



University of Dundee

Understanding the 20-Minute Neighbourhood

AlWaer, Husam; Cooper, Ian

DOI: 10.20933/100001289

Publication date: 2024

Licence: CC BY

Document Version Publisher's PDF, also known as Version of record

Link to publication in Discovery Research Portal

Citation for published version (APA):

AlWaer, H., & Cooper, I. (2024). Understanding the 20-Minute Neighbourhood: Making opportunities for people to live well locally. University of Dundee. https://doi.org/10.20933/100001289

General rights

Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



Understanding the 20-minute Neighbourhood:

Making opportunities for people to live well locally

Published April 2024

Contents

Foreword	4
Acknowledgements	5
10 Key Takeaways	6
SECTION I: Introduction	9
About this guide	9
20-minute neighbours: FAQs	10
Who is doing what?	14
SECTION 2: Information to support 20-minute Neighbourhoods	17
PART A: The benefits of 20-minute neighbourhoods	17
PART B: Defining the 20-minute neighbourhood	22
PART C: How far should we expect people to walk in 20 minutes?	27
Part D:The economic basis for a 20-minute neighbourhood	29
SECTION 3: Designing desired outcomes	31
Outcome I: Convenient walkable distances to goods, services and ideally workplaces too	32
Outcome 2:A variety of housing and building types, sizes and tenures	34
Outcome 3:A variety of workspaces	37
Outcome 4: Easy access to green space and recreational areas	38
Outcome 5: Community supporting change and adapting their behaviour	41
SECTION 4: Addressing the means to deliver outcomes	43
Means I: Plan mixed-use development	44
Means 2: Support accessibility and mobility	46
Means 3: Develop at appropriate densities	49
Means 4: Embrace proximity	50
Means 5: Achieving a critical mass	51
Means 6: Environment and behaviour	53
SECTION 5: Rural communities and 20-minute neighbourhoods	55
Some do's and don'ts	55
SECTION 6: Recommendations and next steps	59
Key messages for promoting and creating 20-minute neighbourhoods	59
Establishing 20-minute neighbourhoods: the next steps	60
Delivering concerted actions	60
Endnotes	64
Photography and image credits	64
References	65
Further Reading List	65

The purpose of this guide

This guide marks, we think, the first concerted attempt to spell out in detail what is involved in trying to implement 20MNs successfully. This goal is both topical and highly relevant given the widespread ambitions across the UK, documented below, to see 20-minute neighbourhoods woven into existing urban, suburban and rural life so that people can 'live well locally'.

Most 20MNs in the UK are still at the planning stage, see page 14. However, our objective is to raise awareness of the extremely wide range of factors that need to be put in place and aligned for 20MNs to work effectively.

We hope that information contained in this guide will enable local authorities, the development industry, design and planning practices, and local businesses and communities to make informed decisions about what needs to be done – and about the roles that each of them will have to play if they are to make a success of their local 20-minute neighbourhood.





Wulf Daseking Professor Dipl. Ing. Architect BDA / AoU Former Chief Planning Officer for the City of Freiburg

Foreword

The world is currently in a state of complete upheaval. The speed at which this is happening is worrying. Nobody really knows where the journey will take us.

Climate, energy, migration, housing supply, economy, conversion and expansion of public and private infrastructure ... etc. are tasks that need to be tackled and that cannot be postponed.

Concepts - in the sense of comprehensive sustainability - must be developed and continuously implemented to cope with these changes.

Unfortunately, there are no generally valid patent remedies but there are some principles that need to be observed.

Each country and region should formulate its own goals and develop solutions for them - with the main work of transformation taking place in the cities and towns.

There it is possible - together with the inhabitants - to develop and implement short-, medium- and long-term concepts to drastically reduce energy requirements and thus CO2 emissions.

The 20-minute neighbourhood is the smaller sister of the 15-minute city. Between them, these two ideas are an attempt to reset how most of us live our lives now. The city of the future is the city of neighbourhoods. Concepts for conserving resources must be developed for these hitherto mostly unsecured, interchangeable and monotonous areas - where most of a city's inhabitants live. The primary goal is to continuously realize the "city of short distances". All measures must be geared towards this!

Diversity, colourfulness, mix of living and working opportunities, reduction of individual traffic, expansion of cycle paths, design of public spaces, accessibility of basic supplies for daily needs, schools and educational facilities, kindergartens, connection to local public transport, development of energy concepts ... etcall integrated into a very intensive involvement of residents. All these areas need to be addressed.

This elaboration is a very good basis for the long overdue discussion about the future of our towns and cities, and of the neighbourhoods that form them. It should make it possible to initiate the long overdue process. All citizens - especially the young - should get involved - because it is their world that we are planning and building today comprise.

However, success is only possible if a powerful organisation is set up in the administrations to take control. This organisation must be equipped with competencies and financial resources.

"Show me your city - and I'll tell you if you're on the right track".

Acknowledgements

This report has been prepared by a specialist team from the University of Dundee and Eclipse Research, and was supported by Urban Design Group, Sustrans Scotland, ADAM Architecture and PLACE LOGIC, Hilson Moran Partnership, Proctor and Matthews Architects, and Corstorphine & Wright Architects. It has been managed by Dr Husam AlWaer and Dr Ian Cooper and draws on the results of their research between 2020 and 2024 when compiling their reports: (1) 'Unpacking the concept of 20-minute neighbourhoods: disentangling "desired outcomes" from the "means" available for achieving them 'https:// www.emerald.com/insight/content/doi/10.1108/ OHI-11-2022-0285/full/html

(2) 'Unhealthy neighbourhood ''syndrome'': a useful label for analysing and providing advice on urban design decision-making?' <u>https://doi.org/10.3390/sul3116232</u>

Our thanks go to all those who helped make this guide possible. We gratefully acknowledge the support, guidance and encouragement, and particularly the ideas and inputs received from a wide range of people in the business and community sectors, academia and practice, and the political and public policy arena – across the UK and beyond. Many talented, creative, busy and influential people gave of their time to participate in, encourage and support this timely document.

Special thanks go to Prof Wulf Daseking for writing the Foreword. We would particularly like to acknowledge the contributions of the following: Kevin Murray (Kevin Murray Associates), Stephen Proctor and Andrew Matthews (Proctor & Matthews Architects),



Husam AlWaer University of Dundee B.Arch, RTPI, P.hD, BREEAM AP, AoU, UDG

Stephen Willacy (Stephen Willacy Architecture and Urbanism), Matt Kitson (Hilson Moran Partnership), Graham Ross (Austin Smith Lord), Paul Reynolds and Robert Huxford (Urban Design Group), Claire Daly (Sustrans Scotland), Jonathan Tarbatt (Corstorphine & Wright Architects), Nick Wright (Nick Wright Planning), Jill Paterson and Antony McGuinness (Angus Council), Alan Thompson (AP Thompson), Hannah Smart (edge Urban Design), and Lowri Nicholson (edge Urban Design) who desktop published this document, Kenzie Harrison who helped in producing drawings, and Denise Chevin for editing the report.

Copies of the report can be obtained from any of the above supporters and it is available to download from the website: AlWaer, H., & Cooper, I. (2024). Understanding the 20 Minute Neighbourhood: Making opportunities for people to live well locally. University of Dundee. <u>https://doi.org/10.20933/100001289</u>

We hope this guide provides fresh knowledge and renewed ambition for the politicians who hold the power and the purse strings, and informs and inspires professionals in their approach. Finally, to those concerned by the prospect of intervention to implement a 20-minute neighbourhood, we hope this guide allays their concerns and instils confidence that there is far more to be gained than lost. We are also very grateful to those who have contributed images and given permission for their use. We have endeavoured to credit photography and drawings where we have been able to. We would be happy to include any credits we may have omitted in future editions. **See the end of the report for photography, drawing and image credits.**

10 Key Takeaways

I. Recognise benefits:

20-minute neighbourhoods are intended to improve the quality of local environments and reduce carbon emissions by providing all the services and facilities needed for everyday life in walkable proximity.

2. Use an integrated approach:

For 20-minute neighbourhoods to be successfully implemented, local authorities need to develop a coherent, strategic approach to planning and design for new and existing neighbourhoods, with clear stakeholder responsibilities.

3. Plan for mixed use:

Developments must provide a variety of housing and building types, sizes and tenures to accommodate the diversity of community, business and household needs. They must also balance design for vehicles with design for children, women older and disabled people. They must also create attractive streets which include trees, landscaped social spaces, and play areas.

4. Remain committed:

Local politicians need to provide a strong political mandate for 20-minute neighbourhoods and the resources required to implement them. Without their backing, planners, architects and urban designers are likely to have limited direct ability to improve the localities identified as suitable for establishing a 20-minute neighbourhood.

5. Raise awareness:

To win acceptance from the public, urban designers, architects and planners must present a compelling and feasible strategy that can convincingly demonstrate how the 20-minute neighbourhood may improve people's quality of life.

6. Listen to locals:

Understanding the needs of local residents and businesses is of paramount importance. Rather than taking a prescriptive approach to walking times and distances, it becomes crucial to adopt an approach that understands specific needs. A top-down approach should be avoided.

7. Win public support:

Public support for 20-minute neighbourhoods is vital. Reliance on cars and the perception of their necessity might be deeply rooted, with residents regarding driving a car as their sole or favoured choice. Changing this may be electorally unpopular. Fears of gentrification could also disrupt plans, with traditional local residents worried about being priced out.

8. Don't assume universal applicability:

What may work in designing a new urban neighbourhood may not apply when retrofitting an existing one. Existing road layouts can make retrofitting extremely difficult and many areas have been created without basic community facilities like shops, healthcare, GP surgeries and workspaces.

9. Stay committed. The work is never

done:

Implementing 20-minute neighbourhoods requires continued investment in resources and funding for ongoing management and maintenance and skills. Investment in facilities can be unviable until a critical mass of residents has been established in the area.

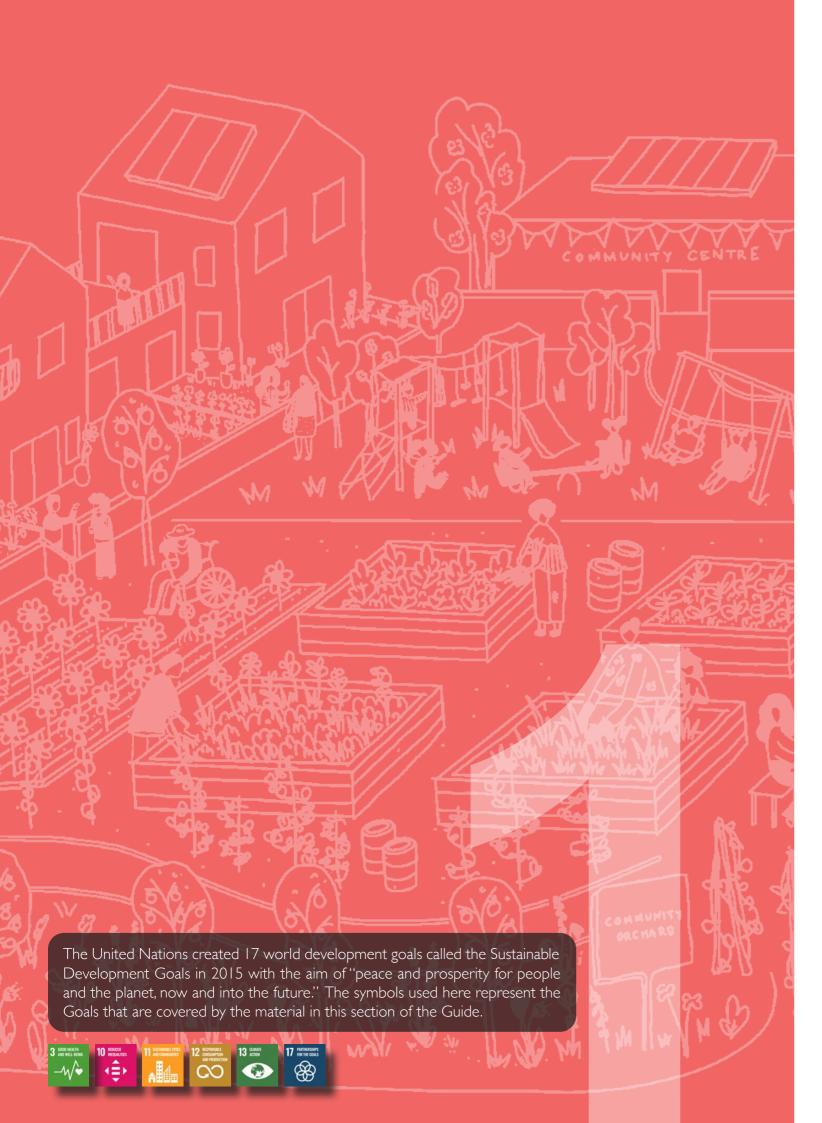
10. Adopt a different approach in rural

areas:

The only way to achieve rural 20-minute neighbourhoods is either to increase population or increase connectivity between rural settings to allow facilities to be shared. Be aware that lack of connectivity in either through broadband or energy networks can also scupper plans. Extensive investment in pedestrian and cycle routes may be necessary.

The 20-minute neighbourhood is not a timelimited task that creates a finished end-product. Neighbourhoods must develop from year to year, from generation to generation. So they need ongoing care and maintenance. This means continuously looking after greenspaces, footways, carriageways, buildings, and tackling litter and neglected land and buildings.





SECTION I: Introduction

About this guide

Creating places where people can pop out to a shop, cycle to their doctor or walk children to school is something that many of us might have enjoyed in the past, if not today. As local authorities look to tackle climate change, air pollution and promote healthier lifestyles, they are also looking to develop places to live that can offer convenience and community.

Some towns and cities already offer their citizens this style of living. For others, there is a widespread ambition to see 20-minute neighbourhoods widely woven into existing urban, suburban and rural life, so that people there can 'live well locally'. In Scotland, for example, the government has committed itself to implementing 20-minute neighbourhoods nationwide alongside its actions and ambitions for net-zero greenhouse gas emissions by 2045.

But while the 20-minute neighbourhood might be a straightforward concept to grasp, it's not always straightforward to achieve. Many post-war neighbourhoods have been designed around the car. Creating a 20-minute neighbourhood requires bringing together many strands, not all of them in the gift of the local authority. It sometimes means overcoming a degree of fear and scepticism from stakeholders.

So what are the necessary ingredients to create a 20-minute neighbourhood? How do you bring them together? And how do you get the necessary buy-in from stakeholders?

This is where our guide comes in. It is intended for anyone who wants to improve their understanding of the meaning and implications of 20-minute neighbourhoods. This includes politicians, policymakers, local council officers and councillors, developers, planners, designers, NGOs, local businesses, community groups and residents' associations. Urban designers and planners should find it useful too.

The guide takes readers through key considerations for a 20-minute neighbourhood strategy. This includes the following ideas.:

• Understanding and articulating the desired outcomes that politicians, planners, architects, urban designers and other decision makers want

to achieve.

- · Correctly assembling the means mechanisms, levers, triggers and causal factors – necessary to produce a 20-minute neighbourhood.
- Setting out the changes and behaviour required to support the successful operation of a 20-minute neighbourhood (essential even where the ends and means can be achieved).

It's worth noting, a '20-minute neighbourhood' defies clear definition. There is no single paradigm around which to organise thought and action. Instead, there are competing viewpoints about how best to deliver 20-minute neighbourhoods, and how much priority should be given to each of their component parts. Each case or project has its own specific context and circumstances. What may work in designing a new urban neighbourhood may not apply when retrofitting an existing one.

Implementing 20-minute neighbourhoods can contribute directly towards achieving UN Sustainable Development Goals, particularly 'good health and well-being' (SDG 3), reduced inequalities (SDG 10), 'sustainable cities and communities' (SDG 11), 'responsible consumption and production' (SDG 12), 'climate action' (SDG 13), and 'partnerships for the goals' (SDG 17). For instance, one of the indicators for measuring SDG 11 is the area of public and green space that people can access, since lack of natural space is seen as creating an unhealthy urban living environment.

We hope that armed with the knowledge and advice in this guide, those seeking to develop 20-minute neighbourhoods feel better informed and more confident about if and how to roll out the concept to suit their individual circumstances.

We begin with the basics, the answers to the most frequently asked questions.

20-minute neighbours: FAQs

In simple terms, what are 20-minute neighbourhoods?

20-minute neighbourhoods seek to provide facilities and services through access to safe walking and cycling routes or by frequent, affordable and reliable public transport and local transport facilities and connections nearby. Facilities might include shops, schools, amenities, GP practices, play space, greenery/ parks, and ideally workplaces too. To achieve this, the 20-minute neighbourhood needs a large enough population to make all these economically and socially viable. And to be successful, it needs a population which is willing to embrace the goals that underpin the idea: i.e., increased inclusivity, equality, safety and accessibility, especially for non-car users. The local population must also be willing to reduce short car journeys, as this will reduce carbon dioxide emissions.

The 20-minute neighbourhood is intended to improve the quality of local environments by:

- Enabling people to meet their daily needs through access to safe walking and cycling routes or by public transport as well as wider connections across and between local neighbourhoods and further afield.
- Supporting the idea of living more locally to deliver lower carbon lifestyles.
- Promoting high-quality local environments, with well-considered landscapes and open spaces, free of pollution, low noise and places which deter anti-social behaviour and promote a higher quality of life.
- Creating an improved sense of community, where people can get to know one another and work together to improve their neighbourhood.
- Promoting a place where people want and can afford to live, with affordable housing an essential component of such an environment.

