



CSA PUBLIC POLICY CENTRE

Out of Office: The Public Policy Implications of Remote Work

March 2023

CSA Public Policy Centre



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wellbeing of
Canadians

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Introduction

Prior to the pandemic, significant attention was paid by the media and policy makers to the changing nature of work. Would gig work explode in the wake of digital platforms like Uber and TaskRabbit? How many millions of jobs might artificial intelligence and advanced robotics eliminate or transform?

While these questions have not disappeared, they were, unexpectedly, overtaken in the public consciousness by another disruptive change to the nature of work—the rapid adoption of remote work (working from home) across some parts of the economy during the early stages of the COVID-19 pandemic. In April 2020, just weeks into the pandemic, roughly 40% of Canadian employees were working primarily from home as compared to 4% in 2016.¹ While that number has declined, 19% of Canadians were still working exclusively from home in April 2022, with another 5.8% in hybrid arrangements.²

Is remote work going to become a permanent feature of work in Canada moving forward? Most of the discussion around this issue has focused on the employer–employee dynamics of particular companies and whether remote work is a much-needed transformation for employees or an impediment to the productivity and collaboration that foster stronger workplace cultures.

Evidence is now coming in on the impacts of remote work from around the world. In Canada, remote work

touches several economic, environmental and social questions that should be factored into the conversation about its future. These include:

- Can remote work help Canada meet its goals for reduced carbon emissions?
- Can remote work ease demand for housing in urban centres?
- How will a remote workforce affect business decisions around outsourcing and offshoring?
- Can remote work foster more inclusive hiring practices for persons with disabilities and other historically marginalized groups?
- How should productivity and innovation be measured for a remote workforce?
- What are the tax and immigration policy implications of a distributed workforce?
- Are there health concerns for employees whose work and home lives are fused?
- How will the benefits and drawbacks of remote work be distributed amongst different groups, firms, and individuals?

This paper will assess opportunities for public policy to shape the emerging benefits and challenges related to remote work across a range of environmental, health, social, and economic areas in the years ahead.

Assessing the Benefits, Drawbacks and Implications of Remote Work

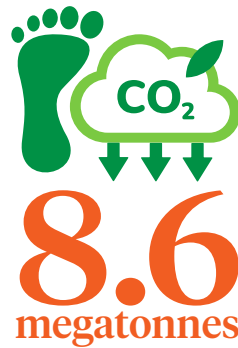
1.1 Environmental Impacts

Canada has set a target of net-zero greenhouse gas (GHG) emissions by 2050. Reaching this target will require transformational change across the economy. Transport is the second largest contributor to GHG emissions by sector, after oil and gas extraction. In 2019, the transport sector as a whole generated 185.5 megatonnes (Mt) of CO₂, a figure that declined to 159.2 Mt with the advent of the pandemic in 2020.³ Passenger transport (motorcycles, bus, rail, aviation, light trucks, and cars) accounted for most of this decline (76%): in 2019, that subsector's emissions were 99.7 Mt, a figure that dropped to 79.7 Mt in 2020. As of 2023, this is the latest data available; presumably there was an uptick in emissions in 2021 and 2022 as passenger travel habits rebounded.⁴

This decline in GHG emissions from passenger traffic in 2020 is notable and can be attributed to the immediate shift to remote work that occurred in mid-March 2020 and carried on throughout the year, as well as other behavioural changes such as the rapid adoption of online shopping and overall declines in leisure and social trips.

Traffic congestion is another significant transport-related contributor to GHG emissions across Canada. The worst bottlenecks, according to the Canadian Automobile Association, can increase commute times by up to 50% while creating additional GHG emissions.⁵

Traffic data shows that congestion decreased dramatically across major highways in Canada in 2020—for example, average speeds on many major Toronto highways increased by between 5 and 40 km/h during early morning peaks of March 2020 compared to March 2019.⁶ A Statistics Canada study estimates that a full transition to remote work for those in the workforce who can do so (i.e., 40% of all occupations) could lead to an annual reduction in GHGs of 8.6 Mt of CO₂, which would represent 1.3% of all emissions in Canada in 2020. This is equal to eliminating the carbon footprint of over 600,000 Canadians, based on a per-capita carbon emission average of 14.2 tonnes.⁷



A full transition to remote work by all workers who could do so would lead to the equivalent of eliminating the carbon footprint of 600,000 Canadians

Furthermore, airborne pollutants from emissions that affect respiratory and other health conditions would also decline—passenger vehicles account for over 50% of volatile organic compound emissions in Canada, as well as 21% of nitrogen oxides and 4% of fine particulate matter emissions.⁸

Congestion and travel times contribute to stress for commuters and potentially affect overall life satisfaction and happiness, with greater impacts for women than men.⁹ A Statistics Canada study estimated that a transition to remote work would eliminate an average of one hour per day commute time for remote workers.¹⁰ A recent international survey of time savings stemming from remote work found that across 27 countries the average daily savings was 72 minutes, with Canadian workers reporting 65 minutes saved.¹¹

The costs of congestion spill over to consumers. A 2018 study by the Toronto Board of Trade estimates that the average household in the Greater Toronto Area paid \$125 extra per year due to slowdowns of goods shipped on trucks in the Waterloo–Toronto corridor.¹²

There are open questions about whether remote workers will increase non-work trips and what the impacts of potential reductions in public transit ridership might mean for the long-term viability of those systems.¹³ Other environmental questions that bear monitoring include the potential for decreased commercial office waste if remote workers use more effective residential recycling programs than those that tend to exist in commercial settings and the size of the energy footprint of working remotely as compared to working in an office.¹⁴

1.2 Housing Affordability

Canada is an urban nation. In Spring 2021, nearly three quarters (73.7%) of Canadians lived in urban centres with populations of over 100,000 (i.e., Census Metropolitan Areas or CMAs).¹⁵ By contrast, only 17.8% of Canadians lived in rural areas.¹⁶ While the rural population increased by 0.6% between 2016 and 2021, this pales in comparison to urban growth of 6.3% over the same period, largely driven by 5.2% growth in CMAs.

