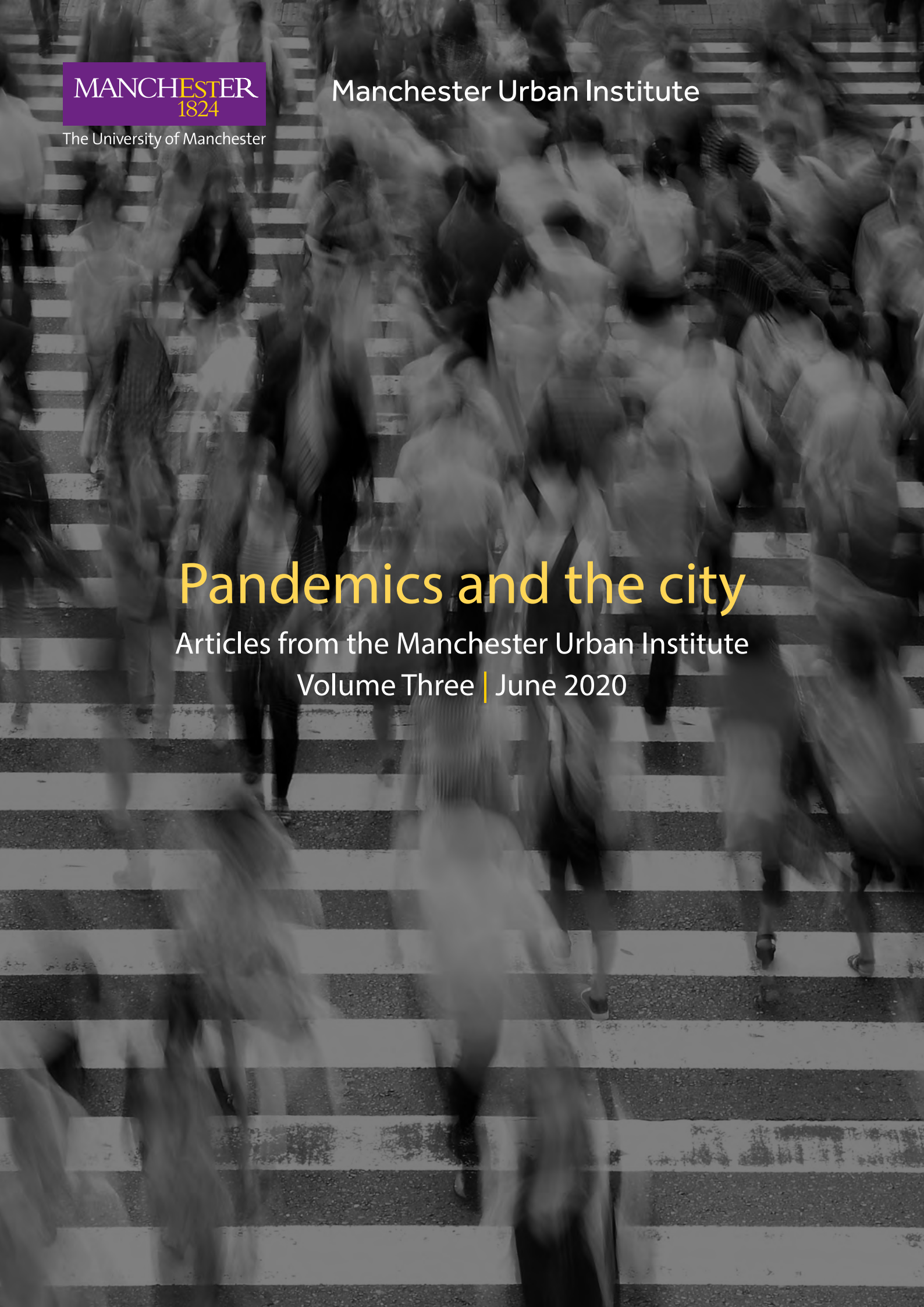

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Pandemics and the city

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The COVID-19 lockdown has forced us to decentralise work: lets not go back

Matthew Harrison

One faint silver lining to the very dark cloud of COVID-19 is the positive effect the lockdown has had on the environment. As many employers have been forced to embrace remote working and with the restriction on 'unnecessary' travel, the reduction in road use has had a positive effect on air quality and noise pollution, most notably in our urban areas. Many key workers have of course continued to travel into our city centres but another benefit of the lockdown has been to make their journeys quicker, easier and more safe.

