The Reimagined Village



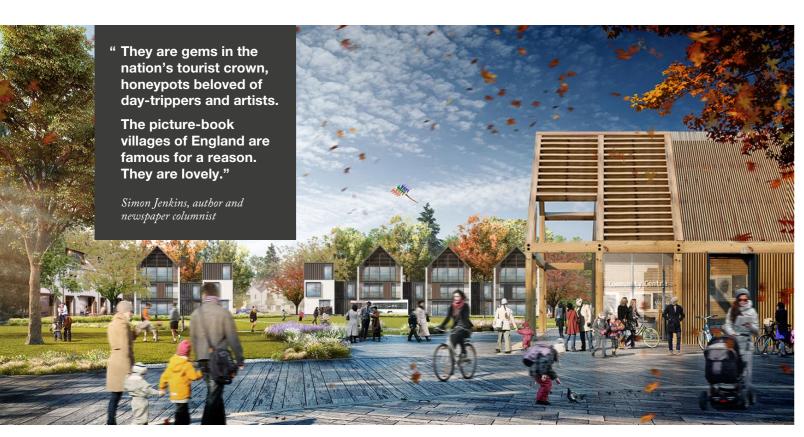
Villages and the need for housing

In the last decade, fewer homes have been delivered in the UK than in any period since the Second World War¹.

The country is currently facing the issue of accounting for consecutively missed housing targets while hitting the extremely challenging ones that lay right ahead, all amid uncertain and undersupplied market conditions, the need to create great places for people to live (as emphasised by the government's National Design Guide)², the mounting pressure of the climate emergency and, of course, the aftermath of the COVID-19 global pandemic.

Whilst appreciating that there are a number of ways in which to deliver new housing, Broadway Malyan believes that, if reimagined, new village developments could provide the impetus needed to regain momentum. By investing in them, and thinking about them differently, we could also grasp the opportunity to change mainstream perceptions of villages into something better suited to the needs of next generation communities and our future way of life.

Our report sets out what we believe will be the key components of a reimagined village of the future. We aim to start a national conversation with stakeholders from a broad range of backgrounds about the opportunities and challenges of realising such a vision.



Housing in numbers

Estimates from the Centre for Policy Studies, released in 2019, show that new build housing completions since the year 2010 averaged around 130,000 per year – below the 147,000 annual average in the 2000s, the 150,000 homes per year delivered in the 1990s, and less than half the output of the 1960s and 1970s.

While the government announced plans to be on track to deliver a mean of 300,000 net additional homes per year by the end of 2022, the falling rate of recent housing completions coupled with population growth has meant that since the 2010s, the ratio of new homes built per head has shifted from 1:14 (the ratio of the 1960s), to 1:43³. This has all occurred in spite of a range of government-backed measures to encourage housebuilding.

The delivery of much needed new housing can take many forms including urban infill and urban extensions, but neither are without their problems (including slower build out rates for the former and the potential impact on adjoining communities for the latter). New free-standing villages can, therefore, become a key part of a portfolio of solutions.

The 2019 National Planning Policy Framework states that the supply of large numbers of new homes is likely to be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages, provided they are well-located and designed, and supported by sufficient infrastructure⁴. The government has backed this up with plans and support for a number of new garden villages across the country.

The concept of new free-standing villages in delivering housing is also more relevant than ever following the COVID-19 crisis. The public health benefits of moving away from the model of densely packed cities to new, well connected and low-medium density villages could be decisive in how we plan for future housing growth.

We, at Broadway Malyan, therefore believe that new villages are a very worthwhile pursuit within our efforts to resolve the housing crisis. However, they must be reimagined and made fit for future generations. Average UK annual new build housing completions









Redefining village perceptions

Villages are very much part of the English landscape, tradition and history. Many of them emerged from agriculture, while others developed around industries such as mining, fishing and small scale manufacturing.

Today, villages are often seen as idyllic places to live – a combination of attractive surrounding countryside, quaint high streets filled with independent shops, picturesque historic buildings and a strong sense of community often give them a unique sense of place, character and identity.

The draw of village life became even more apparent during 2020, with Right Move reporting a 126% rise in people considering moving to a village compared to a rise of 68% searching for properties in towns⁵.

However, existing villages do have their drawbacks:

- Villages are the most expensive places to live in the UK after London
- Employment in villages has fallen over recent years as their local industries have declined
- Many village schools have shut due to lack of demand (as residents tend to be of an older age demographic)
- More UK shops and services are struggling with rising costs and changes in consumer spending habits – a trend that affects villages as well as towns and cities
- Slow internet connectivity of rural villages is a limiting factor of economic and social sustainability, as well as a hindrance to the UK's position in the global digital economy⁶
- Many villages lack the critical mass needed to support other key services such as healthcare
- As a result of the above, village residents are highly reliant on cars to access amenities, services and employment elsewhere, resulting in unsustainable and sometimes dormitory settlements.

If new villages are to become an effective antidote to the housing crisis, they need to be reimagined to better accommodate the needs of modern society – both now and into the future – all while retaining the identity and charm that makes them an attractive prospect, and an integral part of Britain's cultural fabric.

