

## COVER STORY

# Bringing the Office Home

**State and local governments are making teleworking programs succeed in an era of tight budgets and heightened security concerns. Here's how they're doing it.**

**AS THE TRANSPORTATION** planner for the city of Stamford, Conn., it's Thomas Bruccoleri's job to pore over proposals for new developments to make sure increased traffic won't snarl downtown roadways. So where does he go when he has to think about traffic? Anywhere but Interstate 95.

Like a growing number of public and private workers in Connecticut, Bruccoleri is a regular teleworker. Whenever he avoids his hour-long commute on I-95, he becomes more efficient. "My productivity stays high at home because I'm able to stay focused," he reports from his home office, which is equipped with a notebook computer, a digital personal organizer and voice mail services provided by the city. "At the office, there are frequent interruptions. Here, I can concentrate for long periods of time."

Although he teleworks only one day a week because his job requires frequent meetings with officials and developers, Bruccoleri believes he's benefiting along with his employer. Besides enjoying higher productivity when working at home, he has two extra hours to himself, and he saves money on gas and car maintenance. Plus, he's not adding to the gridlock and pollution on I-95.

For years, states and cities have been promoting teleworking (also called telecommuting) for their own employees

and for those of private employers. Now, two new challenges are making teleworking a hotter topic than ever.

First, state and local authorities, like their federal counterparts, worry that nearly a third of their work force could be lost to retirement as early as 2006. However, innovative work arrangements seem to keep talent in the public sector. For example, officials in Lakewood, Colo., report that 68 percent of the city's teleworkers said they are less likely to look for another job thanks to this option.

Second, teleworking can make financial sense in an era of tight budgets. Fewer office workers means reduced demand for office space, which can add up to a sizable expense: An office, utilities, workstations and other necessities cost about \$10,000 a year for each employee.

"Telework is increasingly being seen by states as a potential solution to reducing costs and dealing with their fiscal crises," says Christina Dorfhuber, Pittsburgh-based principal and head of public-sector human capital activities at Deloitte, a professional services firm headquartered in New York.

While teleworking may address these two challenges, advocates say it's also attractive for other reasons. A North Carolina study estimated that having 5 percent of state employees teleworking five days a week would increase productivity, reduce office leases and

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**Dennis Jolly, Supervising Planner for the Department of Transportation in Newington, Conn., says teleworking is reducing pollution and traffic congestion.**

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lower employee turnover. Together, that would save the state \$23 million per year.

In other studies, organizations that sponsored teleworking programs cut turnover by 20 percent, boosted productivity by 22 percent and reduced absenteeism by 60 percent, according to the International Telework Association and Council (ITAC) in Silver Springs, Md. "Teleworking is something to do today because it's a business solution to business problems, not because it's trendy," says consultant Gil Gordon, president of Gil Gordon Associates in Monmouth Junction, N.J.

### Skepticism Remains

With numbers like these, you'd think the country would be littered with vacant office buildings emptied by people who are working at home. Yet, despite its huge potential, teleworking remains something of a workplace wallflower. Last year, about 23.5 million Americans teleworked, up nearly 40 percent over two years, according to ITAC. But compared to the nation's total labor force of 147 million, only a fraction is taking advantage of this flexible alternative to the traditional office.

One of the reasons for this lack of interest is the cost of setting up a home office. Depending on job requirements, organizations could spend \$3,500 or more to equip a home office. (See "The Well-Equipped Home Office" on page 22.) In addition, consulting and training for mid-size agencies to implement a teleworking program can top \$25,000.

Upfront costs aren't the only problem, though. Security concerns leave states scrambling to devote tight IT budgets to homeland security projects. The fight for technology dollars "has been pretty heated," Deloitte's Dorfhuber says. "With budget crises the way they are, there is some hesitation to invest in telework technology. Although it is appealing on many levels, there are cost efficiencies to be gained from other activities too."

