

Acknowledgments

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I would also like to take this time to recognize the impacts of COVID-19 and how it has devastated many millions of families over the past year. Although it has spurred this research topic and is talked about as a phenomenon that is creating change in how and where we work, it is not without sorrow and a heavy heart that it is done. My most sincere condolences go out to everybody who has been impacted by COVID-19. I also applaud all health care and front-line workers who have been working tirelessly to save so many lives.

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Executive Summary

Since March of 2020, COVID-19 has drastically impacted how we move, work, and live across Canada and the world. Mandated work-from-home orders, the closure of public spaces, and strict social distancing rules resulted in many changes in how we interact with others and the ability to share information. People across the globe quickly transitioned to virtual platforms as the primary means of communication, as it allowed 'face-to-face' communication without being physically present in the same room. The workspace was not immune to these effects. Many people who traditionally would work from the office were now working from home, but it was not without its challenges. Many people were not well equipped to work from home; they did not have an adequate workspace, the necessary technology, or the skills or comfortability with virtual-based communications. Employees and employers had to pivot very quickly to adapt to these new paradigms, and as a result, some new work habits and ideas about the future started to arise.

The temporary solution of working from home turned into a more permanent transition to the home due to the continued health risks of COVID-19. This prolonged exposure to these working conditions solidified working habits, changed employers' minds about the future of work, and has paved the way to a rise in more flexible working arrangements.

In the following research report, I look to explore how work habits surrounding work from home have evolved due to prolonged coexistence with COVID-19 and what impacts that will have on how and where knowledge workers choose to work in cities.

Changes in where economic activity occurs in cities can significantly affect the physical design and regulations surrounding our cities. Permanent changes to more activity occurring from home can result in:

- » Downtowns losing their prominence as places of economic activity, requiring a repurposing of the buildings, and how transportation networks are oriented.
- » The rise in importance of residential areas, requiring more supporting services and real-estate accommodations to support the increased time spent in these areas.
- » A redesignation of zoning regulations of residential homes to clarify the difference between residential and commercial designations if both are happening under the same roof.
- » A redesign of homes to accommodate one or more people working from home on a more permanent basis.

To explore these ideas, a set of 40 interviews were conducted in May and June of 2020 with individuals who transitioned to working from home due to mandated work from home orders. Eight respondents from the initial group were engaged in a follow-up interview in January and February of 2021 to understand how the continued coexistence with COVID-19 and work from home has been for them. These first-hand lived experiences provide insights into the aspects of working from home that have worked, not worked, and provide some ideas about the future of work in our cities.

Some important ideas arose due to this transition to working from home, particularly the impact that working from home has on employee well-being, steps employers can take to excel through these shifts, and how this could impact the future of cities. This report does not explore all changes that resulted from COVID-19 and working from home, but rather it explores some of the pertinent ideas that cities, employees, and individuals should consider if a more permanent transition to flexible working arrangements occurs.

Contents

Section 1 Introduction	2
Section 2 Methodology	5
2.1 Research Strategy 2.2 Literature Review 2.3 Interviews	5 5 6
Section 3 Literature Review	8
3.1 Consultant and Real Estate Reports 3.2 Academic Literature	8 11
Section 4 Initial Perceptions	17
4.1 Inadequacies of the Home Office4.2 Types of Tasks4.3 Work/Life Balance4.4 Discussion	18 20 21 23
Section 5 Longer Term Perceptions	25
5.1 Altering the Work Setting5.2 Work From Home Fatigue5.3 Open to Work from Home5.4 Leveraging Virtual Work5.5 Discussion	26 28 29 31 32
Section 6 What Does This Mean for Urban Planning?	33
6.1 Employee Well Being6.2 Employer Success6.3 Why Should Planners Care?6.4 The Future of Cities	33 35 37 38
Section 7 Conclusion	41
Section 8 References	42
Appendix A Respondent Details	45

Section 1

Introduction

The onset of COVID-19 and the global pandemic has affected how we live, move, communicate, and work in cities – notably, many millions of Canadian workers have shifted their work habits from working in a traditional office space to working from home. This transition to working from home has fundamentally changed how companies and workers function, with teleconferencing and virtual communication platforms now being standard practice (Zoom, Microsoft Teams, Skype, etc.). By March of 2020, 39% of Canada's workforce was working from home (Deng, 2020). Although this number is high, before the pandemic, there was already a shift in work locations; depending on how you measure it, an estimated 20-30% of the workforce did not regularly function in a 'usual place of work' pre-pandemic (Shearmur, 2020). Of those who did have a 'usual place of work' (i.e., commuting to their office), it was still commonplace for them to work from home typically one day a week (Shearmur, 2020). However, the significant change caused by the pandemic was the inability to use these 'usual places of work'; office buildings, co-workspaces, and even cafés were closed, leaving working from home as the only option left. The shift in work habits that occurred because of COVID-19 forced employees and employers alike to come up with innovative solutions to work practices and think about the future of office work.

Although work location changed rapidly at the start of the global pandemic, it did more for some workers than others. The mainly highly qualified, high-order, knowledge workers based in the central business districts (CBD) of cities found themselves working from home rather than the office. Where low-qualified essential service workers were still working on-location and exposed to a higher risk of transmission. (Shearmur et al., 2021).

It is essential to understand why a possible change in where people work is of importance for planners. For the past few decades, cities have adapted to changing circumstances but have predominantly functioned under the same pretense: the downtown is where high-order service work occurs and also represents each city's highest concentration of workers. A potential shift in either the frequency or prevalence of that idea could have many related effects on how our cities and society function. There are, among others, four big reasons why planners need to understand if the location of work activities is evolving:

» Downtowns are predominantly office locations. Most spaces in downtowns are either office spaces or other activities that are supporting businesses to office workers (restaurants, stores, print shops, etc.). Also, most public transport networks are designed to converge on downtown, as they are designed to take people to and from these office locations. If there is a drastic decrease in office use, downtowns will be weakened across these dimensions. This is important for downtowns themselves and larger metropolitan areas, as downtowns are often the focus of many cities' image, identity, and business. Furthermore, downtowns represent huge investments in terms of infrastructure and buildings; their abandonment would mean building waste and the need for new buildings elsewhere, both of which would be bad for the environment and expensive public or private actions.

- » More activity in residential areas. If people start spending more time working from home, this could mean that lots of the activities that used to occur downtown (eating out, having a coffee, personal services, etc.) will now occur in or near our residential neighbourhoods. This shift in where activity occurs will mean that real-estate needs and service provisions in certain residential areas will have to shift to accommodate this.
- » How we designate and design homes will have to shift. The distinction between 'residential' and 'non-residential' zones is a tenuous relationship, and if more people work from home regularly, it will become more challenging to maintain. Furthermore, homes and houses may have to evolve as it becomes more normal to accommodate one, if not two or three, people working from home.
- » Not everyone can work from home. As working from home becomes more normalized, roles with more responsibilities or 'better' white-collar jobs will have more flexibility to work from home. However, access to these 'better' jobs may become conditional on having an adequate home office, secure internet connections, and a high capacity to work from home. Many people cannot afford the living conditions that allow for comfortable and prolonged work from home so a marked shift towards working from home could exacerbate inequalities of access to 'better' jobs.

Due to these and many other reasons, it is important to understand the effect of potential disturbances in where we work, live and function in cities; and the global pandemic has led to many questioning all of these factors.

This onset of the pandemic raised many questions, particularly surrounding the future of office space, as some theorized that "this might just be the end of the office as we knew it" (Deng, 2020). To obtain a better understanding, we (a research group at the McGill School of Urban Planning) conducted forty in-depth interviews between May and July from people working from home in Montreal, Calgary, and Vancouver. These interviews indicate the perceived advantages and disadvantages of working from home and insight into the future of office work once the pandemic has subsided. However, co-existing with the global pandemic has become a prolonged reality, and the temporary solution of working from home has become more of a permanent reality for many. The initial sentiment about working from home was generally positive, but it was not without its limitations and issues, and respondents seemed eager to return to life as usual. The interviews' timing has provided valuable insight into the initial impressions of working from home; however, there is a knowledge gap since we do not know how people's attitudes towards working from home have progressed with prolonged exposure to these working conditions.

There is currently very little literature from a planning or geographic perspective that has emerged

discussing the office space's future in response to the most recent shifts, as this is a very recent phenomenon. However, some work has been released from management, medical, and organization studies; but this research does not align with urban understanding of the phenomenon. Organizational work focuses on how companies can manage their workforce, their real-estate and their operations as workers no longer co-locate. Medical research has focused upon the extent to which working from home can slow or mitigate virus transmittal. Understandably, neither of these approaches take a step back to ask what effect a large shift away from offices and towards working from home will affect the city. That being said, since the onset of the pandemic, and in particular over more recent months, a significant number of prominent newspapers, real estate consultants, and management consultants have released reports about the workplace's future. (Thomas, 2020; Baxter et al., 2020; MacLeod, 2020). Many of these outlets have performed small-scale surveys and have published articles on such or have conducted large scale survey with rather superficial findings and discussion. Despite its pitfalls, this initial work is vital in providing a glimpse into the general rhetoric surrounding the workplace's future. This grey literature, which has been released to date will provide an overview of the commonly accepted view of the office space's future. The view published in these outlets will be used as a baseline for understanding the future of the office, and will be compliment the interview data that has been collected as a part of this comprehensive Supervised Research Project (SRP).

Section 4.0 of this report will highlight the themes that arose as part of the Phase One interviews of the research project. They provide valuable insights into the initial perceptions of working from home and the challenges associated with such. Section 5.0 of this report will explore the themes that arose after having experienced prolonged coexistence with COVID-19 and these new work paradigms. Due to this extended period, a knowledge gap exists in understanding how perceptions have advanced in the past year, and this section will aim to shed light on these ideas. This section will provide an opportunity to assess whether (and how) people's attitudes to working from home, returning to the office, and the future of work have progressed as the pandemic continues to be a reality. Finally, Section 6.0 will discuss the findings, comparing the commonly accepted view that emerged from press coverage and consultants' reports with the initial sentiments surrounding working from home and how that view aligns with individuals' perspectives after a prolonged spell of working from home.

Section 2Methodology

The information outlined in this Supervised Research Project was collected in three phases: literature review, phase one interviews, and phase two interviews. The literature review provides the academic and journalistic understanding of the research topic and frames the remainder of the report. Phase one and two interviews bring forth qualitative perspectives about how workers have responded to these phenomena, and this information was gathered through in-depth interviews and analysis. The research in Phase one was conducted in collaboration with Manuela Parra-Lokhorst and Richard Shearmur from the McGill School of Urban Planning. The following section provides detail into the steps undertaken in each phase and how the information gathered will be used in this report.

2.1 Research Strategy

Fundamentally, this project's objective is to understand how people have reacted to working from how and how that evolved during the pandemic in view of obtaining a better understanding of what future work locations will look like.

This is a very wide research objective, one that a single study can't achieve. However, light can be shed on the question by performing three key research activities. First, understanding what informed commentators - mainly newspapers and consultants who have published reports - thinking about what future work arrangements will look like. Second, a set of in-depth interviews of people working at home which will allow the opinions and projections of the informed commentators to be nuanced and maybe questioned. And finally, looking at pre-pandemic understandings of how work location was evolving. One item that has emerged strongly over the pandemic in many spheres is that the pandemic has amplified existing trends (whether of inequality, retail habits, weaknesses in the health system...). This is also true in the realm of work. So obtaining a good understanding of how work location was evolving before the pandemic will provide important pointers as to where it may stabilize afterwards.