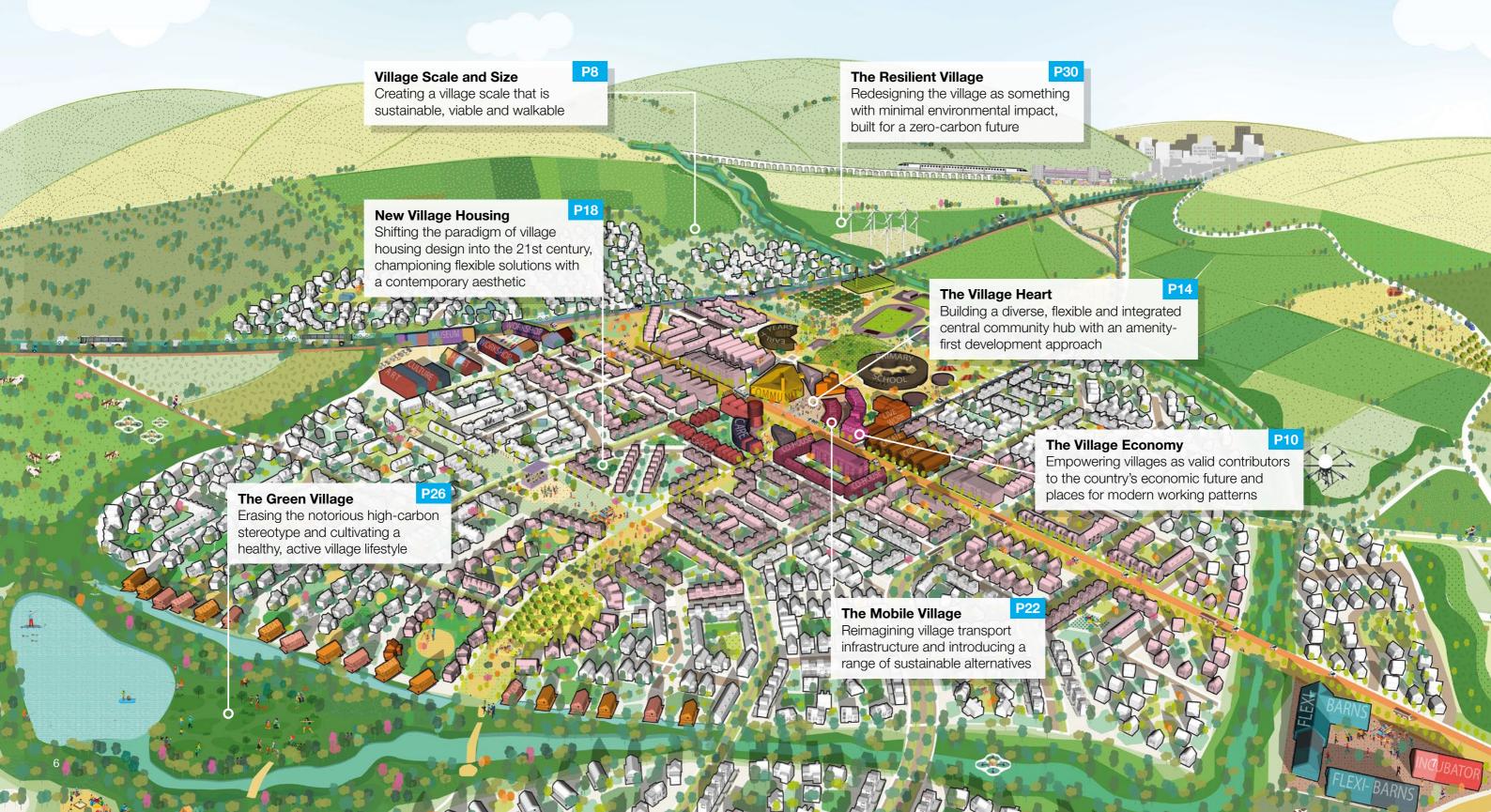


Introducing the reimagined village

Our vision is not to reinvent the notion of village appeal, but to expand it to broader target groups, making it attractive and ensuring it has something to offer to everyone irrespective of age, background, income, location, or career aspirations.

The future village must be a valid economic force in its own right – **connected**, **smart**, and **green**, housing a diverse and healthy community of residents and businesses in a unique, attractive and genuinely sustainable setting.

The remainder of this report explores a number of key components that should be considered when designing the village of the future.



Village scale and size

Our starting point for the reimagined village is its scale and size.

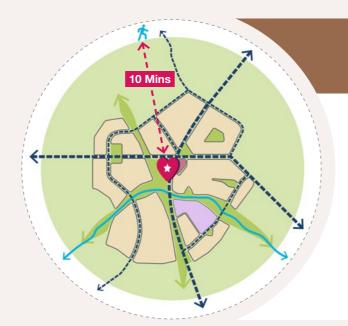
In our view the village needs to be a place that has a real sense of community with its centre easily accessible by both foot and cycle. It also needs to have enough population to support its local facilities and ensure that it remains viable.

In June 2018 the House of Commons Library published its new classifications system for cities, towns and villages. Existing villages were defined as settlements with a population of up to 7,500 people⁷. The Office for National Statistics (ONS) states that the average household size contains 2.4 people⁸; suggesting that an existing village could contain just over 3,000 homes (3,125).

By our calculation a new village should have, at the very least, 1,500 homes. This is the minimum capacity normally required to sustain a two form entry primary school – one of the facilities vital to creating a self-sufficient settlement, as opposed to a dormitory village.

Looking forward, we believe that a village fit for the 21st century and beyond should have the flexibility to grow to up to 4,000 homes, thus creating a sustainable settlement that is capable of supporting: a health centre; primary school(s); a community centre; cafes; and local shops.

At around 4,000 homes, there is the potential to support a secondary school (although this may also serve a wider catchment).





Small Village c.1,500 homes

- · Net residential density: 40 dph
- Multifunctional green space
- **Primary school** x1 two form entry
- Village centre to potentially include shops and services, community store/cafe, co-work business hub, flexible buildings for community uses and events, nursery, mobility hub and public spaces.





Larger Village c.3,750 homes

- · Net residential density: 40 dph
- Multifunctional green space
- **Primary schools** x1 two form entry and x1 three form entry
- Village centre to potentially include shops and services, community store/cafe, co-work business hub, flexible buildings for community uses and events, nursery, mobility hub and public spaces.
- Logistics use (potential Amazon Delivery Station)





Larger Village c.4,000 homes

- · Net residential density: 45 dph
- Multifunctional green space
- **Primary schools** x1 two form entry and x1 three form entry
- Secondary school
- Village centre to potentially include shops and services, community store/cafe, co-work business hub, flexible buildings for community uses and events, nursery, mobility hub and public spaces.
- Logistics use (potential Amazon Delivery Station)

The diagrams (shown left) show how a village of a scale between 1,500 - 4,000 homes can create a place with sensible densities and green open spaces all broadly within a 10 minute walk of its centre, therefore, encouraging walking and cycling and discouraging other less sustainable modes of travel for day to day trips.

We believe that expanding a village significantly beyond this size starts to break up the key principles outlined above and creates something more akin to a small town. In our view, the creation of new towns leads to other issues such as greater land assembly and longer build out times. Furthermore, unlike the New Towns programme that followed the Second World War - we are not seeking to decant large numbers of the population away from cities. Instead, the reimagined village model is more localised - it serves local housing needs and is more attractive to a UK population who, on average, tend to move within 9 miles of their existing home⁹.

Key Principles



Ensure that any new village has at least **1,500 new homes**



Ensure, at the very least, that **primary school education** is provided within the village



Work on the basis of the village centre being, where possible, within a **10 minute walk** of all homes



The village economy

Most UK villages were born out of industry - from fishing villages on the Cornish coast to the mining villages of northern England. However, recent decades have seen major changes in the economic geography of the UK. As jobs in traditional industries have fallen, growing numbers of residents (particularly younger people) have moved to larger towns and cities, enticed by better educational opportunities and higher-paying,

this impact has been exacerbated by issues such as unaffordable house prices, changes in shopping patterns, and centralisation of services, which for young people from village and small town settlements.

So, how can we reimagine village economies to effectively support the next generation of workers?

knowledge-based careers. Villages have lost out as a result, and continue to increase the "push-factor"

Accommodating new ways of working

There are some notable changes emerging in the way we work.

