



Inspiring Futures for Zero Carbon Mobility

Joined-up journeys: INFUZE response to Transport Committee call for evidence

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Introduction

This evidence has been drawn up by Professor Greg Marsden and Senior Visiting Research Fellow Jonathan Bray of the Institute of Transport Studies at Leeds University and on behalf of the INFUZE project. INFUZE is a five-year UKRI funded programme grant (EP/Z531273/1) which is exploring what a better transport system really means to people and whether more integrated solutions can really stem the rising tide of car ownership and use.

Overarching considerations

The quest for a more integrated transport policy is not new. We open with some reflections on what the UK might aim for, but also why this proven elusive to date. Whilst a number of barriers remain, reforms to the transport powers of mayoral authorities in England and the rail and bus industries more widely offer a significant opportunity to improve the travel experience for people. The opportunity for established Mayoral Combined Authorities to take on responsibility for strategic highways taxi and licencing powers is particularly welcome.

What would good look like? An integrated transport system should offer a safe, simple, reliable and affordable network of transport options that enable people to get from A to B. It should, therefore, also be designed around where people need to go and be integrated with the As and Bs. Whilst the key operational ingredients are perhaps well known, our recent research in Leeds shows that the experiential concerns of women, younger people and minority groups on safety are particularly poorly recognised in what people see in front of them. The service pattern is often not well matched to people's lifestyles as it has increasingly shrunk to core radial routes serving the city centre.

It is possible to identify systems operating in other parts of the world which already achieve this to a high degree, Singapore for example. However, it is perhaps most instructive to look at closer European peers. For example, the Netherlands now has fully integrated ticketing across the country by any mode with predictable distance-based pricing, all accessible via bankcard, smartcard or digital device. In Vienna, a

365 euro pass for the year allows unlimited access to bus, tram, metro and local rail services. Switzerland has a well integrated system based around clear timetabling.

Our experience suggests that the reasons that this has been difficult to replicate are:

- The complex and overlapping economic and travel to work area geographies in England are reflected in the complex and emerging forms of devolved regional and sub-regional government in England (and to some extent in Scotland).
- The market model on rail and bus has led individual operators to focus on commercial imperatives, rather than overall traveller experience and, more integrated provision.
- The historic differences in funding and regulation of bus, rail and tram schemes has meant that fare levels and structures for different modes can vary considerably in the same area. Simplification can therefore mean either levelling up or levelling down between modes which creates winners and losers among users (depending on overall subsidy levels).

An important further challenge to integration is the rise in new mobility services. These include a range of existing and new entrants and offerings including on e-bikes, e-scooters, car rental, car pooling, taxis, shared taxis and so on. Many of which are provided by commercial companies in competition with each other and with other modes. Often they exist outside of an adequate or suitable legal and regulatory framework (e.g. e-scooters and taxis) and there are difficulties in ensuring data sharing for more integrated planning.

The reforms to transport services offered by GBR and Mayoral bus franchising begin to offer the opportunity for greater integration, both between networks but also with strategic land-use planning. This mirrors aspects of European cities where the private sector plays a role within a franchised market. However, there still remain some difficult questions:

- Who is the 'guiding hand' and 'single point of truth' that is looking out for passengers when trip chaining? In London it is clearly TfL and indeed its generally easier in large cities with dense public transport networks for this to happen. But who provides that role in less dense areas with thinner public transport networks? When connections do not show up on an hourly or less frequent service this is a major problem. Some coordination problems could be tackled by the bus and rail reforms but others seem out of scope.
- Where does it make sense to hold connections at the expense of the punctuality of the public transport service being held? Or to put it another way when does the interests of the minority of users who are making the connection outweigh the interests of the majority who are not? How are factors like disability, personal security, waiting times for the next connection weighted?
- If there has been inadequate attention to the integrated experience for the traveller, will the funding be available to remedy this?

Towards solutions

The role of technology

There is a huge amount of innovation within the private sector, underpinned by good open data practices from the DfT and some parts of the transport system. Journey planning has become easier, particularly for those who are digitally connected and comfortable with those apps. However, it will be important to ensure that needs of the full diversity of passengers are met – including the unbanked and the digitally excluded. The AI driven sign language information screens at major rail stations is a good example of technology supporting the needs of a diverse range of travellers.

However, people want regular transport services. And the less regular they are the more important it is that they are on-time. A robust set of services is the foundation for passenger information technology to do its thing.

