Councils of Government. According to Shirley LaBella, NIH Telework coordina-tor, NIH received funds to hire the services of a pro-fessional consultant to help set up and/or expand telework programs. They ran a pilot program for 12 months during which 50 employees could telework at least two days per month. It was so successful that, shortly after the end of the pilot, NIH developed a full program and a set of telework policies. NIH has been aggressively implementing telework since that time.

LaBella started at NIH in telework in 2005. The number of teleworkers prior to 2005 had been increasing steadily, but was still relatively low. In 2006, with a change in the Office of Human Resources (OHR) leadership and commitment to the telework program, there was a huge jump in tele-workers. Each of the 27 Institutes then started utiliz-ing telework coordinators. These coordinators had key responsibilities with respect to operating and promoting telework within each Institute or Center. The central office of NIH interacted with these indi-vidual telework coordinators. LaBella serves as man-ager and coordinator for their efforts.

Through marketing campaigns, including branding and advertising, the network of telework coordina-tors within NIH promoted and increased telework numbers. "This took time, and was a multiyear effort," said Daniel L. Dupuis, associate director for administration in the OHR.

Pandemic planning was also a factor in the expan-sion of telework at NIH, since telework was an inte-gral part of those plans. By allowing people to telework who would be mission-critical in an emer-gency, NIH was able to test "mini pilots"of telework and determine what problems might be encoun-tered. The experiences with the pandemic planning effort improved telework policy at NIH. LaBella and Dupuis believe that NIH is now ahead of the curve in comparison to most other government agencies. Telework was also promoted throughout NIH as part of its ongoing Continuity of Operations (COOP) planning. During the February 2010 snowstorms, NIH kept working.

Emphasizing the need for NIH to build a program on a solid foundation, the agency set measurable goals involving benefits and costs for organizations and customers. NIH leadership support was key for this telework "foundation." Support was sought and obtained across NIH from administration, informa-tion management, managers, and employees.

## Determining Eligibility for Telework at NIH

NIH followed the Office of Personnel Management approach. NIH assumed that everyone is eligible for telework unless the Institute or Center determined that an individual did not qualify for performance reasons.

Generally, employees at NIH are eligible to apply for telework if they:

- Have a satisfactory performance record or, for new employees, an equivalent record of satisfac-tory performance from previous employment

- Are not on any special leave procedures

- Have no documented misconduct within the last three years

In terms of task qualifications:

- Tasks must be portable

- Tasks must generate measurable work products in terms of quality or quantity

- Tasks can't require close supervision or frequent guidance from the supervisor

- Tasks can't require constant face-to-face interac-tion with customers or co-workers

Emergency employees (police, firefighters, hospital care) and service employees (child care, etc.) are not eligible to telework.

NIH teleworkers work primarily at home, although they are allowed to use a GSA telework center if there is one near their location.

## Overcoming Technical/Equipment and Managerial Issues

### Equipment
Currently, many components of NIH are migrating to full use of government equipment at the telework location. Many organizations within NIH have

moved to purchasing only laptops, which can be used either in the office or at their telework location. NIH has incorporated this best practice from other agencies. Employees connect through a VPN account, using their own Internet Service Provider (ISP). NIH no longer supports dial-up. On a case-by-case basis, NIH can provide ISP support for teleworking employees, especially those who work full-time or several days per week. Many employees telework three to four days per week, and for these individuals NIH can help pay the cost of ISP service.

### Managerial Challenges

According to LaBella, NIH has many of the same challenges and difficulties faced by other agencies in implementing telework. "I think we'll always have to address some managers' reservations about telework because employee issues continually evolve. I think we'll probably always have a feeling by some managers…that they want the person right there. They want to see them. Their presence means productivity," stated Dupuis. "This is a group that we work with and try to have a paradigm shift with, and we've been successful with that, no doubt." Pragmatically speaking, there are certain positions at intramural labs for which researchers need to be "at the bench" to conduct their research, although it is the position of NIH that when research writing needs to be done, these researchers can also take advantage of telework.

