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Implementation Guides May 2021

15-minute cities: How to create ‘complete’ neighbourhoods

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Building a 15-minute city is about providing equal access to core services and opportunities, with everyone able to meet their basic needs within a short walk or bike ride from home. It means ensuring that the activities that make urban life liveable and enjoyable are available to all, not just concentrated in central or wealthy neighbourhoods. This includes community-scale education and healthcare, essential retail, such as grocery shops and pharmacies, parks for recreation, working spaces and more. Cities built of ‘complete neighbourhoods’, where residents can find most of what they need locally, generate more responsive local growth, vibrant neighbourhoods, stronger communities, more viable local businesses and commerce, lower emissions and more active travel.

This article looks at how city governments can foster this change, drawing on cities’ experience and on the *Green and thriving neighbourhoods* report. It begins with updates to planning and zoning rules that are critical to improving urban form and meeting these objectives in the longer term, before turning to ways to bring more short term change too.

The 15-minute city can help us build healthy and thriving neighbourhoods

The 15-minute city integrates a set of four complementary, overlapping principles for people-centred urban development. It ties together and builds on strands of equitable urban climate action to create a model that helps to build more liveable, human-scale cities – prioritising the most underserved neighbourhoods and disadvantaged groups. Already, there are cities adopting this approach around the world; every city can join

them. Read about what the 15-minute city offers [here](#), and find our series of four articles on how to design and implement a 15-minute city strategy [here](#).



Myth-buster: this is not about *confining* people to their own neighbourhood.

On the contrary, providing easy connections across the city is another core 15-minute city principle. Travel across the city should be a choice, not a necessity for meeting everyday needs. Read 15-minute cities: Debunking the myths for more on common points of confusion and concern.

Establish a baseline of existing amenities within each neighbourhood

Map essential amenities in each neighbourhood and assess ease of access on foot or by bike. The most underserved areas should be prioritised for investment. In particular, map the availability and quality of grocery stores and other essential retail, the diversity of housing and the quality of walking and cycling infrastructure, topography and other factors that limit access. The mapping analysis done by Portland, Oregon to inform the city's 20-minute neighbourhood strategy is a good example.

Increase compactness and promote mixed-use buildings and neighbourhoods

Compact development means higher-density development that makes greater use of the same land area. Mixed-use development refers to the presence of a variety of functions – such as residential, retail, office, institutional and/or light industrial. Unlike a single-purpose area hosting only 'big-box' retail stores, offices or apartment towers, for example, a compact, mixed-use neighbourhood provides a balanced diversity of human-scale activities, allowing more people to live close to services and injecting life into streets. It also produces more balanced energy demand profiles throughout the day than single-use districts and can benefit local clean energy initiatives, as well as district heating and cooling networks.

For more on these issues also read How to drive urban infill development in your city, which looks at ways to increase density, and How to revitalise city centres for social, economic and environmental resilience, which explores ways to promote a more diverse mix of uses in downtown, urban core areas.

Update planning and zoning rules for new developments, infill and regeneration projects to increase compactness and diversity of use in the medium to longer term:

- **Switch from conventional zoning to form-based codes and/or mixed-use zoning.** Form-based codes (FBCs) regulate the overall form and character of allowable buildings in a zone without specifying use, while conventional zoning separates buildings by use.¹ The (US-focussed) Form-

 **Based Codes Institute** provides guidance on establishing an FBC and highlights English practice codes in cities of all sizes across the United States. It highlights, for example, Cincinnati's use of neighbourhood-level FBCs, which has enabled a city-wide FBC to grow organically over time while encouraging neighbourhood-based participatory planning, quality urban infill and improvement of the existing urban fabric.² Outside the United States, Buenos Aires' hybrid code system uses form-based designation to promote mixed use along the city's main corridors; many building uses are allowed, but buildings must meet form requirements. Alternatively, cities can implement mixed-use zoning – on specific corridors or districts, or citywide – starting by identifying any existing provisions that prohibit mixed-use development.³

