# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>About This Report</td>
<td>5</td>
</tr>
<tr>
<td>Employer Benefits</td>
<td>7</td>
</tr>
<tr>
<td>- Productivity Impact</td>
<td>7</td>
</tr>
<tr>
<td>- Industry Research on Productivity</td>
<td>7</td>
</tr>
<tr>
<td>- Productivity Assumptions</td>
<td>8</td>
</tr>
<tr>
<td>- Productivity Savings Results (Table 2)</td>
<td>8</td>
</tr>
<tr>
<td>- Real Estate Impact</td>
<td>8</td>
</tr>
<tr>
<td>- Industry Research on Real Estate Savings</td>
<td>10</td>
</tr>
<tr>
<td>- Real Estate Assumptions</td>
<td>10</td>
</tr>
<tr>
<td>- Real Estate Savings Results (Table 4)</td>
<td>10</td>
</tr>
<tr>
<td>- Absenteeism Impact</td>
<td>10</td>
</tr>
<tr>
<td>- Industry Research on Absenteeism</td>
<td>12</td>
</tr>
<tr>
<td>- Absenteeism Assumptions</td>
<td>12</td>
</tr>
<tr>
<td>- Absenteeism Savings Results (Table 6)</td>
<td>12</td>
</tr>
<tr>
<td>- Attraction and Retention Impact</td>
<td>12</td>
</tr>
<tr>
<td>- Industry Research on Attraction and Retention</td>
<td>14</td>
</tr>
<tr>
<td>- Attraction and Retention Assumptions</td>
<td>15</td>
</tr>
<tr>
<td>- Turnover Savings Results (Table 7)</td>
<td>15</td>
</tr>
<tr>
<td>- Other Employer Benefits</td>
<td>15</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>15</td>
</tr>
<tr>
<td>- Time Savings</td>
<td>16</td>
</tr>
<tr>
<td>- Employee Time Savings Assumptions</td>
<td>18</td>
</tr>
<tr>
<td>- Employee Time Savings Results (Table 10)</td>
<td>18</td>
</tr>
<tr>
<td>- Gas Savings</td>
<td>18</td>
</tr>
<tr>
<td>- Employee Gas Savings Assumptions</td>
<td>19</td>
</tr>
<tr>
<td>- Other Work Expense Impact</td>
<td>19</td>
</tr>
<tr>
<td>- Employee Savings Assumptions</td>
<td>19</td>
</tr>
<tr>
<td>- Employee Savings Results (Table 12)</td>
<td>19</td>
</tr>
<tr>
<td>Community Savings</td>
<td>20</td>
</tr>
<tr>
<td>- Oil Impact</td>
<td>20</td>
</tr>
<tr>
<td>- Energy Savings Assumptions</td>
<td>20</td>
</tr>
<tr>
<td>- Community Gas / Oil Savings (Table 13)</td>
<td>20</td>
</tr>
<tr>
<td>- Greenhouse Gas (GHG) Impact</td>
<td>20</td>
</tr>
<tr>
<td>- Greenhouse Gas Savings (GHG) Assumptions</td>
<td>20</td>
</tr>
<tr>
<td>- Greenhouse Gas Savings Results (Table 14)</td>
<td>20</td>
</tr>
<tr>
<td>- Traffic &amp; Accident Impact</td>
<td>20</td>
</tr>
<tr>
<td>- Traffic and Accident Assumptions</td>
<td>21</td>
</tr>
<tr>
<td>- Traffic and Accident Savings Results (Table 15)</td>
<td>21</td>
</tr>
<tr>
<td>- Healthcare Costs</td>
<td>21</td>
</tr>
<tr>
<td>- Other Community Costs</td>
<td>22</td>
</tr>
<tr>
<td>The Total Impact</td>
<td>23</td>
</tr>
<tr>
<td>Who's Teleworking and Who Could</td>
<td>23</td>
</tr>
<tr>
<td>Summary</td>
<td>24</td>
</tr>
<tr>
<td>About</td>
<td>25</td>
</tr>
<tr>
<td>- Telework Research Network</td>
<td>25</td>
</tr>
<tr>
<td>- WORKshift Calgary</td>
<td>26</td>
</tr>
<tr>
<td>Endnotes</td>
<td>27</td>
</tr>
</tbody>
</table>

This report was prepared by the Telework Research Network for WORKshift Calgary. © 2011 Telework Research Network
“Seeing this impressive data compiled into one concise document has convinced us that it’s necessary, more than ever, to work within our communities and organizations to encourage adoption of these practices in a very meaningful way. This paper not only clearly supports the bottom-line benefits for the commuter, it hits employers over the head with supportive facts they can no longer ignore. Every commuter in Canada should be sitting in their boss’s office tomorrow morning with this paper as a discussion point.”

—Robyn Bews, Program Manager, WORKshift
INTRODUCTION

This report will show how part-time telecommuting by the 4.3 million Canadians with compatible jobs and a desire to work from home could have a bottom line impact of over $53 billion per year. An employer with 250 telecommuters, for example, would save over $3 million per year (see Table 1).

<table>
<thead>
<tr>
<th>Participants</th>
<th>1</th>
<th>250 Canada (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>$10,037</td>
<td>$2,492,146</td>
</tr>
<tr>
<td>Employee</td>
<td>$1,939</td>
<td>$484,738</td>
</tr>
<tr>
<td>Community</td>
<td>$132</td>
<td>$32,940</td>
</tr>
<tr>
<td>Overall</td>
<td>$12,108</td>
<td>$3,009,825</td>
</tr>
</tbody>
</table>

The energy and environmental benefits would include a reduction in greenhouse gases equivalent to taking a third of Montreal solo-drivers out of the commute and an annual savings of 389 million litres of gasoline.

Thanks to advances in technology, work no longer needs to be tethered to time or place. Commonly known as telework—any substitution of technology for business travel, or telecommuting—substitution of technology for commuter travel, employers, employees and communities are slowly learning that when they are not constrained by where and when work is done, people are more productive, more creative, and more successful.

Much has happened since the 1970s when Jack Nilles, a former rocket scientist who turned his attention to solving the problem of traffic congestion, coined the terms telework and telecommuting. At the time, many predicted we’d soon see an end to the daily grind of moving the worker to the work.

Those predictions, and many since, have failed to materialize. While the research conducted for this paper shows that 44 per cent of Canadian jobs are telework-compatible, only three per cent of the population considers home their primary place of work. Another nine per cent work from home as part of their regular job on an occasional basis. Yet, as far back as 2001, 40 per cent of the workforce reported occasionally working from home, although not necessarily on a paid basis. In other words, even a decade ago 40 per cent of the population held jobs that could, at least in part, be done at home.

Thousands of companies and millions of employees in a wide range of industries across the globe have already successfully adopted a wherever, whenever approach to work. They are proof that the traditional barrier to telework, management mistrust, can and should be overcome because the bottom-line benefits are worth the effort. And those companies have led the way by perfecting “best practices” that address the security, communications, collaboration, managerial and social aspects of remote work with a combination of technological and cultural solutions.

These leaders have learned that by offering workplace flexibility and measuring performance based on results rather than presence, they can do more with less: less buildings, less pollution, less overtime and less waste. And their employees are doing more with less too: less stress, less distractions, and less commuting.