Flexible working practices are becoming increasingly expected among those in salaried roles. Indeed, a recent IWC survey showed that 83% of people would turn down a job that did not offer flexible working 10.

Flexible and remote working took on even more importance during the COVID-19 global pandemic with a significant proportion of employees transitioning to home working. This has resulted in those people experiencing working days without the time hungry commute and many have now begun to question the logic in travelling long distances every day to do work that could just as easily be done from home.

A further change relates to the rise in the numbers of freelancers, self-starters and "gig" workers. The strong growth in this sector has been one of the defining characteristics of the UK's recovery from the last financial crisis in 2008 and the Office for National Statistics has predicted that within the next decade more than half of the UK's population will be self-employed¹¹.

Although the millennial generation has driven significant growth in the freelance sector, it is also those over the age of 55 - a cohort who are forecast to be the fastest growing in the UK workforce¹² over the next 20 years - who are embracing this. Many people of this age are now wishing to prolong their careers using flexible and digitally enabled working practices in the face of increasing retirement ages.

The reimagined village can embrace these changes in working practices and lifestyles providing an environment fit for future needs by offering opportunities for home working, flexible work spaces and a solid infrastructure for digital communications.

Co-working spaces

While home working is on the rise, many gig workers and start-ups prefer the option of renting space in affordable, flexible working environments.

The number of co-working spaces worldwide is projected to reach nearly 26,000 by 2022, representing a 42% increase from 201913. While some self-starters feel isolated and unmotivated when working consistently from home, co-working environments provide the opportunity to meet other entrepreneurial spirits from different industries, increasing motivation and facilitating the exchange of knowledge.





The Rural Business Hub in the village of Hurstbourne Tarrant is an excellent example of such an operation. Not only does it provide a flexible range of regular desks, hot desks and meeting rooms, it also offers a range of workshops and seminars to support local businesses including: book keeping; social media; and copy writing.

The reimagined village could provide modern flexible co-working space and facilities which could then empower important entrepreneurial businesses to prosper and grow, thereby strengthening the local village economy from the inside.

HATCH

Contribution by Oliver Chapman, Hatch

Digital connectivity

Villages are commonly associated with low quality communications. Currently, the availability of fast broadband connections in rural areas is significantly lower than that of its urban neighbours, with only 81% of premises in villages having access to superfast speeds (30 mbps or above), compared to 96-98% in towns and cities. One in ten village premises are even below the government's planned Universal Service Obligation (USO) for everyone to have speeds of at least 10mbps¹⁴.

These numbers will need to be vastly improved if villages are to become a valid contributor to the UK economy and an enabler of the digital workforce. To ensure new villages are built with sufficient communications infrastructure already in place, such issues must be addressed at the outset.

Physical connectivity

The reimagined village can offer an alternative to city centre working, potentially offering new businesses cheaper but equally well connected (digitally) workspace as well as relieving the commute.

However, physical connectivity and the improvement of new village transit infrastructure should not be ignored. No matter what the future holds, we can say with some certainty that cities will continue to be key drivers of future growth. Villages can, therefore, safeguard their own sustainability by focusing on improved connectivity and transport links to neighbouring cities. For more discussion on how the villages of tomorrow can leverage the emerging trends set to reshape modern mobility and transport, see 'The Mobile Village' section of this report on page 22.







Diversity and flexibility

The reimagined village should also enable a more diverse economy. This will be realised by jobs in local schools, shops and other proximity services. An aging population (by 2040 nearly 1 in 7 people is projected to be over the age of 75)¹⁵ will also increase the requirement for jobs in local care - a further sector that the village can cater for.

Logistics is another growing industry and the reimagined village could provide opportunities for the 'last mile' delivery - such as Amazon Delivery Stations serving the village and surrounding areas.

The village could also offer flexible workshop space for local trades and training initiatives. Indeed, flexible space is key and in order to maintain a strong economic footing, reimagined villages will also need to be capable of responding to the unforeseen as and when it unfolds. It is estimated that 65% of today's primary school pupils will go on to have jobs that do not even exist yet¹⁶. With this in mind, futureproofed planning and design that can adapt to and accommodate change will be vital to reimagined village developments.

Key Principles



Plan for **co-working spaces** to accommodate flexible working within the village itself



Empower remote workers through high-quality digital connectivity



Create and improve sustainable transport links to neighbouring cities and towns



Design to accommodate future **unforeseen** market transformations



The village heart

The focal point of any village is its centre or 'heart'. Traditionally, this would come in the form of something physical, such as a village green or church.

Over time, village centres have expanded to include pubs, shops, community halls and post offices. In recent years there have been a number of socio economic challenges that have increasingly rendered traditional village staples unviable. However, since the beginning of the COVID-19 pandemic and the enforcement of several lockdowns, shopping locally has had a mini revival - largely due to people not wanting

to travel to larger centres and the huge increase in people working from home.

These behaviors are potentially set to continue with a study by BBC News and Kings College (conducted by Ipsos MORI) showing that 31% of people anticipate shopping locally post pandemic. It also showed that 32% of people surveyed intend to work from home more, creating a whole new customer base for shops, cafes and community facilities in smaller towns and villages.

This could be a real boost to villages, both existing and in the future.



Starting off

In terms of the reimagined village's development lifecycle, the key is to develop a village heart early on to prevent unsustainable travel habits, by residents, to amenities outside of the village.

Pop-up features, temporary facilities and meanwhile building uses should be set up from day one in order to create an immediate community focal point. These could then go on to become permanent features and even key components of the area's identity if popular and successful enough.

More likely, they could move and change as the village grows, giving way to the creation of a new, permanent centre to base village life around.



Flexible, co-located facilities

The reimagined village centre must be more than just a string of single use buildings, as villages have traditionally had in the past. We are of the belief that flexible, multifunctional spaces and buildings are developed to serve as a community hub.

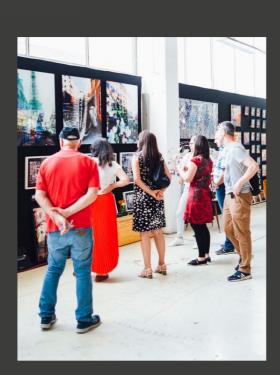
Meeting space, pop-up exhibitions, cafés, travelling museums, leisure and health activities could all be part of an ongoing programme that consistently maximises usage of the spaces.

Having a range of functions in a limited number of buildings or spaces also allows for some positive synergies; for example, combining a café and cycle repair shop for people to have a coffee whilst their bike is fixed.



A flexible, multi-use community complex

This multifunctional community concept comprises a series of buildings covering a platform and courtyard. A large hall contains double-height interior space that could serve a variety of functions for all ages and interests, such as a performance theatre, art gallery, education centre or polling station. Adjoining smaller buildings could house social amenities such as a café, crèche or co-working space, while the courtyard provides an intimate area for quiet and contemplative activity, such as reading or listening to music.



