The Future of Rural Mobility

Bringing communities closer to the services, amenities and transport connectivity they need to succeed.



February 2022

"We hear a lot these days about supporting leftbehind communities, boosting social mobility and improving people's life chances, but what does this look like in practice? If I ask you to imagine a deprived area, many of you will think about an innercity suburb or urban street, however as this report demonstrates, it's also rural communities that need help. Our research shows that poor access to services, patchy public transport and unreliable amenities are holding our rural areas back – causing loneliness, lower wages and an exodus of skilled workers.

"Our plan is simple: to bring people in these communities closer to the things they need to reach their potential. We believe that local 'rural hubs' are the ideal way to do this, bringing together the transport connections and other services individual settlements are lacking, whether this be postal services, healthcare clinics or super-fast broadband. We're now keen to get support from Government as we look to deliver innovative mobility solutions on the ground and trial the first of these hubs across the Midlands region. As well as this, we're looking forward to working with the private sector to identify and implement innovative mobility solutions on the ground as soon as possible."

Maria Machancoses, CEO of Midlands Connect



Through a combination of academic research, market analysis and engagement with local authorities and local enterprise partnerships, Midlands Connect developed a two-pronged approach to improving mobility in rural areas:

> A rural mobility toolkit to guide local authorities and community groups on the different practical, transport and technology solutions available to address some of the problems rural communities face

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The creation of rural mobility hubs – local centres that bring together public transport, technology and a wide range of services in one place. These could range from cash machines to local banking services, education facilities, healthcare, delivery lockers, 5G and EV charging points

> We've since awarded money to Derbyshire County Council and Nottinghamshire County Council to test the usefulness of our research and guidance in helping identify potential locations for rural mobility hubs and the services that could be located there.

The future of rural mobility – an executive summary

Rural communities form an essential part of the economy, contributing £261billion to UK Plc every year. Despite their importance, the communities that live in rural areas face a unique and varied set of challenges, many caused or exacerbated by poor access to transport. While Government recognises the need to improve rural mobility, and has recently launched a Rural Mobility Fund many larger sources of funding (Transforming Cities Fund, Towns Fund) are distributed almost solely to urban areas.

Midlands Connect analysed the needs, characteristics and connectedness of rural settlements across the region. This research found that rural areas suffered from:

- Poorer access to services via public transport, such as settlement centres, schools, and healthcare facilities – average travel time to these amenities was almost twice as long as in urban areas
- A lower concentration of social mobility 'hotspots' compared to the UK average
- Worse productivity economic contributions per job are 10% lower than in urban areas

What next?

With our guidance on rural hubs now complete, Midlands Connect is running a competition asking businesses to submit potential rural mobility solutions. The four best proposals will be selected and £10,000 awarded to each entrant, allowing them to work alongside local authorities to understand how their ideas could be practically delivered.

From these four ideas, one organisation will be selected as the 'winner' and awarded up to £100,000 to fully develop plans for their rural mobility hub pilot. If successful, we hope this model could be used more widely across the region to drive innovation and improve rural mobility for our communities.



What else?



Electric Vehicles Midlands Connect is committed to supporting the roll out of Electric Vehicles in rural areas, developing an 'EV tool' to help local authorities identify sites where public charging points should be installed.



Alternative Fuels Midlands Connect has published a study identifying over 60 potential sites for alternative fuelling stations across the region, to be used by logistics companies travelling to, through and from rural areas.

State of play

As of 2020, almost 10 million people in England, or 17% of the population, lived in rural areas. As well as dominating essential industries such as agriculture and fishing, rural communities and the people that live in them play an important role across a wide variety of sectors including tourism, manufacturing and healthcare. It's estimated that predominantly rural areas are home to over half a million businesses and in total, contribute £261bn to the UK economy each year.1

This said, there's still work to do to ensure rural areas meet the needs of their populations and reach their full potential. Last year, Government launched a consultation seeking evidence for its upcoming Future of Transport: rural strategy², in which it identified a number of challenges faced by rural communities including: an ageing population, greater social isolation, higher levels of car dependency, poorer access to essential services and employment opportunities and a lack of public transport.