While worries over weather calamities, the spread of disease, terrorism, rising fuel prices and road closures often spike temporary interest in remote work, less transient issues are now likely to drive more widespread adoption.

Talent shortages, changing workforce dynamics and employee burnout, key drivers of workplace flexibility before the recession, will return with a vengeance. Research by Gallup shows than 70 per cent of the workforce is not engaged. They’re either wandering around in a fog, or actively undermining their co-workers’ success. They’re burned out, disenfranchised and over 80 per cent are ready to jump ship.

The majority of Baby Boomers are at or near the highest rung of the corporate ladder they’re likely to achieve. The
raises, promotions, and accolades that once motivated them have been replaced by thoughts of retirement, aging parents, mortality and “what do I really want out of life?” Though 70 cent want to continue to work, they want to do it on their terms. Many are eyeing self-employment as an option.

Gen X, the first latchkey kids, watched their workaholic parents climb the corporate ladder. They’re independent souls because they had to be. They learned the reality of employer loyalty from the layoffs of the early 80’s. They grew up with technology. As a result, they value freedom; they want to do things on their terms.

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

The message is clear. This isn’t your father’s workforce. Winning companies understand the transformation and cultural changes demanded. They’ve 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. Those that haven’t are, or soon will be, scratching their heads and wondering where their best people went.

“With Canadian cities struggling to keep up with infrastructure costs, now is the time to consider innovative and modern approaches to addressing transportation and transit issues,” says Alderman Diane Colley-Urquhart (Calgary). “WORKshift, a federally funded program, led by Calgary Economic Development, demonstrates the power of innovation in changing the way we look at transportation and the way we get to work. One key way we can start to tackle these issues is to replace unnecessary commutes with a commute on the information highway.”

**About This Report**

While all forms of telework have their benefits, the focus of this paper is on regular telecommuting among the employee population, not those who work from home as self-employed business owners. There are three reasons for this. First, home-based telecommuting has been more extensively studied than other forms of telework such as working in coffee shops, on the road, at client offices and elsewhere. Second, it’s the category of telework on which the majority of the government data is collected. And third, by replacing the daily commute, home-based work offers the greatest benefits for all constituents.

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

- Organizations
- Employees
- Communities and the environment

A final section offers insight into the nature of existing telecommuters.

The quantitative conclusions in this paper are based on a Telework Savings Calculator™ built by the Telework Research Network, a U.S.-based 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 global 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 U.S., the UK, and now 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 conservative, rather than aggressive, assumptions. Data has been collected from the most respected sources and industry experts. Where possible, assumptions have been weighted based on Canadian data, and global sources have been used to corroborate the assumptions.

The primary sources of data used in the development of the Canadian Telework Savings Calculator™ are:

- AON Associates
- Canada Department of Labour
- Canadian Automobile Association
- Canadian Chamber of Commerce
- Cisco
- EKOS Research Associates
- Gallup
- Life Balance International
- New Ways of Working
- Public Health Agency of Canada
- Statistics Canada
- The Conference Board of Canada
- Toronto Board of Trade
- Towers Watson
- Transport Canada
- US Bureau of Transportation Statistics
- US Environmental Protection Agency
- US General Service Administration
- Workopolis
- WorldatWork

The authors would like to thank the following for their contributions and support:

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- Cisco Systems Inc.
- Colliers International
- Confederation of British Industry
- Councillor Maria McRae (City of Ottawa)
- CresaPartners, LLC
- DEGW
- Deloitte Touche Tohmatsu Limited
- Dr. Bob Schulz, University of Calgary
- GoROWE
- InnoVisions Canada
- Jack Nilles, JALA International
- M.G. Lang and Associates
- Mike Savage, Member of Parliament (Dartmouth-Cole Harbor)
- Peter Tertzakian
- New Ways of Working
- TELUS Communications, Inc.
Telework Savings Calculator: Assumptions

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

• Telecommuting two days per week on average
• Forty-three per cent of the workforce could work from home at least part of the time based on an analysis of the labor force composition
• Seventy-nine per cent of the workforce would do so if given the opportunity based on research from WorldatWork

**Employer Benefits**

Employers can save over $10,000 per year for each two-day-a-week telecommuter. The primary financial benefits for employers come from increased productivity, reduced real estate costs and lower absenteeism and turnover.

**Productivity Impact**

Study after study show 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 is 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.

“For Canadian companies and for the health of the country, increasing productivity is especially important,” states a recent report from the Toronto Board of Trade. “Notwithstanding dismal results on housing and employment, U.S. cities outperformed all Canadian CMAs by wide margins last year.”

Among the 23 worldwide metropolitan areas chosen by the Toronto Board of Trade as benchmark regions, all of Canada’s provinces scored in the lower half of GDP per capita—a measure of productivity:

- Calgary $76,710
- Toronto $68,258
- Vancouver $53,410
- Montreal $49,848
- Halifax $48,896

Lack of management buy-in is the most commonly cited obstacle to the adoption of telecommuting programs. It’s clear managers fear that left unmonitored, employees will not work as hard as they otherwise would.

**Industry Research on Productivity**

In a 2008 global survey of nearly 2,000 employees, Cisco Systems, a multinational corporation that designs and sells consumer electronics, networking, voice, and communications technology and services, estimated they could achieve an annual increase in productivity of $277 million through telework. They found their telecommuters:

- Gave back 60 per cent of the time they would have otherwise spent commuting, doing work
- Sixty-nine per cent of employees cited higher productivity when working remotely
• Seventy-five per cent said their ability to meet deadlines improved.
• Eighty-three per cent said their ability to collaborate and communicate with co-workers was the same or better than being on-site.

Employees admit to wasting two hours a day (not including lunch and scheduled breaks).12

A 2010 survey by TELUS Communications, Inc., a Canadian company that provides a wide range of communications products and services including data, Internet protocol (IP), voice, entertainment, video and satellite TV, found that 56 per cent of respondents thought flexible work options would motivate them to work harder.13

Alpine Access, one of the US’s largest all-virtual employers, attributes a 30 per cent increase in sales and 90 per cent reduction in customer complaints to its home-based agents.14

Sun Microsystems, a computer hardware and software company now named Oracle America after acquisition by Oracle, found that teleworkers spend 60 per cent of the commuting time they save performing work for the company.15

A study of the return on investment from telework prepared by management consulting firm Booz Allen for the US General Services Administration reported an increase in productivity of one hour per day among teleworkers.16

In a study of more than 24,000 global workers, 80 per cent of IBM managers agreed that productivity increases in a flexible environment.17

A Work+Life Fit / BDO Seidman survey of CFOs showed 75 per cent agree that flexible work increases productivity.18

Best Buy measured an average productivity increase of 35 per cent through its flexible work program.19

Productivity Assumptions

• Twenty per cent increase in productivity on telework days based on synthesis of cited studies
• The per person income assumption of $67,700 per year20

Productivity Savings Results (Table 2)

<table>
<thead>
<tr>
<th>Productivity Increase</th>
<th>Per Person</th>
<th>Man Years</th>
<th>$ Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$5,958</td>
<td>350,999</td>
<td>26.1 Billion</td>
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Real Estate Impact

Traditional offices are expensive, inefficient, inflexible and difficult to scale (particularly down). Telework programs can reduce the capital drain of owning or leasing a building. Along with the lease/purchase costs, a telework program can save on electricity, parking lot leases, furniture, supplies, maintenance, security, janitorial, insurance, taxes, common area expenses and other related costs.

