Australian Urban Observatory

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Your pathway to liveable cities

Creating Liveable Cities 1

RMIT Centre for Urban Research
Essays from The Conversation

September 2020

Healthy Liveable CITIES

RMIT UNIVERSITY

Creating Liveable Cities 1

RMIT Centre for Urban Research - Essays from The Conversation

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2020

Mapping COVID-19 spread in Melbourne shows link to job types and ability to stay home

Melanie Davern, Mary-Louise McLaws, Ori Gudes
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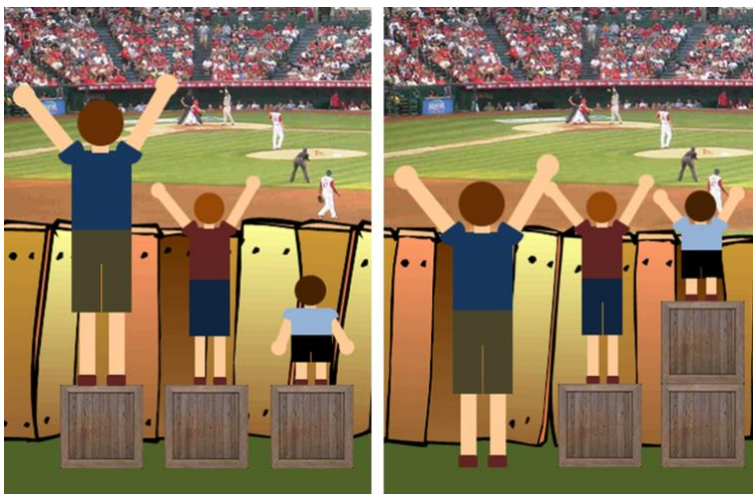
COVID-19 provides a stark reminder of inequity and the spread of disease. These aren't new ideas and can be traced back to John Snow's cholera maps and Charles Booth and his colour-coded maps of occupation types and poverty in the 19th century. Today, as case numbers soar in Melbourne, large clusters of COVID-19 cases have been identified across the northern and western suburbs, raising questions about occupation types and socio-economic differences across the city.

One of the most important messages from government during the pandemic has been to work from home if you can. Though what happens if your work isn't suited to this?

Snow and Booth were forefathers of modern geographical information systems (GIS) analysis. It's a powerful tool for mapping and visualising differences or inequities across cities and the spread of disease. We mapped the connection between occupation types, indicating the ability to work from home, and the locations of COVID-19 cases across Melbourne in the recent second wave.

Why is equity a health issue?

Hotspot suburbs were first identified and ring-fenced in early July. A hard lockdown was applied to the 3,000 residents of nine high-density public housing estates in inner Melbourne.



Ring fencing is a powerful method of containing a disease. It's most appropriate where a specific location has a distinctive pattern of risk. It should also be applied without bias.

As the public housing towers lockdown reminded us, there is an inequity in health.

Many people associate equality with treating everyone the same regardless of their needs. This is very different to equity, which is about treating people according to their needs. Unlike equality, equity is providing people with extra help when it is needed.

The picture below makes the concept of equity easier to understand.

In the context of this pandemic, a recent discussion of housing affordability raised the issue of equality versus equity.

We see a stark difference between the initial transmission of COVID-19 and the second wave. The earliest cases were concentrated in Melbourne's wealthier areas and associated with international travel. In the second wave we have seen a different pattern of spread across disadvantaged areas of Melbourne.