How does this relate to 15 minute cities?

The 20-minute neighbourhood and the 15-minute city are both urban planning approaches that stress helping people access what they need locally to live well whilst creating safer and healthier communities. As such, they are strongly related. But they should not be treated as synonymous because they operate at different spatial scales.

As a result, the provision of services, for instance - which may work well at a city scale may not be appropriate at the neighbourhood scale and vice versa, (see Outcome I for details). In addition, the components that are taken to be essential for a 20-minute neighbourhood or a I5-minute city are often inconsistently applied.

How did the concept emerge and why is it a popular idea now?

The 20-minute neighbourhood is not a new concept. Rather it builds on earlier ideals, such as garden cities, walkable neighbourhoods, urban liveability and compact cities. The appeal of the 20-minute neighbourhood has been amplified globally by the Covid-19 pandemic and climate crisis.

Restrictions imposed by lock down starkly revealed existing structural inequalities, such as 'digital poverty' poor quality housing and lack of access to greenspace, local shops and amenities, which all curtail neighbourliness and make life far tougher for some people than others.

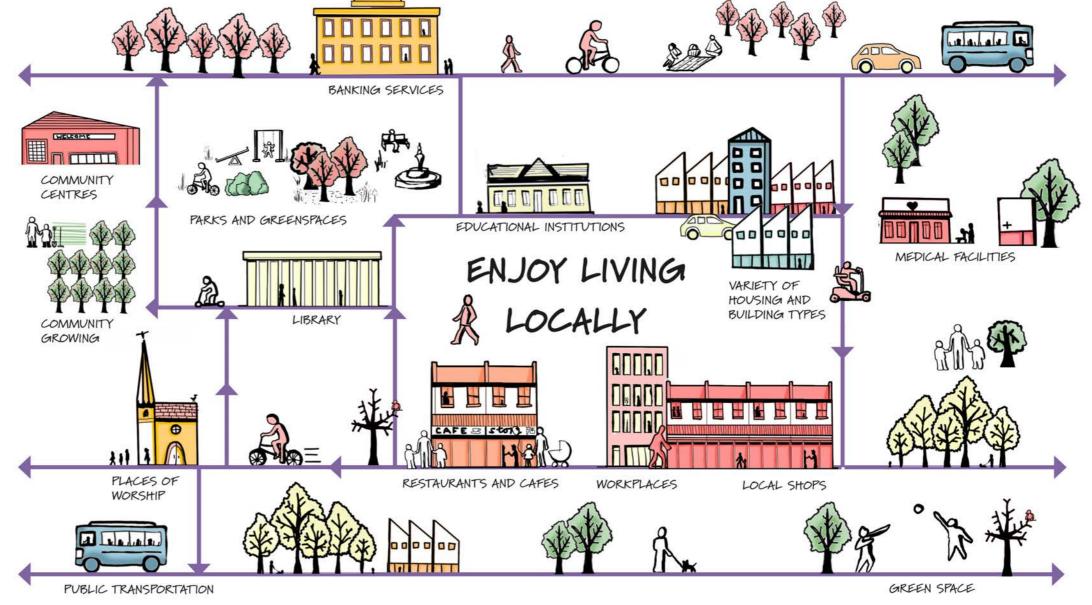
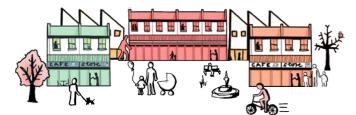


Figure 3:The viability of the 20-minute neighbourhood depends on having a sufficiently large population to make it economically and socially feasible.

During the pandemic many discovered a new, pleasanter way of living, with an improved work-life balance achieved through working, shopping and playing locally. That period also saw streets given over to pedestrians with with some roads given an increased priority to pedestrians. As a result, the pandemic underscored the importance of place to quality of life, and highlighted a general need for local identity and belonging. The feasibility of achieving these goals across the range of existing urban, suburban and rural neighbourhoods has yet to be tested.

How do 20-minute neighbourhoods differ from low traffic neighbourhoods?

The low traffic neighbourhood is a much narrower idea than the 20-minute neighbourhood. It centres on reducing the volume, speed and weight of throughtraffic and reducing rat running by drivers in busy (often inner city) neighbourhoods and sometimes in historic urban areas, without reducing neighbourhood permeability. Reducing traffic improves air quality, pedestrian safety and vibration impacts near schools and homes, and makes streets safer for pedestrians and cyclists. 20-minute neighbourhoods encompass active travel ideals but are about more than that, providing facilities that residents can access easily. 20-minute neighbourhoods do not look to exclude the car but encourage different patterns of use. Ultimately, they are about making sure that neighbourhoods are designed as mixed use and are not reliant on car journeys for work, shopping and relaxation, with fewer journeys to out-of-town shopping centres.



Why are there fearmongering and conspiracy theories around 20-minute neighbourhoods?

There has been a backlash against 20-minute neighbourhoods, not least from some politicians. Critics associate 20-minute neighbourhoods and 15-minute cities with 'liberty-restricting' measures, and this has led to the promulgation of conspiracy theories. Opposition typically comes from those who fear that 20-minute neighbourhoods will de-prioritise the use of motor vehicles.

The 20-minute neighbourhood is about prioritising inclusivity and improving safety for people put at risk by pavement parking, speeding, congestion and pollution, rather than being against motorists or freedom of movement per se. This benefits people who have no access to cars - predominantly children, women and older people.

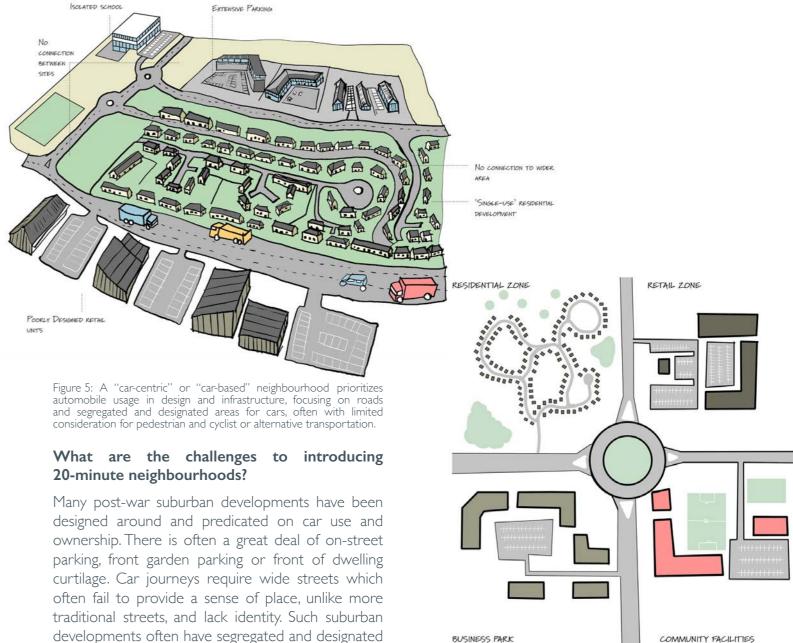
The evidence from other countries like Germany and Denmark, where walking and cycling are more prevalent, points to improvements to the quality of life in neighbourhoods and town centres and air guality, biodiversity and mental health.

20-minute neighbourhoods still need motorised vehicles. They need public transport and many people need taxis, or personal vehicles.

It is clear though that more needs to be done to win public support and provide a convincing argument for the benefits of promoting active travel. We return to this issue at the end of this section (Why winning public support is vital).



Figure 4: Neighbourhoods are likely to face a series of often interrelated challenges. Clear diagnosis is need to establish which are the most pressing in each particular case.



areas for cars, which prioritise cars over pedestrians.

Re-engineering the balance between people and motorised vehicles in order to improve pedestrian and cyclist safety can be difficult on numerous levels.

Design:

Given the existing configurations of roads and the layout of streets, not all neighbourhoods can be remodelled into 20-minute neighbourhoods. Also, many areas have been created without basic community facilities like shops, healthcare, GP surgeries and workspace. It is difficult to enforce design requirements if they are not adopted and made mandatory for developers.

Political commitment:

Users of motorised vehicles will have to accept that they no longer have priority over pedestrians, a concept which has been built into places by traffic engineering practices for decades. This change may

not be electorally popular, although shared spaces have been prevalent in historic towns and neighbourhood centres around the world for many years.

Economic viability:

As well as political will, implementing 20-minute neighbourhoods requires continued investment in resources and funding for ongoing management and maintenance and skills. A noticeable time lag often exists between when new housing is built and when the necessary accompanying social infrastructure and public transport is created. Investment in facilities remains unviable until a critical mass of residents have established themselves in the area.

Public support:

Given their current circumstances, people may regard driving a car as their sole or favoured choice of transport. Gentrification could also disrupt plans, with traditional local residents being priced out.

Who is doing what?

Thirty-three cities worldwide had adopted the concept of the 20-minute neighbourhood by the end of 2020. None, so far, exist in the UK.

There are, however, developments being undertaken by local authorities in the UK under the banner of 20-minute neighbourhoods which are at the early briefing or preliminary planning stages. Some of these plans are listed below.

Where?	When?	What?
Bridgend County Borough Council	2023	The council has incorporated the concept of a 20-minute neighbourhood into the Replacement Local Development Plan (RLDP). <u>https://democratic.</u> <u>bridgend.gov.uk/documents/s30177/Planning%20Update%2020%20</u> <u>Minute%20Neighbourhoods.pdf</u>
Edinburgh City Council	2023	The council has set out a vision of creating places where most people's daily needs can be met within a 20-minute round trip and hopes to create good places to live and work, end poverty and become net zero by 2030. <u>https://www.edinburgh.gov.uk/future-council/need-20-minute-neighbourhoods</u>
Fife Council	2023	The council is preparing a new Local Development Plan and is promoting a living well, locally approach, or the 20-minute neighbourhood concept. It wants to create connected communities, where people can meet the majority of their daily needs within a reasonable walk, wheel, cycle or short trip from their home. <u>https://www.fife.gov.uk/kb/docs/articles/planning-and-building2/ planning/ development-plan-and-planning-guidance/local-development-plan- fifeplan/fife-living-well-local-survey</u>
Leeds City Council	2022	The Council commissioned a 20-minute neighbourhood study in support of its emerging Local Plan update. It set out to examine levels of walking accessibility across the district based on how many amenities are accessible within a 20-minute round-trip onfoot. <u>https://www.leeds.gov.uk/docs/</u> Local%20Plan%20Update/Local%20Plan%20Update%20-%2020%20 Minute%20Neighbourhoods%20Report.pdf
London Borough of Newham	2023	The council has set out a delivery plan for 15-minute neighbourhoods to create healthier and happier communities around high streets, where people in Newham can access all their basic day-to-day needs within a 15-minute walk or cycle from their home. <u>https://www.newham.gov.uk/downloads/file/3925/newham-15-min-neighbourhoods-appendix-1-delivery-plan-redacted-</u>
Surrey County Council	2023	The County's Local Transport Plan (LTP4) has introduced the concept of the 20-minute neighbourhood. It aims to create thriving local neighbourhoods by ensuring that everyone can access, without a car, services and opportunities within 20-minutes. <u>https://healthystreets.surreycc.gov.uk/requirements-and-guidance/section?id=4.8</u>

Why winning public support is vital

People can usually support pursuing active travel as part of healthy living. But for some, reducing car journeys may be a step too far. Owning a car provides not only significant mobility and economic opportunities but also a strong sense of identity and self-worth. The prospect of reduced opportunities for using a car may raise real concerns. Planners, architects and urban designers should be prepared to adequately compensate for such 'reductions' by other gains.

To win acceptance from the public, urban designers, architects, and planners must present a compelling and feasible strategy that can convincingly demonstrate how the 20-minute neighbourhood will yield more freedom, economic opportunities, prosperity, and an improved quality of life.

Throughout the history of urban planning, grand and ambitious ideas have been proposed. However, these lofty concepts have often been developed in isolation by what might be viewed as relatively privileged individuals who may not fully grasp the diverse realities faced by other urban dwellers.

Why and when people need cars

To get to work: In industrial areas where local factories, mines, steelworks etc have closed and jobs have moved away, people face some of the longest journeys to work. Also in rural areas, some people are prepared to drive for an hour or more to get to work. As a result, many villages have been turned into ultra-low density suburbs. Many have experienced shop closures, and are reliant on volunteer run shops. 'Commuter rural' is a term that has been used to describe these localities.

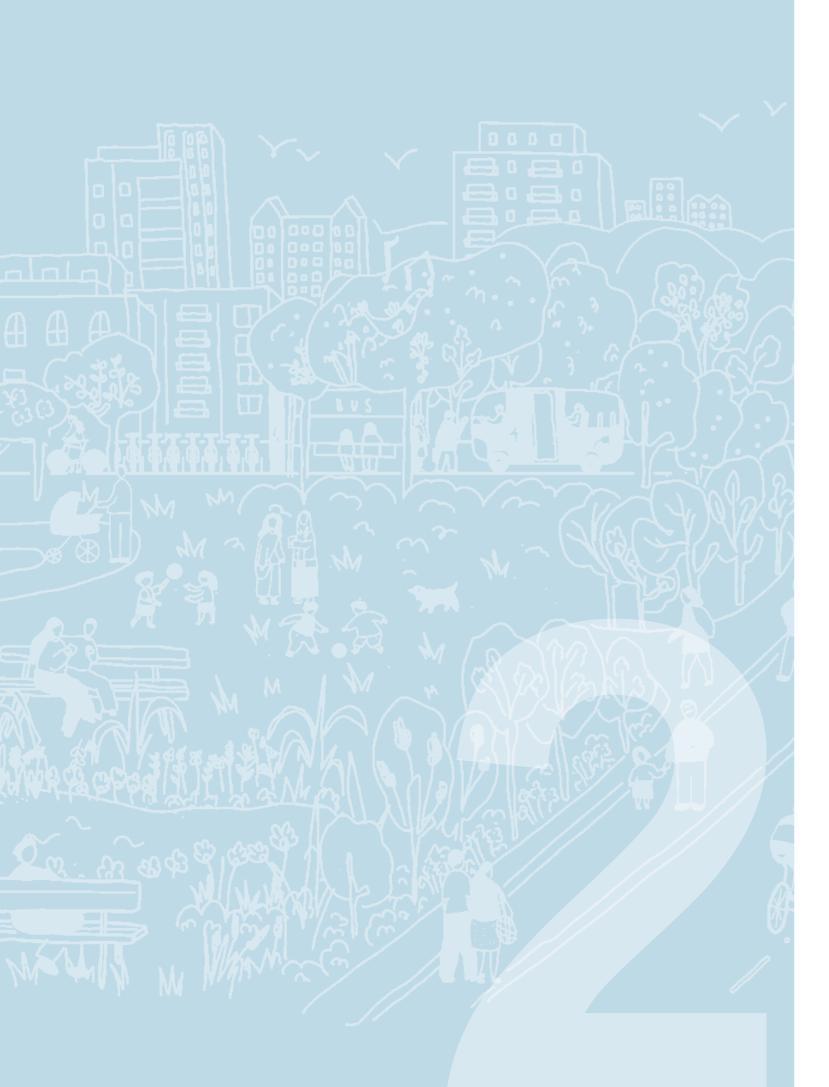
- **Everyday survival:** To go to the shops for essentials where local shops and services are lacking and public transport is unavailable, unaffordable, unreliable or infrequent.
- **Status:** To some, owning car can be a sign of success. Some people may seek to demonstrate wealth in the form of their car as they cannot afford to buy a house.
- **Safety concerns:** Some vulnerable members of the community, especially women, are sufficiently worried about personal safety that it affects their choice of mode of travel, even their decision whether to travel at all.
- **Cost:** Prohibitive rents and mortgage prices for housing and high cost of living crisis may mean that people cannot afford to live near where they work.
- Lack of alternatives: Withdrawal of bus services, poor land use planning that permits housing in areas that are only accessible by car, and the decline of place-based retail rob people of choices.
- Age or infirmity: Some cannot drive a car, because they are too young, too old, have a disability or cannot afford to. Some young people are giving up on cars, with many not even bothering to secure a driving licence.

Many workers travel to work by car because it is often quicker and cheaper at point of use than public transport. However, many journeys are under two miles and could be easily cycled in around 10 minutes.

Consequently, these ideas are imposed from the top down onto communities, and due to this and their technocratic nature, have often led to outcomes that disproportionately harm historically marginalised groups, including women, disabled individuals, racial minorities and the economically disadvantaged.



Such misgivings raise important questions about implementation of 20-minute neighbourhoods. Will they benefit everybody? And how can we ensure that they do not become a new form of gentrification, improving neighbourhoods but driving the poor further out to areas with fewer services and facilities? There is no simple answer here – but these issues need careful consideration in any plan to implement a 20-minute neighbourhood.



SECTION 2: Information to support 20-minute Neighbourhoods

PART A: The benefits of 20-minute neighbourhoods

Boosting health and welfare benefits

Independent mobility: Time spent walking in green spaces contributes directly to mental health and recovery and those who walk and cycle to work are at a reduced risk of early death or illness compared with those who commute by car.

