

The Bottom Line on Telework

California Government Workforce

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Sacramento State University



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INTRODUCTION

State and local government employees are bummed out, burned out, and stressed out from the endless struggle of trying to do more with less. To make matters worse, more than half the state's most experienced people are moving toward the door to retirement. If California expects to attract a new generation of talented government leaders and staff workers it needs to find a new way of working, both figuratively and literally.

This report will show how telework can save government employers up to \$11,000 per part-time telecommuter per year. This new workplace strategy offers a relatively easy, inexpensive, and popular solution to some of government's most vexing problems such as:

- attracting and retaining talent
- reducing traffic congestion
- improving air quality
- reducing energy consumption
- reducing employee stress
- increasing morale

Thanks to advances in technology work no longer needs to be tethered to time or place. *Telework* allows substitution of technology for business travel in general, and *telecommuting* substitutes technology for commuter travel specifically. Thanks to these new ways of working, employers are slowly learning that when employees are not constrained by where and when work is done, they're more productive, more creative, and more successful.

In the 1970s Jack Nilles, a former NASA rocket scientist, turned his attention to solving the problem of traffic congestion and coined the terms *telework* and *telecommuting*. At the time, many predicted we'd soon see an end to the wasteful and inefficient exercise of moving millions of workers back and forth to work each day.

Those predictions, and many since, have failed to materialize. While research shows that about 50 percent of state and local government jobs are telework-compatible, only 5.3 percent of state workers and 2.5 percent of local workers consider home their primary place of work.^{1,2}

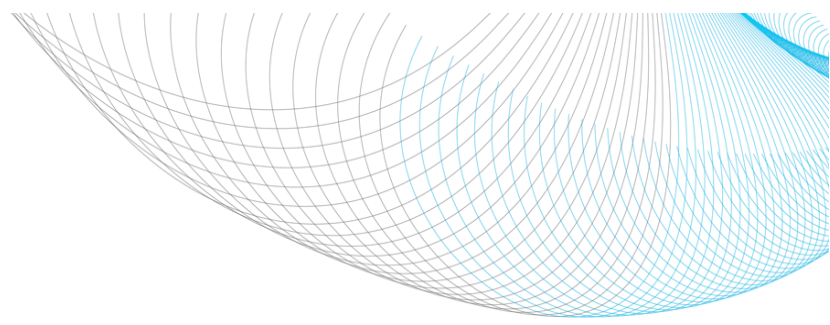
Thousands of organizations and millions of employees in a wide range of public and private sector jobs have already successfully adopted a wherever, whenever approach to work. They're proof that the biggest barrier to telecommuting—management mistrust—can and should be overcome because the bottom-line benefits are worth the effort. And those same organizations have perfected and made available “best practices” that use a combination of technological and cultural solutions to address the security, communications, collaboration, managerial, and social aspects of remote work.

Those leaders have shown that by offering workplace flexibility and measuring performance based on results rather than presence, they really can do more with less: less buildings, less pollution, less overtime, and less waste. And their employees can do more with less too—less stress, less distractions, and less driving.

While worries over weather calamities, earthquakes, the spread of disease, terrorism, rising fuel prices, transit strikes, and road closures often spike an interest in remote work, less transient issues are now driving more widespread adoption.

Talent shortages, changing workforce dynamics, and employee burnout—key drivers of workplace flexibility before the recession—are returning with a vengeance. Research by Gallup shows that 70 percent of the workforce is not engaged. As much as 20 percent are either wandering around in a fog, or actively undermining their co-workers' success.

The majority of Baby Boomers are at or near the highest rung of the career ladder they're likely to achieve. The raises, promotions, and accolades that once motivated them have been replaced with



thoughts of retirement, aging parents, mortality, and “what do I really want out of life?” AARP research shows that 70 percent want to continue to work, but they want to do it on their terms. Even now, many are eyeing self-employment as an option.

Gen X, the first latchkey kids, watched their workaholic parents climb the career ladder. They’re independent souls because they had to be. They learned the reality of employer loyalty from seeing their parents struggle through the layoffs of the early ‘80s—a lesson that’s been reinforced in recent years. They grew up with technology and they value freedom; and they want to do things their way.

Gen Y grew up questioning their parents; now they’re questioning their employers. They’re confident, tech-savvy, happy to communicate virtually and eager to be part of a team, but they’re not in it for the gold watch.

The message is clear. This is not your father’s workforce.

Telework isn’t ‘just’ an HR, IT, corporate real estate, or sustainability tactic. It’s much more. Best practices show that in order to maximize its potential, workplace flexibility needs to be part of an organization’s culture. It needs to be endorsed at the highest levels, supported by middle management, coordinated across functional areas, and integrated into everyone’s goals.

Winning employers have already taken steps to make work flexible; to manage their salaried, hourly and contingent workforce by what they do, not where, when or how they do it; and they’ve adopted the tools and technologies that make flexible work possible.

California is home to some of the worst traffic, natural disaster, sustainability, and budget challenges in the country. Telework offers a solution.

ABOUT THIS REPORT

While there are benefits associated with all forms of workplace flexibility, the focus of this paper is on regular home-based telecommuting. There are three reasons for this. First, home-based telecommuting is the only form about which government data is available. Second, while working in coffee shops, at telework centers, or other places is popular, home is by far the most common non-traditional workplace. And third, regular part-time telework offers the greatest benefits for all constituents and few of the drawbacks.

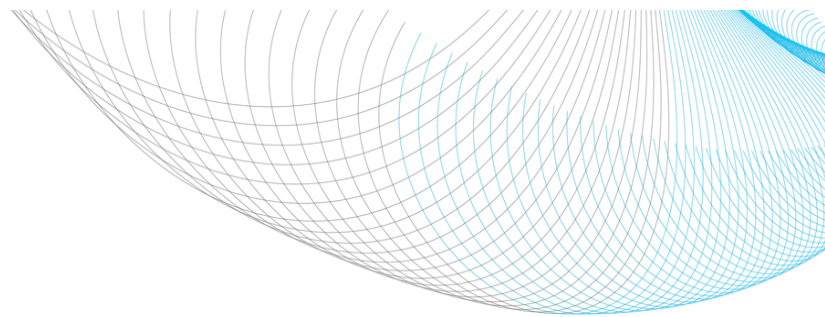
This paper is organized into three sections that summarize the qualitative and quantitative benefits of telecommuting for:

- Government agencies
- Employees, and
- the Community at large

The quantitative conclusions in this paper are based on a Telework Savings Calculator™ built by the [Telework Research Network](#), a consulting and research organization that specializes in evaluating the bottom-line impact of workplace flexibility for companies and communities.