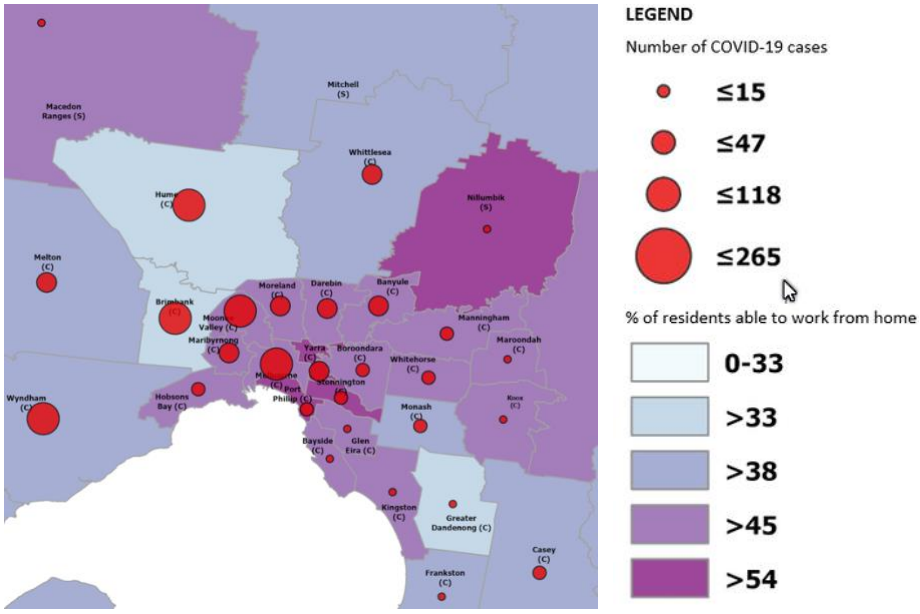
This pattern is possibly linked to inequity associated with living and work conditions. People with higher education tend to work in occupations that often enable them to work from home, making it easier to self-isolate.

Outer areas of Melbourne have had more cases of COVID-19 cases in the second wave and this might be associated with job types and education levels. Residents living in inner areas of Melbourne are more likely to hold tertiary qualifications needed for occupations more suited to working from home.

What does mapping reveal?

We analysed Australian Bureau of Statistics Census data on employment typesfrom the Australian and New Zealand Standard Classification of Occupations. We identified 93 major occupation types suitable for working from home.

We linked and mapped these occupation data along with COVID-19 incidence according to local government areas. The map below shows data from July 16.



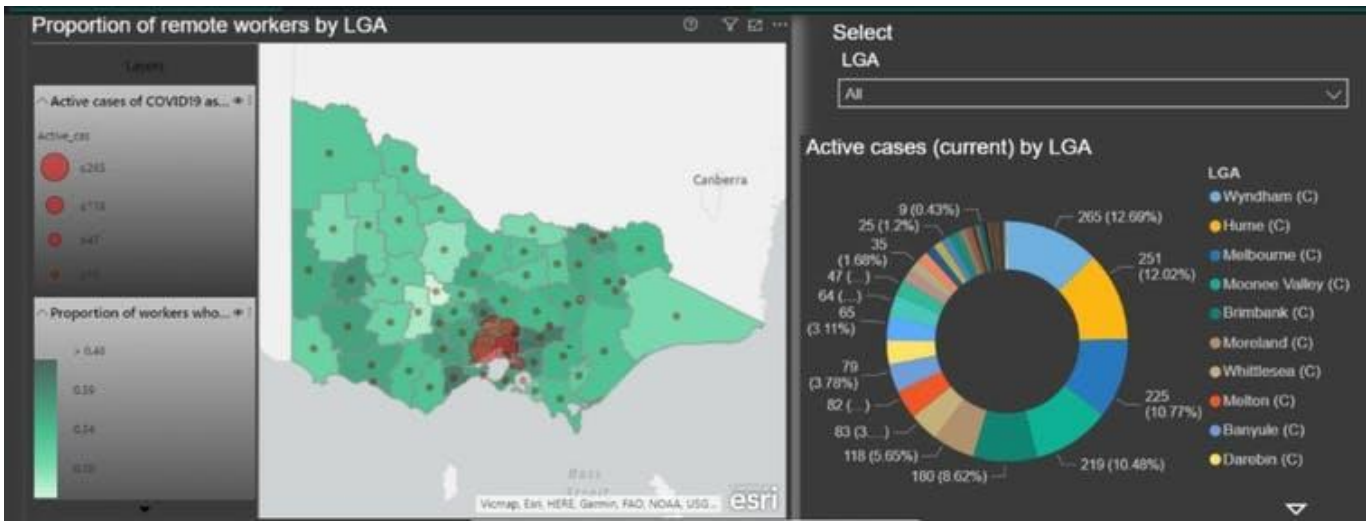
The map reveals lower proportions (shown by lighter-coloured areas) of people employed in occupations suitable for working from home in many outer northern and western areas of Melbourne. In particular, the proportion is low in Hume, one of the local government areas where COVID-19 cases have been concentrated.