Some shifts in these growth patterns emerged as the pandemic continued. Fewer people lived in major downtowns such as Montreal (-3.1%) and Vancouver (-2.9%) in the summer of 2021 than had a year earlier. Growth in distant suburbs (30 minutes or more from downtowns) of Canada's three major cities grew at a faster pace than closer suburbs, at rates ranging from 7.0% (distant suburban Montreal) to 9.4 and 9.5% respectively (distant suburban Toronto and Vancouver).¹⁷

Escalating housing prices are certainly a factor in this suburban growth—house prices across Canada have risen by 90% since 2010.¹⁸ Interest rates have spiked since the spring of 2022, driving housing affordability

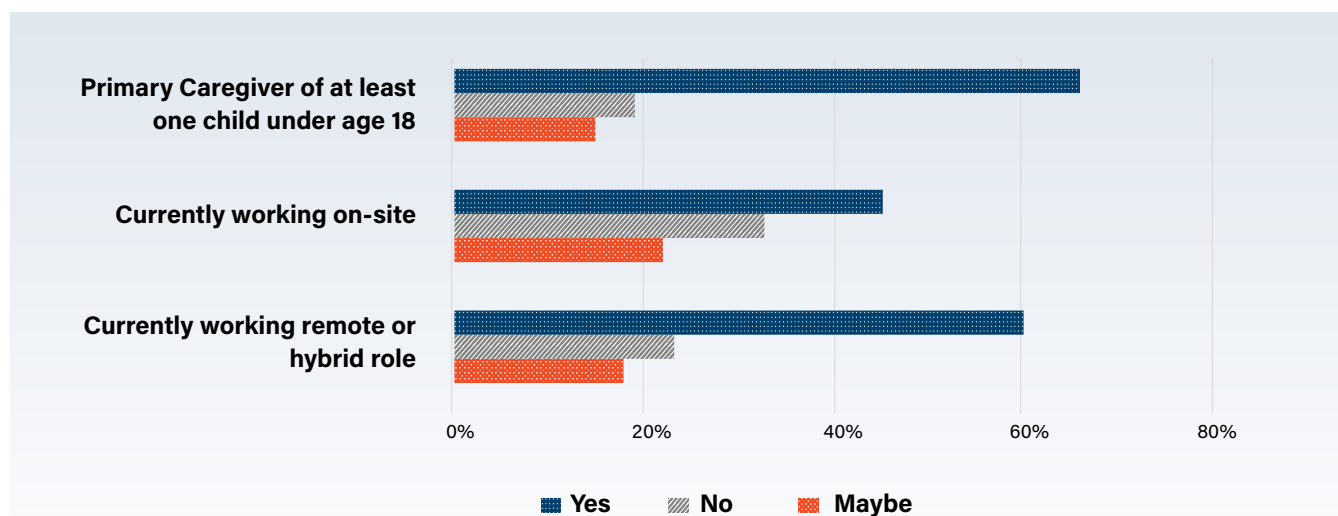


Ratio of mortgage carrying costs to household income is over 80% in Toronto and 90% in Vancouver

down to its worst level on record in Ontario, British Columbia, and parts of Atlantic Canada, with the ratio of mortgage carrying costs to household income eclipsing 80% in Toronto and 90% in Vancouver.¹⁹

In a December 2022 survey of Canadians conducted for the CSA Public Policy Centre by RIWI, 49% of respondents stated that they would consider moving to a lower-cost-of-living community if they could work remotely, with another 22% saying they might consider such a move, and 29% stating they would not consider it. Primary caregivers of a child (66%) and current remote workers (60%) were both more likely to consider such an opportunity (see Figure 1).

Figure 1: Would you consider moving to a lower-cost-of-living community for a remote role? (n=1413)



Source: CSA Public Policy Centre, December 2022 Survey conducted by RIWI. See Appendix 1 for methodology and notes.

The preferences of homebuyers also shifted during the early stages of the pandemic, which may be tied to the dramatic increase in remote work during this same timeframe. Sixty per cent of Ontarians surveyed in the summer of 2020 agreed that living in rural or suburban communities was more appealing than it had been pre-pandemic, while only 34% said the same about living in a downtown setting.²⁰

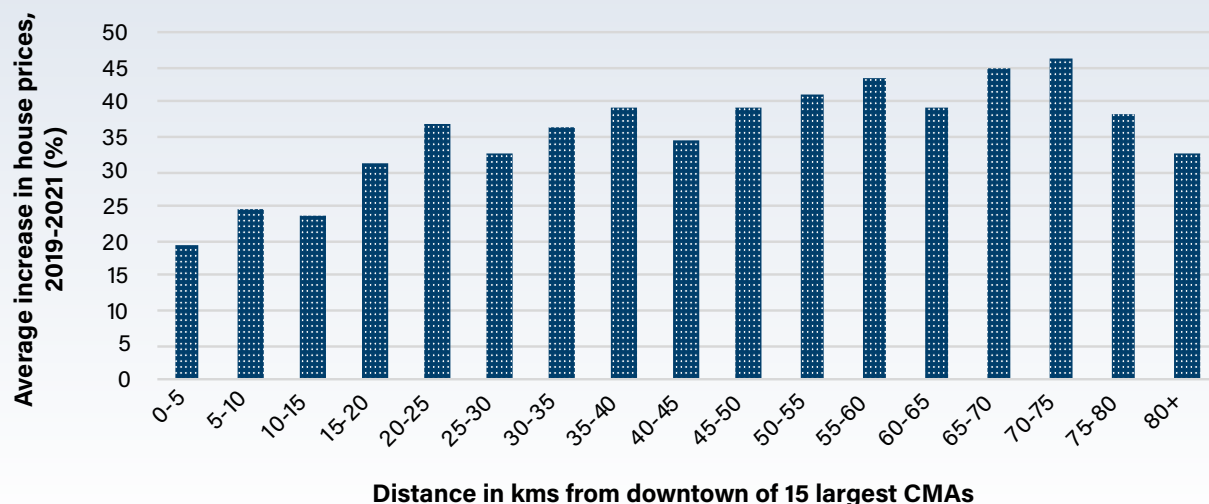
Rates of remote work continue to be higher in larger cities, mostly due to a high proportion of knowledge workers than smaller communities with more industrially focused economies. In April 2022, over 45% of workers in Ottawa and 35% in Toronto were working remotely or hybrid, compared to fewer than 15% in places like Lethbridge and Abbotsford.²¹ Travel data patterns also support this trend—Canada's overall rate of travel to downtown workplaces measured through mobile device data was down 7% between January 2020 and September 2022, but the rates of travel to downtowns of Toronto, Kitchener, Waterloo, Ottawa–Gatineau, and Vancouver declined by over 45%.²²