Some of the other major challenges faced by NIH included:

- **Identifying positions and employees that are suited for telework:** At NIH, positions aren't emphasized when evaluating suitability for telework. Duties and functions are more important. While one position may appear unsuitable for telework, there may be duties and functions within the position which may be suitable for telework. LaBella says, "The fact is that telework is never an 'all or nothing' proposition." Performance management is absolutely critical. NIH addresses this issue through policy, training, and through communication with managers.

- **Protecting sensitive information:** At NIH, there is a requirement that all sensitive information is accessed only via the secure NIH network or encrypted laptops. Since laptops are provided, teleworkers are encouraged to put sensitive

information on a secure drive and access it in that way.

- **Minimizing the cost of telework startup:** At NIH, the pilot program and some of the cost of professional consultation was paid for by a grant, discussed earlier, helping to minimize the cost. Also, moving to a single computer model helped eliminate duplicate equipment purchases.

- **Addressing management resistance:** NIH responded to this issue in several ways. Communication with managers proved to be a key in overcoming resistance. Managers were also encouraged to try small pilot programs. Even if an employee is allowed to telework only one day per pay period in the beginning, these pilots had the ability to demonstrate to managers that teleworkers can be effective and productive. Managers were also encouraged to try telework themselves to get a feel for how it works.

- **Implementing training:** Training was a very important component. NIH has an extensive training program, including both face-to-face and online components. The online program for employees includes topics such as "How to apply to telework" and "How to develop a well-written telework application." For managers, the online training includes how to review and modify agreements to best meet office needs.

  Seminar-style training, developed in collaboration with the USDA Graduate School, follows the OPM model of telework training. It is an advanced course that focuses on making a "paradigm shift" from managing performance on-site to managing performance of people who are off-site. The training program also addresses how to communicate effectively, how to create successful telework agreements, and how to undertake emergency planning.

### Benefits of Telework at NIH

Based on interviews for this report, telework was reported to have had a positive impact on NIH. It created a performance-based environment and enabled better work planning and superior measurement of work accomplished. It also had a positive impact on recruiting and retention, expanding the pool of available talent to NIH.

Regarding the benefits of telework as a recruitment tool, Dupuis said, "NIH needs to recruit and retain the very best people. Telework is one of those flexible accommodations that the very best people often look for. Managers at NIH who buy-in to telework can reap the benefits and recruit and retain the best talent. For those leadership folks who do not profess that kind of philosophy, they simply are going to develop barriers and obstacles in their ability to keep this kind of talent. This kind of talent is being recruited by other competitive organizations, especially the private sector, which is recruiting from the NIH. We are a target recruitment point for many other organizations trying to lure our people away. The telework tool is one tool that can prevent that from happening."

For NIH, telework increased group productivity and morale, reduced absenteeism, and increased employee availability. It also reduced downtime, and promoted continuity of operations. For NIH employees, telework decreased or eliminated commuting time and expenses and allowed greater flexibility in personal time and professional responsibilities. Employees also reported that they liked having a dedicated, uninterrupted block of time for working on a particular project, significantly compressing completion time.

## Lessons Learned from the NIH Telework Experience

- **Leadership support and communication was crucial:** NIH leadership provided clear support. Many employees wanted to know whether management and leadership support telework at NIH. Effective communication with employees made clear that management support existed for telework.

- **Pilot projects were encouraged:** Managers were encouraged to try small pilots. Even if an employee was allowed to telework only one day per pay period in the beginning, these pilots had the ability to demonstrate to managers that teleworkers can be effective and productive. Managers were also encouraged to try telework themselves.

- **Training was an important component:** NIH has an extensive training program, including both face-to-face and online training.

- **Policies were "pushed down" within the organization:** The details of NIH policies needed to be "pushed down" to employees, including plans for emergency drills, identification of mission-critical functions, and identification of personnel who would perform those functions as well as backup for those functions. Delegation of authority was also important to ensure that employees could do their jobs in the case of an emergency. Across NIH, the importance of continuity of operations was also emphasized.