2.2 Literature Review

The literature review achieves three main objectives:

» It provides an overview of the common sentiments and understandings of trends affecting where and how people work within cities. First, provide a review examining academic work released prior to the onset of the COVID-19 global pandemic, both from a journalistic and academic standpoint. It highlights trends that were starting to be apparent in changing where and how people work in cities.

- » The section overviews literature released since the onset of the global pandemic, exploring how COVID-19 has impacted how and where people are working. There has been limited work released to date that links COVID-19 related shifts to the urban or geographic field, but there has been some early work in the communications, managerial and operations fields which are of particular interest to this research project.
- » Finally, the section provides a review of 'grey literature' using information released in newspaper articles, managerial reports and real-estate consultant reports. In the absence of extensive academic literature relating to the effect of COVID-19 will have on work habits in cities, this set of grey literature provides an understanding of some of the early trends and predictions about work habits and the future of the workplace.

The combination of literature released before the onset of COVID-19, early work released since its onset, and the commonly accepted view found in grey literature frame the findings outlined in the remainder of the report.

2.3 Interviews

A total of 48 in-depth qualitative interviews were conducted for this research study, 40 in May and June of 2020, and 8 follow interviews in January and February of 2021. Due to the involvement of human participants in these interviews, there was a need for ethics clearance. Richard Shearmur, who was the supervisor for this project, had already obtained ethics clearance for this topic, and as such, we (Manuela Parra-Lokhorst and myself) were able to conduct this research under his ethics clearance umbrella and supervision. The interviews were conducted in a semi-structured format. This meant an interview guide was used with prompting questions that were asked to every respondent, but if a respondent brought up a unique or interesting point, they were asked follow-up questions or to elaborate on an idea.

The respondents were chosen using a snowball technique – people from our direct networks were first reached out to, and then they were asked if they knew of anyone else who would be willing or interesting to participate in the study. This method of interviewee selection is convenient but has some limitations associated with it, most prominent being that there is a greater likelihood for similar respondents (in age, profession, lifestyle, etc.) and a greater likelihood for a non-representative group. Due to the group not being a representative population, the interviews are beneficial at shedding light upon, and nuancing results of the more representative surveys outlined in the literature review, and they may identify issues that are not raised in the wider literature, but they cannot be used to assess the prevalence of any particular behaviour or attitude. Nonetheless, the group of 40 represented a broad group of stages of careers and professions, which provided good insights into the topics. See Appendix A for details surrounding respondent age, gender, profession, living situation and location.

The interviews themselves were conducted virtually and recorded using the web-based communications tool "Zoom Videoconferencing." The interviews lasted anywhere from 20 minutes to 80 minutes, depending on the respondent. Post-interview, the interviews were transcribed using the web-based transcription service called "otter.ai." The transcription service used natural language processing to listen to the interviews and do the bulk of the transcription; however, the transcription was not perfect, so it required a second listen and combing through the output to ensure the transcription was accurate.

The research team then analyzed the interviews. First, to analyze the content, a high-level read of all of the interviews was conducted to understand key themes and trends that arose. Then, using those themes and trends as guiding principles, they were re-read to find supporting evidence and indicative quotes that supported the narratives that arose. These themes and ideas that arose through the reading are the basis of the analysis outlined in this project.

2.3.1 Phase One Interviews

Phase one interviews were conducted during May and June 2020 – the early days of the global pandemic COVID-19 and work from home mandates. These interviews were conducted using the method described in the section above. Predominantly, these interviews were designed first to understand where and how they worked and lived before the onset of COVID-19 and how things have changed because of the pandemic. In addition to understanding how things have shifted, they were asked to theorize about how they assume their work situation to look like in a post-pandemic world and if they had any ideas about how cities might operate differently to accommodate that. All the information gathered during this phase will be explored more in Section 4, but it sets the stage of initial insights into how workers were adapting to changing work paradigms and their predictions for how things could change moving forward.

2.3.2 Phase Two Interviews

In January and February of 2021, a set of eight follow-up interviews were conducted with a sub-section of the initial Phase One respondents. This sub-section of interviewees was chosen based on two criteria: if they provided interesting or unique perspectives during the first phase of the process and if they were available and willing for a follow-up interview. The same process as Phase One was conducted: a semi-structured in-depth interview via Zoom, transcribe the interview using the Otter.ai platform, and then analyze the information through a thorough reading and re-reading the transcriptions. These Phase Two interviews provide insights into how things have adapted and changed throughout the pandemic and explore whether perceptions have changed due to prolonged coexistence with COVID-19.

Section 3

Literature Review

As described in the methodology section, this literature review is split into two main components. Firstly, pertinent grey literature is reviewed to paint the picture of how COVID-19 has affected how and where people are working in cities. This section is of great importance, as these are early newspaper articles, real estate reports, statistic reviews, and overviews of small surveys which together make up the generally accepted view and rhetoric surrounding the future of work in a post-pandemic world. Following that section, there is an academic framing of the rise of working from home in recent years, the benefits and drawbacks of such, and how that all relates to the pandemic-related shifts that are occurring right now. Together, this section provides the commonly accepted view and academically accepted view about the rise of work from home, how it is being impacted by COVID-19, and what the potential is for the future of where and how people work in cities.

3.1 Consultant and Real Estate Reports

Many have theorized that in a post-COVID-19 world, the physical office space will no longer play the prominent role that it has over the last century in cities (Vasel, 2020 & Nicoll, 2020). The office is not dead, but there will be a shift in how they, and the workforce that fills them, operate. Many different ideas have arisen surrounding how much time will be spent in the office instead of the home, how an office will function, and how cities should adapt to these new paradigms. The following section will highlight the commonly accepted view published by print media to build the general narrative surrounding the future of the workplace.

3.1.1 Time Split Between the Home and the Office

This topic is the most controversial as many different outlets, companies and consulting groups have generated their own results based on a small number of interviews, a short survey and some early data. As a result, there are varying responses about how much time will be spent working virtually instead of physically in the office in a post-COVID-19 world. The common understanding is that the workforce will not return to work as usual; there will be more emphasis on virtual work habits.

Statistics Canada released a report in September of 2020 stating some early numbers based on what has been reported to date from Canadian businesses. Most prominently, there was a 16% increase in the number of companies who reported 10% or more of their workforce was teleworking or working remotely and that 22.5% of businesses expect 10% or more of their workforce to continue working remotely post COVID-19 (Statistics Canada, 2020). The change highlighted here states that there will be a larger

proportion of the workforce working permanently from home, as opposed to the pre-COVID world of workers alternating between working from the office and home. Moreover, that number is considerably higher for the information and cultural industries sector (47.2%) and the professional, scientific and technical services section (44.5%) (Statistics Canada, 2020). In addition to more people permanently working from home, 25.2% of businesses reported being likely or very likely to offer more employees the possibility of working virtually once the pandemic is over, and 14.3% were likely or very likely to require it (Statistics Canada, 2020). Overall, based on this report, there is a shift in both total numbers working from home and businesses' likelihood to offer more employees the freedom to work from home.

The potential flexibility surrounding the freedom to work virtually has given rise to more opinions about how much time will be spent in the office versus the home. As stated earlier, it is estimated that 20-30% of the workforce did not have a usual place of work, and it was common for those who did have a usual place of work to work from home, typically one day per week (Shearmur, 2020). In post-pandemic times, which we are now edging towards, it is now common understanding that those who do have a usual place of work will now have the freedom and flexibility to work more than one day per week from home. One Financial Times article predicts one to two days per work week will be spent at home (Thomas, 2020). In contrast, another Financial Times article indicates more definitively that two days per week will be spent working from home and the rest in the office (Giles & Thomas, 2020). A report released by the Boston Consulting Group (BCG) predicts an increase from 25% working remotely to 50% working remotely, and that 60% of employees want flexibility in when and/or where they work (Dahik et al., 2020). A report published from Colliers Canada, based on a widespread survey of 12,000 employees, states that most people would like the opportunity to work from home occasionally, up to two days per week (Baxter et al., 2020). There have been other predictions about the time split between the office and home, but overall the trend is a slightly higher amount of time will be spent in the home than in pre-COVID-19 times. Employees now want more flexibility about when and where they work, and employers are more open to this idea now as they have just gone through a forced experiment trialling their employees working from home. It is generally estimated that employees will now spend two to three days per week working not at their 'usual workplace', and the other days in the office space, which is an increase from the estimated one day per week in pre-COVID-19 times.

3.1.2 How the Office Space will Function

Employees desire more flexibility in their work, but this does not mean that they no-longer want a physical office space; they now want a different kind of office space. The office space in a post-GOVID-19 world has to adapt to employees' changing work desires, especially if they have the flexibility to work either from home or in the office. Therefore, the office has to offer something that the home does not provide; if both places offer the same thing, the people will have no draw into the workplace. One thing that is prominent in reports published is that office space will need to provide more adaptable and inviting places, and

provide something impossible to create within your home workspace (Thomas, 2020). Colliers predicts that the office space's future requirements will be comprised of spaces for collaboration, agility, and innovation, with a greater mix of experiential spaces supporting teams and collaboration (Baxter et al., 2020). This was a move that was already starting before the pandemic, but these reports are predicting an acceleration of the existing trend based upon how people have worked over the past year. Furthermore, having a social or client space with lots of amenities will showcase a company's brand and culture, and help with attracting top talent (Baxter et al., 2020). The notable shift that is being predicted about the office space's functioning is that individual-focused and process-driven work will likely occur in the home environment moving into the future, which will open up opportunities for office spaces to be spaces for teamwork and ideation. The office space will still play a prominent role in the future, as a beacon of company values, attracting talent, and being a collaborative space. The office will shift away from being the place to spend nine to five, seated in an isolated desk, to being a space for collaboration, innovation and company well-being.

3.1.3 How Cities Should Adapt

This shift that everyone is predicting and experiencing will significantly impact how our cities function and govern. Some reports and authors have made a few predictions surrounding how our cities should adapt to accommodate this new paradigm. With more time being spent in the home and less in the workspace (which are typically located in downtown business cores or office parks), there is need to create more convivial public spaces, as there will be less time spent isolated in the office. The Financial Times state that cities will need to adapt by providing more space for leisure, entertainment, culture, and arts; "the value of outdoor space has become more evident as result of the confinements measures, and cities will need to double up on creating more public spaces" (Thomas, 2020). Other ideas include the retrofitting of schools, libraries, churches and other under-used buildings into flexible co-workspaces to provide more opportunities for work locations outside of the home and the office (MacLeod, 2020). Shifting work habits will change where and when people will spend a large proportion of their time, and cities should consider ways to adapt spaces outside of the traditionally busy business centres, as their prominence as spaces for business will likely diminish over coming years.