Research has shown that working from home is associated with increased job satisfaction, increased productivity and improved job retention (Bloom et al, 2015; Madsen, 2003). I believe there are many more benefits to decentralising some work but first I want to acknowledge some of the potential negatives, although most of the available research primarily considers working from home. Hartig et al (2007) reported that many people working from home found it harder to break away from work and the restorative effects of returning home after work were reduced. Noonan and Glass (2012) found that additional time in the home can exacerbate familial conflicts and Bloom et al (2015) found high levels (25% in one particular study) of reported loneliness.

For many years now, I have been thinking about an alternative to working from home which could bring many workers out of crowded cities, would benefit workers and, I believe, local economies while at the same time avoiding many, if not all, of the issues found with working from home. 'Satellite' offices, located in smaller towns and villages could be a neat way of combating at least some of the issues with working from home while keeping many of the positives of remote working and at the same time providing a much-needed boost to run-down town centres.

Workers could drop children off at school on foot and walk or cycle to an office nearby. Time lost to, and stress caused by, the daily commute (not to mention delays in heavy traffic or due to late or cancelled trains and buses) would be greatly reduced: a benefit to the employee, employer and workers who are still travelling into city centres. Local businesses would see increased footfall: with workers buying lunch from local shops and cafes, perhaps shopping in local shops while on breaks or before and after work and meetings or celebrations taking place in local bars and restaurants. The positive effect on the environment of fewer people driving shorter distances to and from work could be huge and permanent. The physical health benefits, with improved air quality and with potentially many more people walking or cycling to work, would also be significant. I also believe the improved work/life balance and the reduction in commuting-related stress would also benefit workers' mental health.

COVID-19 has highlighted some serious inequalities. People in more deprived areas – including inner-city areas and those along busy arterial roads who are already affected by poor air quality – are more likely to die from Coronavirus than those in more affluent areas. There are a number of reasons for this: people in those communities are more likely to live in cramped housing conditions; are more likely to be exposed at work in key jobs such as cleaning and social care and tend to have more underlying health problems related to poverty.

In addition to the improved air quality associated with a reduction in commuter traffic, some deprived areas would also feel the economic benefits of having office spaces located along their high streets. I believe we would also see some change in the housing market in the longer term. At present, areas which have good transport links to city centres tend to be more expensive to live in than areas less well-served by public transport and good road links. If transport was not such a significant factor in choosing where to live, people might instead decide they can get more for their money – for example a house with a garden rather than one without – in a more affordable area. The reduced demand for previously more 'desirable' areas could lead to a fall (or slower rise) in house prices, with rises in other areas.

A further positive side effect could be to bring communities closer together. Like many people, my work takes up the majority of my time and much of my spare time is spent at home looking after my son or doing housework. If you also factor in commuting time, there isn't much time left to interact with my local community. If I was working locally, I would get to know people working in local businesses, might find myself meeting people I know while on my way to the office. The boost to local economies could also result in more shops, cafes etc which would give locals more reasons to spend time in their communities.

If we consider some of the negatives highlighted above then shared office spaces still enable people to have a work space away from home helping them to differentiate the time and have time away from difficult home environments. Loneliness is also likely to be less of a factor in these spaces compared to working from home as these facilities would

be shared workplaces either for workers from one employer or workers from multiple employers. In recent years shared work spaces have been popping up in city centres for small businesses and the self-employed and those connections regularly lead to collaboration or new client-customer relationships. Employers who have an 'away day' once per year might decide to bring their workers physically together more frequently for team building and other such activities.