- **Zone for medium density development and smaller block size.** Medium density means, for example, more multi-family or ‘missing middle’ housing than single-family buildings. Smaller blocks create better walkability. The favoured type of compact development will depend on local market conditions, residents’ preferences and the feasibility of different building types. Zoning reforms should apply to new build as well as promote infill. For instance in 2020 Portland, Oregon, passed a comprehensive zoning reform to allow up to four homes on almost any plot under the Residential Infill Project, and remove parking mandates. The reform re-legalises ‘missing middle’ housing types, and is designed to increase neighbourhood density, provide more housing choices and tackle the city’s housing shortage.
- **Provide financial and regulatory incentives for compact and mixed-use development.** For example, offer fee reductions and expedited development approval processes. The design of incentives should be informed by a feasibility analysis of the types of buildings sought in a given district.
- **Promote the adaptive reuse of vacant or underused buildings.** This will allow buildings to be brought into more productive use while preserving their character and providing space for a more diverse mix of uses. Cities can promote adaptive reuse by relaxing regulations that would make repurposing a building unfeasible and by offering incentives such as expedited permitting. For example, Los Angeles’ 1999 Adaptive Reuse Ordinance gave developers permit incentives to convert historical (often abandoned) commercial buildings into residences and has proven a powerful tool in revitalising neighbourhoods.⁴ How to reduce embodied emissions in private and residential buildings explains more.
- **Require critical public services, infrastructure and green space to be accessible to all residents at neighbourhood level.** Update the city’s plans and regulations – such as comprehensive plans, district plans and zoning codes – to ensure that they require each neighbourhood to be properly served in terms of green and open spaces, schools, small healthcare facilities and essential retail (particularly groceries, fresh produce and pharmacies). For example, Vancouver’s 2018 updates to the



city's rezoning policy for large developments include a clause on the inclusion of sustainable food assets, including greengrocers and community gardens or kitchens, to combat the prevalence of food deserts.

Activate ground floors to create pleasant, safe streets for pedestrians and to support the local economy

Active frontages at street level and high-quality public realm that uses outdoor space for café seating or market stalls, for example, will attract footfall for local businesses, community activities and public services. This, again, requires an adjustment of planning rules. More specifically, cities can increase minimum ground-floor heights or minimum depths for new developments and update zoning codes to mandate active and street-facing uses at ground level on every neighbourhood's main street.

Cities can also convert on-street parking to increase street space for pedestrians, cyclists and active commercial uses, building on trends for the alternative use of street space to facilitate physical distancing during the pandemic. Read more in *How to build a 15-minute city: people-centred neighbourhood streets and mobility*.

San Francisco's planning-code reforms for active ground floors

In 2014, with the help of advocacy groups like Livable City, San Francisco revised its planning code to make ground floors more active and pedestrian friendly. The Ground Floor Code reforms included a requirement for active use to a depth of 25 feet from the street frontage; an increase in the minimum height of ground floor spaces (17 feet) to facilitate development of good retail and leisure units; and the removal of parking requirements in transit-oriented housing developments to increase the space available for – and the visibility of – active use. Zoning has also become more flexible to allow small retail spaces in traditional ‘production, distribution and repair’ zones and to allow some production within commercial zones. This has helped to diversify usage in all neighbourhoods, generating more activity throughout the day.

Bring priority services, amenities and parks to every neighbourhood, focusing first the most underserved areas

Enabling more compact and mixed-use development with updated planning and zoning rules is critical, but takes time to bring to fruition and is not guaranteed to deliver specific priority services and amenities in every neighbourhood. Informed by the mapping and analysis of essential amenities, city governments can implement targeted actions to ensure that priority gaps are filled more rapidly.

- **Create decentralised local administration hubs that pool select services.** Where local government



services are concentrated in city centres, consider opening smaller administrative priority services across the city. For example, Buenos Aires’ 15 communes each have an administrative municipal building, typically near a school, to decentralise public services.

Focus on access to good food

More shops selling fresh, healthy foods in underserved areas – eliminating ‘food deserts’ – is critical to enabling everyone to eat a good diet. *How cities can support access to healthy, sustainable food* looks more closely at the issue.