Using the latest government data and assumptions culled from a synthesis of over 500 case studies, scholarly reviews, research papers, books, and other documents on telecommuting and related topics, the Telework Research Network has analyzed the economic, environmental, and societal potential of telecommuting for the US, the UK, and Canada. Their unique research has been cited in the *Wall Street Journal*, *Harvard Business Review*, *Inc.* magazine, and [scores of other publications](#).

Throughout this report, every attempt has been made to err on the side of cautious assumptions, rather than aggressive ones. Data was collected from the most respected sources and industry ex-



perts. Where possible, multiple sources were consulted to corroborate the assumptions.

The primary sources of data used in the development of the California Public Workforce Telework Savings Calculator™ include:

- American Community Survey / Census
- Bureau of Labor Statistics
- California Air Resources Board
- Booz Allen / GSA Telework Study
- US Bureau of Transportation Statistics
- US Environmental Protection Agency
- National Highway Safety Administration
- WorldatWork
- Reason Foundation
- California Telework Advisory Group

Telework Savings Calculator: General Assumptions

The following general assumptions provide the basis for the analysis that follows:

- ▶ Telecommuting frequency: average of 2 days per week ³
- ▶ Employees who want to telecommute: 79 percent ⁴
- ▶ Jobs compatible with telework: 51 percent of state government employees, 48 percent of local government employees ⁵



EMPLOYER BENEFITS

The primary financial benefits of telework for employers come from reduced real estate costs, increased productivity, and reduced absenteeism and turnover.

REAL ESTATE IMPACT

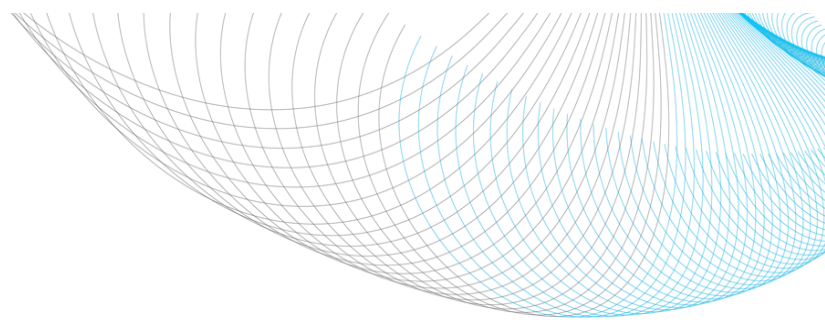
Traditional offices are expensive, inefficient, inflexible, and difficult to scale (particularly down). Telework programs can not only reduce the capital drain of owning or leasing a building, they can save on electricity, transit subsidies, parking lot leases, furniture, supplies, maintenance, security, janitorial, insurance, taxes, common area expenses, and other related costs.

In addition, telework can reduce the cost of complying with disability, environmental, and office safety regulations. And it can help agencies consolidate inefficient space.

Through desk sharing, office hoteling, and other changes to the office footprint, organizations have found they're able to save money and, at the same time, better address the needs of their workforce.

When asked to assess the lasting impacts of the recession, over sixty percent of respondents to a New Ways of Working (NewWOW.net) survey reported replacing assigned one-to-one workplace seats with alternative workspaces.

Videoconferencing, teleconferencing, remote desktop technologies, virtual training, and other remote collaboration technologies are changing the nature of work. The most progressive organizations are designing their workplaces to increase efficiency, and promote teamwork. For them, the traditional office is where people go to collaborate, and employees' home offices are where people go to concentrate and get things done.



“Walking around the offices at Sun Microsystems and seeing 70% of the desks and offices empty is what sold me on telework.”

- Scott McNealy, former CEO, Sun Microsystems

Industry Research on Real Estate Savings

- The US Patent & Trademark Office avoided \$11 million in new real estate expenses through telework and office hoteling. Over 80 percent of eligible staff telework telecommute.
- The Defense Contract Management Agency, plans to shed all but 1,000 of its almost 13,000 desktop computers over the next three years, for an estimated savings of \$5 million by 2014.
- Sun Microsystems reported saving \$68 million a year in real estate costs, \$3 million a year in reduced power consumption, and \$25 million a year in IT expenditures with flexible work options for 17,000 employees.
- McKesson Corporation’s telework program saves \$1 million a year in real estate costs.
- At Oracle BV, redesigned workspaces, hot-desking, and electronic access to documents improved interaction between staff and reduced space usage from 247 sq. ft. per employee to 140 sq. ft..
- Microsoft was able to accommodate 30 percent more people in the same amount of space through flexible workplace strategies.
- Hewlett Packard, through a combination of mobile work initiatives and space reconfiguration, has been able to drive office space utilization from 35 percent—not atypical in modern offices—to over 75 percent in just 3 years. They’re desk-sharing ratios range from between 2 to 1 and 20 to 1.
- DEGW, a worldwide workplace strategy consulting firm, reports that based on a survey of over 60,000 North American employees and their observations of thousands of workers, the average knowledge worker spends only about 35 percent of the time at their desk.

