House of Lords Built Environment Committee call for evidence – Public transport in towns and cities

Response by the Chartered Institute of Logistics and Transport (UK)

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Introduction

The Chartered Institute of Logistics and Transport (CILT) is a professional institution embracing all transport modes whose members are engaged in the provision of transport services for both passengers and freight, the management of logistics and the supply chain, transport planning, government and administration. Our principal concern is that transport policies and procedures should be effective and efficient, based on objective analysis of the issues and practical experience, and that good practice should be widely disseminated and adopted. The Institute has a number of specialist policy groups, a nationwide structure of locally based groups and a Public Policies Committee which considers the broad canvass of transport policy. This response has been prepared by our Bus and Coach and Strategic Rail Policy Groups with contributions from others.

Summary

The Institute represents a wide range of transport knowledge and experience and is responding comprehensively; particular issues include:

- The complexities of predicting demand for public transport services, especially post-pandemic;
- How future levels of use are very uncertain;
- The need for properly integrated services which will need legislative and regulatory changes;
- The important role of local authorities; and
- Better public transport is an essential component of any strategy to improve urban living and economies.

1. What are the current and anticipated levels of public transport demand and capacity in towns and cities in England? What influences public transport travel patterns? How does the choice of public transport vary across different demographic groups?

Influencing travel patterns

It is clear is that during the pandemic there have been significant falls in public transport usage. However, we do not have access to sufficient data to provide a full assessment of the current and anticipated levels of public transport demand and capacity. This is in part due to Government guidance requiring working from home and passengers' reluctance to share transport with people who could be carrying Covid.

The ability for a person to get to their place of work will always be a key driver. The pandemic has shown a clear difference between people who need to get to a specific location(s) for work and those who are able to work from home linked with colleagues electronically. It is still too early to make a full analysis of how many office-based workers will be able to work for at least part of the week from home and the extent to which they will need to travel into work. However, it is fairly certain that the five-day week in the office will not return for everyone, being replaced with a two or three day office presence with the remainder being spent working from home.

The primary decision is mode selection which may involve car use alone or other means of transport such as cycle, car share or taxi; this includes the availability and price of car parking and other measures such as low emission zones which could influence the decision to drive. If an individual has access to a car and free parking at their destination, there must be good reasons why they would choose to use public transport.

There are many other factors influencing public transport demand including the availability and legibility of service information, the journey time relative to other options, price e.g. peak fares, the reliability and punctuality of the service, convenience and the route in relation to the origin and ultimate destination.

Covid-19 impacts

It is useful to distinguish between demand levels and forecasts applicable prior to the impact of Covid-19, and those subsequent to this. 'Towns and cities' may be defined as urban areas of 10,000 upward (the distinction between rural and urban areas in population statistics), with public transport usage being concentrated in the larger urban areas. However, it should be noted that demand originating in rural catchments can be significant, especially in terms of car movement into towns; for example, a number of bus-based park and ride schemes on the edge of freestanding towns and cities divert such movements on to buses, thus reducing congestion.

In term of rail use, strong demand growth had been experienced since the mid-1990s on the national system and within urban areas, along with the London Underground, although some others such as the Tyne and Wear Metro experienced a largely static patronage. This growth was associated within improved service frequencies and expansion of office employment in city centres. Strong population growth, especially in London, was also a factor. Some constraints on peak capacity supply (in terms of rolling stock and infrastructure) were evident, resulting in overcrowding. Forecasts of further growth in peak demand indicated justification for investment in increased capacity, such as Crossrail 2 in London.

Bus use in London grew strongly until about 2010 and although declining since then remains at very high per capita levels compared with other urban areas. Bus use elsewhere has generally declined for many years but with notable exceptions where positive policies were adopted by operators and local authorities, such as Brighton and Hove and Nottingham. Positive impacts can also be seen where segregated busways have been constructed (for example, in Cambridgeshire) and park and ride schemes introduced.

