

Executive Summary

The Covid-19 crisis has brought substantial changes to the way people interact, and firms conduct their business. Faced with containment measures, many workers have needed to adapt to remote working, while firms were also forced to quickly shift activities onto virtual platforms through online services and online ordering, which led to a significant acceleration in the up-take of digitalisation. Although the capacity to adapt is unequal across regions, with large cities hosting the largest share of tele-workable jobs, increasing digitalisation presents new opportunities and indeed challenges, including where workers live and firms locate.

Historically, cities have attracted most workers and firms due to economies of agglomeration. A greater adoption of remote working could incentivise the demand for places outside large cities that can offer affordable and suitable housing and office spaces with better access to environmental amenities. Many of these locations however will likely be located within close proximity to cities, which will remain important hubs of opportunity.

In many countries, these transitions have already begun to emerge but the extent to which they will be long-lasting remains uncertain, not least as the pandemic is far from over. Notwithstanding those uncertainties, this report considers the potential future effects on places of remote working adoption, and proposes a way forward to help all regions seize the opportunities this phenomenon presents.

The report relies on real-time data at subnational levels and national labour force surveys to analyse changes in people's mobility patterns and the determinants of remote working adoption across types of workers and places. The analysis covers a period from the beginning of the COVID-19 crisis in 2020 until early 2021 (in the midst of the third COVID-19 wave in many countries). The report also takes stock of policy responses to the increasing prevalence of remote working adoption from a survey undertaken in G7 countries, from which broader lessons are drawn for all OECD economies.

The first chapter outlines people's mobility patterns from home to work at subnational levels, relying on new sources of real-time data based on mobile phone activity. The second chapter explores the socio-economic determinants of remote working across regions, based on national level labour force statistics as well as microdata on broadband speeds. The third sheds light on the uneven effects of remote working adoption on the labour market, particularly employment and wages in different types of areas. Finally, the fourth chapter sets out the possible effects of COVID-19 on the spatial distribution of people and firms, and outlines current and required policy responses to benefit from the rise in remote working.

The report identifies a number of findings and policy takeaways to guide short- and long-term policy making to better prepare regions for what may be a 'new normal'.

Findings and policy takeaways

From the pandemic

- Throughout 2020 and early 2021 the COVID-19 pandemic had a sustained impact on people's mobility, with some relief during the summer months. The greatest reduction in mobility was seen in regions with large cities (that had the highest levels of mobility to start with), both during the first and second waves, reflecting, in large part, reduced work-related mobility.
- Whilst differences exist in the types of jobs that are amenable to remote working across regions (with higher shares in cities), a critical enabling factor to remote working is good telecommunications infrastructure, which is typically lower in non-metropolitan regions (in terms of coverage and speed).
- While women are more likely to have jobs that could benefit from remote working, female labour force participation rates tend to be lower in non-metropolitan regions, in large part because of the types of activities performed.
- Because high shares of occupations are ill-suited to remote working (or indeed can be replaced by automation) are lower-skilled, the adverse labour market effects of the pandemic were particularly strong for already disadvantaged groups of workers (e.g. young, old, low-skilled and migrants). Some of these groups, particularly old and low-skilled groups, are typically overrepresented outside metropolitan regions.

Looking towards the post-pandemic world

Increased remote working is likely to be a lasting legacy of the crisis. Although the transition towards virtual working was a forced experiment for many, it has produced a number of positive results including the temporary reduction of greenhouse gas emissions, greater potential for improved work-life balance and cost savings. Remote working may also create new job opportunities for people who would not have otherwise joined the labour market, particularly women and people with certain disabilities. These positive aspects, and evidence that remote working can be effective, are likely to mean that remote working arrangements, at least in a hybrid form, are here to stay.

But the transition will require support. Despite the many positive aspects of remote working, the transition will require careful management by governments, firms and indeed workers. The pandemic has also revealed a number of challenges related, for example, to gaps in digital infrastructure, digital skills and differences in the ability of some workers and firms to adopt remote working. These challenges risk increasing the digital divides, especially for smaller firms, the low-skilled, and regions with poor digital infrastructure. In addition, it has also generated, for many, negative social side-effects such as isolation or hidden overtime (some are partly associated with the effects of measurements taken to slow the spread of the virus).

The possibility to work remotely opens up new opportunities for places outside large cities to reach new markets and attract new residents and firms. Greater adoption of virtual working methods and social interactions offer incentives for some workers to relocate outside large cities (either partially or full time). The possibility to work virtually—coupled with a greater availability of suitable housing, lower costs of living and greater environmental amenities outside large cities—can attract workers. For firms, the pandemic has increased the number of companies considering a change in their real estate strategy, either by downscaling or relocating part of the office space. For example, a recent survey of the Japanese government revealed that 14% of companies with headquarters in Tokyo considered changing their real estate strategy as a result of the pandemic. Most of those firms expect to downscale their office space (48%), while the rest expect to relocate part (17%) or their entire (35%) office.

Yet a big exodus from cities is not envisioned as these places are reinventing themselves. Large cities may continue to concentrate most of the skilled workers and firms through ongoing policies to transform themselves and improve quality of life (e.g. 15 minutes cities). For example, a temporary or full relocation of a number of high-skilled workers outside large cities and changes in real estate strategies of firms could ease housing availability for low-skilled workers or promote reconversion of buildings into green areas in some areas of the city. As both metropolitan and non-metropolitan regions are conducting strategies to become more attractive for remote workers, greater regional competition based on temporary measures could result, if it is poorly managed or co-ordinated, in a “race to the bottom” scenario.

