Future of Mobility in Counties Smart Mobility Roundtable 6 May 2020 **Mobility Hubs**

This report documents the fourth in a series of roundtable discussions organised by the Smart Mobility Unit at the University of Hertfordshire and sponsored by Department for Transport and others. The format was a 90 minute virtual meeting via WebEx due to Covid-19 social distancing restrictions.

1.0 Participants

There were 17 participants from the following sectors: national, sub-regional and local government, technology/innovation, transport provider, transport consultancy, academic research, non-governmental organisations. Stephen Joseph chaired the discussion.

2.0 Aim

The aim of the roundtable was to explore mobility hubs, one of the emerging ideas for the future of transport outside cities. These hubs would bring together different forms of transport and sometimes services (deliveries etc), and might be virtual or physical. The following questions were used to guide the discussion.

- What forms might mobility hubs take?
- How can mobility hubs be promoted/supported/funded by the private sector?
- How can mobility hubs be promoted/supported/funded by different levels of government (from town/parish councils to national Government)?

3.0 Papers circulated in advance

- Richard Dilks, CEO CoMoUK
- Chris Pritchett, Head of Energy Foot Anstey LLB
- Renee van Baar, Midlands Connect/WSP

4.0 Presentations

4.1 Richard Dilks

CoMoUK is a specialist in car club and car share with a remit including all forms of shared transport. Mobility hubs have an important part to play to make shared transport more visible and available but also to connect shared transport with public transport and active travel.

At present, shared provision gets tacked onto the existing landscape. Mobility hubs provide the opportunity to design locations for shared transport.

Mobility hubs can vary in scale. In large new developments they offer a dramatic increase in transport choices and can include community facilities. Hubs in very dense urban locations will struggle to include a range of services and facilities. Designs for rural locations will differ from 'edge of rural', suburban and peri-urban locations.

The car's role in mobility hubs is rightly contentious. Shared cars will be an appropriate part of the mix for some but not necessarily all hubs. In space-poor places (urban centres) there will be car free mobility hubs, but elsewhere car-sharing can ease congestion, cut air pollution and enable travel behaviour change.

In Europe, the ShareNorth¹ project shows that car club cars are routinely included in mobility hubs but these are 'car light' with small numbers of car-share cars. Most examples are not particularly attractive aesthetically, prioritising function over form. Mobility hubs in the UK could be designed, via master planning for example, to improve the ambience, increase the dwell space and widen the appeal. Design needs to be adapted to each location.

¹ https://share-north.eu/

Freight is an important function of a mobility hub, a common feature being a package 'drop wall' for consumers. Mobility hubs could also provide consolidation services for freight suppliers but experience suggests that this is harder to deliver than freight services for individuals.

Non-transport services at mobility hubs can include health and community facilities, both daytime and evening. In major new housing developments a mobility hub could be usefully located between the school and health centre.

Building on case studies in Europe (eg Vienna and Bremen), mobility hubs in UK could link public transport with active travel. We should take lessons from the public transport sector on signage both to in order to funnel demand effectively and to explain how to use shared transport.

Dockless bikes pose challenges and should be combined with other mobility and other services. Covid-19 provides an opportunity to tidy up locations.

CoMoUK is eager to work with partners to build hubs, with a particular interest in setting standards drawing on European experience.

4.2 Chris Pritchett

Foot Anstey is a member of the Urban Mobility Partnership² whose founders include Stagecoach, Brompton Bike Hire, Bosch and Enterprise.

Work is underway on several mobility hubs with local authorities in the Solent area Future Mobility Zone. This includes an energy super hub for fleet charging, which demands very different infrastructure to smaller hubs. Smaller hubs offer e-bike docking, bus links and car-share spaces. Design standards are in preparation with input from WSP. Mobility hubs must be appealing places.

Foot Anstey is engaging with developers in the commercial, residential and mixed use sectors whilst also assisting local authorities, planning authorities and central government to shape NPPF guidance. It is important that planning authorities have the power to require developers to connect new developments into existing infrastructure carefully.