Demographic groups

Evidence from the National Travel Survey (NTS) indicates that rail users come from higher income groups than bus users. As discussed in response to question 2 below, there are also major differences in the composition of bus and rail markets by trip purpose.

Car ownership has continued to grow until recently, but with markedly different trends by age group. Older people are now much more likely to own and drive cars than previous generations, but younger groups (especially males) have lower levels of driver licence holding and car ownership than twenty to thirty years ago. London is a major exception, where car ownership per capita has been broadly stable since the mid-1990s and the percentage of households with two or more cars is very much lower than elsewhere. Growth in car ownership and use does not appear to have affected rail use in aggregate (for example, much rail commuting, is into centres of larger cities where car use is constrained by road space and parking availability). Conversely, bus use is affected much more

directly. This is associated with shorter trip lengths and the fact that much bus use comes from areas outside the core central areas of large cities.

Where a car is available for a specific journey, it is likely to be chosen in preference to bus due to shorter door-to-door journey times, except where other factors apply, such as the cost of parking and its availability. Bus user journey time is also affected by in-vehicle speed, service reliability (where this is poor, users have to allow additional waiting time) and service frequency. Hence the best potential for attracting people with a car available to bus or other public transport modes is likely to be on denser urban corridors where a high frequency can be offered with bus priorities or segregated track to improve speed.

For those without a car available for a specific trip (which includes members of one-car households without driving licences, or access to the car at a specific time), public transport services provide an essential means of access to activities such as employment, education, health, shopping, etc. This demand is not inelastic, but is also sensitive to changes in service frequency, price etc.

Younger age groups may use public transport because they don't drive or have use of a car or may not have convenient parking e.g. at central education destinations. If their experience of using public transport is good and affordable for groups with limited disposable income, they may continue as public transport users in later years. Reduced fares for this age group may be very important factor and it is noteworthy that many authorities and operators have extended such reduced-price travel well beyond previous 'child' fare ranges.

Older age groups have a tendency to use public transport if they no longer drive or afford a car and for many it is a lifeline connecting them to vital services including shops and healthcare. This has benefits beyond simply making a journey in terms of their welfare, independence, social contacts and mental and physical health. However, amongst the car-owning population, there are some clear influences on using public transport. These include the ability to park a car at the journey's end, the journey time for the public transport option, the price charged to travel and the ease with which the public transport can be reached. Examples of this are light rail systems and metro services in major conurbations, which experience relatively high demand during peak travel times.

The National Concessionary Travel Schemes remove the affordability problem provided there are services available. While many people of working age use public transport but many do not due the inflexibilities of ticket pricing, convenience and perceived or real reliability of the service. These important farepayers making regular journeys have to contend with the often inaccurate image of public transport users as secondary citizens and rising fares which prohibits some journeys.

2. How might public transport travel patterns shift in the next 10 years? What impact could digitalisation and the COVID-19 pandemic have on travel patterns in the long term?

The long-term decline in bus use has resulted from transport policies with mixed messages. On the one hand, use of public transport is promoted but on the other, car use is supported by road improvement schemes which swallow up much of the transport budget. The upturn in train use appears to have plateaued, partly as a result of regular fare increases which have become unaffordable for some.

Train users

Rail usage has been traditionally dominated by journeys to/from work, around 50% of the total. Prior to Covid-19, this had been increasing strongly in London and other major cities, associated with a shift to service-based economic activity. However, a number of trends were already evident prior to the impact of Covid-19, notably a reduction in average trips per week by rail season ticket holders. This may reflect a shift to a 'hybrid week' working pattern (mixing home-based teleworking and work at the traditional locations) – this has been greatly accelerated under Covid-19. Whilst some return to traditional workplace is evident, many surveys strongly suggest that the hybrid pattern will remain widespread. Hence a shift in the timing of trips, as well as total volume, may be expected. Coupled with greater recovery in weekend and leisure travel than work trips to date, this could point to a better spread of demand between peak and off-peak periods. However, there is also the danger that if working at home is not evenly distributed through the working week, a high peak could remain on some days (e.g. mid-week), with associated capacity demands but such capacity would be less well used than now on other days.