The guiding hand

In urban areas, in much of the world, the guiding hand is usually the transport authority. This is the case in London and is becoming the case in England's other major conurbations as they follow Greater Manchester's lead in bringing buses back under public control as part of 'one network, one ticket, one brand'. However, the paradox is that outside of the largest conurbations it could be argued that in some ways the need for a guiding hand is greater given that public transport services are less frequent and successful connections consequently more important. Yet it's in these areas that authorities tend to be more lightly staffed and also have less control over the public transport network. It's also in these areas that heavy rail services can play a more central role as spines from which bus services radiate.

The main tools to address this challenge (in England at least) could be via the newly established Great British Railways (GBR) and existing enhanced bus partnerships. For example, there could be **a requirement for GBR and LTAs responsible for enhanced bus partnerships to collaborate around ensuring joined up journeys across bus and rail**. In relation to this in Northern Ireland (where all bus and rail services are publicly provided) and Wales (where rail is devolved and all bus services are to be brought under public control under TfW) there are potential models for what good could look like on integrated public transport in less densely populated areas.

In general, the railways have traditionally exercised a greater duty of care to passengers around service disruption including providing taxis if passengers are left stranded by cancellation of last trains and greater use of technology and staff to keep passengers updated around service disruption. The 'last bus guarantee' now in operation in places like West Yorkshire and the West Midlands extends some of this thinking into bus – by providing means for passengers to be reimbursed for a taxi fare if the last bus doesn't run. However, this still potentially leaves passengers stranded if they can't get a taxi and more widely if they are left stranded during the day by a cancellation on a very infrequent route. **The Government could enhance guidance on bus franchising and enhanced quality partnerships to require LTAs to consider how bus passengers will be supported if low frequency bus services are late or cancelled** including: information at stops; helplines; provision of taxis; and resourcing of sufficient staff and well maintained vehicles to reduce

service failures and to be able to act if they do occur. However, it's worth noting that this would come at a cost – which might reduce the funding available for keeping fares affordable. So, ultimately, it's a decision which is best taken locally. **Research and sharing around good practice in this area could be a theme for the Bus Centre of Excellence to take up.**

Public transport fares

It is important to differentiate between fare levels and the means by which people pay those fares. The latter can become simpler (e.g. paying by bankcard) whilst the former can remain complex.

In general the UK has a low subsidy, high fares model (softened with a multiplicity of concessions) when compared with Europe. Recent trends in Europe include moving to free, or low and simple fares, either regionally or nationally – from free fares in Luxemburg to the Deutschland ticket which provides nationwide local and regional public transport for €49 a month in Germany. Some of these trends are also visible in Britain such as the national £2 bus fare cap (in England), now £3, as well as wider ticket simplification through moving to a zonal system (either a single or a limited number of zones). This is generally welcome as the evidence suggests that flat, simple and consistent fares are the way forward in urban areas¹. The disbenefit of very simple zonal ticketing for longer journeys / very large areas is that it creates big winners and losers (depending on how its resourced). It could be argued that, in principle, simple, flat fares work best for urban area whereas more graduated fares work best for rural areas. There is also scope for including more bus and coach networks within national rail's ticketing and information service (for example to some extent this has been achieved with the TrawsCymru long distance network in Wales).

Interchange, mobility hubs and Mobility as a Service

As a result of historic, commercial and organisational factors in the UK the quality of interchange varies considerably in terms of passenger facilities and the priority given to different modes. By way of contrast the Netherlands takes a standardised and tiered approach to interchange facilities at rail stations which relates to station size. Considerable research and development has also gone into station design in order to provide passengers with interchanges which are both simple to navigate and pleasant to spend time in. This attention to detail and consistency of approach means that travellers in the Netherlands are more comfortable with interchanging than is the case in the UK. This in turn can result in bus routes in the UK becoming very elongated as they seek to serve everywhere rather than being based on local feeders into fast core routes.

Our research has reinforced the need to see interchanges as opportunities, both to integrate them into other activities and land-uses and to make them more family friendly, comfortable for neurodiverse travellers and accessible. For example, LNER have opened family lounges at York and Kings Cross. Our workshops with school children showed a desire for more green space and play areas at or near

¹ <https://www.urbantransportgroup.org/system/files/general-docs/integratedticketingreportFINALOct09.pdf>

interchanges as they can be a meeting place as well as a place for moving through. This suggests the need for a design-led approach to interchange to ensure that integration is not just possible but pleasant and works for a diverse group of users.