Remote work offers an opportunity to re-distribute housing demand from large urban centres towards more suburban and rural areas. At a small scale, this phenomenon did play out during the pandemic, with house prices increasing at a greater rate between 2019 and 2021 in areas that were 50–80 kms away from the downtown areas of CMAs than in areas that were 0–50 kms away (see Figure 2).²³

While it obviously benefits the housing seekers moving out of more expensive downtown settings, the shift in demand also raises prices in smaller communities, which risks pushing existing residents into increasingly unaffordable rental contracts or reducing their opportunities to purchase a home.

These shifts in location, while noteworthy, were likely tempered by the uncertainty surrounding the durability of work-from-home adjustments. Many remote workers adopted a wait-and-see approach, and others have, it appears, decided to return to their urban roots either due to requests by their employers or personal preferences.

Figure 2: Suburban house price appreciation in Canada, 2019-2021



Source: Morel, L. (2022, June). *Analyzing the house price boom in the suburbs of Canada's major cities during the pandemic*. Bank of Canada. <https://www.bankofcanada.ca/2022/06/staff-analytical-note-2022-7/>

If the remote work arrangement became permanent, could Canada's small and rural communities manage an influx of new residents? Many communities in regions like Atlantic Canada have long been challenged by an exodus of young people. A reversal of these trends could help boost economic prospects and local tax bases but would need to be balanced against the impacts of increased demand for housing and other services.

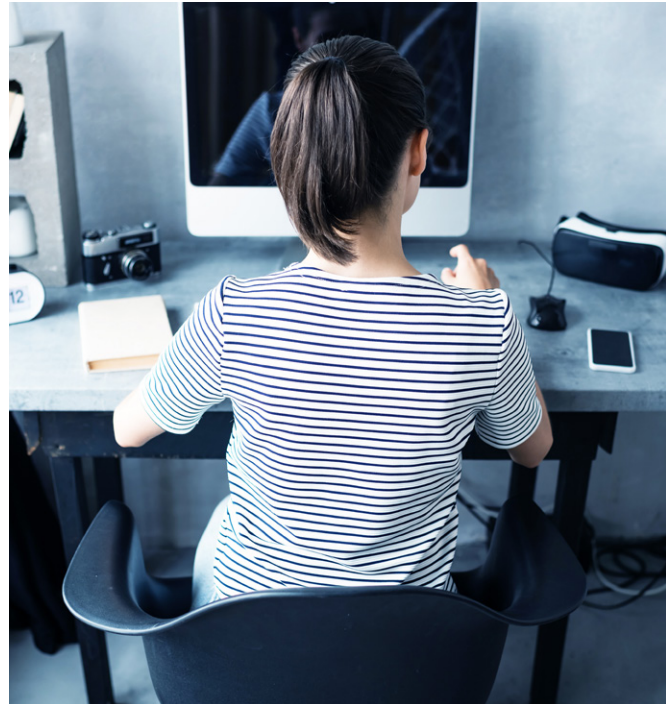
1.3 Broadening Economic Opportunities

Cities have traditionally provided unique opportunities for economic clustering and agglomeration (i.e., the benefits arising from clusters of firms and workers) with relative ease of knowledge exchange, lower costs of networking, and ease of building new business relationships.²⁴ For example, Toronto is home to 38% of Canada's business headquarters and accounts for 20% of the country's GDP.²⁵ In 2013, Canada's 33 cities with 100,000 or more people accounted for over 70% of GDP.

Consequently, cities have been the focus of economic development efforts for many countries. Yet, within cities and within regions and countries, there are often significant disparities in wealth.²⁶

Remote work arrangements offer the opportunity to replicate some of the clustering and networking effects of cities (largely accelerated by the proliferation of virtual collaboration and meeting tools) without the need for geographic proximity, while enhancing the potential pool of workers for employers and improving skill-matching between available workers and jobs. However, the long-term impacts of reducing the agglomeration effect of large cities could ultimately lower productivity and wages at an aggregate level.²⁷

Could remote work be a tool to spread opportunities more broadly by allowing firms access to talent in other regions or countries? Furthermore, could remote work be a spur to firms setting up a physical presence outside of major cities? Some evidence of this behaviour occurred during the early days of the pandemic—for example, Tokyo saw a 20% increase in companies leaving the city in 2020.²⁸ In downtown Toronto, office vacancy rates jumped from 2% pre-pandemic (March 2020) to 13.6% by the end of 2022, and were even higher in other cities including Montreal



(16%), Waterloo (22.8%), London (26.2%) and Calgary (32.6%).²⁹ The travel patterns noted earlier also support the observation that the downtowns of many larger cities are not back to pre-pandemic days in any sense.

Beyond simply adjusting to having staff work remotely, could firms pursuing remote work policies change how they operate and what they choose to do—whether outsourcing key functions, turning to an increasingly non-standard workforce (e.g., independent contractors, part-time, and temporary workers), or off-shoring?³⁰ This would have significant implications for productivity in the services sector as well as global shifts in where work is performed and by whom.