Bus users

Bus use is less concentrated on the journey to/from work (about 20% of all local bus trips). Bus users tend to have lower incomes than rail users and work in jobs less suited to teleworking, hence a lower impact from this may be expected than for rail. A further 20% is associated with education travel (primarily schoolchildren) which forms a major component of peak demand. In addition to use of public bus services, contract services purely for statutory free school travel form an important part of demand for coach operators, especially in rural areas.

Demand at other times of day for bus services has been dominated by shopping, also around 20% of all trips prior to Covid-19, but previously a higher figure. Some decline had already occurred due to changes in shopping patterns, again an aspect greatly accelerated under Covid. The introduction of free travel for older people in all parts of England in 2006 substantially increased demand between the peak periods. This impact was greatest around 2010, but subsequently some decline occurred due to (a) later cohorts of those entering eligible age groups being more likely to own and drive cars, and (b) successive increases in eligibility age from 60 to the current female retirement age. There is also evidence that travel by concessionary pass holders has recovered less strongly than other bus users since Covid-19, perhaps reflecting greater caution in going out of the home and risking infection.

Pandemic legacy

The Covid-19 pandemic has hit public transport hard. Demand fell away and has not recovered as a result of changing work patterns, loss of jobs and declining in-person retailing while also curtailing many healthcare and social journeys.

Government's advice not to use public transport was devastating and as Transport Focus' research has shown had the effect of frightening away a substantial number of users. This has created a problem that was not based on any evidence at all. It should be noted that emergency funding for trains, trams and buses was very much welcomed to retain services but the scheduled coach sector received nothing. For bus and coach operators, there has been a period of consolidation and in some cases service withdrawals simply because revenue is well below levels that cover costs. The fact that the great majority of services are provided on a commercial basis without subsidy means that any decline in revenue can have disproportionate effects on the level of services.

Both light and heavy rail services reduced their timetabled services which has since been revised to reflect improving usage. However, it is clear that there is less use of rail services by commuters, particularly peak services on Mondays and Fridays. It is likely that this will continue for the foreseeable future as a proportion of office workers adopt a 'hybrid' working style. While there is a reduction in peak travel, there has been a noticeable growth in off-peak travel. It is likely that this will continue, particularly given the price differential between peak and off-peak tickets.

3. What can be done to improve connectivity across public transport modes? How could better integration be delivered in urban areas outside London?

For journeys which include a change of service or mode, the interchange between them can have a significant influence on the choice of whether to use public transport. A short, smooth transition period will encourage use of multiple services while a long, uncertain wait will not. The provision of information to support this transition will become more important as well – both in respect of providing the times for the relevant services in a tailored manner and for supporting the actual process of interchange such as indicating the relevant platform or bus stop to use.

Competition requirements

There remains amongst operators concerns over potential breaches of competition law where public transport services operated by private companies have looked to integrate timetables for services and this has stifled work on improved connectivity. This has been a particular concern for bus operators looking to have multi-operator tickets with capped fares. The National Bus Strategy for England is now encouraging such actions and the Competition Commission has indicated that it will take government policy into account but having a clear statement on this would be helpful.

Making unambiguous government policy that encourages integration of public transport services and sets out clearly what is permitted without falling foul of competition law would be a good step forward. It should also give the local authority the power to collect information from all operators to provide an integrated timetable. Too often only single operator information is shown on timetables, with limited information on onward connections.

Fares and ticketing

Travel tickets need to be able to work across modes, particularly in the context of bus and tram, where they operate along similar routes. The implementation of bus franchising in cities which contain tram systems will allow the local authority to actively coordinate their respective services. This would include the provision of bus feeder services onto a tram-based 'steel spine' for the relevant city.