A landmark study by Mayer Hillman and colleagues found that children's levels of independent mobility in England fell dramatically over the span of just two decades. In 1971, 80% of 7-8 year-olds travelled independently to school: in 1990, only 9%. This decline can be attributed to several factors, including increased car use, perceived dangers from traffic, and 'stranger danger,' reflecting the rise of a risk-averse society. The way cars have been allowed to dominate streets has led to the collapse in children's independence (both travel and outside play without adult supervision). This decline is a concern as independent mobility is linked to healthy child development through increased physical activity. Evidence shows that proximity and safety are both key to supporting independent mobility for adults as well as children².



Reducing healthcare costs: Physical inactivity is responsible for one in six deaths in the UK and is estimated to cost the NHS up to $\pounds I$ billion per annum, according to a study by the Department for Transport³. In England the economic and social costs of poor mental health amount to $\pounds I$ 05 billion a year, according to a study published in 2026 by NHS England⁴. Encouraging people to become more active can improve both physical and mental health, helping to relieve pressure on the NHS.



Making healthcare more accessible: The NHS is increasingly trying to provide healthcare services close to where people live, thus reducing the need to travel to hospitals. Health hubs, or other local centres, that bring together traditional healthcare services and voluntary groups, nurseries and libraries can be co-located in high streets and other sites that already have good public transport links.



Fostering inclusiveness: Creating a well-designed, more walkable environment provides opportunities to support inclusive design. Older people are more likely to engage in walking than in other forms of exercise, and this activity can help to prevent ageing conditions such as arthritis. Child-friendly streets allow for informal play and increased independence, which is important for child development.



Environmental improvement

Climate resilience and mitigation: Road transport is a major source of both greenhouse gases and air pollutants. Around a fifth (21%) of UK greenhouse gas emissions came from road transport in 2017⁵.

Better air quality: Poor air quality is the largest environmental risk to public health. It results in up to 36,000 deaths per year in the UK, with vehicle emissions the largest source of air pollution⁶. Urban greening, such as the introduction of street trees, can also help to improve air quality. And enabling children to walk or cycle to a local school reduces congestion enormously.

Noise reduction: Exposure to high levels of environmental noise has been linked to adverse health outcomes including a general sense of annoyance, sleep disturbance, cognitive impairment and cardiovascular disease⁷. Studies have shown that people who live in poor quality housing and in residential areas with high noise pollution have an increased risk of poor health outcomes⁸. It has been estimated that 55% of the UK population live in dwellings where noise levels exceed the recommended daytime sound level of 55 dB (LAeq, I 6h), and that 67% live in dwellings exceeding the night-time recommendation of 45 dB (LAeq,8h).

Boosting biodiversity: Planning for walkable environments offers opportunities to improve biodiversity, particularly improving street connectivity to aid the proliferation of flora and fauna across landscapes.

Cultural benefits

Nurturing a sense of community: Living in an easily walkable environment can support a sense of community and improve social interaction, as residents are more likely to know their neighbours and trust others, to participate politically and be involved in the community.

Safety: Increased pedestrian activity in public space can also improve perceptions of safety through passive surveillance that naturally aids the prevention of crime, with more 'eyes on the street.' Investment in safe streets can also reduce the number of trafficrelated pedestrian injuries and deaths.

Economic dividends

Increasing footfall for local businesses: Investment in better streets and public spaces for pedestrians can boost footfall and trading by up to 40% and can help to reduce retail vacancy in high streets and town centres⁹.

Productivity: Walkable environments with highly connected street networks are more likely to make a positive contribution to labour productivity¹⁰.

New jobs: Keeping investment local through community wealth-building can develop the skills of local people and create stable, well-paying jobs¹¹.

Increasing land values: Investment in better placemaking can boost land values by up to 25%¹². Walkable environments can sustain and increase value because they are popular places in which to live and do business. This can be beneficial by bringing investment and jobs. But it is also crucially important to ensure that affordable housing is provided and protected in neighbourhoods¹³.

Reducing road congestion: 58% of car journeys made in England in 2018 were under five miles long and could have been made by walking or cycling¹⁴. Making active travel safer and more inviting can help to minimise traffic and reduce unproductive and polluting congestion.

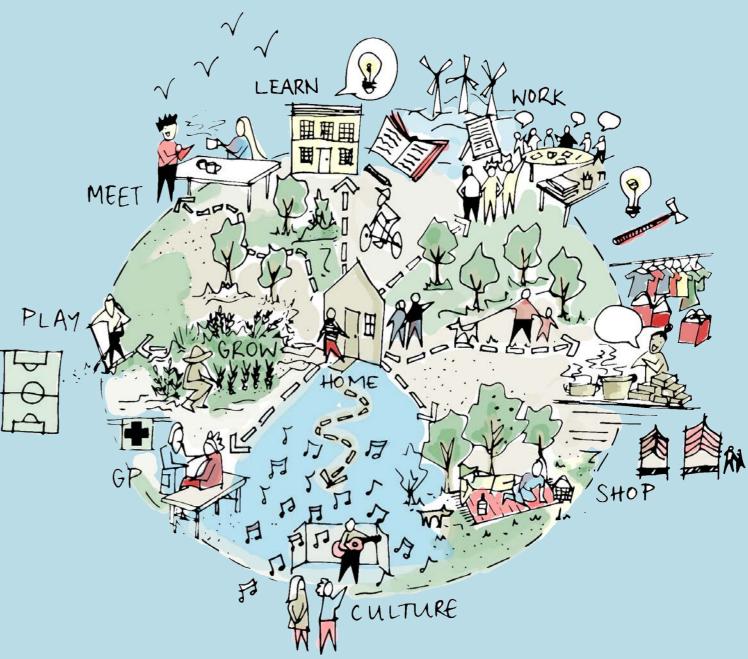
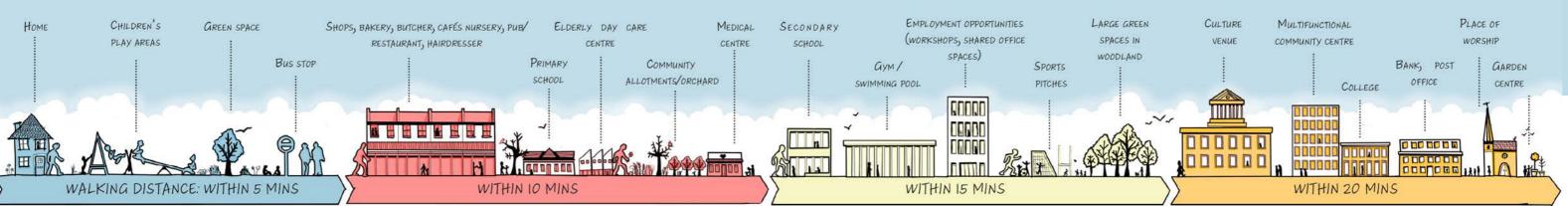


Figure 6: The 20 minute neighbourhood concept is one method of supporting local living. It aims to provide everyone with a rich, fulfilled life.



18 Figure 7: The concept of the 20-minute neighbourhood is centred around creating communities where residents can access essential services, amenities, and recreational opportunities within a 20-minute walk or bike ride from their homes.

What are the health benefits of physical activity?

Regular physical activity reduces your risk of...

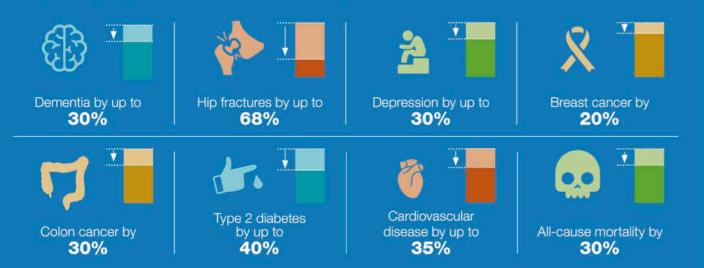


Figure 8: The health benefits of physical activity. Source: Department for Transport (2020) after Public Health England (2019) Physical activity: applying All Our Health



Healthier, happier and greener communities

Peoples' health and quality of life is improved by more people walking and cycling; the number of short journeys made by car is vastly reduced, meaning people from all parts of our communities around the country can enjoy the benefits of cleaner, healthier, safer and quieter streets.

Safer streets

Nobody is afraid to cycle; every child is confident and safe walking or cycling to school; all road users treat each other with mutual respect.



Convenient and accessible travel

Cycling and walking are recognised as the most convenient, desirable and affordable way to travel in our local areas; more women and disadvantaged groups enjoy walking and cycling as part of their daily journeys; everybody has opportunities to take up walking and cycling.

At the heart of transport decision-making

Better cycling and walking infrastructure has allowed more efficient use of road space, to the benefit of all road users; cycling and walking routes are well connected with wider public transport services; cycling and walking measures are no longer seen as an afterthought but have moved to the very heart of considerations for all transport policy and planning, at all levels of leadership.

Figure 9: Enhancing people's health and quality of life by increased walking and cycling, and reduction in short car journeys, allowing communities to experience the advantages of cleaner, healthier, safer, and quieter streets. Source: Department for Transport (2020): Gear Change: A Bold Vision for Cycling and Walking.

Health

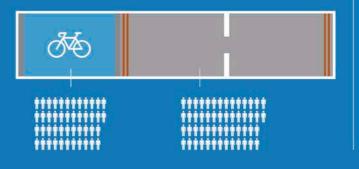
Physical inactivity costs the NHS up to £1bn per annum, with further indirect costs calculated at £8.2bn





Congestion

The new east-west and north-south cycle routes in London are moving 46% of the people in only 30% of the road space



Environmental and air quality

Meeting the targets to double cycling and increase walking would lead to savings of £567 million annually from air quality alone and prevent 8,300 premature deaths each year and provide opportunities to improve green spaces and biodiversity⁵



Climate change

Mode shift to active transport is one of the most cost-effective ways of reducing transport emissions



Figure 10:The benefits of walkability and cycling on health, wellbeing, economy, environmental and air quality in England. Source: Department for Transport (2020), Gear Change: A bold vision for cycling and walking.

Wellbeing

20 minutes of exercise per day cuts risk of developing depression by 31% and increases productivity of workers



Local businesses

Up to 40% increase in shopping footfall by well-planned improvements in the walking environment





Economy

Cycling contributes £5.4bn to the economy per year and supports 64,000 jobs



PART B: Defining the 20-minute neighbourhood

There is no clear definition of a 20-minute neighbourhood or what it should constitute. Organisations and city authorities have defined the concept in a number of ways, though most are not dissimilar:

"A 20-minute neighbourhood is a place with convenient, safe, and pedestrian-oriented access to the places people need to go to and the services people use nearly every day: transit, shopping, quality food, school, parks, and social activities, that is near and adjacent to housing."

- Portland City, Oregon, USA

"A method of achieving connected and often compact neighbourhoods designed in such a way that people can meet the majority of their daily needs within a reasonable walk, wheel or cycle (within approx. 800m)."

- The Scottish government

The 20-minute neighbourhood... "ensures that it is easy for people to meet most of their everyday needs by a short, convenient and pleasant 20-minute return walk -10 minutes there, and 10 minutes back."

- Sustrans

The 20-minute neighbourhood ideal

Although no definition exists, we consider 20-minute neighbourhoods to have the following attributes:

- Liveability and living well locally with access to services, health care, schools, parks and green space and public space;
- Provide more choice locally, e.g., shops, specialist services, library, community centre;
- A vibrant local economy a flourishing 'foundational economy';
- A diversity of housing and building types and tenures;
- Reduced congestion and carbon emissions because of fewer car trips;
- Greatly reduced environmental impact from vehicle use;
- An efficient use of land enabling preservation of the countryside from development, and protecting natural features;
- Be walkable/cyclable and therefore promote active travel;
- Healthy people and wellbeing reduced air pollution and noise, increased exercise and socialising and improved quality of life;
- Identity more localised sense of self and community and a strong character and sense of belonging, social engagement and safety; and
- A variety of local employment opportunities.

"...this concept supports the idea of living more locally to support lower carbon lifestyles, giving people the ability to access their daily needs within a 20 minute walk from home, with safe cycling and local transport connections nearby"

- Architecture and Design Scotland (A+DS)

"20-minute neighbourhoods are a concept of urban development [whose] basic premise is a model of urban development that creates neighbourhoods where daily services can be accessed within a 20-minute walk."

- Royal Town Planning Institute (RTPI)

LOCAL SHOPPING CENTRES LOCAL HEALTH FACILITIES AND SERVICES LOCAL SCHOOLS LIFELONG LEARNING OPPORTUNITIES LOCAL PLAYGROUNDS AND PARKS All GREEN STREETS AND SPACES P COMMUNITY GARDENS it SPORT AND RECREATION FACILITIES 30 SAFE STREETS AND SPACES



- SAFE CYCLING NETWORKS
- B LOCAL PUBLIC TRANSPORT
- REDUCE PRIVATE CAR USE

- LOCAL EMPLOYMENT OPPORTUNITIES
- WELL CONNECTED TO PUBLIC TRANSPORT. JOBS AND SERVICES WITHIN THE REGION

What is a neighbourhood?

There are two main approaches for identifying a neighbourhood. These are through:

- Official administrative boundaries set by local authorities, like city districts or zones; or
- Based on people's personal (subjective) descriptions and experiences of a particular area.

Because of this, neighbourhoods cannot be easily described using a fixed set of social, economic, physical, or environmental factors. What the term 'neighbourhood' means depends on who is using it and for what purpose.

Neighbourhoods can be understood as either a concrete physical location or as a reflection of the interwoven relationships among people. At times, they encompass aspects of both concurrently.

Neighbourliness is an essential aspect of building strong and harmonious communities, as it promotes a sense of belonging, social cohesion, and mutual support among residents. It contributes to a safer and more enjoyable living environment and often leads to a higher quality of life for everyone involved.

It is crucial to acknowledge every aspect of the built environment that can provide comfort, convenience, and foster connections with others. Settlements or neighbourhoods range in size and location from large urban areas to very remote rural villages. They vary by virtue of the type of buildings, street patterns and technological infrastructure (from street lighting to broadband provision).

Neighbourhoods can also vary widely in terms of density and intensity of uses, and quality of facilities and amenities. Defining the boundaries of, and the threshold between, neighbourhoods can be very complex. Adjoining neighbourhoods may blend into one another: Rural neighbourhoods may overlap with outer suburban ones, which may also intersect with inner urban ones. Such grey boundaries can hinder stakeholder groups from working together to define a shared agenda for their adjacent but differing neighbourhoods.

Since each setting is different, bespoke versions of the 20-minute neighbourhood need to be developed and applied for each context.

Because of this complexity, no attempt is made here to produce a generic set of neighbourhood solutions.

Figure 12: There are multiple components that may contribute to the character of a neighbourhood. Here these are depicted in a circle to indicate that there is no implied hierarchy. In some neighbourhoods, a component may assume significant importance while others might have only limited impact. Each case needs a separate diagnosis.



Neighbourhoods are created by many people working together through a large network of practical projects and community businesses, built into the fabric of everyday life. Doing so puts people at the heart of how a neighbourhood works, leading to neighbourhoods made by everyone, for everyone, creating vibrant places that leave no one behind.

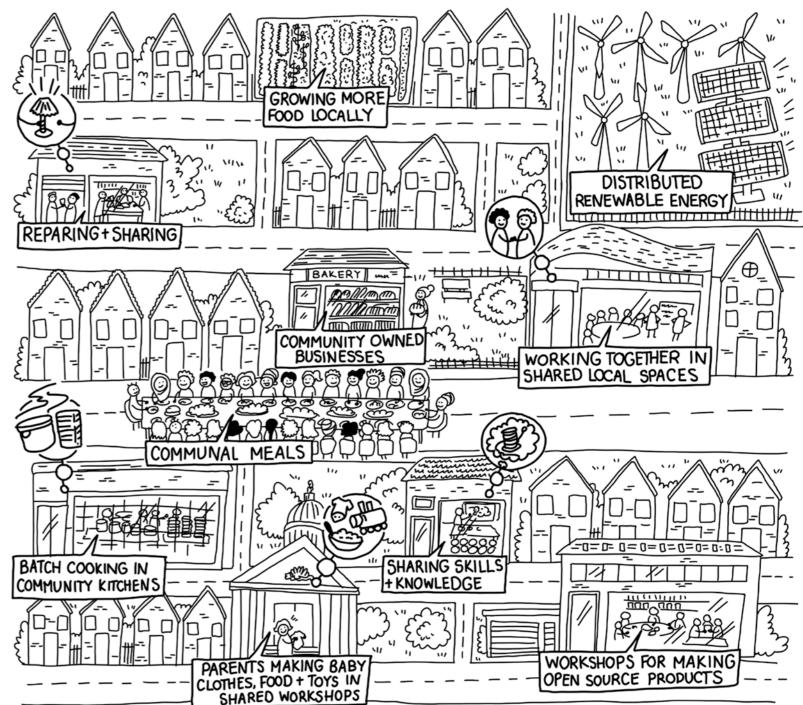


Figure 13: Fostering neighbourly connections is crucial in constructing resilient and unified communities, for cultivating feelings of belonging, social cohesion, and reciprocal support among residents, that leave no one behind. Simply knowing more people in your neighbourhood is claimed to have multiple positive effects.



PART C: How far should we expect people to walk in 20 minutes?