In 2021, 17 local authorities were awarded a total of £19million from a new Rural Mobility Fund to undertake businesses cases for potential improvements in their area. In the Midlands, this included Leicestershire, Nottinghamshire, Staffordshire and Warwickshire County Councils, with many of the proposals focusing on how demandresponsive transport can improve access to services.

Despite this progress, many of the resources made available by Government to local authorities looking to spur regeneration and infrastructure investment are focused on larger settlements – for example the £3.6bn Towns Fund and the £2.4bn Transforming Cities Fund.

If Government is to succeed in fulfilling its pledge to level up the UK, it is essential that policymakers also place a renewed focus on rural areas, their mobility challenges and how these can be overcome to improve social, environmental and economic outcomes for local communities.

The evidence gathered and outlined in this document reinforces the assumption that people living in rural communities face a varied and distinct set of challenges, including poorer social mobility, lower productivity and worse access to services.

The COVID-19 pandemic has contributed to further cuts to local bus services, links that are vitallyimportant for many rural communities. In the year leading up to September 2021, the number of bus journeys taken in England's non-metropolitan areas fell by 20%.

Our analysis suggests that rural communities experience:

Lower productivity

Productivity in rural areas is significantly lower than both the England average, and the average for urban areas. In 2019, the average GVA per workforce job was £45,500 in predominantly rural areas, compared

GVA per workforce job, 2019



Poorer access to services

People who live in rural areas have poorer access to services, including healthcare, educational institutions and basic amenities such as shops and local centres.⁴ While some differences in access will always be present, due to differing geographical

Average minimum travel time to reach the nearest key services by walking and public transport for rural and urban areas, England, 2019



4. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1035874/09_Statistical_Digest_of_Rural_ England_2021_November_edition.pdf

5. https://www.gov.uk/government/collections/journey-time-statistics (Table JTS0102, 2019)



to £50,900 in predominantly urban areas (excluding London). All in all, rural communities were 17% less productive than the England average, and 10% less productive than urban communities.³

proximity - i.e. most city centres are on the doorstep of a hospital whereas isolated hamlets are not, deficiencies in public transport are likely to be felt most acutely by rural residents, particularly those without access to a car.



When accessibility scores (how easy it is to get to key services via walking and public transport) are graded from 1 to 10, with 1 being the worst score and 10 the best, the differences between rural and urban populations become particularly apparent. A huge 50% of rural areas score 1 for accessibility, compared to less than 1% of urban areas.⁵ There are a number of factors affecting the quality, accessibility and frequency of public transport networks in rural areas.

Lower passenger numbers often reduce the commercial viability of services. These issues, combined with uncertainty around travel patterns and the financial pressures surrounding the COVID-19 pandemic, are likely to exacerbate these problems further. Over the past decade, the number of journeys made by bus has fallen by 12%.⁶

Rural population accessibility of services



Score based on minimum travel times (where 1 is the least accessible and 10 the best) by walking and public transport.

Worse social mobility

According to the Social Mobility Index, urban areas are 46% more likely to be social mobility 'hot spots' than rural areas.⁷ The Index is a tool that examines how geography impacts the likelihood of disadvantaged children doing well at school and

Percentage of local authorities that are social mobility 'hot spots'



What does this mean?

Action must be taken to improve rural communities' access to public transport, technology and other essential services. Bringing local people closer to the jobs, facilities and education they need to succeed will in turn empower these areas to increase their productivity, promote social mobility and level up opportunity across the UK.

Midlands Connect has undertaken a number of studies into rural mobility, the challenges communities face and how to overcome these challenges, with the aim of assisting its local authority partners in creating practical, on the ground solutions that will improve access to transport and other services.

getting a good job. The top 20% of local authorities, where upward social mobility is highest are labelled as 'hot spots'. A comparative lack of hot spot areas in rural local authorities suggests that poverty and low socio-economic status is harder to overcome.