If this idea was to gain traction, city councils and city centre-based businesses may feel uneasy about the effects on them. However, many workers will continue to travel into city centres daily and other workers will continue to travel occasionally for meetings. And with increased leisure time and potentially more disposable income as the costs of commuting are reduced, people might be more likely to travel into the city centre for leisure. Finally, city centre populations have been rapidly increasing in the last two decades so businesses now serve residents far more than they did in the recent past and no longer rely solely on the presence of workers. Residents and workers who are visiting the city centre will benefit from quieter streets and better air quality and businesses will of course adapt.

> 'Satellite' offices, located in smaller towns and villages could be a neat way of combating at least some of the issues with working from home while keeping many of the positives of remote working and at the same time providing a much-needed boost to run-down town centres.

Approval for such a scheme might depend on an initial injection of funds to set up a number of offices. City regions with devolved powers could lead on this, as they would be able to see the benefit to the wider region. There are 36 towns in Greater Manchester, for example, and many of those would benefit from spreading employment opportunities out across the region. Some devolved city regions have considered congestion charges and introducing city centre tolls could offset the cost of taking over empty shops and offices and fitting them out appropriately. Alternatively, business rates in city centres could be increased, perhaps just for non-essential businesses bringing high numbers of road users into the city.

Decentralising work would be a progressive move which would benefit our climate, our health and our economy. We have seen that, for many types of work, technology has facilitated a relatively smooth transition to remote working. We now have an opportunity to move away from our old unsustainable working arrangements.

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Bloom, N. et al. (2015). Does working from home work? Evidence from a Chinese experiment. Quarterly journal of economics, 130(1), 165–218.

Madsen, S. R. (2003) The Benefits, Challenges, and Implications of Teleworking: A Literature Review. Journal of Business for Entrepreneurs.

Hartig, T., Kylin, C. & Johansson, G. (2007). The Telework Tradeoff: Stress Mitigation vs. Constrained Restoration. Applied Psychology, 56(2), pp.231–253.

Lewis, S. and Cooper, C.L. (2005). Work-life integration: case studies of organisational change. Chichester: Wiley.

With thanks to Dr Alicia Picken for her input.


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Not enough beds, not enough care: putting New York City's COVID-19 crisis in context

Caitlin Henry

Socio-economic inequality in cities has exacerbated the uneven impacts of the COVID-19 pandemic, with people in poverty and people of colour more likely to be exposed to and more likely to die from the virus. Accounting currently for nearly ten percent of the confirmed cases in the US, New York City has been the epicentre of the pandemic. The pandemic has also shed light on the condition of New York City's already stretched health system, straining to care for those who have fallen ill. Throughout the crisis, hospitals have been crowded, refrigerator trucks have lined the near-by streets once morgues reached capacity, and ambulance services have been overwhelmed and short-staffed as front line workers fall ill.

The New York City health system: a brief background

Two important challenges facing the New York City health system help to explain why and how the pandemic has impacted the City so severely. The City has experienced a series of hospital closures over the past two decades that has transformed how residents access health care. As well, the health system in New York, the US, and much of the Global North, has stretched nurses and other health care workers thin for decades.

Nearly two dozen hospitals in the City have closed over the past 20 years, as the hospital system has become increasingly financially fragile since the 1990s. This has drastically reshaped how and where New Yorkers access health care. Hospital services to each of the City's five boroughs is unequal. Manhattan has many more hospitals, particularly speciality facilities. Meanwhile the two most populous boroughs, Queens and Brooklyn – which currently lead in number of COVID-19 deaths per county in the US – have fewer hospitals and fewer beds per 1,000 residents. These boroughs have been hit hard with closures, especially since the 2008 recession. Many of these closures occurred because of a confluence of two events.

First, in 2006, a state commission, whose mandate was to update New York State's hospital and long-term care systems, targeted a number of New York City hospitals for closure. The second event was the 2008 financial crisis. When the financial crisis hit, more facilities proved financially unstable and were let to close. Even though people in the US access health care through a mix of public and private care providers, the government is still responsible for managing and coordinating much of the system. This management happens through a variety of

COVID-19 crisis shows the limits of living without a local hospital. Ugent Care clinics are no replacement for hospitals when people need emergency or acute medical care.

means, including public insurance payments, regulations, licensing, and accreditation – and assisting facilities that are struggling financially. Some facilities, such as Brooklyn's Interfaith Medical Center, get state assistance to get back on solid financial ground. Others are considered too expensive to bail out and subsequently let to close, such as Manhattan's St Vincent's Hospital.