Places of residence will also have to adapt to these changes, as many individuals are now looking for somewhere to live that can accommodate one or two people working from home. Some development companies have already gotten ahead of this trend by building flex spaces or office alcoves into apartment designs to accommodate people looking to work from home (CityRealty, 2021). Other companies are now making co-workspaces into buildings as an extra amenity space for residents of the building (Deschamps, 2021). Cities are fast to adapt to change, and developers have been quick to provide solutions in new builds for people who are now working from home more regularly.

Furthermore, there could be significant impacts on the activity in downtowns areas, especially when

considering retail spaces, supporting businesses, and overall demand for office space. Many companies are paying high rents for large office space in prime city center locations, under long lease commitments. Shifting work habits could result in companies thinking about smaller spaces and shorter lease arrangements and only using the office space when essential collaboration is required (Eisenstein, 2021). Long leases and anchor tenants are crucial to bringing long-term economic confidence into cities, so a shift of this nature could result in some instability to the office market. Cities will have to adapt to this change and have an opportunity to bring more uses into certain parts of the city, spread out economic activity and ensure there is lots of flexibility in city-designs moving forward.

3.2 Academic Literature

The grey literature was reviewed above as it provides a more recent review of the impact of COVID-19 on the workplace and cities, one that partly reflects empirical findings and that partly reflects consultants' views, expectations and wishes. Unfortunately, only a few academic articles have been published that describe the changes of COVID-19 on work, and even less when linking those ideas to the impact on planning and cities. However, a body of work pre-dates the COVID-19 pandemic, which explores the changes being experienced in where and how people work in cities. The following section outlines the academic work surrounding the rise of work from home over recent years, the effect of COVID-19 on the workplace, a potential future for office work and location, and associated benefits and drawbacks of this shift.

3.2.1 The Rise of Work From Home

There has been an acceleration of workplace mobility over the past few decades, mainly due to the increase in internet communication technologies. The rapid increase of internet communication technologies over the last 30-years has changed the relationship between employment and geographical space. This is predominantly due to the ability to separate jobs from a specific location as no longer do you have to be in a specific location to conduct your job; work can be performed in various places, including but not limited to places-of-residences (Shearmur, 2018). Workplace mobility can be described as the capacity to perform the job from a variety of locations (Shearmur, 2018), the degree which varies depending on the job and type of worker, but these locations could include the place-of-residence, café, restaurant, car, bus, train, park, etc. Workplace mobility has also been referred to as different names by different people, including 'telework,' 'mobile work,' and 'ICT-based mobile work.' Overall, they are all describing the same thing, "a work arrangement where workers work remotely, away from an employer's premised or fixed location, using digital technologies such as networks, laptops, mobile phones and the internet" (Eurofound, 2020).

While this shift has been accelerated and pushed to the forefront of many workers' lives due to the COVID-19 pandemic, workplace mobility is far from being a novel phenomenon. This is evident in Shearmur et al.'s 2020 study, which found that even before the pandemic, workers already spent, on

average, 31% of their work time in a location other than their usual place of work, for all economic sectors. Furthermore, it had become common for people officially assigned to a usual place of work – such as an office – to work part of the time (typically one day a week) from home (Shearmur, 2020a; Ojala and Pyöriä, 2018). Thus, the pandemic's effects have not revolutionized work practices, and the most significant shifts towards increased workplace mobility continue to predominantly affect office-based employment (Shearmur et al. 2020).

Further, the prevalence of workplace mobility does not negate the relevance of in-person and shared meeting spaces for work, let alone the efficiencies of city living. Almost 25 years ago, Gaspar and Glaeser (1996) predicted that despite advances in telecommunication technologies, cities would continue to be relevant and essential for enabling face-to-face interactions. Rather than being mutually exclusive, they argued that telecommunication technologies and face-to-face interactions could act as complements, as both forms of communication are helpful depending on the type of relationship and the complexity of the information exchanged.

3.2.2 Benefits and Drawbacks

With the rise of flexible work and workplace mobility, individuals experience some pertinent benefits but also drawbacks. The items outlined here are not mutually exclusive or ubiquitous; however, they are the trends that have been identified during the rise of working from home. As will be described in later portions of this report, some of these trends are experienced differently by individuals depending on the personal circumstances, and where a particular issue could be detrimental to one, it could be a substantial positive to another.

Potential Benefits

With spending more time working from home or in a more flexible work arrangement, it is possible that workers can achieve and maintain a healthier work-life balance. The amount of time in the day required to commute to and from the office or conduct other daily tasks can be minimized as work and life are occurring in the same place; in theory, some may find this time is not saved as it is instead being dedicated to more work. This allows for workers to spend more time exercising, eating well, spending time with family, etc. (Wheatley, 2017). This saved time is substantial, and people who work in these situations admit that it is a significant benefit from working from home by not having to commute on either end of their day. The time saved can be translated into extra efficiency gains which allows people to further excel within their positions.

Another potential benefit is that working from home, with an adequate workspace and limited external distractions, productivity and efficiency can be improved, especially for tasks that require concentration. In a typical office setting, there are lots of other people, ad-hoc chats, in-person meetings, birthday parties, etc. which can all act as distractors from concentrated work. If lucky enough to have an adequate

workspace in the home, there is the potential to work more un-disturbed for longer blocks of time, which can result in a real increase in productivity (Kelliher and Anderson, 2010). Of course, this saving is only realized for work that is individual based and process driven: it is noted that there is a decrease in productivity in work that requires collaboration between parties due to the limitations of online tools and the perils of online communication.

Potential Drawbacks

Although it can be argued that the work-life balance can be improved due to being closer to home life, the opposite is also true. When the borders between home and work are blurred in the case of working from home, the pressures of work can spill over into non-work life with the inability to 'switch off' at the end of the day (Felstead & Henske, 2017). The commute home or physical change of location was the great delimitator between home and work, and when both are happening in the same location, these lines can become blurred and result in an unhealthy balance.

When looking at the amount of work effort expended, Kelliher and Anderson (2010) found that imposed and voluntary work effort is higher among those working from home. It was found for those working at home as opposed to the office, the working day was longer, the intensity of each hour was higher, and more voluntary effort was expended (Ibid.). When working at home, there can be fewer distractions, fewer adhoc discussions with co-workers, and the ability to work in long un-disturbed work blocks. Furthermore, as mentioned, the work-life balance can become blurred, allowing those working more from home to work longer hours in the day. All of this suggests that those working from home could be working more intensely than those in the office. Depending on how you look at it, that can either be positive or negative. It means that people are working harder, and more work can be completed simultaneously, leading to better outcomes for that organization. But it also means that people are more likely to burn out, work more than they are being compensated for, and are working harder than their counterparts in the office. Therefore, there is a need to be cognizant of the amount of work effort being put in when working at home.

Another potential drawback lies in the fact that the chances of promotions when working from home can be reduced. When working from home, there is less of an ability to build personal connections and have ad-hoc discussions with higher-ups, potentially leading to upward mobility within the organization. This force is of particular concern when some are working from home, and others are not. Those not physically in the office could be overlooked for promotions and different opportunities within the company due to a lack of physical presence and connections (Kaushik and Guleria, 2020; Felstead & Henske, 2017).

3.2.3 Effect of COVID-19 and Work

As mentioned, there has been limited work released discussing the impact of COVID-19 as it relates to where and how people work, and even less released linking it to a geographical or urban field. However,

there has been an early set of work that discusses the impact of COVID-19 on the workplace spawning from more managerial and communications fields. Some early findings have linked to some of the potential benefits and drawbacks of working from home, which will be elaborated more in the coming section.

A prominent theme that has arisen so far is how companies, who prior to COVID-19 didn't have to, are now having to turn to more disruptive technologies to cope with working from home (Kaushik and Guleria, 2020). Companies over the past year have turned to having to quickly adapt and learn how to use online tools such as Microsoft Teams, Zoom, Skype, and other online based communication tools to allow their teams to function smoothly.

Many of the identified potential benefits and drawbacks that are associated with flexible work and work from home situations are being experienced by those who are now working from home. Kaushik and Guleria (2020) conducted telephone interviews and developed a list of identified positives and challenges associated with working from home. Among many other things, some of the most prominent challenges being experienced are as follows.

- » Not every home has an office or quiet workspace, which is creating technical and logistical challenges for some to conduct their work.
- » There are other technical and logistical challenges which have arisen, such as the lack of high-speed internet, necessary hardware (computers, headsets, monitors, etc.) and software (programs, VPN's, cloud-based storage/drive, etc.), which is causing many companies to scramble to provide appropriate tools to conduct their work from home.
- » Collaboration issues have already been identified with working from home, and that now more than ever, companies are encouraging video calls and casual interactions to reduce the sense of isolation people are feeling working from home.
- » Working from home can put people into a comfort zone, which can lead to laziness and lots of distractions. Therefore, time manage is a significant challenge that employees need to work on to be accountable to their employers.

On the other hand, there are many positives that people are experiencing from the early transition to working from home. Some of which being:

- » There are large amounts of time saved each day from reducing the commute on either side of the day. Minimizing daily commutes gives individuals extra time to spend either on the work or life domain, which allows individuals to be more productive with their time in the day.
- » People now have the flexibility around when they work and how they work, as they are no longer tied to a typical office 9-5 workday. Therefore, individuals are able to create a schedule that works with other responsibilities (children, exercise, cooking, etc.) while still maintaining the same amount of work in a day.

» Worker morale is on the rise, as people who do not have to spend time with lengthy commutes are able to spend more time with their home and family life which translates into better overall morale for individuals. This can translate into productivity gains, as they are happier to be working when they are, and spending time on other things when they aren't.

Without a doubt, there are other potential benefits and drawbacks that are being experienced through this transition to working from home. This following analysis of the interviews conducted in preparing for this research project will affirm many of the initial benefits and drawbacks outlined here and shine light on some others which are affecting how and where individuals are working.

3.2.4 Potential Future of Work

As described in the grey literature review, this is not the demise of the workplace; instead, there will be a more widespread shift to more flexible working habits. The idea of a flexible office is not new; it could just be the prevalence of such an idea that would be the shift. As described by Felstead and Henske (2017), the flexible office is a "type of working arrangement which gives a degree of flexibility on how long, where, when and at what times employees work." There has already been an increase in workplace mobility (Shearmur, 2018), but due to the apparent success experienced by many companies during this forced work from home, there could be a further rise in flexible work arrangements.

The workplace will inevitably evolve due to the pandemic, from basic on site, towards a combination of face-to-face and remote (World Economic Forum, 2020) also known as flexible work arrangements. This evolution can occur due to the technology and habits that were already in place or starting to form before COVID-19. Work from home mandates due to COVID-19 came at a time were the transfer towards working from home was technologically possible, and when work habits were already changing – but the changes were not well documented or observed (because a majority of people's time was still spent at a usual place of work outside the home) (Shearmur, 2020).

A rise in flexible work arrangements could mean two main things; firstly, the amount of time and widespread prevalence of working outside of the office space (the home, for example) could continue to increase. This could mean that some, who before COVID-19 did not have the opportunity to work from home, may now have more freedom to do so. If individuals can work from home more often, they have the opportunity to live where they prefer (not close to the office), which, allows people to potentially live with lower living costs or closer to family (Ancillo et al., 2020).

