November 2020

SPOTLIGHT
Savills Research

Rural Logistics

savills

Urban migration • Logistics capacity • Rural repurposing

356,000

The number of extra homes in rural areas expected to be built by 2025

During the last decade the levels of online retail and the number of people living in cities combined to create a new sub sector of industrial property. Driven by increased levels of parcel delivery to the home, office and storage lockers, the urban logistics warehouse needs to be located as close to population centres as possible and also to major road networks to mitigate the traffic congestion associated with city centres. In areas of low warehouse vacancy, rents have increased by almost 100% in less than five years as occupiers scramble to acquire units that improve supply chain efficiency.

The outbreak of Covid-19 put many retail supply chains under pressure, but also gave people the time to reflect on where they want to live and work. Survey data from Savills has demonstrated that residential buyers are now looking for gardens and space for home working as a priority and many of our more rural residential agencies are reporting a surge in requests from people looking to move away from cities.

During 2020 the level of online retail increased to a June peak of 33% of all retail sales, which, combined with the fact that many families chose to spend lockdown away from their normal residence, meant that the geography of logistics in the UK changed significantly.

This report aims to explore the issues around the geography of delivery should we see a sustained increase in the number of people choosing to live in more rural settings. We also examine what options are available to developers and landowners in the countryside to accommodate the potential rise in demand for warehouse space in rural markets.

In search of the good life

An increased desire to relocate to the countryside brings a need for more local warehouse space

For many, life in lockdown has shone fresh light on to the compromises we make when living in cities. Demand for homes in rural locations has risen as preferences shift away from the convenience of urban life towards having a garden and space to work from home. Given the constraints of affordability, for most households this will mean moving further away from big cities.

However, we can't expect the demand for convenience from those households to disappear entirely. Being able to click "proceed to checkout" at breakfast and see a package arrive on your doorstep before dinner is taken for granted in cities. Demand for that level of service in rural locations is certain to rise as city dwellers move out to the countryside.

The results of our recent buyer survey show a growing preference for larger, leafier homes. Around half our buyers, 49%, said they placed greater importance on having a garden than they did before lockdown, rising to 70% of buyers under 40, while 44% of our buyers said having a dedicated space to work from home was a higher priority for them now. That

> **Demand for homes in rural locations has risen as preferences shift away from the convenience of urban life towards having a garden and space to work from home**

proportion rises to 61% for the under-40s.

However, that extra space comes at a cost – a cost that may not be affordable while also staying in the city. In 2019 the average home in London's travel Zone 2 was worth £796 per sq ft; in Kent that figure was just £324 per sq ft.

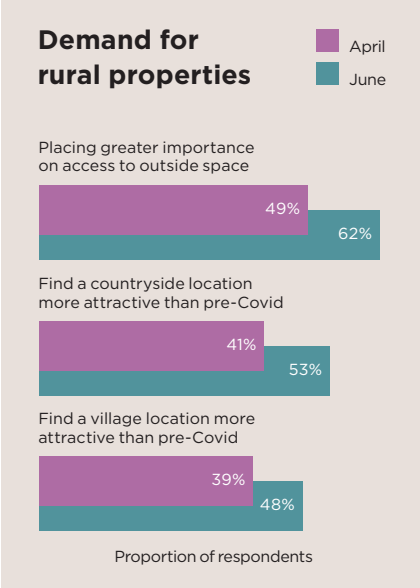
The households that are moving from dense urban areas to rural ones are younger than existing rural households. In fact, the average age of someone moving from an urban to a rural area is 40, which is 12 years younger than the average rural resident at 52.

The new rural residents are also more likely to be early tech adopters – 37% of households moving from urban to rural areas say that either they love new tech and buy all the latest gadgets on release, or that they buy new technology within six months of it launching. Those early adopters make up just 24% of rural households.

All this suggests that as younger, more tech savvy households move out to the countryside, they will bring with them greater expectations for modern conveniences such as online shopping. The need for rural logistics space will rise to help service that additional demand.