Network security is another big issue. Having hundreds of outside-the-firewall workers remotely logging on to internal networks creates headaches for CIOs. "Don't underestimate the impact on security and the technical support infrastructure," warns Linda Finley, director of Minnesota's Office of Technology in St. Paul.



Linda Finley, Director of Minnesota's Office of Technology in St. Paul, says government should take advantage of teleworking's benefits.

### What Teleworking Costs

**Fully equipped home office:**  
\$3,500

**Consulting and training:**  
\$25,000\*

\*For mid-size agencies with 400 to 500 employees

### Where Teleworking Saves

**Real estate costs:**  
Saves \$10,000 for each full-time teleworker

**Employee turnover:**  
Decreases 20 percent

**Absenteeism:**  
Decreases 60 percent

**Productivity:**  
Increases 22 percent

Source: State Tech reporting; International Telework Association and Council

Then there are the managerial challenges. "With the passage of time, teleworking no longer elicits a 'Huh?' reaction," consultant Gordon says. "What hasn't changed is an inbred resistance from some managers—resistance that's often based on misinformation and myth."

This may be especially true in the public sector. Managers used to working in a bureaucratic environment "are being asked to perform unnatural acts," says Gina Vega, professor of business at

Merrimack College in North Andover, Mass., and author of *Managing Teleworkers and Teleworking Strategies*. "It creates problems when they're suddenly asked to relinquish tight control."

Finley believes managerial doubts—along with security, support issues and cultural change—are partially responsible for slowing the spread of teleworking throughout Minnesota government. "It's human nature for managers to have an interest in seeing what people are doing," she says. "In Minnesota, there's still a cultural attitude on the part of some people who think that if you're not physically at work, you're not working. But technology enables us to take advantage of things like teleworking, and we should leverage that capability."

Though managers seem to have the most concerns about teleworking, they aren't the only ones affected by the change it brings about. Employees who have grown used to office camaraderie and water-cooler conversations might worry that "out of sight" means "out of mind" when the time comes for raises and promotions. "It's nice to think people recognize us for our accomplishments, but managers do need to see our faces or we tend to get overlooked for promotions," Professor Vega says.

Although certain dangers do exist, a number of states, including Connecticut and Arizona, feel that these fears are exaggerated. They believe that with well-structured programs in place, the benefits of teleworking far outweigh the risks involved.

PHOTOGRAPHY BY BRUCE KLICKHOHN

## Connecticut's Bankroll

Connecticut estimates that at least 117,000 private- and public-sector employees in the state regularly telework an average of two days per week. This is good news for a state that is striving to reduce pollution and traffic congestion, especially in the southern part of Connecticut, according to Dennis Jolly, supervising planner for the Department of Transportation (DOT) in Newington.

Five years ago, the state implemented a service to encourage teleworking. It gives state support for seven independent contractors to provide free consulting and training to employers—public and private—who are interested in teleworking. “We’ll provide any service they need, other than legal, to help them decide about teleworking,” Jolly explains.

The state recently boosted the annual budget of the program, known as Telework Connecticut, by 25 percent to \$500,000. Currently, 126 employers participate in the program, including the cities of Stamford and Plainville, representing about 3,500 teleworkers.

Spending half a million dollars a year for teleworking may prove to be a bargain. “Instead of spending hundreds of millions of dollars on a new highway, [the DOT] is trying to reduce the number of people on the road through teleworking,” says James Lush, Telework Connecticut project manager based in Hamden. “It’s one sure way to get cars off the road.” He estimates that mid-size employers receive about \$25,000 to \$30,000 worth of free consulting services.

Most clients use the services to transform ad-hoc teleworking into a formal program. “We begin by helping employers define their telework goals,” Lush says. Some see opportunities to save money, others want to retain valuable employees and still others expect productivity gains. When the goal is productivity, Lush works to dampen expectations, at least in the beginning. “It may take two to three months after a person begins to telework before all the components fit together” and greater efficiency kicks in, he explains.