- **Provide targeted support to essential and cultural retailers, with activities concentrated in neighbourhood main streets.** Parcel-scale zoning regulation, mandating that a given commercial space can only be used for a specific type of retail activity, can help to achieve this. This zoning should be informed by the mapping analysis and target priority services lacking in each neighbourhood, such as pharmacies or grocery stores. Cities may be able to use right of first refusal to purchase a given commercial space first or to award the space to a partner agency, as Paris does (see box), to ensure that the building is used for a priority purpose. Cities can also promote the temporary or flexible use of underutilised spaces to meet these needs (see below) and provide targeted support for specific types of business in priority areas. Washington, DC has done this with its Healthy Food Retail Investment Fund, which incentivises healthy food retailers to open in underserved areas.
- **Expand green space.** Cities can invest, for example, in transforming abandoned lots, schoolyards, parking spaces and road space into small parks. Rotterdam is converting roofs into parks such as Dakpark, very large park above a shopping centre in a built-up neighbourhood that lacked green space. *How to build a 15-minute city: people-centred neighbourhood streets and mobility* looks more closely.
- **Identify opportunities for infill, redevelopment and expanded services on municipally owned property.** As well as promoting adaptive reuse by private developers, cities can optimise municipal buildings and asset use – prioritising repurposing, renovating and retrofitting, rather than demolition and new build. For instance, in 2020, Toronto launched an initiative to identify land and buildings appropriate for new affordable housing, which has led to the repurposing of 18 city-owned properties into almost 13,000 affordable homes across the city. Rotterdam has converted an unused indoor swimming pool in the city into a flexible working and events space, BlueCity, which doubles as a hub for the city’s circular economy goals.

- Consider establishing micro-logistic centres. This will reduce transport emissions and congestion, especially if coupled with policies to support zero emission freight vehicles and cargo bikes. Berlin, for instance, is promoting the use of cargo bikes by citizens and businesses. *The Future of the Last-Mile Ecosystem* highlights good practice interventions.

Bringing healthy food to underserved neighbourhoods in Los Angeles

In Los Angeles, low-income neighbourhoods and communities of colour have, on average, half as many full-service grocery stores as more affluent, predominantly white neighbourhoods, limiting residents' options for a healthy diet. In 2019, as part of its Green New Deal, the city set a 2035 goal for all low-income residents to live within half a mile of fresh food. The Healthy Neighborhood Market Network programme is one of the city's tools for meeting this goal of decentralisation – the programme supports local corner-store and market-stall owners in low-income neighbourhoods, who receive training, guidance and upgrades to their stores to help them provide healthy, affordable food. The programme was joined in 2020 by a Good Food Zone policy to further increase economic opportunity for healthy food businesses while improving the provision of healthy food in underserved areas.

Consider running high-profile competitions to infill and redevelop underutilised sites and buildings

Invite proposals that will be judged on the benefits for the neighbourhood, community and environment. This is the premise of the Reinventing Cities competition, which is organised by C40 in collaboration with participating cities – all cities (including C40 member and non-member cities) can apply to participate by identifying appropriate sites. This approach can also be implemented independently. Through the competition, Montréal identified a project to turn a 0.9 ha former service yard into a mixed-use site with residential, commercial, industrial and institutional uses all permitted. The site will host an urban forest, zero-waste grocery store, restaurants and more. Reinventing Paris is a competition launched in 2021 to convert vacant offices into housing to support the city's COVID-19 recovery.

Paris' supports priority local business types through a semi-public agency

In Paris, semi-public agency Semaest has right of first refusal to buy abandoned shops, which it then lets at below-market rates to priority types of local shop, from bakeries to bookstores, cheese shops and record stores, that would otherwise be pushed out. The project has reassigned more than 650 commercial premises to local businesses, helping to keep them independent and the streets thriving.

Promote the flexible use of spaces and buildings throughout the day and week



Using buildings and public spaces for multiple purposes throughout the day and/or week will maximise the value of that space to local people and building owners. It helps to activate neighbourhoods throughout the day, week and year, creating more vibrant, safer and inviting places. This already happens to some degree in every city, but increasing the flexible use of buildings and space in neighbourhoods across the city can help them to thrive. Many cities saw a rapid shift towards more flexible use of space during the pandemic to facilitate physical distancing and to help businesses survive lockdowns, opening a window of opportunity to make positive changes permanent.

- **Allow municipally owned premises to be used for multiple purposes at different times of the day and week.** For example, school yards can be used for markets or public parks at the weekend, while libraries can host music or other cultural events out of hours. This usually requires updates to rules and also, in some cases, the facilities. New York City, Lagos, London and many other cities already use schoolyards for food markets, long-term and/or as a temporary measure during the pandemic. As part of Paris' 15-minute city approach, the Oasis Project is turning schoolyards into public gardens that can be accessed by local residents outside of school hours.
- **Incentivise and support businesses and owners of private spaces to find ways to put their assets to greater use.** In the wake of the pandemic, this could be especially valuable for businesses in the hardest-hit industries – restaurants, bars, hotels, clubs and other enterprises in the hospitality, nightlife, leisure and entertainment industries. For example, restaurants that see most of their trade in the evening may be able to open as co-working spaces during the day, nightclubs could open as daytime cafés, or shops and galleries as bars in the evening. To support this, cities can, for example, raise awareness of the opportunity (including for additional revenue or rental streams), facilitate local discussion of ideas and opportunities for flexible use, enable flexible lease structures and licences, and put in place flexible zoning requirements.

