

The Case for a More Distributed Federal Workforce

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The Biden administration has a unique and largely undiscussed opportunity. Prior to Covid-19, 5 percent of the U.S. workforce primarily worked from home¹. During the pandemic, this share rose as high as 50 percent; as of November, 36 percent of federal workers were still working remotely. With vaccines already beginning to roll out, this temporary arrangement is likely to end during the Biden administration. The government will face a choice between making what has been a temporary experiment permanent or returning to the status quo ante and bringing everyone back to the office. We believe the latter would be a mistake.

Covid-19 has taught employers the surprising lesson that for many more positions than expected, remote work is preferred by workers and seems to have little negative impact on workplace productivity. Within the federal government, a [September poll](#)² showed that 53 percent of remote federal employees agreed they could perform their duties with minimal or no disruption and a [November survey](#)³ of managers at the Department of Transportation found 55 percent of units were more productive during the pandemic than before. Full-time remote work also decouples where workers live and work, allowing firms to employ workers from anywhere. Hiring from outside of expensive urban centers tends to lower costs and expands the pool of applicants from which an organization can hire. For these reasons, surveys indicate private companies anticipate a dramatic expansion of permanent remote work relative to before Covid-19.

The federal government should follow suit and give current workers the choice to continue to work remotely full-time if they were able to function well during the crisis. Going forward, the government should start with the assumption that new positions will offer workers the same choice, opening up federal positions to people living anywhere in the country. While not every position can be performed remotely, a large fraction of the 36 percent currently being done remotely can.

A more distributed federal government would likely raise real worker wages, improve recruiting, and lower the government's overall operating costs. But the federal government has several additional reasons to prefer a more distributed workforce.

- By allowing jobs to be performed by people who do not live in DC, a more distributed workforce can combat the trend of ever widening geographic inequality. Compared to

policies like the relocation of federal agencies, it is more incremental, less political, spreads jobs to more areas, and will likely result in far less employee attrition.

- Remote work brings the federal government closer to the governed, advancing the goal of recruiting a workforce drawn from all segments of society.
- Property prices in DC have increasingly pulled away from national levels, but the federal presence in DC is large enough that a more distributed workforce could lead to meaningful downward pressure on residential and office rental prices in the city, benefiting residential and business renters who do not relocate.

With the end of the pandemic finally in sight, now is the time to move to a more distributed workforce. It will never be easier than it is now to reorganize the federal bureaucracy into a more decentralized model. Managed well, all these goals can be advanced without sacrificing the quality of federal government service.

A HISTORIC OPPORTUNITY

This is a unique opportunity to reorganize the large federal bureaucracy. Moving from a co-located to a distributed labor force presents significant challenges for any organization: new technology must be acquired and allocated, processes rethought and rewritten, and employees trained to use new technology and follow new procedures. Even then, there will be uncertainty: what problems are unforeseen and will need to be solved? Will they be solvable? And looming above it all is a bias towards the status quo (don't fix what isn't broken). For all these reasons, firms have historically been hesitant to pivot to remote work, even when it was technically feasible.

But due to the Covid-19 global pandemic, many of these sources of friction have been overcome. Organizations that can operate remotely are likely to have more than a year's experience doing so by the time they can safely bring workers back into the office. Technology has been acquired and allocated, processes have been changed, and workers have learned to use their new tools and procedures. Uncertainty is resolving and with practice organizations are getting better — not worse — at working remotely. Perhaps most importantly, remote work is now the status quo for much of the federal government.

Reinforcing this rationale is the [unusually large employee turnover](#)⁴ that is expected to occur during the Biden administration due to the retirement of the baby boomers. In 2018, just 14 percent of federal employees were eligible to retire, but this number is expected to rise to 30 percent by 2023. NASA, HUD, the Treasury, and the EPA are all forecast to have more than 40 percent of employees eligible for retirement by 2023.

This presents an unusual opportunity to reorient the federal workforce towards workers who prefer remote work. One potential challenge to a more distributed federal workforce is that federal workers may believe career advancement is more difficult for remote workers if senior managers have a preference for co-location. Indeed, in pre-Covid [surveys](#)⁵, older workers do tend to be less interested in remote work than young ones. When this is the case, remote work may become unattractive to the most ambitious (young) workers, which can undermine the successful transition of an organization to remote work. Fortunately, the retirement wave presents an opportunity to give the federal government a large infusion of workers who are

comfortable with managing and working remotely, which should help mitigate these concerns.