The second thing this could affect is how the office space itself functions. If fewer people are working from the office regularly, then the traditional office does not need to be set up to always accommodate all employees, nor need to be set up for process drive work. Process driven work can comfortably be conducted in a place outside of the office as there can be fewer distractions and more ability to dedicate time extended time to that type of work (Kelliher and Anderson, 2010). However, collaborative work that

requires working in teams has been noted as harder to maintain without working face-to-face (Beauregard et al., 2013). Therefore, if there is a rise of flexible work habits, the physical layout of the office space should adapt to reflect the needs of employees when they choose to be physically present in the office. Possible things that would benefit these employees would be more collaborative spaces, meeting rooms and shared spaces. This would provide the most opportunities to work collaboratively while in the office, and other, less collaborative work, can be conducted while in the home or working in another third space (café, park, library, etc.)

3.2.5 What Could This Mean?

Trends have been on the rise towards more flexible or mobile work conditions, with more and more people opting for or allowed to work remotely over the past few decades. COVID-19 has exacerbated this as many stay-at-home orders have forced a much larger swath of the workforce into different working locations. However, working remotely or flexibly has many potential drawbacks and some prominent benefits that will allow some to thrive in these working conditions, where others could struggle to adapt to this.

According to the grey literature, the rise of remote or flexible working will not subside post-pandemic. The office is still very much going to be a prominent factor in people's lives, but how often and its function could change drastically in coming years. The trend suggests that moving into a post-pandemic world, employees will have more ability to work outside of the office two to three days per week and the other days in the office. Furthermore, the office itself will transition from being a place to conduct process-driven work to a place for collaboration and sharing ideas. This is not a new concept for the workplace; this idea, the flexible office, is an idea that some organizations have been utilizing for many years. The shift could be that there will be a rapid increase in these flexible work situations, which will change the prominence of where people work within cities.

The pandemic has dramatically impacted how people cope with, adapt to, and succeed in these new working conditions. The following sections of the report will first examine how individuals who started working from home situations early in the pandemic adapted to these conditions and the benefits and drawbacks. Following that, the report covers the opinions from a group of those initial respondents, one year later, to understand how or if those ideas have changed. The final section of this report will connect will then be more discussion-based, looking at the overall impact over the past year, what that could mean for office spaces and cities moving forward and the other implications that this past year could have on where and how we work in cities.

Section 4

Initial Perceptions

In March of 2020, many office workers worldwide were forced to transition from working predominantly in the office to working predominantly from home to minimize the amount of contact with other people and limit the spread of COVID-19. This forced transition has resulted in many people adapting how they work, the tools they use, how they communicate with others, and their daily work schedule. This meant people had to quickly scramble to pull together an at-home workstation or dust off the home desk in the corner. The transition to working from home was difficult for some and seamless for others - this was predominantly due to the type of work they do and their home circumstances.

As mentioned in Section 2 of this report, during this transition to working from home, myself and a group of researchers from the McGill School of Urban Planning developed and undertook 40 in-depth interviews with individuals who transitioned from working predominantly in the office to working predominantly from home. These interviews were conducted during May and June of 2020, which was two or three months since the onset of stay-at-home ordinances and provided enough elapsed time for respondents to account for what has happened during these shifts. During these interviews the key questions asked were as follows:

- » Pre-pandemic, what was the title of your position, and your associated work activities?
- » Pre-pandemic, where did your work generally take place?
- » Pre-pandemic, what did your typical work-day/work-week look like?
- » From the onset of the pandemic, what have your work arrangements at home been?
- » From the onset of the pandemic, what is your work routine from home?
- » From the onset of the pandemic, how has your experience been overall, and how has it impacted your quality of life?
- » From the onset of the pandemic, have there been any advantages working from home?
- » From the onset of the pandemic, have there been any disadvantages working from home?
- » Now that you are working from home, do you have a preference between working from home and working on location?
- » Post-pandemic, do you think that this experience will shift the ways in which you choose to work, or your company will choose to organize itself?

Together, these questions and other follow-up questions built out a profile for each respondent. These profiles gave an overview of the type of work they conduct, what life looked like pre-pandemic, how life and work have shifted over the first few months of the pandemic, and finally if they have any ideas of what things could look like moving forward.

The ideas gathered from these interviews will be outlined in this upcoming section, but they were also used to guide some other academic work. For more reading on the information overviewed in the following section, look to the following pieces of work:

- » Shearmur, R., Parra-Lokhorst, M. & Wycliffe-Jones, A. (2020). The exaggerated reports of offices' demise: the strength of weak workplace ties. *Global Reflections on COVID-19 Urban Inequalities*, Volume 3 Planning and Policy.
- » Shearmur, R., Ananian, P., Lachapelle., U., Parra-Lokhorst, M., Paulhiac, F., Tremblay, D. & Wycliffe-Jones, A. (2021). Piecing together a post-Covid geography of work: documenting and assessing COVID-related shifts in workplace in Montreal. *Urban Studies*. 1(23).
- » Shearmur, R., Ananian, P., Lachapelle., U., Parra-Lokhorst, M., Paulhiac, F., Tremblay, D. & Wycliffe-Jones, A. (2020). The future of downtown Montreal: Immediate impact of COVID and post-COVID perspectives. *City of Montreal*.

The following section will overview some of the key trends that emerged from this early set of interviews, mainly focusing on the general work habits of working from home and the initial attitudes towards it. This section provides an initial glimpse and understanding of how individuals were adapting to these new paradigms. The information covered in Section 5 will provide an overview of things that changed due to these working paradigms being prolonged. From this initial set of interviews, three prominent themes arose, which will be explored in the following section, they are:

- » The inadequacies of the home office compared to the workplace and the steps taken to remedy such.
- » The perils of working from home as it relates to collaboration, meeting fatigue, and concentration.
- » The blurring lines of work and life causing an unhealthy work/life balance.

4.1 Inadequacies of the Home Office

A common challenge that many individuals faced while transitioning to working from home was the shift from a fully developed and controlled workspace provided for by the employer to a workspace within their own home. From the group interviewed, many of them before the transition were working in workspaces with adequate workstations, access to technology (computers, monitors, projectors, etc.), private and communal meeting rooms, and all the other common office accoutrement. However, when working from home, many were faced with working in less-than-ideal work stations such as a communal area or bedroom, without adequate access to technology, and without the proper conditions to adequately mimic office working conditions.

I have a desk in my room, which I usually sit at. Otherwise, I like to lay on my bed and work from my bed. (R5)

So, I work from my garage, so I have a garage where we usually would put the car, but during the crisis I would work from my workshop in the garage. (R12)

I'm [working] at the dining room table, my bedroom doesn't have a desk so I'm sitting at the dining table with a very uncomfortable chair. (R32)

Currently operate in a 12 by 12 room that is in a non-ideal work location. I would say from a sensitivity perspective, I am slightly concerned when I am on the phone, I just don't have the same security and privacy around. I have a desk setup or home office setup situated in my bedroom which is never ideal, as it's hard to split the work life, work and home balance because it's in your own bedroom. First and foremost, it means I have to have my bed made for Zoom calls. I live in a house with four other individuals. (R22)

Yeah, so I work. I work off a Surface. And I did at work too. I just have a Surface that at work, it hooks up to my, it's got a docking port, and it hooks up to two big monitors. So currently, I'm working off this little tiny. And it hooks in, I can hook it in remotely to our network at the city. So I use all the same software for my day to day work that I would at work, except I don't have two huge monitors, which is like, kind of crap... (R23)

I purchased a desk because I've been doing a lot of my client and stakeholder meetings in video conference form now. I'm often standing and kind of in presenter mode. So I had a bunch of board games and books stacked on my kitchen table. Or I was using, like, you can see this stool there. [...] So I got myself, it's like a moveable standing desk. So right now I'm obviously sitting and it has a lower level for like the mouse and keypad and then this higher level that I can lift up to, so that I can stand and present. It was \$250 from Wayfair, definitely doesn't look like it's worth the money, it's like some MDF, like the board looks like it came from ikea. (R26)

I had to buy a new laptop stand, new keyboards, new mouse, new ergonomic chair, new chair mat, I had to move bedrooms in order to facilitate the addition to the encompassing of a desk setup in an office essentially to have an office. I have had to order a new lamp. (R22)

However, this transition was much more seamless for some as they were already set up to work outside of the office, already had a private space to work from, or were quick to adapt to these new paradigms.

I have a main floor bedroom slash office. So it's actually set up sort of as an office and bedroom. So I work out of that. (R23)

I'm used to work from home, so I was already set up [...] I used to work anytime, anywhere, and not going to work before joining where I am now. So, when they told me I would have to work from home, well you can't see it now but I have an office in the condo, I have my two

screens, printer, chair, library, so I'm fully set up, like I'm completely operational. For me it went seamless. (R10)

So we have an office actually that is upstairs. My wife had commandeered it for her painting, but I have now commandeered it for work. But we have an office at the front of the house. The only thing I had to do was I did go down to the office and I did bring a second monitor home, because I was working on like a little Surface Pro laptop. The screen was too small. So I brought home a second monitor and a stand that actually held it up. (R30)

One respondent summarized this idea well when talking about the difference between the home and the office, he, rather pithily remarked:

You can't really expect everyone to have the same at-home work setup and the same availabilities. Which is, markedly different than when you're in the office full time. When you're in the office full time, I think everyone's sort of set up. You know, what resources they have access too, home-life challenges versus work-life challenges are almost valued less in an office setting. Everyone kind of comes into work and everyone's equal. (R34)

Pre-pandemic, the office place acted as a great equalizer, where people could come in and work on an even playing field, with (more-or-less) equal access to resources and opportunities. However, with the transitions to working from home, individuals were suddenly not on this equal playing field. Some have an adequate at-home work setup, which allowed them to transition with little-to-no hiccups or challenges; whereas, for others, working from home posed many challenges and they were very quickly working from an unequal standpoint.

4.2 Types of Tasks

When working from home, individuals had to rapidly adapt from working shoulder to shoulder with their co-workers, subordinates, and managers, to working in a situation of isolation. This shift resulted in people quickly changing how they worked, especially when communicating and collaborating. Meetings that used to be in person were now conducted through video platforms such as Zoom, Microsoft Teams or Skype, over the phone, or through web-based messenger apps such as e-mails, Slack or Microsoft Teams. Project updates or learning about anything happening within one's organization now had to come in an official e-mail or chat communication. In contrast, before, a lot of this informal news could have occurred over the 'watercooler.' This transition to working remotely posed many challenges and struggles for individuals working from home, as they were no longer in close contact with their team, everything was virtual, and feelings of disconnection and isolation started to creep in.

I used to function in a face-to-face meeting... I was way more effective in a face-to-face meeting, way more. So, I think I miss that. The social interaction that is not being replaced by for example, a Zoom meeting. (R21)

But there's a lot of people that you see kind of around the watercooler, which would make all of our lives easier just to be able to like casually to walk by their desk, instead of scheduling a meeting. There's a lot less casual touch points. And that's true of our brokers, our brokers consistently are saying like, they don't really have a pulse as much on like the vibe or like, what are people working on? You know, if I would usually know if like a certain underwriter and a certain broker if things were going really well, or if they weren't. I can see the numbers right now. I can't really see exactly the story behind the numbers as easily. (R29)

Due to the challenges associated with virtual collaborative work and inter-team communication, teams had to quickly adapt to re-create work-like conditions. Some individuals found that working from home allowed them to succeed and achieve more; some struggled with this transition.