In 2019 there were 64,732 homes built in rural areas. Early indications suggest migration from cities could be stimulated by the onset of Covid-19. In the absence of an official forecast, we have assumed that rural house building will rise by 10% per year over the next five years, which would mean that there would be an extra 356,000 homes in rural areas by 2025.

In turn, that would create a need for an additional 24.6 million sq ft of warehouse space in the same time period. This figure is driven by the fact that each additional household needs 69 sq ft of warehouse space to support it, according to the recent "What Warehousing Where?" report commissioned by the British Property Federation.



Source Savills Research Buyer Surveys

Local authority	Additional homes needed	Warehouse space needed (sq ft)	Current warehouse supply (sq ft)	Shortfall of warehouse space (sq ft)
Cornwall	10,296	710,424	140,025	570,399
Bedfordshire	10,874	750,272	379,550	370,722
East Riding of Yorkshire	4,983	343,827	33,645	310,182
Huntingdonshire	5,264	363,182	57,197	305,985
East Devon	4,395	303,221	5,990	297,231
South Oxfordshire	4,769	329,027	35,262	293,765
South Derbyshire	4,923	339,653	73,749	265,904
Horsham	3,971	273,999	10,864	263,135
Northumberland	4,851	334,719	73,047	261,672
South Cambridgeshire	6,149	424,281	173,119	251,162
Herefordshire	3,718	256,542	19,451	237,091
Stratford-on-Avon	5,297	365,459	132,614	232,845
Wiltshire	9,625	664,125	442,399	221,726
South Gloucestershire	3,625	250,091	54,855	195,236
Shropshire	5,759	397,337	202,664	194,673
Vale of White Horse	3,927	270,963	79,739	191,224
Wychavon	3,938	271,722	103,655	168,067
West Oxfordshire	3,559	245,537	92,115	153,422
Aylesbury Vale	4,659	321,437	193,299	128,138
Cheshire East	5,363	370,013	286,057	83,956

Examining the current levels of warehouse availability in the top 20 local authorities, which are expected to see rural housing demand increase, shows that there is a shortfall of almost five million sq ft. In more urban and established warehouse markets, this shortfall would typically be addressed by increased levels of speculative development. However, in these 20 local authorities there is currently no warehouse space whatsoever under construction to add to the already limited supply.

64,732

homes built in rural areas last year

> Consumers living in more rural locations have long complained of a two-tier system where they are excluded from the benefits of next-day, or even same-day delivery options

The challenge of rural logistics

Increased delivery expectations of consumers

As online retail has grown over the last decade, so has the demand for warehouse space. Indeed, the average amount of space transacted per year has risen from 16 million sq ft in 2009 to almost 28 million sq ft by the end of 2019. Research from warehouse developer Prologis states that for every additional £1 million spent online a further 770,000 sq ft of warehouse space is needed, which was highlighted in June 2020 as online retail reached 33% of all retail sales. If these levels continue next year an additional 14.9 million sq ft of space will be needed.

On the whole, supply chains have been configured to allow for the fast-paced delivery of products to where populations live and work, primarily around large cities. Indeed, prior to lockdown, data from Metapack, a provider of delivery management software to the logistics industry, showed that 70% of the parcels delivered in the UK went to just 7.5% of the country. Consumers living in more rural locations have long complained of a two-tier system where they are excluded from the benefits of next-day, or even same-day delivery options. This may well change as consumers with urban expectations move into rural locations.

At its heart, logistics is about efficiencies and a key problem with rural markets is that areas are more sparsely populated, meaning delivery routes are less efficient. However, lockdown has acted as a catalyst for change. Data from online parcel broker ParcelHero has shown that 91 local authorities in the UK have seen parcel deliveries rise by more than 100% over the past year. The response of many online retailers and delivery companies has been to recruit more staff and purchase more vehicles to meet this increased demand. Indeed Amazon, Hermes and DPD have announced plans to recruit 26,000 additional staff. However, as many depots reach capacity additional solutions will be needed, such as acquiring new and larger warehouses or other innovative solutions using pre-existing real estate.