Part of the better integration needs to involve clear rules for the combination of fares and the fair distribution of this income across all operators which provided that journey. With the increased use of smartphone ticketing and an ability to detect which services the passenger uses, the allocation of fares revenue across the operators who actually carried the passenger becomes easier. Operators need to be able to view themselves as part of a larger system established to increase public service ridership rather than seeing shared tickets as being a direct competitor to their own single user tickets which do not share any revenue with other operators.

Integration

The use of bus franchising will provide opportunities for local authorities to ensure that integration of bus services is provided within their transport area. Enhanced Partnerships can achieve an amount of integration, albeit without the same level of compulsion that would come with bus franchising.

The closer involvement of the local transport authority with the local rail services would also provide greater opportunities for integration of services. This would allow the needs of the area, including management of travel patterns, to be managed on a local basis rather than continuing to coordinate locally-led and nationally-led services which has not worked well in the past.

While there are some good examples of integrated bus and train services, on the whole integration has been poor, even when trains and buses are operated by the same group. Integration covers a wide field including co-location (sometimes difficult in that stations do not always have a convenient bus stop nearby), passenger information covering both modes, adapted timetabling to ensure connections and fares which, with the exception of PlusBus (the bus add-on ticket to trains in selected urban areas), are not integrated at all. Much of this stems from fragmented ownership of the different services over which local authorities have limited involvement, for example in ticket pricing which must be done by commercial providers.

4. What are the likely areas of innovation in urban public transport over the next 10 years? How should public policy be shaped considering both incremental and transformational innovations? How could data help transport services meet consumer demand?

Disseminating innovation

Public transport innovations typically take a long time to deliver. Examples include alternative fuel vehicles and new forms of ticketing (cashless payment by contactless card, smart cards and mobile phones) and service information. The latter has improved considerably but coordination and partnership is the usual barrier to progress. For example, one bus operator will not include information about another operators and while the National Bus Strategy in England aspires to overcome such problems, changing the culture of operators may take some time. Data is an interesting line of improvement as demonstrated by operators providing real time information about how loaded buses were during the pandemic to take account of social distancing, all available through apps.

While vehicle engineering continues to improve, innovation is restricted by competition law and procedural difficulties on the supply side together with exogenous policies relating to car movements and parking which undermine bus use. Resistance to change on the part of highway authorities for fear of upsetting a minority of the electorate remains a stumbling block, for example the introduction of bus lanes and continuing to provide often excessive public parking.

Innovation to support policy

Public policy should be embracing new innovations while at the same time looking at low carbon/ low particulate alternatives. This would significantly reduce car movements in city centres while increasing the number of buses and rail services and possibly establishing a tram network which has both low carbon and low particulates emissions.

Timely data will allow operators to consider services frequencies or the type of vehicles used. For train operators it is relatively easy to plan to add an extra multiple unit to a train to cope with increased demand during peak and other high volume times. Easy to access data should also be made available to inform passengers arriving in an urban area by train of the various connections available for travel to that passenger's destination. The ability to provide timings and ticket prices will also assist the traveller's choice of mode.

Innovation is already occurring on a large scale in reduction of emissions, notably in the bus sector. Adoption of Euro VI standards for diesel engines has already sharply reduced emissions dangerous to health. The use of other energy sources, such as hydrogen and battery electric power, would give further improvements, along with reduced greenhouse gas emissions (subject to the mix of electric power being used and methods of formulating hydrogen). Given that buses normally have a life of about 15 years, one would expect about two-thirds of the fleet to be replaced over a ten year period. However, new vehicle deliveries are currently very low, due to reduced demand and poor profitability. Coupled with the higher capital cost for electric and hydrogen vehicles, continued public funding for fleet replacement is likely to be needed. In the case of rail, vehicle life is much longer (around 30 years), but electrically-powered vehicles already comprise all tram fleets and most urban heavy rail fleets.