Introducing community stores

Whilst bricks and mortar retail will still be required to serve day-to-day needs, reimagined village shops will have to supersede the uneconomic rural business models of the past. Traditionally, village stores were run by families and couples working astronomical hours to keep the business afloat.

We think that community stores – i.e. businesses that trade primarily for the community's benefit, and that are run for local people, by local people (usually on a voluntary basis) and with profits going back into the community – could prove a better alternative.

The success rate of community stores is 95%, which is commendable when one considers the average small business success rate of 46%¹⁷. Such stores are also a great way to bring the residents of a new village together, uniting people of all demographics and creating a real sense of community from the outset.

Community stores are also versatile, capable of hosting a rich mix of uses, without the pressure to remain profitable amid wider economic difficulties.

The community store could include a farm shop – a growing rural enterprise, wherein numbers of stores has tripled over the last 15 years. Farm stores respond to a number of growing 21st century ideals, such as the increasing desire to eat more organic, sustainably-sourced food, and to support the local economy and independent farming efforts.

Key Principles



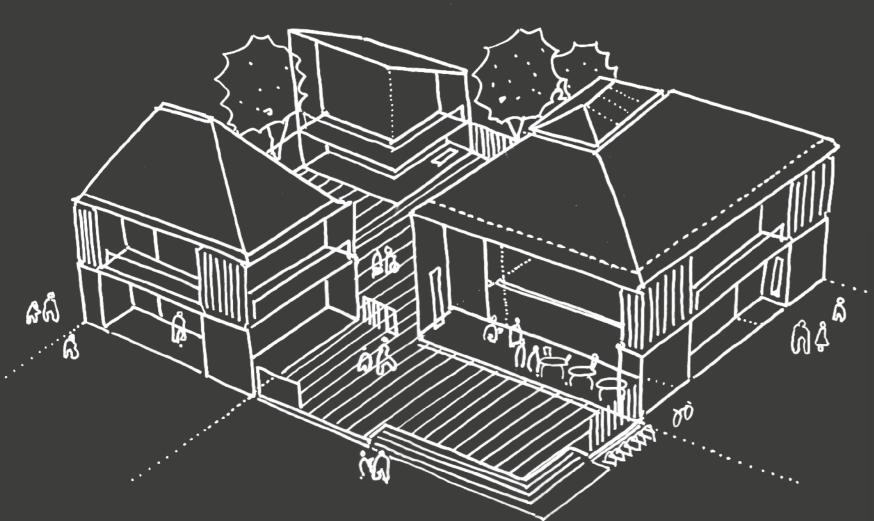
Consider "meanwhile" uses at the outset



Provide flexible, multi-functional buildings and spaces



Create opportunities for a **community-run** shop



New village housing

If most people were asked to visualise typical village housing, they might think of tied cottages with thatched roofs, or grand country houses.

Generally low rise in form and architecturally influenced by the village's original function and age, most village housing is still seen as quaint, attractive and characterful. However, high property prices mean that villages remain unaffordable to many and their low-density design is at odds with the UK's current housing goals. Today's villages are also experiencing growing levels of reported social isolation.

By reimagining the village, we have the opportunity to create something new – more suited to future living and more aligned with modern methods of construction, potentially offering affordable, flexible and sustainable typologies that appeal to a broader mix of people and actively facilitate social integration¹⁸.

Village housing considerations

Affordability

The reimagined village should look to supply housing across all tenures, with a balanced mix of affordable, private rental, shared ownership and privately owned homes to attract residents from all walks of life. As well as housing developers, there is an opportunity for local authorities and registered social landlords to lead development. The reimagined village also offers opportunities for self-build housing.

Social interaction for all ages

Housing should be geared around the creation of communities, with a mixture of housing appropriate for different demographics – why not have young professionals live next door to retirees?

Or even share the same communal space?

Co-living is a model that is proving successful in cities and towns and could be transferred to the village. The sense of community and connectedness it can bring is also vital to mental wellbeing. Designing spaces that avoid isolation and promote a variety of modes and reasons to interact is a surefire way to improve the health and happiness of village residents.

Adaptable homes for intergenerational living

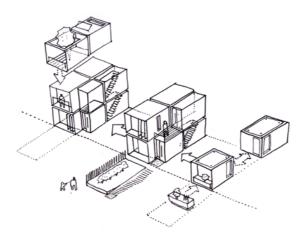
ONS data shows that in the 20-34 year-old category, one in three men and one in five women live with their parents. With people living at home for longer, homes within the reimagined village should be adaptable and offer areas of privacy, such as separate living areas or entrances. Longer term, this adaptability may be required as older parents move back in with their children.

Innovative approaches to housing

Flexible density and buildings

The reimagined village should not shy away from increased density. Indeed, it needs to cater for a mixed, sociable community including co-living, care homes and apartments for young and old – not just larger family homes. A planning approach allowing flexibility to build up rather than just out could allow for densification and a far more sustainable approach for village growth.

Favouring modern methods of construction could also offer significant gains in residential flexibility and accommodate the changing needs of village residents.



Reduced residential parking

A combination of reduced private car ownership, a more active lifestyle of walking and cycling and a future that may involve autonomous vehicles, could help reduce the need for large amounts of surface parking. This space could, instead, be repurposed for better, more worthwhile uses.

The removal of parking spaces, whether on residential roads or on plot, could also have an impact on the design of streets as well as future housing.



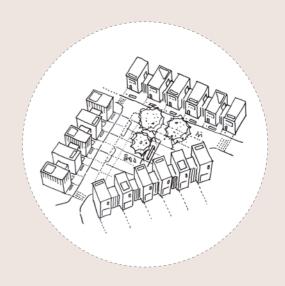
The home workspace

The rise of remote, home working was referred to earlier in this report and it will be important that future housing in the reimagined village facilitates this increasing trend. This could either be a dedicated space within the home itself (with space provided in place of garages) or space within the curtilage of the property, with the necessary infrastructure (power and internet) connections in place to allow an external workspace pod to be installed if required.

Housing typologies

With the development of the future village comes an opportunity to challenge and rethink the norms of village architectural design. This is a chance to cast off the outdated perception of old and look to showcase a high-quality, contemporary design, purpose-built for the 21st century and beyond.

The options are numerous, but we have explored two potential approaches.



1. The Square

By taking the established single village green model and extending it into multiple iterations of residential squares and spaces to be used throughout the village, this design approach will help foster a sense of community. Having several squares in close proximity creates a number of nearby pockets of space, aiding social interaction and establishing a sense of openness.