Indeed in rural parts of the US delivery companies use a process called On Road Dynamic Transfer whereby larger vehicles drive to a rural location, unload the parcels on to smaller vehicles for onward delivery to the consumer. While this is not common in the UK yet, its implementation is a possibility should the demand for rural deliveries continue. In real estate terms many existing rural locations could be well suited to this, so long as access and security can be guaranteed.

Top 20 rural local authorities for parcel delivery increase

from June 2019 to June 2020

Local Authority	ONSI Classification	Percentage increase
Cynon Valley Assembly Const	Semi rural Welsh Valley	501% +
Barrow-in-Furness District	Urban with Significant Rural	501% +
Stroud District	Urban with Significant Rural	501% +
East Ayrshire	Urban with Significant Rural	250% – 500%
Blaenau Gwent Assembly Const	Semi rural Welsh Valley	250% – 500%
Wychavon District	Mainly Rural	250% – 500%
Vale of Clwyd Assembly Const	Mainly Rural	250% – 500%
Chiltern District	Urban with Significant Rural	250% – 500%
East Renfrewshire	Urban with Significant Rural	250% – 500%
Selby District	Mainly Rural	250% – 500%
Argyll and Bute	Mainly Rural	250% – 500%
Carmarthen West and South Pembrokeshire Assembly Const	Mainly Rural	250% – 500%
Boston District	Urban with Significant Rural	250% – 500%
Forest of Dean District	Mainly Rural	250% – 500%
Inverclyde	Mainly Rural	250% – 500%
Waverley District	Largely Rural	250% – 500%
Hart District	Urban with Significant Rural	100% – 249.9%
Neath Assembly Const	Urban with Significant Rural	100% – 249.9%
Tandridge District	Urban with Significant Rural	100% – 249.9%
Stafford District	Urban with Significant Rural	100% – 249.9%

Source ParcelHero

WHAT IS THE IMPACT FOR RURAL LAND OWNERS?

Our calculations suggest a potential 24.6m sq ft of additional warehouse space are needed in rural areas, which, assuming industry standard plot ratios, would mean 1,230 acres of land is required. From a logistics perspective the most preferable option is always to take facilities that are designed for the use intended. This would, therefore, suggest that rural local authorities should be making preparations in their local plans to allow for the extension of existing industrial estates.

However, we have historically observed that in areas of high warehouse demand and extremely low supply potential occupiers are prepared to make compromises to their operational requirements. This has been shown clearly in London where industrial vacancy rates have plummeted to around 2% and companies such as DPD and Amazon have taken underground car parks or converted retail warehousing to meet their needs.

So, where operational requirements cannot be met through traditional means what options do rural landowners have to diversify to meet that need? The first consideration is what land can be brought forward for the development of modern warehouse facilities. In this instance, connectivity to the wider road network is key. Repurposing existing structures should also be examined when suitable land is not available. Given their height and flooring, grain stores would be the most preferable option, followed by secure yard space and, lastly, the reuse of dairy buildings. Given the size and use of these buildings the exception of requiring a commercial EPC may make this an attractive option.

The remainder of this publication examines these options in greater detail.

£548m

This is the net investment in farm buildings in England during 2018-19; investment in machinery was 164% higher

Are they fit for purpose?

The size and height of many agricultural buildings are ill-suited to modern needs

Some of the largest structures in rural areas are agricultural buildings, so how much potential is there for some of them to be re-purposed for logistics uses?

Agricultural subsidies will be phased out across the UK, squeezing the finances of farm businesses and challenging the industry to improve its efficiency. In England, Defra has even acknowledged that its intention is to encourage structural change, which is likely to lead to there being fewer but larger farm businesses. In due course farmers in Scotland, Wales and Northern Ireland are likely to experience similar pressures. This could have consequences for the type and size of buildings needed for agricultural use.