Encourage temporary uses to help neighbourhoods thrive, evolve and build a stronger identity

Enable the temporary 'meanwhile' use of vacant buildings and plots, such as for pop-up shops, eateries, pocket gardens, sports or cultural activities. This approach – sometimes called 'temporary urbanism' – can bring activity to an area quickly, provide opportunities to trial and test uses, help to shape the character of a local area and provide space for start-ups. It could help to revitalise struggling downtown and high street areas. Experimental uses can inform longer-term regeneration and development plans, particularly where local residents have been closely engaged in shaping 'meanwhile' uses and where flourishing start-ups can become permanent tenants.

To support ‘meanwhile’ uses, cities need to reduce real and perceived risks for building owners and investors.⁵ Meanwhile Use London includes good examples, analysis and recommendations that may be relevant elsewhere. For more advice, read [How to enable temporary use to activate your city](#).

- **Lead by example by opening underused municipal properties to ‘meanwhile’ uses.** As well as directly increasing actively used space, this can garner interest and inspire action by private building owners. For example, in 2015 Paris converted a 3.4 hectare former hospital site for temporary use until 2020 as the hugely successful Les Grands Voisins (The Great Neighbours) facility, which hosted allotments, a boules court, football pitch, urban campsite, a market, cafés, live performances, start-ups, pop-up shops and a homeless shelter.⁶ It will gradually be redeveloped into a new neighbourhood.
- **Dispel the common perception that hoarding a site is the safer option and raise awareness of the benefits of temporary use.** Most developers, local authorities and other land and building owners have relatively little experience of meanwhile use and it is not typically seen as an attractive opportunity – though this is changing.⁷ For mid- to large developers, in particular, meanwhile use is a low-cost, low-risk investment that proven to create value, reduce security costs and act a means to involve the community in redevelopment proposals. It can also reduce tax costs; in London, for example, since 2009, the meanwhile use of 215,000 square feet of vacant properties have saved landlords £2.5 million in empty rates.⁸
- **Develop registers of vacant spaces and/or potential occupiers.** Finding out which spaces are empty and who owns them is often challenging for the prospective temporary occupier.⁹ City governments can help by compiling and sharing data on empty commercial units from business rates records. Cities can also keep a register of interest for meanwhile space and/or offer a ‘matchmaking’ service.¹⁰ Budapest’s Lakatlan (Vacant City) programme, launched in 2012 to identify ways to regenerate empty urban spaces, and offers advisory, property mapping and matchmaking services and has launched community-led initiatives such as the Festival of Empty Shops.
- **Relax planning consent and licensing rules for temporary use and explore flexible and fast-track approaches.** This will allow more flexibility in temporary changes between use classifications, reduce costs and accelerate the process.¹¹
- **Provide targeted incentives and financial support.** This includes tax incentives, such as reduced business rates in line with other activities of social value, and regulatory incentives, such as a presumption in favour of meanwhile use that expect landowners applying for planning permission to open up space to meanwhile activity. The London Borough of Brent, for example, is running a meanwhile pilot scheme in partnership with local non-profit Meanwhile Space in the wake of the pandemic to reactivate vacant high-street units – the scheme provides grants to qualifying landlords

for refurbishment works, and the council will match the property with a temporary English er to test and develop their business proposal.

- **Develop guidelines to smooth the exit.** Concerns about temporary occupiers’ potential unwillingness to leave are among property owners’ biggest concerns. For any meanwhile use project, it is important that property owners and occupiers’ expectations are set early.¹² City governments can develop and promote a Good Practice Code of Exit to strengthen trust between landlord and occupier.¹³

Healthy neighbourhood explorer

This tool allows cities to explore how they rank on nine healthy neighbourhood indicators. It allows urban planners to quickly identify which neighbourhoods might benefit most from an intervention and which interventions might be most effective. For those interested only in measuring the health, economic, and climate benefits of walking and cycling, you will need to request login details via the online tool. Find out more [here](#).



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