Community hospitals – generally smaller, non-specialist facilities with a range of services and clinics that serve local populations – have been hit the hardest with closures. For many residents, these are often a first stop for care. People without health insurance or a GP often depend on the emergency room for basic care, since the ER cannot turn them away. Community hospitals are also hubs of health care, housing many other health clinics. While urgent care clinics have opened across the city, the COVID-19 crisis shows the limits of living without a local hospital. Such clinics are no replacement for hospitals when people need emergency or acute medical care. Closures have left residents farther away from the nearest hospital and facilities under greater pressure. This is not to forget the important economic and social roles hospitals fill in communities. They employ often thousands of people and occupy major infrastructure. Hospitals are hubs of economic and social activity. Surrounding businesses benefit greatly from the activity a facility brings to the area.

Closures, crisis, COVID-19

Elmhurst, Queens exemplifies how communities of colour and lower income neighbourhoods have felt the brunt of the impacts of these closures. It has been cited as New York City's worst impacted neighbourhood by COVID-19. Elmhurst's St John's Queens Hospital closed in 2009, leaving the public Elmhurst Medical Center as the only hospital serving the area. Elmhurst is vibrant and diverse and also home many new immigrants to the City. Language barriers, lack of health insurance, crowded living conditions,

and poverty have created a perfect storm for COVID-19. In the past two months, key workers have called Elmhurst the 'epicentre of the epicentre' of the COVID-19 pandemic. The public hospital has been stretched beyond its limits; people are disproportionately vulnerable to infection; funeral homes are overwhelmed; and workers exhausted, sick, and worse.

Hospital closures are not the only long-standing health crisis facing the city. A chronic under-investment in health care workers also makes the health care system fragile. Shortages of health care workers, especially nurses, have been an ongoing issue for not only New York's health system, but health systems around the world. Decades of underinvestment in nursing education and difficult working conditions have meant that the US overall does not train enough nurses and has trouble retaining them in the profession. Like many Global North countries, the US has dealt with cyclical nurse shortages since at least the 1970s. Often, facilities have turned to hiring migrant nurses to help fill staffing shortages, and this is especially true in New York.

Care deficits

Staffing shortages are a symptom of what feminist scholars refer to as 'care deficits'. Care deficits describe the conditions when individuals, families, populations, or systems (such as a health care system) lack sufficient resources. Those resources could be money, workers, or supplies such as ventilators and personal protective equipment. A care deficit is different from a labour shortage: a facility might hire more nurses to fill vacancies, but patients may still not receive enough care. A unit might still need more nurses working each shift. Nurse unions have been at the forefront of advocating for better labor protections to solve care deficits. Regulating the number of patients a nurse can be responsible for has been a central strategy to improve working and caring conditions. ICU and especially ventilator patients require an immense amount of care and attention. Imagine the difference in care for your mother, grandmother, or uncle if a nurse has to care for two or three other ventilator patients compared to just focusing on your loved one. A staffing shortage directly impact a nurse's working conditions – and a patient's quality of care.

Nurse shortages and hospital closures are not separate issues. Just as when jobs are lost when a manufacturing plant closes, when a hospital closes, jobs are also lost. Given the work that happens in a hospital, the stakes are so high. Nurses are just one example of care workers who are essential to providing sufficient, safe, high quality care. COVID-19 has helped many people see just how essential certain jobs are to meet everyday needs. Within a hospital, nurses, nurse assistants, physicians, cleaners, lab techs, phlebotomists, food workers, and more are essential to keeping a hospital, its workers, and its patients safe. Each worker is part of the team ensuring patients and loved ones receive high quality care. A hospital isn't a hospital without workers making it a place for care, treatment, and healing. At the same time, if hospitals and beds aren't available, health care workers can only do so much to treat patients. If a hospital closes, a care deficit can open in its place. Surrounding hospitals only absorb so much of these patients and newly unemployed key workers.