In the inner and outer eastern areas of Melbourne, residents are more likely to be able to work from home. Nillumbik in the outer north-east has the highest proportion of people able to work remotely. It has very few cases of COVID-19.

Greater Dandenong is an exception to this pattern. As a manufacturing hub for Melbourne, it has a low proportion of people in occupations suitable from working from home, but has few cases.

COVID-19 is spread through community transmission or close contact with others who are infected, as happened in meatworks factory clusters in northern and western Melbourne. Greater Dandenong may have been protected by the small number of cases across south-eastern Melbourne where more residents have occupations suitable for working from home.

The Victorian Department of Health and Human Services updates COVID-19 incidence data hourly. We first sourced data on July 16, a week after the Melbourne-wide lockdown began, to understand the patterns of occupation types and COVID-19 clusters as they evolved. To continue monitoring, we have developed a data dashboard, which is shown below.



We hope this data dashboard will be released in coming days with updated data.

Using inclusive data to protect everyone

The related patterns of occupations and COVID-19 incidence remind us of the importance of the well-known relationships between health and place.

This pandemic takes advantage of inequity and our most vulnerable communities. It shows us why we must include the full spectrum of society (not only those we know best) when we make decisions, communicate and ask people to work from home.

Many workers are engaged in casual and insecure employment and work is a critical determinant of health. Our mapping provides evidence that can help authorities decide where and how to focus preventive measures when planning public health interventions.

These methods of GIS analysis and easily understood maps should be freely available. The community will then be able to interrogate the data so they can realise in close to real time the rationale for public health directives.

These same principles have been used to understand health and liveability in cities though the Australian Urban Observatory to inform city planning.

You can read this article in The Conversation here.

Coronavirus reminds us how liveable neighbourhoods matter for our well-being

Melanie Davern, Billie Giles-Corti, Hannah Badland, Lucy Gunn
First published in The Conversation, 22 April 2020. Chanan Greenblatt/Unsplash

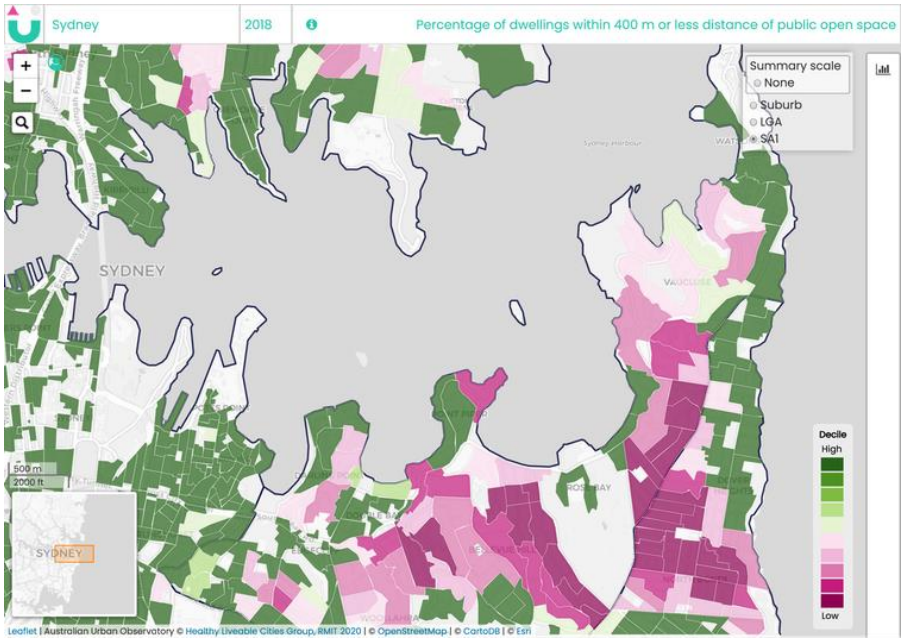
We are witnessing changes in the ways we use our cities in response to the COVID-19 pandemic. The liveability of our local neighbourhoods has never been more important.

Right now, we are working together to flatten the curve by staying home to control the spread of COVID-19 and reduce demand on health services. This means spending a lot more time at home and in our local neighbourhoods. We are all finding out about the strengths and weaknesses in the liveability of our neighbourhoods.