If developers understand that a well designed mobility hub can increase the financial return per unit, ease discussions with the planning authority and might reduce or avoid fees by delivering on sustainability, then a mobility hub will be seen as a worthwhile investment. The business case must be supported by high quality journey mapping, especially in rural areas. Liftshare data can be very useful in making a case for and in designing mobility hubs at major employment sites such as NHS trusts and universities.

Successful development of mobility hubs will require public and private sectors working closely together, drawing on a rigorous evidence base and delivering tangible benefits. These benefits include increased profit per unit sale for developers, revenue to suppliers of mobility hubs and meeting carbon targets for local authorities.

4.3 Renée van Baar

Midlands Connect is a partnership including local authorities, LEPs, Chambers of Commerce and airports. It undertakes research and development on transport schemes in the region. The presentation summarised the findings of the Future of Rural Mobility Study (FoRMS) in relation to rural hubs.

The Midland region's geography is large and varied. Its rural areas are highly diverse, incorporating residential settlements, protected environments (AONBs and Peak District National Park) and businesses. The "last mile" in a rural setting is five to fifteen miles. Rural dwellers predominantly have an older profile, fewer transport choices with reduced bus services and are further from health and education services. This leads to underutilisation of healthcare and later diagnosis. The cost per head of population of delivering health and

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² https://www.ump.org.uk/

education services is higher. The health and education sectors struggle to recruit and retain qualified staff in rural areas.

It is helpful to consider a geography of need which clarifies the priorities for different zones. Settlements should be connected in a hierarchy of provision and access. In particular, better broadband would make a big difference to rural communities in terms of access to education and real time bus information.

The research explored three approaches: moving people to places, moving goods to people and replacing transport with communications. Highly specialised services are more likely to require moving people. Covid-19 is stimulating sectors to deliver products for the first time, for example rural pubs. Even with good communications technology, there is still a serious risk of social isolation. For example, a virtual consultation with a GP lacks the social interaction of the waiting room and people working from home can suffer loneliness.

A toolkit has been developed with objectives to increase community cohesion, provide access to key services and promote health and wellbeing. Solutions include active travel and mobility as a service, including a role for mobility hubs. The preference is to boost existing services and existing hubs, being careful not to deplete town centres.

Rural hubs can bundle up demand and offer public space for a range of activities whilst waiting for transport. There can be complementary hubs in neighbouring villages linked together by demand responsive or community transport. Hubs can provide a base for health and childcare services. Medicine collection points can replace the chemists which have long been missing from many communities.

Under Stage 2 of the Future of Rural Mobility Programme Midlands Connect is developing guidance for local authority partners on how to operate mobility hubs and identify where commercial transport operators can contribute. The objective is to find opportunities for pilot schemes and tendering is underway.

5.0 Overview of discussion

The discussion is summarised as follows. Detailed comments are recorded in section 6.

5.1 Spatial models, Place-making and Demand

What to put where, why and for whom?

There was consensus that existing patterns of travel demand are the starting point for choosing locations. Hubs should aim to concentrate demand for mobility, enable interchange and provide attractive places to locate services. It was felt that hubs will perform better in places where the economy is already active and the population is open to travel behaviour change. The relationship of the private car to mobility hubs needs to be considered critically. Some were concerned about edge of town hubs undermining high streets or rail station hubs causing car parking problems.

5.2. Design, Standards, and Planning Guidance

How to design and build a rural mobility hub?

There was agreement that place making and ambience is important. Good design can unify different scales and types of hub and improve 'legibility' for shared transport. The design approach must be flexible rather than 'one size fits all' and allow functions to evolve over time. A toolkit approach is recommended. Both design standards and planning guidance will help owners and investors model demand. Mobility hubs need to have a clear status in planning law and the separation of land use and transport planning powers in two tier authorities is a challenge for the development of mobility hubs.

5.3 Funding

Local and regional government participants saw funding as a barrier, particularly funding for long term maintenance. Others were more optimistic about local authority framework agreements to underpin

receivables funding from the banking sector. There was some demand for government guidance on ownership and funding models.