Austerity is bad for your health

This context means that New York City's health system was already under strain, with fewer hospitals and a stressed labour market. The closure of hospitals and the insufficient funding and resources for training, supporting, and hiring health workers are not isolated trends. Rather, they are intertwined and together, they have made New York's health system fragile and uneven across the city. While Governor Andrew Cuomo might be celebrated as a leader in the US recently, history reminds us to be mindful of long-standing and repeated cuts and restructurings to essential safety nets like community hospitals and Medicaid, the state-provided health insurance for people in poverty.

Moreover, deadly austerity policies have made the COVID-19 outbreak in New York City even more deadly for residents and workers. It didn't have to be this way. The protests in cities all over the US against police brutality against racialized people must be understood in a context of racism as a public health hazard and the disproportionate harm of austerity politics on people of colour and their communities. COVID-19 abandonment, thus, has long histories in, among other things, a destabilizing and defunding of health care systems. Public health experts and community health workers have been sounding the alarm for years. Now, as health workers are called 'heroes', perhaps leaders will listen more to the great ideas that workers have been advocating to make health care more just, equitable, and accessible in New York and beyond.

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COVID-19: What should transport and mobility responses be now and beyond?

Ransford A. Acheampong

Low-wage vulnerable workers, who cannot work from home and are at greater risk of catching the virus, tend to depend on public transport for commuting purposes.

Social distancing can be achieved with walking and cycling, making a mass cycling culture critical to our collective health, well-being and resilience now and in the future.

There is a unique opportunity to learn lessons and to invent new futures for towns and cities, including the way we travel.

The COVID-19 pandemic has brought major disruptions to social life, work and the way we travel. There is already evidence pointing to serious ramifications for the global economy. In the UK, after months of lockdown to protect public health, the government is desperate to have the wheels of the economy turning again. The lockdown is gradually being eased since mid-May, and people are being asked to return to work.

It is clear that the measures we put in place around transport and mobility will be critical to how we emerge from this pandemic and rebuild in the coming years. This is particularly important in the face of real concerns that the government's responses regarding transport and mobility, in the short to medium term, will have serious implications on whether or not there is a second wave of infection of the virus.

In the months of the lockdown, we have witnessed an overall decreasing trend in movement by different modes, including public transport, car-based transport and even walking and cycling. As people return to work, we are also witnessing a gradual increase in traffic on our roads and in the use of public transit in our major towns and cities, such as London. One of the key questions we now face is how to make transport safe for people who are returning to work?

It appears that people in low-wage work across different sectors of the economy are at greater risk of catching the virus, partly because of the nature of their work.

In response to this, the UK government has issued transport and travel guidelines, which essentially advices commuters to avoid public transport, if they can, and instead drive, cycle or walk. What could the likely impact of these transport measures be?

Some of the most vulnerable groups are returning to work

Firstly, we know from the evolving evidence that while COVID-19 poses serious risks to the population as a whole, people from ethnic minority backgrounds are some of the most affected groups in the UK. While factors such as prior health status and underlying health conditions have been attributed, it is possible that the differential levels of risk and vulnerability are partly the result of the occupations that people are engaged in. It appears that people in low-wage work across different sectors of the economy are at greater risk of catching the virus, partly because of the nature of their work. These low-wage vulnerable workers, who cannot work from home, also tend to depend on public transport for commuting purposes.

On the one hand, UK Transport Secretary Grant Shapps has indicated that it is a 'civic duty' for people to avoid public transport. On the other hand, we know that public transport is essential for most people to access opportunities, including going to work. Indeed, in 2018/19, some 4.8 billion journeys were made by people using their local buses in Britain, constituting about 58% of all public transport journeys. In London, 27% of workers drive to work, with many of the remaining workers depending on other modes, including public transport. This means that some of the most vulnerable population who are now returning to work, do need public transport to be able to do so. Consequently, there is real risk that people will continue to use public transport in large numbers despite government advice, potentially risking their health and that of the general population.

Making public transport safe and reducing travel-related transmissions

So, how do we ensure that transportation measures being taken actually protect public health?