This experience can teach us some lessons about how to live and plan our communities in the future. A liveable neighbourhood promotes good health and social cohesion, both now and after this pandemic passes.

Heavy use of local open space

Anybody who has left their home in the past few weeks will have noticed more people are using local streets and public open spaces. Parks and other public spaces are more popular than ever. Some are becoming too crowded for comfort.



Accessible public space is a key ingredient of healthy and liveable places. Public green spaces provide multiple benefits for mental and physical health, urban cooling, biodiversity, air pollution and stormwater runoff as identified in a previous review for the Heart Foundation.

Access to local public open spaces has become even more important as the current need to stay home adds to the impacts of increased density in the form of smaller houses, lot sizes and apartment living. Yet not everyone has access to local parks.

We looked at neighbourhood access to public open space using our liveability indicators included in the Australian Urban Observatory.

Not all neighbourhoods have access to public open space within 400 metres. We see this in neighbourhoods just north of the beach in North Bondi, Sydney, as the liveability map below shows.

Residents of neighbourhoods north of Bondi Beach in Sydney lack good access to nearby public open space. Australian Urban Observatory, Author provided
We found a similar pattern in neighbourhoods of St Kilda East in Melbourne. It's a pattern repeated in many neighbourhoods across cities in Australia.

Private green spaces and backyards are also being appreciated more than ever. Many people are rushing to plant fruits and vegetables at home.

The private green spaces and biodiversity found in backyards are important influences on subjective well-being. Connecting with nature in the garden is a great way to support mental health.

Dogs are also enjoying more time with their owners in local green spaces and pet ownership is increasing. Office video conferences often feature furry friends at home. Let's hope the increase in pet adoptions helps people cope with social distancing but also provides the animals with good long-term homes.

Fewer cars, more cycling and walking

One of the noticeable differences in our cities right now is the reduced car traffic in typically busy neighbourhoods where more people (including children) are out on bicycles and walking. Walkable environments with paths and cycleways are providing supportive and safe spaces for both recreational physical activity and for getting to places such as local shops and supermarkets and offices without unnecessary exposure to other people.

The benefits are greatest for people living in high-amenity walkable areas with access to such places within 800 metres. Having services and facilities close by has been shown to support walking for transport to shops and services, promote health and reduce non-communicable diseases such as heart attacks and strokes.

However, our new lives during this pandemic also highlight inequities in local access to health, community and social services. Research shows access to these services is poorer in the low-density outer suburbs that are common across Australian cities.

Better air quality
Reduced car traffic and industrial emissions are undoubtedly improving air quality in our cities. In 2018, the World Health Organisation declared air quality was the "new smoking" as it increases respiratory problems and cardiovascular disease. The transport sector also contributes about 25% of global carbon dioxide emissions .

Homes, schools and care facilities located within 300 metres of major roads are more exposed to air pollution and risk of disease. Those risks are likely to have decreased during the COVID-19 crisis.
At the moment, many of us are living and shopping locally and enjoying the co-benefits of the "slow walkable city": less traffic, more active modes of transport, better air quality and less noise.

Valuing social cohesion

Loneliness is a serious public health problem. It causes premature deaths on a scale similar to that of smoking or obesity.

Pre-pandemic lifestyles involved time-poor people travelling widely to destinations for employment, education, recreation, socialising and extracurricular activities. The suburbs were places of much social isolation.

With these activities now reined in, are we are seeing a rise in neighbourhood social connections due to people staying at home? Anecdotally, yes. It's emerging through new or reinvigorated conversations with neighbours, support and sharing of goods (toilet paper anyone?), and coordinated neighbourhood support systems, such as WhatsApp groups and neighbourhood happy hours. Across the world, we can see this sense of neighbourhood belonging in the form of bear hunts and rainbow chalk drawings.

It is well documented that feeling part of the community is good for your mental health. Local support networks become even more important and valued during crises such as COVID-19.

These are just some of the more obvious reflections about the liveability of our neighbourhoods as we stay home to help contain the spread of COVID-19. No doubt there will be many more lessons to come that we need to remember and act on after the pandemic passes.

You can read this article in The Conversation here.