Telework can reduce the cost of complying with disabilities, environmental and office safety regulations.

Telework can help companies consolidate inefficient space, and it can eliminate the need for a local presence in regionally regulated industries such as healthcare, insurance and finance.

When asked to assess the lasting impacts of the recession, over 60 per cent of respondents to a NewWOW survey reported replacing assigned one-to-one workplace seats with alternative workspaces.21

“It’s a case of the incredibly shrinking office,” says Joe Sciolla, Managing Principal of CresaPartners Boston (CresaPartners LLC is North America’s largest corporate real estate advisory firm specializing in tenant representation).22
Here’s how it works: As technology increases productivity at the workplace, it also leads to a decreasing need for space. Thanks to automation, we need fewer employees, we use less space per employee, and we outsource more jobs.

With laptops, smart phones and iPads becoming more sophisticated and more ubiquitous, fewer employees are needed at the office. Today, seven employees can do the work that required ten before the dot-com boom. Moreover, wireless technology has created an environment in which anyone can work practically anywhere at any time.

Today’s virtual office can be a home studio, a car, a plane or a hotel.

Another intriguing arrangement is hotelling, in which companies reserve office space on a “check-in, check-out” basis for employees who are typically on the road. These fully equipped, shared workstations are effective in certain situations, but they may not work when workers are involved with team projects or need face-to-face supervision.

In the last 10 years, we have seen a significant reduction in the average office space per employee. In 1995, it was approximately 300 sq. ft.; in 2000, it was 250 sq. ft. to 275 sq. ft.; and today, it is about 225 sq. ft. or less.

Another trend is the use of collaborative space outside and inside the office. Conference rooms are getting more use, and there’s also greater use of collaborative technology such as videoconferencing, which brings people together at the workplace. Videoconferencing as well as virtual meetings further reduces the need for everyone to work on site.23

Mark Lang, President of M.G. Lang & Associates, has repeatedly made happen the kind of changes Sciolla describes at places such as TELUS, Capital One Corporation, Vancouver Coastal Health, the Health Services Association of British Columbia and others. The TELUS Flexible Work Styles program, launched in 2007, is now being used by about 20,000 of their 32,000 employees.24

“Real estate is hugely underutilized,” say Lang. “Most organizations model their space based on a traditional work style, with 80 per cent of space for individual work and 20 per cent for team interaction. This is what led to the ‘cube jungle.’ Today, however, work is much more collaborative with relatively little ‘alone’ work. Consequently, a typical company will likely find through a utilization survey that 40 per cent or more of its desks are empty throughout the day…and it’s challenging to find an open team room.”

David Craig, Director of DEGW, a worldwide workplace strategy consulting firm, sees working from home as a natural extension of rising intrinsic mobility. “The fact is that work, even if it doesn’t take place at home, is less likely than ever to take place at a traditional desk. Our research, which includes survey responses from over 60,000 North American employees and observations of thousands of workers, shows the average knowledge worker only sits at their desk around 35 per cent of the time. The balance is spent in meeting rooms, in ad hoc work areas, at colleague’s desks and in other office buildings,” says Craig.25

AgilQuest Corporation has built a technology platform that measures the actual amount of space a company uses and then manages the day to day operations of the office. This helps their clients reduce real estate costs and at the same time manage the workplace in a way that increases productivity. They’ve been in the business of measuring and managing the workplace change for 16 years.

An example of the how AgilQuest has been able to help companies increase staff and at the same time decrease their real estate footprint is illustrated in the following San Francisco Business Times excerpt about their work with ‘big four’ accounting firm Deloitte Touche Tohmatsu Limited:
"Managing Partner Mark Edmunds expects to expand his 1,500 person San Francisco office by 10 per cent in the next year, the new office will represent a 42% decline in square footage from the 285,000 square feet the firm occupies. "We are reducing personal space, no doubt, but increasing cool collaborating space so we can do greater things for our clients."  

John Vivadelli, Founder and CEO of AgilQuest agrees, "More people, cool space, less cost: What could be more sustainable."

**Industry Research on Real Estate Savings**

Sun Microsystems saves $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 (2,000 primarily working at home, 15,000 up to 2 days a week)

McKesson Corporation’s telework program saves them $1 million a year in real estate costs

The US Patent & Trademark Office avoided $11 million in new real estate expenses through telework and office hoteling. Over 80 per cent of eligible staff telework (4,000 employees, 70 per cent of staff) telecommute.

According to DEGW’s 60,000 survey responses, the average North American knowledge worker says they already spend 10 per cent of their time working from home, with the highest percentages seen in the technology sector where work has long been paperless and electronically mediated. The vast majority of this is not the result of any attempt to promote or enable remote work. It’s primarily an outgrowth of the ubiquity of mobile technology, distributed teams and virtual collaboration tools. If it were actively encouraged, 65 per cent of employees say they would work from home even more.

In a study of a Canadian financial services firm conducted by DEGW in December 2011, employees were found to not work from home very much—only around three per cent of the time on average. However, 78 per cent of employees said they would work more from home if it was encouraged and enabled, with average preference being to work from home around five days a month.

**Real Estate Assumptions**

- Average office cost = $44.47/sq. ft. based on Toronto Board of Trade data (Table 3)
- Real estate reduction with two day a week telecommuting of 20 per cent based on synthesis of cited and other research
- No electricity savings assumed
- Extra home office energy usage is shown as a cost in the Employee Savings section

**Table 3—Class A Real Estate Costs**

<table>
<thead>
<tr>
<th>City</th>
<th>$/sq. ft.</th>
<th>Per cent of Boston Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halifax</td>
<td>$29.90</td>
<td>0.8%</td>
</tr>
<tr>
<td>Montreal</td>
<td>$36.28</td>
<td>124.9%</td>
</tr>
<tr>
<td>Calgary</td>
<td>$50.42</td>
<td>142.4%</td>
</tr>
<tr>
<td>Vancouver</td>
<td>$50.93</td>
<td>143.9%</td>
</tr>
<tr>
<td>Toronto</td>
<td>$59.04</td>
<td>166.7%</td>
</tr>
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</table>

**Table 4—Annual Savings In Real Estate**

<table>
<thead>
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<th>Scenario</th>
<th>Low</th>
<th>Mid</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Person</td>
<td>$1,049</td>
<td>$1,561</td>
<td>$2,072</td>
</tr>
<tr>
<td>Nationally</td>
<td>$4.6 b</td>
<td>$6.8 b</td>
<td>$9.1 b</td>
</tr>
</tbody>
</table>

**Absenteeism Impact**

Unscheduled absences cost employers billions. They necessitate staffing redundancies, inconvenience coworkers and customers, and reduce productivity.
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 has been in the 20 years they’ve been tracking it. It’s not only historically high, it’s high by international standards34 and getting worse:35

- Canada: 10 days per year in 2009
- 12.6 days per year for public sector
- 8.9 days per year for private sector36
- Up 22 per cent since 199937
- U.S.: 5.3 days per year
- UK: 5 days per year

Canadians are struggling to balance the priorities of their work and private lives. According to Human Resources and Skill Development Development Canada (HRSDC), “When employees are ‘out of balance’ they experience more stress and fatigue and tend to be absent from work more often due to these reasons. They have less focus while at work because they are worried about issues at home and they are also more distracted at home because work matters weigh on their minds. The end result is that neither situation is healthy or productive; in short, it’s a lose/lose situation for employees, their families and their employer.”38

Fifty-three per cent of Canadian employees report that they’re stressed by work-life conflicts.39

The Public Health Agency of Canada examined various reasons for work-life-conflict-related absenteeism including:

- Role overload: having too much to do in a given amount of time.
- Family and work interference: when work demands and responsibilities make it more difficult for an employee to fulfill family role responsibilities.
- Caregiver strain: physical, financial or mental stress that comes from looking after an elderly or disabled dependent.