2. The Terrace of the Future

The terrace typology of the Victorian era still features prominently across the UK. Here, we have reinterpreted it for the future. A series of high quality, modular, premanufactured units would create a terrace system that can be added to or subtracted from depending on changing lifestyle circumstances. The primary elements (bedroom and living spaces, entrance and stair modules) are designed for easy transportation via truck and highway. Residents can order garden components to sprinkle their own touch of character, while roof terraces provide a secluded wellbeing space.

Key Principles



Vary tenures and typologies to establish a diverse, sociable and integrated community



Embrace **flexible** density and buildings



Explore striking but sustainable new housing design



The mobile village

Currently, village residents tend to be highly reliant on cars to provide access to employment, services and education.

According to the National Infrastructure Commission (NIC) "Transport is a particular challenge, with public transport services to existing and new villages often being poor (and, without public subsidy, often unviable). This is due to the inherent inefficiency of running public transport services to a disparate population and the vicious circle of low patronage, leading to reduction in services which compounds lack of use¹⁹."

However, by leveraging benefits of new technology and adopting a fresh design approach, reimagined villages could reduce their historic reliance on private vehicles and become the forerunner for mobility innovations.

Within the broader area of mobility, **three transformative trends** have begun to emerge across the UK. These are:



Shared mobility



Autonomous vehicles



Electric vehicles

Shared mobility

A shift to shared vehicles - such as bike share, e-scooter share, car clubs and on-demand services - has the potential to provide numerous benefits over private vehicle ownership.

Shared transport can make villages more accessible with less dependency on private and single occupancy vehicles. Meanwhile, the technologies that come with these innovations provide users with greater flexibility and real-time data to inform their travel decisions, and also help operators to manage transport services more effectively.

When compared to previous generations, it has been shown that men and women aged 17-34 are much less wedded to the car, with the amount of miles travelled and numbers of car or even driving licence ownership all seeing a significant decrease²⁰. By accommodating this trend, and aiming to equal or even outdo the efforts of towns and cities in shared transport provision, villages could increase their appeal to this younger age demographic.

Reducing the need for private vehicles could also allow for an emphasis on garages and parking in new village housing design to be exchanged for additional living space, home offices or gardens.

In terms of transport between villages and their neighbouring towns and cities, lots of village residents currently struggle to overcome the 'last mile' between their home and their nearest public transport hub. On-demand services such as ArrivaClick are proving effective in closing this gap. Following a partnership with the landowner, the Drummond Estate, ArrivaClick introduced an on-demand service in April 2019 to the residents of the new large scale mixed use community at New Lubbesthorpe in Leicester.







Autonomous vehicles

Autonomous vehicles (AVs) are currently being trialled as logistics and public transport solutions and could form a major component of what constitutes mobility in the reimagined village.

The aim of autonomous vehicles is to reduce congestion on roads, provide more responsive public transport and limit environmental impact. While there is no specific timeframe for when AVs will be fully introduced to the UK road networks, plans for new villages should keep them in mind.

The initial application of AVs within a village is most feasibly a direct connection to a neighbouring urban area or as a loop between residential areas, inter-city transport links and the heart of the village.

Electric vehicles

With over 500,000 plug-in vehicles in the UK, the electrification of the fleet is well underway.

Although private ownership of Electric Vehicles (EVs) is not the idealised scenario, and policy should be used to encourage a shift towards shared electromobility, there will need to be a phased approach in which charge points are available for privately owned vehicles before the transition to shared mobility or autonomous vehicles is adopted as mainstream.

With the logistics sector and online retail expanding, companies such as Amazon are already planning to switch over to an electric delivery fleet.

Electrification offers further opportunities to encourage a shift to ebikes for medium distance or 'last mile' trips (such as to local transport hubs) when combined with enhanced dedicated cycle infrastructure. Examples of electrification include Co-wheels car club and Lime e-bike sharing.

Drone usage

Drones, either air or ground-based, should also be considered in the future village. Studies into the potential uses of drones have shown a range of functions, including:

- Logistics:
- e.g. certain mail and parcel deliveries (such as the autonomous delivery pods in Milton Keynes)
- Emergency services: e.g. delivering medical supplies
- Conservation activities: e.g. monitoring wildlife and green spaces

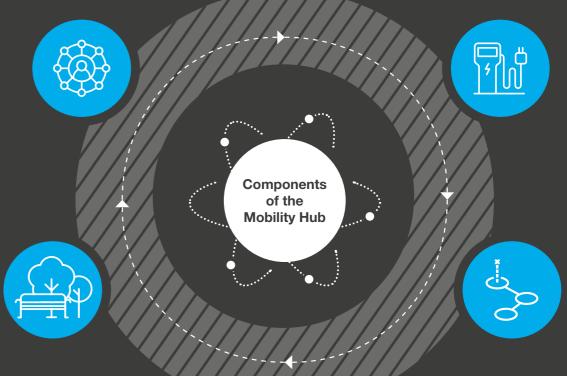
While there are still concerns around privacy, surveillance and safety, the UK has recently published new guidelines and legislation around drone usage.

Tech-spot

- WIFI & phone charging
- Digital displays boards (wayfinding, bus times & village events)

Charging / Repair

- EV car charging
- Electric bike charging
- Bike repair / cycle cafe



Improved Public Realm

- · Parklets and sitting areas
- Shelters
- Planting and artwork
- Refreshments
- Toilet facilities

Last Mile Delivery

- Community concierge
- Package delivery lockers
- Delivery drones

Mobility Modes

- Back to base car clubs
- Ride hailing / demand responsive mini bus stops
- Bike stands
- Shared e-cargo bikes
- E-bike/ bike share

Mobility hub

To help embrace, encourage and accommodate future transport innovations, the reimagined village should contain a mobility hub within its centre, serving as a focal point for the administration of the travel plan and the shared transport options within the scheme. In many ways, the mobility hub is a new way of creating transit orientated development.

Components of the mobility hub, as illustrated above, will help to establish equal access to transport services for residents, encourage more sustainable travel, create a sense of place for the village and improve accessibility to those with limited transport choice or no access to a car. They can also ensure that less area is consumed by parking, which would provide more space to be used for alternative means.

Key Principles



Embrace the concept of **shared mobility**



Plan for **electric** and **autonomous** vehicles



Design in a mobility hub

The green village







Green infrastructure is vital to places that bring delight to their residents and has been repeatedly proven to have a direct and positive impact on levels of health and general wellbeing (both physical and mental), as well as air quality, carbon emissions and biodiversity.

Many people move to villages to feel more connected to the outdoors. While new village developments should still strive to fulfil these desires, green space and infrastructure should not be added arbitrarily to simply conform to a traditional village stereotype or to just meet generic local planning standards.

In the reimagined village, access to more functional, purposeful and interesting spaces that raise happiness and community spirit while reducing environmental impact should be a key priority. Encouraging residents of the reimagined village to use their local greenspace, rather than travelling away from home would also improve community cohesion and identity.