THE BENEFITS OF DECENTRALIZATION

Allowing more remote and distributed federal work has several advantages.

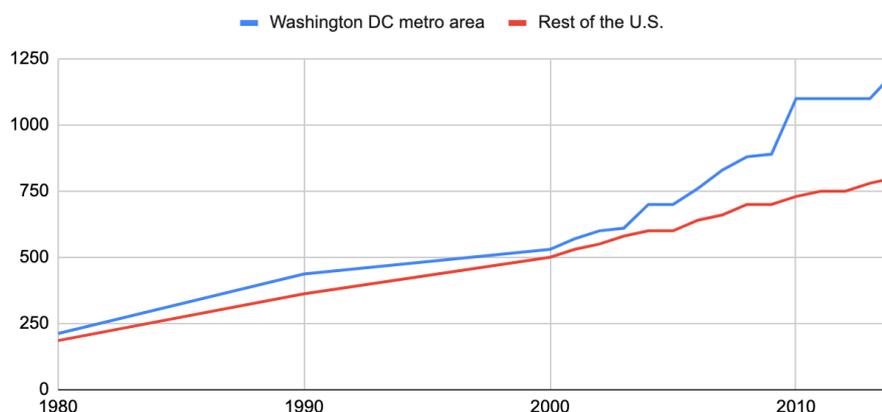
Morale and Real Wages

Workers like remote work. As described in detail in [another report](#)⁶, remote work is valued by workers for a variety of reasons. The freedom to work from anywhere allows workers to move to be closer to friends and family or to where they can live in their preferred lifestyle. Remote work [also](#)⁷ eliminates commuting time, tends to reduce meetings and distractions, and frequently increases schedule flexibility. In a pre-Covid study workers were willing to accept wages that were [8 percent lower](#)⁸ in exchange for the opportunity to work remotely; another showed that remote work [significantly reduced](#)⁹ employee turnover.

In the era of Covid-19, greater experience with remote work has done little to dampen enthusiasm for it. Overall, 76.1 percent of workers who can work from home [say they](#)¹⁰ want to do so at least a day a week when the pandemic is over, and 27.3 percent want to be fully remote. Among tech workers, the desire to be remote is even higher: a November [survey](#)¹¹ found that 95 percent with the option to work remotely permanently would choose to work remotely on a permanent basis, and that 6 in 10 would take a pay cut to work remotely. Giving federal workers the option to work fully remotely is a cost-effective way to raise employee morale.

Remote work's most salient benefit for federal workers may be its potential impact on the real wage of federal workers (i.e., the wage relative to their cost of living). A plurality of federal workers lives in and around Washington, D.C., where the cost of living has diverged from the national average at an increasing rate. BEA data shows the overall cost of living in the DC metro area was [17.4 percent higher](#)¹² than the average for the U.S. in 2019. This difference is largely driven by significantly higher housing costs, which Census data show has increasingly pulled ahead of the rest of the country over the last two decades.

Median rent over time



Source: Census Bureau

By allowing federal workers to relocate from the Washington metro region to areas with a lower cost of living, federal workers in Washington, D.C. can benefit from an increase in their real wage (that is, their wage relative to cost of living). Given the BEA's estimate, D.C.-based federal employees can enjoy the equivalent of a 17.4 percent reduction in living expenses by moving to a region with a nationally representative cost of living.

This benefit, of course, depends on how much pay is adjusted for remote workers. In principle, the federal government could allow workers to retain their original pay, regardless of their location, or it can adjust pay to reflect local cost of living (as is [current federal policy](#)¹³ for full-time telework). The maximum benefit to federal workers would allow workers to retain their original salary, while the maximum savings to government would adjust pay to reflect cost of living.

It is important to note that D.C.-based federal workers could very well see their real wages rise if they relocate, even under the current system of locality-based pay. Federal workers are typically paid according to the general schedule, which includes locality pay adjustments based on the prevailing local wages for non-federal employees. For the year 2021, the location pay adjustment for the Washington, D.C. metro area was 30.5 percent, as compared to the lowest locality adjustment of 16.0 percent for "rest of the United States." Thus, in general, a worker relocating to a place with nationally representative prices would see their cost of living decline by 17.4 percent according to BEA data, but would see their wages reduced at most by 14.5 percent.