Firms that embrace remote work for domestic workers are, presumably, open to embracing international talent if the price and productivity equation makes business sense. For policy makers, this could require a strategy to stem job losses arising from offshoring – whether through augmenting skills-training for Canadian workers to make them more attractive in a global marketplace or competing on tax, labour and regulatory standards.



Whether, and to what degree, firms shift their location, how they operate, and where their workers are based will have important implications for regional economic development and, potentially more broadly, the nature and pace of innovation and growth.

1.4 Workforce Inclusion and Distribution of Benefits

Canada's workforce is not fully reflective of its population and distribution of economic benefits is not equitable. People with disabilities, Indigenous peoples, women, recent immigrants and some racialized groups all have experienced lower than average rates of labour force participation and median employment income in recent years.³¹ Marginalized populations, given their over-representation in lower-income, service-sector roles, were disproportionately affected by layoffs at the outset of the pandemic—unemployment rates of South Asian (+9.1%), Black (+6.3%), and Chinese (+8.4%) Canadians all increased by more than the rate for White Canadians (+4.4%) between July 2019 and July 2020.³²

Labour market outcomes and opportunities for persons with disabilities are particularly dire. Median employment income for persons with disabilities in 2017 was only \$18,800, and their employment rate pre-pandemic was 59%, compared to 80% for Canadians without disabilities.³³ Disability rates are higher for

Indigenous peoples (31%) and women (24%) than the rate for all Canadians (22%). People with disabilities (13.5%), along with Indigenous peoples (18%) and recent immigrants (17.4%) all experience higher poverty rates than the overall population (10.1%).³⁴

Barriers to labour market opportunity and equity for marginalized groups include discrimination, bias, and physically inaccessible workplaces, as well as broader systemic inequities related to educational, training, and social support systems such as access to affordable childcare.³⁵

Remote work offers an opportunity to improve inclusion for workers with disabilities who are faced with office environments that are inaccessible and may not offer sufficient privacy to address medical issues.³⁶ American data shows employment rates of people with disabilities aged 25–54 were 3.5% higher in Quarter 2 of 2022 than they were pre-pandemic, while workers without disabilities had an employment rate that was 1.1% lower over the same timeframe. Remote roles saw a more rapid increase in the share of disabled workers over this timeframe as compared to non-remote roles.³⁷

Evidence is more mixed around whether remote work mitigates discrimination and harassment against marginalized and under-represented groups. A survey of US technology workers during the first year of

the pandemic found that more than 1 in 4 reported experiencing more gender-based harassment while working remotely, with far higher rates for Asian women and non-binary people (39%), transgender people (42%), and Latinx women and non-binary people (38%).³⁸ Ellen Pao, founder of the group conducting the survey, noted that “There’s more one-on-one interaction when you’re not in the office. People are seeing more harassment on chat and on email and on video conferencing.”³⁹ The absence of colleagues who can act as witnesses or deter inappropriate behavior is a challenge, along with a lack of clear reporting procedures.⁴⁰

In contrast, visible minorities who are knowledge workers have seen other aspects of their self-reported employee experience (e.g., being treated fairly at work and having supportive management) improve markedly while working remotely.⁴¹ This may reflect an increased focus on results and outcomes rather than social cues, interpersonal dynamics, or other cultural preferences.

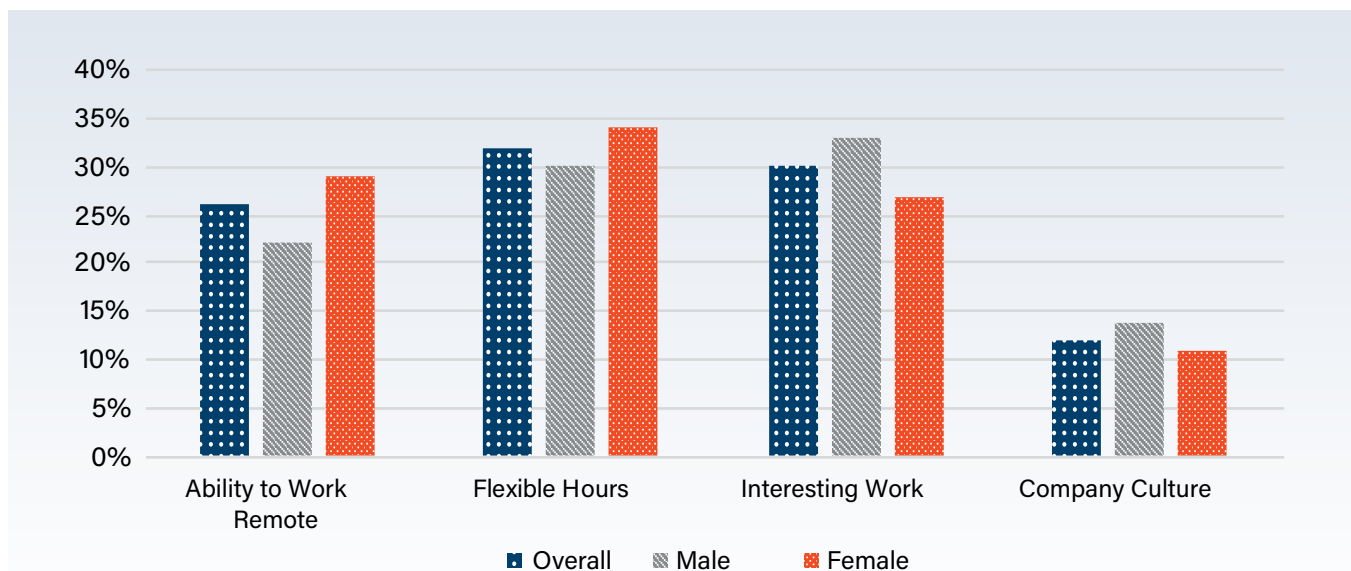
A large-scale 2021 Future Forum survey of knowledge workers in several advanced economies found that the preference for flexible work arrangements is higher

amongst women and visible minorities. In contrast White knowledge workers, men, and non-parents preferred being in the office.⁴² Canadian women ranked remote work opportunities and flexible hours as higher priorities than men in the CSA Public Policy Centre’s December 2022 survey (see Figure 3).