- **Engagement in the broader telework discussion was helpful:** At NIH, telework coordinators knew what was going on elsewhere in the federal government. Attendance at quarterly telework meetings held at OPM was expected. LaBella reported that their office participated in a White House-sponsored Telework Thought Forum. Telework coordinators also attended department-level telework committee meetings to lend help when possible and to keep aware of what was going on at the department level. Telework coordinators also kept informed about possible changes down the road, including the possibility of new telework legislation.

- **Protecting sensitive information was emphasized:** At NIH, sensitive information may only be accessed via the secure NIH network or encrypted laptops. Since laptops are provided, teleworkers are encouraged to put sensitive information on a secure drive and access it in that way.

- **Awareness of cost is important:** NIH was proactive in pursuing cost savings. For example, NIH's hotelling initiative has resulted in space savings for the Institutes and Centers. Cost savings was attractive to NIH because the agency could then redirect that money into research or new administrative initiatives. Savings from telework can be realized from parking savings (space, need for parking attendants), real estate costs, utility costs, and other physical space-related savings.

# Recommendations for Implementing "The Telework Enhancement Act of 2010"

## Recommendations for Establishing Plans and Policies

**Recommendation One: Agencies should develop a Comprehensive Telework Plan for their organization by July 2011.** As part of the mandated effort to establish policies for telework eligibility and to determine eligibility of employees to telework, each agency should develop a Comprehensive Telework Plan. In addition to including information on eligible positions, the Plan should answer the following questions:

- What is telework in the organization, and how does it function for the employer and employees?
  - What is expected of the teleworker?
  - What is expected of the organization?
- What organizational positions and job responsibilities qualify for telework (mandated by "The Telework Enhancement Act")?
- What is the agency telework training plan?
- How will teleworker performance be evaluated?
- What are the continuing education requirements and opportunities for teleworkers?

**Recommendation Two: Agencies should develop clear, written telework policies and telework agreements.** As demonstrated by the case studies, written policies outlining the roles and responsibilities of teleworkers and managers are crucial so that there will be no misunderstanding of expectations. The mission of the organization should be the primary driver of agency telework policy.

**Recommendation Three: Agency training for employees and managers should receive high priority in implementing the new law.** The case studies prepared for this report demonstrate the importance of placing a high priority on training as a crucial element to the success of agency telework in the organization. The training should be tailored to the needs of the organization. At a minimum, training should address management and performance, as well as information technology, software, and security.

As required by the new law, agencies should not start a telework program (or expand the number of individuals in the agency teleworking) without having a training program in place both for teleworkers and their managers. Managing an increased number of employees from a distance will require special skills and techniques, and these should be made explicit during the training.

## Recommendations for Managing in a Telework Environment

**Recommendation Four: Agencies should develop effective measures of performance.** While there were significant variations in the form of performance measurement, cost-benefit, and goals, each of the case study agencies emphasized the need for some form of measurement for teleworkers and managers. This could be in terms of work output, work quality, or some other relevant metric.

**Recommendation Five: Managers must base individual evaluations on performance, not on presence.** Knowing that a worker is in a particular place at a particular time is not useful as a measure of performance, unless they are attending a meeting,

## Key Success Factors
## Identified in Case Studies

**If a telework program is to succeed, support from top management is essential.** Top agency management must be willing to make their support visible and tangible. Indicators of top management support are written policies, public declarations during briefings, and making telework participation a part of managers' and supervisors' performance evaluations.

**Clear, written telework policy and telework agreements are paramount.** In each of the case studies, a written policy outlining the roles and responsibilities of teleworkers and managers was developed, so that there was no misunderstanding of expectations from all quarters.

**Training for employees and managers is key.** Telework training should be tailored to the needs of the organization. The training should address management and performance, as well as information technology, software, and security. Some of this training can be online, and of that, most can be accomplished as telework.

**Measurement of performance is critical.** While there were significant variations in the form of measurement for performance, cost-benefit, and goals, each organization emphasized the need for some form of measurement for teleworkers and managers. Measurements included work output, work quality, and other relevant metrics. Performance measurement was viewed as an important tool for overcoming management resistance.