This understates the potential gains from relocation, since the places with the lowest locality pay have lower than average costs of living. To take one example, the location pay adjustment for Des Moines, Iowa (where one of the authors of this report resides) is also 16.0 percent. A federal worker relocating from Washington, D.C. to Des Moines would see their salary reduced by 14.5 percent, but would see their cost of living fall by nearly twice as much (27.2 percent).

An alternative approach would be to default to the current system of locality wages in the new location while retaining the option for agencies to hire using the D.C. adjusted pay scale on a case-by-case basis. Doing so would essentially allow agencies a 17.4 percent average increase in the real wage they could afford to pay under the General Schedule pay scale. This would enable the federal government to attract more qualified candidates than would ordinarily be the case.

Not everyone prefers remote work, but there is no reason the federal government cannot provide office space in D.C. for workers who prefer it. One of the main advantages of remote work is greater choice and autonomy for workers, including the choice to work in a traditional office environment. Others will prefer a hybrid arrangement, enjoying a less frequent commute into the office (as was already the norm for much of the federal workforce prior to Covid-19). Moreover, even federal workers who do not work remotely will likely benefit from a more remote friendly policy. In San Francisco, an exodus of tech workers due to the option to work remotely led to a [27 percent drop](#)¹⁴ in real rental prices over the year. Downward pressure on rental prices in the D.C. area would also serve to raise the real wages of federal employees who are unable to relocate to areas with a cheaper cost of living. It could also reduce congestion and commuting times for D.C. residents. This is important since, as we

discuss later, the majority of federal positions will probably remain co-located for the foreseeable future.

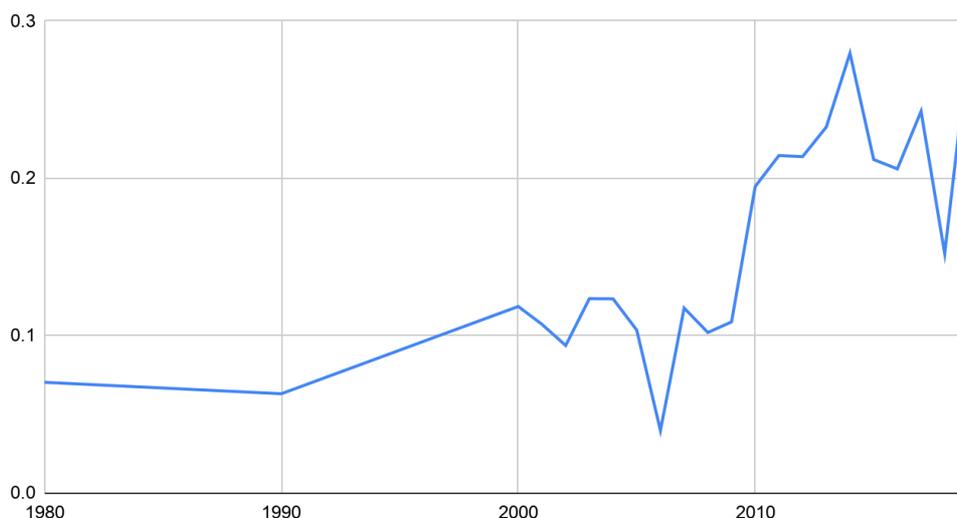
Lower Costs

Whether the government ultimately chooses to adjust pay based on locality, remote work will allow the work of the federal bureaucracy to be done at lower cost. Renting office space in Washington, DC is expensive. According to Moody's Analytics, office space is 41.6 percent above average for the U.S., making the D.C. metro area the 7th most expensive in the country. The US Patent and Trademark Office, which already has a work-from-anywhere program for patent examiners, estimated remote work saved it [\\$52.1mn¹⁵](#) on reduced office space requirements in 2019 alone. And just as workers unable to relocate from D.C. may benefit from lower property prices if a significant portion of D.C. workers relocate, D.C. based agencies may benefit from lower prices for office space due to reduced local demand.

Office space isn't the only source of savings. Increased worker morale due to remote work has been found to reduce employee turnover in some [settings¹⁶](#). The USPTO estimated that increased retention accounted for [\\$23mn¹⁷](#) in savings over 2019.