For me, I'm actually able to focus a lot more. Put in context that if I'm away half the week, like I was pre-COVID, when I come back to the office, there's always a bunch of questions. There's always a bunch of things that people are looking for my input on and so when I've come to the office, it would be quite disruptive. And you know, there's more just general socializing, more distractions generally. At home I find that I can concentrate and I'm way more productive. I don't have the distractions. You know, I know what my day looks like, I know what meetings I have and I work through those and outside of that I could find blocks of time to actually get really sort of focused on whatever I need to do. (R33)

Through this transition to virtual work, two groups started to emerge; those who could succeed virtually and those who struggled. A force that influenced whether they were succeeding virtually was the type of work they were engaging in. Respondents involved in highly collaborative or communicative work struggled to adapt as virtual platforms failed to recreate working in-person. However, those who engaged in more process-driven or individually directed work seemed to have found fewer distractions than an office and the ability to work for more extended periods without interruption. This idea is important to consider when considering more permanent transitions to virtual work, as the tasks at hand influence one's ability to succeed or struggle.

4.3 Work/Life Balance

When working in person, it was noted that many respondents found it easier to maintain a healthier work-life balance as work can stay at the office, and life can happen at home. When transitioned to working from home, many were unable to separate the workday and the rest of the day, as they are now

happening in the same place. In pre-pandemic times, for many, the commute at the end of the day was an important separation from work to home life. The absence of a physical barrier between the office and the house created an unhealthy work-life balance as these activities occurred in the same location. This was particularly detrimental for those whose work location within the household was not in a separate office, as they could not disconnect work and living spaces within the household (those who worked in their bedroom, for example).

No. No, we do not have clear working hours and this has become a large factor in the work from home, there is no break from balancing that work life balance and the first month from working from home I found myself working for the sake of working because my laptop was there, there was no escape from the office per se. There was no act of actually 'going home.' (R22)

It's like sometimes when you work from home, you have your resting space and then your workspace are like all in one. Sometimes it's hard to move from resting to work like that transition can be difficult. As much as like the opposite, like turning off can be just as hard. (R4)

Respondents who had a separate office in their household or were able to compartmentalize their work and home life talked about how it was necessary to stop working and do something else at the end of their workday. People who could separate the two have maintained a better work/life balance through these new working situations.

You know, I really, it's absolutely fantastic getting up 15 minutes before I have to be at work, like I absolutely love it. Maybe not 15, sometimes 15. Depending on if I have an eight o'clock meeting or not. And then what I do is I finished my day and I close the door and I never enter that room again. [...] But the difference that's happened for us is we used to as soon as I would get home we'd go in and cook dinner. Because I used to have that transition period between the office and driving home. So you kind of can kind of unwind a bit. So you don't get that when you're working at home. So what we do is now when my husband comes home, we sit we have a cup of tea for at least an hour I find before I can do anything else. So it's that transition out of work to home. (R23)

...going back to the commute, I feel like I have like another three hours in my day. Because I don't have to commute, I don't have to like get ready for work, I don't have to pack my lunch, [...] there's a lot of things that I don't have to do. So, I really feel like I have three more hours in my day. (R7)

I probably do a bit less work in the evenings, if any, like I'll actually take off full evenings now. Whereas before I often would come back to my computer at night, now it's like if I let the day slip by maybe I'll jump in the evening, but I've been pretty good at like taking the evenings off. (R26)

Many who do not have a separate workspace or work from their bedroom found that the workday bled beyond a traditional 9-5 workday due to the two activities happening in the exact location.

Not setting my own schedule, but being more cognizant that I need to have that break, I need to have that separation. And where I would normally have that 45/50 minutes train ride home. I'm now using that 45/50 minutes to continue, or I was, to continue working, and then stopping work. (R22)

I think for me, and I think for everybody, there's more of a blurred line. I know that, like I'll start earlier than maybe I typically would. Like I said, sometimes I'm going to call it seven, but pre COVID I might have been traveling to the airport at seven. You know what I mean? It's a bit of a blur, it's not like five o'clock hits and everyone's done. I mean, for me, it has it's definitely spilled over. It's way easier to go back and look at your emails or take on a task in the evening or a weekend [...]. And I've heard others saying the same thing that they've found that it's, it's really hard to sort of escape. (R33)

Then throughout my morning I'll maybe make myself a coffee and that's it. I am glued to my laptop for the rest of the day I walk around my house with my laptop because it kind of signs out if it's inactive for more than like a minute, it signs me out. I have to put in my key and everything, it's a long process, so I walk around with my laptop everywhere in the house. (R5)

Those who have an adequate home work setting, or separate room within the household, appeared to maintain a healthier work-life balance as the two activities were more easily separated. Those who are poorly housed or unable to have a separate place or room to work find it harder to separate the two activities and find work spilling into other aspects of their lives. A healthy balance of work and life is needed; otherwise, employees could start to experience higher stress levels and more opportunities to burn out in their positions.

4.4 Discussion

Many nuances and differences were heard from the initial respondents about their experiences working from home, but some prominent themes arose. Many respondents were not prepared to work from home and experienced inadequate workplaces; this resulted in them either making do with what they had or upgrading their situation. On the other hand, some already had a home office and the ability to work remotely, making the transition to the home relatively seamless.

Many respondents mentioned that internal and external communication and collaborative-oriented work was harder to achieve through virtual platforms. Further, they found that conducting one hundred percent of communication virtually instead of in-person led to significant inefficiencies, challenges

and missed nuances. Despite these inefficiencies, some respondents mentioned that they were more productive and got through more work with fewer distractions in the home rather than in the office. Increased productivity was not experienced ubiquitously; for some, the home is full of more distractions (children, pets, family, roommates, etc.) which can distract from conducting work.

Finally, the transition to working from home had positive and adverse effects on employees' work and life balance. For some, they could dedicate more time to household tasks, exercise, and other aspects of their life as they were saving time on the commute and had access to everything in their house at all times of the day. For others, work spilled over into their lives negatively; without the physical separation between the household and the office, some individuals worked longer hours, developed unhealthy habits with work, and let other parts of their lives (such as exercise, socialization, diet, etc.) be neglected.

Overall, the transition to working from home due to the COVID-19 pandemic and stay-at-home mandates has had varying effects on individuals' work habits and attitudes towards this new paradigm. There was a consistent sense of gratitude through respondents that they were still working, as many people were faced with unemployment or unstable working conditions during these times. Moreover, although there were many issues and challenges associated with working from home, respondents were able to make the best of their situation, work through the challenges and still complete the majority of their work.

Section 5

Longer Term Perceptions

When first faced with working from home, many thought it was a short-term solution to curbing the spread of COVID-19. Working from home for over a year was not what people expected. However, due to continued high risk and a slow vaccine roll-out, the short-term solution of working from home became a long-term reality for many. To understand how long-term working from home affected people, a small sub-group from the initial interviewees was interviewed again to understand how COVID-19 progressed their perceptions about working from home and how their habits changed to accommodate the more permanent reality.

In January and February of 2021, eight out of the original forty respondents participated in a short follow-up interview. This sub-section of the initial forty were chosen based on two criteria: if they provided interesting or unique perspectives during the first phase of the process and if they were available or willing for a follow-up interview. The same process as Phase One was conducted, respondents engaged in an in-depth semi-structured interview via Zoom, then all information was transcribed using the AI platform Otter.ai. After the interview, prominent themes were highlighted through close reading and re-reading of the transcriptions.

These interviews were conducted 10/11 months after the onset of stay-at-home ordinances and seven months after the first round of interviews. Due to the first round of interviews, the questions were not as exploratory about their respondent's job or their pre-pandemic life, as that information was already covered. Instead, they were focused on how things have gone over the past few months and if there were any ideas about what their workplace will look like moving forward. Among other things, some of the primary questions that were asked were:

- » Whether they were still working from home or back in the office, and if back in the office, how much time per week was spent there versus at home.
- » If they had made any adjustments to where they live or work within the household.
- » If their work had changed or adapted at all.
- » How the experience has been overall working from home/virtually.
- » If there was a preference between working from home versus the office.
- » If there were any different ways in which their organization altered their working arrangements based on the last few months.
- » Looking into a post-pandemic world, if there were any ways that they, or their organization, will choose to work or arrange themselves.
- » And how working from home has impacted their quality of life.

These interviews provided a more concise snapshot of some worker's experience after a prolonged altered work pattern. A few of the prominent themes that arose due to the prolonged working from home and coexisting with COVID-19 included, which will be explored in detail in the following section, are as follows:

- » A general frustration with at-home work resulting in some respondents changing where they live or altering/upgrading their workspace.
- » A general fatigue and burnout associated with this working style and a drive for more in-person activities.
- » A more open mind from both employers and employees to more flexible working situations.
- » A realization of how telecommunication tools can be leveraged into new and different ways of working.

5.1 Altering the Work Setting

When the interviewees first started working from home, many believed that these were temporary measures to curb the spread and that things would be back to normal within a few months. Unfortunately, the virus has become a more prolonged reality resulting in temporary measures of working from home becoming almost permanent realities. When still thinking that the work-from-home measures would be short-lived, some participants were okay with a sub-par working station as they would be back to the office in no time. As working from home continued to be a reality, some participants started looking to tweak their imperfect work set-up or look for alternative living conditions to make their home working more comfortable.

Participants addressed minor inconveniences to make their workstations more comfortable. For some, this meant hardware upgrades or more Wi-Fi capacity.

I upgraded the network hardware. To give us a faster system, and also to give us more capacity for others using the system in our house. So did that. And I have also upgraded my desk. So I have a stand-up/sit-down desk now. Because I'm aware I spend more time sitting in front of a computer. So I have an standing desk now. (R21)

I have got a monitor now. Second monitor. Thank God. Oh, my gosh. So yes, I have another monitor. I just got that though, a couple months ago. I just realized I need two monitors. Yeah, because, you know, I do spreadsheets too. And it's just, it is revolutionized my work at home, having a second monitor. (R23)

Yeah, so I did change the second bedroom into an office space. So it's a pretty good setup on the main floor of the house and decent lighting. And, for the first time in seven years upgraded to having a monitor with my laptop to have dual screen. I always thought it was only for the designers. But now I'm realizing particularly with things like constant Zoom meetings to be able to have that dual screen open is a real benefit. (R26)

For others, it resulted in a much more drastic change, a change in where they lived. Granted, these respondents mentioned they were already contemplating moving before working from home but working from home expedited their move.

I have done a new full home office setup. I was working in a very loud environment. That was also my bedroom. So I needed to have a more of a defined space, specifically for work. So, I purchased a home a few months ago in order to acquire enough space to do so. (R22)

So we moved in December, to a new place in terms of new place, new lifestyle. We moved from about within 30 minutes of where we work to now just over 90 minutes from where we work and to a much smaller community. The reason for that move was largely COVID-19 and working from home in a sustained way. Knowing that we may never go back to a full in-office setup, even after COVID, meant that it opened more opportunities for where we could live. And we weren't as much tied to living as close to where we work. So we moved about 150 kilometers away, closer to our family and friends, and it was easier to do so knowing that we weren't as tied to the office anymore. (R25)

Furthermore, those who moved took special considerations to ensure that their new residence had an appropriate space where they could work. Working from home appeared to be a continued reality for the time being, and post-COVID, they took measures to have a long-term solution to working from home.