The average regional city resident lacks good access to two-thirds of community services, and liveability suffers

Melanie Davern, Alan Booth, Carl Higgs, Lucy Gunn
First published in The Conversation, 17 March 2020. zstock/Shutterstock

The way our growing cities are planned and built is becoming ever more important in building healthy, liveable and sustainable communities. Much of the focus on liveability has been on Australia's biggest capital cities, Sydney and Melbourne, which will become megacities of more than 10 million people by 2050. Regional cities are often missing from these conversations, but will be critical for future liveability and sustainable urban development across Australia.

In research for the newly launched Australian Urban Observatory we found people living in urban neighbourhoods of regional cities have satisfactory access to only 31% (five of 16) of essential community services on average. Capital city neighbourhoods have access to 40% on average. This means residents of many parts of both regional and capital cities need more accessible services.

These findings are drawn from Liveability Report scorecards for eight capitals and 13 regional cities, which are now available online.

Good access to community services is a key element of liveability.

We developed the Australian Urban Observatory to make understanding and measuring liveability easier. It's an online digital platform providing liveability indicators across the nation's 21 largest cities. (The smallest of these has 80,000 residents.) Together, these cities are home to nearly 20 million people.

The eight capital cities have 67% of Australia's population. The remaining 13 cities are home to about 13% of Australians.

Many of these regional cities are predicted to grow substantially over the next 30 years. Some are already among our fastest-growing urban areas. These regional cities are Albury-Wodonga, Newcastle-Maitland, Wollongong, Cairns, Gold Coast-Tweed Heads, Mackay, Sunshine Coast, Toowoomba, Townsville, Ballarat, Bendigo, Geelong and Launceston.

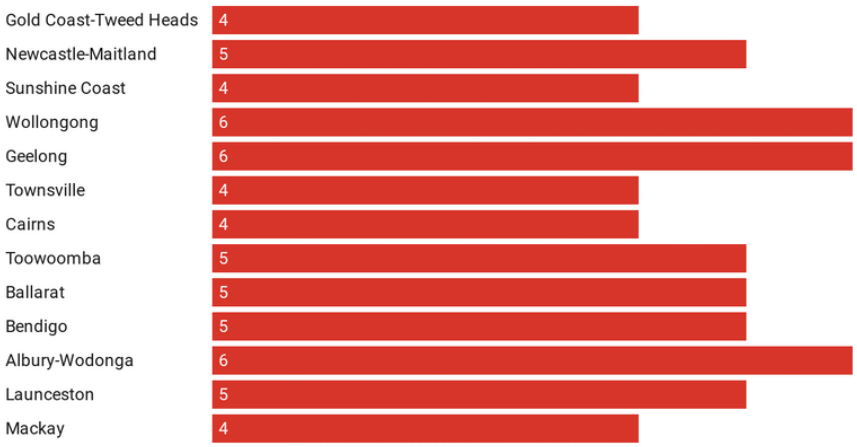
We mapped liveability indicators across the 21 cities at various scales: local government (council) areas, suburbs, and neighbourhoods (ABS Statistical Area 1). This mapping shows all cities have areas where liveability could be improved. And we know inequity in liveability is related to inequity in health.

How is liveability assessed?

The Liveability Index summarises an area's performance across 13 different topics and 24 service types. These cover all the critical components of our definition of liveability: social infrastructure, walkability, public transport, public open space, housing affordability and local employment.