As noted above, a more distributed federal government could also choose to save money by adjusting pay by locality. To estimate the potential savings if some portion of D.C.-based federal workers relocated, we use data on 1.5 million federal government employees from U.S. Census data from 1980 through 2019 to estimate the DC pay premium with regression analysis. The results show that (conditional on age and time varying education premiums) the relative cost of employing workers in DC has gone from around 6 - 7 percent in the 1980s and 1990s, to 10 percent in the early 2000s, to around 22 percent in the most recent years, relative to federal workers in the rest of the country.

DC Federal Worker Pay Premium



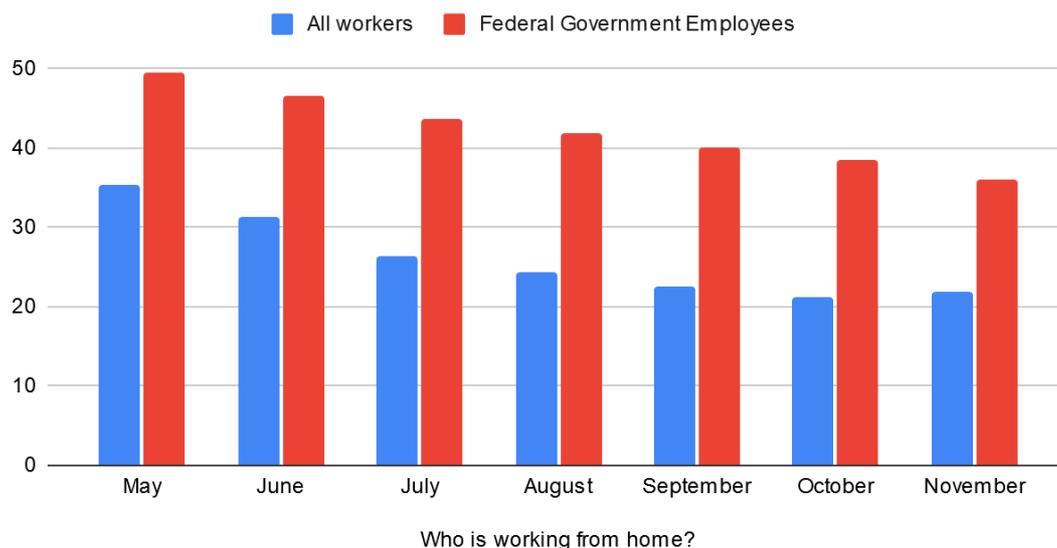
A Larger Labor Market

Remote capabilities can also improve government quality by facilitating access to the best job candidates in the nation, rather than the best in the local job market. Thus, even if a given worker is slightly less productive when working remotely than in an office (and they probably are not, as discussed later), this disadvantage can be more than outweighed by the benefits of access to a larger labor market. As an illustration, suppose it's a bit harder to do some job remotely; any particular worker is 5 percent less productive performing their job remotely than they would be in an office. Since the remote job is open to anyone in the country, if that lets the government hire a worker who is 6 percent more productive than could be had locally, this will more than offset the decreased productivity of doing the job remotely.

These issues are particularly salient to the federal government.

First, relative to the nation as a whole, the federal government is unusually suited to remote work. As indicated in the figure below, the share of federal workers who are working remotely has persistently been 15 percentage points higher than the national average of all workers.

"At any time in the last 4 weeks, did you telework or work at home for pay because of the coronavirus pandemic?"



Source: Bureau of Labor Statistics, Current Population Survey

Importantly, the estimates above are likely to be conservatively low, since BLS estimates only refer to working remotely due to the pandemic and exclude those who were already remote. In addition, [other estimates](#)¹⁸ find significantly higher rates of overall remote working than the BLS, suggesting it is on the conservative end of the spectrum.

To get a better sense of the kinds of federal positions that can be done remotely, we can turn to the current population survey, which has asked employees if they are working remotely due to the pandemic since May. Over September, October, and November 2020, federal government position types with more than 30 percent remote workers are displayed below.