People's differing abilities mean they walk and cycle at different speeds, and their perceptions of walking distances are nuanced. For instance, children and adults walk at different speeds *. People are prepared to walk further for some activities than others. On average, current walking journey times to access a local service take longer than people suggest they are willing to walk. A service may be near in terms of distance, but it may still not be easily accessible on foot or by bike because of the difficult journey required to access it.

There is little agreement about precisely how far people are being expected to walk in 20-minute neighbourhoods. Internationally, the walkable distance specified ranges from 15 minutes in Paris, 20 minutes in Melbourne and Portland, Oregon, through to 30 minutes in Dublin, Ottawa, Sydney and Bogota. As a note of caution, in these specifications it is not always clear whether the timing given is for the journey there and back or only for one way.

It is estimated that an 800m walk takes 10 minutes, and a 1,600m (about one mile) takes 20 minutes (or 10 minutes' there and back).

Travel statistics show most people are likely to walk to a destination when it is within a 10-minute walk, or 20-minute return trip. Most people can walk or wheel (that is using a wheelchair or mobility scooter) a distance of around 500-800m, although it should be remembered this is not the case for everybody. Some services, for example, green spaces and bus stops, should be within 400m of where people live¹⁵.

	DISTANCE TRAVELLED IN 10-MINUTES	AREA OF THEIR 20 - MINUTE NEIGHBOURHOOD
WALKER	800 M	200 HA
ELECTRIC WHEELCHAIR / PAVEMENT MOBILITY SCOOTER	1000 M	314 Ha
ROAD LEGAL MOBILITY SCOOTER / BEGINNER CYCLIST	2000 M	1,257 HA
aood cyclist	5000 M	7,854 Ha

Figure 14: 20-minute neighbourhoods by different modes.

* The average walking speed for a 2-year-old is around 1.74 miles per hour (2.8 kilometers per hour), gradually increasing with age to about 3.10 miles per hour (5 kilometers per hour) by the age of 12 and into adulthood.

- People are more likely to walk, cycle or use public transport, and less likely to drive, when travelling to amenities within their own immediate neighbourhood.
- Data extracted from the 2019 National Travel Survey, conducted for government, indicates that roughly 80% of journeys spanning less than one mile were undertaken on foot¹⁶.
- People demonstrate an increased tendency to opt for walking when direct pathways to their destination are available, especially in areas where a network of interconnected walking routes exists.
- Data from the Walking and Cycling Index (the UK's biggest ever study of walking, wheeling and cycling in urban areas) conducted in 2021 suggests that, when a primary school is more than a 10-minute walk away. 51% of people drive to it. But when it is within a 10-minute walk, only 23% drive¹⁷. Unsurprisingly, the geographical area covered by walkers is generally smaller than cyclists.



HOW MOST TRAFFIC ENGINEERS SEE YOUR CITY AND NEIGHBOURHOOD



HOW CITIES AND NEIGHBOURHOODS SHOULD BE DESIGNED Figure 15: How most traffic engineers see cities and neighbouhoods and how they should be designed

We recommend that organisations looking to develop 20-minute neighbourhoods consider prioritising the following facilities and services within a 10-minute walking or wheeling distance:

Local Shops:

Grocery stores, pharmacies, convenience stores, and other essential retail outlets should be easily accessible to residents without the need for long journeys.

Public transport:

Access to public transportation stops, such as bus stops or train stations, is crucial to promote mobility for all residents, including those with mobility challenges.

Medical facilities:

Healthcare centres, clinics and hospitals should be within reach to ensure timely access to medical services.

Parks and green spaces:

Having parks and recreational areas nearby encourages physical activity and improves the overall quality of life.

Educational institutions:

Schools, libraries and educational facilities should be easily accessible to students, parents, and teachers.

Community centres:

Places where people can gather for social and cultural events contribute to a sense of community and belonging.

Restaurants and cafés:

Access to eating and drinking establishments offers residents options for socialising within their neighbourhood.

Banking services:

Banks and ATMs are essential for financial transactions and services. However, local branch banks are closing everywhere because of online banking.

Post offices:

Access to postal services is necessary for sending and receiving mail and packages.

Pharmacies:

Proximity to pharmacies is essential for timely access to medications and healthcare products.

Recreational Facilities:

Gyms, sports centres and other recreational facilities should be accessible for promoting a healthy lifestyle.

Community safety services:

Police stations, fire stations and emergency services should be easily reachable in case of emergencies.

Workplaces:

Neighbourhoods can benefit from physical locations where people are able to engage in employmentrelated activities. Such workplaces are crucial components of a neighbourhood, contributing to its economic vitality, to social interactions within it, and to its overall functional viability.

Planning to make existing neighbourhoods more accessible must focus on integrating or retrofitting the key features above rather than becoming fixated on a 10-minute or 20-minute duration for active travel. And it is crucial to consider long-term funding of services if public transport is to be improved and expanded.

Part D: The economic basis for a 20-minute neighbourhood

Local procurement

Delivery of the 20-minute neighbourhood can draw on what is termed the foundational economy - those activities which provide locally essential goods and services regardless of the social status of consumers. These are listed above in Part C. They include infrastructure, utilities, food processing, retailing and distribution, health, education and welfare. They are often characterised by their stability, long-term importance, and direct impact on the quality of life for individuals and communities.

In many residential areas the local foundational economy is absent, just as in many towns it is severely weakened. A key aim of the 20-minute neighbourhood is to restore and grow the local foundational economy and keep the circular flow of money within the community.

This approach will help spread investment, jobs and services more widely across a town or city rather than just being based in the centre. In turn this will help to create local jobs and services, especially in underfunded areas, ensuring that a strong neighbourhood centre exists to support everyday needs. In more rural locations, different approaches can be employed to lessen the necessity for people to travel long distances, following the example of mobile libraries, to deliver goods and services locally.

A policy for promoting the foundational economy was adopted by the Welsh government in spring 2021. Its policy focuses on care and health services, food, housing, energy, construction, tourism and on retailers, industries and firms, that are located locally because people use them. It seeks to reduce the leakage of money from communities and address the environmental cost of extended supply chains.

A similar approach is being applied in an urban setting by Preston City Council, its anchor institutions, and other partners, which are implementing the principles of community wealth building within the town and the wider Lancashire area. It means, for example, that local councils might give priority to procuring goods and services from local businesses. This generates employment opportunities and optimises the economic impact of council expenditure within the community. Planners also work with developers, businesses and community groups to formulate strategies that focus on local employment and skills development as part of plan making. This requirement for local spending is part and parcel of local authorities' desire to generate social value from their spending.

Supporting local shops

Over the past decade, there has been a noticeable shift in behaviour among younger urban dwellers, which has prompted changes in the business models of larger superstores. Many young urban residents neither have the interest nor the financial means to own a car and have moved away from doing traditional big weekly shops. Instead, they have adopted an almost daily shopping routine, a trend not exclusive to the young generation, as many people now shop more frequently. Consequently, we have witnessed the rise of smaller-scale stores like Tesco Metro, Sainsbury's Local, and smaller M&S food outlets, occupying less space on the high street, to cater to these evolving shopping habits.

To embrace the concept of sustainable 20-minute neighbourhoods, how then do we make the high street economically viable and accessible to all? The answer is, we need to create a more balanced mix of affordable housing options and level the playing field between online businesses and local retailers, the latter often being subject to very high business rates.

Why is VAT, for instance, the same on the local high street as it is on Amazon? Without a thriving high street, we cannot achieve the essence of a 20-minute neighbourhood. This is not something that urban designers, architects or planners can change; it is a matter of central government policy.



SECTION 3: Designing desired outcomes

Previous sections have touched on the ingredients to a successful 20-minute neighbourhood. This section delves into more detail about how those characteristics and outcomes can be designed.

It is essential to acknowledge that not all neighbourhoods can encompass a complete array of services and amenities within walking distance. Therefore, the provision of well-designed cycling pathways and efficient public transportation to destinations more than 20 minutes away gains in significance.

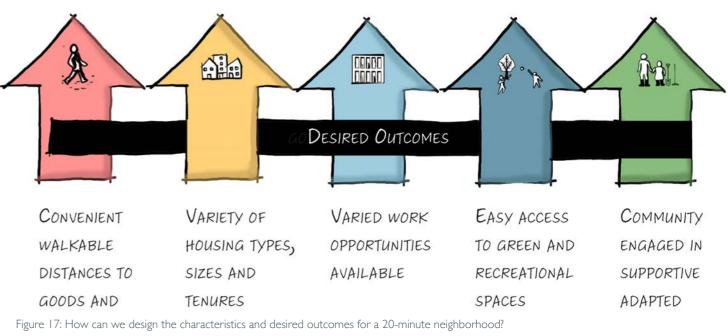




Figure 18: The symbols used here represent the Goals that are covered by the characteristics and desired outcomes for a 20-minute neighborhood

Outcome I: Convenient walkable distances to goods, services and ideally workplaces too

20-minute neighbourhoods provide goods and services, especially fresh food, groceries, healthcare, educational and cultural facilities, and ideally workplaces too, that are convenient and accessible to everyone.

We have, too often, built houses in the wrong places, far away from existing communities and services. Over a quarter (27%) of people living in towns and cities across the UK cannot easily get to places they need to visit without having to drive¹⁸. At the same time, 25% of households do not have access to a car and may be isolated with poor access to everyday services, jobs, social opportunities, and even affordable, healthy food¹⁹.

Currently large-scale residential developments intended to meet the bulk of the UK's new housing needs are typically being built by volume housebuilder developers in car-dependent locations, at relatively low densities and with a critical absence of spend to sustain local facilities. Yet accessing amenities is becoming harder for many as vital bus services are in decline and inadequate or unsafe infrastructure prevents many people from walking and cycling. At the same time, many local libraries, post offices, banks and pubs are closing.

This means services and amenities are found further away than previously from where many people live. Hence, the need for mixed-use developments that

encourage jobs and services being located closer to people and their place of employment.

Facilities with wide catchment areas (e.g., superstores, malls) should be clustered in mixed-use high streets and well served by public transportation. Large industrial and distribution activities, that employ few people per hectare, and where the efficient movement of goods is of prime importance, should be distanced from residential areas. Proximity and safety are key to supporting active travel, and access routes should be designed from a community's point of view, especially for vulnerable users to ensure their safety.

Understanding the needs of local residents and businesses is of paramount importance. Rather than taking a prescriptive approach to walking times and distances, it becomes crucial to adopt one based on understanding specific needs. This includes acknowledging that the concept of a 20-minute neighbourhood encompasses a comprehensive strategy for placemaking that extends beyond mere enhancements to walking conditions.



Figure 19: The viability of the 20-minute neighbourhood depends on having a sufficiently large population to make it economically and socially feasible.

FACILITIES AND THEIR TYPICAL CATCHMENT POPULATIONS

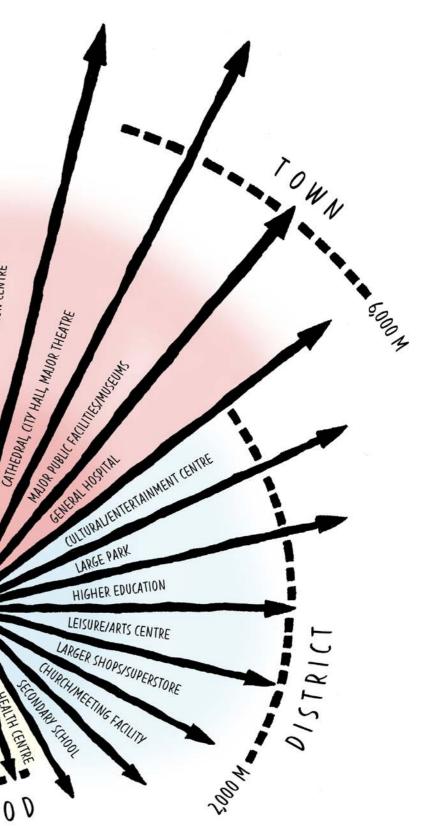
DISTRICT OR TOWN (2-6 KM)			
SPORTS CENTRE	25-40,000		
DISTRICT CENTRE	25-40,000		
LIBRARY	12-30,000		
HEALTH CENTRE	9-12,000		

NEIGHBOURHOOD (400-600 M) COMMUNITY OFFICES 7,500 COMMUNITY CENTRE 7-15,000 PUB 5-7,000 POST OFFICE 5-10,000

LOCAL HUB PRIMARY SCHOOL 2,500-4,000 DOCTOR

IVERSITIES, REGIONAL EXHIBITION CENTRE 2,500-3,000 CORNER SHOP 2-5,000 HOME 600 M EIGHBOURHOOD

Figure 20: Facilities and amenities require different catchment populations and distances from home.



FACILITIES AND THEIR TYPICAL DISTANCES FROM HOME

Outcome 2: A variety of housing and building types, sizes and tenures

20-minute neighbourhoods are places that provide a variety of housing and building types, sizes and tenures to accommodate the diversity of community, business and household needs and support people at all stages of life.

Housing, by itself, does not make neighbourhoods. A neighbourhood needs to contain a mix of uses working together to encourage formal and informal transactions between people and to be capable of sustaining activity throughout the day that strengthens social integration and civic life. Mixing dwellings, workplaces, businesses and services will help to ensure that there are people in a neighbourhood at all hours. Housing provision must also provide genuinely affordable and social housing, including communityled housing projects.

Living through the Covid pandemic showed that many house types and sizes do not meet their inhabitants' needs.

Current zoning practices prevent mixed uses. Poorer neighbourhoods are more likely to have lower quality housing with greater exposure to pollution and reduced access to key services, green parks and other amenities.

Higher housing density must be complemented by access to facilities, opportunities for active travel, highquality green infrastructure and increased frequency of social interaction. In some cases, grading so that higher densities are close to high streets, with lower ones further away and towards the main greenspace network, could help to maximise accessibility and choice.

New neighbourhoods should provide mixed-tenure occupation for a wide cross-section of people and be tenure-blind in architectural expression and detail. Large clusters of single tenure dwellings should be avoided, and flexibility of tenure over time should be catered for. The design of new neighbourhoods should enable mixed-use activity with places to work, relax and meet that will help create a local economy. Managed offices, workspaces, retail and commercial units integrated into residential areas, acting as dynamic hubs, will also contribute to a local circular economy.



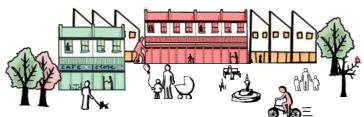
Figure 21: Neighbourhoods should support mixed-tenure occupation for a wide demographic cross-section and complemented by access to facilities, opportunities for active travel, high-quality green infrastructure and increased frequency of social interaction.



Outcome 3: A variety of workspaces

20-minute neighbourhoods are places that provide a breadth of working options to suit a variety of working patterns and circumstances. This includes co-working spaces, co-working hubs or a dedicated office places and retail and hospitality facilities.

During the 2020 pandemic, society underwent a profound transformation across all aspects of life, and not least in working practices. The traditional nine to five routine, with workers sitting at a fixed desk alongside colleagues, gave way to increased fluidity and choice of when and where people work. Advancements in technology facilitated these freedoms.



Remote working means people spend more time in their neighbourhoods and therefore spend more locally. If this mode of working continues, the increased presence of locals during the daytime may result in the re-emergence of local amenities and it could be a positive step for local neighbourhoods to contain co-working hubs and venues, dedicated office places, and retail and hospitality facilities. However, some employees have returned to their place of work full time – though many are now hybrid working.

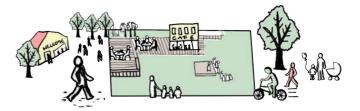


As well as a place to sleep and live, for many the home has also become somewhere to work. Some have converted existing rooms to offices; others have built extensions. Others, however, can only find working space in the kitchen or bedroom – again, exacerbating existing inequalities. New neighbourhoods will need to provide people with the opportunity to work at home in dedicated home-offices. At present, few developers offer this for two working adults.

- Remote working supports the 20-minute neighbourhood idea. The provision of co-working spaces may help to revive existing high streets and make new ones viable. Proximity makes walking and cycling more practical when the commute is considerably shorter. Residents could cycle their child to school, continue their ride to their co-working space, and then call at a delivery hub on the way home
- The design of new neighbourhoods, and the regeneration of existing ones, should accommodate other changes in lifestyles too – adjusting, for instance, to the boomerang generation - grown up children who return to their parents' home, and caring for the elderly.



Traditional housebuilding will continue to play a major role in housing delivery. But a strong consumer demand for a more diverse range of options could encourage major housebuilders to improve and differentiate their products in an increasingly competitive market. However, to have a real impact, such alternative forms of house and workplace types, designs and tenures cannot be confined simply to small-scale exemplars and experiments. They will need to be made more widely available.



Outcome 4: Easy access to green space and recreational areas

20-minute neighbourhoods are places that provide good quality outdoor space and frequent opportunities to encounter nature through green and recreation spaces within walkable distances.

The Covid pandemic highlighted the fact that many people lack access to nature and outside spaces. This has led to an increased desire for gardens and balconies, particularly for families with young children. Unsurprisingly, post-Covid there has been an increased level of interest in homes with such amenities, even in areas that were until recently considered less desirable. Areas with established networks of green spaces are at a premium.

A lack of perceived access to greenspace or trees can lead people to avoid the public realm, reducing their social interaction and physical activity. Individuals residing in the most-deprived areas frequently experience the least access to high-quality green spaces, despite being the ones who would gain the most from such spaces.



