A new post-pandemic pathway for mobility?

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Starting in early 2020, the pandemic has had a major impact on how we all live our lives. We have been tracking the changes in behaviour in the UK for those two years. Our findings are both modest but also extraordinary in many respects. Modest, in that it is only some behaviours in some parts of the economy which have really changed. Extraordinary, in that the findings challenge aspects of the foundations which have governed how we think about and plan for mobility.

The pandemic has had a major impact on how we all live our lives. As we learn to live with Coronavirus without restrictions on how we travel and where we work, we face difficult questions. Society demonstrated enormous capacity to adapt, including to varying restrictions on travel, and many people were able to reorganise daily life to travel less. Some of this came at great cost, such as the postponement of weddings or even the inability to attend funerals. Some of this was a major acceleration of trends which were already visible such as home working, home shopping and on-line platforms for gaming and talking.

We have been tracking the changes in behaviour in the UK for those two years. Our sample was collected in 10 areas in England and Scotland with the population representative of those areas, although overall the sample is more urban than the UK average. Over 9000 respondents completed the first wave in July 2020, which included estimating pre-pandemic behaviours. Over 6000 people have responded to two further waves of survey in December 2020 and July 2021, with 4808 of the sample completing all three waves with three further waves planned. ¹

Pro-sustainability shifts in behaviour.

First, even in late March 2022 car traffic during the week is 10% below pre-pandemic levels. By contrast, weekend car traffic is at or above pre-pandemic levels. Our in-depth panel data suggests that the total proportion of days worked from home remained high with over 41% of days worked from home across the sample, almost four times pre-pandemic levels. The combination of continued working from home and a reduction in business related travel is dominant in the reduction of car traffic. Crucially however, the economy has returned to above pre-pandemic levels and so we now have a significant period of time where economic growth has been enabled with less car traffic. Imagine, in 2019, writing that weekday car traffic would fall by 10% (see Figure 1), and perhaps even being disappointed that the change was ‘so small’!
Average traffic levels (percent)

20%

0%

March 2020
April 2020
May 2020
Second, we have also recorded a small but statistically significant reduction in car ownership. Whilst some households shifted from not owning a car to owning one, the biggest move was 14% of two car households reducing to one. Used car sales were down 5% in 2021 below their 2018 equivalent. New car sales were 30% down, although this comparison is complicated by supply side constraints. Nonetheless, there were expectations that the turn away from public transport during the pandemic would lead to a turn to the car. This has not happened. Indeed, people reported the pandemic being a more important reason in giving up their car than it was a factor if they increased car ownership.

Third, our data has continued to show a very high level of walking with 58% of the population walking three times a week or more compared with 36% just before the pandemic. Walking is the only mode of travel which has seen an increase in the number of people undertaking it regularly (Figure 2). Whilst some of the increase is walking for leisure we have also observed a doubling of the proportion of journeys which involve some form of walking.
Car as a passenger
Cycling
Finally, we have seen a reduction in the frequency of shopping trips and an increase in on-line retail with an increase of an additional nearly 7% of all retail sales going on-line over and above the previous rising trend. This has been accompanied by many more businesses improving their on-line offer and logistics supply chains increasing their capacity in line with demand. The system is now geared up for greater on-line retail and consumers are even more familiar with this. High street, retail park and shopping centre retail vacancy levels increased during the pandemic by between 2% and 5% to an average of around 15%. In time, retail will adjust its offer but this is a further stage in the structural shift of retail which seems unlikely to go back. Taken in combination, there are some important behavioural shifts at play. When people are spending more time working at home they are travelling less by car. This is resulting in greater use of neighbourhood facilities and more on-line shopping. Overall this is resulting in more walking for a range of purposes but more of this is happening near where people live, which is not traditionally where effort has been spent improving conditions for walking, at least in England. Indeed, none of the local authority footfall counts have picked up this trend as they focus on the busiest retail areas (where footfall has reduced). The more localised lifestyles seems to have enabled some households to reduce car ownership, at least in the short run as the problems of synchronising use of vehicles across household members diminishes. This appears to create the conditions, at least for those parts of the population who can work from home, to generate more sustainable and less car intensive travel patterns.
Travelling less is also impacting public transport

Of course, there are also some important downsides of the pandemic. Rail use and bus use have been rising slowly since the removal of restrictions but still remain around 80% of pre-pandemic levels. Data suggests that users are less concerned with risk of contracting Covid-19 than non-users and it will be even more difficult to attract non-users to bus and rail than pre-pandemic. It will also be difficult to grow the market back for bus and rail because some of the decline is a reduction in the need to travel for commute or business purposes.