When choosing a house, we had that in mind, we definitely chose a house that had a better layout, I think, for work from home. So something that allowed both my husband and I to have our own dedicated office, not have to work in a temporary way off of like a dining room or in the bedroom or anything like that. So it was dictated by COVID and working from home. And this whole shift is dictated where we can live, what our house looks like. And I think what our layout looks like as well. And I think just in simple ways, we took that opportunity now that we have more dedicated spaces just to kind of upgrade our technology a little bit like better screens, more screens, better desks, better chairs, all that sort of thing. (R25)

It was mandatory [a home office when purchasing a new home]. It was always top of the list for me. One of the top things on my list was den slash office space, for that exact reason. (R22)

Respondents who already had an adequate workstation going into the pandemic did not need to alter their physical place of work, as they did not mention the same physical inconveniences as others. Those who did not have that pre-existing workstation or inadequate workstation struggled more. During the first

few months of working from home, some respondents were faced with more substantial changes (buying a desk, a computer, new headphones, etc.). For most respondents after the prolonged working from home, changes were made to make their situation more comfortable and address minor inconveniences. However, a few respondents felt it necessary and timely to change their place of residence and do so with a more dedicated place of work.

5.2 Work From Home Fatigue

Another factor that many respondents indicated was the general fatigue of working from home and using virtual platforms. This feeling of fatigue is generally attributed to a combination of limited social interaction and monotonous days, leading to fewer connections, informal chats, and breaks from routine.

Working from home, day after day, in the same routine has led to a few respondents mentioning that they are struggling mentally with this type of work; the repetition and lack of difference in the day are wearing down their performance.

I think we're all kind of adapting. But I would say that fatigue is pretty, it's pretty heavy. I mean, I've tried not to let it creep in, because I don't want it to affect my performance and how I show up in front of the organization because of my responsibility. But it's, it has sucked, and it really is getting to me. (R31)

Almost every day of the week, every hour of the day, has, yeah, has been kind of challenging. Like I said, which then obviously translates a little bit negatively in the brain. And so yeah, just feeling really monotonous. [...] I'm still doing the same thing, sitting on a computer or going on a dog walk. (R26)

Respondents experiencing this feeling of burnout are obviously of worry if people are struggling with the long-term effects of working from home in isolation. These feelings are coupled with the larger societal changes of having limited social interactions and uncertain health risks during this time. So, although alarming, this is not necessarily only indicative of working from home, as there could be other reasons people are feeling this way.

Moreover, having spent this much time working from home and using virtual platforms for communication, internal and external communication is worsening. There is now recognition that there was merit to the inperson work setting as informal discussions were essential to understand what was going on with everyone else in the team.

I miss not having that face-to-face connection. I think you can sometimes miss team building, and more of that intimate connection you can have with your team. I think you also miss knowing when they might not be doing quite so well. You maybe don't notice those cues anymore. It's just

a lot more subtle. So I think the ability to integrate all the flexibility that we've had, but just add a little bit of structure and coming together as a team would be good. I would say a lot of people are missing that. (R25)

I don't know, you kind of just miss the bumping into people. I feel like now I only talk to sort of three or four people in my team. Whereas before, I talked to all sorts of people on my floor, and you miss out on some of those informal conversations. But sometimes those are the kind of conversations where you learn about what they're doing or other things going on. (R37)

Finally, due to this perceived worsening ability to cope with working from home and lack of informal communication and connections within an organization, some respondents are now calling for more inperson time, even if only part of the time, to fill those gaps.

I think that the other thing, too, and there's a kind of a mix, but my sense in having had some team meetings about various things, is many folks are eager to have, at a minimum, a rotation access to the office. There is I feel it. And you know, this could have answered your question earlier, I miss the human beings, that physical contact, and kind of that spontaneity and the social elements to spending so much time in the work. And I think just knowing kind of a sense of what's happening in the shop. We put in place a lot of communications tools just to know the day's grind and the excitement or the challenges of the day, but it's still not the same. So there's a couple of people that feel very strongly about returning to work physically in the office. And then there's only other a few other folks that actually liked the mix and flexibility. (R31)

Overall, there is a desire to move beyond the past few months and into a space where the future can be planned with more certainty. The lack of informal communication and variance in one's day left some people feeling fatigued or burnt out working from home. This feeling of burnout leaves some yearning for more in-person activities to allow for better team communication and a change from the 100% virtual world.

5.3 Open to Work from Home

Working from home was a rapid shift for employers, and it caused them to rethink their policies surrounding how their workforce was organized. Although it was a rapid shift from the office to the home, there has been an overall sentiment that it has worked well and is successful. Many employers have experienced limited hiccups with this new working situation and now have more trust in their employees to work unsupervised. With this perceived success, some employers are rethinking how and where their workforce conducts their work.

From the respondents, a general acceptance of more hybrid work was acknowledged. Employers are

generally more open to spending some days at home and some in the office, depending on the type of work.

They did come out and say like, they're definitely more flexible if people want to, if you have a reason to work from home one day, they are more open to it. I think, it's kind of like say we are in the office, and you just, like, want to work from home one day, that's kind of frowned upon. But if you have a reason to like, Oh, I got an appointment or something then people are totally cool with that now. It's kind of nice. (R37)

I guess, going forward, because a lot of people are saying, well, you said it wouldn't work, and it works. So like, what is going to be allowed and what isn't going to be allowed? So they have a taskforce, dedicated taskforce to figuring out how to make it work for us. (R23)

So two things have happened at our job. One is, overwhelmingly people have said we want to work from home most of the time and have that flexibility but go to the office when it makes sense for larger events, committee meetings, things that really require more face to face. And the second thing that's happened that's been formal as well, as our CEO has announced that while we have renewed the lease on our building, they're working over the next five years to drastically reduce our environmental footprint, but to reduce our environmental footprint, to having little to no brick and mortar presence anymore. (R25).

But I think for individual team members, what that might mean is that they will exercise the flexibility that was already built in before that not many people on the team actually use. We've always had the flexible work policy, like you can work from a coffee shop or home. Like there's no office hours. But most people never used it. So I think now that people have it, it'll be more used and there will be more flexibility. But I could be wrong about that and people might just want to have a space where they know they're going to work. And when they leave it, it's generally not work time. (R24)

I would like to think we'll move to a hybrid approach where there is a recognition that sometimes you need to be in the room with someone, but particularly around training. I think we've; I think that's been more successful than I thought it was going to be. People, you know, used to say we didn't do it, because there was a lack of engagement, there were studies that showed that people just didn't engage, I'm not so sure about that our experience would be increased numbers, and probably a pretty good level of engagement. As a result of that people are more able to choose to attend. And so I think my company, my organization probably will not move back to old style in future. (R21)

There is now more ubiquitous support to a more hybrid work setting, which aligns with the ideas presented in the literature review and grey literature. Some respondents mentioned that there were already systems to work like this before the pandemic, but there was limited uptake. Although there will likely be a greater uptake in these organizations, those notions are not as interesting as the respondents who mentioned that their organization was more against flexible work pre-pandemic. The forced experiment of working from home proved to employers that companies can still function virtually at a high level, and it has swayed some decision-makers into being more open to this working style.

When first faced with working from home, employers were willing to test how their workforce would work from home as they had no other choice. However, after a year of these working conditions, they have now realized that there can be many benefits to this work style. A short test of a few months would not have been long enough for some employers to be sure about the long-term possibility of working in a more virtual setting. The prolonged forced exposure to working from home has created the conditions for employers to test these working habits and conditions and monitor their output. The overall sentiment after this extended stint of working from home has been positive, and that there will be more possibilities to work like this moving forward.

5.4 Leveraging Virtual Work

Without a doubt, working from home and through virtual platforms have created some serious roadblocks to overcome, but some companies have found interesting ways to create benefits out of these situations. Some companies have managed to leverage the working from home setting to create new opportunities for their company that they would not otherwise be able to.

Some organizations are not geographically tied to a single location, and their work can span across geographies—however, costs associated with travel and the inability to meet face-to-face limits some opportunities. Now that work has been transitioned to a virtual setting, geographical location no longer has the same implications in one's ability to meet 'face-to-face' and travel costs have been nulled. With this, some organizations can now conduct work in new places, and they are now changing their practice to reflect the benefits that virtual work can have.

We are now declaring, that it's not responsible to plan for face-to-face engagements until the end of the year, at least. So it's actually expanded our geographic scope. Doesn't matter if I'm down the street or across the country if we're all talking on Zoom. [...]. It's been a real advantage. And we've been proactive with it to make sure that we're responding to the new reality. So we're trying to [...] translate the good things about this way of working into the after times. And so I think in terms of where resources go on projects for travel, and those kinds of things, I think there's an opportunity for a pretty profound shift on projects and resources. And then I think

largely, for our team members, our energy, quality of life, things like that. Just to have to travel less, that's probably a better thing. And that translates to a better word for our clients. (R24)

I mean, ideally, things like public and stakeholder engagement can, in some forms, go back to in person, but I would now be pretty insistent that I don't need to physically drive to Edmonton for a client meeting. I think for the most part, like check-ins and stuff, I think, yeah, using the online format is that is perfectly fine. (R26)

Almost everyone has now had experience using a virtual platform to conduct a call or have a meeting. Due to this newly learned skill (for some), there are new opportunities to leverage this to benefit their professional practice. Whether it is cutting travel costs to appear more competitive or the ability to have more meaningful conversations through a web-based video platform, there are now different ways to work with people regardless of physical location - essentially making geographic location far less relevant.

5.5 Discussion

When COVID-19 and working from home were first on people's radars, not many predicted working from their spare bedroom or kitchen table for over a year. However, due to the continued risk, that ended up being a reality for many people. This forced workers to settle in for the long haul working from home, which has had differing effects on people - both positive and negative. People who were 'making do' with their at-home work set-up took time to make the necessary improvements to mimic the office setting. Some respondents who needed more drastic changes even took it upon themselves to find a new place to live with an adequate workspace to work from home more comfortably. The lack of informal communication and variety built into the day has left some with a sense of working from home fatigue. This fatigue leaves some people wishing for more in-person activities to build in a break from the screen and more communication with co-workers. Employers have now experienced how their workforce can handle working from home, and it has been a general success. Due to this perceived success of working virtually, some employers are now more open to providing people with more flexibility in when and where they work. Finally, some companies have been able to leverage the changes that have occurred over the past few months into new business opportunities and chances to change how they work. Virtual work has nullified geographic barriers to an extent, which provides opportunities to engage in otherwise impossible work.

The prolonged working from home has resulted in many changed practices and habits and could significantly impact how work is done in cities. The following section will discuss what these changes could mean for our cities in a post-pandemic world.

Section 6

What Does This Mean for Urban Planning?

COVID-19 has impacted all our lives in one way or another. Some have managed to adapt to the changing circumstances and thrive through these conditions, while others have been less fortunate and have found themselves yearning for life to return to how it was pre-pandemic. Regardless of whether relative success was experienced, a few prominent themes arose that are of note and worth exploring when considering a more flexible working situation. These more flexible work situations will impact employee well-being, employer success, and the future of cities. The ideas presented throughout this report provide a glimpse into how a society could function when many office workers are forced into working from home; how they adapt, how they succeed, the issues they experienced, and things they would like to change. These ideas are important, as this forced experiment has shown employers that it is possible to have a dispersed workforce, which will likely lead to more people working from home into the future, at least part of the time.