What they found was that work-life conflict costs Canadian companies between $5.5 and $10.5 billion a year (Table 5):40

| Table 5—Nationwide Costs of Absenteeism Due to Various Types of Work/Life Conflict (billion) |
|---------------------------------------------------------------|------------------|
| Role overload                                               | Direct | Indirect |
| Family/work                                                 | $1.5   | $1.0     |
| Caregiver                                                   | $1.0   | $1.0     |
| Total                                                       | $5.5   | $5.0     |

Public Health Agency of Canada (in 2003 dollars)

But the costs don’t stop there. According to Towers Watson, a leading global professional services company, the link between health and productivity goes beyond the physical and mental health of individuals to creating a healthy work environment. Companies with the most effective health and productivity programs experienced:41

- Eleven per cent higher revenue per employee
- Lower medical trends by 1.2 percentage points
- Twenty-eight per cent higher shareholder returns

What’s more, Towers Watson found that excessive work hours (75 per cent), lack of work/life balance (65 per cent) and fears about job loss (64 per cent) are the foremost sources of stress affecting organizations today.42

Home-based workers are sick or absent less often because they:

- Experience less stress
• Are less exposed to sick co-workers
• Are exposed to fewer occupational and environmental hazards
• Avoid driving
• Continue to work when they’re sick
• Are able to return to work more quickly following pregnancy or surgery
• Are able to handle personal and family appointments
• Have more time for exercise

Industry Research on Absenteeism

• The need for senior caregiving is on the rise and will continue grow.
• The share of the population that spent time caring for seniors increased from 16.5 per cent in 1996 to 18.4 per cent in 2006.43
• About one-fifth (20.9 per cent) of women spent some time looking after seniors in 2006, up slightly from 19.2 per cent in 1996.
• The share of men providing care increased at a slightly faster pace, from 13.6 per cent in 1996 to 15.7 per cent in 2006.44
• Absenteeism is highest among Federal employees at an average of 14.6 days a year in 2009 compared to 10 days a year for full time permanent employees.45
• Seventy-eight per cent of employees who call in sick, really aren’t. They do so because of family issues, personal needs and stress.46
• Telework has proven to be the second most effective method of reducing absences; flexible scheduling is first.47
• Among those companies that have tried to reduce work-life conflict, 84 per cent say it’s had a positive impact.48
• The US federal government’s telework cost/benefit model estimates a 63 per cent reduction in unscheduled absences per teleworker.49
• The spread of contagious disease is at the root of a US federal policy that requires all eligible employees to telework to the maximum extent possible.50
• Companies with the most effective health and productivity programs have 1.8 fewer days absent per employee.51
• In 2003, The Public Health Agency of Canada estimated that reducing work-life conflict could reduce absenteeism by 43 per cent.52 Absenteeism has increased 16 per cent since that time.53

Absenteeism Assumptions

• Average reduction in absenteeism of 6.3 days a year based on US government model.54
• Annual cost per unscheduled absence per person of $321 based on average annual compensation divided by work days per year.55

Absenteeism Savings Results (Table 6)

| Table 6—Annual Savings Due To Reduced Absenteeism, Per Person |
|-----------------|-----------------|-----------------|-----------------|
|                 | Private Sector  | Public Sector   | Average         | Nationally      |
| $ Savings       | $1,800          | $2,548          | $2,022          | $8,900,000,000  |

Attraction and Retention Impact

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 customers, coworkers and corporate intelligence. 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 workers
• Offers alternatives that would have otherwise kept parents and senior caregivers out of the full-time workforce
• Appeals to retiring workers

By 2016, Canada could have more people leaving the labor force than entering it.56

In a 2008 article titled “The Emerging Diverse Workforce: Implications of a Global Demographic Tsunami for Organizations in Canada”, Hewitt Associates (now AON) reported this message of doom for Canadian employers:

“Canada’s province of Alberta is the canary in the coal mine for the looming talent shortage across Canada and other parts of the world.

So severe is the labour shortage in Calgary that McDonald’s is paying $15/hour. Stores close at 4 p.m. because there is no one to tend to the shoppers at the door. Pharmacists are being hired from the Philippines.

This storyline is beginning to show up from the St. Lawrence Seaway to the Pacific Ocean.

…during the last 25 years of the 20th century, the Canadian labour force grew by 226,000 per year; during the first decade of the 21st, it will grow by 123,000; by 2010, it will drop to 42,000. By 2016, growth will be near zero.”67

In a 2009 AON survey of 278 employers in nine Canadian provinces, 84 per cent of respondents said the shortage of qualified and skilled employees will be their biggest HR issue over the next three years.58

“With a looming labour shortage it is becoming increasingly important for employers to set themselves apart to attract the right talent,” said Gabriel Bouchard, president of Workopolis, the leading Canadian online recruitment, employment search and career planning website. "New concepts such as offering staff the option to work from home allow employers to demonstrate their respect for work-life balance—something more and more candidates have told us they are looking for in new career opportunities.”69

Research commissioned by Workopolis earlier this year found that good work-life balance was the top attribute workers are now seeking in a job opportunity, with over three-quarters (78 per cent) citing this as their top choice.60

“The tables are turning from the unemployment spike of the recession to a long-term talent shortage that will dominate business priorities for the years ahead,” says Workopolis’ Bouchard. “The day is done when a company could post a job and take their pick from the responses. Now it must sustain an ongoing campaign to court and entice the best talent over a period of time.”61

“With the economy gaining strength, people will be increasingly selective about the companies they look to work for,” said Jeff Lowe, vice president, TELUS Communications, Inc. in a 2010 press release. “Organizations that leverage technology to allow their staff to work anywhere—in the office, on the road or at home—will have a measurable advantage in the competition to attract top talent. At the same time, they’ll increase their ability to retain the best and the brightest, inspiring the kind of productivity and loyalty that only the strongest companies in the world successfully generate amongst their teams,” said Lowe.62

The Canadian Chamber of Commerce echoes the message: “There is a skilled labour shortage facing Canada. In a country with an aging population, disparities in regional economic growth, and internal labour mobility barriers, it is not surprising that the many issues surrounding the availability of skilled labour have come to the fore.”63
Regarding the impact of retiring Baby Boomers, Statistics Canada projects “...that the proportion of the labour force aged 55 years and older will reach between 18 per cent and 20 per cent in 2021, about double that observed in the mid-1990s. The number of workers per retired persons aged 65 or older was about five to one in 2005. This ratio is expected to fall to about two to one by 2031.”

In a 2007 report, Deloitte predicted that the government sector would be particularly hard hit. “In some provinces, more than 50 per cent of the workforce is likely to retire with in the next seven years. 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.”

**Industry Research on Attraction and Retention**

The Public Health Agency of Canada found that employees with high role overload were 2.3 times more likely to report high intent to turnover, half as likely to report high levels of job satisfaction and approximately half as likely to have a positive view of their employer.