Other themes

Collaboration between the public and private sectors will be important for rural mobility hubs to succeed but integration is difficult with deregulation and the uncertainty presented by Covid-19. Representatives from three sectors emphasised the importance of community involvement in the design of rural mobility hubs and pointed to opportunities for parish councils and others to provide leadership at the village level. Several participants underlined the difficulty of establishing a network of useful rural mobility hubs for the long term. Careful monitoring and evaluation of exemplar projects will be pivotal in disseminating lessons learned.

6.0 Detailed notes of Discussion by Roundtable Participants

The following abbreviations indicate the sector making comments:

ACAD Academic

NGO Non-governmental organisation

CONS Consultant

CC County council

REGG Regional transport body

GOV National government.

6.1 Spatial Models, Place-making and Demand

GOV: Not important whether we call these mobility or accessibility hubs. The big prize will be to deliver fast broadband in work pods. They needn't be co-located with shared cars.

REGG: To overcome the challenging polycentric nature of our region we are seeking to concentrate demand to make rural public transport viable. There is big potential to make services attractive to a deregulated market if you can concentrate demand.

REGG: The key is getting the right level and scale for a mobility hub. Mosaic demographic data can be very useful to focus carefully on place and identify those locations with suppressed demand where people are willing to use different transport modes.

REGG: Agrees. When we talk about data we also need to learn about latent demand - i.e. trips people would make if they could.

GOV: Is the traditional 'hub and spoke' hierarchical transport model still relevant or is point-to-point connection between villages more important? Is it beneficial for villages to specialise in different services?

CONS: Lake district survey of rural transport 2012-2014 explored whether rural transport provision should prioritise linking into multimodal networks or provide services at hubs. The findings showed that from a community perspective a mobility hub can be **both** a link into a multi-modal network **and** a location in itself. A teenager will value the hub for getting great Wi-Fi in the evenings, whilst others will use the hub in the daytime for access to shared transport.

CONS: Agrees with the both/and model. When designing hubs in urban or suburban areas the best sites are already vibrant economically. The mobility hubs in the UK which have failed were in economically inactive areas. If hubs are in the right locations, flows will develop naturally and demand responsive transport will be viable.

NGO: Yes to both/and but only up to a point. Ideally you want to know the origin and destination data to lattice rural locations, but demand management also matters. We should want to shape people's movement

patterns as well as meet their immediate needs. We should seek concentrations of flow or services at destinations. Locations with multiple economic functions are good sites for mobility hubs so long as a market exists with an appetite for using public transport.

REGG: A thorny problem is whether a mobility hub is effective if it needs people need to drive there or is this self-defeating? The prevailing assumption in UK transport modelling, based on behavioural science is that people are very unwilling to interchange. Once someone gets in the driving seat, it is assumed they are very likely to drive the entire journey. Anecdotally however, there are examples of people driving part of a journey if this leads to cost savings.

CC: Need to make changes to the transport network at the journey's destination so that the interchange becomes a preferred option. Therefore parking and other charges are important. Cambridge is an excellent example.

CONS: People will leave cars at hubs if car access "downstream" is restricted, rather than simply being encouraged to do so.

CONS: Interchange is about people firstly being aware of it as an option, and then the authority encouraging people to develop habits of interchanging, i.e. making it the default 'normal' practice.

NGO: People need help to interchange. Even in London we are not good at making transfer between transport modes easy, certainly not compared to Europe.

CC: The city of Cambridge pioneered traffic demand management with parking controls and extensive park and ride. No-one who knows the city thinks about driving into the centre. The park and ride is funded from parking accounts and Stagecoach bus departure fees. In the current climate, with reduced bus ridership due to Covid-19, it would be impossible for a bus operator to develop transport hubs on this model.

CC: Rail stations have to be an obvious starting point. A good start would be to provide a better mix of modes at stations, led by the franchise model, rather than a focus on car parking.