Automation

Scope for automation of road vehicles (i.e. driverless control) is attracting wide attention, although some hopes of rapid transformation may have been naïve. In the case of rail, using segregated track, it is already attainable, as can be seen on the Docklands Light Railway in London, driverless since its inception in 1987. Outside Britain, operation of heavy metro systems, such as some lines of the Paris Metro, has adopted this form. Current modernisation of the Glasgow subway (a tube line) will also enable this in Britain. In addition to avoiding driver costs, service reliability can be improved, and off-peak frequency can be increased at low cost. For buses, drivers represent about 60% of total cost and hence automation could be of very large benefit. This would depend on acceptably reliable and safe operation of driverless vehicles in mixed traffic which has yet to be attained (current trials in Britain retain a driver on the bus). However, if this became acceptable for other vehicles (cars, lorries etc.) it would in principle also apply to buses.

Data opportunities

Improvements in data collection have been achieved through the use of smart cards for fare payment and free concessionary travel, from which extensive data can be derived on travel patterns, such as start and finishing points of journeys on the public transport system (bus stops or railway stations), travel by time of day and the linking of trips by the same card holder (e.g. a trip by bus to a rail station then train). This can show the connections between modes and between different times of day, for example the extent to which single trips in the evening are part of a round trip which commenced earlier the same day. As a growing proportion of public transport journeys are made without cash transactions, these data will be increasingly representative of public transport demand as a whole. Anonymised data from mobile phones can be used to examine walk, car and cycle access to public transport journeys. These data then provide a much better base for network and timetable planning.

Trip data can be taken into real time form with the provision of demand-responsive bus services, in which travel demand in a defined area is accommodated through operation of vehicles which vary their route and timing according to customer journey requests. Improvements in software now

enable these to operate with only a short period of notice being required. However, they do incur high unit cost per passenger trip (mainly due to use of minibuses, whose drivers may cost not much less than those for full size buses and operating costs of the booking system). Hence, they tend to require high levels of public expenditure, and do not offer a lower cost alternative to buses in general.

5. Are local authorities well equipped with appropriate funding and powers to deliver high-quality public transport services? Would further devolution of transport policy contribute to better outcomes?

Currently, local authorities are not well placed to deliver because their transport roles have been diminished, resulting in a lesser need for transport-skilled staff. They do however have an important coordinating role that covers public bus services, community transport operations, home to school transport and transport for people with special educational needs. In addition, where tram systems are in place, the authority is able to determine the various stations to be established as interchange points.

Outside franchised bus service areas, commercial operators will continue to have the prime role in determining where and when bus services operate, even under an Enhanced Partnership with the local authority. While train service improvements require extensive negotiation with operators and Network Rail, the emergence of Great British Railways will hopefully provide a basis for better communications and faster decisions.

Given the squeeze on local authority funding, there are limited opportunities to do much more than maintain services and renew assets. While private sector investors are interested in transport projects and working on joint projects with local authorities, the long term certainty and availability of exit strategies means that few such projects have gone beyond the drawing board. For buses, franchising offers direct control over bus services but at a significant cost which may be too much of a risk for many authorities. Light rail does provide direct control and the proposals for greater involvement of local authorities in rail services is encouraging.

6. Could better policy coordination across government departments, and between central and local government, improve public transport outcomes? If so, how can this be achieved?

Linking government agencies

Much public transport demand is determined by location of activities (such as housing, schools, hospitals, etc.) which in turn is influenced by land use planning policy which is in some cases directly determined by public bodies such as the health sector. Public transport functions best where fairly high densities of demand exist and complementary land uses are allocated along corridors which can be served on high frequency routes. Hence, it is important to ensure that new housing is developed accordingly rather than scattered low-density development and facilities such as hospitals are located at points well served by public transport. Such patterns of activity also help to promote a better spread of demand throughout the day along the same corridor, improving operational efficiency. Improved accessibility to facilities such as hospitals is of particular importance for people without car access and to reduce problems caused by high demand for car parking.