Once the consultants help an employer design a formal policy, the program’s technology specialists step in to analyze the computing and telecommunication needs at both the headquarters and field locations. The

main questions the specialists try to answer are: Does the employer have the right infrastructure for teleworkers to achieve increased productivity? Equally important, can that be done securely? In addition to establishing broadband accounts and virtual private networks (VPNs), employers should consider subscribing to telephony services that offer home offices the same voice mail and call-forwarding features as the main office.

At this point, negotiations begin between employers and teleworking candidates over who pays for what office equipment. “If the teleworker deals with sensitive or confidential information, it behooves the employer to provide all the computing equipment and connectivity

one day a week to cut down on Phoenix area smog. Recently, the state upped that goal to 20 percent. At the same time, teleworking is becoming a key tool for the state to attract and retain employees.

With current state-employee turnover rates at 14 percent, Arizona is paying about \$40 million per year in human resource expenses to maintain appropriate staffing levels, says John Corbett, telework programs administrator for the state’s Department of Administration in Phoenix. “If we could avoid one-in-ten voluntary turnovers by being more flexible, it would represent a significant saving,” he says.

The state doesn’t have hard numbers showing how effective teleworking is in reducing turnover, but Corbett believes

## Defining Teleworking

**What it is:** It’s a formal program that allows certain employees to work one day or more a week in a home office.

**Why it’s important:** Studies show that when it’s done correctly, teleworking can increase employee productivity and loyalty, while significantly decreasing real estate costs, employee turnover, absenteeism, traffic and pollution.

**Who will benefit:** State and local governments that need to reduce expenses and attract talent, as well as workers who need flexibility in balancing work and personal lives.

**Where the danger lies:** Ad-hoc programs leave employers vulnerable to discrimination and workers’ compensation complaints.

services,” Lush says. “Then the employer is in a position of control and can say, ‘You must maintain complete confidentiality in your home office, and no one else can use the computer for any reason.’ People who work from home for the first time don’t think about the fact that kids can get on the computer at night, download a virus and the next day everyone in the company is affected by it.”

Some employers even provide office furniture to ensure that workers use ergonomically correct equipment. This minimizes the chances of workers’ compensation complaints down the road.

The final step is to begin a pilot to help employers and employees work out job, technology or cultural difficulties. “We sit down, iron out the bumps in the road and then roll out teleworking to the rest of the workplace,” Lush says.

## Arizona Pioneers

In 1995, Arizona mandated that 15 percent of its state work force—about 3,300 workers—would telework at least

more teleworkers will translate into happier employees. “We have anecdotal stories from workers who were offered more [money] to jump ship but stayed because of teleworking,” he says.

Arizona plans to use teleworking to target its most productive and valuable employees by giving them greater flexibility in managing their work and family lives “before they begin looking for something more flexible elsewhere,” Corbett says. “We’re sitting in a calm sea, but right around corner is the tempest,” as improvement in the overall economy reduces the pool of available workers.

Before the “tempest” hits, Arizona will draw on the lessons it learned as a teleworking pioneer. State agencies start with a pilot project, which helps them set criteria for determining the best home-based candidates: primarily those whose jobs don’t require constant office interactions with co-workers and who excel at working independently. Few Arizona teleworkers work at home full-time, choosing instead to work

offsite only part of the week.

How state agencies outfit teleworkers with technology depends on individual needs. Some teleworkers need only a removable storage drive and disks to ferry files between home and office. Some get subsidies for broadband network connections so they can access office files as quickly as if they were onsite. Either way, they're required to install firewall and antivirus software, and a connection to protect their home-office computers and communications links.

Although Arizona has learned a lot from its long history with teleworking, some questions remain, including how to soften managerial resistance. "In the beginning, we thought acceptance was just a matter of letting them know what teleworking was, but education alone hasn't been enough," Corbett says. "Managers were not seeing what was in it for them as a business strategy, but instead saw telework as something they had to go along with."

Corbett's answer is to bring about cultural change among reticent managers by framing teleworking as part of a work-life balancing effort. "Initially, they say, 'This is just a touchy-feely thing to do; we don't manage people's lives,'" Corbett says. However, as family-friendly benefits become the norm, skepticism decreases. Eventually, teleworking "becomes a business decision," he reports.