^{5.} Statistical Digest of Rural England: Statistical Digest of Rural England - GOV.UK (www.gov.uk) 6. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929992/annual-bus-statistics-year-endingmarch-2020.pdf

Our work so far

Stage 1

In 2019, Midlands Connect worked with the likes of Herefordshire Council, Shropshire Council, Worcestershire County Council, Worcestershire Local Enterprise Partnership and the University of Lincoln to undertake a Future of Rural Mobility Study (FoRMS). The work included a literature review of previous research, engagement with around 300

What we found

The make-up of our rural communities and businesses is distinct from more urban areas and therefore, the transport and access issues faced by our rural communities and businesses are substantially different to those in more urban settings.

Examples of the different features of rural economies include:

- 24% of the rural population is over 65, compared to 16% in urban areas;
- Average weekly transport costs for those in rural hamlets and isolated dwellings are around \pounds 132 accounting for 15.1% of weekly disposable income, this is \pounds 58 higher than in urban areas.

stakeholders including local authorities, transport companies and healthcare providers, a survey led by the Rural Services Network alongside research with 1000 people in both urban and rural areas. The evidence gained was used to create a picture of the challenges facing rural communities, the impacts of these challenges and potential solutions.

- Rural areas are on average, nearly twice as far from their nearest services than urban areas, including town centres and hospitals (hospitals by public transport)
- Secondary school students from villages, hamlets and isolated dwellings travelling 7.0 miles on average, compared to 2.8 miles in an urban conurbation.
- Responses to our survey showed that one in ten (11%) respondents in rural communities have missed or delayed medical treatment due to a lack of transport.

Bundling different services together, including technology assets (5G, high speed broadband, EV chargers) services (post office, education, ATMs, healthcare) and transport (bus services, demand responsive transport) could increase demand for, and access to these important services.



Outputs



A rural mobility toolkit for partners, developed to illustrate the range of options that local authority officers and community groups may wish to consider when seeking to improve mobility and access to services for rural residents and to support rural businesses

The identification of 'rural hubs' as a potential solution to poor access to services



Midlands Connect's rural mobility toolkit was cited & promoted by Government in its 2021 Transport Decarbonisation Plan

Our rural mobility toolkit

Outlines how rural needs can be met by a series of 'tools' spanning transport infrastructure, better access to amenities and technology.



Key

1 Multi-use hub

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- 2 Last mile delivery pods
- Telephone triage
- 4 Online education from home
- Car sharing
- Drone deliveries
- Autonomous tractors
- 8 Demand responsive bus
- Road traffic sensors
- Local businesses
- E-bike hire
- Autonomous vehicles
- 13 Public WiFi

14 Delivery lockers

Real time bus timetable

Electric car charging points

THE CIT

Town Hall

- Co-working space
- Village/Town hall clinics
- Multi-use space
- 20 Rail freight
- 21 Park and ride/ transport hub