In a follow-up Future Forum survey, managers acknowledged the risk of “proximity bias,” whereby in-person workers who have greater exposure and access to executives could serve to entrench inequities in career opportunities for historically marginalized groups. More than 40% of executives surveyed in November 2021 reported proximity bias as their most significant concern related to remote work.⁴³ Younger workers without established connections and networks, along with historically marginalized workers, could face particular challenges in this regard, which might harm their long-term career prospects.

It is important to keep in mind that most remote workers in Canada are more well educated and better compensated than workers whose roles cannot be performed remotely. Significantly more workers with a bachelor’s degree (59%) can work remotely, compared

Figure 3: Which of the following is most important for you when looking for a new job? (n=1345)



Source: CSA Public Policy Centre, December 2022 Survey conducted by RIWI

to only 10% of workers without a high school diploma.⁴⁴ More than half (54%) of salaried couples who are in the top 10% of the family earnings distribution can work from home, while only 8% of couples in the bottom 10% of the distribution can work from home.⁴⁵

Consequently, any opportunities for remote work to improve labour force participation for under-represented demographic groups will be constrained by which roles can and cannot be performed remotely. There is also the prospect that remote work, largely undertaken by more well-off workers, could accelerate income inequality in the years to come—though this could be mitigated by firms offering remote work as a means of moderating wage-growth pressure.⁴⁶

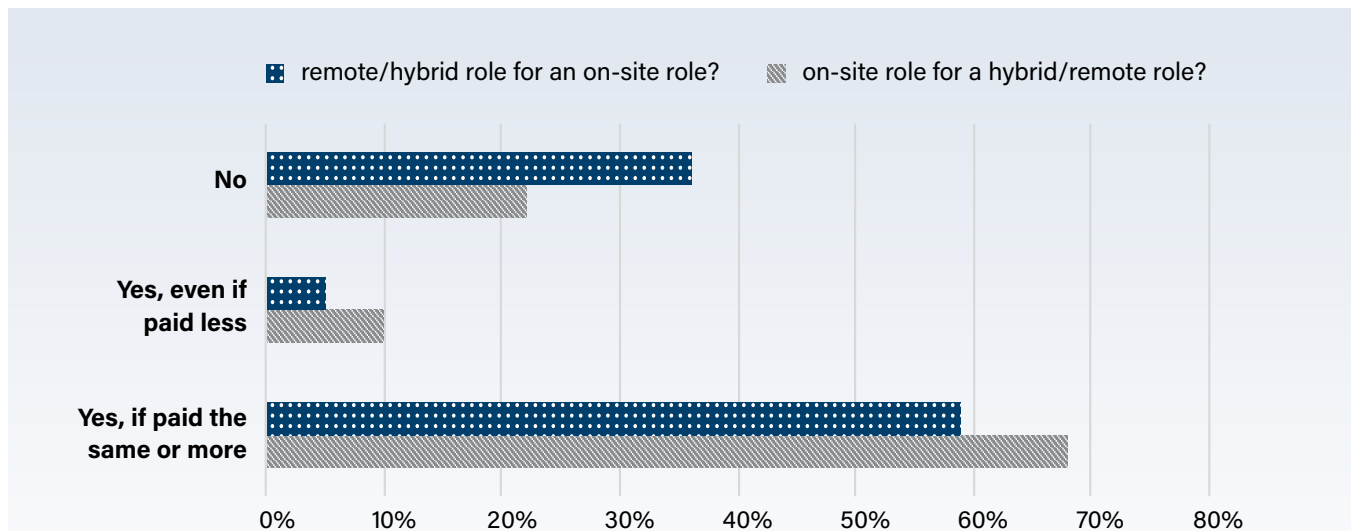
In fact, early evidence from the US shows a compression of wages over the first two years of the pandemic, a development that could in part be driven by how different types of work arrangements have been valued during the pandemic (i.e., higher wages for those

workers required to conduct more risky, face-to-face interactions while higher-paid workers were willing to exchange wage increases for convenience).⁴⁷

The CSA Public Policy Centre's December 2022 survey found that workers in a hybrid or remote role were slightly less likely to consider taking an on-site position for the same or more pay (59%) than on-site workers offered a remote role for the same or more pay (68%). These preferences were consistent across income levels in both scenarios (see Figure 4).

Thinking through how workplaces can adapt remote and hybrid work arrangements to be more inclusive will necessitate a thorough assessment of HR practices and policies, the appropriate use of technological tools, and a focus on tackling broader socio-economic barriers that stand in the way of well-paying job and career pathways. The impacts of remote work on wage growth for different types of workers, and which effects are transitory versus those that are more durable, should also be an area of attention for policy makers in the years to come.

Figure 4: Would you leave your current...



Source: CSA Public Policy Centre, December 2022 Survey conducted by RIWI

1.5 Tax and Immigration Policy

As remote work becomes a feature of Canadian business practice, there are a range of tax-related questions that must be sorted out in relation to remote work arrangements, particularly where those arrangements cross provincial or international borders.⁴⁸ In particular, complications around how to calculate source withholdings on payroll taxes and determinations around whether remote workers might constitute a permanent establishment in a different jurisdiction could lead to additional corporate tax filing obligations. The Canada Revenue Agency (CRA) may wish to consider issuing additional guidance around different remote work situations for employers to avoid confusion and inadvertent non-compliance with tax obligations.