Cross-national comparisons show important similarities

It is obviously of great interest to look across different countries to explore how different approaches to managing the pandemic impacted on the behavioural outcomes. Whilst, on face value, the trends observed in the UK appear transferable, the extent to which local cultural norms for working and shopping, different labour market structures or different ways of managing public transport impact on behaviour could be substantial. The Swiss Mobis19 study, for example, tracked 1,300 people using GPS tracking devices and a phone app at the start of the pandemic. There, they have found a reduction in the number of days which people record any trip, by around 20%, but a somewhat smaller reduction in car travel and a slightly higher level of public transport use in the autumn of 2021 compared to the UK. Walk trips per day were up as in the UK but distances (which we did not measure) showed some reductions. Similar to the UK, bike distance appeared to be higher in the summer but with no notable uplift in Autumn and Winter. In the Netherlands most people expected their outdoor activity to return to pre-Covid levels (as seems to have happened in the UK with weekend travel) but to maintain some of the home working behaviour. More detailed comparisons are difficult as more research effort was concentrated on the immediate aftermath of the Spring 2020 lockdowns with very little longitudinal insight available. However, it appears that there are some strong parallels in aspects of the behavioural adaptations seen.

Working with the trends to deliver better outcomes

Turning back to our findings, it is important to note that we do not see any of the trends we have observed as somehow settled or set in stone. Indeed, it appears likely that more people will return to work more of the time. That is not the same as going back to pre-pandemic patterns of work. The ability to work flexibly, remotely, from regional hubs or with a different pattern of office and home is now more common. It is part of every recruitment decision and a key feature in the way in which companies can access the labour market. Similarly, whilst conferences, events and meetings are returning, there is a different set of trade-offs being made about how to keep in touch with the latest knowledge. It is now possible to drop in on webinars in any country for an hour or two rather than committing to a day or more of travel to hear people speak. Great familiarity with document sharing through the cloud makes collaboration across places easier. This is particularly beneficial to smaller firms and those in less geographically accessible places who can now tap in to knowledge more quickly. This in turn should make us reconsider the kinds of transport investments we make as the step-change in knowledge exchange potential which the pandemic has delivered far exceeds anything which can be delivered through decades of transport infrastructure investment. People will continue to value convenience, comfort and good journey times when they do travel but we need to pay far more attention to the initial decisions that are being made about the necessity of travel.

We have been surprised by the somewhat limited policy response as we have moved from emergency support mode to the phase of living with the pandemic. Our report sets out eight recommendations (see Table 1, below) which we think should be undertaken now to try and respond to what we have learnt and to steer the changes in a more sustainable direction. We summarise the strategic reasoning to support this below before concluding.

Planning for less car-based futures

Is this the point at which it has become possible to seriously plan for lower car based futures? How can this be balanced off against a desire to preserve strong public transport networks whilst recognising a need to readjust to a different demand base? We suggest that there is a need to resist the temptation to either leave things to play out without intervention or to actively try to put things back to the way they were. We have to remember we are in a climate crisis and where we were was nowhere near where we need to be to meet our emission reduction obligations. In the UK this will mean rethinking the privileging of the private car in transport and taxation policy. In particular, we think reassessing the access to and extent of company car tax breaks is urgently required and much greater thought given to how to incentivise working from home whilst delivering on wider climate obligations. This could mean shifting incentives towards heat pumps or greater insulation. There is a need for companies to rethink the profile of staff commuting and for local authorities to pool this outcome. It is now possible to drop in on webinars in any country for an hour or two rather than committing to a day or more of travel to hear people speak. Great familiarity with document sharing through the cloud makes collaboration across places easier. This is particularly beneficial to smaller firms and those in less geographically accessible places who can now tap in to knowledge more quickly. This in turn should make us reconsider the kinds of transport investments we make as the step-change in knowledge exchange potential which the pandemic has delivered far exceeds anything which can be delivered through decades of transport infrastructure investment. People will continue to value convenience, comfort and good journey times when they do travel but we need to pay far more attention to the initial decisions that are being made about the necessity of travel.