Various settlement patterns could emerge in the post-COVID-19 normality due to the increased adoption of remote working. They include: i) structural changes from a permanent movement of high skilled workers outside city centres, ii) expansion of commuting zones around cities as a doughnut effect, iii) intermediate cities becoming increasingly attractive, and iv) business as usual but with greater adoption of remote working. These scenarios might not occur in mutually exclusive forms and will differ across countries and places. Regardless of how the post-pandemic world eventually unfolds, technology will continue to disrupt the benefits of physical proximity and the way people and firms interact. Emerging technologies coupled with a greater adoption of remote working will likely bring new forms of commuting with longer and less frequent commutes for a share of the workforce, which might have environmental and income effects.

Irrespective of the post-pandemic scenario, policies need to be forward-looking and proactive to seize the potential benefits that remote working and other technologies can bring about. Ultimately, people’s and business’ decisions to relocate, full time or partially, will involve a cost-benefit analysis in which national and subnational government actions can play a decisive role. Changing patterns of work have implications for regional development and a range of policy areas, including infrastructure, business support, healthcare and the environment. Therefore, governments at national and subnational levels should support the right conditions for those workers and firms aiming to adopt hybrid remote working, while improving people’s quality of life in all regions. To this end, policy responses from different levels of government should focus on three main areas:

I. Reduce digital divides and facilitate the adoption of remote working across regions, workers and firms by:

- **Making high quality communication services accessible and affordable in all regions.** This involves implementing holistic policies to foster competition in telecommunication markets, simplifying procedures for broadband deployment and creating funding methods to increase connectivity (e.g. demand aggregation models, public-private partnerships, public funding to expand connectivity, coverage obligation in spectrum auctions, bottom-up approaches, and addressing the last mile).
- **Investing in digital skills for workers and ICT capacity for firms, especially SMEs.** This includes implementing training on basic use of ICT technologies and computing, and capacity building on software and ICT maintenance in rural economies.
- **Helping overcome cultural and legal barriers for remote working.** This includes promoting a ‘right to telework’ and to ‘disconnect’, conduct information campaigns and guidelines to best deal with remote working, and adapting tax regimes and regulatory frameworks to conduct virtual activities.

II. Improve the attractiveness and accessibility to quality services particularly in non-metropolitan regions by:

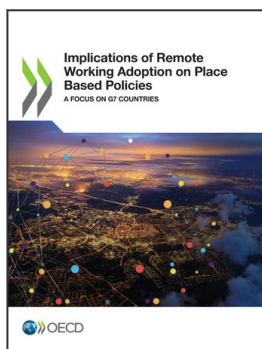
- **Adapting support services to enhance conditions for remote working to all population groups, particularly women and youth.** Regardless of the extent to which remote working is adopted, policies to ensuring adequate provision of key support services, such as childcare or work-life balance measures will continue to be important. The COVID-19 crisis also revealed the

relevance of physical interactions. Governments can help through support for co-working spaces that can offer network opportunities and quality work conditions for those lacking them. A focus on policies to support older workers and women's labour market participation (either virtually or physically) is relevant to revitalise non-metropolitan regions.

- **Enhancing the provision of quality education and health** outside large cities by addressing gaps in provision that lower the attractiveness of some non-metropolitan regions. Whilst a potential increase in population and thus demand for services can ease the challenges of small-scale provision in non-metropolitan regions, there are a number of direct actions that should be taken to improve quality of education and health, regardless of the future scenario of remote working adoption. These include:
 - regarding education: developing school clusters or networks in which schools formally co-operate under a single leadership to allocate resources more flexibly and efficiently. This could be further supported through more flexible approaches to considering class sizes and other relevant regulations.
 - regarding health: providing incentives for the establishment of multi-disciplinary health centres and reinforcing primary and integrated care provision (which is generally the first contact point for the majority of patients' needs outside large cities). Policies to attract, retain and empower health workers should also be bolstered.
- **Adapting the provision of services to population changes** resulting from greater adoption of remote working.
- **Promoting a greater use of digitalisation to provide services** in all regions (e.g. online education and health). This includes enhancing cooperation with information and telecommunications firms (e.g. real time and big data) to improve the efficiency in the provision of local services.
- **Co-ordinating regional attraction policies**, while discouraging regional strategies to attract economic actors based on tax incentives and subsidies. Place-based policies to boost regional attractiveness should focus on improving quality of life (e.g. transport networks and affordable housing) and business environment (e.g. quality and affordable ICT infrastructure, skills, entrepreneurship and quality governance and regulation).

III. Ensure the outcomes from remote working are efficient and environmentally sustainable by:

- **Developing policies on land use, housing and transportation that are forward-looking and co-ordinated appropriately.** Policies should adapt to different forms of commuting and working styles after COVID-19 (including permanent relocation or dual residency). For example, authorities should ensure that public transport projects are aligned with new co-working and housing projects in non-metropolitan regions, particularly in areas close to large cities.
- **Adapting environmental policies to the effects of a greater dispersion of economic actors.** This includes adjusting energy efficiency policies in housing and resource management (water and waste) to changes in population, while avoiding urban sprawl effects and adapting public transport to new forms of commuting.



From:
Implications of Remote Working Adoption on Place Based Policies
A Focus on G7 Countries

Access the complete publication at:
<https://doi.org/10.1787/b12f6b85-en>

Please cite this chapter as:

OECD (2021), "Executive Summary", in *Implications of Remote Working Adoption on Place Based Policies: A Focus on G7 Countries*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/324fce02-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.