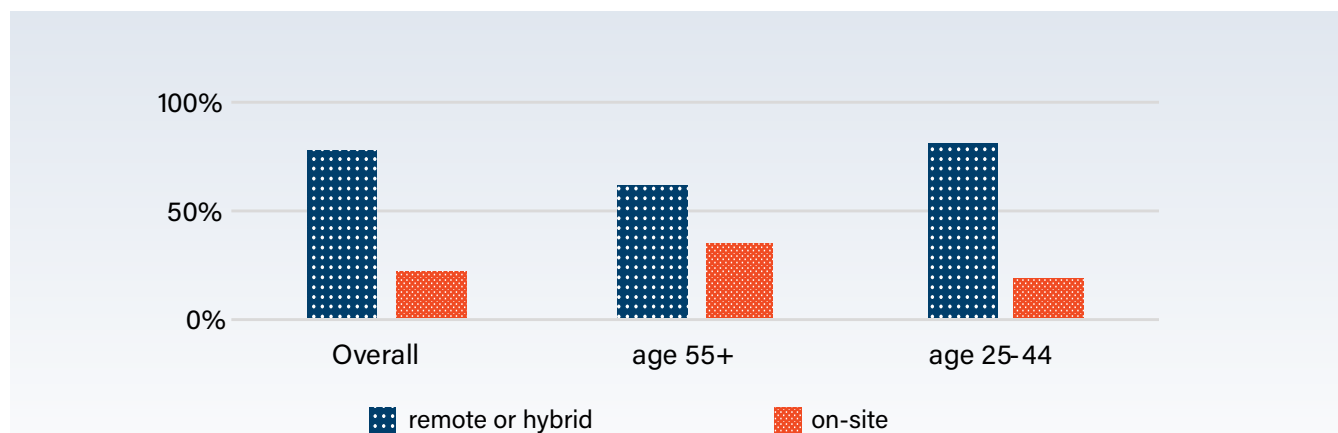
Some broader issues beyond tax filing also merit consideration. In December 2020, the CRA issued a new simplified method of claiming home office expenses that would provide \$2 per day for each day spent working from home, which has been extended for the 2021 and 2022 tax years.⁴⁹ Going forward, the federal government could choose to increase or decrease this amount, or re-instate documentation requirements for employers and employees, which would serve to promote or de-incentivize remote work arrangements.

Canada's ability to attract remote workers from abroad while also retaining existing workers in Canada could offer a means of generating additional income tax revenue. Several countries have offered so-called "digital nomad" or remote work visas to attract foreign workers to their shores.⁵⁰ Some of these countries do not tax workers' incomes, while others have a certain trigger rate (e.g., over 183 days) or mandate payroll tax obligations in place of income taxes.

Whether Canada could compete with Aruba and Jamaica as a destination for digital nomads is a serious question, but there is clearly some level of competition among countries for this new class of workers. Re-thinking Canada's existing visitor visa and work permit system to explicitly recognize digital nomads and make the country a more attractive and well-known destination for remote workers is one potential path forward that could yield revenue gains.

This approach could be of value for rural areas and regions outside the conventional business hubs (e.g., parts of Atlantic Canada) looking to attract younger residents, particularly if pathways to permanent residence were available. The CSA Public Policy Centre's December 2022 survey of Canadians demonstrates a clear generational preference (+20%) for remote/hybrid work amongst younger workers (see Figure 5).

Figure 5: What is your ideal working situation? (n=1331)



Source: CSA Public Policy Centre, December 2022 Survey conducted by RIWI

Nearly 88% of Canadian remote workers reported in April 2022 that it was easy or very easy to adjust their work schedules for personal or family reasons, compared to only 61% of workers who typically worked at a location other than their home.



Finally, the local impacts of spending, or lack thereof, by office workers should be kept in mind. The ongoing debate in Ottawa–Gatineau about the return of federal civil servants to the office has been highlighted by conversations around the challenges for local businesses in the downtown core.⁵¹ For cities with well-developed downtown cores, the impacts of a long-term and broad shift to remote work would be felt in the longer-term erosion of viability of downtown businesses and the municipal property tax base, which represents the primary source of revenues for cities.

A hit to the property tax base would be concentrated on the commercial side if residents stayed (and shopped) in a city but worked outside of the core. However, a larger-scale exodus from cities for smaller, more affordable communities could ultimately destabilize the residential property tax base. Knock-on effects from hollowed out downtown cores could also impact the fiscal sustainability and delivery of other services such as public transit in the form of higher fares and reduced services.

The Toronto Transit Commission, which was at 70% of pre-pandemic ridership levels by late 2022, proposed services cuts and fare hikes in its 2023 budget.⁵² Increased pressures on cities' budgets would likely increase calls from municipal leaders for more stable and predictable revenue tools and transfers from the federal and provincial levels of government.

1.6 Physical and Mental Health

There are both physical and mental health issues to consider in relation to remote work. A 2021 online survey of American remote workers found that roughly half of respondents reported changes in their physical health, including increased eye strain, lower back issues, and a significant reduction in their physical mobility.⁵³

With respect to mental health, immediate questions arose about how remote workers navigate work/life balance when their work stresses can't be left behind at the office. Some jurisdictions, led by France in 2017, have moved forward with "right to disconnect" policies that recognize the importance of a clear separation between work and home lives to mitigate the physical and mental health effects of always being connected to work.⁵⁴ But how does a right to disconnect work in a remote environment, where there is no physical separation of work and home?

There is a deep body of literature around the negative impacts of long commutes on physical and mental health and the ability to maintain social connections.⁵⁵ However, workers who have shorter commutes tended to report less stress than those with no commutes—possibly because they have some time to de-stress and disconnect from their workplace.⁵⁶ What happens when that time is lost?

A study of Canadian remote workers (based on surveys in the fall of 2020 and a follow-up in spring of 2021) found lower burnout and stress levels, but respondents reported decreased general mental health.⁵⁷ However, it is difficult to draw any firm conclusions about the psychological and physical wellbeing of remote workers during the pandemic given the immense swings in external stressors independent of the workplace.

Moving forward, a better understanding of how to weigh the health benefits of less time spent commuting with the possible downsides of a closer nexus of work/home lives is key to assessing the overall health impacts of remote work. A healthier workforce would have clear direct benefits insofar as it would reduce strain on the healthcare system and also generate productivity and economic benefits more broadly.