Rethinking public transport support

There is a need to look at the social value of public transport. Huge sums of money were channelled to public transport with, particularly for bus, limited say over the operational decisions that followed. The subsidy was justified because of the crucial role public transport played in enabling key workers to access work. These workers are often low paid workers but yet it was these people who had to continue to access the hospitals, supermarkets, warehouses and bakeries which are essential to keeping the wider economy running. If services are cut as a result of commuters who have the choice to do things differently using them less then those who have no choice risk losing out. A comprehensive public transport network remains a key backbone to our towns and cities. This may be more difficult to deliver in the UK than in mainland Europe. In the UK, in most cities the decisions about what services to operate are left to private sector operators. If patronage remains at 80% of pre-pandemic levels once the emergency support dries up in Summer 2022 then even more services will be cut. However, the challenge of managing a public transport network with a smaller demand base will pose difficult fiscal questions everywhere, whatever the ownership model.

Investing in neighbourhoods

Walking has been the big winner and this should jolt us into rethinking how we support walking. This is the dominant active travel mode yet has received comparatively little attention relative to the bike. Investing in better neighbourhood walking environments, complemented by good cycle networks will be important in supporting vibrant 15- or 20-minutes neighbourhoods. It is important to improve the quality of access to everyday facilities for these local areas if we are to avoid a switch to the car for access or the drift away from the city to less accessible areas which has previously been seen. Better and more accessible footpaths and crossings benefit everyone.

Manage the rise in on-line deliveries
It is also more important now than ever to respond to the realities of on-line shopping. The debate tends to focus on more sustainable “first and last mile” deliveries. This is of course helpful but does nothing to address the growing culture of next day, same day or even same hour delivery. Creative thinking about the right set of taxes to incentivise greater consolidation and use of community hubs and drop points to reduce mileage seems critical given the post-pandemic surge in van traffic.

If not now, then when?

The pathway for mobility has been changed by the pandemic because of the way in which society and businesses have innovated in overcoming the mobility restrictions that were put in place. Not everyone has benefitted in the same way and not every impact was positive but many of the changes are here to stay and they often reflect an acceleration of previous trends. What is less clear is whether transport policy makers can recognise this and act on it to lock in some of the beneficial aspects of lower car travel. The boldness of the response now will be at least as important to the overall outcomes of the pandemic as the very visible emergency roadspace reallocations in the early weeks of the pandemic. If now is not the right time to rethink the future of travel demand it is worth asking when would be?

Table 1: Policy Recommendations

| Recommendation 1 | There needs to be an immediate cross-sector ‘welcome back to public transport’ campaign to win back people who have not used trains and buses during the pandemic. |
| Recommendation 2 | Government adopts a ‘whole economy’ approach to understanding the benefits as well as the costs of public transport subsidy post pandemic as part of its consideration of the future governance, regulation and funding of the sector. |
| Recommendation 3 | The Department for Transport should fund a series of innovation projects as part of its Commute Zero programme to ensure that hybrid working is integrated with sustainable access to work. |
| Recommendation 4 | Local authorities should commit staff to support the development of updated commuter travel plans with employers and work with transport providers to identify the right incentives to smooth demand across the week. |
| Recommendation 5 | There should be renewed focus on delivering significant enhancement of the pedestrian environment to support walking as the natural first choice for as many trips as possible. |
| Recommendation 6 | Revenue funding should be committed now to support locally-led campaigns and interventions to encourage people back to more regular cycling and to try new facilities. |
| Recommendation 7 | National governments should conduct major studies to understand the growth in light van traffic and then develop strategies to manage it. |
| Recommendation 8 | Employers, HM Treasury, HM Revenues and Customs and the Department for Transport should work together to create a new set of incentives to replace company car benefits, lock in lower travel and support the shift to decarbonising domestic property. |

Notes

1 Full details on the sample can be found here https://covid19transas.org/less-is-more-annex/
2 The full report can be downloaded here https://www.creds.ac.uk/publications/less-is-more-changing-travel-in-a-post-pandemic-society/ with data available at https://covid19transas.org/category/data/

Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

Lockdown

The lockdown measures implemented throughout 2020 in the context of the Covid-19 crisis, while varying from one country to the next, implied a major restriction on people’s freedom of movement for a given period. Presented as a solution to the spread of the virus, the lockdown impacted local, interregional and international travel. By transforming the spatial and temporal dimensions of people’s lifestyles, the lockdown accelerated a whole series of pre-existing trends, such as the rise of teleworking and teleshopping and the increase in walking and cycling, while also interrupting of long-distance mobility. The ambivalent experiences of the lockdown pave the way for a possible transformation of lifestyles in the future.

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