Telework Savings Calculator: Real Estate Assumptions

- ▶ Average office cost: \$6,803 per employee based on CA Telework Advisory Group data
- ▶ Real estate reduction: 20 percent for two-day-a-week telework based on U.S. GSA model
- ▶ Electricity savings: none assumed (extra home office energy usage is, however, shown as an offset to Employee Savings covered later in this paper)

The Bottom Line on Real Estate:

\$1,360 in annual savings per 2 day a week teleworker

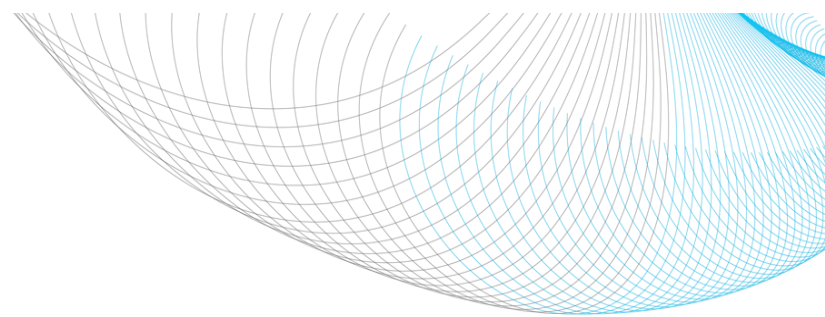
Government-wide savings: \$563 million a year

PRODUCTIVITY IMPACT

Lack of management buy-in is the most commonly cited obstacle to the adoption of telecommuting programs. It’s clear that the majority of managers feel that left unmonitored, employees will not work as hard as they otherwise would. The facts show just the opposite to be true.

Study after study reveals that people who work from home are more productive than their office counterparts. Contributing factors include:

- Fewer interruptions: Home-based workers are not distracted by the many time drains that take place in a traditional office: morning chatter, coffee breaks, long lunches, rumor mills, birthday parties, football pools, etc.
- More effective time management: E-mail and other asynchronous communications can be time-managed more effectively and are less apt to include non-work digressions.



- Feeling like a trusted employee: A sense of empowerment and commitment has consistently shown to be one of the highest contributors to employee job satisfaction.
- Flexible hours: For those who are able to flex their hours as well as their location, telecommuting allows them to work when they are most productive.
- Longer hours: Many employees work during the time they would have otherwise spent commuting. In fact, overworking is a significant problem.

Industry Research on Productivity

- A study of the return on investment from telework prepared by management consulting firm Booz Allen for the US General Services Administration estimated increased productivity among teleworkers at one hour per day.
- In a 2008 global survey of nearly 2,000 employees, Cisco Systems estimated they could achieve an annual increase in productivity of \$277 million through telework. They found:
 - their teleworkers spend 60 percent of time they would have otherwise spent commuting doing work
 - 69 percent of employees cited higher productivity when working remotely
 - 75 percent of telecommuters felt their ability to meet deadlines improved
 - 83 percent said their ability to collaborate and communicate with co-workers was the same as or better than being on-site
- A Basex survey of over 1,000 information workers concluded that workplace interruptions comprise 25 percent of their workday.
- A 2010 survey by TELUS Communications found that 56 percent of respondents thought the option to work flexibly would motivate them to work harder.
- Alpine Access, one of the largest all-virtual employers, attributes a 30 percent increase in

sales and 90 percent reduction in customer complaints to its home-based agents.

- Sun Microsystems (now part of Oracle), found that teleworkers spend 60 percent of the commuting time they saved performing work for the company.
- In an IBM study of more than 24,000 global managers, 80 percent agreed that productivity increases in a flexible environment.
- A Work+Life Fit / BDO Seidman survey of CFOs showed that 75 percent felt that flexible work increases productivity.
- Best Buy measured an average productivity increase of 35 percent through its flexible work program.

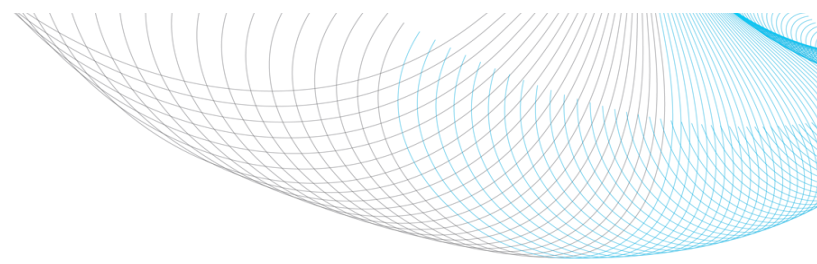
Telework Savings Calculator: Productivity Assumptions

- ▶ Productivity increase: 15 percent on telework days based Booz Allen / U.S. GSA report
- ▶ Average salary: \$76,862 for state government employees, \$77,442 for local government employees based on American Community Survey data for telework-compatible jobs
- ▶ Employee benefits overhead: 34.5 percent based on BLS Data

The Bottom Line on Productivity:

\$6,200 annual increase per 2 day a week teleworker

Government-wide savings: \$2.6 billion a year



ABSENTEEISM IMPACT

Unscheduled absences cost employers billions. They necessitate staffing redundancies, increase overtime costs, inconvenience coworkers and customers, impact morale, and reduce productivity.

Telecommuters are absent less often because they:

- Are less exposed to sick co-workers
- Are exposed to fewer occupational and environmental hazards
- Avoid driving—something OSHA considers to be the most dangerous part of an employee's day
- Continue to work when they're sick
- Return to work more quickly following pregnancy, surgery, or extended illnesses
- Are able to handle personal appointments without taking a full day off
- Have more time for exercise
- Eat better

Perhaps the most important reason they're absent less is that they are more satisfied with their job and therefore less likely to fabricate an illness.

According to the Conference Board of Canada, a global independent not-for-profit organization focused on helping businesses strengthen their performance and better serve society, absenteeism is at the highest level it's been in the 20 years they've been tracking it. Recession-related stress is likely the blame.

According to Towers Watson, a leading global professional services company, the link between healthy and productivity goes beyond the physical and mental health of individuals to creating a healthy work environment. They find that organizations with the most effective health and productivity programs experience:

- 11 percent higher revenue per employee

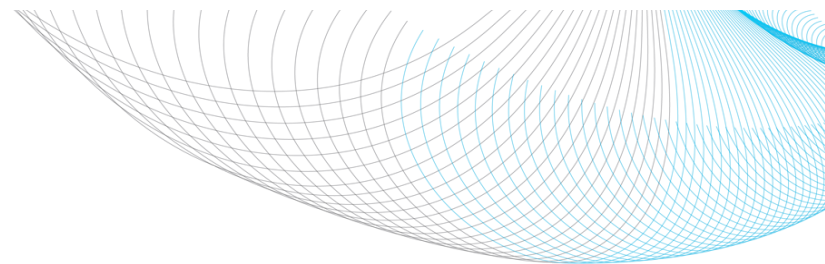
- Lower medical trends by 1.2 percentage points
- 28 percent higher shareholder returns

Towers Watson also found that excessive work hours (75 percent), lack of work/life balance (65 percent), and fears about job loss (64 percent) are the foremost sources of stress affecting organizations today.