This implies a need for greater co-ordination at central government departmental levels (e.g. between transport, local government and housing, health, and education) and likewise within local authorities.

Direct involvement

In some cases, different departments are directly involved in public purchase of transport services - for example health (non-emergency patient transport), adult and child social services and education (especially free school transport). To these can be added the purchase of public transport services such as bus services operated under contract. Better value for money can be obtained by co-ordinating these activities, especially in rural areas. This was attempted in the 'Total Transport' concept several years ago with limited impact but might have performed better with more effective co-ordination between public bodies involved. A particular benefit might arise from staggering of school journeys. At present, many buses used for school services provide only one loaded trip in each peak period and car congestion is accentuated by schools starting and finishing at similar times.

It would be very helpful if a clearer line could be drawn between the role of central government departments in setting overall policy and local authorities in implementation, based on local knowledge and accountability. It is inappropriate for central government to micro-manage, a lesson that should have been learned from the administration of the railway. Leaving sub-national transport groupings and local authorities to determine how best to spend funding allocations would be more helpful. It is particularly unhelpful for funding streams to be made available on a competitive bid basis because many authorities no longer have the resources to submit a bid or deliver if selected. This is compounded by central government apparently having no idea how long scheme implementation takes, particularly where most are starting from scratch as they have no funding to develop schemes speculatively. Hence a better idea of funding expectations and a realistic programme for delivery would be major steps forward.

Central and local government

Regrettably, ministers and many government departments including the Department for Transport appear to understand little about local bus services outside London. There are not easy wins and the procedural straightjackets within which highway and planning authorities work mean that what appear to be relatively simple solutions can be mired in procedures, approvals and scrutiny which takes considerable time, effort and cost.

While the National Bus Strategy for England has laudable aims, delivery of improvements does not reflect the statutory processes involved and potentially undermines the democratic process. The success of tram systems in the cities where they have been established provides good evidence that local involvement in local transport is a good way to breed success.

The National Rail Strategy provides the opportunity to separate local rail services from national services, which will localise what is currently centralised control. The key will then be the effectiveness of the regional or local transport authority to meet the requirements of the local population. If the services do not go to the places people wish to travel to and at affordable prices, they will fail to serve their purpose and become a drain on the limited funding available.

7. What are the barriers to improving urban public transport, in terms of delivering the necessary infrastructure, increasing connectivity and improving the consumer experience?

New infrastructure can bring financial risks that deter investment, notably those that are susceptible to construction cost inflation. The rail industry's approach is thorough and lengthy but always results in high scheme costs. For highway schemes that would support better buses, there are numerous obstacles including Traffic Regulation Orders, planning consents, Enhanced Partnerships

that are legally binding, requirements for air quality improvements and a multitude of procedural steps.

Revenue funding for bus services is as important, if not more so, than infrastructure spend but sources of revenue funding are very constrained and in some cases, non-existent. Unfortunately, one example, that of low emission zones was specified by government with the result that some schemes penalise bus operators but do not include cars which are the source of much of the problem. Ultimately this stems from the lack of a coherent national transport policy for England, emphasised by more enlightened approaches in Wales and Scotland.

Inevitably, funding is a critical issue following years of austerity that removed much of the ability of local authorities to deal with transport issues appropriately, significant cost increases both for public transport users and providers, all amplified by the problems of the pandemic. Essentially, the current funding model for local transport in the UK is proving to be unfit for purpose.

8. Are there other important changes, not covered elsewhere in these questions, which would improve matters?

Much of urban transport policy focuses on the removal of car journeys where other more sustainable options are available. This is fundamental to improving air quality, reducing social exclusion, alleviating traffic congestion and many other aspects of urban living. Even a relatively small shift from car use to other means of access would generate significant environmental gains hence better public transport is the key to achieving policy objectives.

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