In a Workopolis poll of over 8,000 web site visitors, 82 per cent of Canadian respondents indicated that they would change jobs for the ability to work from home.

Among OECD countries, Canada has the 11th highest part-time employment rate at 18.4 per cent (compared to 15.5 per cent for all OECD countries and 12.8 per cent for the US). This represents a potentially untapped talent pool.

81.2 per cent of women without children at home are employed, compared to 73.8 per cent of those with. 38.5 per cent of women age 25-44 work only part time because of family responsibilities (compared to 4.9 per cent of men). Only 18 per cent do so out of choice.

In a Cisco survey of 2,600 worldwide employees, two out of three employees said they would take a job with less pay and more flexibility in device usage, access to social media and mobility than a higher-paying job without such flexibility.

According to the Canadian Center for Occupational Health and Safety, businesses that support employees work-life balance by offering more flexibility enjoy numerous advantages including increased ability to attract new employees; a more diverse workforce and increased initiative and teamwork.

Half (49 per cent) of working dads would consider making a job change if a potential employer offered more family-friendly options than their current employer.

While only 12 per cent of older workers are provided the option to work at home, 35 per cent say they would welcome such a program and indicated that they would remain in the workforce longer should it be offered.

In a survey of nearly 2,000 Cisco teleworkers, 91 per cent of respondents said telecommuting is somewhat or very important to their overall job satisfaction.

Fifty-nine per cent of respondents of the over 6,000 respondents to a Workopolis poll say they would use their own resources for the flexibility to work from home; 22 per cent would opt for a pay cut; and 20 per cent would work longer hours.

A TELUS poll of over 1,000 Canadian’s found that:

- Eighty-nine per cent of employees think that offering a flexible work program makes a company more attractive.
- Eighty-one per cent of respondents agreed that an organization offering a flexible work program positively differentiates one company from another.
Sixty-seven per cent of Canadians surveyed noted they would be more loyal to companies that provided them with the option of flexible work.

Seven in ten (71 per cent) of working fathers say they feel guilty when work commitments take precedence over family time. If given the choice, more than half (56 per cent) would take a 10 per cent pay cut to spend 10 per cent extra time at home with their kids.  

Good work-life balance was the top job attribute cited by job seekers in a 2010 Workopolis survey. It costs 75 per cent of a hourly person’s pay to lose that employee; the cost rises to 150 – 200 per cent of an salaried person’s pay if that employee leaves the company.

Attraction and Retention Assumptions

- Reduction in attrition of seven per cent
- Existing attrition of 7.65 per cent
- Cost of turnover of 75 per cent of salary, high case 150 percent
- Average income of $67,707 plus 19 per cent benefits

Turnover Savings Results (Table 7)

<table>
<thead>
<tr>
<th></th>
<th>Average Per Person</th>
<th>Nationally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Turnover Savings</td>
<td>$427</td>
<td>$1.8 billion</td>
</tr>
<tr>
<td>High Turnover Savings</td>
<td>$855</td>
<td>$3.7 billion</td>
</tr>
</tbody>
</table>

Other Employer Benefits

Other benefits not quantified in the employer model include:

- Potential financial incentives: WORKshift Calgary, the Canadian Telework Associations and other regional advocacy groups offer financial and non-financial incentives to encourage telework
- Improved continuity of operations
- Higher community citizenship scores for being environmentally and labor friendly
- Avoidance of environmental sanctions/city access fees
- Virtual communications can equalize personalities
- Reduced potential for discrimination
- Increased employee empowerment
- Reduced overtime among shift workers
- 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

EMPLOYEE BENEFITS

On average, telecommuting just two days a week would save employees between $600 and $3,500 per year—the result of reduced driving and fewer work-related expenses (food, clothes, parking, gas and other vehicle costs for drivers, or public transportation costs).

Nationally, that adds up to over $8.5 billion a year that could go into savings or be spent elsewhere in the economy. Time saved per employee could be up to three workweeks a year.

“To date over 65,000 Canadians have pledged their support for a National Work From Home Day,” says Gabriel Bouchard, President of Workopolis. And their voices have been heard by Parliament. In November 2010, Liberal MP and Human Resources and Skills Development critic Mike Savage championed the idea in the House of Commons. While it hasn’t yet come to pass, Workopolis continues to
collect support for a National Work From Home Day in Canada on their Facebook page.

"As a nation we need to rethink the world of work and the option to work from home should be part of that national discussion," said Mike Savage, Member of Parliament for Dartmouth-Cole Harbor. "It’s good for the environment and work-life balance, and will improve our nation’s productivity, which adds to greater business success. I applaud Workopolis for their efforts to spearhead this initiative and urge the government to listen to the thousands of Canadians who support a National Work From Home Day. This is part of the new reality of work."

A recent Workopolis poll showed that four in ten (39 per cent) people are fed up with traffic jams citing the most important benefits associated with working from home would be a reduction in traffic congestion and pollution.

While the onus is on the employer to ensure that secure technology and clear policies are in place, workers have made it very clear that they’re willing to go the extra mile to be able to work from home.

The Harris/Decima poll commissioned by Workopolis reveals:

- Half (51 per cent) of Canadians said they would be willing to use their own resources, such as their own personal computer, to work from home.
- More than a quarter (28 per cent) indicated they would work longer hours, and almost two in ten (19 per cent) said they would take a pay cut to be able to work from home.
- Sixteen per cent of workers would give up vacation days to take advantage of the added flexibility a work from home day would provide.
- Better work-life balance was second only to better compensation and benefits as what would help employees increase their love for their job.

In a survey conducted by Cisco, 80 per cent of the 2,000 respondents said their quality of life had improved through telecommuting.

**Time Savings**

Canadian commuters could save an average of nine work days a year by working at home just twice a week. Transit users could save the equivalent of almost three weeks a year (see Table 8 and Chart 1).

<table>
<thead>
<tr>
<th>Table 8: Round Trip Commute Time by Region (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30 min</td>
</tr>
<tr>
<td>Atlantic</td>
</tr>
<tr>
<td>Quebec</td>
</tr>
<tr>
<td>Ontario</td>
</tr>
<tr>
<td>Prairies</td>
</tr>
<tr>
<td>BC</td>
</tr>
</tbody>
</table>

Statistics Canada, General Social Survey 2005

A report by Statistics Canada states that: "Rush-hour road congestion is a problem common to most major..."
urban areas in Canada. The negative consequences of congestion, which are suffered by both individuals and communities, are numerous and well-documented: pollution and increased greenhouse gas emissions, lost time, delays reaching work and home, increased stress, reduced productivity and other economic costs.¹⁴

Not surprisingly, those in the fastest growing urban areas suffer the longest commutes (see Charts 2 and 3).