- Increase public transport service frequency. The UK government's latest safer travel guidelines indicate that

there is going to be reduced capacity of public transport services. However, in order to avoid overcrowding on public transport, as we are starting to see on tubes and buses in London and elsewhere, it is crucial that capacity is increased by increasing the frequency of services, especially during peak-hours of travel.

- Make public transport faster. Again, the UK government's safer travel guidelines signals that travel may take longer than normal on some routes. Longer travel time, added to social distancing not being possible as a result of overcrowding, could increase the time that passengers come into contact on public transport, thereby increasing risk of travel-related transmission of the virus. As more people return to work driving, congestion could return, and travel delays on public transport in our major towns and cities could return to the pre-pandemic levels or even worsen. Thus, in the short-to-medium term, it would make sense to reallocate more road space by creating new dedicated bus lanes with the aim to making service more frequent and faster.
- Ensure social distancing on public transport and at stations. Basic measures such as reducing occupancy on public transport, marking seats where passengers can sit and controlling passenger flow in stations could go a long way to making public transport use safe and protecting the vulnerable populations who depend on it. Obviously, doing so will amount to reducing capacity, but this can be offset by increasing the frequency and speed of services, such that at regular intervals, more buses, tubes and trams are available for people to board.

Active transport—are more people going to cycle?

The benefits of cycling and walking are obvious, and it does not come as a surprise that the safer travel guidelines encourage more people to do so as they return to work. From the UK government's position, as reflected in the travel guidelines, walking and cycling are essential to reducing pressure on public transport. Social distancing can be achieved with walking and cycling, with added benefits to the environment and the health of those who do it. The government's plans for cycling in particular, and some of the actions backing those plans, including the 'creation of a £2 billion package to create a new era for cycling and walking', are steps in the right direction and are welcome. However, we need to be careful and even cautiously optimistic about what levels of cycling could actually be realised in the short-to-medium term.

Compared to countries such as The Netherlands and Norway, the UK is a low-cycling country. Nationally, cycling constitutes just about 1% of total trip mileage. In London, where cycling has increased significantly in recent years, less than 3% of all trips were undertaken using the bike pre-COVID19 pandemic. Females and older adults as well as ethnic minorities and low-income groups are under-represented in the number of people who cycle.

A plausible scenario for the UK is that car use will return to pre-pandemic levels or even increase as people avoid public transport. This could make cycling seem unsafe, especially for those that the government is intending to encourage to change their behaviours. If commuters do not drive and cannot cycle, then they have no option but to use public transport. Thus, in the short-to-medium term, as more people return to work, the focus should be on making public transport safer, faster and reliable, by implementing the measures already outlined in this article.

Beyond the pandemic—inventing our transport and mobility futures

In the coming months and years, society and economies will recover from the devastating impacts of COVID-19. There is a unique opportunity to learn lessons and to invent new futures for towns and cities, including the way we travel. Sustained, long-term investment in cycling, walking and public transport should be central in these futures.

As this pandemic has shown, a mass cycling culture, is critical to our collective health, well-being and resilience now and in the future. There is the need for policy to help remove barriers to cycling among under-represented groups, to create inclusive transport futures. In the unfortunate event of another pandemic, we can be sure that the investments we make in cycling and walking, in particular, will yield dividend in aiding our rapid recovery.

Above all, making transport sustainable will be crucial to reversing climate change and averting potential cataclysmic impacts now and in the future.

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COVID-19 and the challenge of crisis urbanism

James Evans and Karen Lucas

We are living through a period during which cities are changing much faster than usual. Lengthy and conservative cycles of planning, consultation, policy development, budgeting and implementation are being bypassed by accelerated delivery frameworks and temporary interventions. Initiatives to pedestrianise streets and reclaim space from traffic for walking that for decades have been seen by most cities as too hard are happening overnight. This represents a form of crisis urbanism, whereby city authorities are forced into a rapid responsive mode of governance.