Finally, from a social perspective, there is data to suggest that individuals juggling childcare or eldercare demands were aided by remote work arrangements. In a traditional office setting, it can be difficult for caregivers to balance their work responsibilities with their caregiving duties. Remote work gave caregivers more control over their schedules, allowing them to more easily pick up children from school or daycare or keep tabs on an elderly parent at home.

According to a survey of workers conducted in 27 countries in 2021 and 2022, 34% of the time savings from remote work were allocated to leisure (37% for Canadians) and 11% to caregiving (7% for Canadians).⁵⁸ Nearly 88% of Canadian remote workers reported in April 2022 that it was easy or very easy to adjust their work schedules for personal or family reasons, compared to only 61% of workers who typically worked at a location other than their home.⁵⁹

At a time when Canada is facing challenges in delivering both childcare and eldercare, some seemingly marginal improvements in this regard could yield significant gains from both a personal and societal perspective. But given the extent to which these burdens fall disproportionately on women, large-scale interventions (e.g., more accessible and affordable childcare, before and after school care, and aging at home supports) driven by public policy would be more effective.⁶⁰



1.7 Productivity and Innovation

Perhaps the most contentious area of debate around the impacts of remote work concerns productivity. Are workers more productive when freed from the constraints of commuting and distractions in the office or does the absence of in-person engagement hinder collaboration and innovation? A number of studies examined this question over the last three years in a broad range of different industries and types of companies around the world.

Some of these findings, which are highly industry- and role-specific, include:

- A 70% decline in feedback on computer code for software engineers at a large American firm in a virtual environment. Physical proximity to coworkers was particularly important for the engineers under age 30 and female engineers, who both received notably less feedback in a remote environment and were more likely to quit their jobs—four times as likely in the case of female engineers who had previously been working in the same building as their colleagues.⁶¹



- A study of US Microsoft employees observed that the shift to remote work in the early months of the pandemic led to fewer connections between different business groups. Workers spent more time collaborating with stronger connections and less with weaker connections (who are more likely to provide access to new information), suggesting a silo-ing effect and potential negative impacts on productivity and innovation.⁶²
- A study analyzing the internet activity of hundreds of thousands of US firms between 2019 and 2021 found that while employees work more hours in a virtual environment, they also read less novel information and share less information with colleagues, which could portend declines in innovation in the longer term.⁶³ An international survey of workers in 27 countries found that workers saved 72 minutes per day working from home and allocated 40% of those time savings to work.⁶⁴
- Researchers looking at a firm in Bangladesh noted that workers in intermediate hybrid roles (23–40% of time in the office) over a 9-week period in the summer of 2020 sent more emails to a broader range of recipients and were rated more highly in their performance than workers in high or low work-from-home arrangements.⁶⁵

By self-reported measures, 90% of new remote workers in Canada in February 2021 said that they are at least as productive as they were in the office—with 32% reporting that they get more done in a remote environment. Workers in the fields of public administration (41%) and healthcare and social assistance (45%) reported higher productivity levels than those in goods-producing industries (31%) and educational services (25%).⁶⁶ When asked about barriers to productivity, 21.7% identified a lack of interaction with co-workers as the main obstacle, while 19% mentioned child/family care obligations; internet speed was the main issue for only 5.1% of respondents.⁶⁷

More data will continue to arrive on these questions in the months and years ahead—and individual firms will surely refine their ability to measure and track worker productivity. The more nebulous and difficult-to-track impacts of remote work on a firm's innovation performance will require close tracking. Ultimately, where firms land on the answers to these questions will be a key determinant of their remote work policies. Looking ahead, the performance of firms that adopt fully remote/hybrid arrangements versus those preferring in-office arrangements will be closely monitored by industry and researchers alike.

Looking Ahead: Policy Pathways

As a guiding principle, policy makers should not interfere with the decisions of individual employers. The scope of activities, objectives, regulatory and workplace environments, and firm–employee preferences makes it virtually impossible for an outside actor to assess whether remote, hybrid, or in-person arrangements are the best path forward for employees, a particular employer, or even a group of employers within an industry.

2.1 Public Policy Opportunities

What then, if any, role should policy makers play in shaping the future of remote work in Canada? There are some broad-based interventions worth considering that would improve public infrastructure, introduce greater clarity and set minimum expectations around digital connectivity, labour standards and tax treatment. In particular:

- **Accessible and affordable digital infrastructure throughout Canada** should be a priority for all levels of government with a focus on rural, remote, and Northern areas. Currently, only 62% of rural communities have access to 50mbps download/10mbps broadband connections with unlimited data, compared to 91.4% of the country as a whole; digital infrastructure on First Nations reserves lags even further behind.⁶⁸ Access to reliable high-speed internet is a pre-condition if smaller communities are to attract talent from other parts of Canada and abroad in a digital world of work.
- **Federal and provincial labour laws should be updated to account for the rise in remote work.** Ontario's recent introduction of legislative provisions related to workplace electronic monitoring and the right to disconnect, as well as federal studies of the latter issue⁶⁹ are just the beginning. How do overtime rules, occupational health and safety standards, and expectations around privacy evolve when a worker might be toggling between work and personal activities throughout the day?
- Ensuring that worker safety and privacy are protected while balancing an employer's ability to ensure work is performed to their satisfaction will require broad consultations and a close review of current legislative and regulatory frameworks. There are also questions around how worker mobilization will be impacted in remote work environments, which could further erode unionization rates and may require action to sustain and foster a collective voice amongst workers.⁷⁰
- **Tax and revenue issues related to remote work require review and assessment.** The federal and provincial governments may wish to revisit the available mix of municipal revenue tools to better reflect new workforce and economic realities. More permanent, stable transfers and access to income tax revenue, for example, could help large cities cope with potential declines in transit ridership and economic activity in downtowns.⁷¹
- The Canada Revenue Agency may wish to clarify how remote work arrangements impact payroll withholdings and permanent establishment rules; as well as review the pandemic-initiated temporary flat-rate method for claiming home-office expenses.
- **A range of policy frameworks, ranging from immigration to skills-training, should be optimized through a talent attraction and retention lens.** In the ongoing global war for talent, Canada has an opportunity to position itself as a remote-work destination of choice for international workers. While competing with the beaches and warm weather of Caribbean destinations is a challenge, some options to consider include:
 - ▶ **The introduction of a simplified and streamlined "digital-nomad" pathway for foreign workers** to come to Canada for a time-limited period, with the express authorization (and requisite proof) that they will be working remotely for a foreign company. A new pathway for remote workers to come to Canada, experience the country, and potentially bridge to longer-term permanent residency or citizenship would be a complement to the federal government's increased immigration level targets. A key question to inform the development of any such program would be what taxes such workers would be subject to and how, and whether, to compete with low/no-tax countries offering similar opportunities.