In 2005 (the most recent data available), commuters spent an average of 63 minutes on the round trip between their place of residence and their workplace. That's 21 per cent longer than the average U.S. commute and 16 per cent longer than in the UK.⁹⁵ And it’s getting steadily worse as commuters move further from city centres. Those with round trips of 30 minutes or less fell from 27 per cent in 1992 to 21 per cent in 2005.⁹⁶

Worse yet, a full quarter of workers spend 90 or more minutes going from home to work and back—up from 17 per cent in 1992 (see Chart 1).⁹⁷

Regional differences are significant. Montreal, Calgary and Edmonton suffered the greatest increase in commute times (see Chart 2). In 1992, for example, fewer than half of Montreal workers spent an hour or more commuting to and from work (47 per cent). By 2005, 60 per cent of them did so. In Calgary, the increase was even greater, from 36 per cent in 1992 to 57 per cent in 2005.⁹⁸

Compared to the Toronto Board of Trade’s worldwide benchmark cities, all of Canada’s top cities except Halifax, ranked among the worst commutes with Toronto and Montreal among the worst. All five regions were in the lowest half of the benchmark cities, scoring C’s and D’s, in the transportation portion of the Labour Attractiveness scores.⁹⁹

The percentage of public transportation users has remained stable since 1992, accounting for 12 per cent of all commuters and 20 per cent of urban commuters. But, for them, the commute times are substantially longer than those who traveled by car.¹⁰⁰

The average public transportation commute time went from 94 minutes in 1992 to 106 minutes in 2005, a 14 per cent increase. For those traveling by car, 55 per cent made the trip in less than 60 minutes, compared to just 35 per cent of transit users (See Table 9).¹⁰¹
Table 9—Average Travel Time by Means of Transportation to Work

<table>
<thead>
<tr>
<th>Mode</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car (alone)</td>
<td>59</td>
</tr>
<tr>
<td>Public Transport</td>
<td>106</td>
</tr>
<tr>
<td>Bicycle</td>
<td>75</td>
</tr>
<tr>
<td>Car poolers</td>
<td>71</td>
</tr>
<tr>
<td>Those with stops</td>
<td>77</td>
</tr>
<tr>
<td>Those without stops</td>
<td>59</td>
</tr>
</tbody>
</table>

The Time it Takes to get to Work and Back, Statistics Canada 2005

Nearly two-thirds (64 per cent) of transit users spent 90 or more minutes commuting to work (up from 48 per cent in 1992) compared to just 21 per cent of those traveling by car (see Chart 3).102

Those who walked or biked to work declined from 15 per cent to 11 per cent between 1992 and 2005.103

Employee Time Savings Assumptions

• Mean round-trip commute of 63 minutes round-trip; Low: 30 minutes; High: 106 minutes104
• Equivalent days calculation based on 8-hour days

Employee Time Savings Results (Table 10)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Low</th>
<th>Avg.</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time days/year/person</td>
<td>4.3</td>
<td>9.1</td>
<td>15.4</td>
</tr>
</tbody>
</table>

Table 11—Extreme Commuters

<table>
<thead>
<tr>
<th>Location</th>
<th>Over 50 km Round Trip*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrie (Ont)</td>
<td>35.3 per cent</td>
</tr>
<tr>
<td>Abbotsford (BC)</td>
<td>24.4 per cent</td>
</tr>
<tr>
<td>Brantford (Ont)</td>
<td>21.2 per cent</td>
</tr>
<tr>
<td>Oshawa (Ont)</td>
<td>32.6 per cent</td>
</tr>
<tr>
<td>Total Canada</td>
<td>10.4 per cent</td>
</tr>
</tbody>
</table>

* Measured as the crow flies.

Commuting Patterns and Places of Work of Canadians 2006 Census (Table 10)

No surprise, the data suggests that suburbanization is adding to the travel distance. Workers living in more recently built homes tend to travel farther to work. For example, in 2006, the median distance travelled to work by people living in a dwelling built between 2001 and 2006 was 10.8 kilometers, compared to 6.6 kilometers for those living in a dwelling built between 1961 and 1970, and 4.7 kilometers for those living in a dwelling built in 1920 or before.109

Gas Savings

Note: Statistics Canada calculates commuting distances “as the crow flies” and therefore potential gas savings through telecommuting are substantially understated.

While research shows that not all travel is eliminated on telecommuting days (because errands that used to be performed during the commute now require separate trips), the majority of driving is avoided.106

Distance traveled to work grew an average of 8.5 per cent between 1996 and 2006. The relative slower growth in distance versus time is apparently the result of increased congestion.106

Commuting distances rose in every region except New Brunswick during the period from 1996 to 2006. The average increase was 8.5 per cent though regional differences were substantial. In Quebec and Ontario, the increase was 13 per cent. In Newfoundland and Labrador it was 36 per cent. And in the Northwest Territories the increase was 163 per cent.107

About one in ten Canadians commute more than 50 km per day; in Barrie and Oshawa, more than three in ten do (see Table 11).108

Table 11—Extreme Commuters

<table>
<thead>
<tr>
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<th>Over 50 km Round Trip*</th>
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</tr>
<tr>
<td>Total Canada</td>
<td>10.4 per cent</td>
</tr>
</tbody>
</table>

* Measured as the crow flies.
Employee Gas Savings Assumptions

Whilst research shows that those with the longest and most expensive commutes are most likely to choose telework, the travel savings numbers in this model reflect the weighted average of Canada-wide use of car, motorcycle, bike, public transit, and pedestrian commuters.

- Average commute of 15 kilometres/day\textsuperscript{110}
- Reduction in driving of 75 per cent based on three independent studies\textsuperscript{111, 112}
- Gas cost of $1.23/litre
- Gas usage of 26 mpg for cars\textsuperscript{113}

Other Work Expense Impact

The cost of working in an office doesn’t stop at the gas station. While socioeconomic, geographic, occupational and other factors create a wide range of employee costs, the savings are significant for all telecommuters.

Savings not reflected in the model include:

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

Employee Savings Assumptions

- Cost of extra home office electricity of $142.78/year (shown as a reduction in the employee savings)\textsuperscript{117}
- Mode of travel of 72.3 per cent car/van (alone), 7.7 per cent carpool, 11 per cent public transportation, 6.4 per cent walked, 1.3 per cent bicycle\textsuperscript{118}
- Transit: Low = $1.62, Mid = $4.37, High = $6.95/day\textsuperscript{119}
- Parking = Low = $0, Mid = 13.25, High = 19.87, drivers only\textsuperscript{120}

Employee Savings Results (Table 12)

<table>
<thead>
<tr>
<th></th>
<th>Car Alone</th>
<th>Carpool, Walk, Bike</th>
<th>Public Transit</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>$605</td>
<td>$228</td>
<td>$469</td>
<td>$524</td>
</tr>
<tr>
<td>Mid</td>
<td>$2,344</td>
<td>$738</td>
<td>$1,182</td>
<td>$1,938</td>
</tr>
<tr>
<td>High</td>
<td>$3,505</td>
<td>$1,284</td>
<td>$1,930</td>
<td>$2,945</td>
</tr>
</tbody>
</table>

Combined National Savings (Mid) $8.5 billion
COMMUNITY SAVINGS

In his book, A Thousand Barrels a Second: The Coming Oil Break Point and the Challenges Facing an Energy Dependent World (MaGraw-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, and even the impact on our national security. Our birthright of abundant, reliable energy is coming to an end.

Telecommuting offers one of those rare solutions to many of the nation’s most vexing problems that’s inexpensive, easy and even popular. It can reduce our energy usage, greenhouse gases and traffic congestion and also provide a significant savings to society.”