The opposite of absenteeism, presenteeism is costly for organizations too. The people who drag themselves to the office only to make everyone else sick aren't doing anyone any favors. Studies show that the large majority of people go to work when they're sick because the company culture, benefits, or policies—perhaps unwittingly—encourage it.

Industry Research on Absenteeism

- Sick leave among state and local government employees is almost 70 percent higher than that of the private sector
- 78 percent of employees who call in sick, really aren't. They do so because of family issues, personal needs, and stress
- The US federal government's telework cost/benefit model estimates a 63 percent reduction in unscheduled absences per teleworker
- The federal government's telework program was originally put in place to avoid the spread of contagious disease
- Telework has proven to be the second most effective method of reducing absences; flexible scheduling is first
- Among those companies that have tried to reduce work-life conflict, 84 percent say it's had a positive impact
- A Wake Forest University study of over 3,000 employees showed that those with flexible schedules were less likely to have health problems that affect their job performance
- Companies with the most effective health and productivity programs have 1.8 fewer days absent per employee



"Until cable companies starts giving precise appointments (not 9am to 1pm), we will always have people sitting at home waiting on them. The choice is ours, we can have them productive on work or watching TV."

- John Sawislak, Senior Fellow at the Telework Exchange

Telework Savings Calculator: Absenteeism Assumptions

- ▶ Current absenteeism rate: 2.5 percent based on BLS data
- ▶ Annual cost per unscheduled absence per person: based on average daily compensation for local and state government telework-compatible jobs (American Community Survey)
- ▶ Average reduction in absenteeism: 4 days a year based on Booz Allen / GSA model

The Bottom Line on Absenteeism:

\$1,790 per telecommuter per year

Government-wide savings: \$740.7 million a year

ATTRACTION AND RETENTION IMPACT

The majority of state employees who hold managerial or higher positions will be eligible to retire in the next five years. Among them:

- 62 percent of Career Executives / Exempts
- 50 percent of Managers / Supervisors
- 35 percent of Rank and File

Retaining senior government talent is crucial to the knowledge transfer process.

The cost of replacing an employee extends far beyond the recruiting process; it includes separation

costs, temporary replacement costs, training costs, and lost productivity. An employee's exit can also lead to a loss of business, coworkers, and organizational memory. Telecommuting enhances attraction and retention because it:

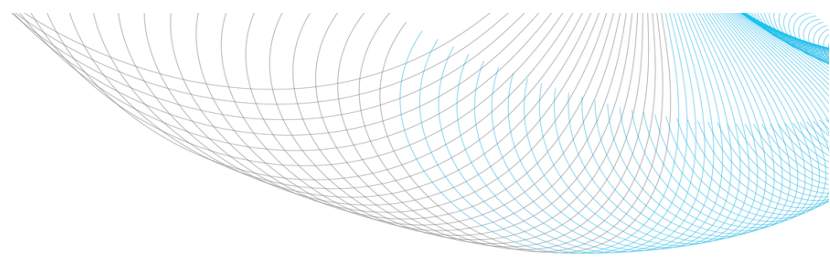
- Is among the top non-financial benefits desired by employees
- Expands the talent pool beyond geographic boundaries
- Provides access to disabled, rural, and other difficult to reach workers
- Offers alternatives that would have otherwise kept retirees, parents and senior caregivers out of the full-time workforce

Prior to the recession, being able to hire and retain good people was one of management's top non-financial concerns. As the recovery continues, retention and hiring problems will be exacerbated.

In a 2007 report, Deloitte predicted that the government sector would be particularly hard hit by talent shortages in the years ahead. "To become a choice employer among this emerging workforce, the public sector must appeal to a population insistent upon a sociable, flexible, purposeful, and technologically savvy work environment. Certain perceptions of government work, if not reversed, pose a major obstacle to attracting Gen Y into government. The image of the public sector as a slow-moving, bureaucratic monolith, juxtaposed against a fast-moving, anti-bureaucratic Gen Y, poses a significant challenge."

"In a bad economy, we can hire and retain good employees with little effort, but as the economy improves (and it always does), the first sign will be when we lose our good people. Flexible work rules allow us to keep our best people happy even as the competition for their services increases."

- John Sawislak, Senior Fellow at the Telework Exchange



Industry Research on Attraction and Retention

- Research by WorldatWork shows that 79 percent of employees say they would like to work from home, at least part of the time.
- In a 2011 survey of over 2,000 adults conducted by Mom Corps, more than 40 percent said they would take a pay cut in exchange for the opportunity to work from home.
- A study conducted by Deloitte at the peak of the recession found that nearly half of employees were either looking for a new job or planning to do so when the economy improved.
- In a Cisco survey of 2,600 worldwide employees, two out of three said they would take a job with less pay and more flexibility over a higher-paying job without it. Ninety-one percent of respondents said telecommuting was somewhat or very important to their overall job satisfaction.
- A WorldatWork survey found that 85 percent of employers say telework has a moderate to high impact on employee retention.
- Turnover among VIPDesk's home-based customer agents is less than 10 percent; compared to 100–150 percent typical in a traditionally staffed call center.
- Over two-thirds of Schering-Plough Corporation's telework program participants say that being able to telework has been a factor in their decision to stay with the company.
- In a Robert Half / Career Builder survey, 72 percent of employees said flexible work arrangements would cause them to choose one job over another; 37 percent specifically cited teleworking.
- That same Robert Half / Career Builder survey found over half of managers felt that Gen Y workers are more difficult to recruit and to retain but noted that they are particularly attracted to flexible work arrangements (ranked as 8 on a 10 scale for impact on overall job satisfaction).
- An AARP study found that 70 percent of Baby Boomers plan to work for pay after retirement by seeking flexible work arrangements and part-time

schedules that allow them to pursue other interests.