Increasing farm size to benefit from economies of scale has long been a strategy and the average farm size in the UK has grown by 17% since 2005. However, these statistics do not reflect the fact that due to joint ventures and contract farming agreements agri-businesses are performing field operations over multiple holdings and as a result much larger areas than Defra's data suggests. For example, arable joint ventures average 1,600 hectares but will each be comprised of a number of smaller member businesses.

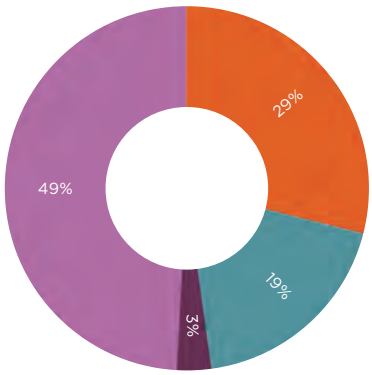
Joining forces with a neighbour or entering into a contract farming agreement is a proven way to cut fixed costs and increase profitability. However, the ageing infrastructure found on many farms can be a barrier to improving productivity. Expanding farmers can find that they accumulate a portfolio of buildings that are no longer fit for purpose. A 2006 study by EFFP found that up to a third of on-farm grain storage in England was more than 30 years old. Fourteen years on, and with limited investment in farm buildings, a significant proportion of on-farm grain storage is now over 44 years old. We estimate that this could represent a floor area of over 25 million sq ft.

The size and particularly the height of many older farm buildings are ill-suited to larger modern farm machinery, while the capacity of fixed grain handling equipment such as dryers and conveyors cannot meet the demands placed on them by today's largest combine harvesters. These steel portal frame buildings may still be structurally sound, but they have become operationally obsolete – a situation exacerbated by a taxation policy that encourages investment in higher output agricultural machinery more than farm buildings. During 2018-19 net investment in farm buildings was £548 million in England, whereas investment in machinery was 164% higher.

To increase efficiency, businesses could consider consolidating their storage capacity in a modern, efficient, centralised grain storage site or buying storage space within a cooperative central store. Both solutions would also allow the business to access more energy-efficient grain drying equipment. As the focus on achieving net zero increases, farms will come under pressure to ensure their grain is dried as efficiently as possible.

Another reason to invest in new or cooperative storage is to improve food safety. The argument that the UK's high food safety standards need to be upheld underpins calls for farmers to benefit from a degree of protection from imports. However, there are food safety standards that arguably should be tightened to strengthen this case. The flexibility to store food crops in temporary stores until 31 October each year is one example. In a temporary store, grain is likely to be accessible to birds and rodents and the risk of contamination by fungi, insects or mites is higher too as it cannot be cooled and ventilated to the standard possible in a fully assured store.

Net capital expenditure and investments



Land	£842,516,653
Buildings	£548,202,709
Improvements (drainage etc)	£95,619,422
Machinery, glasshouse and permanent crops	£1,448,981,167
Total	**£2,946,197,458**

Source Defra Farm Business Survey

STRUCTURES AND BUILDINGS ALLOWANCE

The incentives for investing in new agricultural buildings are currently the strongest they have been since April 2009. In the Autumn Budget of 2018 the Structures and Buildings Allowance was announced. This tax relief allows farmers to offset 2% of the construction, renovation, repair and conversion costs of farm buildings against their taxes each year for a period of 50 years. The 2020 Budget improved the relief, increasing the allowance to 3%, which cuts the "payback period" to 33 and one third years. It can be used in combination with the Annual Investment Allowance (currently £1 million) that covers plant and machinery, such as grain handling and drying equipment, and allows the full value of qualifying plant and machinery to be written off against profits in the year in which the expenditure is incurred.