Oil Impact

In his book, The End of Energy Obesity: Breaking Today’s Energy Addiction for a Prosperous and Secure Tomorrow, Tertzakian writes: “With virtualization, the office complex and business travel itself are also becoming relics of the industrial age... Not only are individuals saving gas by avoiding the commute, but the office is saving power: fewer lights and terminal, less concerns about the air conditioning or heat. Although such talk has retreated significantly since the financial crisis destroyed energy demand, the cat is out of the bag. Hopefully common sense, competitive advantage, and good policy will prevail and there will be no going back.”

Twice weekly telework for compatible workers in Canada could save 390 million litres of gas and 5.2 million barrels of oil.

Energy Savings Assumptions

- Gas savings: refer to assumptions in Employee Benefits section
- Retail value = $102.96/barrel

Community Gas / Oil Savings (Table 13)

| Barrels of Oil | 5,200,000 |
| $ Value       | $541,000,000 |
| Litres of Gas | 390,000,000 |

Greenhouse Gas (GHG) Impact

Twice weekly telework could reduce GHG by taking the equivalent of three in ten of Montreal’s solo commuters permanently off the road.

Greenhouse Gas Savings (GHG) Assumptions

- GHG reduction stated in tonnes or million metric tons (MMT)
- CO2 per mile of .34094 kg
- Equivalent cars based on 5.5 tons of GHG per car/year

Greenhouse Gas Savings Results (Table 14)

<table>
<thead>
<tr>
<th>GHG</th>
<th>2,100,000 tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equivalent Cars</td>
<td>385,231</td>
</tr>
</tbody>
</table>

Traffic & Accident Impact

The cost of traffic congestion is substantial. It 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 a
company'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. 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 per cent decline in traffic volume can cut time lost in congestion by as much as 50 per cent.\footnote{126} The City of Calgary’s Transportation department estimates that a three per cent reduction in the 100,000 people who commute to work in the core on any given day would completely eliminate gridlock.\footnote{127}

A study by Transport Canada put the social costs of the 613,000 motor vehicle collisions that occurred in 2004 at $63 billion ($70 billion in today’s dollars). Although fatal collisions accounted for less than one per cent of reportable collisions, they represented 64 per cent of total social costs estimated in 2004. Injury collisions made up 27 per cent of all collisions and costs.\footnote{128}

Transport Canada estimates the average social cost of a collision is $15.7 million per fatal accident ($17.7 million in today’s dollars) and $82,000 per injury accident ($92 million in today’s dollars).\footnote{129}

### Traffic and Accident Assumptions

- Number of accidents per billion vehicle mile traveled (VMT) of 5.2 fatalities, 363 injuries\footnote{130}
- Cost/accident of $17.7 million per fatality, $92 thousand per injury\footnote{131}

### Traffic and Accident Savings Results (Table 15)

<table>
<thead>
<tr>
<th>Vehicle Kilometers</th>
<th>48,300,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident Avoided</td>
<td>110.5</td>
</tr>
<tr>
<td>Costs Avoided</td>
<td>$37,500,000</td>
</tr>
</tbody>
</table>

### Healthcare Costs

The impact of work-related stress on employee health is well documented and workplace flexibility has repeatedly been shown to reduce that stress. Though not included in the financial savings summarized in this paper, the potential for telecommuting to dramatically reduce healthcare costs is worthy of national attention.

In a government study of over 30,000 employees of medium and large Canadian companies, the data was unequivocal: employees with high levels of work-family conflict are in poor physical and mental health and make greater use of Canada’s health care system than those without conflict (See Chart 4, next page).\footnote{132}

Though dated, the 2003 survey reported 58 per cent of respondents felt role overload, 40 per cent reported work-life conflict, and 26 per cent reported caregiver strain.

These stressed workers are between 1.3 and 2.9 times more likely to:

- Say their health is fair or poor
- Have sought care from a mental health professional
- Spend more than $300 a year on prescription medicine
• Make more than eight visits a year to the doctor
• Have received outpatient care
• Have required inpatient or emergency room hospital care

By reducing work-life conflicts, the study estimated that companies could collectively save over $6 billion a year in healthcare costs. It estimates by just reducing role overload—the most costly of the conflicts, physician visits would be cut by 25 per cent, inpatient hospital stays would decline by 17 per cent and emergency room use would go down by 23 per cent.134

The aging population will place even greater pressure on eldercare. The government report concludes that “work-life conflict is not only a moral issue—it is a productivity and economic issue, a workplace issue and a social issue, and needs to be addressed as such.”135

Finally, the report recommends that role overload is strongly associated with heavy work demands, longer hours at work, high amounts of unpaid overtime, greater amounts of work-related travel and a culture of face time (i.e. emphasis is on “presenteeism” as opposed to outputs and deliverables).

Of all the risks assessed in the study, the report concludes that role overload represents the highest level correlation with poor physical and mental health and use of Canada’s healthcare system.136 Undoubtedly, the incidence of role overload has increased since 2004 as a result of companies trying to do more with less during the recession.

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

• Reduce overcrowding
• Revitalize cities by reducing traffic
• Increase the life of infrastructure including roads and transit
• Improve emergency responsiveness
• Reduce road rage
• 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
• Reduce terrorism targets of opportunity

![Chart 4 — Impact of Role Overload on Use of Health Care](image-url)
• Pave the way for remote training opportunities
• Provide highly educated talent access to jobs that maximize their potential
• Promote inbound talent migration without adding to local population
• Further reduce travel through widespread use of virtual technologies

THE TOTAL IMPACT
As stated at the beginning of this report, the total impact of 2 day a week telecommuting by those with compatible jobs and a desire to work from home is $53 billion in national savings. A company with 250 telecommuters would save over $3 million a year (See Table 16).

Table 16—Bottom Line Benefits

<table>
<thead>
<tr>
<th>Participants</th>
<th>1</th>
<th>250</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>$10,037</td>
<td>$2,492,146</td>
<td>$44,000,000,000</td>
</tr>
<tr>
<td>Productivity</td>
<td>$5,958</td>
<td>$1,489,563</td>
<td>$26,200,000,000</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$1,561</td>
<td>$390,130</td>
<td>$6,800,000,000</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>$2,022</td>
<td>$505,617</td>
<td>$8,900,000,000</td>
</tr>
<tr>
<td>Turnover</td>
<td>$427</td>
<td>$106,830</td>
<td>$1,900,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>$1,939</td>
<td>$484,738</td>
<td>$8,500,000,000</td>
</tr>
<tr>
<td>Community</td>
<td>$132</td>
<td>$32,940</td>
<td>$578,000,000</td>
</tr>
<tr>
<td>Oil</td>
<td></td>
<td></td>
<td>$540,000,000</td>
</tr>
<tr>
<td>Greenhouse Gas</td>
<td></td>
<td></td>
<td>2.1 million tonnes</td>
</tr>
<tr>
<td>Traffic Accidents</td>
<td></td>
<td></td>
<td>$37,500,000</td>
</tr>
<tr>
<td>Overall</td>
<td>$12,108</td>
<td>$3,009,825</td>
<td>$53,100,000,000</td>
</tr>
</tbody>
</table>

WHO’S TELEWORKING AND WHO COULD
Based on data from various cycles of the General Social Survey from 2000 to 2008, a typical Canadian telecommuter is older and better educated than the average worker. Men and women are about equally likely to telecommute.