The creation of Great British Railways offers an opportunity to move to a more standardised and tiered approach to station and interchange facilities along the Dutch model. It's important to look too at the hierarchy of interchange priority. We are of the view that this should prioritise the least environmentally damaging and most vulnerable users first – so pedestrian and cycle access should come before long-stay car parking. It is also important that there is integration on the routes to the station. Great cycle parking only works if there are routes to reach it. Secure cycle parking is also important. **In terms of bus stations and interchange there is a role here for the Bus Centre of Excellence to research and share good practice, working with GBR.**

There has been much focus recently on Mobility as a Service and Mobility Hubs. The original concept of Mobility as a Service was that it would allow people to buy, for a capped fee, packages of mobility (public transport plus access to e-bike, taxi, car share and so on) for different periods of time. In practice this hasn't proved to be a commercial proposition as to buy in all these different forms of transport makes the price higher than people are willing to pay.

Meanwhile Mobility Hubs have also become a buzz word in transport. Again the term can be applied to many different initiatives however the core idea is to have a hub where to a greater or lesser extent users can access public transport, car hire, e-scooters, bikes and so on.

In Berlin the city has begun implementing Mobility Hubs of different scales throughout the entire city (including the suburbs within the city limits). This sits alongside the Jelbi app (which some would describe as MaaS) which provides information and payment for all public transport as well as the majority of private sector e-scooter, bike, car hire operators. It also gives access to one of Berlin's main taxi providers as well as van hire. This is an ambitious and impressive programme however it should be noted that the app is an aggregator rather than offering capped daily access to all modes (other than the public transport element) and it's too early to say whether or not it will be successful.

We see Mobility Hubs as having the potential to develop a set of higher quality, more diverse interchange opportunities which provide opportunities for multi-modality in the suburbs. Public transport will be the backbone of these hubs and it will only be the public sector transport authorities that oversee public transport that are likely to cross-subsidise the provision of the payment, information and physical infrastructure necessary for at scale integration of this sort. Attention needs to be paid to how to integrate these offers into new housing and to make them part of wider community focal points, as a place-making investment – rather than just a more diverse bus stop. At present the scale of the mobility hub trials in the UK are very small and arguably of limited value in understanding what would happen if you scale up to provide areas with a more meaningful level of provision. We recommend that **the Government should keep a close eye on the outcomes of at scale mobility hub introduction in other countries to see what lessons can be learned for at scale**

introduction here. We also recommend that public sector transport authorities should seek to take the lead on the provision of, initially at least, single information and payment portals for public transport plus other shared modes.

Integrating all modes and services

The opportunities to better integrate rail and bus are real and need to be seized as do the opportunities to integrate with wheeling. However, most journeys made by car today were never made by public transport. A truly integrated system which provides real choice will need to enable more of these journeys to be easy to make. This will mean integrating a range of other transport services and this poses challenges. In particular, we would prioritise:

- Access to cars when they are needed has to be part of an integrated offer. However, car hire / share / pooling remains at the fringes of transport policy at both the national and sub-national level. This is not the case in countries like France where the car share option is available via the SNCF website, there are now car share lanes on the Paris Périphérique and cities like Grenoble are trialling free use of car share on fixed routes with fixed stops via an app. **We therefore recommend greater institutional and policy support for expanding and integrating car share should be a theme of the integrated transport strategy**
- Coach and long distance express buses can provide a service where there is no rail provision - yet coaches largely sit outside formal transport policy. At present their role in the four nations of the UK varies considerably. In Northern Ireland 'Goldline' express services are part of the wider coordinated and publicly provided public transport network; in Scotland commercial CityLink coaches provide a defacto national network competing with and supplementing rail; in Wales, Transport for Wales provides an extensive TrawsCymru network of long distance bus services that fill in the gaps in the rail network and in England there are commercial coach services competing with rail (and each other) plus various locally specific express bus services. **There is an opportunity for the Integrated Transport Strategy to assess the different approaches in the four nations and how coach and express bus links could provide a more consistent role in supplementing, and integrating with, the rail network in England.**
- Finally, there remains an opportunity for the public sector to act on integration through its own services. At present there are many different forms of collective transport being provided by separate budgets and by separate bureaucracies. This includes regular public transport, patient transport services, social services and schools transport. There is potential for greater pooling of budgets and provision of these services – particularly in rural areas where most public transport is subsidised and the respective bureaucracies are smaller. Previous pilot programmes have floundered on the lack of real commitment by the NHS on patient transport services. **We recommend that at an at scale Total Transport pilot is undertaken at Shire scale with the explicit buy in of local NHS organisations.**

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