- A Cornell University reported that 71 percent of retired workers who later decided to go back to work originally retired because of a desire for more flexibility than their job offered.
- BLS data shows that 5.4 million Americans with at least some college education aren't working.
- More than 12 percent of the working age population is disabled. Accessible-Society.org reports that a full three quarters of those who are unemployed cite discrimination in the workplace and lack of transportation as the major factors that prevent them from working.
- In a nationwide survey, CDW found that forty-one percent of workers who have the option to telework are "very satisfied" with their jobs, compared to only 27 percent of those who are office-bound.
- WorldatWork and other workforce experts estimate that turnover costs and employer 75 percent of an hourly person's pay, and between 150 – 200 percent of an salaried person's pay.

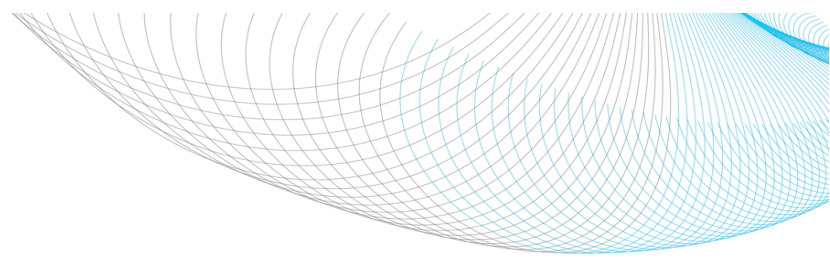
Telework Savings Calculator: Retention Assumptions

- ▶ Reduction in attrition: 15 percent based on a synthesis of a wide range of studies
- ▶ Existing voluntary turnover: 9.2 percent based on BLS data for state and local government jobs
- ▶ Cost of turnover: 138 percent of salary based on mid-point of WorldatWork estimates

The Bottom Line on Retention:

\$1,980 annual savings per 2 day a week teleworker

Government-wide savings: \$819 million a year



OTHER EMPLOYER BENEFITS

Employer benefits that have not been quantified in this report include:

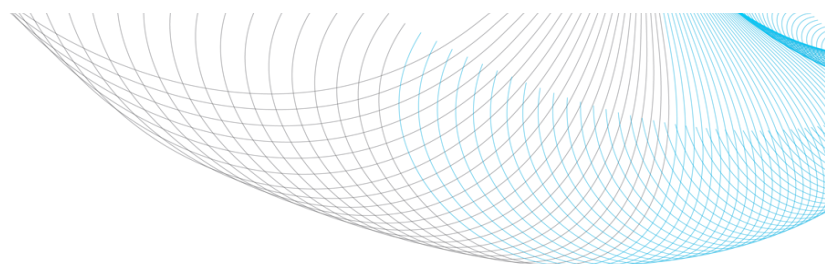
- Improved continuity of operations
- Reduced transit subsidies
- Avoidance of environmental sanctions
- Higher community citizenship scores for being environmentally and labor friendly
- Reduced overtime
- Improved customer service
- Reduced paper, travel, and technology costs
- Reduced ADA compliance costs
- Reduced need for overstaffing to accommodate peak loads
- More effective and less expensive 24/7 global coverage
- Avoidance of local labor burnout
- Ability to hire people without brick and mortar presence
- Reduced healthcare costs
- Reduced vehicle fleet

The Bottom Line
State and Local
Government
Annual Savings:

\$11,365 per 2-day-a-week teleworker

Government-wide: \$4.7 billion/year





EMPLOYEE BENEFITS

Employers aren't the only ones who benefit from telework. For employees, it saves them two of their most precious commodities, time and money.

A CDW study found the top reasons federal employees want to work from home are:

- Reduced commute (63 percent)
- Greater flexibility (49 percent)
- Greater productivity (29 percent)
- Saving money (28 percent)

EMPLOYEE FINANCIAL SAVINGS

In a Business Week survey conducted during the 2008 run up in fuel prices, 92 percent of employees said they were concerned with the high cost of fuel. Eighty percent of them specifically cited the cost of commuting to work. Seventy-three percent felt their employers should take the lead in helping them reduce their commuting costs. In the same survey, two-thirds said they'd take another job to ease the commute. At the time, fuel was more than a dollar a gallon cheaper than it is today.

Beyond the cost of gas, telecommuters save on vehicle wear and tear, parking, transit costs, food, clothing, and more.

Telework Savings Calculator: Employee Cost Savings Assumptions

- ▶ Gas cost: \$3.80 per gallon
- ▶ Gas usage based on EPA standards
- ▶ Parking costs: based on Colliers Parking Survey (high, mid, low)
- ▶ Food (net of food at home): based on BLS data (high, mid, low)
- ▶ Clothing: based on BLS data (high, mid, low)

- ▶ Distance to work: 32 miles round-trip based on Air Quality Management District data
- ▶ Workweeks per year: 46.6 based on California Telework Advisory Group data
- ▶ Auto costs (net of gas): based on IRS data
- ▶ Reduction in driving on telework days: 75% per Air Quality Management District data
- ▶ Breakdown of means of transportation to work (solo drivers, car/vanpoolers, public transit users, bikers, walkers, other): American Community Survey, California government worker data
- ▶ Cost of extra home office electricity (as a reduction in employee savings): based on data from the Global Environment and Technology Foundation

Employee Time Savings

In terms of time, twice weekly telework can save between 1 and 3 workweeks a year—time they'd have otherwise spent commuting.

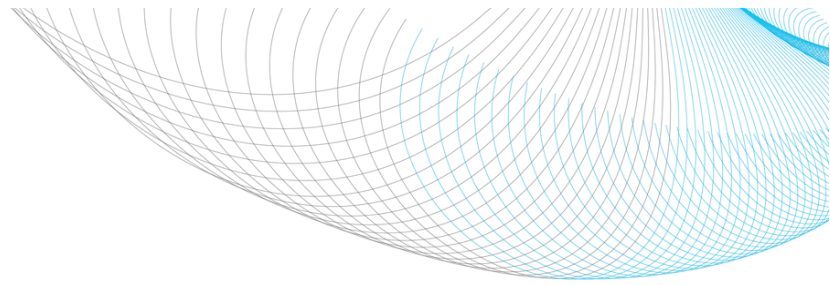
And the commute is likely to get worse. According to the Reason Foundation, if traffic continues to grow at the current pace over the next couple of decades, drivers in many of the nation's cities will be sitting in daily traffic jams worse than those that currently plague Los Angeles 8 hours a day. Their commutes will take almost twice as long.