**Personnel evaluations were based on performance, not on presence.** Knowing that a worker is in a particular place at a particular time is not a good measure of performance, unless they are attending a meeting, are a security guard, or are working on an assembly line. The four case study agencies all had performance evaluation systems which treated *all* employees in the same way. Managing teleworkers is not significantly different than managing other employees. The primary difference is that managers are forced to actively manage.

**An "inclusive" mode of working was adopted.** Just because someone is not physically present in the office, it does not mean that they should be excluded from meetings, conferences, and communication with the rest of the team. It is to everyone's benefit to include teleworkers in routine collaborative office activities.

are a security guard, or are working on an assembly line. Managers will need to know what the worker is doing, and must be able to measure their performance in a meaningful way.

**Recommendation Six: Agencies should place increased attention on "managing for results," and managers will have to manage proactively.** With positions that are eligible for telework, location is largely irrelevant. Agencies will need to manage by measuring results, rather than by "butts in seats." Even teleworkers will not be at their desk for the entire eight to ten hours of their workday, and shouldn't necessarily be expected to be. Most teleworkers will be every bit as accessible as those in the office. This may be a difficult concept for some managers, but if an employee can answer help desk calls from a remote location, and provide good customer service, wherein lies the problem? It's all in the measurement of results.

In essence, managing teleworkers is not significantly different than managing other employees. However, when teleworkers are involved in an organization, managers are forced to "step-up" and actively manage *all* employees. It will no longer be sufficient to hire workers to fill an open position, and hope that their presence will naturally contribute to institutional goals. Organizations with teleworking employees will be required to plan, task, and manage the performance of *all* employees in an objective, critical, and even-handed manner, whether they are teleworking or in the office.

**Recommendation Seven: Managers should review employee performance based on measurable outcomes.** Employee performance for teleworkers, should be based on metrics appropriate for the individual teleworker, and the job tasks that they perform. There is no "magic" one-size-fits-all solution for measuring the performance of any worker, let alone teleworkers. Measuring performance according to an established, pre-defined set of metrics is the best course for all employees, especially teleworkers.

Over the last several years, Results-Only Work Environment (ROWE) has emerged and been successfully implemented at large organizations such as Best Buy, Gap, and other organizations. This is a rather radical departure from traditional time-based work measurement. With ROWE, an employee's performance

is based completely on outcomes of work assignments. There are no set working hours, save those required for essential meetings and/or presentations. ROWE has the potential for relieving manager fears that teleworkers are not at their assigned workstation for eight hours per day, five days per week. When performance assessment is based solely on results, there is no opportunity for doubt whether or not a teleworker is doing their job—it is either performed on time with a quality output or not.

In the event that an organization is not ready for such a radical departure from tradition, it is possible to assign measurable outcomes to all workers, including teleworkers, along with a commitment to a certain level of effort in terms of time, and gradually ease into an increasingly independent arrangement.

**Recommendation Eight: Managers should embrace a more proactive and "inclusive" management style.** Just because someone is not physically present in the office does not mean that they should be excluded from meetings, conferences, and communication with the rest of the team. It is to everyone's benefit to include teleworkers in routine collaborative office activities.

This "inclusive" mode of operations should include regular communication (i.e., daily or weekly, depending on the situation) between immediate supervisors and teleworking employees. The most commonly cited critical success factors for telework are support, communication, and trust (Kowalski and Swanson, 2005). Regular, scheduled (and occasional, but infrequently unscheduled) contact with teleworkers, both between peers and supervisors, is essential for maintaining a cohesive, bonded unit. For full-time teleworkers, monthly or quarterly face-to-face visits to the workplace are also very useful for maintaining relationships between employees and between employees and supervisors. Video teleconferencing is also effective as a substitute for face-to-face visits. It might also be helpful for teleworkers to submit plans for the coming week, and reports on the previous week, every Monday, regardless of job responsibilities. With online forms, this process should be relatively painless. It will serve to keep workloads in line with job responsibilities, encourage teleworkers to plan ahead, and give supervisors "warm, fuzzy" feelings about what teleworkers are doing at any given point in time.