NGO: Craven Arms is a useful example of how attracting private car access to a mobility hub could be justified on several levels. Craven Arms (a population approx 2,000) is overshadowed by its more prosperous neighbouring towns of Ludlow (11,000) and Shrewsbury (71,000). However, Craven Arms has some of the ingredients of a mobility hub i.e. a rail station, visitor centre and a retail offer. Parking in Shrewsbury or Ludlow is a bit annoying but not difficult, so rather than interchange at Craven Arms people will drive the whole way. By introducing parking controls in Shrewsbury and Ludlow and with some incentives to drive into Craven Arms, the latter could develop as a rail hub and lift its profile as a destination in its own right.

REGG: Residents strongly resent incomers causing parking problems and a lot of issues in small towns get blamed on commuters from the wider catchment coming in to use the train station. Car commuters use parking needed by local shops and if parking controls are implemented the commuters simply park in the wider community. See point under planning guidance.

ACAD: If a mobility hub brings in cars from outside but also delivers services which had previously been lost to a rural settlement perhaps it would be more palatable to locals.

REGG: The lack of retail at the major Park and Ride at St Ives on the Huntingdon to Cambridge guided bus route was an astounding missed opportunity³.

REGG: It is important to grapple with the impact of rural mobility hubs on settlements' high streets. If an out-of-town or edge-of-town railway station seeks to establish a hub with retail and leisure services to attract car commuters and bus users, this could easily undermine the local high street. There is no clear resolution to this problem.

³ https://www.thebusway.info/routes-times.shtml

6.2 Design, Standards and Planning Guidance

CONS: Design quality is very important. A good approach is to design from the tourist or visitor perspective and think how to make alternatives to the car more attractive. Iconic design (such as St Pancras Station) can inspire and excite people enough to motivate them to try unfamiliar modes of transport. Design needs to include legibility so that anyone can easily see how to use the services on offer.

REGG: Bus policy against carrying dogs, or unclear policy, deters tourists from using public transport, especially for National Parks and AONBs.

CC: Agreement that total place planning is very important.

CONS: If a mobility hub is considered as a point in space where you can access services, then there is a very big range of scale for potentially useful locations, from rural 'end of track' to town centre interchanges. A defunct isolated bus stop can be used as a hitch-hiking location, a point for DRT pick up or for a delivery drop-off locker. Similarly village bus shelters are valuable community hubs even without bus services. Diverse hubs along this continuum of scale could benefit from design continuity.

CONS: Learning from projects in the Lake District work, mobility/accessibility hubs can be seen **both** as a cascade of nodes in a multi-modal mobility network (rather than simply the bus network) **and** convenient local points where people can easily access services (delivery drop-offs, car club/bus stop, ice cream sales). A relevant and effective hub brings both these functions together.

GOV: Potential role for car parks owned by the National Park Authority.

NGO: Standards are very important but there needs to be a toolkit approach, as there will be no single model to suit all locations. Mobility hub standards will help potential owners and investors estimate demand, model footfall, pedestrian catchments and income projections.

NGO: Flexibility in planning is important. The NPPF needs to build in the capacity for mobility hubs to evolve because we can be confident that whatever gains planning consent now there will be a different pattern of demand in five years time.

CC: Need to engage MHCLG as they review NPPF and other development regulations but the message of additional housing at any cost is challenging.

REGG: Creating a mobility hub is a spatial decision but the benefits are largely in transport terms. Therefore the split in two tier authorities between town planning (District Council) and transport planning (County Council) makes location decisions difficult.

CONS: Agrees that the split between land use and transport planning is a barrier. Local authority specialists can help project teams navigate the gap between the tiers of local authority decision making.

CONS: Planning authorities have no process for mobility hubs because they are not defined in planning law. It is unclear what category of planning they fall into. This is important as developers and local authority offices are likely to be ahead of local politicians and the public over car parking standards, for example. There will be objections to planning applications.

REGG: The housing and planning team in DfT have a strong interest in how to line up land use planning with transport planning to achieve sustainable growth in line with the NPPF.

6.3 Funding

There was strong consensus that it is difficult to finding a robust, long term funding model for mobility hubs.

REGG: Revenue funding for the ongoing operation mobility hubs needs to be identified at the outset. Funding silos at DfT mean that there is no natural place for government funding to be managed. Even if a region has mobility hubs in its transport strategy and stakeholders have a strong appetite to establish hubs, lack of confidence in ongoing funding undermines the approval process.