	Share Remote
Research, development, and testing services	52%
General government, n.e.c	47%
Administration of environmental quality and housing programs	44%
Computer and data processing services	44%
Public finance, taxation, and monetary policy	42%
Engineering, architectural, and surveying services	38%
Administration of human resources programs	36%
Administration of economic programs	35%
Executive and legislative offices	33%

Note: From 2020 CPS, limited to cells with a sample size of 100 responses or more.

Note that many of these position types require high levels of skills, education, or experience, which can make hiring challenging. This is important given the anticipated [spike](#)¹⁹ in retirement eligibility during the Biden administration as the baby boomers retire. Making the federal bureaucracy remote will facilitate filling these vacancies quickly with the best candidates in the country. Moreover, given the move to remote work by much of the private sector (one [survey](#)²⁰ found 22 percent of US workdays will be remote even after the pandemic subsidies), the US government will be at a significant hiring disadvantage if it insists workers relocate to accept positions and other organizations do not.

Finally, it's worth considering new types of talent that wouldn't previously have considered working for the federal government that would be open to public service under a permanent remote work arrangement. In particular, the federal government has struggled to increase its technical capacity with many workers earning higher salaries at firms like Google, Facebook, and Microsoft than are possible working under the General Schedule pay scale. To combat this, the federal government has [attempted to increase](#)²¹ the frequency of technical "tours of duty" that tech workers can undertake. However, take-up has remained low, with one reason being the difficulty of relocating to D.C. for a temporary fellowship. But if these workers could work remotely, opportunities within federal agencies will become more attractive.

Geographically Dispersed Workforce

A geographically dispersed workforce has several other advantages for the federal government. The first principal of the [US Merit System](#)²² is (emphasis added):

Recruitment should be from qualified individuals from appropriate sources **in an endeavor to achieve a work force from all segments of society**, and selection and advancement should be determined solely on the basis of relative ability, knowledge

and skills, after fair and open competition which assures that all receive equal opportunity.

By removing relocation barriers to employment, more opportunities to work from anywhere would contribute to a more geographically representative workforce. These barriers can be significant, even when the monetary cost of relocation to D.C. is covered by the employers. A 2020 [study](#)²³ found the typical U.S. adult would need to be paid an additional \$24,000 (43 percent of the typical salary) to relocate to a job that took them away from friends and family.

[Other studies](#)²⁴ have highlighted the importance of informal ties and social networks for finding jobs. Clustering federal jobs in a small number of locations means the social networks of government workers are geographically constrained, contributing to an information gap about job openings, the desirability of different positions, the kinds of fm ,experiences that would be valued, and so on, outside major federal clusters. Over time, a dispersed workforce would help erode these information gaps.

More speculatively, a geographically dispersed workforce could help rebuild trust in government, which has been nearing historic [lows](#).²⁵ Working from home during the Covid-19 pandemic has been associated with a 31 percent increase in white collar crime tips to the Securities and Exchange Commission, which [may have been caused](#)²⁶ by a more arms-length and professional relationship between coworkers. A dispersed workforce may also be harder to improperly influence for similar reasons (it is harder to convince someone to bend the rules over email than dinner and drinks). Lastly, it is worth noting that historically, Americans have [trusted](#)²⁷ their local government more than their state government, and their state government more than the federal government. No doubt this is partially due to the social and physical distance between the local, state and federal governments and the governed.

Economic Development

Finally, remote work could be a new tool for economic development in regions that are being increasingly left behind by the rising importance of agglomeration effects. The increased importance of agglomeration effects over the last several decades have led to economic prosperity for cities and economic decline in rural areas. This is one of the [root causes](#)²⁸ of the serious political and social challenges we face today. A variety of policies have been suggested to revitalize or at least slow the decline of lagging US regions, including [proposals to relocate several](#)²⁹ federal agencies outside of Washington, D.C. The purpose of relocation is to move jobs to regions with shrinking economies (and tax bases). These are not just the jobs of the workers in federal agencies, but also workers in related fields who work with the agencies (lawyers, lobbyists, etc.), and workers who provide services to high-paid government workers (barbers, restaurant workers, IT personnel, etc.).

Dispersing the federal bureaucracy is a much easier way to gain the benefits of economic development that is relocation's goal.

- It would distribute the gains of relocation more widely, including to rural areas, rather than concentrating them in a handful of expensive, urban cities.