Of course, all of the findings explored throughout this report were elaborated in the context of COVID-19. Respondents were not only reacting to the changes associated with working from home and more virtual work; rather, they were doing so in the context of a global pandemic, uncertain restrictions, and the stress that is associated with such. The ideas presented are not to be negated due to the situations experienced in the world. However, it is to be considered that some experiences could have been different if working from home had occurred during a more 'normal' time.

Based on the ideas presented through this report, three themes will be discussed further:

- » The impact that working from home can have on employee well-being, both positively and negatively.
- » What led to perceived success on behalf of the employers, and how this type of work can benefit organizations.
- » How changing work habits could impact how we use cities.

6.1 Employee Well Being

It is critical to consider how working from home can impact employee well-being, as although the business operations themselves were able to function at a relatively high level throughout COVID-19, employees had to adapt the majority of their working routines. Any pre-existing work routines from before the onset of COVID-19 were very quickly changed, which forced individuals to develop new routines, either for the

better or worse. If considering a more permanent shift to a part-time or full-time work from home model, employee well-being is a critical factor that emphasis should be placed upon, as those are the ones who will have to adapt to the new paradigms.

From the research presented throughout this report, there are three important considerations to consider when transitioning to working from home:

- » The importance of an adequate at-home workstation including the environment that it is located in.
- » The ability to maintain a proper work/life balance.
- » Ways to mitigate employee burnout and fatigue.

A home and an office space are starkly different situations, both in the physical layout, access to amenities, and systems in place. An office is designed to maximize efficiency, collaboration, and flow of work; the home is not. There are significantly more external distractions in a home, the comfort and familiarity of your own space, and no supervision or other employees to work alongside. When transitioning to working from home, respondents worked to try and recreate office-like settings in their homes. Re-creating officelike settings came in two streams - the physical workstation and where in the house it was located. First, employees spent time and money to recreate what they had in the office, purchasing new desks, new chairs, new monitors, new computers and upgrading WIFI connectivity. These are all costs that were initially on the employer to provide in the office but were transferred down onto the employee. The other part was finding an office-like setting in the means of being able to separate home life and work life. Those who had a separate office or place to work found it easier, but some found themselves surrounded by children, dogs, or others working - all things that can distract. The absence of an appropriate place to work resulted in some changing living situations or repurposing rooms in their homes for offices. The home has not been designed to be a place of work, but it has been acting as one over the past year. When considering more permanent transitioning to working from home, it is important to consider one's situation at home and ability to recreate the environment specifically designed to promote efficient and high-quality work – the office.

Another important thing to consider when both work and life are now happening under the same roof is maintaining a healthy work/life balance. The office was a great divider, which once left at the end of the day, usually meant the end of work and the start of other aspects of life. When both are occurring under the same roof, that is harder to achieve. In this sense, well-defined boundaries are essential from both the employee and the employer; otherwise, situations where work is bleeding into other aspects of life are inevitable. Interestingly, some found their work/life balance improved working from home as they now had more time to dedicate to other aspects of their lives. This group was much more deliberate about setting boundaries and compartmentalizing work and life, but this was not ubiquitously experienced.

Finally, it is important to recognize when aspects of burnout or mental fatigue creep into employees' health. These ideas are not exclusive to working from home and can occur in any work setting. However, a few respondents have mentioned that working from home and the monotony associated with such has exacerbated these feelings. There are changes in physical location when working in the office and differences in the people interacted with throughout the day. There is little opportunity to interact with others, work in different locations, or have any interruptions in a typical day when working from home. Due to this, an increase in mental fatigue has been noted as days can blend without any change. When considering more permanent transitions to virtual work, the impact of these working conditions on employee's mental health is important to consider, especially knowing when to provide opportunities to break the monotony of working and living under the same roof.

Working from home can improve the mental well-being of employees if there are certain systems in place to do so. Employees need access to appropriate tools and space from which to work virtually, they need clear boundaries between work and life, and steps should be taken to ensure employees' mental health is taken seriously. Without these systems in place, employees face a more difficult transition to working from home, leading to challenging circumstances and more mental fatigue.

6.2 Employer Success

If considering transitioning to a more flexible working arrangement (some days are from an office space and the others conducted virtually), or entirely virtually, some important lessons can be learned from the past year that should influence those decisions. There were some perceived successes and failures from both the employer and the employee perspectives, which are worth understanding to create better systems when contemplating this type of work permanently. Three things to consider are what support is given to employees while working from home, knowing when to work from home and when in-person would make more sense, and how virtual work can be leveraged to provide different opportunities.

The transition to working from home happened rapidly due to nationwide work from home mandates. Some organizations managed to support their workforce better than others, and these practices are some to look towards if contemplating more permanent shifts. Employees struggled to re-create office-like settings in their homes. Some employers quickly recognized this challenge and provided either hardware itself (computers, monitors, desks, chairs, headphones, etc.) or provided a funding allocation to support the recreation of the office setting. Those who received this were thankful, as many did not have a pre-existing home office, and it could have required substantial financial investment on the employee side. On another note, some employers changed their daily and weekly practices to provide more support and connection to their workforce, knowing that their interactions were more limited now that work was being conducted virtually. For some, this meant more daily or weekly check-ins, virtual social events, and more accessible communication channels with teammates. By providing support for employees

both in terms of the physical infrastructure to work comfortably and through communication channels, some employers have managed to cultivate an environment where employees can work comfortably and successfully from home.

Working from home came when there were no other options, and due to the heightened health risk, virtual work was the only way to ensure the safety of everyone involved. During this time, certain tasks and types of work could be conducted well through virtual platforms, while other tasks were significantly more difficult. When considering working from home without health restrictions and the ability to meet in person, there is more flexibility to have a conference meeting in person or a collaborative working setting. Based on the challenges respondents faced during this past year, some tasks can be comfortable at home, where others would benefit more from being in person. Individual, process-driven work was conducted with relative ease and even more efficiently from home for some. Collaborative and highly collective work were noted to struggle due to virtual platforms and virtual communication limitations. Knowing this, if considering a more flexible working situation, it is important to do so with the types of tasks to be completed in mind. If the employee predominantly engages in process-driven work, there should be limited challenges with conducting that work from home. If the work is more collaborative, there are noted limitations with working virtually, and more effort will be needed to adapt. However, if considering flexible work, days working at home versus in an office can be decided upon based on the tasks needed to be completed. By utilizing and planning around flexible work situations, an organization can excel virtually.

This desire expressed by respondents to have the flexibility to work from home or the office when they want may not be organizationally feasible. For informal contacts and mingling (features identified as lacking due to not being in the office), everyone will need to be in the office simultaneously. So not only will many meetings require face-to-face (in-office) contact, maintaining a wider organizational identity will also require some fixed days or times when people show up. To achieve the desired mix of days at home while still maintaining an organizational identity, days at home versus the office will likely need to be closely coordinated by management. There will likely still be an increase in the number of days working outside of the 'usual place of work,' but outside of appointments or other circumstantial reasoning, work location will likely not be decided upon in an ad-hoc way.

There are ways in which virtual work can be leveraged to create better practices and open different opportunities for organizations. Over the past year, almost everybody has interacted with a virtual video conferencing tool in some way or another. Due to the exposure to these tools, organizations are now much more open to using them for meetings, interviews, conferences, or conducting regularly scheduled work. With this newfound openness to conducting work virtually, previously unfeasible work is now attainable. Whether conducting work in another city or province, geographic restrictions are minimized due to the ability to meet face-to-face with others through teleconferencing platforms. Organizations

that are not geographically tied to a singular location can now leverage virtual work into situations to work in more locations with relative ease.

Virtual work has been proven to function in a context where every other organization is also working virtually, and due to the increase of exposure to virtual work, opportunities exist to incorporate these practices into a more permanent way of working. To incorporate these practices appropriately, lessons learned from the past year should be reflected upon to ensure that the proper steps are being taken for organizational and employee success. Employees need support in terms of physical tools to conduct work, and open and supportive communication. Without these, added financial burdens are placed upon employees, and employees can feel isolated and unsupported. It is essential to understand when virtual work is appropriate and when it would be more appropriate to work in person. And finally, working virtually can open new opportunities by minimizing the necessity of close geographic location, allowing organizations to expand their scope into new territories without a physical presence in those areas. Employers can learn from the successes and failures experienced over the past year and incorporate them into their practices if considering more permanent shifts to flexible work arrangements.

However, a large unknown moving into a post-pandemic world is whether an organization whose workforce is dispersed/at home will be as competitive or high functioning as an organization working in a dedicated workspace. As mentioned throughout this report, people working from home lack the communication and collaboration present in an office setting, which could leave those working virtually disadvantaged in creating organizational cohesion as opposed to those in person. Furthermore, individuals seeking to make a name for themselves in the workplace, looking for advanced work opportunities, or aiming for a promotion, may have a significant advantage if they see their bosses in person regularly and get to know them socially. Literature and identified trends suggest that things will not return as they were before the pandemic; however, things may be less different than we think. As the literature is suggesting (Shearmur, 2020), there was already a fair amount of people working remotely before the pandemic, and this number may be somewhat more prevalent after the pandemic. However, the office space still holds many advantages in the workplace, and although there could be more opportunities to work flexibly, it does not appear that there will be a complete revolution in work habits.

6.3 Why Should Planners Care?

The identified benefits and drawbacks for both employees and employers are important concepts to understand if contemplating how to coordinate one's organization in a post-pandemic world, but why should urban planners care about this? The research conducted through this report is also incredibly pertinent for the management or real-estate fields, but planners need to pay special attention to the impacts of any potential changes happening in those fields. When scaling urban planning back to the root of its role, it is to regulate and organize the use of urban space. This includes transportation

networks, public spaces, and the types of buildings and uses that can occur in any given space across cities. Planners have arranged and designed these spaces based on a few assumptions that are no longer as applicable as they once were. Some of these assumptions include: the vast majority of people work in a workplace outside of their home, different parts of the city have different uses (CBDs for economic activity, residential neighbourhoods for living, etc.), and that most people commute at fairly clear times along fairly well-defined routes. The pandemic has altered these assumptions: the role of the CBD and residential neighbourhoods have changed, and the volumes and timing of traffic flows were altered.

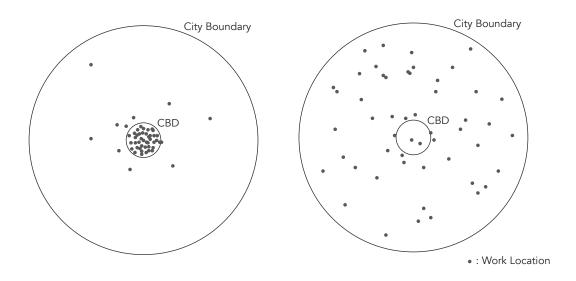


Figure 1: Diagram representing the typical locations where work occurs within a city pre-COVID-19 and the effect on work locations after the onset of the pandemic. The pandemic drastically pulled people out of the CBD and into their respective residential neighbourhoods.