## Recommendations for Providing Technology to Teleworkers

**Recommendation Nine: Agencies should include telework technologies in agency budgets, but allow employees to use their own equipment when practical.** Previous studies have found that there is a minimal expenditure gap in the technology required to support teleworkers at the basic level, and the technology required to support most current workers on-site, especially for knowledge workers. Agencies must now budget for the additional items necessary for telework. Based on experience to date, many agencies have moved to purchasing laptops (with docking stations) that can be taken home, rather than office desktop machines, and providing an adequate software suite for all employees (not just teleworkers).

In the event that Government Furnished Equipment (GFE) is not available or not budgeted, and unless information security is a primary issue in the organization, agencies should avoid demanding that teleworkers utilize GFE when it is not necessary to do so. Allowing knowledge workers to utilize their own equipment and home Internet connections is a money-saver that can improve productivity, especially when home office computing capabilities are superior to those the workers have access to at the office.

Implementation of the new law will require that agencies provide equipment to teleworkers who do not have adequate computing and telecommunications capability in the home, along with those who need specialized capabilities for security purposes, and supply those who already have their own equipment as the need arises. Nilles (1998) summed up telework technology nicely when he wrote, "The technology needed for full-scale successful telework is roughly the same as that required in the principal office--plus some more telecommunications."

In December 2009, the Government Business Council (2009b) conducted an online survey of line or program managers from both civilian and defense agencies to determine what these managers viewed as the most necessary tools for successful telework. Of 419 respondents, 94 percent indicated that e-mail was most important, followed by the telephone, at

90 percent. Following e-mail and phone, the survey found:

- 42 percent indicated that access to the office communications server was important

- 40 percent indicated Web conferencing

- 20 percent indicated video conferencing as necessary to successful telework

The results of this survey suggest that providing a full suite of equipment and services to teleworkers may not be necessary in all cases, and that the costs of telework program may be lower than anticipated.

Federal policy guidelines (FMR Bulletin 2007-B1), effective March 2, 2007, currently permit agencies to provide hardware, software, and associated services to teleworkers in home or remote offices, according to the requirements of their job responsibilities. This equipment must come from the departmental budget, however. The current policy guidelines recommend the following support to teleworkers, including:

- Basic Equipment (computing, peripherals, and telecommunications equipment)

- Telecommunications and Internet Services

- Security and Data Encryption (services and software)

- Privacy (rules and associated safeguards)

- Training

- Technical Support

**Recommendation Ten: Agencies should focus on security issues while implementing new telework policies.** While OMB is required to produce telework security guidelines within six months of passage of the Act, there should be no gap in security with telework programs started prior to receiving those guidelines. For example, agencies should utilize VPNs and CITRIX/RSA gateways and tokens when teleworkers must connect to workplace networks from home.

A caveat for the use of personal equipment does already exist in GSA policy, however. FMR Bulletin 2007-B1 states: "If an agency permits the use of personally owned equipment, the employee must agree to allow the agency to:

- Configure that equipment with the proper

hardware and software necessary for secure and effective job performance, and

- Access the equipment, as needed, to verify compliance with agency policy and procedures."

The above seems like a reasonable tradeoff between allowing the use of personal equipment and mandating the use of GFE. The case studies demonstrate that both approaches to home equipment are currently being successfully employed.

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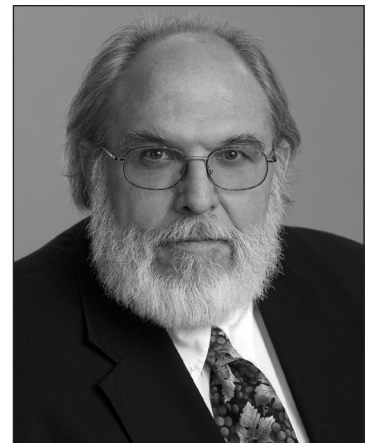
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