Midlands Connect Transport Investment Growth

HAMLET

MARKET TOWN

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Rural Mobility Toolkit

Midlands Connect Transport Investment Growth Rural Mobility Toolkit

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| Tool Rural need | Enhancing existing public transport (smart ticketing, dynamic scheduling etc.) | Self-drive, carpool and ride-share innovations | Independent transport (cycling, walking and electric micro-mobility) | Autonomous vehicles (people and goods) | Digital and online innovations (working from home and internet orders) | Hubs |
|--|---|--|--|---|---|--|
| Community cohesion | Encourage public transport use; simplify payments and provide confidence to travellers. | Potential to generate more social mixing and companionship. Social enterprises and volunteers to operate schemes. Scope for drivers to offset cost of travel by offering lifts. | Promote use of local services and community facilities. Community groups work together to develop cycle hire schemes, travel together for safety etc. | Enable less mobile individuals to get out of the house without feeling reliant on other people.Potential limitations for those with poorest physical mobility. | Online hubs and digital training centres can promote community cohesion. Village websites and social media spaces integrate with physical community activities. Requires comprehensive mobile/digital coverage. | A transport hub would provide the footfall to sustain more essential village services and activities. |
| Accessing key services (shops, banks, PO etc) | Sustain market town high streets through increased footfall. | Highly realistic for journeys that are not time critical.Requires cultural change. | Support local businesses as part of a mix of retailing behaviours. More limited functionality for bulkier shopping trips. Requires secure parking spaces. | Could fulfil 'first and last mile' links to faster public transport. Reduce rapid increase in 'white van' traffic to the home. Requires large scale network implementation with hubs, 5G, trackways, plus blockchain and microcontainerisation for freight. | E-retail and e-banking are growing, but excludes those not online. E-retail increases freight journeys to rural homes. Requires upskilling and confidence among users. | Retail delivery lockers reduce intra-village freight travel. Provide ATMs at the hub. Access point to fast travel to town centres can strengthen high streets. |
| Education, training and skills | Encourage public transport use and align school/college hours to transport timetables. Smart ticketing systems can allow easier implementation of subsidies for education-related transport. | Common destinations make car-shares realistic – potential to run from college or from rural community. Safeguarding and payments to drivers are possible. • Car-share reliant on willing volunteers with driving licences. | Desirable among young people if safe and mode-switch is possible. Data could be collected through wearable technology. | Could fulfil 'first and last mile' links to faster public transport. • Needs dedicated trackways and 5G. | High potential for online courses, especially among work-based learners.Less desirable for younger and full-time learners. | Co-working and learning spaces for students and professionals. Bridge time between transport to college and home. |
| Health and well-being | Potential to link different forms of transport through joined up information and ticketing, which could include non-emergency health travel. | Enable better coordination across existing voluntary patient transport schemes. Common destinations allow for more journey sharing, especially if outpatient appointments were coordinated by postcode. | Could promote healthier lifestyles. Cycling: health care workers cycle to clients. Less realistic for those who are already unwell or less physically mobile. Distances may make cycling impractical. | First and last-mile links to hospitals. Improve mobility of health and social care professionals. Secure, autonomous delivery of prescriptions. Currently limited by challenges of rural environments to implement technology. | Blended e-health and personal healthcare is realistic with new digital technologies. Requires 5G and cultural acceptance Over-reliance on e-health could worsen isolation. | Community space could be used by mobile health care services. |
| Accessing employment | Allow more rural people to access a wider choice of jobs. Improve access to opportunities for seekers. | Allow more rural people to access diverse jobs; including shift work at irregular hours. Reduce isolation for jobseekers. | Integrate healthy lifestyles into working practices. | Provide first and last-mile links to public transport networks. | Allow jobseekers better access to information. Make online interviews more realistic. Open up gig-economy opportunities to rural people. | Enhance commuting experience. Enable workers to be based in co-working spaces. |
| Business growth | Simplify access for tourists/customers and workers.Disproportionate costs to smaller rural travel firms. | Improve access to workplace with potential for work-based schemes. Improve labour market options for employers. | Tourism options built around cycle hire, enhanced safety and signage on routes. Potential for rural commuting with safe routes and funding (e.g. wheels2work). | Entrepreneurial opportunities in the transport sector. Tourists, customers and employees access workplace/destination more easily. | 5G opens up new business tools for efficiencies, collaboration and home manufacture. | Rural businesses become more accessible and the hub provides outlets for sales and other activities. Co-locate with flexible co-working and networking spaces. |
| Environmental protection | Encourage people away from the private car.Requires government policies to promote behavioural change. | Reduce private car miles. Increase use of e-vehicles in car-pools. | Reduces carbon footprint. | Advances in logistics combined with automation can reduce congestion and freight on rural roads. | Reduces carbon footprint of travel. | Hubs can support greener travel, reduce some journey needs and provide a focus for investment in charging points. |

Our work so far

Stage 2a

In January 2020, we developed a set of detailed guidance to help local authorities identify the right location and conditions for a rural hub and ensure that their proposals are commercially viable.



What we found

Rural hubs have the potential to regenerate villages and market towns, by bringing goods and services closer to the people that need them, in turn creating the conditions needed to support enhanced transport connectivity in those locations. Our step-by-step framework allows our partners to evaluate the types of services that are needed in their area, where these facilities may be located, how to connect them to their potential users and what is needed practically to make the plans work.

Next steps

Award funding to Midlands Connect partners, allowing them to test our guidance and investigate potential locations for rural mobility hubs in their area.