### Just Do It

Because IT is at the heart of most teleworking arrangements, CIOs might cringe at the prospect of adding one more burden to their overworked staffs. But some believe a proactive approach can actually decrease support headaches.

Minnesota's Finley notes that teleworking is especially beneficial to technology workers, and points to people on her own staff as an example. "Programmers are well-suited to work from home," she explains, and they typically don't require help desk support when equipment misbehaves.

"If an organization is typical of many these days, it already has 'guerrilla teleworking'—teleworkers in place without a formal policy," says David Fleming, founder of Fleming LTD in Davis, Calif. This can create problems since informal policies that determine who gets to telework and how their home

offices are equipped can make employers vulnerable to discrimination and workers' compensation issues, he explains.

Fleming, who helped implement the state of California's first teleworking project in the 1980s, also warns that "formal" shouldn't mean "onerous." The California agencies that failed to implement effective teleworking programs often crafted overly restrictive policies, such as insisting that teleworkers stay in almost constant contact with skeptical supervisors to convince the supervisors that they were working. "No one wanted to telework under those conditions," he recalls.

In contrast, Minnesota has developed

broad teleworking guidelines for agency managers, but gives them the freedom to customize the policies to accommodate their department's needs. "Each agency uses its own discretion on how to handle home workers," Finley explains.

Consultant Gordon offers one last piece of advice for state and local governments considering a teleworking program. "Just jump in and do it," he urges. "You can benchmark telework in pilot projects for the next 10 years, but the only way to know how effective it will be is to try it. We know teleworking works. The only question is how to tailor it for your individual organization." ♦

## The Well-Equipped Home Office

With costs declining for newer technologies, such as broadband communications and notebook computers, the home office is no longer the final resting place for obsolete equipment. Here's a technology checklist for both a full-service home office and for the back office, based on the advice of Richard Bassett, senior IT consultant with Business IT Strategies in North Haven, Conn., who is affiliated with Telework Connecticut. Whenever possible, he recommends standardizing on specific vendors and models to make support easier for the IT staff.

### Home Office

**PC:** Can be a notebook or desktop model, depending on whether the teleworker travels extensively or alternates between home and office. Cost: \$800 to \$1,200 for desktops; \$1,000 to \$2,000 for notebooks.

**Multifunction device:** Handles faxing, printing and copying in one unit. Cost: \$200 to \$600.

**Network connectivity:** It's usually handled by an Internet service provider. Where it's available, broadband is preferable to dial-up connections because the productivity gains make up for the higher monthly fees. Cost: \$20 a month for dial-up; \$30 to \$50 a month for cable or DSL (Digital Subscriber Line) broadband.

**Security:** Includes hardware and software firewalls to keep intruders out of home computers. Cost: \$50 to

\$75 for the software; \$70 to \$100 for the hardware.

**Antivirus software:** Filters out viruses from infected files or e-mail. Cost: \$30 to \$40 for standalone packages. (Check to see if the employer's corporate license applies to home offices.)

**Virtual private network:** Residing on home-office PCs and on back-office communications servers, VPN software secures messages transmitted over the Internet using passwords and data encryption. Though one of the most expensive technology components, VPNs are essential for workers who send and receive confidential information. Cost: \$15,000 to \$20,000 for a 10-user license.

**Remote access software:** Used by organizations with a few teleworkers and minimal security needs. Cost: \$200 for multi-user package.

### Back Office

**Telecommunication services:** Leased from phone companies, these services provide varying amounts of large-scale bandwidth for incoming teleworker connections. Cost: \$1,200 to \$1,500 per month for T-1 service, which can handle demand maximums of 1.5 megabits per second.

**Authentication server:** A second layer of security to confirm a teleworker's identity after passing the back-office VPN security checkpoint. It's often part of a network router. Cost: \$150 for 40 to 50 users.