When considering a post-COVID recovery, planners should be taking stock of this situation and planning for the best opportunities for cities to thrive. These decisions should not be based upon sensationalism, the wishes of consultants, or the extrapolations of surveys conducted during the pandemic. Instead, planners need to consider longer-term trends and carefully assess how (and how far) COVID-19 may have nudged these trends. Using this rationale, planners can prepare for reasonable scenarios rather than for futurist projections. As identified through this report, there is a change in use of not only buildings (homes becoming workspaces, offices becoming meeting places, etc.), but in the importance of neighbourhoods (downtowns becoming less of a focus for high-order service work, workers working in residential neighbourhoods, all the ramifications in terms of retail and support services). These are identified trends that have pre-dated COVID-19 but have been exacerbated due to the pandemic. Planners need to consider what impact these will have in the long run and plan out scenarios to accommodate these potential changes.

6.4 The Future of Cities

The shift to working virtually could significantly impact how our cities function and where economic activity occurs. Throughout history, cities have adapted to changing circumstances and responded to any new disruptive technologies. For the last few decades, cities have predominantly functioned under the same pretense: the downtown is where most of the economic activity occurs. A potential shift in either the frequency or prevalence of that idea could have many related effects on how our cities and society function, and that could happen because of this rising popularity of flexible work habits and working from home. Downtowns have been designed to support economic activity, and if there is a shift to a more dispersed model of economic activity, these areas will be less important. Residential areas are now shifting from solely being places people live to now being places where people live and work, which will bring around a new set of challenges. Finally, how we designate, and design homes will have to respond to more people working from their homes. This profound shift could have lasting effects on cities, and some steps need to be taken to ensure a successful transition.

Downtowns have been designed to be the central-local for economic activity, and as a result, they are predominantly offices and supporting services for these offices (restaurants, coffee shops, retail stores, etc.). This centrality of economic activity has also influenced road and transit networks to move people in and out of the downtown core efficiently. The rise in flexible work that could occur post-COVID could result in less emphasis on this downtown area, as centralized office locations are less significant for economic activity. This could result in shorter, more flexible leases of smaller or more dispersed offices being signed by organizations, and larger or long-term fixed leases could be less sought after, resulting in higher downtown vacancy rates. Fewer people working in downtown areas could lead to supporting services struggling or failing and a loss of municipal identity and attraction. There is a need for municipal governments and private real estate managers to incentivize reinvestment in downtown office spaces - whether that be in the form of providing favourable rates for long-term core tenants or repurposing vacant spaces for other uses like residential. Downtown areas will have to adapt to changing work practices, as the past year has shown the world that economic activity can occur from people's spare bedrooms – there is not the same need for centralized office locations.

With the rise of flexible work, there is now an increase in those who spend their working hours (9-5) in local residential areas instead of commercial districts. Due to this, the opposite functions, as mentioned in the section above, could occur; there will now be greater demand on local communities to provide support services for economic activity. Real estate markets and land designation may have to change to allow for adequate spaces to develop all of these supportive services in predominantly residential areas. Also, with the idea of a more dispersed office model, there could be the need for more co-work or small rentable offices located outside of the downtown core, in residential areas, to accommodate changing

habits. Office spaces in residential areas would allow employees to 'go into the office' without commuting to the city's downtown while still benefiting from being in an office (fewer distractions, collaborative workspaces, meeting spaces, etc.). These trends will likely be slower to occur, as they will first require more substantial shifts away from centralized commerce locations. However, there is an opportunity for both real-estate providers and municipal governments to prepare for these possible shifts by designating land to accommodate different uses (commercial and commerce) and providing more supporting services in residential areas.

Residential homes are now transitioning into workplaces, which can have quite a few impacts on the land use designation of these areas and the future design of new homes. Currently, zoning bylaws clearly state the difference between what is allowed in residential zones and what is allowed in commercial zones. However, if more commercial activity is occurring in residential homes, these lines begin to blur. There is a need for municipal governments to outline parameters surrounding this to ensure that there is enough flexibility and freedom to allow residents to work from home without a permanent commercial address. Furthermore, the design of residential homes, and homes with more bedrooms, could become more desirable locations as working from home becomes more prevalent; It could become more normal to accommodate one, if not two or three, people working from home. Spaces designed with designated office spaces or extra bedrooms will become more advantageous as people may now be looking for new homes considering the possible work locations within the home. Homebuilders have an opportunity to capitalize on this transition and build more units that provide the needed flexibility of accommodating people working from home. As working from home becomes a more permanent shift, there will need to be corresponding shifts in how we designate residential areas and in the layouts of homes to accommodate people working from home.

Throughout history, cities have proven to be flexible enough to accommodate change; this could be the dawn of a new change in cities. Downtowns are the areas that could be most significantly impacted as companies transition to less physical office space and more virtual space. To curb the possible detrimental effects of such a shift on downtowns, cities need to re-invest in downtowns and ensure there is still economic, commercial, and residential activity occurring in these locations. As work shifts to being more flexible, people will spend more time in residential areas. With this shift, there will be the need for more supportive services and commercial land designations in residential areas. Finally, with the rise of working from home, how residential areas are designated and how homes are designed will need to change to accommodate such. Homes will now need to be designated to allow commercial activity out of the home and designed with more dedicated space to work inside the home. These are only a few of the possible things that cities should consider when thinking about how to react to the rise of flexible work, but with these actions, cities can ensure that they are responding to these changes rather than only reacting.

Section 7

Conclusion

The onset of COVID-19 and associated health restrictions drastically impacted the work habits of many millions of Canadians and people worldwide. Work typically conducted in person very quickly shifted to being done in the comfort of one's own home. This shift to working from home was first seen as a temporary fix, to slow down the spread, and then life would snap back to how it was pre-pandemic. However, with extended risk, a slow vaccine roll-out, and uncertain health restrictions, this temporary shift to working from home was extended to well over a year for many. This extended stretch of working from home has altered working habits, perceptions surrounding them, and ideas about the future that would not have happened if it was just a temporary stint. These changes will usher in a new wave of flexible work, with more people than ever having the opportunity to work from home or virtually. This rise of flexible work could have significant impacts on how cities function.

Before the pandemic, a slow shift was already occurring, with an estimated 20-30% of the workforce not regularly functioning in their 'usual place of work' (Shearmur, 2020). During the onset of the pandemic, this number very quickly rose to 39% (Deng, 2020), and it is estimated that post-pandemic, there could be a sustained higher percentage of people work some of the time outside of their usual place of work (Giles & Thomas, 2020; Thomas, 2020; Statistics Canada, 2020). Due to this increasing proportion of people working from home, a group of researchers from the McGill School of Urban Planning and myself undertook a set of interviews with employees who shifted their work habits due to COVID-19 to understand how it has impacted them. The ideas gathered from those interviews, presented through this report, highlight some of the potential benefits and drawbacks of working from home and some ideas about how this could impact cities. This forced experiment of transitioning many millions of people to working from home provided a glimpse into what a large-scale dispersed and virtual work environment could look like, and as a broad generalization, it mostly worked.

Some important themes arose throughout this paper that should be considered if this projected increase in working outside of the office or usual place of work continues; particularly the impact that working from home has on employee well-being, steps employers can take to excel through these shifts and how this could impact the future of cities. If the amount of time and amount of people working virtually or from home continues to grow as outlined through this report, these ideas should be carefully considered, as there have been many things that worked over the past year, and similarly, many things that resulted in hardships for the people going through it. Cities and people are resilient and adaptive. The changes experienced over the past year were unprecedented and unexpected, but cities and the people in them found innovative solutions to the challenges and have come out the other side with creative ways to act differently.

Section 8

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Appendix A Respondent Details

ID	Age	Gender	Profession	Living Situation	Location	Language	Phase II
1	25-30	Female	Project Manager	Lives with parents, single family home	Montreal	English	No
2	25-30	Female	Administrative Assistant	Lives with family, condo	Montreal	French	No
3	20-25	Female	Account Manager	Lives with partner, condo	Montreal	English	No
4	25-30	Female	Graphic Designer	Lives with mother, condo	Montreal	English	No
5	25-30	Female	Financial Analyst	Lives with family, single family home	Montreal	English	No
6	40-45	Male	Transport Engineer	Lives with partner and child, duplex	Montreal	French	No
7	25-30	Female	Legal Assistant	Lives with family, single family home	Montreal	English	No
8	25-30	Male	Graphic Designer	Lives with roommate, condo	Montreal	English	No
9	50-55	Female	Business Development	Lives with family, single family home	Montreal	English	No
10	30-35	Male	Project Supervisor	Lives with partner, condo	Montreal	English	No
11	25-30	Male	Civil Engineer	Lives with family, condo	Montreal	English	No
12	45-50	Male	Company Executive	Lives with family, single family home	Montreal	English	No
13	40-45	Female	Financial Analyst	Lives with family, single family home	Montreal	French	No
14	35-40	Male	Software Engineer	Lives with family, condo	Montreal	French	No
15	25-30	Male	Researcher	Lives with brother, condo	Montreal	English	No
16	25-30	Male	Customer Service	Lives with family, single family home	Montreal	French	No
17	50-55	Male	Company Executive	Lives with family, condo	Montreal	French	No
18	30-35	Male	Researcher	Lives alone, condo	Montreal	English	No
19	40-45	Female	Developer	Lives with daughter, condo	Montreal	French	No
20	30-35	Female	Music Teacher	Lives with family, condo	Montreal	English	No
21	60-65	Male	Doctor	Lives with family, single family home	Calgary	English	Yes
22	25-30	Male	Accountant	Lives with family, single family home	Calgary	English	Yes
23	55-60	Female	Human Resources	Lives with partner, single family home	Calgary	English	Yes
24	40-45	Male	Company Executive	Lives with family, single family home	Calgary	English	Yes
25	35-40	Female	Project Manager	Lives with family, single family home	Toronto	English	Yes
26	30-35	Female	Community Engagement	Lives with roommates, single family home	Calgary	English	Yes
27	25-30	Male	Accountant	Lives with roommates, single family home	Calgary	English	No
28	25-30	Male	Architect	Lives with partner, condo	Calgary	English	No
29	30-35	Female	Insurance provider	Lives alone, single family home	Calgary	English	No
30	60-65	Male	Lawyer	Lives with family, single family home	Calgary	English	No
31	40-45	Male	Company Executive	Lives with family, single family home	Calgary	English	Yes
32	25-30	Male	Software Engineer	Lives with roommates, single family home	Calgary	English	No
33	40-45	Male	Developer	Lives alone, condo	Calgary	English	No
34	35-40	Male	Insurance provider	Lives with family, single family home	Vancouver	English	No
35	25-30	Female	Community Engagement	Lives with partner, single family home	Calgary	English	No
36	25-30	Male	Project Manager	Lives with roommate, condo	Calgary	English	No
37	25-30	Male	Financial Analyst	Lives with roommates, single family home	Calgary	English	Yes
38	30-35	Female	City Planner	Lives with partner, condo	Calgary	English	No
39	25-30	Female	Operations Manager	Lives with roommates, single family home	Calgary	English	No
40	25-30	Male	IT Consultant	Lives with partner, single family home	Calgary	English	No