GOOD GREEN SPACES IN THE RIGHT PLACES

Well-designed outside spaces promote sustainable communities and create a sense of wellbeing, of safety and ownership. Importantly, they allow us to access nature, and realise our dependence on the natural world. To effectively address the climate emergency, we also need to move away from endless hard and grey surfaces, and seek green and blue solutions, with integrated soft and permeable surfaces to provide natural drainage and flood mitigation.

20-minute neighbourhoods place a strong emphasis on the quality of green spaces. Streets, gardens, allotments, woodlands, and waterways and parks should provide places to meet neighbours, spaces for children to play and be well stocked with plants and trees that can be home to wildlife.

There is a growing recognition that green infrastructure is not just an amenity but a necessity. However, parks and open spaces are often seen as a liability and burden on the public purse. There is a tension between the pressure to plan the maximum number of new homes on a given piece of land and the aspiration for accessible open spaces.

Integrating green infrastructure into streets through trees, hedges and planting is an efficient way to enjoy the benefits of a more natural landscape and yet preserve the character, particularly of suburban neighbourhoods. Getting the landscape right can change our experience of the very nature of urban life.

Greening the streets

Importantly, greening streets also improves air quality by absorbing pollution. Car dependency poses a threat to the health and wellbeing of residents which is worsened by poor connectivity in neighbourhood layouts. Opportunities for access to open, green, landscaped spaces and other facilities (woods and fields, schools, shops, play areas and pubs) is often thwarted when homes are in cul-de-sacs or within a warren of unconnected streets.

Such disconnections between the surrounding spaces and facilities limit options for walking and cycling and promote unhealthy, inactive lifestyles as well as stifling interaction between neighbours and members of local communities.

The design quality of the street network plays a pivotal role in creating appealing environments that cater to human dimensions. Well-designed streets can provide diminished air and noise pollution, along with chances to engage with the natural surroundings

Unsurprisingly, allowing plants, trees and landscape to permeate streets and open spaces is now seen as an important aspect of urban life. Planting provides shade, improves air quality and enhances the visual appeal of streets, not least through marking seasonal changes. Generous shared facilities can include orchards. allotments, communal greenhouses, play areas and quiet contemplative gardens. A key aspect should be

to redefine the relationship between the dwelling, the garden and the car. Development intensity, quality and greenery are not antipathetic. But prevailing development practices for neighbourhoods makes achieving this difficult.

Further, an integrated local food system can play an essential part in 20-minute neighbourhoods by creating and designating new, fresh-food growing spaces, particularly in derelict lands or areas of deprivation. By producing food locally, communities can enhance their food security, support local economies, reduce carbon emissions, and help provide communities with healthy, locally sourced, fresh food.

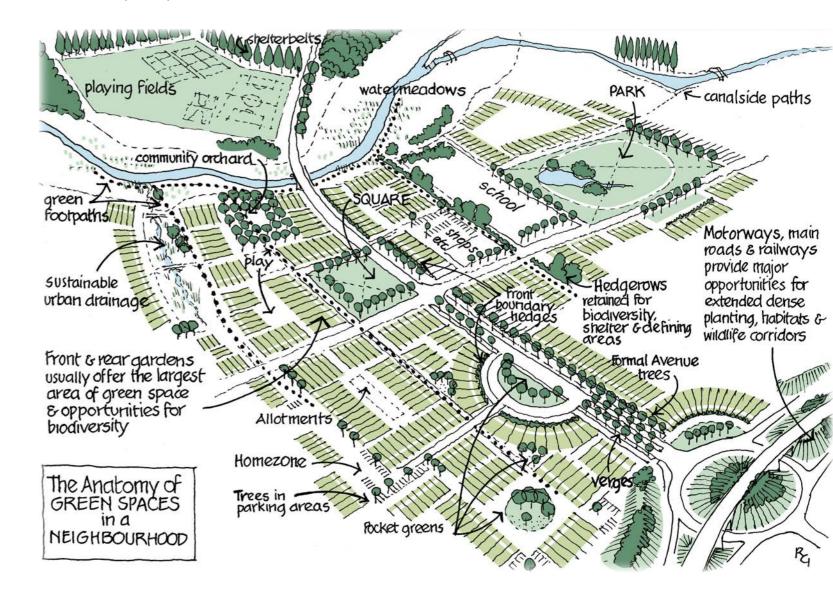


Figure 23: Nature and green spaces contribute to over-all attractiveness and quality of a space or a route, potentially leading to an increase in people travelling actively.

Enhancing the local food landscape can be a key strategy in mitigating the influence of major supermarkets and out of town centres, which frequently diminish the sustainability of small, independent local stores and pose accessibility challenges for individuals who do not own cars. Also, growing locally means that more of the products' nutrient value is retained at the point of sale. Local food production can occur in a variety of settings, from modest areas like allotments to urban farms and community-driven food enterprises.



Outcome 5: Community supporting change and adapting their behaviour

20-minute neighbourhoods are places where those who live and work are prepared to adapt or change their behaviours to make sure places perform as they should.

Even if all the desired outcomes outline above can be provided, they will not - of themselves - deliver 20-minute neighbourhoods. That comes down to people's behaviour. Yet much of the planning and design advice focuses on the physical, assuming that desired social behaviours will simply arise from correct spatial layouts, configurations and facilities provided.



To operate effectively, 20-minute neighbourhoods need to include what are called 'third places' (where homes are 'first' places and workplaces are 'second' places). Third places act as meeting areas that can bring people together, creating a shared sense of place, identity, and perhaps even an esprit de corps.

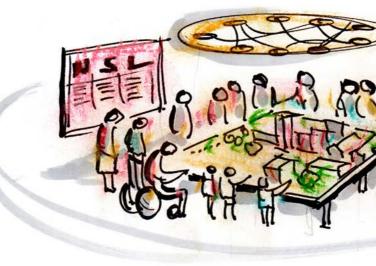
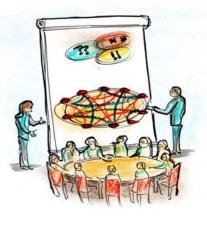


Figure 25: Engagement; community supporting change

- A well-functioning public realm contains a richness of third places that can build social capital by reinforcing and harmonising social relations.
- For this to be achieved successfully, those tasked with creating 20-minute neighbourhoods must deliver bespoke measures designed to meet community needs. And accomplishing this requires that local stakeholders are involved (but not forced into) in making the important decisions about what steps that need to be taken, and the governance structures and resources required to maintain and operate what is put in place.







SECTION 4: Addressing the means to deliver outcomes

All the desired outcomes listed in the previous section are based on a particular set of social values. They are features planners and urban designers believe should be displayed in areas if they are to be worthy of what is meant by a 20-minute neighbourhood.

But what are the mechanisms, levers, triggers, (on occasion, the causal factors) - the means as it were - that need to be in place and aligned to allow a 20-minute neighbourhood to operate effectively?

There is a wide range of factors which can be manipulated to achieve a viable 20-minute neighbourhood, and they are often interlinked. This section looks in more detail at these.

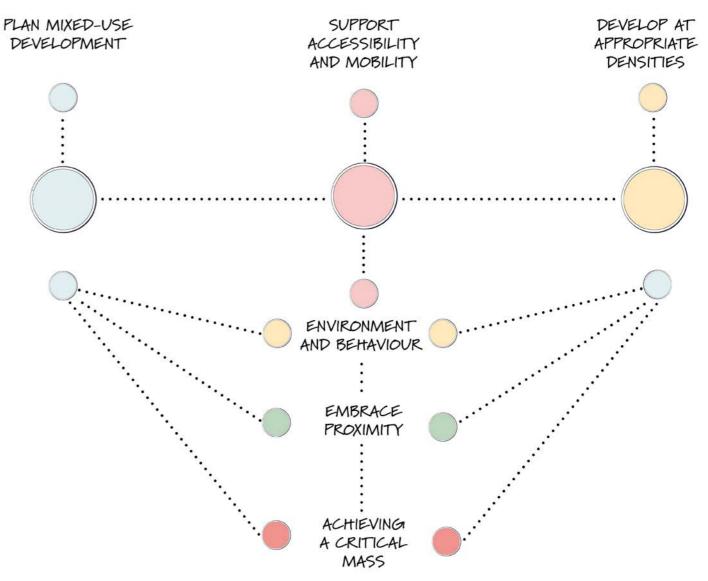


Figure 26:This diagram illustrates the means available for achieving the long list of desired outcomes outlined above. Each of these means appears to be interlinked. This implies that each of them needs to be in place and manipulated effectively to achieve 20MNs.

Means I: Plan mixed-use development

Ensure the spatial arrangement of functions and facilities supports the operation and behaviours of 20-minute neighbourhoods.

ISOLATED PODS OF SINGLE USE ACCESSED FROM COLLECTORS AND ARTERIALS

Prevailing urban planning practices have divided uses into separate zones to enhance amenity, efficiency and safety.

This has resulted in homogeneity in land use that generates vehicular traffic and eliminates social interaction between areas.

Such real-estate development practices make development easier, from a developer's perspective, since single-use developments are generally less complicated to create, simpler to manage and more readily understood by potential investors. But the results have been characterised as 'placeless with no social or economic activity'. They include single-use housing estates characterised by poor street layout, over-engineered roads, over-provision of parking spaces, poor amenity space, poor connectivity and places bereft of planting and local facilities. Developers' focus on this 'end product' has been described as leading to the standardisation of places and a reduction in their quality.



Seen from this perspective, many urban environments (at least in the UK) are poor quality. To meet the requirements of the 20-minute neighbourhood they will have to be radically upgraded to accommodate integrated mixed uses such as shops, public and green spaces and workplaces, that are accessible via active travel. The scale of such upgrading represents a significant challenge, not least because it will involve challenging the combined resistance of current planning and real estate development practices to mixed use.

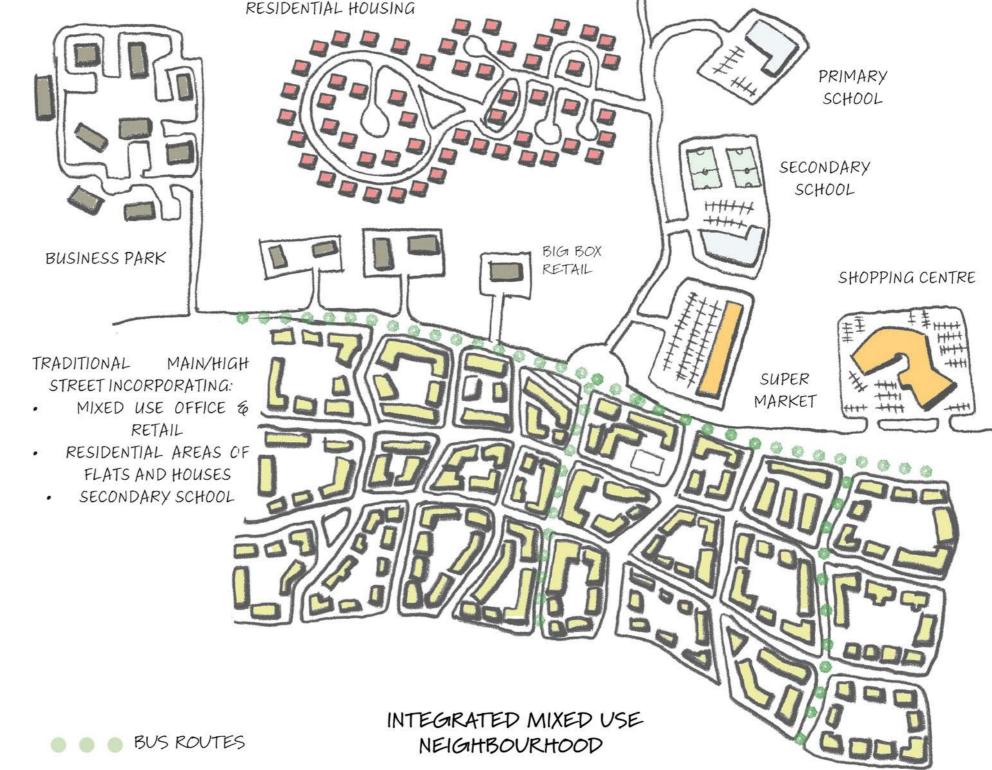


Figure 27: This figure reveals the contrast between physical master plans with rigid zoning by function result, in mono-functional housing sub-divisions, containing populations isolated from services, with segregated uses often heavily dependent on car travel and a traditional street pattern with mix of houses, workplaces, local shops, high street.

Means 2: Support accessibility and mobility

Providing appropriate mobility and accessibility options, allow places to perform as 20-minute neighbourhoods.

Current patterns of accessibility, and the technologies on which these depend, also work against establishing successful 20-minute neighbourhoods. The introduction of mechanised transport led to the spread of villages, towns and cities. Mass transport systems have brought about a separation of where we live, work and play. This in turn has intensified dependency on private cars to perform tasks necessary for everyday life.



The arrangement of street and developments can promote car use – even if that was not the intended outcome at the time. For example loop, cul-de-sac and distributor road layouts were expressly intended to prevent through traffic - but the effect is to increase car dependency. Those who live or work in streets lacking connection interconnections with their surroundings may find it more difficult to engage in active travel. Once a place has such a fixed pattern of development, it can be hard to reverse it or open it up later to become a more connected system.



Instead, traffic planning techniques may be required for achieving road networks that exclude through-traffic from developed areas - but which, unlike cul-de-sacs, still provide access for walking, wheeling or cycling. Retroactively, this might be not feasible. It may require interventions, like compulsory purchasing of private land at excessive costs, or other mechanisms likely to be so politically unpopular as to be prohibitive. Even where feasible, careful consideration is needed as restricting traffic movement could isolate areas from others, so creating inward looking neighbourhoods.

Promoting mobility hubs

Mobility hubs have the potential to yield substantial planning benefits, and allow for greater housing densities if tied in with reduced parking requirements.

Mobility hubs allow people to switch from one mode of transport to another, with convenient facilities designed for a low-carbon society. They might, for example, have cycles or electric scooters or cars that can be rented by the hour.

They are suitable for new residential developments, not least because moving into a new home is the time when many people are likely to alter their transportation habits and behaviours. In the longer term, mobility hubs hold the promise of diminishing traffic congestion. They enable urban rejuvenation by repurposing space away from individual vehicles, thus aiding in combating transportation inequity. By presenting users with viable, cost-effective and conveniently accessible substitutes to personal cars, these hubs can contribute to addressing issues of transport accessibility and affordability.

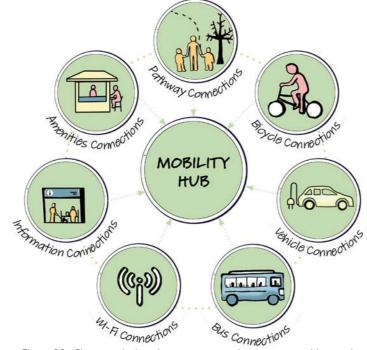


Figure 28: Since each location presents unique opportunities and challenges based on its context, scale, amenities and transportation functions, there is not a single definition or description for a Mobility Hub. The hub should consider the above essential components.

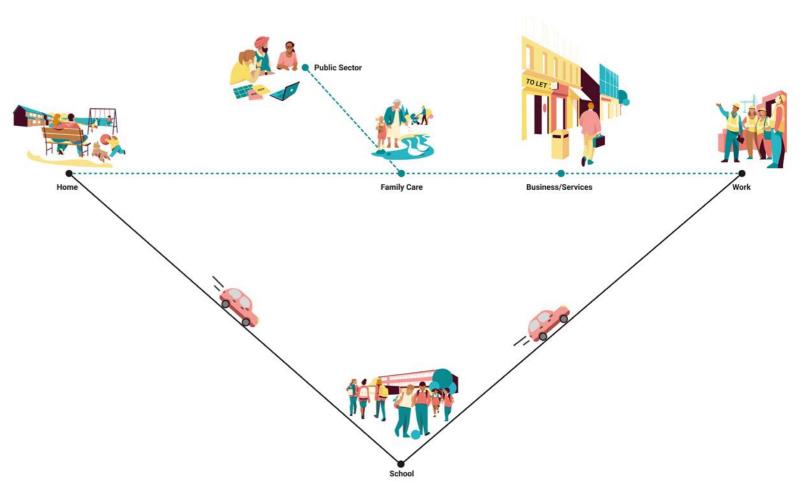


Figure 29:This trip diagram illustrates negative impacts on daily life and possible additional burdens placed on public services and town centres when amenities and key sector services are not planned and located close together

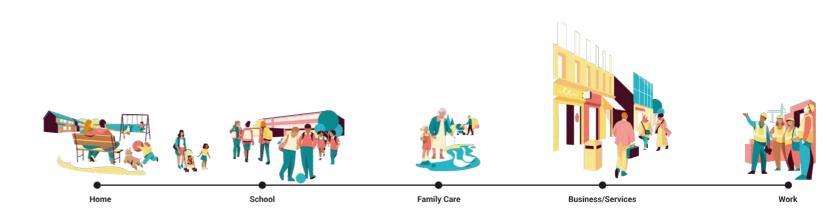


Figure 30: This trip chain diagram illustrates a possible daily journey that can be achieved using sustainable transport when amenities and key sector services are planned and located close together.