Social infrastructure ratings of regional cities

Overall score out of 16



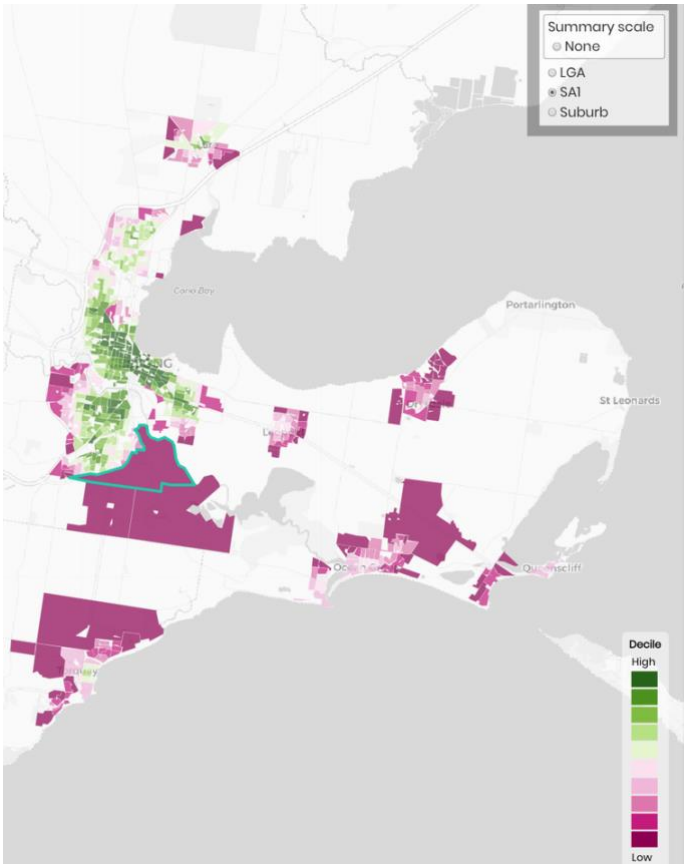
Cities are listed in order of population

The Liveability Index for each area is based on an evaluation of its performance relative to all other areas at this scale. Areas performing well on all 13 indicators score higher than 100. Areas scoring lower than 100 are below average for a city.

The Australian Urban Observatory shows how liveability and access to the amenities we need in our daily lives vary across neighbourhoods and suburbs. It enables us to identify relative liveability strengths and weaknesses of areas. Using other indicators to understand these patterns helps to explain area-based scores.

Selecting an area can help to understand what a liveability rating actually means both in absolute terms and relative to other areas of the city.

For example, neighbourhood-level ratings in the map below reveal liveability is lower in many outer growth areas of Geelong. It is relatively good in more established neighbourhoods.



This is a common pattern in Australian cities. It is likely to get worse if city planning continues to allow sprawling low-density urban development that doesn't deliver local services as new housing is built.

A closer look at social infrastructure

Our indicator of social infrastructure provides a good example of liveability differences within cities. This index measures residents' access to 16 different types of essential community services within reasonable distances. Having to travel further than these distances has significant impacts on our health and well-being.

Social infrastructure describes the common services and facilities people need over their lifetimes. We have previously shown the growth areas of Melbourne lack these services despite their importance for health and well-being.

The chart below shows the overall Social Infrastructure Index for each regional city.