Services considered at each hub



Links to station and local bus stops, car club bays, park and ride, taxi rank, EV charging points, park and ride, Secure cycle parking, cycle hire, repair stand

Technology

Travel

Digital transport information pillar

Stage 2b

In June 2020, Midlands Connect awarded funding to Derbyshire County Council and Nottinghamshire County Council to investigate potential rural mobility hub locations. The rural mobility toolkit was also used to assess the needs and services that would be most appropriate within each hub, also ensuring that service provision aligned with each of the Local Authorities' own objectives. Adrian Whithill, Interim Public Transport and Technology Projects Manager at Derbyshire County Council, said:

"Identifying Buxton and Hope Valley as potential rural mobility hub locations is a great start to better connecting our rural residents; we are now investigating other locations across the county where other hubs could reside. We have also conducted detailed research with key stakeholders and residents to fully understand the types of services that would be provided at each hub, making sure that any of the services provided would be used by the community."

Buxton railway station

The hub would integrate two projects: integrating with the wider townscape as part of the Town Centre Masterplan, as well as incorporating the new planned health centre within the region.

Hope railway station

Hope railway station would be a focal point for the community and act as an 'operational base' for existing demand responsive travel facilities within the region including home-to-school and special educational needs transport.

Ollerton

Home to a higher proportion of residents without access to a car, a hub here would connect the community to bus services, improving their commercial sustainability and enhancing access to healthcare, employment opportunities and leisure destinations.



Additional hub services

Local helper programme, book exchange, children's play area, community retail or café, greenspace provision



Improving access

Visitor information, waiting facilities, delivery lockers, loos

Next steps

As our guidance has now been tested, we plan to publish it and share it with our local authority partners so they can follow suit and make use of it to develop potential hub locations.



Our work so far

Stage 3

Now that we've developed our guidance around rural hubs, their implementation and how they can be deployed to improve rural mobility, we're now keen to see how this blueprint can be applied to solving the challenges faced by local communities. Midlands Connect is launching a competition for private companies/consultants, asking them to submit entries outlining rural mobility solutions that could be deployed in the Midlands.

Stage one -> January – Feb 2022

Entries sought from private businesses, who will be asked to provide innovative solutions to meet the rural mobility challenges experienced in parts of the Midlands.

What might the entries look like?

Demand-responsive transport solutions that use technology to improve access to healthcare and essential amenities in isolated areas.

Integrated multi-modal transport services that bring users closer to leisure and tourism destinations, encompassing the likes of electric scooters, bicycle hire, buses and taxis via an online application.

The competition challenge:

How might we make rural residents across the Midlands feel confident that low carbon transport services can: meet every day travel needs; support vulnerable groups in isolated areas; and ultimately lead to lower car ownership per household than today?

Stage two -> March – June 2022

The four best solutions are selected, and organisations awarded funding to work with the local authority in the hub's location to understand better how to deliver the project.

Stage three -> June – December 2022

After a competitive pitch process, a winner is selected and awarded funding to complete the development of their connectivity concept. Once this process is complete, the project will be ready for delivery, acting as our first rural mobility pilot. Midlands Connect will be keen to secure the support of Government in delivering this pilot, and if successful, rolling out such projects region-wide.

What next?

Midlands Connect now plans to publish its rural mobility hubs guidance and toolkit to assist its partners in identifying and developing potential hub sites. By running a competition with private businesses and partnering them with local authorities to develop innovative mobility solutions, it's intended that the winning entry is developed into a fully formed concept, with the aim of:

- Gaining Government support to fund the delivery of the winning mobility concept
- Influencing Government policy to secure a renewed focus on and financial commitments to boosting rural mobility in rural areas
- Securing better access to education, healthcare and other amenities for communities across the Midlands region

And we'll be examining how the benefits of rural transport projects are calculated.

Midlands Connect has also commissioned research to investigate whether existing Transport Analysis Guidance (DfT's TAG) neglects the specific impact of transport interventions in rural and/or visitor economy focused settings. The research will explore evidence on how businesses' and communities' economic requirements may differ from those in urban areas, with the aim of ensuring projects in rural communities and their corresponding business cases are correctly analysed.







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