- ▶ **Promoting remote work as a means of obtaining valuable foreign work experience for Canadian workers who remain in Canada.** In an increasingly digital, globalized economy, Canada's economy could reap benefits from a workforce that is actively engaged in other regions and bringing new knowledge and skills to Canada without leaving their communities. Consideration of whether to incentive these types of arrangements could involve, for example, looking at ways to co-locate remote-work hubs in public facilities like libraries or under-utilized government offices.
- ▶ **Marketing the benefits of less-common settlement destinations to new arrivals.** Ninety percent of immigrants live in one of Canada's 41 cities with a population of over 100,000, with more than 50% of recent immigrants settling in Toronto, Montreal, or Vancouver.⁷² Even incremental shifts in settlement patterns driven by digitally-connected smaller communities could help alleviate pressure on stretched housing markets and spread economic opportunities more broadly across the country.
- ▶ **Developing strategies to blunt the impacts of offshoring.** Canadian policy makers will need to consider how best to position Canada as the home of the world's most talented and in-demand workers if offshoring strategies become widespread in a remote work environment. Modernizing skills-training frameworks to be more effective and accessible and optimizing tax, regulatory and labour standards to compete with other advanced economies will be crucial in this regard.

2.2 The Public Sector as a Pilot Project

The federal government alone has a workforce of over 335,000, and the broader public sector in Canada employs over 4 million people, including those working for organizations such as hospitals and school boards. There is a strong case for governments and some broader public sector organizations, where practical, to preference remote and hybrid work for segments of their own workforces and use the opportunity to test policy innovation and make progress towards several public priorities.

Cost-savings through divestiture of surplus real estate holdings, progress towards achieving targets for reduction of greenhouse gases, and the opportunity to shift jobs and economic opportunities outside of traditional centres of government all support a public sector workforce that embraces remote work.

However, demonstrating that productivity is not impaired will continue to be a challenge, particularly given the optics of public sector workers having more flexibility at the same time private sector workers are returning to the office. In this regard, governments ought to prioritize:

- **Development of metrics and supporting data on productivity, collaboration, and innovation that is specific to different public sector work contexts.** This evidence would ultimately inform decisions around whether to pursue remote, hybrid, or in-person arrangements.
- **Sponsor robust and collaborative research** on issues such as productivity and inclusion in the private and non-profit work contexts to help guide ongoing decisions about optimal work arrangements across the economy.



Conclusion

The pandemic suddenly and unexpectedly thrust Canada and many other countries into a natural experiment about how we work. The results of this experiment are just beginning to come in.

Given the broad range of societal and economic questions that remote work touches upon, ranging from greenhouse gas emissions to housing to workforce inclusion to productivity and innovation, it is imperative that remote work be assessed to discern how it can enable better outcomes for workers, firms and society and what might stand in the way of progress to those outcomes.

The answers to these questions will vary for workers, employers, and different industries. Moreover, the distributional gains of remote work arrangements might serve to further entrench inequities. Ensuring that historically marginalized groups, lower-income workers, and workers who cannot work remotely are not left behind in a new world of work should be a key focus for both policy makers and employers.

In twenty years, Canadians may look back at remote work's rapid adoption during the pandemic as a historical oddity or it may be the inflection point that transformed workplaces. Whatever the future, it should be informed by evidence and adopting policies and practices that lead to a healthier, more productive, and more equitable Canada.

Appendix

Methodology

This report was informed by conversations with policy makers, as well as a literature review and jurisdictional scan. The CSA Public Policy Centre also commissioned a survey from RIWI that was conducted in December 2022.

RIWI Survey Methodology and Notes

Data was collected using a method invented and patented by RIWI Corp. by which web users encounter random anonymous opt-in surveys when they come upon entry points on the internet that might have held some other content or have been an inactive domain (such as error 404). Entry points include ads, dormant domains, in-app purchases, among others. By using a wide range and mix of entry points, RIWI can reach a highly diverse sample of web users anonymously and confidentially.

All Internet users over the age of 16 in Canada had the possibility of randomly landing on one of the entry points to the survey. 1,280 respondents in Canada completed the entire survey between December 6th and 9th, 2022; with higher response rates for individual questions.

The questionnaire included seven questions for all respondents and up to eight questions, depending on skip logic. It was administered in English, with respondents in Quebec also having the option to complete the survey in French. Those who reported that they were students full-time and not working; retired persons; or not working and not looking for work were exited from the survey.

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CSA Group is a global organization dedicated to safety, social good and sustainability. We are a leader in Standards Development and in Testing, Inspection and Certification around the world including Canada, the U.S., Europe and Asia. Our mandate is to hold the future to a higher standard.

The mission of CSA Group's Standards Development organization is to enhance the lives of Canadians through the advancement of standards in the public and private sectors. We are a leader in standards research, development, education, and advocacy. The technical and management standards developed with our more than 10,000 members improve safety, health, the environment, and economic efficiency in Canada and beyond.