Means 3: Develop at appropriate densities

Plan places where densities of development and intensity of uses support the behaviours necessary for viable 20-minute neighbourhoods.

Appropriate density and intensity are necessary for achieving the 20-minute neighbourhood. However, there are no hard and fast rules on how to deal with density at neighbourhood levels.

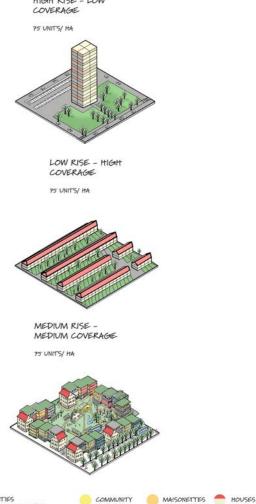
Density in whatever form (high, medium and low) shapes how neighbourhoods look and feel, and how they are perceived and experienced by those who use them. It affects the availability and vitality of services along with other architectural and townplanning characteristics which influence how satisfied people feel about their neighbourhood.

The density of a place influences the choice of mode of travel. Lower densities are insufficient to support a full public transport system and so promote private car use. Lower densities also create financial difficulties in the provision of basic services and facilities. Higher density does not imply a landscape of isolated tower blocks. Terraces of mid-rise buildings can provide just as many homes in the same area and in a way that is far more conducive to walking and supporting local services.

Generous outdoor space allowances can be accommodated at higher densities through good design and a creative use of volume, light, green routes and outdoor space. Creating compact neighbourhoods does not mean building on all available land: walkable and green routes, public and civic spaces and other green infrastructure are all vital for 20-minute neighbourhoods. Density should evolve in a way that correlates intensity of occupations and uses, with accessibility and proximity to facilities and services.

Achieving a more sustainable urban form inevitably involves the development of densities that can enable public transport, walking and cycling to be viable and be preferred options. Also, diversity of urban form is seen to have a role to play in improving social equity. For example, it could help widen choices of jobs, housing types, recreational facilities and modes of transport. Medium density should promote mixed tenure housing for a wide demographic cross-section and be tenure blind in architectural resolution and detail.





KEY TARGET A MIX OF ACTIVITIES INCLUDE A VARIETY OF HOUSING TYPE

Figure 32: Relationship between density and urban form. All three areas shown have the same housing density but the 'medium rise – medium coverage' design is more supportive of active travel.

Means 4: Embrace proximity

The proximity of people, facilities and functions supports the behaviours necessary for places to perform as 20-minute neighbourhoods.

Proximity is the closeness of people, goods, resources, facilities, services, shops, schools, green parks and ideally workplaces. Also, living close to friends matters. Amid a loneliness epidemic, the 20-minute neighbourhood planning concept offers a vision for proximity.

In a dense, diverse urban environment, there are at least three notable benefits that proximity can bring.

- Physical proximity: Being in close physical proximity to people and places can enhance accessibility to employers and employees, teachers and tradesmen, shops, schools, and essential services when and where they are needed.
- Common resources: In an urban setting, proximity is facilitated by shared resources like public spaces, GP practices, libraries, universities and public transportation. It involves being in closer proximity to places where decisions are made, discoveries unfold, knowledge expands, fashion emerges, trends begin and culture thrives.
- Shared identity: within a community, this can emerge from the shared use (possibly even mutual

ownership) of common places and resources. This sense of belonging is evident in the pride individuals may take in their neighbourhoods, its places and local heroes, its public buildings, parks, and promenades as well as its athletes and artists.

If high density blocks of flats are in areas lacking good transport links or hubs, and without proximity to local facilities and amenities, then this is a recipe for car reliance, with all its knock-on effects on household expenditure and levels of congestion, pollution, noise, road traffic casualties and carbon dioxide. Large scale suburban housing developments may also lack proper connectivity to essential amenities through any means of transportation, including the most sustainable, healthy, and affordable transport options.

A simple equation of 'density x diversity = proximity' has been offered. But it is necessary here to guard against the 'fallacy of proximity.' Simply because people live near a facility - for example, a shop, school, sports facility or employer - it doesn't follow that they will necessarily choose to use it.

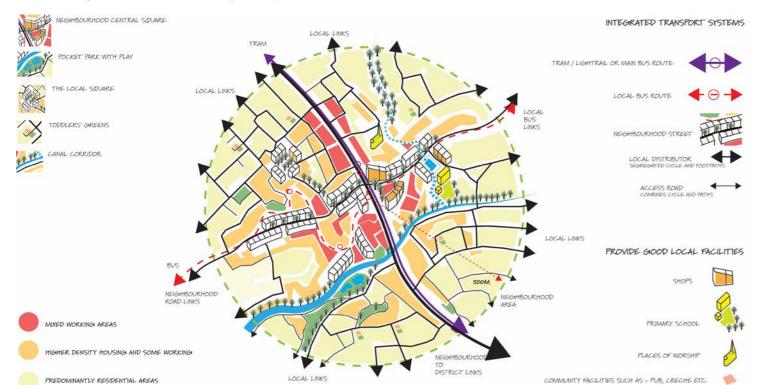


Figure 33: Proximity - to an integrated transport system and good local facilities and amenities - can enable residents to easily meet their daily needs closer to home.

Means 5: Achieving a critical mass

A critical mass of people, facilities and functions is needed for places to perform as 20-minute neighbourhoods.

The viability of 20-minute neighbourhoods is dependent on a critical mass of people within a given area. For instance, the number of households required to make a corner shop viable is between 2,000 and 5,000. 3,200 dwellings result in a population of about 7,360 people. A 20-minute neighbourhood, able to support all of the facilities listed in the table below, would need a population of at least 10,000 people at a density of 50–90/hectare, depending on how direct the walking routes were. If everyone is approximately within 400m of shops, then this population density can also support a school and other community uses. To make bus travel a real choice over the private car, bus stops ideally should be no more than 5 minutes from home. A density of 100 persons/hectare is required to support a good bus service.

But a critical mass of people will be to no avail if the local facilities are not used, and this comes down to the quality of service or goods they provide and the streets and spaces in between. As Graham Ross at the architectural practice, Austin Smith Lord, has noted: "There is no point living next to a green park if it is unsafe, dirty and has anti-social behaviour. And there is also no point living next door to a health centre if you cannot get a GP appointment. Nor living next to a bus stop if services stop at 6pm.

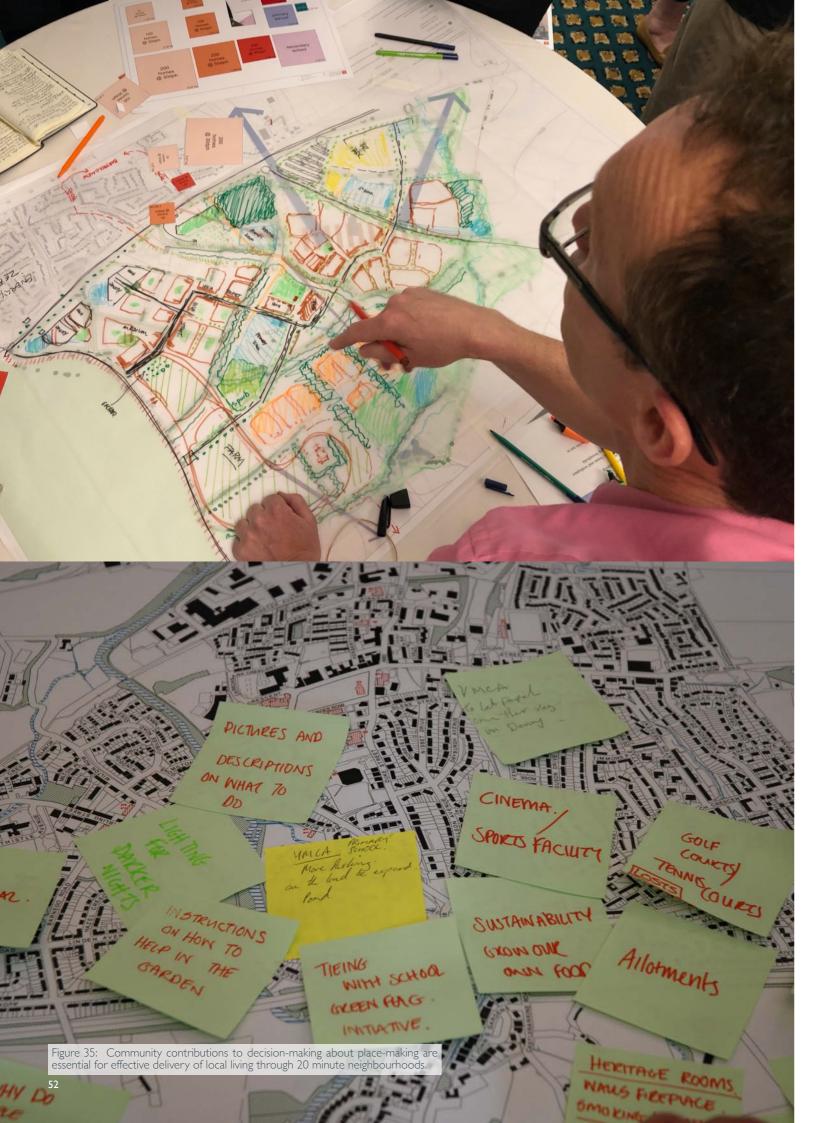
Local facility	Illustrative catchment population
Local shop	1,500
Nursery/first school	2,000
Primary/middle school	4,000
Community centre	4,000
Post office	4,000
Local centre	6,000
Primary/Middle school	4,000
Small secondary school	8,000
Healthy centre (4 GP's)	10,000
Source: Barton et al. (2021)	·]

So, beyond discussion of numbers – and of proximity, density and accessibility, 'design quality' is also crucial, both in terms of the journey and the destination. And the mix of uses (whether within a building, a street or an area) can help determine how well-used a place is, and what economic and social activities it will support. Overlapping and interveaving of activities crucially impacts on the vitality of neighbourhoods by creating more active street life.

Critical mass can be influenced by local authorities in new settlements or development of infill/periphery sites through masterplanning. In existing settlements, any influence is likely to be piecemeal, for instance in response to planning applications to develop backlots and rear gardens.



Figure 34: Successful local living entails more than just the existence of amenities or services; it encompasses how people experience accessing them.



Means 6: Environment and behaviour

Engage with the community to promote increased walking and cycling within their local neighbourhoods.

There is a long-standing belief expressed in planning guidance that the form and nature of the built environment affect, perhaps even determine, people's behaviour and patterns of movement. So, for instance, the location of housing is held to affect the frequency of physical activity. Occupants of houses that have direct connections to a diverse range of destinations are reported to be more likely to engage in 30 or more minutes of physical activity per day.

The 'life between the buildings' is held also to be important. Increased spatial distance between buildings increases social distance, resulting in less social interaction and social cohesion.



While social interaction cannot be enforced by urban form or physical design, it can be encouraged (or discouraged) by it. There are many different arrangements which can produce wonderful places that are pedestrian friendly, whose fabric allows frequent interlinkages at scales that work. If housing estates or local centres have been designed with cul-de-sacs or 'pod' patterns, which militate against sustainable, direct, 'people-powered' movement, then those who use them may struggle to engage in active travel. The configuration of a built environment determines how (dis) connected or (im) permeable it is. This, in turn, affects people's patterns of movement within an area and through it. People quickly adapt their travel behaviour to suit the context of the street layouts and infrastructure that they encounter.

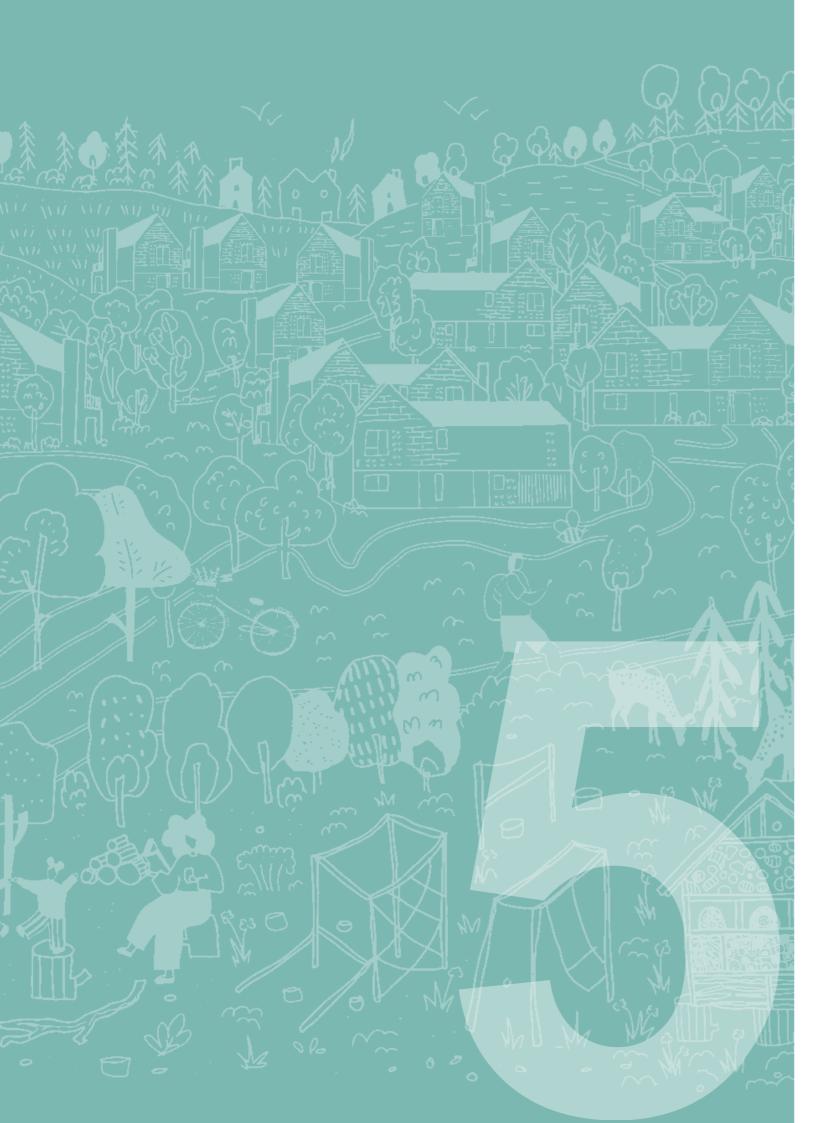
Rightly the planning and design advice on 20-minute neighbourhoods gives detailed consideration to these physical characteristics. Yet it cannot be assumed that desired social behaviours will simply arise

from correct spatial layouts and configurations. For a 20 minute neighbourhood to be viable, let alone effective, its built environment must meet people's aspirations and concerns.



Attempts to introduce 20-minute neighbourhoods that are imposed without active contributions from (decision-making by) those who live and work in them are unlikely to succeed . A study commissioned by the Department for Transport revealed that most individuals support implementing changes to promote increased walking and cycling within their local neighbourhoods²⁰, but effective community engagement is essential to ensure that these perspectives are genuinely acknowledged.





SECTION 5: Rural communities and 20-minute neighbourhoods

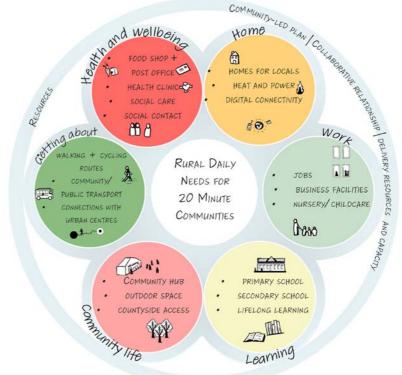
Some do's and don'ts

Rural settlements do not have access to two of the key means needed to establish a 20-minute neighbourhood – population density to support facilities and services and availability of active travel options for accessing them.

In the countryside, there are not enough safe walking and cycling routes, making it harder for people to get around on foot or by bike within a short distance.

In such cases, the only ways to achieve rural 20-minute neighbourhoods are either to increase population or increase connectivity between rural settings to allow facilities to be shared. In rural areas, the infrastructure and energy networks/grids often have insufficient capacity to support major growth. Sharing facilities is likely to be a more feasible option. Doing this sustainably requires improvements across a number of fronts - from home/hybrid working facilities, to the quality and frequency of public transport, to safe cycling and walking connections between villages.

One of the biggest challenges is likely to be costeffective ways of providing such connections. Country roads can be narrow, with fast-moving vehicles, and are dangerous for non-car users. A choice will need to be made between speed restrictions or the construction of safer, off-road routes.



There is a need to avoid the notion of 20-minute neighbourhoods being parachuted into rural areas inappropriately. 'Communities' may be seen as more appropriate and inclusive term since it references policy aspirations for community empowerment and development. But many of the components of the 20-minute neighbourhood/community are beyond the powers of local government and the public sector to enable, implement or deliver. Given the inadequacies of public transport, whatever the policy intent, motorised vehicles are likely to be needed locally to support everyday life, to provide access to schools, shopping and other services Because of internet retail and the growth in supermarkets (out of town centres), many villages have lost their shops. There are also major variations in the relative self-sufficiency of villages. All have some level of dependency on urban centres for the services they provide. Those in urban fringes may be less selfsufficient than those in more remote areas due to their urban proximity.