On the one hand crisis urbanism is nothing new. The rebuild of cities hit by disasters has historically enabled radical transformations of urban space and living. Christchurch, New Zealand, was levelled by an earthquake in 2011 and has attempted to rebuild a low rise city centre. Covid represents a different level of crisis in that it represents a challenge for all human settlements and all aspects of how they function. In this sense it is more akin to the Nineteenth Century sanitary movement that saw cities demolish high density slums and construct sewers and municipal water provision systems to prevent diseases like cholera, although this took decades). The current crisis represents an opportunity to make changes that not only reduce vulnerability to Covid, but improve peoples' quality of life and the sustainability of the planet more rapidly than this. To achieve this so-called 'clean recovery' crisis urbanism needs to be directed in the right way to maximise long term benefits and avoid unintended negative consequences.

Three challenges exist. First, because crisis urbanism often proceeds by trials and experiments, cities need to become much better at learning what works from each other. Although cities house most of humanity and generate most of our wealth, compared to nation-states there are remarkably few mechanisms for them to coordinate or share best practice. City networks would disagree – for example C40, ICLEI, POLIS and so on, but they don't reach everyone. Worse, cities are often competing against each other to attract investment and accelerate growth. This needs to change. Second, crisis urbanism needs to be driven by coherent visions of what societies want and need to achieve. In terms of transport, cities need to create 'quality catchment' neighbourhoods whereby essential services are within walking distance and there is a consistent level of service that gives priority to walking and excludes polluting traffic, otherwise they run the risk of increasing car use and exacerbating existing inequalities.

Fully coordinated changes across complex systems like cities cannot be done rapidly. For crisis urbanism to be effective cities have to be comfortable with adaptive management that is experimental, iterative and reactive.

This requires innovation across the service destinations including health, education, retail, and work places, brought together with new urban design tools that are responsive, agile and quick to help with transformation. Finally, crisis urbanism depends on the ability of city authorities to manage change. The rapid walking network being implemented in London currently is partly building on a plan devised in response to the terrorist bombings a decade ago. Further, they have the confidence to implement it rapidly based on experiences making temporary but sweeping transport changes to accommodate the movement of millions of spectators to the London 2012 Olympic Games.

Fully coordinated changes across complex systems like cities cannot be done rapidly. For crisis urbanism to be effective cities have to be comfortable with adaptive management that is experimental, iterative and reactive. Some, like London, have experience of this to draw on. Many don't. We need more in depth understandings of how municipal authorities and their networks of stakeholders and organisations learn to implement change across a wide range of cities. A crisis typically creates a steep curve away from 'normal'; the challenge we all face is how to ensure the 'new normal' after the journey back down comes with a measurable improvement to everyday quality of life and long term sustainability.

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COVID-19 and the future of urban mobility

Michael Hodson and Andrew McMeekin

- Lockdown has disrupted both public and private urban mobility systems, which rely on shared usage.
- Cities throughout Europe have seized the opportunity to reform their transport systems, with bike lanes and widening of pavements.
- Policymakers must act to protect public transport while it recovers, prioritising public interest over short-term profit.

Pre-COVID urban mobility

Our work on Greater Manchester's existing transport system revealed long-standing challenges that are shared by many urban areas: over-dependence on cars, congestion at peak times, a privatised and fragmented public transport system of highly uneven and often very expensive (especially compared to London) provision, air pollution hotspots, unsustainable carbon emissions, and investment on infrastructure that focused on the city centre and strategically prioritised connections within the wider metropolitan area.

However, in the context of devolution, we have seen some progressive changes, including ambitious plans announced for a major new cycling and walking infrastructure and proposals for taking bus provision under municipal regulatory control. These developments were starting to address our call for a focus on the travel needs of all citizens, delivered under new governance arrangements of 'civic futures'.

New, disruptive digital innovations have also reconfigured urban mobility systems. In pre-COVID transport systems, digital platform technologies – from the ride-hailing platform, Uber, to the mapping platform, Citymapper – were being experimented with by both private investors and via a renewed civic politics.

The challenge for existing forms of urban public transport, and for imagining the future role of digital platforms in urban mobility, is that they are predicated on mass, shared usage. Social distancing and lockdown, in the short-term, fundamentally challenges principles of shared ridership and shared usage and has stimulated a variety of responses.

