

The surge of teleworking: a new tool for local development?

Headlines

- Teleworking levels climbed all across the world when governments mandated minimising physical presence at work in response to the COVID-19 outbreak. Large-scale teleworking is likely to persist, as most managers and workers have expressed an interest to continue teleworking at least some days per week.
- A growing number of governments are looking at the link between teleworking and local development. Some of them have set up dedicated strategies with the goal of enhancing workers' well-being and productivity, addressing spatial divides, improving job matching, and supporting the green transition.
- Measures envisaged typically range from creating an enabling regulatory environment for teleworking to incentives for teleworking uptake among SMEs, as well as awareness raising of opportunities and risks associated with this practice and incentives to attract remote workers.
- However, the potential to telework varies greatly across space, implying that the benefits of teleworking are not equally distributed. Local conditions can both enable and constrain teleworking, calling for a place-based approach in the design of teleworking strategies for local development.

What's the issue?

Teleworking has risen to record levels since the COVID-19 outbreak. Countries experienced a dramatic rise in teleworking levels after governments mandated minimising physical presence at work. For example, 47% of workers in France and the UK teleworked during the lockdown in early 2020, and Australia reached the same rate by the end of the year. Teleworking rose by 25, 20 and 15 percentage points respectively, compared to pre-pandemic levels.¹

Teleworking is likely to persist into the future. A 2021 survey suggests that around 40% of managers and 70% of workers from 25 OECD member countries foresee many more staff working from home in the future compared to the pre-pandemic period. Both agree that two to three days of teleworking per week most desirable.² A study in the US suggests that 20% of full work days will be undertaken from home after the pandemic ends, compared with just 5% before.³ The share of job postings that advertise teleworking more than tripled during the pandemic, from just 2.5% of job postings in early 2020 to 8.5% in late 2021, and has remained near its peak despite the easing of restrictions, further suggesting that teleworking is here to stay.⁴

Teleworking can have a number of benefits:

- **Improving well-being.** Time saved from commuting and the adoption of more flexible working schedules may support work-life balance, if safeguards are in place to limit the risk of isolation and blurring work-life borders. At the macro level, job flexibility may lead to higher employment rates.
- **Boosting productivity.** Evidence suggests that increasing teleworking levels can boost staff productivity within firms. In particular, productivity climbs with a larger share of staff working more days per week remotely, but drops when teleworking levels become excessive, due to negative repercussions on teamwork and creativity.⁵
- **Addressing spatial divides.** Teleworking may help to ease urban congestion and promote growth in less dense areas.⁶ However, it could also create new planning questions, such as how to convert underused office buildings into residential housing.⁷
- **Reducing commuting and its negative repercussions.** Higher teleworking levels would entail a drop in commuting, reducing air polluting emissions from private vehicles. Overall, teleworking can support energy saving, if measures are taken to mitigate adverse effects (e.g. less efficient domestic energy use taking over central office heating).
- **Addressing local skills shortages.** Teleworking can help expand the talent pool for firms. This may imply better job matching within commuting distance and make a case for attraction policies that target so-called “anywhere-workers”.

However, the share of jobs amenable to teleworking varies greatly across and within countries. For example, 50% of jobs are teleworkable in Luxembourg, but only 21% are in Turkey. The share of workers that could potentially work remotely differs, on average, by 15 percentage points across regions within OECD countries.. Cities, in particular, have a 13 percentage point higher share of teleworkable jobs than rural areas, partly reflecting the skill composition of the local workforce, as the highly educated are more likely to telework.⁸ At the same time, there is a positive correlation between firm size, digital readiness and teleworking uptake, implying that workers in smaller firms may have fewer chances to telework. Overcoming these barriers would help ensure that the advantages of teleworking are more evenly accessible among people, places and firms.⁹

A growing number of governments are looking to teleworking as a local development tool (e.g. Ireland’s Remote Work strategy; Trentino, Italy; Ems Achse in Germany). Furthermore, tools for teleworker attraction have become increasingly popular across the OECD since the beginning of the pandemic, as shown by a growing trend in issuing new seamless visa procedures (e.g. Estonia, Iceland), grants (e.g. New Brunswick, Canada, Tulsa and Vermont, US) and tax breaks (e.g. Greece).



How does it work in practice?

Strategies linking teleworking and local development do not aim to promote teleworking as an end in itself or prescribe teleworking as the preferred work method across the board. Rather, it is seen as a means for achieving broader objectives, such as boosting productivity and fostering regional competitiveness in conjunction with other policies already in place. They also seek to minimise some of the challenges associated with the expansion of teleworking.