- It would allow more jobs to be moved out of Washington. Agencies that do not need to be physically present in Washington could go remote. But, even more workers from agencies that cannot relocate could also go remote, as long as their specific position does not require physical proximity.
- It would be far less politically contentious than deciding centrally where to relocate entire agencies. Instead, workers would have the choice on if and where to relocate.
- It would avoid the attrition and disruption that typically accompanies relocation. For example, the relocation of the USDA Economic Research Service to Kansas City led to the loss of at least [half the staff](#)³⁰ (and up to [93 percent](#)³¹) as workers declined to move.
- Moves could be implemented incrementally, one open position at a time.
- It would be cheaper and logistically easier than organizing a move. The costs and logistics are borne by staff, not the Agency.
- Embracing remote work at the federal level will help entrench remote work as a new mode of organizing business in general. As more firms adopt a remote-first orientation, geographic inequality will be further reduced.

Data from the BLS suggests approximately 40 percent of federal workers were working at home in September, and a [survey](#)³² of remote workers from the same month found that slightly over half agreed that they could perform their work remotely with minimal or no disruption. Taking these estimates seriously suggests 20 percent of federal jobs can already be performed remotely. Given that the federal government has consistently had more remote workers than the national average, this estimate is likely conservative: a [survey](#)³³ from Upwork of 1,000 hiring managers found they were planning an average of 22.9 percent workers fully remote in the long-run.

Looking only at the 400,000 federal workers based in D.C., Maryland, and Virginia, 20 percent equals 80,000 workers. For comparison, a [2019 Brookings report](#)³⁴ about the potential economic development benefits of relocating federal agencies listed 19 greater D.C.-based agencies and sub-agencies as potentially able to be relocated. They collectively employ a similar number in the same three states: 89,000 workers. But remote work would also be available to the federal government's other [1.4mn](#)³⁵ US-based federal workers, many of whom are also based in expensive urban centers.

ADDRESSING SOME POTENTIAL FEARS OF REMOTE AND DISTRIBUTED WORK

Like any policy change, dispersing the federal workforce may entail some costs as well as benefits. In this section, we address two major concerns and conclude they are not significant enough to outweigh the benefits discussed above.

Does remote work really work?

A primary reason that remote work was not more widespread prior to Covid-19 was a perception that it was not as productive as a traditional office. Even if this was true, it would not necessarily mean remote work is undesirable, since any disadvantages associated with productivity might be more than offset by cost savings and access to a larger labor market. Fortunately, for a wide variety of job types, no such trade-off is necessary: for many positions, remote work appears to be just as productive as traditional office-based work.

A [review](#)³⁶ of the economic literature about the efficacy of remote work prior to Covid-19 found little evidence that it results in any reduction in worker productivity for a wide variety of positions. Indeed, plenty of evidence — including a particularly relevant study from the US Patent and Trademark Office's work-from-anywhere program — found remote workers were more productive than those in a traditional office environment. The fact that modern remote work is productive is the likely explanation for the steady rise of full-time working from home before Covid-19 from under 3 percent to 5 percent over 1980 to 2018 (with a marked acceleration after 2010). Even 5 percent understates the true extent of remote work prior to Covid-19, since it excludes work away from both the home and the office, such as in coworking spaces. Including these raises the share of full-time remote workers prior to Covid-19 [to 10 percent](#).³⁷ Even without Covid-19, businesses were (slowly) learning that remote work worked.

Extensive experience with remote work during Covid-19 has accelerated that process. It is now clear that in a wide variety of contexts, there really is no question that remote work can be at least as productive as traditional work. A number of high-profile companies have made the switch to permanent remote work after several months of experience with it (e.g., [Microsoft](#)³⁸, [Facebook](#)³⁹, [Twitter](#)⁴⁰). This is not limited to a few anecdotes either; in a [survey](#)⁴¹ of 1,000 hiring managers by Upwork, 60 percent planned to increase their use of remote work in the future, as a result of their experience with Covid-19.

Within the federal government, experience has also been broadly positive as workers gained experience. Whereas an [April poll](#)⁴² of federal workers working remotely found just 15 percent reporting minimal or no disruption due to the shift to remote work, a follow-up poll in September saw this number rise to 53 percent. A [November survey](#)⁴³ of managers at the Department of Transportation found 55 percent of units were more productive during the pandemic than before.