CC: County council is exploring hub locations and may have a developer interested, but the problem in the UK is revenue funding to maintain the infrastructure. There is too much fragmentation of income streams. It seems reasonable that a developer would design and build but hand over to a local authority to maintain. Bike hire businesses are notoriously unstable.

CC: How to consolidate the mobility hub offer for the long term? European models might be worth researching.

CONS: NatWest Future Mobility Group is eager to help local authorities develop mobility projects via receivables financing.

CONS: A local authority framework agreement would give banks confidence to lend against future revenue. The funding model for public EV charging points is currently based on expected revenue in years 6 to 8.

CONS: Ideally car-hire or delivery companies (e.g. Amazon) should fund mobility hubs, but the challenge is how to tie them in. The risk is that the hub withers and dies when the first generation of contracts expire.

CONS: If the mobility hub is kept in public ownership local authorities could use their open spaces management funding to maintain it, with rental income from supply partners. Alternatively the public sector could set long term commitments for service providers with a funder to take some security over the hub.

CONS: Grants are unsustainable. There must be a robust framework in place for the private sector to tolerate an 8-10 year payback.

CONS: An exemplar project under development has the hub suppliers already contracted with each other as a 'package' so that the local authority need only engage with a lead party.

NGO: The major focus should be on mobility hub funding and ownership. There is no clear answer to this as yet and government must provide some central guidance. Will mobility hubs be delivered through local authority framework agreements?

NGO: A mobility hub for a major new development is easier to specify because of the relatively high agency of the developer.

6.4 Public / Private Collaboration

CONS: Collaboration between public and private sectors is important but difficult. Mobility hubs are about geography and networks. The form of the networks will change under Covid-19. The old models will need rethinking because behaviour patterns will change, along with mobility requirements and willingness to travel.

CONS: Agree on the importance of a collaborative approach. Experience proves that 'integration' is very, very difficult to achieve under the current deregulated environment for public transport.

ACAD: There are examples of innovative use of transport hubs from around the world as a result of Covid-19, in particular in New Zealand⁴.

ACAD: Need to institute a legal governance framework to aggregate services and funding. We know that the NHS did not participate in Total Transport pilots because scale the savings on offer was imperceptible in comparison to overall budgets.

6.5 Community Involvement

CONS: Whilst all can agree that mobility hubs are a good idea, surely it is also very important to involve the community in driving their development? There is a great deal of informal capacity in rural communities. A mobility hub shouldn't be imposed without involvement.

⁴ Details available from participant on request.

ACAD: Mobility hubs must be user and community led. Research shows that organisations and communities are keen to be involved in designing mobility hubs. The stumbling block is making a good business case to get funding.

GOV: Villages present a great opportunity for community-led mobility hubs run as social enterprises. There is scope to re-think the entire mobility requirement of a village community. Rural households often need multiple vehicles, representing a considerable financial burden. On street parking in villages is often as much of a concern as in city centres. Parish Councils or other local community innovators could design village mobility hubs located at the village car park, funded by attracting transport expenditure away from residents' second, third or fourth cars.

GOV: The Total Transport concept that it is cheaper to provide collectively than individually also applies to private ownership of transport equipment. Village shared van, etc

GOV: The public sector should take the lead by supporting some demonstration projects to inspire Parish Councils across the UK.

6.6 Evaluation and Follow Through

ACAD: The logistical problems of creating an effective network of mobility hubs is immense and it will take a decade to establish them. In the UK we do have a pattern of 'abandoning ship' if transport initiatives get too difficult. It will require stamina.

NGO: Valuation of impacts for mobility hub pilots should be kept in the public domain to facilitate learning and avoid future failures.

ACAD: Develop and learn from 'exemplar' mobility/accessibility hubs, where industry and academia collaborate and involve MSc/PhD students to collect data for monitoring and evaluation.

NGO: There must be follow through to track the impacts of mobility hubs over the medium to very long term, five to twenty years in the future.