Specific examples of approaches used in such strategies are included in the table below. They can vary based on the competences different levels of government have for different policy areas.

Creating an enabling environment for teleworking

- Improvement of regulatory frameworks (e.g. foreseeing an entitlement to request teleworking and a right to disconnect outside working hours).
- Financial support mechanisms and regulatory reforms to ensure high-performing and secure internet infrastructure across a territory.
- Creation of co-working spaces via conversion of public buildings and/or incentives for and partnerships with private owners to do so.

Supporting firms in the uptake of teleworking

- Support to SMEs in adopting teleworking through incentives for upgrading ICT investment and relevant training, including on related managerial practices, such as output-based performance assessment and remote leadership.
- Promotion of public-private dialogue, collective bargaining and peer learning on teleworking arrangements.

Awareness raising of opportunities and risks associated with teleworking

- Consultation with the social partners and promotion of a quality public debate.
- Leading by example through public employment practices.
- Integration of teleworking concerns into policies in related fields, such as housing and public transport planning.
- Development of frameworks to monitor and assess the level and impacts of teleworking.

Attracting remote workers

- Tax breaks, grants, streamlined visa procedures and other incentives to attract remote workers.
- Place branding and other territorial marketing campaigns.

Practical examples



Our Rural Future: Ireland's rural development plan 2021-2025.

This plan represents the Irish Government's blueprint for a post-COVID-19 recovery and development of rural areas over the next five years. Its stated objectives include optimising digital connectivity, supporting employment and careers in rural areas, whose population has been shrinking over the last decades, revitalising rural towns and villages through enhanced participation, public services and resilience, as well as fostering the transition to a climate neutral society. The plan places particular importance on teleworking, acknowledging that the rise of this working mode has contributed to reducing transport emissions, provided a boost for small local businesses across the country, and offered possibilities for young people to build a career while continuing to live in their communities, regardless of where their employer is headquartered. Planned actions specifically related to teleworking include, among other things:

- Invest significantly in **teleworking infrastructure** to provide an opportunity for people to continue to live in rural areas while following their career ambitions;
- Provide financial support to local authorities to bring vacant buildings in towns back into use as **teleworking hubs** and create a network of 400+ teleworking facilities

across the country, with shared back-office services and a single booking platform for users;

- **Pilot co-working and hot-desking hubs** for civil servants in a number of regional towns, and move to 20% teleworking in public sector in 2021, with further annual increases over the lifetime of this policy;
- Explore the potential to introduce specific **incentives for teleworkers' relocation** to rural towns and provide funding to local authorities to run marketing campaigns targeted at attracting teleworkers and mobile talent to their county.

Learn more

[Our Rural Future: Ireland's rural development plan 2021-2025](#)

Teleworking strategy in the Autonomous Province of Trento, Italy

The Autonomous province of Trento, in Italy, has launched an ambitious strategy on teleworking in 2021.¹⁰ Having experimented with teleworking for years to raise efficiency in public administration, the local government is resolved to boost regional competitiveness through a broader adoption of teleworking. In its view, higher teleworking levels could lead, among other things, to a more efficient provision of public services, as service hours could be extended and civil servants reallocated to smaller communities; savings from lower investments in work premises, with more people working from home; an incentive to the digitalisation of processes within public and private employers; and an improved ability to attract talent, thanks to better framework conditions to reconcile professional and personal needs. The main actions envisaged by the plan revolve around the following areas:

Skills and culture

- Provision of training for teleworking staff, including managers, and certification of skills required for effective teleworking (the initiative will first be tested among public sector workers, and then be extended to the private sector).
- Set-up of a community of practice on teleworking, gathering HR managers from the public and the private sector, to foster peer-to-peer learning and the dissemination of good practices.
- Awarding higher scores in public procurement to firms offering teleworking and other well-being practices for staff.

Digital environment

- Establishment of crosscutting teams, including domain experts and innovation specialists, within the provincial public administration, to identify procedures and tasks that can be digitised and, therefore, carried out remotely.
- Set-up of a single cybersecurity risk monitor at provincial level in light of increased threats in an ever more digital work environment.
- Promotion of data sharing and collaborative virtual environments.

Regulatory environment

- Promotion of collective agreements to regulate teleworking among staff of municipalities and local health authorities, based on directives issued by the provincial government on areas such as eligibility and priority criteria for teleworking, working time schedules and right to disconnect, criteria for productivity assessment, etc.
- Adoption of guidelines on safety at the workplace for teleworkers.

