Economy, Infrastructure and Skills Committee at the Welsh Parliament

Examining the risks and opportunities arising from the COVID-19 pandemic, with a particular emphasis upon **how transport policy and delivery in Wales should respond, manage the risks and maximise any opportunities**

Glenn Lyons, Mott MacDonald Professor of Future Mobility at UWE Bristol (Glenn.Lyons@uwe.ac.uk)

Thank you for the invitation and opportunity to offer my thoughts on the matter above.

In what capacity am I providing this input?

I was the founding director of the Centre for Transport & Society at UWE Bristol where I now hold the Mott MacDonald Chair in Future Mobility – seconded for half my time into consultancy. I did a degree in civil engineering and then PhD in artificial intelligence and driver behaviour at Cardiff University. I have subsequently devoted my research and practice career to **understanding and influencing travel behaviour in the context of continuing social and technological change**. I take a socio-technical perspective: trying to address the interplay between the social and technical systems within society. I have particularly focused upon how the digital age has collided and is merging with the motor age – triggering, I believe, regime change away from 'automobility' (the motor age as we have known it). I am now specialising in helping transport authorities, including the Department for Transport (DfT), take **a new approach to transport planning and policymaking that is vision-led and which can better expose and accommodate uncertainty**. I have also been the technical lead for a piece of work supporting the DfT's development of its Transport Decarbonisation Plan – this has developed a series of technology roadmaps for the reduction and removal of direct emissions from across domestic transport modes by 2050 (see talking head video here).

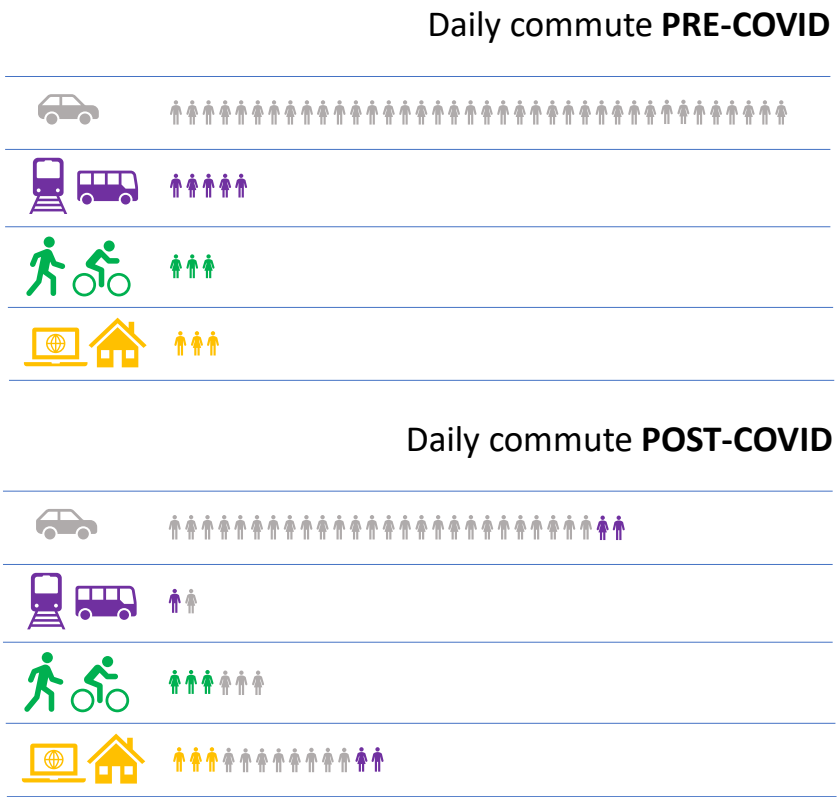
Risks and opportunities in respect of what?

It seems important to understand the perspective taken when viewing risks and opportunities. For me this is clear. We are facing a climate emergency, the true gravity of which cannot be fully understood but which in any case presents us with a legally binding commitment to achieve a net zero carbon emissions economy in the UK by 2050. We know transport, as the single biggest emitting sector and most stubborn to decarbonise to date, is front and centre in the challenge to address this. As acknowledged in DfT's March 2020 publication Decarbonising Transport: Setting the Challenge, "behaviour change will be an important aspect of the decarbonisation of transport". Behaviour change is not only a rapid change in vehicle purchasing decisions towards lower and zero direct emissions vehicles. Its about how much we travel and the modes of travel we use: "[a]ccelerating modal shift to public and active transport" and "fewer car trips". **It is not enough to green business as usual. To decarbonise transport in only 30 years calls for significant, substantial and timely behaviour change**. Such change is likely to be intimidating and met with resistance from public and businesses who feel they have a vested interest in the status quo. This makes it politically very challenging – especially in a context of weakened economic prospects and social inequality.