The Structures and Buildings Allowance is not specific to agriculture, so it is available for the construction and conversion costs of commercial buildings too.

70%

Data shows that 70% of the parcels delivered in the UK went to just 7.5% of the country

A commercial opportunity?

Obsolete farm buildings could be the answer to the demand for rural logistics space

With demand for rural logistics space projected to increase, this market could provide an opportunity for farmers to secure commercial tenants for those buildings that are no longer suited to the demands of modern agriculture. This additional capital receipt or income stream would then help farmers to build a business case for investing in new agricultural buildings or alternative storage arrangements for their farms.

Farmers have the right to change the use of up to 5,382 sq ft of agricultural buildings to a flexible commercial use under Class R permitted development rights. This is subject to a number of criteria and exclusions. The commercial uses allowed range from offices to hotels, and include storage and distribution (Class B8). A logistics unit is likely to exceed 1,615 sq ft so an application would need to be made to the local planning authority to see whether prior approval would be required for the following aspects of the development:

- Transport and highways impacts
- Noise impacts
- Contamination risks on the site
- Flooding risks on the site.

Class R permitted development rights allow for the change of use of the building only, any external alterations require a separate planning application. If the building is not suitable for change of use, redevelopment of the site would be necessary and requires a full planning application. Applicants would need to consider the impact of the new use when making their case. For a logistics use considerations would include extended hours of site operation and higher traffic volumes.

“Farmers have the right to change the use of up to 5,382 sq ft of agricultural buildings to a flexible commercial use under Class R permitted development rights”

> **Repurposing the existing structure would require the lowest level of investment – it could be leased to provide a base for transferring goods from a larger vehicle to smaller vehicles for final delivery**

Taking sites forward

Options vary according to appetite for investment

A range of options are available for taking forward a potential site or conversion opportunity. Depending upon the location and the objectives of the farm or estate, sites can be sold or retained as an investment.

Repurposing the existing structure would require the lowest level of investment – it could be leased to provide a base for transferring goods from a larger vehicle to smaller vehicles for final delivery. Alternatively, the land could be brought forward for development and either offered for sale or developed through a joint venture to access the expertise and possibly capital from a specialist in the sector.

This could potentially involve working with a developer to construct small units, or directly with an end-user to deliver a building tailored to their specification. As well as higher returns, higher specification units can have stronger tenant retention, because once the tenant has fitted out and built their distribution network around the site changing location becomes risky and costly.

5m

sq ft shortfall of warehouse space available in top 20 rural growth locations

RE-USE OF DAIRY BUILDINGS

Each week five dairy farmers typically exit the dairy industry in Great Britain. Could converting the cubicle shed into a warehouse unit be a viable option? A 60 cow cubicle shed is around 5,000 sq ft, which is the size in demand from "last mile" delivery companies, and permitted development rights are available for a conversion.Significant works will be required, particularly to the floor of the unit, but this option could be worth examining when the supply of traditional warehouse space is low, the demand is high and the site is well connected to the wider road network.

Mark Waugh / Alamy

CONCLUSIONS

The onset of Covid-19 has dramatically altered the geography of the UK online retail supply chain and, while many delivery networks have coped admirably with the increased demand, deeper strategic thinking is required if rural populations start to rise and delivery expectations also change.

While we have yet to see a dramatic change in urban/rural migration patterns, we have assumed there will be a 10% rise in rural house building in the next five years, which will result in an additional 24.6 million sq ft of good quality warehouse space needed in rural locations. Based upon our calculations for the top 20 rural locations for household growth there is a five million sq ft shortfall of warehouse space available.

This presents a diversification opportunity for landowners who can deliver new buildings in appropriate locations or indeed re-purpose existing buildings that are no longer required for agricultural purposes.

10%

assumed rise in rural house building in the next five years

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We're a dedicated team with an unrivalled reputation for producing well-informed and accurate analysis, research and commentary across all sectors of the UK property market.
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