Systematic evidence on the longer-term viability of remote work is unfortunately limited at the moment. While there are examples of organizations that have successfully organized in a distributed manner for many years (the USPTO has had a work-from-anywhere program since 2012, WordPress since 2005), any evidence about the long-term efficacy of remote work necessarily predates the recent transition to remote work due to Covid-19. It may be that longer term challenges to successful remote work will yet emerge. At the same time, it is likely that new organizational and technological solutions will emerge (indeed, the number of patent applications related to remote work technology has [increased dramatically](#)⁴⁴ since February 2020), so that remote work is just as likely to function better in the long run than in the short run. The experience of remote work is also likely to improve once widespread vaccination allows children to return to full time childcare and social gatherings outside of work are viable.

Nonetheless, given long run uncertainty one possibility would be to implement a multi-year trial for remote work. To realize most of the benefits of remote work, such a trial needs to be sufficiently long, because if workers feel they will be required to return to a D.C. office in the near term, they will be unwilling to relocate. As an example, the U.S. Patent and Trademark Office's work-from-anywhere program began as a [five-year pilot program](#)⁴⁵ in 2017.

Benefits of Agglomeration

Another critique of remote work focuses not on the level of individual workers and businesses, but on the broader ecosystems in which they operate. Physically clustering a large number of workers in a particular industry has traditionally led to at least two major benefits: more efficient matching of workers to positions, and learning. One concern may be that these benefits will be lost if an organization goes remote, even though at the level of individual workers productivity is unaffected. Fortunately, the internet and cheaper travel has [significantly eroded both](#)⁴⁶ of these advantages of physical proximity.

First, clustering workers together can make it easier to match the right worker with the right job. Physical proximity makes it easier to share information and form informal social networks (which can be just as important for helping people find jobs that are good fits). While these effects no doubt continue to exist, their relevance may be fading with the advent of online job markets, the use of algorithms for matching workers to jobs, and the growth of online social networks (which allow people to maintain geographically distributed networks of informal friends).

Second, economists frequently point to learning via “local knowledge spillovers” as another reason why organizations choose to cluster together. A variety of evidence shows innovative businesses learn from each other, borrowing and improving on the ideas and inventions of their neighbors. But here too, there is a lot of evidence that these effects are shrinking – possibly to the point of irrelevance in some sectors – as the internet and cheap travel makes it no longer necessary to physically reside near each other to learn from each other.

Moreover, it is unclear if these kinds of knowledge spillovers are relevant in the context of the federal government. Furthermore, while keeping the majority of federal employees clustered together in Washington, D.C. makes it easy for them to share knowledge with each other, it makes it harder to learn from the policies and processes of 50 state governments and thousands of local ones.

In sum, it is true that a more distributed federal workforce might find it benefits less from matching and learning than it would if it remained in D.C. But, at a minimum, the internet and cheaper travel have eroded the importance of these factors. And for learning, it may in fact be the case that a more distributed government would benefit more from learning than one clustered in DC. At any rate, the challenges associated with remote work are likely smaller than they have ever been, while the benefits remain as large as ever.

CONCLUSION

The Covid-19 pandemic has shown us that for many more positions than previously suspected, remote work has come of age. It is now possible for a significant share (perhaps 20 percent) of federal positions to be done effectively by a distributed workforce of full-time remote workers residing where they choose. Moving the federal workforce in this direction would have myriad advantages. It would make working for the federal government more attractive, both by giving workers the autonomy to work in the place and manner they prefer, and by potentially allowing for increased real wages for workers who choose to live in places with a lower cost of living. Combined with access to a larger national labor market, this would

facilitate hiring and retaining quality employees. This is especially important given the expected retirement wave that will come in the years ahead. A more distributed federal workforce would also likely lead to lower costs for the government, in terms of office space and possibly wages. It may also benefit workers who continue to reside in Washington, D.C., through its beneficial impact on congestion and property prices. Lastly, a more distributed workforce would be a tool for economic development of lagging regions and allow the government to better achieve its goal of hiring a workforce that is representative of the population it governs.

For all these reasons, the government should give current workers the choice to continue to work remotely full-time if they were able to perform their job effectively during the crisis. Going forward, the government should start with the assumption that new positions will offer workers the same choice, opening up federal positions to people living anywhere in the country.

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