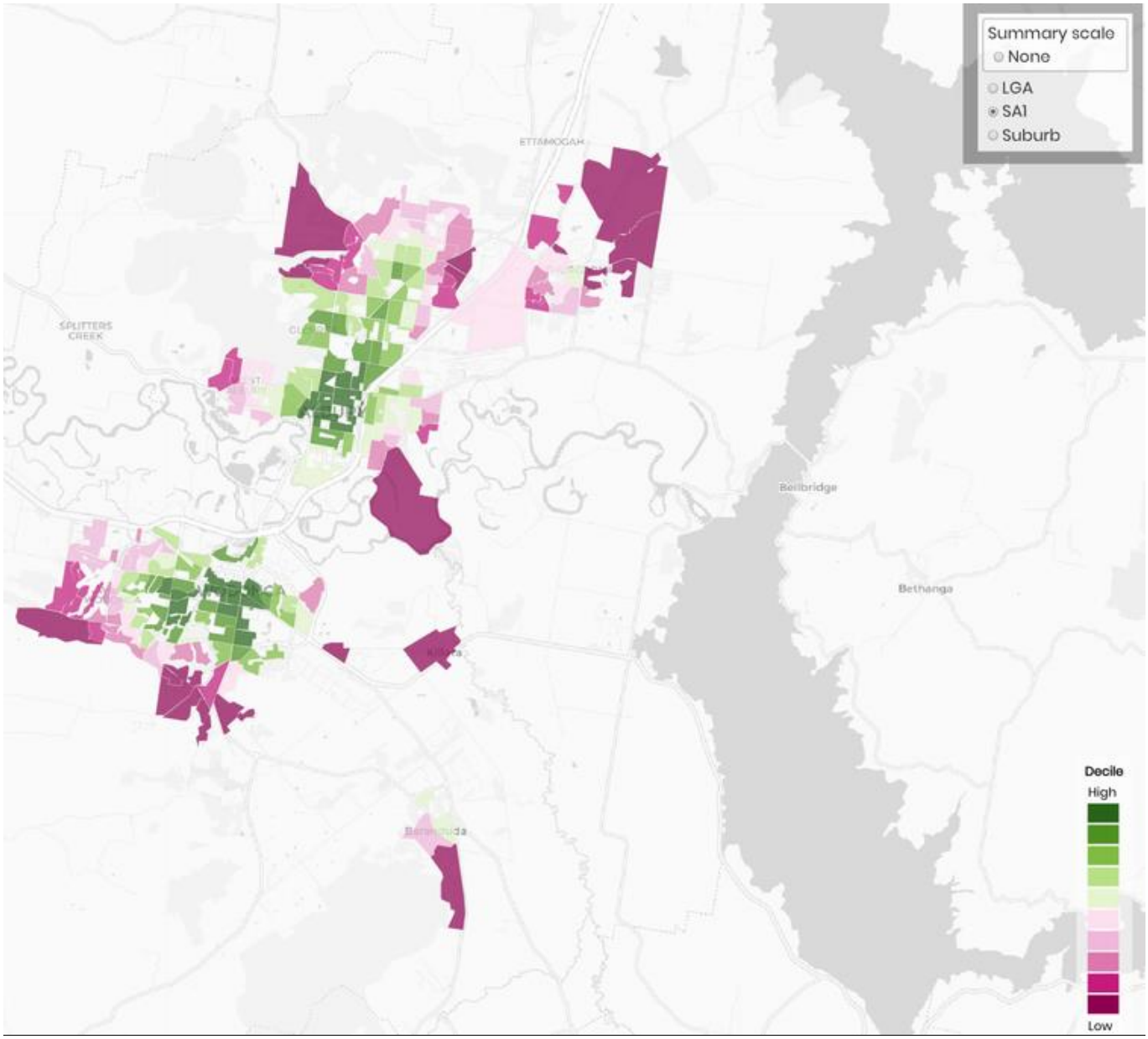
On average, residents of urban neighbourhoods in the 13 largest regional cities (6,245 neighbourhoods) have access to five of the 16 essential community services within recommended distances. The average for capital city neighbourhoods (33,722 neighbourhoods) is 6.5. Both capital cities and regional cities need better access to services.

Not surprisingly, Sydney and Melbourne have the best results. City-wide averages for these cities show residents have access to seven different types of services. Geelong, Albury-Wodonga and Wollongong perform as well as many capital cities and actually outperform Canberra, Darwin, Hobart and Perth on this measure.

Identifying priorities for local action

City-level averages and national comparisons are of limited use for improving liveability across Australian cities. We need to focus on within-city differences to drive action on inequities between neighbourhoods and to provide evidence to support more effective policy, planning and delivery.

For instance, the map below shows neighbourhood-level social infrastructure access across Albury-Wodonga. Access in central and established areas is very good, but poorer in outer areas. Liveability here is compromised as residents depend on cars to get to everyday services.



The Social Infrastructure Index shows access to essential community services is very good in central and established areas of both Albury and Wodonga, but poorer in outer areas. Australian Urban Observatory, Author provided

This pattern is becoming very common across our cities. It's having long-term impacts on people's health. This means ineffective city planning will have a long-term affect on health budgets across all levels of government. Neighbourhood-level results presented in the Australian Urban Observatory clearly identify where policy and planning action should begin to reduce the inequities across our cities. These results show why we need to include regional cities in discussions about the future liveability and sustainability of our country.

You can read this article in The Conversation here.

No need to give up on crowded cities – we can make density so much better

Thami Croeser, Lucy Gunn
First published in The Conversation, 19 February 2020.

The idea that we should decentralise our population has come up many times in Australia. Recently, the National Farmers' Federation president pushed the notion, calling for a shift to the regions. And the premise is this: city living is unpleasant. Roads are jammed, housing is expensive and it's all so much nicer out in the country. We need to "spread out".

We reject this conclusion. Regional centres certainly must play a role in accommodating our population growth, but for now it'll be a modest role.

The more immediate need is to focus on improving conditions in our major cities. Our smaller towns matter, but we can't neglect the urgent need to get better at doing the bigger ones right.