Designing such an environment via green infrastructure to encourage social interaction from the outset can also be a key way of tackling the issues of isolation and loneliness in villages and creating community resilience, a condition that has become more prevalent during the recent global pandemic. The ability of communities to withstand external shocks and bounce back quickly from sudden environmental or economic changes is now absolutely essential. Never before has access to green and natural environments become so important to the wellbeing of so many.



Green spaces and connections

Neuroscientific research shows an "enriched" environment - one with multiple diverse elements of interest - can connect us with nature and prompt movement and engagement, therefore, keeping us happier and healthier. Our affinity with nature and other living beings is well known.

The economic benefits of green space and planting has recently been the source of several articles and reports, such as the Greenkeeper tool²¹, which uses the latest health research and economic valuation methods to quantify the social, economic and environmental benefits of green infrastructure.

Incorporating plants, trees and "wild" landscapes such as flower meadows into the reimagined village can reduce stress, blood pressure and heart rates, whilst also increasing productivity, creativity and overall wellbeing. It also improves air and water quality, cools the built environment and mitigates flooding.

The reimagined village can be created around a multitude of connected, green and blue landscape features of different scales ranging from pocket parks to meadows, from rain gardens to lakes and from orchards to woodlands. Street trees, green walls and green roofs can also play their part in the village's biophilic design. Development should be embedded in this green landscape.

Active design and connections

High quality public spaces are important, and the reimagined village should include flexible outdoor squares and plazas, particularly within the village heart, for community gatherings and events such as a farmer's market. Routes and paths within the reimagined village are of equal importance and should deliver diverse and safe connections for pedestrians and cyclists. Different people venture outdoors with different intentions, so the village should provide connections for all purposes, whether they are looking for a long and leisurely ramble through the surrounding countryside, a new running route with a trim trail, or a quick shortcut to the village centre, local children's play space or community sports pitches.



Playful design

Children are the future residents of the reimagined village and play is a very important part of a child's life. Appropriate play provision allows children to let off steam, build social relationships and challenge their own boundaries. Active play benefits physical health, improves mental health and develops resilience. Play is inherently linked to mobility; both as a means to enable access to play opportunities and as a form of play experience in itself. Walkability in particular is critical to children's experience of place as they grow up. Therefore, it is extremely important that the village offers a child friendly public realm and opportunities for active travel, tree planting, natural landscaping, generous footpaths and cycle lanes, pocket parks and play areas.



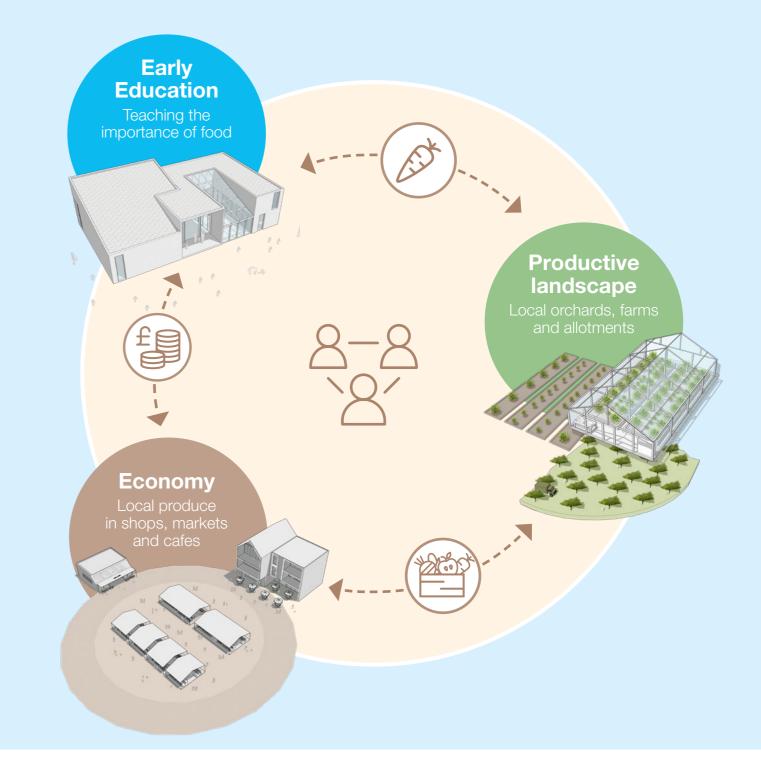




Local produce

Food production on a micro scale is extremely achievable in a village setting. Putting aside land and providing spaces for locals to produce and source their own food within the village carries a myriad of benefits. As well as increasing local food security and the accessibility of healthy living, spaces such as community orchards and allotments provide additional educational and local business opportunities and encourages social engagement by bringing the community together. These spaces also offer learning opportunities for families and people of all ages, as well as an incentive for young people to enrol in apprenticeships in such things as gardening, vegetable and fruit growing, beekeeping and horticulture.

While locally planted produce could help the local economy by providing organic goods to the farm shop or local café within the reimagined village, locally planted trees could form part of the landscaping strategy. This approach, one of the suggestions in the recent Living with Beauty Report by the Building Better, Building Beautiful Commission and the Planning White Paper, not only helps with the greening aesthetics of the village, but also provides spaces and shading that help to offset the embodied energy associated with building materials.



Futureproof the public realm

UK towns and cities are seeing increasing public demand for more advanced outdoor furniture features to make them more convenient, seamless and environmentally friendly, and there is no reason why villages can't aspire to do the same. Tables and benches that offer WiFi and mobile phone charging points, "Think Bins" that alert users when they are nearly full, pavement systems which harvest the kinetic energy of footsteps to power nearby streetlights – all of these are possible village additions to be explored and, where possible, designed in from the start. The key to implementing them successfully is to do so as part of a wider adaptability strategy, rather than a series of piecemeal developments.

Key Principles



Provide **routes and spaces**that bring safety, comfort and
enjoyment for a variety of purposes



Create opportunities for **local food sourcing**



 $\textbf{Futureproof} \ \text{the public realm}$



The resilient village

With buildings accounting for 40% 22 of emissions and the UK government now bound by law to reach net zero carbon by 2050, the villages of tomorrow will have to be designed and planned with climate resilience at front of mind in order to minimise their environmental impact and maximise their sustainability. Striving for Passivhaus standards will be essential as we continue to move away from cheap, non-renewable energy sources to electricity, and other greener premium sources.

Creating clean, climate-resilient homes and buildings

Adapting home and building designs in line with climate change is essential as periods of prolonged warm weather and intense rainfall continue to increase.

By employing a fabric-first approach, new buildings in the reimagined village can establish a self-sufficient ambient temperature, reducing the need for intensive heating and cooling systems. This would allow houses to align with the UK's net zero carbon targets from day one, and unlike existing urban areas, remove the need to retrofit existing buildings to achieve higher emissions standards which can be three to five times more costly.