Access to working space

- Redesign of public office spaces, to improve team work in hybrid settings.
- Creation of co-working spaces across Trentino for incumbent and entrant teleworkers. This goal will be achieved through a set of actions, including reconverting dismissed public buildings and local branches of co-operative credit banks, and reviewing existing “telecentres”. The latter had been set up by the provincial government already before the pandemic in support of officials with special needs (e.g. caregiving) requiring proximity to homes.

Learn more

OECD (2021), "The future of remote work: Opportunities and policy options for Trentino", <https://doi.org/10.1787/35f78ced-en>.

What does the evidence say?



Evidence on impacts of teleworking strategies for local development is still limited. While it is too early to assess the latest policies on teleworking, evidence on pre-pandemic policies is encouraging. For example, Vermont’s incentives programmes for remote worker attraction had sizeable effects on job creation and local tax revenues (see upcoming OECD brief on teleworker attraction policies for more information). Nevertheless, surveys carried out during the pandemic shed light on how growing teleworking levels can affect their underlying policy objectives.

Firms and workers have a positive opinion about teleworking and its impact on well-being and productivity. About 63% of managers and 74% of workers surveyed by the OECD Global Forum on Productivity had an overall positive assessment of their teleworking experience from the point of view of company’s performance and worker’s well-being, respectively. More than 60% of managers in the survey sample believe that labour productivity grew because of teleworking, in that workers are more focussed and commit fewer errors at home. In addition, more than one manager in two saw advantages in terms of the time saved on the commute, a drop in superfluous office costs and an enlargement of the talent pool.¹¹ These beneficial effects could expand in the future.

Prospective studies of the potential of teleworking for local development suggest positive impacts as well. In Trentino, for example, the talent pool would expand dramatically should large-scale teleworking remain in the post-pandemic future. In the absence of a daily commute, workers could consider accepting longer, less frequent, commuting. Increasing commuting distances from the provincial capital from 30 to 60 minutes raises the hypothetical labour market from about 0.5 to 2.2 million, providing scope for greater efficiency in job matching, and in turn, higher productivity and competitiveness, whilst also boosting employees’ well-being.¹²

Preliminary evidence of a future increasingly marked by teleworking is beginning to show. In Ireland, ConnectedHubs.ie currently includes 216 co-working hubs, 306 desk plans and 291 meeting rooms. Launched in 2021 as part of the national teleworking strategy, this initiative is designed to simplify and standardise the process of sourcing and booking offices and desks in hubs for short and long stays. It is operated by a National Hub Network, a Government of Ireland initiative that provides a vehicle for individual hubs to come together under a shared identity to maximise the economic opportunity of remote working.

Potential pitfalls . . .

- **Failure to balance trade-offs or take unintended consequences into account**
 - Workers may use the time saved from commuting for family and leisure, but may also experience blurring work-life boundaries if a clear definition of working times and spaces is not in place.

- Declining productivity due to excessive levels of teleworking and/or loss of agglomeration benefits from workers concentrating in urban areas. Women may also be more likely to experience a decrease in productivity when working from home because of increased childcare responsibilities compared to men.¹³
- People who relocate outside the urban transit system may become more reliant on private over public transport means, partially offsetting the reduction of air pollution resulting from lower commuting.
- **Increases in other types of disparities**
 - SMEs may face disadvantages compared to larger firms in terms of ability to offer teleworking packages to attract talent. Lack of ICT infrastructure, limited digital skills among staff or management that is inexperienced with integrating teleworking into the workplace may all be contributing factors.
 - Service workers in central business districts may face knock on effects in light of a reduced foot traffic from office workers.¹⁴
 - Housing affordability challenges in rural areas as a result of higher demand from high-income entrant teleworkers.
- **Too narrow of an approach that fails to consider other enabling factors**
 - Low-density areas may aim to attract new residents with cultural or natural amenities and quality public services, but shortages in internet speed may constrain their ambitions.
 - Lack of childcare facilities within reasonable distance from home may nullify the beneficial effects of teleworking in terms of reduced commuting for parents who relocate to areas with a lower density of population and services.