Telework Savings Calculator: Employee Time Savings Assumptions

- ▶ Mean round-trip commute: 54 minutes based on American Community Survey data for California
- ▶ Equivalent days calculation based on 8-hour days

OTHER EMPLOYEE BENEFITS

Beyond the employee savings we've quantified in this paper, many employees can save on:



- Daycare/eldercare—particularly for those who are able to adjust their hours around those needs
- Serendipity purchases
- Office gifts and kitties
- Vehicle insurance
- Healthcare costs
- Other office-related incidentals

In addition, some may qualify for home office deductions. And some may even be able to relocate to less expensive communities or avoid selling their real estate at distressed values in order to take a job in a new community.

The Bottom Line on Employee Savings:

\$1,850 to \$4,500 in annual savings per 2 day a week teleworker per year

8 workdays a year in time they'd have otherwise spent commuting

Workforce-wide savings: \$1.1 billion (based on mid-level savings)

COMMUNITY BENEFITS

In his book, *A Thousand Barrels a Second: The Coming Oil Break Point and the Challenges Facing an Energy Dependent World* (McGraw-Hill 2007), Peter Tertzakian, Chief Energy Economist & Managing Director at ARC Financial Corporation writes: “Right now, the only thing anyone cares about is the rising price of energy; but soon we’ll be worried about potential changes to our lifestyles, the trade-off between cheap energy and clean energy, the necessity of building new refineries and power plants in our backyards, an even the impact on nation secu-

rity. Our birthright of abundant, reliable energy is coming to an end.”

“Expanding performance-based telework will save taxpayer money, ease traffic congestion, save energy, and help us clean our air,” says Auburn City Council member, Kevin Hanley. “Implementing a smart telework policy is indispensable in getting California on the comeback trail.”

Telecommuting can reduce our energy usage, greenhouse gases, and traffic congestion and provide a significant savings to society.

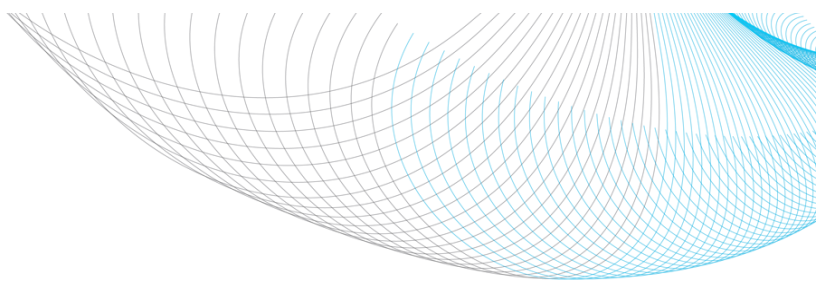
Telework Savings Calculator: Energy, Greenhouse Gas (GHG), and Air Quality Improvement Assumptions

- ▶ Gas savings: as described in the Employee Benefits section
- ▶ Trip reduction: based on Air Quality Management District data applied to breakdown of CA government employee means of transportation to work (per American Community Survey)
- ▶ Imported oil cost = \$100/barrel
- ▶ GHG calculations based on EPA standards
- ▶ Air Quality improvements based on California Air Quality Board standards applied to breakdown of CA government employee means of transportation to work (per American Community Survey)
- ▶ Note: U.S. GHG reduction stated in million metric tons (MMT)

TRAFFIC & ACCIDENT IMPACT

According to TrafficSafety.org, traffic accidents cost the nation \$60 billion a year and result in 3 million lost workdays. More than a quarter of accidents occur during the commute to and from work, making it the most dangerous part of an employee’s day.

Traffic congestion stresses drivers and reduces their productivity by forcing them to leave more time for



travel rather than risk being late. It reduces the reliability of transport, which can impact an organization's inbound and outbound shipments. It makes employers located in high traffic areas less attractive to employees. It increases idling, which contributes disproportionately to pollution. And it increases highway maintenance costs.

At the extreme, traffic congestion can even cause businesses to opt for more commuter-friendly locations—a substantial cost to the losing economy.

With traffic congestion comes accidents, the cost of which doesn't stop at the repair shop. Other costs to both consumers and the economy include property damage, hospital and emergency care, police, fire, ambulance, tow trucks, out of pocket costs, and increased insurance premiums.

Fortunately, lowering traffic volume has a multiplicative impact on congestion. According to a study by Confederation of British Industry, a mere five percent decline in traffic volume can cut time lost in congestion by as much as 50 percent.

Telework Savings Calculator: Traffic and Accident Assumptions

- Accident incidence and costs: based on Department of Transportation and Federal Highway Administration Standards

OTHER COMMUNITY BENEFITS

Beyond the community benefits quantified in this report, widespread telecommuting could:

- Increase the life of infrastructure including roads and transit
- Improve emergency responsiveness
- Reduce road rage
- Reduce overcrowding
- Revitalize cities by reducing traffic
- Increase productivity by reducing travel times

- Provide portable work options for military families
- Reduce the offshoring of jobs and “homeshore” some that have already been lost
- Raise the standard of living in rural and disadvantaged areas
- Help bedroom communities retain the commerce that would otherwise be lost to employer communities
- Reduce terrorism targets of opportunity
- Provide employees access to jobs that would allow them to maximize their potential
- Promote inbound talent migration without adding to local population
- Further reduce travel through widespread use of virtual technologies
- Increase workforce mobility.