COVID as a source of disruption to the norms of travel

Travel behaviour of the population is continually changing – more dramatically at the level of individuals than at the aggregate. Change in circumstances (and in attitudes) can bring about changes in people's needs and priorities for transport – a new job, a new home, a new location, a new relationship, a new family, a retirement, a divorce, a scrapped car, a drop in income. Travel behaviour changes and can be changed. The pandemic for many has been a months-long exposure to a change in circumstances. They have understood what it is like to rethink their travel requirements and choices, and they have experienced the consequences. **Travel requirements and choices emerging from the pandemic will change and can be changed – this is at the heart of the opportunities and risks ahead**. The illustrative diagram below depicts

how the makeup of people's access to employment could change. The question becomes, **what can policymakers do to influence the post-COVID profile, and to continue to influence it over time?**



What are the risks?

There are of course multiple risks associated with the pandemic that relate directly and indirectly to transport and which are short-term and longer-term in nature. **The risk to public transport is arguably one of the most serious**. As illustrated above, some former public transport users may become, or return to being, car users for some journeys in the face of social distancing concerns. Some former public transport users may now be relying upon digital connectivity in their homes for access rather than travelling by public transport. Its possible that some former car users will see empty buses and trains (if they are still running) and switch to using public transport for some trips. Not everyone will have the same freedom of choice in changing their behaviours. If public transport carrying capacity and level of service is diminished post-COVID in the face of precarious commercial viability, **social inequality may well be exacerbated**.

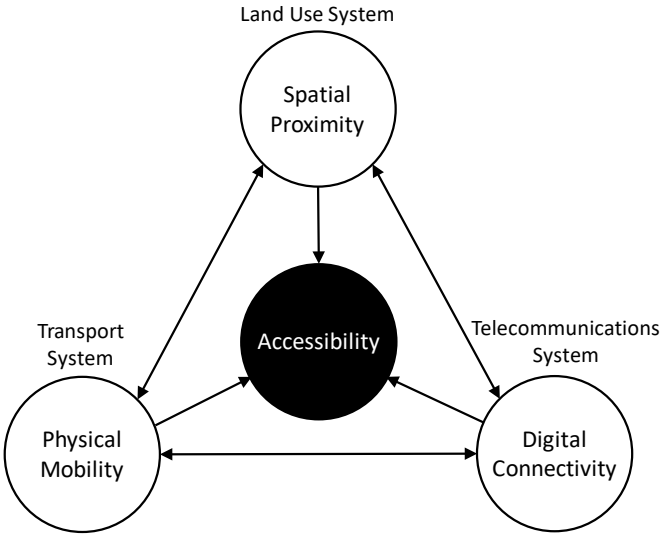
There are non-transport risks for urban centres in terms of 'the commuters not returning' if homeworking is more commonplace. **The risk for transport is that this is seen as a reason to discourage homeworking – a behavioural trend that can help address decarbonisation**.

The greatest risk for transport is that the lesson the pandemic has provided in human capacity to adapt to changed circumstances, will be squandered by vested interest in the old status quo and the inertia that results: efforts to resurrect a strong semblance of the old normal rather than seizing the opportunity to shape a new normal, aligned to the imperative of addressing decarbonisation.

What are the opportunities?

In 2016, based upon work in 2014/15 as Strategy Director for the New Zealand Ministry of Transport, we

put forward a model called the Triple Access System[1] (see below). This recognises that **what underpins economic prosperity and social wellbeing is access – the ability to reach people, goods, services and opportunities**. Access can be fulfilled through the transport system (physical motorised mobility), the land use system (spatial proximity and active travel) and the telecommunications system (digital connectivity).



Thank goodness this is the world we live in and that access is not all about motorised transport – because **the resilience and adaptability afforded to us by the Triple Access System has been critical during the pandemic** – as reliance on motorised transport was reduced, we switched emphasis to digital connectivity and spatial proximity for our fulfilment of access ('living local and acting global'). **The opportunity is now to embrace 'triple access planning'** – to support future economic prosperity and social wellbeing through changing the supply-side of this Triple Access System and fostering and supporting behaviour change.

Triple access planning involves moving away from the forecast-led approach in transport planning of predict and provide (forecast a most likely mobility future (within sensitivity-tested bounds of uncertainty) and provide a means to accommodate projected demand). Instead it concerns a vision-led approach of **decide and provide: decide on a preferred accessibility future (and outcomes) and provide a means to move towards it in a way that accommodates the deep uncertainty ahead**.

The Climate Assembly UK report 'The path to net zero' published on 10 September signals public appetite for change. The Assembly's recommendations on transport are: *a ban on the sale of new petrol, diesel and hybrid cars by 2030–2035; a reduction in the amount we use cars by an average of 2–5% per decade; and improved public transport*. We need to go even further and faster and triple access planning holds the key. **Decide on the relative prioritisation of support for the shaping of the Triple Access System that creates the environment of choice for how people lead their lives**. Public transport must not only survive the pandemic but thrive beyond it. Spatial planning and reprioritising our built environments must give walking and cycling sustained, not temporary, acknowledgement as key, rather than peripheral and downtrodden, modes. Capitalising on digital connectivity allows us to tread more lightly as a society – and offers flexibility of access, including helping people to better manage their working and personal lives.

[1] Lyons, G. and Davidson, C. (2016). Guidance for transport planning and policymaking in the face of an uncertain future. Transportation Research Part A: Policy and Practice, 88, 104-116. http://dx.doi.org/10.1016/j.tra.2016.03.012