CUNDALL

Contribution by Alan Fogarty, Cundalls

In the reimagined village, homes should be designed for natural ventilation, with good solar control to prevent overheating. Provision should also be made for the installation of ceiling fans so as summers become warmer, occupants have a sustainable, low-cost option for enhancing comfort.

Buildings can also be designed with whole life carbon materials in mind. Materials can be analysed, using smart technology in the supply chain to evaluate embodied carbon.

Another crucial consideration will be avoiding the urban island heat effect, which can be achieved by limiting hard landscaping around the reimagined village's buildings, and maximising the amount of reflective, light coloured surfaces.

Sustainable energy

The use of photovoltaics should be maximised and energy storage integrated into the development in order to serve the village's homes, businesses and transport network. All residual energy demand can come from a low-carbon grid.

The village's sustainable energy infrastructure should also include the use of ground and air source heat pumps. Hydrogen power could also be considered in the future, subject to availability, cost and technology.

Wastage and water

Waste should be minimised and zero waste sent to landfill throughout housing construction and operation. Furthermore, buildings could be designed for deconstruction, with their embedded materials considered as assets for future reuse.

A village-wide waste recycling program could also be implemented, with clearly identified waste streams.

Rainwater recycling could be used for everything from the village's landscape irrigation to washing vehicles, thereby conserving potable water during future droughts.

Sustainable Urban Drainage Systems (SUDS) in the form of permeable pavements, green roofs, rain gardens and landscaping could be used to mitigate flooding and clean the outflow from the site. Landscaping features such as swales can store, channel, and to an extent, filter the water to improve its quality.

Integrating the SUDS with amenity space throughout the village would also serve to provide a calming, natural environment that carries health benefits for both residents and local plant life.

Creating a circular community lifestyle for all

The reimagined village should facilitate and foster a culture of sustainability amongst its residents, and overall, encourage them to treat energy as an asset.

Hot water consumption should be reduced. Furthermore, there is the opportunity for sewer energy mining. Currently, water from washing machines, dish washers and showers, all of which can be at temperatures of between 20C to 40C, ends up being flushed into the sewers. An energy centre combined with a water treatment plant can recover this heat along with the water itself, greatly reducing the carbon emissions of a building.

The reimagined village could also serve to raise consciousness of environmentalism from an early age by having children learn in village schools designed and located to overlook and connect to the area's green landscape. Outdoor learning, perhaps by way of a school outdoor amphitheatre teaching space, could help the young appreciate the reimagined village's natural surroundings.

Other features, such as green roofs and living walls, can not only encourage younger people to appreciate, understand and care for their surroundings, but they can also enable the village's ecosystem to flourish.

Key Principles



Create fabric-first homes and buildings and utilise sustainable forms of energy



Embrace and nurture the local village ecology



Encourage hyper-local, reuse and recycling as a community lifestyle



14%

of greenhouse gases come from energy used in homes ²³



24%

reduction in CO2 from homes needed by 2030 (from 1990 level) 24



Designing in sustainable measures in new build homes is just

20%

of the cost compared to retrofitting existing 25

The average eco-home cuts energy bills by



About half of household waste is reusable, but only

17%

is recycled or composted ²⁷



Discussions and focus groups

In producing this report, we have also spoken to a number of people and organisations in the built environment profession. These include Homes England, house builders, strategic land promoters, land agents, economic partnerships, public bodies and political figures. We have also spoken to operators of facilities such as co-work spaces and experts in home working. In addition to this, we also held two focus groups with members of the public to see what they thought of the ideas and themes discussed in this report.

Extracts of the focus group discussions are set out here. These are largely written verbatim.



On internet connectivity & technology...

I think it's vitally important that you're kind of reassured that if you're making that leap out of a city into a rural setting that you have the facilities to be able to work from home - like fast broadband speed for example.

Homeowner, Leith

City folks, moving into villages will require a shift in technology. People like me would definitely want their homes to be equipped with smart technology.

Renter, London

On new forms of mobility such as on demand buses and shared travel...

I'm currently in the east of London, Essex border and I would move out if the facilities were there, especially the bus services and if it was a lot better to get from A to B. I contemplated this prior to Covid, but I think the only drawback was the communications. So, if those transport facilities were available, I would definitely consider it and I think others would do the same as well.

Living in family home, Essex



On why you may leave a city or town and move to a village...

You've got pollution [in cities], you've got bringing up children, you've got remote working, working from home, the kind of work/life balance and perhaps there is a greater appreciation now (since COVID-19) of the kind of outdoorsy life style.

Homeowner, Buxton



On a sense of community spirit and belonging...

I actually do think that part of the reason I would like to move away from the city is because I felt there was a kind of loneliness in the initial few months of the pandemic, where London didn't really know how to do community... But, at the same time, I do think that a concern that I have is whether the village, where I go, will accept me and my friends? I would like there to be a demographic that makes me feel welcome and would make my friends feel welcome. That would, I think, definitely be a part of a modern 21st century village.

Renter, London

On walking and access to open space...

I'm not an out of doors person, I didn't used to walk much before. But, once I started working from home, I did. I think one of the things that I'd be looking at is somewhere nearby where I can go for a walk in the evening or the morning.

Renter, Birmingham

Having the facilities like shops, schools and GPs, those things. I think having them in relative proximity would be something that I would consider before I move out to a village.

Living in family home, Essex

On the need to design in home workspaces...

On village facilities..

I actually think it's quite important that if one wants to work out of the house, that the house has a separate space... maybe it's just a personal preference, but I don't like to work in the same room that I eat or where I sleep.

Renter, London

On lifestyle, post pandemic...

On the experience of multi-use village community centres...

On housing design...

On co-work

space ideas..

They use the whole centre. I've done First Aid courses in it, I've done sports in it, I've done karate. They had the gym going as well and various things like that. I've done my PAT testing courses, so I think a lot of places need to develop an area for people to learn new skills

What about a pub with a co-working

space attached to it or on top of it

or something like that?

Renter, London

Homeowner, Glasgow

I always imagine that you can

style that was there before, but

I thought if the pandemic lasts any longer, I would definitely need a quieter area, because the place where I was before did not really have any walking spaces. I am ready, right now, to spend more on transport, as long as I have this very big, open space to exercise and meet friends.

Renter, London

On designing villages...

Take the great things from the city, but don't erase what is nice about the rural areas and about the villages, because then people will say 'Well, why don't I just stay in the city then'.

Renter, London

maintain respect for the architectural

Renter, London

have modern upgrades.



This short report has examined ways in which new villages can be an effective antidote to the housing crisis, so long as they are updated and realigned to the needs and desires of modern society - not just the communities of today, but those of the future too.