Annual Bottom Line on Community Savings:

\$73 million in accident related costs

1.8 million barrels of oil valued at \$181 million

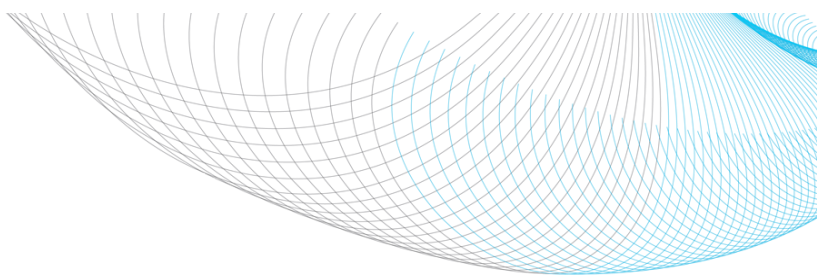
718 million vehicle miles not traveled

53 million fewer trips

330,000 tons of greenhouse gases (equivalent to 60,000 cars)

3,870 tons of air pollutants a year

\$253 million in total community savings



THE BOTTOM LINE

The bottom line on employer savings from 2 day a week telework by those state and local government employees with compatible jobs would total over \$4.7 billion a year (see Table 1).

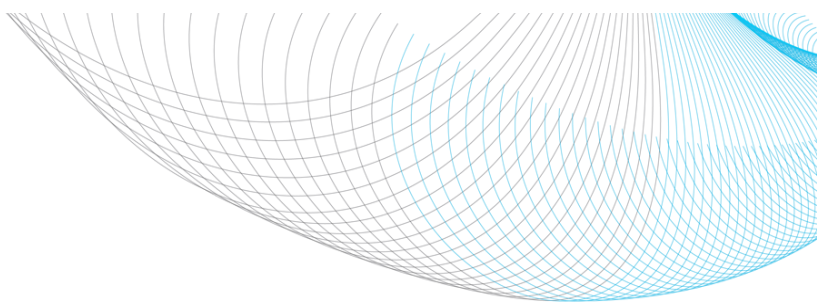
The employee teleworkers would collectively save another \$1.1 billion a year.

All that together with the savings from traffic accidents and oil imports, would total over \$6 billion a year.

The greenhouse gas impact would equate to taking over 40 percent of Sacramento's solo commuters off the road.



Employers	State	Local
Real Estate	\$168 M	\$395 M
Productivity	\$765 M	\$1.8 B
Absenteeism	\$219 M	\$521 M
Turnover	\$243 M	\$576 M
Total	\$1.4 B	\$3.3 B
Employees	State	Local
Total	\$340 M	\$800 M
Community	State	Local
Oil Imports	\$48.7 M	\$132 M
GHG (MMT)	89,000	241,000
Pollutants (tons)	1,046	2,820
Trips	14.4 M	38 M
Traffic Accidents	\$19.6 M	\$53 M
Total	\$68.3 M	\$185 M
Total Impact	\$1.8 Billion	\$4.3 Billion



SUMMARY

Telework offers a relatively simple, high return-on-investment solution to some of the state's most critical problems:

- Workforce planners see telecommuting as a way to mitigate the “brain drain” effect of retiring Baby Boomers.
- Human resource professionals see it as a way to recruit and retain the best people.
- Work-life experts encourage it as a way to address the needs of families, parents, and senior caregivers.
- Employees desire it because it saves time and money, and improves the quality of their lives.
- Baby Boomers see telework as a flexible alternative to full retirement.
- Millennial workers appreciate it as a way to work on their own terms.
- Disabled workers, rural residents, and military families find it an answer to their special needs.
- Environmentalists applaud it because telecommuting can significantly reduce greenhouse gases and energy usage.
- Financial managers endorse it for its cost savings and increased productivity potential.
- Urban planners see it as a strategy to fill the growing gap between transportation system demand and supply.
- Governments see it as a way to reduce highway wear and tear and alleviate the strain on the nation's transportation infrastructure.
- Organizations rely on it to ensure continuity of operations in case of a disaster or pandemic.

FROM THE EXPERTS

“Other than a stapler and paper clip, hardly anything about the way work gets done in today's offices is the same as it was ten, twenty or even fifty years ago – except for the office itself,” says telework expert Gil Gordon. “The computing and telecommunications revolution we all now take for granted has taken place in offices that are largely unchanged from a century ago. The lighting is better now and the furniture is more comfortable, but most organizations are still bringing all the office workers to the office most if not all of the time. How archaic! It's time to finally rethink the “where” of office work just as we have done with the “how” of office work. Today's government and private-sector office work in so many organizations is running like a sports car with the parking brake on: all that horsepower can't produce the results needed with the drag of the same time-same place office mentality.”

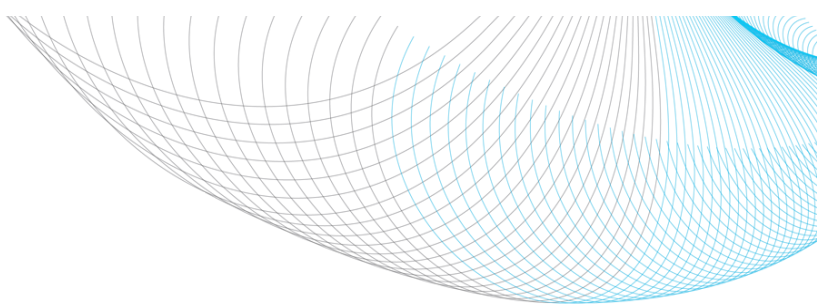
- Gil Gordon, Gil Gordon Associates

“Whether employers want to admit it or not, the nature of work has already changed and the genie is not going back in the bottle. If employers expect to compete in the years ahead, they need to see work as verb, rather than a noun.”

- Michael Dziak, COO, e-Work.com

“Time and time again leading organizations have demonstrated that telework is an effective operating model that drives direct improvements in employee efficiency and helps slash operational costs. State and Federal Agencies are being asked to achieve these same outcomes but are forced to use a 19th century operating model. The result is far too often reliance on cost saving measures that have significant side effects and negative consequences (furlough days, employee layoffs, and abandoning critical programs). Telework can deliver immediate results for the State, for employees, and for the environment, without the morning-after headache.”

- Ian Gover, President & CEO, Better Workplace



"The savings are real, the business model for telework is proven. My company alone realized over a billion dollars in savings. It's important to note that it is not an all or nothing proposition. You may have some workers who only telework one day a month, others a couple times a week; the important thing is to find the right balance for each individual and the needs of the organization. At Sun, we found that morale and retention were higher with telework users and that we had higher productivity from them. The dirty little secret is that they worked more productive hours and were happier and it was less expensive to support them."