Here’s more about a typical telecommuter:

• Age: 39 per cent of those 35 and over telecommuted, versus less than 10 per cent of younger employees
• Education: 31 per cent of those college or university-educated worked at home versus only 7 per cent of those without higher education
• Job: 46 per cent of those in a professional or management role versus 23 per cent of others
• Income: 52 per cent earn over $60,000/year compared to 25 per cent of those who did not
• Full-time versus part-time: 33 per cent of full-timers compared to just 15 per cent of part-timers
• Work hours: 23 per cent of those who work over 50 hours a week compared to 10 per cent who work 40-49 weekly hours
• Unionization: 13 per cent on non-union employees versus 8 per cent of union workers
• Frequency: over two-thirds telecommute less than 10 hours a week
• Location: The majority live in urban areas
• Commute times: 23 per cent of those with over 20 km round-trip commutes versus 16 per cent of those with shorter ones

Interestingly, telecommuters have a significant presence across industry (see Table 17) because most jobs, even manufacturing, now involve some knowledge work. Thanks to technology, employees in many in occupations and industries that are not traditionally thought of as telework-compatible can and do work remotely.
Table 17: Per cent of Industry Who Telecommuted at Least Occasionally

<table>
<thead>
<tr>
<th>Industry</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Services</td>
<td>54%</td>
</tr>
<tr>
<td>Information, Culture &amp; Recreation *</td>
<td>36%</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate &amp; Leasing</td>
<td>34%</td>
</tr>
<tr>
<td>Professional, Scientific and Technical Services</td>
<td>29%</td>
</tr>
<tr>
<td>Educational Services</td>
<td>27%</td>
</tr>
<tr>
<td>Trade *</td>
<td>27%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>18%</td>
</tr>
<tr>
<td>Public Administration</td>
<td>8%</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance*</td>
<td>8%</td>
</tr>
</tbody>
</table>

2008 Canada Working at Home Update (Turcotte / StatCAN)
* borderline statistical significance

SUMMARY

“Many governments around the world actively encourage and support telework.

In the U.S., the federal government, and many of the states and cities have developed programs to encourage more telework.

They offer a variety of supports to increase telework, including online and consulting assistance, tax breaks and other incentives.

Ditto for the governments in many other countries—the UK, Australia, Japan, Malaysia to name a few.

They do so because they fully appreciate the tremendous benefits of telework to: improve employee lifestyles and reduce stress and gas costs; significantly improve organizational recruitment and retention capabilities, productivity and business continuity in event of emergencies, all while reducing layoffs and absenteeism.

They also know that telework can significantly reduce public and private-sector operating costs. In tough economic times, this not only reduces the need to downsize but helps improve regional and national economic development, competitiveness and job creation.

Here in Canada, there is still room for a lot more telework. With few exceptions, such as The City of Calgary, our governments have unfortunately not done a great job of supporting telework. I strongly encourage all Canadian governments—federal, provincial and municipal—to not only promote the heck out of telework, but also to help their constituent companies and citizens to telework.”

—Bob Fortier, President, InnoVisions Canada

Telework offers a relatively simple, high return-on-investment solution to some of the nation’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 book Growing the Virtual Workplace, co-authored by Dr. Bob Schulz (Haskayne School of Business, University of Calgary), Dr. Alain Verbeke, and others: The Integrative Value Proposition for Telework: “It is an inconvenient truth that many people in advanced economies currently spend most of their professional lives in unfortunate office towers and inefficiently consume energy and public infrastructure during their lengthy commutes to and from work. Their lives could be so different…”

According to The Conference Board of Canada, “The issue of whether or not to allow employees to work at a distance is no longer a cost benefit issue—it is now the reality of doing business. With increasing globalization requiring far-flung networks of employees and the specter of labor shortages, companies may not be in a position to choose location when it comes to finding top talent. Add to these factors the desire of Generation Y’ers for flexible work arrangements, their comfort with the technology of distance work, the reduced pollution from daily commutes, the savings afforded by reducing bricks and mortar offices, the wider availability of the technology and bandwidth to work virtually, the productivity gained by reducing or eliminating commuting time, and the need to disperse workforces for security reasons, companies will need and want to recruit the most talented employees wherever they reside.”

Councillor Maria McRae (Ottawa), an enthusiastic supporter of telework sums it up like this: “Between my Blackberry and my iPhone, I could run the nation from the palm of my hand. Offering employees the opportunity to sit in the comfort of their home, or sit in a park and answer email, even if it’s just once a week, can go a long way to earning their trust, respect, and loyalty. Employers in this global, mobile society can’t afford not to offer workplace flexibility.”

**About**

Telework Research Network

This report was prepared by Kate Lister and Tom Harnish for WORKshift Calgary.

The Telework Research Network is 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 The Wall Street Journal, Harvard Business Review, Inc. magazine and scores of other publications.

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 appearances.
Related white papers include:

- Telecommuting: The Bottom Line Impact (US)
- Results-Based Management—The Key to Unlocking Talent and Increasing Productivity
- The Shifting Nature of Work in the UK—The Bottom Line Benefits

Visit [http://TeleworkResearchNetwork.com](http://TeleworkResearchNetwork.com). For more information contact Kate@TeleworkResearchNetwork.com.

**WORKshift Calgary**

Launched in May ’09, WORKshift is a federally funded initiative designed to create a model for a regional telework program that can be easily and readily replicated across other jurisdictions. The program seeks to accelerate the adoption of alternative work styles, specifically telework, within the business community in Calgary and is led by the influential agency, Calgary Economic Development.

With funding of $800,000, WORKshift has been able to partner with industry leaders to provide telework tools and resources to Calgary businesses and organizations free of charge as a pilot. Initiatives include the Teletrips Quick Start assessment tool, Telework Management System, a tracking and reporting mechanism, and e-Work training modules. These products help remove barriers to acceptance and adoption within organizations that have previously been unable to commit the time and resources to pilot these programs.

In addition, WORKshift has embarked on a comprehensive marketing campaign to elevate the visibility of telework as a viable business strategy. To date, tactics include a website, an award-winning video, print collateral, media coverage, a sold-out ‘Future of Work Summit’, Canada’s first Telework Week and over 100 presentations to key decision makers.

In 2011 WORKshift will lead the City’s second annual WORKshift Week and host the founders of the Results Only Work Environment (ROWE) movement for the first-ever Canadian public appearance.

Calgary Economic development also launched an app in 2011 that supports employees to generate an on-the-fly business case to telework.

WORKshift is the first program of its kind in Canada and was created as the result of cooperation between three levels of government (municipal, provincial and federal). The program sets the stage to create a telework-ready platform that is easily and readily replicated across other jurisdictions in North America. In addition to government stakeholders, WORKshift has secured the support of leaders from the business community including those who signed the inaugural charter, the Evans Hunt Group who donated $50,000 to develop the WORKshift video, and Scott McNealy, former chairman and CEO of Sun Microsystems and pioneer of telework as a practice. Scott traveled to Calgary to endorse the program and address a group of business leaders for Telework Week.

WORKshift is particularly innovative as it utilizes government funding to provide the business community with specific tools and resources to enable the adoption of a sought-after practice that has been either cost or time prohibitive. Additionally, this single comprehensive program addresses common issues including transportation and congestion, public infrastructure challenges, business competitiveness, talent attraction and pollution in a way that is measurable and reportable.

Visit [http://workshiftcalgary.com](http://workshiftcalgary.com). For more information contact RBews@CalgaryEconomicDevelopment.com.
ENDNOTES

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