Urban transport during the lockdown

Despite widespread disruption under lockdown conditions, a range of initiatives in different urban areas have been emerging that are starting to reimagine the fabric of urban transport. At the same time, evidence has been emerging about how empty streets during lockdown led to improved air quality and lower carbon dioxide emissions, renewing public debate about what future low-pollution, low-carbon urban mobility should look like.

It is within this context that cities have introduced new mobility initiatives: Milan has introduced measures to reduce car use and turn over 35km of city streets to cyclists and pedestrians; France has made €20million available for citizens to service bicycles to promote cycling, and Manchester has announced the pedestrianisation of Deansgate, one of its major thoroughfares. Greater engagement through various networks, such as the C40 group, has allowed cities to learn from each other. These networks should be developed to enable further sharing of key lessons.

Platform-based mobility providers have also been adapting, introducing in-vehicle segregation and no-contact deliveries. Also, in a new partnership with the World Economic Forum, German start-up Wunder Mobility has launched #WeAllMove, an open digital platform that connects essential services with mobility providers.

Similar open digital platforms could serve as a model for UK policymakers as lockdown restrictions are eased, but the need for distancing remains.

Some lockdown interventions – eg 'temporary' widening of cycle lanes – have been introduced as sticking plasters to cope with current circumstances. But as people start to appreciate and experience them as the new normal, they may become permanent. On the other hand, some interventions, such as Paris mayor, Anne Hidalgo's, plans for a more self-sufficient '15-Minute City', have been much more openly directed towards experimenting for long-term change, with the lockdown seen as an opportunity to create more sustainable and effective mobility systems for the future.

Social distancing has meant the 'sharing' envisaged by ride-hailing companies has become problematic. This has created pressure to repurpose digital platforms for an era of social distancing. To do this effectively will require building new relationships between policymakers and platform expertise. This will be needed to develop mobility apps for processes of contact tracing and social distancing, which will likely become fundamental to monitoring and controlling urban movement.

A key question is whether this more interventionist state will be confined to responding to the immediate crisis before bouncing back to 'business-as-usual' or whether we are seeing the foundations of deep institutional and structural change?

With many nations easing lockdown measures, a key concern is how to get people moving in dense urban areas while maintaining social distancing measures. This risks favouring private cars over public transport. It also poses questions about which of these experimental interventions will solidify, which will be exposed as temporary and what this ultimately means for the organisation of urban transport systems.

Beyond COVID?

The lack of a vaccine means we don't know when we will be 'beyond COVID', and predicting what urban mobility will look like is inevitably even more speculative than regular future gazing.

That said, current responses and interventions give us some clues. The reclaiming of streets for active travel in the absence of cars may become sufficiently popular to persist, especially in city centres. The end of rush hours could be facilitated by collective discussions about more genuinely flexible working patterns. This could involve solidifying home working and staggered commute times.

On the other hand, disruption to public transport, which is not well suited to social distancing, seems likely to continue for some time. In the period before buses, trains and trams return to full-scale operation, private mobility platforms may seize opportunities to fill the vacuum.

Policymakers must robustly protect the public interest over the possibilities for short-term profits for narrow social interests.

How this plays out is likely to be shaped by how the wider political and economic conditions of a post-COVID world shape future urban transport systems. The crisis has required a renewed reliance on a state that intervenes more deeply in the organisation of economic life and in securing the health of its citizens. A key question is whether this more interventionist state will be confined to responding to the immediate crisis before bouncing back to 'business-as-usual' or whether we are seeing the foundations of deep institutional and structural change? The answer likely rests on a combination of what the length, depth and scope of the COVID-19 crisis is, including the length of a global economic downturn, and the range of societally feasible political and experimental ideas that are available to draw on.

The fallout from COVID-19 is likely to intensify this political-economic struggle between the private investment opportunities provided by digital platforms in urban centres, and a new civic politics of digitally delivered provision that seeks to use platforms to bolster collective priorities via existing urban transport systems. How they are rebuilt, with which combinations of transport mode and under what arrangements of ownership and control, will shape the sustainability, resilience and effectiveness of future urban mobility systems.

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