Networked villages

Dispersed rural communities can, with assistance from their local councils and in partnership with local stakeholders, become more cohesively connected by establishing a 'village cluster.' Networked villages can work together on a common strategic goal, using each other's strengths to develop both individual villages and the entire cluster to create a shared place identity, social communities, gathered around shared physical facilities and activity opportunities. In this way, villages can strengthen their communities and village life while at the same time optimising municipal services and their operation .

Networked villages are more appropriate when they are located far apart. Improving connectivity between them - particularly though frequent, reliable, and affordable public transportations - may help them share facilities, resources and services and reduce dependency on cars. It could also attract capital investment, by unlocking under-utilised local assets like libraries, restaurants, community halls, local markets, sport centres and schools, so providing circumstances for further investment.

In reality, however, implementing the desired outcomes listed in this guide is much more difficult in rural settings. The private sector is generally unwilling to invest there. Rural services are costly to maintain. Many services have disappeared because of the convenience of internet shopping or the cheapness of shopping in major supermarkets as compared with supporting a local shop.

There is also a clear design challenge here. In rural villages, the pace of change is inherently slower and more incremental. Large-scale developments, such as those favoured by volume housebuilders, can undermine identity and character irretrievably, even where responsive to design guides and codes.

Adjustments to ideas underpinning 20-minute neighbourhoods are suggested as necessary for coping with rural conditions²¹ such as:

- Adopting sustainable transport rather than fixating simply on walking and cycling.
- Treating 20 minutes as a target rather than a (planning) requirement.

- Embracing quiet lanes and lower speed environments to support and promote active travel in rural areas.
- Focusing on rural settlements with affordable housing, shared facilities such as heating, electric vehicles, cooperative growing spaces and community work hubs.
- Establishing innovative ways to build health and wealth in rural places.
- Achieving such developments via community-led, cooperative housing models such as co-housing and collective self-build.

Given the geography of rural areas, it is unrealistic to expect the local delivery of all services to all people. Ensuring that current and future residents can reasonably access them, without adversely affecting the viability of development sites, by placing burdens on rural development proposals, is seen by property developers as potentially slowing housing delivery.

Planning and delivery of 20-minute communities will require investment. They will not happen by relying on either policy or the market alone. If resources are scarce, they may go to empowered communities who already have the resources to bid for them or attract developers. This could further impoverish those who lack the capacity to do so. There is a need to avoid further centralisation of services, with more remote areas becoming even more isolated and so worse off.

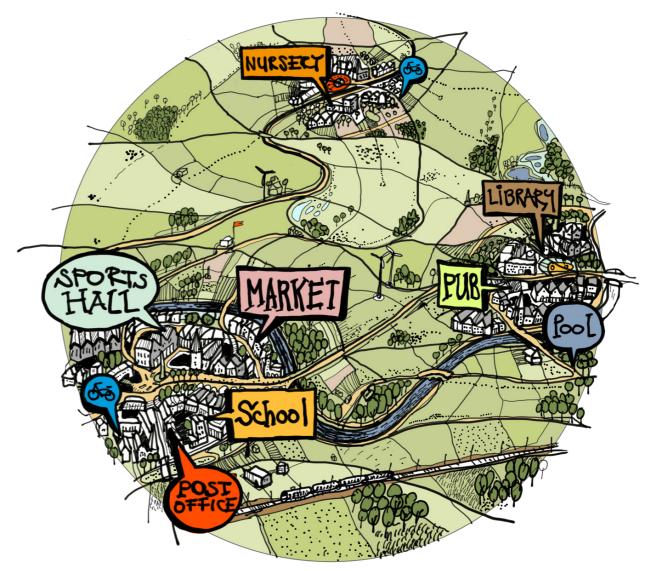


Figure 37: Rural Villages are stronger when they are connected with shared resources benefiting everyone.

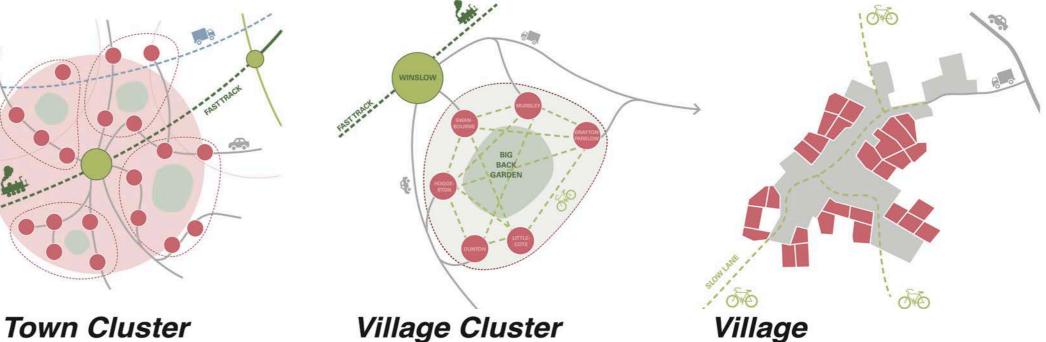
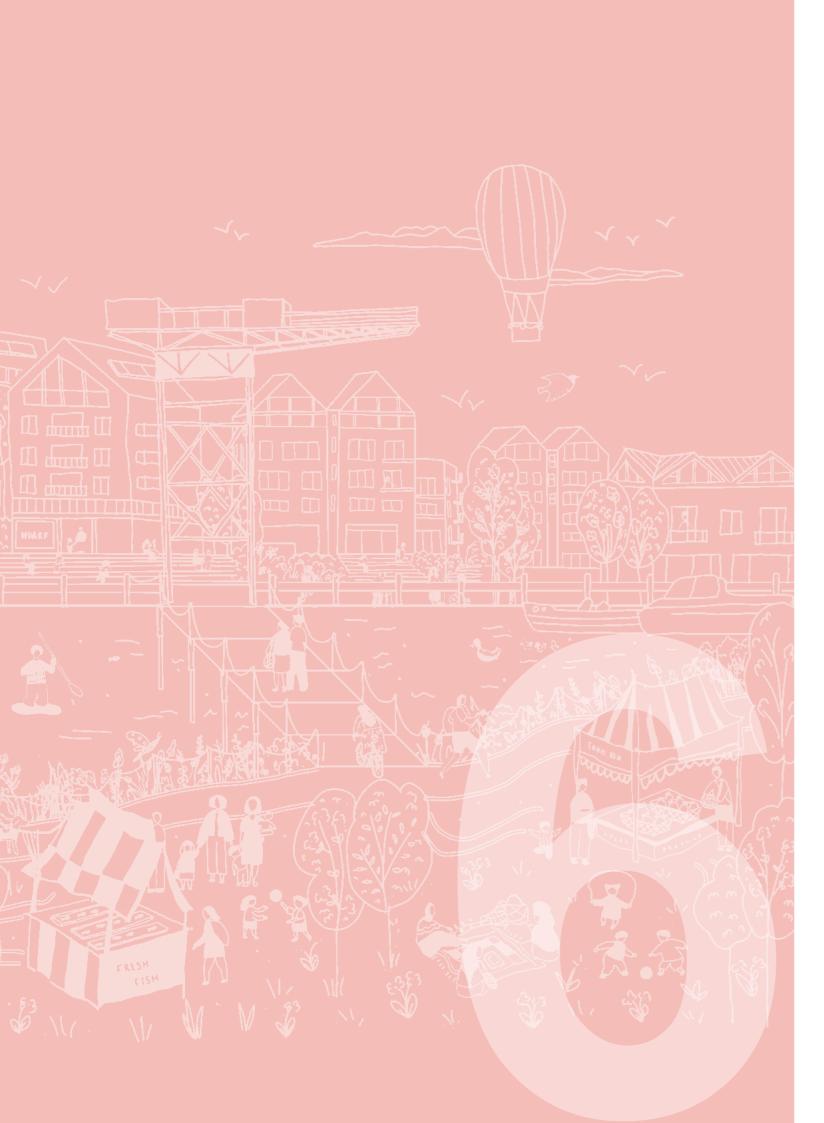


Figure 38: Dispersed rural communities can become more cohesively connected by establishing a ' town/ village cluster.'



SECTION 6: Recommendations and next steps

Key messages for promoting and creating 20-minute neighbourhoods

For central government and national politicians

20-minute neighbourhoods cut across agendas, policies, organisations, and professional silos by offering a holistic place-based approach. They appear to be easy to understand. Beware - this appearance is deceptive. Far from being easy, grasping the breadth involved in 20-minute neighbourhoods requires unravelling complex relations which can be difficult to disentangle. So governments need to:

- Provide more clarity about what establishing a 20-minute neighbourhood entails to increase public understanding and create trust in the wider public debate about their governance.
- Develop a coherent, strategic approach to 20-minute neighbourhoods in planning and design terms for both new and existing neighbourhoods, with clear stakeholder responsibilities. This needs to align with macro-trends such as the climate crisis, environmental and health inequalities, cost of living crisis, demographic, social, economy, political, and technological change. All these factors influence policy, its implementation, and its operation on the ground.
- Avoid treating communities as a homogeneous mass. They are comprised of individuals and groups with differing levels of knowledge and differing needs and expectations.

Local politicians and policy makers

- Provide a strong political mandate, and the resources required to implement this. Without either, planners, architects and urban designers are likely to find that they have limited direct ability to improve the lives of those in localities identified as suitable for establishing a 20-minute neighbourhood.
- Avoid imposing a top-down solution. Support local people to make their own decisions.
- The 20-minute neighbourhood is not a timelimited task that creates a finished end-product. Neighbourhoods must develop from year to year, from generation to generation. They need ongoing

care and maintenance. This means continuously looking after greenspaces, footways, carriageways, buildings, and tackling litter and neglected land and buildings.

Developers and designers

- Provide a variety of housing and building types, sizes and tenures to accommodate the diversity of community, business and household needs.
- Balance design for vehicle usage with design for children, women, disable and elderly people.
- Create much more attractive streets, which include trees and landscape social spaces and play areas. It is not just destinations that are important, but the streets and spaces that encourage social life and interaction in between them.
- Create places that enrich local businesses and the quality of life of local people.

Economic development officers and consultants

- Support local businesses, traders, and shops and the provision of community services.
- Organise services provided or funded by the local authority so they operate efficiently with minimum travel distances and time wasted, and strengthen the local (foundational) economy.

Social development officers and consultants

Use 20-minute city initiatives to create a deeper sense of community, where people start to know one another, and work together to improve their neighbourhood.

- Encourage the organisation and adequate funding of clubs, societies and local activities.
- Give serious consideration to the two-way relationship between the built environment (urban form) and people's behaviour. People's choices will impact on the deliverability and viability of 20-minute neighbourhoods. This is not being sufficiently addressed or factored into how to bring about the changes sought.

Establishing 20-minute neighbourhoods: the next steps

If 20-minute neighbourhoods are to be delivered successfully, a wide range of actors will each have to play their part. 20-minute neighbourhoods also need to be based on effective, as opposed to cosmetic, community engagement and must not be imposed.

Top-down inputs from politicians and policy makers will have to reinforce the efforts being made by service providers caught in the middle – by planners, urban designers, the police and the health service and these, in turn, will have to be aligned with those the bottom-up efforts from local residents, businesses and employers.

The sheer range of the contributions that need to be marshalled, listed below, clearly illustrates the complexity of establishing 20-minute neighbourhoods effectively. It also indicates the number of potential obstacles that will need to be overcome.

Delivering concerted actions

Achieving the desired outcomes of 20-minute neighbourhoods cannot rest with a single set of hands - however responsible or benign they are. Concerted action across all those involved will be critical.

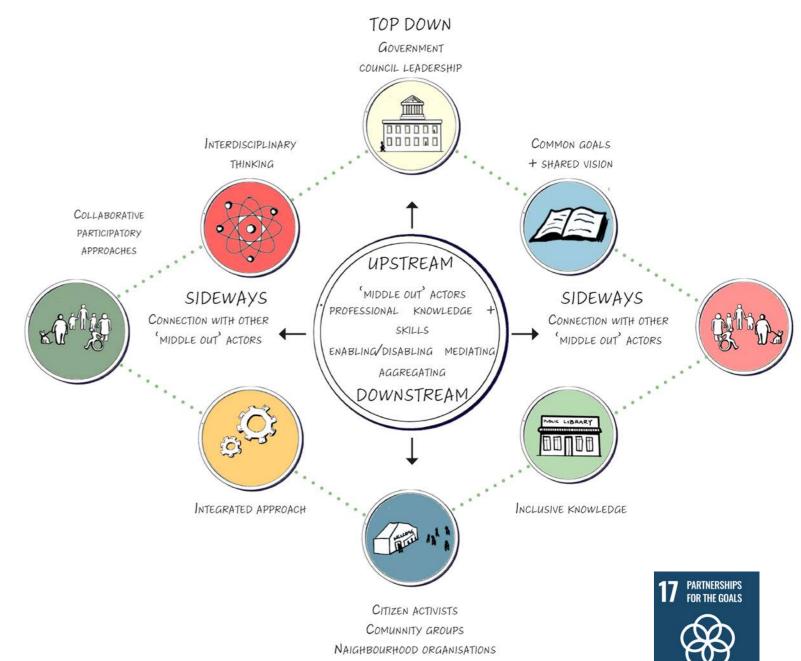
Central government and national politicians

- Ensure that National Planning Policies are enforced to support the objectives and delivery of 20-minute neighbourhoods.
- Support public transport, especially local bus services, to avoid its disappearance from the countryside and smaller settlements.
- Encourage the opening of new stations, light rail, guided buses and the increased frequency of local services.
- Ensure local authorities are adequately funded to delivered National Planning Policies.
- Ensure local businesses can compete on a fair and even level with internet retailers.
- Provide housing so that people can afford to live near where they work.
- Trialling solutions/interventions and initiating early meaningful engagement is crucial for facilitating transformative and enduring shifts towards the adoption of best-practice thinking.

Local councils and councillors

Ensure council policies support 20-minute neighbourhoods by taking the following steps:

- · Build teams that contain the skills required for addressing economic, social and environmental components of 20-minute neighbourhoods as well as design quality.
- Provide financial incentives for local businesses, including grants and business rate reductions and exemptions.
- Support training schemes for local people.
- Use powers under Social Value legislation to procure goods and services preferentially from local businesses.
- Support or catalyse Business Improvement Districts.
- Consider overall cost to local people when providing services, rather than just the cost to councils themselves.
- Ensure governance arrangements are in place for engaging local people in making decisions about where they live, work and play.
- Avoid one-size-fits-all solutions and embrace the full complexity of 20-minute neighbourhoods.
- Take care that 20-minute neighbourhoods are only introduced in ways that meet with local strong approval.



BOTTOM UP

Figure 39: Implementing 20MNs effectively will need alignment of not just the contributions from (middling out/ mediators) professionals but reconciling these with those of (top down) political actors, who hold the purse strings, and with the (bottom up) aspirations and concerns of all those affected when interventions in the built environment are being planned.

Policymakers

- Address the resource implications of trying to implement 20-minute neighbourhoods effectively.
- Provide guidance on the governance arrangements required to engage local people effectively in making decisions about 20-minute neighbourhoods.
- Frame policies and regulations to ensure that implementation of 20-minute neighbourhoods is inclusive of all socio-economic groups.



Planning agencies and departments

- Planning policies and decisions should support development that makes efficient use of land, including achieving appropriate densities, and securing well-designed, attractive and healthy places.
- Planning policies should plan higher density and uses around transport nodes.
- Expand the range of different types of housing and other forms of development (e.g., build to rent, co-housing and self-build models) and identify the availability of land suitable for accommodating them.
- Ensure all new developments support living locally.
- Only give planning permission where developments avoid flood plains, have easy access to employment, schools, goods and services.
- Use planning conditions to make sure that these facilities are actually delivered.
- Use planning agreements to provide these facilities and to operate them.
- Use planning agreements and conditions to provide and run places and activities where people can gather, such as libraries, community centres, community halls, clubs, societies etc.
- Require that new buildings can be adapted as

needs change, including use as shops, offices or workplaces.

- Consider the availability and capacity of infrastructure and services – both existing and proposed – as well as their potential for further improvement and the scope to promote sustainable travel modes that limit future car use.
- Enable diverse stakeholder groups to be involved in making decisions about how where they live, work and play are reconfigured as 20-minute neighbourhoods.
- Ensure individual and aggregated changes to the built environment address the needs of local people, businesses and organisations.
- Use equality legislation to address inequalities experienced by women, children, the elderly and disabled.
- Increase opportunities for local people to make their own decisions which affect where they live, work or play.
- Ensure planning systems adequately addresses the competing needs of local stakeholder groups, especially those without a voice or who are hard to engage with.
- Avoid one-size-fits-all solutions by embracing the full complexity of 20-minute neighbourhoods.
- Avoid implementing 20-minute neighbourhoods in ways which will drive the less well off further out, putting them at the mercy of scarce facilities and inadequate public transport.
- Introduce mixed use development in plans to enrich social and cultural engagement and economic vitality.



Social care providers

- Work to support people living in their own homes for as long as possible.
- Co-ordinate provision of locally funded care-athome so that providers are focused on single neighbourhoods rather than spread over larger, overlapping areas, with long travel distances between clients.

Health Service providers

- Provide surgeries, health centres and hospitals that can be reached without long journeys.
- Avoid centralising hospitals and health centres without assessing the travel implications for local people.
- Work with local councils to enable elderly and incapacitated to continue living in their own homes and within their own communities.