Our reimagined village concept seeks to set out ideas and approaches to ensure that new villages are connected, smart, sociable and green, housing a diverse and healthy community of residents in a unique, attractive and genuinely sustainable setting, all while retaining the inherent identity and charm that makes them an intrinsic part of Britain's cultural fabric.







Scale and Size

- Ensure that any new village has at least 1,500 new homes
- Ensure, at the very least, that primary school education is provided within the village
- Work on the basis
 of the village centre
 being, where possible,
 within a 10 minute
 walk of all homes

The Village Economy

- Plan for co-working spaces to accommodate flexible working within the village itself
- Empower remote workers through high-quality digital connectivity
- Create and improve sustainable transport links to neighbouring
- Design to accommodate unforeseen market transformations

cities and towns

The Village Heart

- Consider "meanwhile" uses at the outset
- Create opportunities for a community-run shop
- Provide flexible, multi-functional buildings and spaces









New Village Housing

- Vary tenures and typologies to establish a diverse, integrated and sociable community
- Embrace flexible density and buildings
- Explore striking but sustainable new housing design

The Mobile Village

- Embrace the concept of shared mobility
- Plan for more electric and autonomous vehicles
- Design in a mobility hub

The Green Village

- Provide routes and spaces that bring safety, comfort and enjoyment for a variety of purposes
- Create opportunities for local food sourcing
- Futureproof the public realm

The Resilient Village

- Create fabric-first homes and buildings and utilise sustainable forms of energy.
- Embrace and nurture the local village ecology
- Encourage sustainability, reuse and recycling as a community lifestyle

Reference

- Britain set for worst decade of housebuilding on record. CCR Magazine, 2019. ccrmagazine.com
- National Design Guide: Planning practice guidance for beautiful, enduring and successful places, Ministry of Housing, Communities & Local Government, 2019. gov.uk/government/publications/ national-design-guide
- Britain set for worst decade of housebuilding on record. CCR Magazine, 2019. ccrmagazine.com
- National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2019, assets.publishing. service.gov.uk/government/uploads/system/uploads/ attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
- Escape to the country: how Covid is driving an exodus from Britain's cites. Guardian 2020. https://www.theguardian.com/ world/2020/sep/26/escape-country-covid-exodus-britain-citiespandemic-urban-green-space
- Broadband in the backwaters: rural Britain's fight for faster internet, 2016. ingenia.org.uk/Ingenia/Articles
- Cities, towns and villages: Trends and inequalities, House of Commons Library, 2018. commonslibrary.parliament.uk/insights/ trends-and-inequalities-in-cities-towns-and-villages
- What's driving our increasing population and household numbers?,
 Full Fact, 2018. fullfact.org/health/increasing-population-households
- The Whole Nine Miles the distance of a typical house move in 2019. Estate Agent Today. 2020. estateagenttoday.co.uk/breakingnews/2020/1/the-whole-nine-miles--the-typical-house-move-in-2019
- The Annual IWG Global Workspace Survey International workplace Group, 2019. iwgplc.com/global-workspace-survey-2019
- 11. The future is freelance: research by Kalido, 2018. kalido me/the-future-is-freelance-research-by-kalido
- Baby boomers will be the fastest-growing generation in the workforce next year, CNBC, 2019 cnbc.com/2019/11/12/baby-boomerswill-be-workforces-fastest-growing-generation-in-2020.html
- Global Coworking Growth Study 2019, Coworking Resources, 2019. coworkingresources.org/blog/key-figures-coworking-growth
- Cities, towns and villages: Trends and inequalities, House of Commons Library, 2018. commonslibrary.parliament.uk/insights/ trends-and-inequalities-in-cities-towns-and-villages

- **15. Future of an Ageing Population,** Government Offices of Science, 2016 OGL
- The Future of Jobs Report, World Economic Forum, 2016. reports.weforum.org/future-of-jobs-2016/ chapter-1-the-future-of-jobs-and-skills
- The Rural Shop Report 2019, ACS (The Association of Convenience Stores), 2019. acs.org.uk/
- How to overcome loneliness in the countryside, CountryLiving, 2017. countryliving.com/uk/wellbeing/advice
- Cambridge, Milton Keynes and Oxford Future Planning Options Project, NIC, 2017. https://www.nic.org.uk/ wp-content/uploads/5thStudio-FinalReport.pdf
- Young Adults' Licence-Holding and Driving Behaviour in the UK: A Summary of Findings, Ann Berrington & Julia Mikolai, RAC Foundation, 2014. racfoundation.org/research/mobility/ young-adult-drivers-berrington-report
- 21. Greenkeeper.co.uk
- UKGBC's vision for a sustainable built environment is one that mitigates and adapts to climate change, UKGBC, 2020. ukgbc.org/climate-change
- Reducing UK emissions 2018 Progress Report to Parliament,
 The Committee for Climate Change 2018, https://www.theccc.org.
 uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-toParliament paf.
- UK Housing: Fit for the future, The Committee for Climate Change, 2019, theccc.org.uk
- A report for the Committee on Climate Change: The costs and benefits of tighter standards for new buildings, Currie Brown and AECOM, 2019. theccc.org.uk
- https://www.pbctoday.co.uk/news/planning-constructionnews/buildingeco-friendly-on-a-budget/38458/
- https://assets.publishing.service.gov.uk/government/ uploads/system/ uploads/attachment_data/ file/290679/scho0805bjns-e-e.pdf

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Broadway Malyan is a global architecture, urbanism and design practice with strong expertise in the masterplanning and housing sector. With over 500 employees across 15 global studios, we have a wealth of skills available. We work with both private and public sector clients to create high quality residential led, sustainable mixed communities. We specialise in masterplanning strategic housing sites across the UK and, in the last few years, have worked on around 70 schemes ranging from 250 to 10,500 new homes.

HATCH

Hatch is one of the leading economic development consultancies in the UK. With 50 staff at its offices in London and Manchester, Hatch provides robust, high-quality social and economic research, analysis and advice to the private, public and non-profit sectors. Its range of services includes strategy development, economic appraisal, case making, economic impact assessment and evaluation.

CUNDALL

Cundall is an international multi-disciplinary consultancy, operating from 25 locations across the globe. With sustainability at the heart of everything we do, our team of engineers delivers innovative, sustainable design solutions to address the project's whole life cycle. We routinely design to LEED, BREEAM and Green Star standards, and our approach is always to look for those wider implications. We are also the world's first consultancy to be formally endorsed as a One Planet Company by sustainability charity Bioregional.

steer

Steer is an international consultancy specialising in infrastructure advice, transport planning, economics, financial appraisal and modelling, and research. Steer's New Mobility team, work closely with a wide range of public and private sector clients to plan, develop, implement and monitor projects in shared mobility, EV infrastructure and emerging services including Mobility as a Service (MaaS), Connected and Autonomous Vehicle (CAV) services and Mobility Hubs.



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