- Scott McNealy, co-founder and former CEO of Sun Microsystems

"We've repeatedly proven that it is possible, even desirable to have successful organizations whose employees are scattered around the countryside. Technology isn't the problem (if it ever was). So why do we still stick to the old ways? Because many of us are still not sure how to get from that traditional, tense, irritable and frustrated state to a new relaxed, pleasant and self-fulfilled existence. Change is scary. So here we are, still making dumb trips."

- Jack Nilles, president of JALA International (quote from the foreword to *Undress For Success—the Naked Truth About Making Monday at Home*.)

"...here's a deceptively simple action item to put on your agenda for business growth, working families and a green future: Make it the norm for everyone to work at home at least one day a week. That single step could raise productivity, save energy, decrease pollution, reduce traffic congestion, cut household expenses, increase quality of family life, and keep educated women in the workforce."

- Rosebeth Moss Kanter, Ernest L. Arbuckle Professor, Harvard Business School

"In a knowledge worker economy, we need to focus on outcome measures of productivity, not attendance or even output."

- John Sawislak, Senior Fellow at the Telework Exchange

"If you pick the right people and give them the opportunity to spread their wings—and put compensation as a carrier behind it—you almost don't have to manage them."

- Jack Welch, former CEO of GE

"Even though we propose results-based management as an innovation of the last decade or so, it seems to me that results have always been the bottom line. Somewhere along the way we started talking about time—desk-time, face-time, full-time, over-time, as the measurement of what we accomplish and where we accomplish it."

"I am a proponent of flexible and effective workplaces because I believe excellence in management stems from trusting and empowering each person within an organization to do their job to the best of their ability."

- Patricia Kempthorne, Founder/Executive Director, Twiga Foundation, Inc.

"Management by walking around is fine for crumbly organizations that don't trust their employees, but good companies work with their people to establish goals, they give them the tools they need to meet those goals, and then they get out of their way."

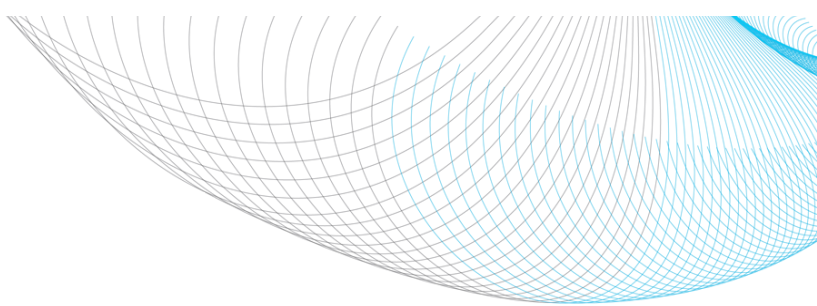
- Jack Nilles, JALA and the father of telecommuting

"Supervisors and team leaders may have difficulty figuring out how to manage employees when they can't see them. That's why a focus on performance outcomes is critical. Detail what is expected of your staff—work products, availability, communication procedures—and hold them accountable wherever they are—at the office, the client's office, the airport, the beach or at home."

- Judy Casey, Director at Work and Family Researchers Network

"Telework forces managers to focus on what's important - efficient and effective work, no matter where it takes place."

- Monica Babine, Senior Associate, Program for Digital Initiatives, Washington State University Extension & College of Liberal Arts



ABOUT THE TELEWORK RESEARCH NETWORK

This report was prepared by Kate Lister and Tom Harnish from the Telework Research Network, a consulting and research firm based in San Diego, California.

The company specializes in evaluating the business case for telework and workplace flexibility. They have synthesized over 500 case studies, research papers, and other documents on the topics. And they've conducted interviews with the largest and smallest virtual employers and their employees, telework advocates and naysayers, top researchers, leaders of successful telework advocacy programs, and venture capitalists who have invested in the remote work model. Their research has been quoted in *he Wall Street Journal*, *Harvard Business Review*, *Inc.* magazine and scores of other publications.

Frustrated by organizational reluctance to initiate workplace flexibility, Lister and Harnish co-authored a popular press book, *Undress For Success—The Naked Truth About Making Money at Home* (Wiley, 2009), to help employees to negotiate, find, or create their own home-based work.

The principals of the Telework Research Network are available for consulting and research projects, custom telework and flexible work modeling for companies and communities, branded web-based telework and flexible work savings calculators, white papers, and public or virtual appearances.

RELATED WHITE PAPERS INCLUDE:

- The State of Telework in the U.S. (April 2011)
- Workshift Canada—The State of Telework in Canada (April 2011)
- The Shifting Nature of Work in the UK—The Bottom Line Benefits (March 2011)

- Results-Based Management—The Key to Unlocking Talent and Increasing Productivity (September 2010)
- Telecommuting: The Bottom Line Impact (US) (May 2010)

For more information visit the [Telework Research Network website](#), or email [Kate Lister](#)

*It's time to make the road less traveled
the way to work.™*

ENDNOTES

¹ U.S. Department of Labor, 2009 Report to Congress shows 61 percent of federal employees hold telework-compatible jobs. The Telework Research Network estimates that based on an agency by agency assessment of jobs, 48 percent of local government and 51 percent of state government jobs in California are telework-compatible. This compares to the overall non-self-employed population compatibility rate of 45 percent for the U.S. total workforce.

² American Community Survey, 2009, CA state workers who worked at home the majority of the time.

³ a) BLS Work at Home Special Report (2004) showed average of 2.4 days a week; b) Working at home: An update, Perspectives on Labor and Income, Statistics Canada, June 2007. In 2005, teleworkers worked at home an average of 17 hours a week. c) chose 2 days a week because at lower frequencies, the opportunity for financial savings are minimal.

⁴ a) WorldatWork.org: 2009 Telework Trendlines shows 79 percent of employees say they would telework if allowed b) 2010 Federal Employee Viewpoint Survey showed only 12.3 percent of employees chose not to telework.

⁵ Telework Research Network estimate based on agency by agency analysis