Education services

- Share local school and college facilities with the whole community.
- Avoid centralising schools without assessing the social, economic and environmental impact and how local people will be affected, including longer journeys, increased car use and congestion, and the weakening of local community ties.

Police

• Put resources into local community policing, with clear and effective community contact points and engagement forums.

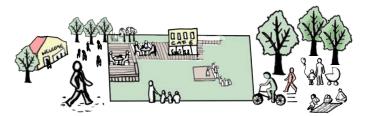
Urban designers, architects, landscape architects, infrastructure providers, and transport engineers

- Ensure the design of all new neighbourhoods and reconfiguration of existing ones meet the requirements of 20-minute neighbourhoods.
- Upgrade neighbourhoods to improve residents' sense of place, quality of life, health and wellbeing.
- Introduce mixed uses to enrich social and cultural engagement and economic vitality.
- Ensure individual and aggregated changes to the built environment address the needs of local people, businesses and organisations.

- Follow government policy in redressing imbalances in priority given to motorised traffic, cyclists and pedestrians.
- Embrace designs for places which nurture a sense of belonging and exhibit a strong identity/ character that will encourage residents to spend time in their neighbourhoods.

Developers and housebuilders

 Develop a reputation for creating high quality neighbourhoods with shops, health centres, workplaces, schools and leisure facilities. People will (and already do) pay more for living in a high quality (existing) neighbourhood. In practice, quality is rationed by price. In social housing, as some continental European societies demonstrate, it can be paid for through local and national taxation.



Local people and community groups

- Take part in any opportunities offered for decision-making in initiatives undertaken to reconfigure where they live, work and play as 20-minute neighbourhoods.
- Accept that compromises may need to be made to accommodate both active travel and motorised traffic.
- Adjust behaviour to support practices required to underpin effective operation of 20-minute neighbourhoods.

Research organisations and agencies

- Investigate the operation of implemented 20-minute neighbourhoods in the UK
- Collect evidence about what does and doesn't work
- Provide advice and guidance, especially about what kinds of arrangements for the governance of 20-minute neighbourhoods work well.

Endnotes

- I Hillman et al., 1990
- 2 Riazi, et al., 2022
- 3 Department of Transport 2020
- 4 NHS England
- 5 Road Transport and Air Emissions, 2019
- 6 Public Health England, 2018
- 7 Maynard, et al., 2010
- 8 Skinner and Grimwood, 2005
- 9 Living streets, 2018
- 10 Rohani and Lawrence, 2017
- Centre for Local Economic Strategies, 2019
- 12 Savills, 2016
- 13 The Prince's Foundation, 2020
- 14 Department for Transport, 2020
- 15 Public Health England, 2014
- 16 National Travel Survey, 2021
- 17 Sustrans 2021 walking and cycling index report
- 18 Sustrans 2021 walking and cycling index report
- 19 Sustrans 2021 walking and cycling index report
- 20 Department for Transport, 2020
- 21 Wright and Triebel, 2022; AlWaer and Cooper, 2023; TCPA, 2023

Photography and image credits

Page 1- 68: Front and Back Cover illustration $\ensuremath{\mathbb{C}}$ Proctor and Matthews Architects

Page 2 & 3: Marmalade Lane, Cambridge © David Butler Page 6 & 7: Goldsmith Street, Norwich City Centre © Tim Crocker

Page 8: Sketch © JTP LLP

Page 10 & 11: Figure 3 adapted from TAYplan

Page 12: Figure 4 adapted from State Government of Victoria

Page 13: Figure 5 A adapted from Anderson Bell Christie, B adapted from Designing Streets: A Policy Statement for Scotland © Crown copyright 2010

Page 14: Goldsmith Street, Norwich City Centre © Tim Crocker Page 16: Sketch © |TP LLP

Page 18 & 19: Figure 7 adapted from Dr Wei Yang

Page 19: Figure 4 © JTP LLP

Page 20: Figure 8 $\ensuremath{\mathbb{C}}$ Crown copyright 2020 and Public Health England

Page 20: Figure 9 © Crown copyright 2020

Page 21: Figure 10 $\ensuremath{\mathbb{C}}$ Crown copyright 2020 and Department for Environment and Rural Affairsw

Page 22: Polnoon, Eaglesham, East Renfrewshire © Proctor and Matthews Architects

Page 23: Figure 11 adapted from Liveable Neighbourhoods By

- Glasgow City Council 2021
- Page 24: Figure 12 © Richard Guise (Context4D)
- Page 25: Figure 13 © Participatory City

Page 26: Great Kneighton, Cambridge by Proctor and Matthews Architects © photographer Tim Crocker

Page 27: Figure 14 adapted from Nathaniel Lichfield & Partners Ltd 2022

Page 27: Figure 15 adapted from Copenhagenize Design Co. 2013

Page 28: Sketch © Andrew Davidson / Duchy of Cornwall

Page 29: Sketch © Corstorphine & Wright Architects

Page 30: Sketch © JTP LLP

Page 32: Figure 19 adapted from edge Urban Design

Page 33: Figure 20 Drawing by Rob Cowan in (Essential Urban Design), from the Urban Taskforce Report 1999, adapted from 'Sustainable settlements guide'; Geoff Davis, Hugh Barton, Richard Guise, University of the West of England , 1995

Page 34 & 35: Figure 21 VeloCity © Mikhail Riches

Page 36: Figure 22 © ADAM Architecture / Duchy of Cornwall / Hugh Hastings (photographer)

Page 38:The figure adapted from edge Urban Design

Page 39: Figure 23 © Richard Guise (Context4D)

Page 40: Figure 24 'Make Your Mark', Pollokshields, Glasgow. Photo by Ross Campbell- Photography (Dress for the Weather alongside Collective Architecture)

Page 41: Figure 25 © Dr Joe Ravetz of Manchester University Page 42: Sketch © |TP LLP

Page 44 & 45: Figure 27 adapted from the Prince's Foundation for the Built Environment (2007), Valuing Sustainable Urbanism

Page 46: Figure 28 adapted from URBANISM NEXT

Page 47 and 51: Figure 29, 30 and 34 © Local Living Diagram (2023) using images from Our Place developed in partnership by the Scottish Government, Public Health Scotland, Glasgow City Council and Architecture & Design Scotland. Public sector information licensed under the Open Government Licence v3.0. www.ourplace.scot

Page 48: Figure 31 Redwood Park, Southwark by Proctor and Matthews Architects © photographer Benedict Luxemoore

Page 49 and 50: Figures 32 & 33 - © Queen's Printer and Controller of HMSO, 1999, 2002 and Andrew Wright Associates

Page 51: Table © Barton et al. (2021)

Page 52: both pictures © Kevin Murray Associates Page 54: Sketch © ITP LLP

Page 55: Figure 36 © Nick Wright and Ines Triebel

Page 57: Figure 37 VeloCity © Mikhail Riches

Page 56-57: Figure 38 VeloCity © Mikhail Riches

Page 58: Sketch © JTP LLP

Page 61: Figure 39 © AlWaer et.al 2021

Page 66-67: Sketch © Proctor and Matthews Architects

We have endeavoured to credit photography and drawings where we have been able to. We would be happy to include any credits we may have omitted in future editions.

References

AlWaer, H. and Cooper, I. (2023), "Unpacking the concept of 20-minute neighbourhoods: disentangling "desired outcomes" from the "means" available for achieving them", Open House International, Vol. 48 No. 4, pp. 704-728. <u>https://doi.org/10.1108/</u>OHI-11-2022-0285

Barton, H., Grant, M., Guise, R. (2021). Shaping Neighbourhoods: For Local Health and Global Sustainability. United Kingdom: Taylor & Francis.

Development: The Value of Placemaking. Savills, 2016. <u>https://pdf.euro.savills.co.uk/uk/residential</u>--other/spotlight-the-value-of-placemaking-2016.pdf

Gear Change: A BoldVision for Cycling and Walking. Department for Transport, Jul. 2020. <u>https://www.gov.uk/government/</u> publications/cycling-and-walking-plan-for-england_

Health Matters: Air Pollution. Guidance. Public Health England, Nov. 2018. <u>https://www.gov.uk/government/</u> <u>publications/health-matters-air-pollution/health-matters-air-pollutions/</u> <u>health-matters-air-pollution/health-matters-air-pollution</u>

How We Built Community Wealth in Preston: Achievements and Lessons. Centre for Local Economic Strategies (CLES), Jul. 2019. https://cles.org.uk/publications/how-we-built-communitywealth-in-preston-achievements-and-lessons/

Maynard, R., Berry, B., Flindell, I. H., Leventhall, G., Shield, B., Smith, A., & Stansfield, S. (2010). Environmental noise and health in the UK: A report by the ad hoc expert group on noise and health.

M Rohani and G Lawrence: The Relationship between Pedestrian Connectivity and Economic Productivity in Auckland's City Centre. Technical Report 2017/007-2. Auckland Council, Nov. 2017. <u>https://static1.squarespace. com/static/58e441d2f7e0abde3be51110/t/5a559d5008522</u> <u>9d58dfed85b/1515560335402/TR2017-007-2-Pedestrianconnectivity-economic-productivity-Auckland-city-centrescenarios.pdf</u>

Revaluing Parks and Green Spaces: Measuring their Economic and Wellbeing Value to Individuals. Fields in Trust, 2018. http:// www.fieldsintrust.org/Upload/file/research/Revaluing-Parksand-Green-Spaces-Report.pdf

Riazi, N. A., Wunderlich, K., Yun, L., Paterson, D. C., & Faulkner, G. (2022). Social-ecological correlates of children's independent mobility: a systematic review. International journal of environmental research and public health, 19(3), 1604.

Road Transport and Air Emissions. Office for National Statistics, Sept. 2019. <u>https://www.ons.gov.uk/economy/environmentalaccounts/articles/roadtransportandairemissions/2019-09-16#greenhouse-gas-emissions-from-road-transport-make-up-around-a-fifth-of-uk-greenhouse-gas-emissions</u>

Skinner, C.J. & Grimwood, C. J., Applied Acoustics, vol 66 (2005), pp 231-243

Sustrans. (2021). UK Report: Walking and Cycling Index. Published May 2022. <u>https://www.sustrans.org.uk/media/10527/</u> <u>sustrans-2021-walking-and-cycling-index-aggregated-report.</u> <u>pdf"https://www.sustrans.org.uk/media/10527/sustrans-2021-</u> <u>walking-and-cycling-index-aggregated-report.pdf</u>

The Five Year Forward View for Mental Health. Mental Health Taskforce. NHS England, Feb. 2016. <u>https://www.england.nhs.</u> <u>uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf</u>

Town and Country Planning Association. (2021). The 20-Minute Neighbourhood Guide. <u>https://www.tcpa.org.uk/resources/</u> <u>the-20-minute-neighbourhood/</u>

Walkability and Mixed-Use: Making Valuable and Healthy Communities. The Prince's Foundation, Dec. 2020. <u>https://</u> princes-foundation.org/journal/walkability-report_

Wright and Triebel (2022). Living well locally: 20 Minute Communities in the Highlands and Islandshttps. This report was commissioned by HITRANS and Sustrans. <u>https://nickwrightplanning.s3.eu-west-2.amazonaws.com/my_uploads/20MNs_</u> <u>highlands_islands_2022_hires.pdf.</u>

Further Reading List

ARUP (2023) Superbia: post pandemic change in the suburbs, https://www.arup.com/perspectives/publications/research/ section/superbia

Cavagna, G.A., Franzetti, P., & Fuchimoto, T. (1983). The mechanics of walking in children. The Journal of physiology, 343(1), 323-339. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1193922/

Create Streets (2024) Move Free, Create Streets/Cycling UK, https://issuu.com/ctc_cyclists/docs/move_free_-_final

Hillman, M., Adams, J. and Whitelegg, J. (1990) ONE FALSE MOVE. A Study of Children's Independent Mobility, Policy Studies Institute, London, <u>http://john-adams.co.uk/wp-content/</u> <u>uploads/2007/11/one%20false%20move.pdf</u>

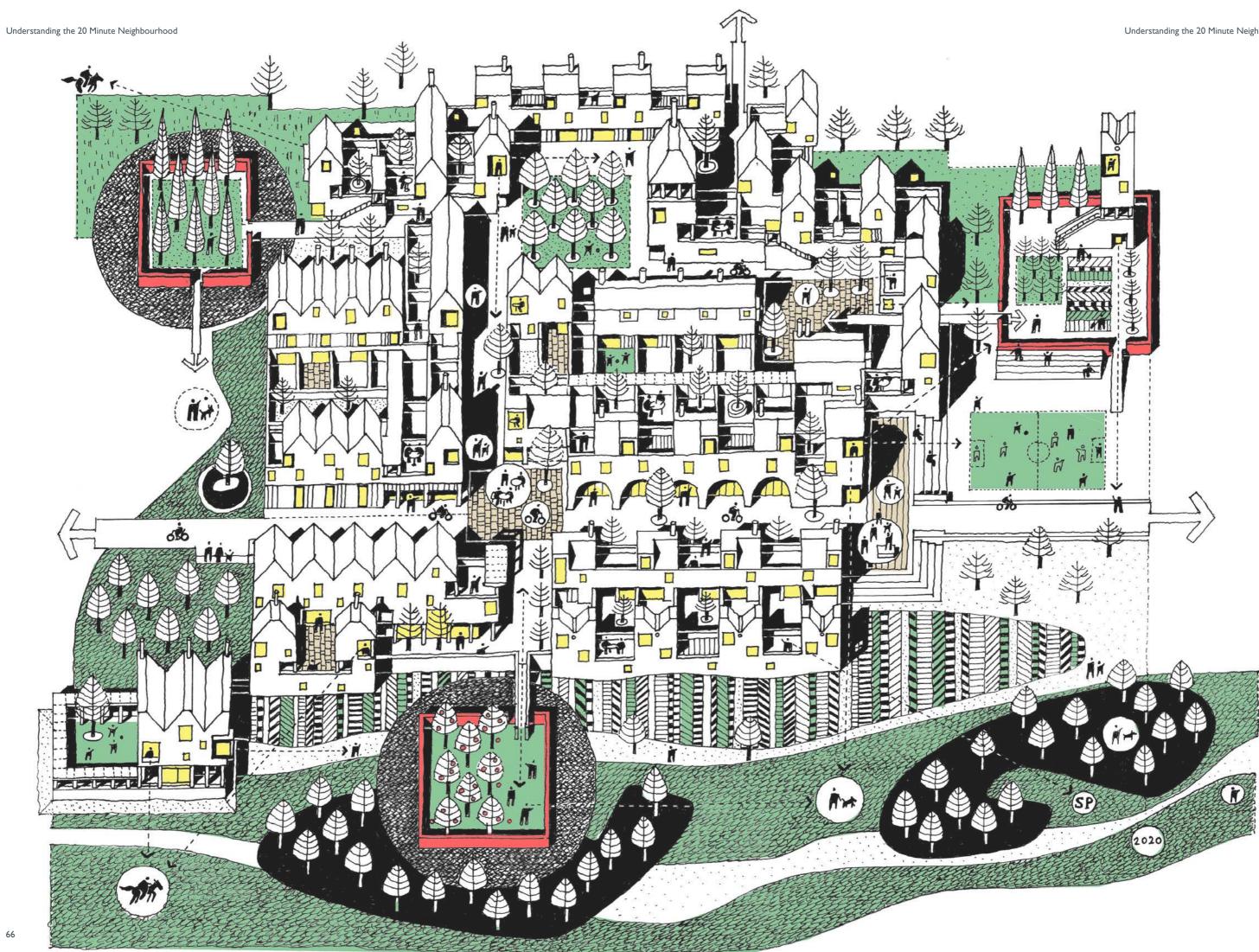
Living Streets. (2018). The Pedestrian Pound: The Business Case for Better Streets and Places. <u>https://www.livingstreets.org.uk/</u> <u>media/3890/pedestrian-pound-2018.pdf</u>

Royal Institute of Town Planning (2021) Implementing 20 Minute Neighbourhoods in Planning Policy and Practice, Policy Briefing Paper, <u>https://www.rtpi.org.uk/research/2021/march/20-</u> <u>minute-neighbourhoods/</u>

Town and Country Planning Association. (2023). Special Issue: 20-Minute neighbourhoods,TCPA Journal,Volume 92 Number 3, <u>https://www.tcpa.org.uk/wp-content/uploads/2023/06/</u> <u>TCP_May-Jun23_R.pdf</u>

Town and Country Planning Association. (2023). Rural expressions of 20-minute neighbourhoods. <u>https://www.tcpa.org.uk/resources/rural-expressions-of-20-minute-neighbourhoods/</u>

Urban Design Group (2021) Special issue: Future neighbourhoods, UDG Journal, Issue 160, <u>https://www.udg.org.</u> uk/publications/journal/urban-design-160-autumn-2021



Corstorphine & Wright

URBAN DESIGN GROUP







ADAM ARCHITECTURE

© The Authors 2024. This work is openly licensed via CC BY 4.0.



For citation please use: AlWaer, H., & Cooper, I.(2024). Understanding the 20 Minute Neighbourhood: Making opportunities for people to live well locally. University of Dundee. https://doi.org/10.20933/100001289

For More Information Contact Dr. Husam AlWaer h.alwaer@dundee.ac.uk