...And strategies to avoid them

- **Promote blended models, combining on- and off-site work** According to managers and workers, the ideal amount of teleworking is 2-3 days per week, in line with the notion that expected benefits (e.g. less commuting, fewer distractions) and costs (e.g. impaired communication and knowledge flows) need to be balanced at an intermediate level of teleworking intensity.¹⁵ While this is not a hard and fast rule, it can serve as a rough benchmark to assess where a given place stands in terms of its teleworking level, notably whether there is room for growth or a risk that teleworking is excessive, potentially harming productivity and other public goals.
- **Facilitate knowledge and practice sharing** on teleworking among public and private employers as well as the wider public, to minimise the downsides of teleworking and make its opportunities accessible to the largest share of people in teleworkable jobs. This may include:
 - Fostering an evidence-based public debate on the societal implications of large-scale teleworking, and raising awareness of the opportunities and risks inherent in this practice at firm level and beyond;
 - Expanding programmes to support digital skill upgrading and management practices; and
 - Promoting employer role models and best practices in the field of teleworking.
- **Integrate teleworking concerns into other policy areas**, for example related to boosting residential energy standards, accessibility of childcare, and incentives to upgrade digital skills and infrastructure.
- **Set up comprehensive tools to monitor and assess the impact of teleworking strategies for local development.** From the design stage, an in-depth reflection upon their underlying goals and corresponding indicators will ensure that the solutions envisaged are fit for purpose and take into account potentially unintended consequences,

including for different groups (e.g. SMEs, women). The outcomes of such assessments can also contribute to the development of a broader knowledge base and inform the design of future strategies.

Learn more:

OECD (2020), *Job Creation and Local Economic Development 2020: Rebuilding Better*, OECD Publishing, Paris, <https://doi.org/10.1787/b02b2f39-en>.

The future of teleworking. A place-based toolkit for local development (project flyer for governments): <https://www.oecd.org/cfe/leed/Trento-Teleworking-Flyer.pdf>

The new reality of teleworking: People, firms, places | 9th SPL meeting (webinar held on 3 September 2020): <https://www.oecd.org/italy/spl-9th-meeting.htm>

OECD (2020), "Exploring policy options on teleworking: Steering local economic and employment development in the time of remote work", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2020/10, OECD Publishing, Paris, <https://doi.org/10.1787/5738b561-en>.

OECD (2021), "The future of remote work: Opportunities and policy options for Trentino", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2021/07, OECD Publishing, Paris, <https://doi.org/10.1787/35f78ced-en>.

OECD (2021), *Implications of Remote Working Adoption on Place Based Policies: A Focus on G7 Countries*, OECD Regional Development Studies, OECD Publishing, Paris, <https://dx.doi.org/10.1787/b12f6b85-en>.

¹ OECD (2021), "Teleworking in the COVID-19 pandemic: Trends and prospects", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, <https://doi.org/10.1787/72a416b6-en>.

² Criscuolo, C., et al. (2021), "The role of telework for productivity during and post-COVID-19: Results from an OECD survey among managers and workers", *OECD Productivity Working Papers*, No. 31, OECD Publishing, Paris, <https://doi.org/10.1787/7fe47de2-en>.

³ Barrero, J., N. Bloom and S. Davis (2021), *Why Working from Home Will Stick*, National Bureau of Economic Research, Cambridge, MA, <http://dx.doi.org/10.3386/w28731>.

⁴ Adrjan, P. et al. (2021), "Will it stay or will it go? Analysing developments in telework during COVID-19 using online job postings data", *OECD Productivity Working Papers*, No. 30, OECD Publishing, Paris, <https://dx.doi.org/10.1787/aed3816e-en>.

⁵ OECD (2020), "Productivity gains from teleworking in the post COVID-19 era: How can public policies make it happen?", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/a5d52e99-en>.

⁶ OECD (2021), *Implications of Remote Working Adoption on Place Based Policies: A Focus on G7 Countries*, OECD Regional Development Studies, OECD Publishing, Paris, <https://dx.doi.org/10.1787/b12f6b85-en>.

⁷ For further information, visit: <https://oecdcoqito.blog/2021/10/29/can-office-conversion-help-solve-the-housing-crisis-in-cities/>

⁸ OECD (2020), "Capacity for remote working can affect lockdown costs differently across places", <https://www.oecd.org/coronavirus/policy-responses/capacity-for-remote-working-can-affect-lockdown-costs-differently-across-places-0e85740e/>.

⁹ OECD (2020), "Exploring policy options on teleworking: Steering local economic and employment development in the time of remote work", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2020/10, OECD Publishing, Paris, <https://doi.org/10.1787/5738b561-en>.

¹⁰ Resolution no. 1735 of 25 October 2021 of the council of the Autonomous province of Trento (https://delibere.provincia.tn.it/ricerca_delibere.asp).

¹¹ Criscuolo, C., et al. (2021)

¹² OECD (2021), "The future of remote work: Opportunities and policy options for Trentino", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2021/07, OECD Publishing, Paris, <https://doi.org/10.1787/35f78ced-en>.

¹³ OECD (2020), *How's Life? 2020: Measuring Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9870c393-en>.

¹⁴ OECD (2020), "Exploring policy options on teleworking: Steering local economic and employment development in the time of remote work".

¹⁵ Criscuolo, C., et al. (2021)