Our cities are growing very rapidly. The fastest growth is in Melbourne, which added 119,400 residents in 2017-18. That's nearly as many extra people as the entire population of Darwin in a single year. This rapid growth doesn't need to mean more traffic, ugliness or stratospheric housing prices and rents – if we confront a difficult truth.

A dirty word in Australia

The truth is we're just really ordinary at urban density. It's so poorly executed in Australian cities that it has become a dirty word in local politics.

Urban density targets remain low in planning policies for many states. It's often set at around 15 dwellings per hectare. In practice, even lower density is delivered.

Australians tend to think of density as living in high-rise tiny apartments. Drop the "d-word" at your local pub and see how the term "shoebox" or "vertical slum" quickly follows.

The irony is that the very thing that makes a getaway to central Paris or Barcelona so attractive is what many Australian city residents revile at home. The places we visit and admire are really quite dense.

Our estimates based on UN figures suggest Paris averages around 213 people per hectare and Barcelona 156. (By contrast, Melbourne averages 38 people per hectare and Sydney around 50.)
It's higher-density living that makes their streets and public spaces buzz. But, importantly, this density is achieved through a combination of well-designed mid-rise apartments (roughly six storeys) close to shops, services and public transport. This gives residents the best of both worlds: cities that are liveable and likeable.

A failure of planning

Past failed experiments in density have made it difficult to replicate overseas examples locally. The great Australian dream of owning a quarter-acre block and the stigma around density persist with reason. In Melbourne, for example, rapid high-rise development in the last decade has delivered large numbers of very small apartments, in some cases of poor quality and lacking natural light and ventilation.

Very modest investment in public transport makes things worse, as new residents try to cram onto services that haven't kept pace with growth. Car parking, however, is usually mandated. These planning rules mean the price of new apartments includes the expense of multiple floors of parking, and streetscapes are peppered with vehicle crossover ramps.

Without adequate public transport, roads fill with cars, stoking resident opposition to further infill development. The roads and parking these cars need occupy valuable space, which could be better used for trees and urban greening. Green space is often overlooked in the haste to accommodate rapid population growth, yet it's essential for community health and well-being and for reducing urban heat island effects.

Handling population growth doesn't require us to move to Tamworth or Toowoomba, but it will require some really important changes in our urban development priorities. There has to be a much stronger focus on quality and aesthetics to win back public support for infill development. It's also going to take commitment to lift density targets in key planning policies.

Plan Melbourne's 2017 refresh, for instance, has moved to a goal of "over 20 dwellings per hectare". It follows the recommendations of research in allowing higher densities in high-activity areas such as activity or town centres. However, it will take time to implement this change in existing and new areas across the city.

Density must be complemented by suitable streetscapes and infrastructure. This will require a significant rethink of the role of the car in urban areas, greater investment in public transport, and a reallocation of large areas of streetscape space to greenery and pedestrians.
That's a big ask, but it's worth it, because density really doesn't have to mean "dogbox".

Dutch show change is possible

Take a (digital) walk around a *woonerf* neighbourhood in the Netherlands and you'll notice on-street parking is scant, the speed limit is around 15km/h and plentiful road space is allocated to tree planting and garden beds. Kids play in the street under the watchful eye of long-term locals. You don't notice the dense apartments around you because there are trees in the way and there's a lot to see at ground level.

Remarkably, it was only in the 1970s that the Dutch started to move away from car-oriented planning to deliver this kind of urban design, which puts people and place first. With courageous policy change, we could have this in Australia too.

You can read this article in The Conversation here.

2019

It’s easy to get us walking more if we have somewhere to walk to near our home and work

Rebecca Bentley, Hannah Badland
First published in The Conversation, 11 October 2019.

We know walking more and increasing our levels of exercise are good for our health.
But how can we walk more in our busy lives?

Our research shows people walk more if the city’s design provides them with places to walk to near where they live, work or study.

The research also shows people walk even more if they live in a place that has good public transport and plenty of jobs or employment opportunities they can easily access.

What gets us walking

Our study examined walking behaviours in nearly 5,000 adult commuters in Melbourne, drawn from the Victorian Integrated Survey of Travel and Activitybetween 2012 to 2014.

We looked at what level of access they had for destinations to walk to, typically within about 800 metres, close to their home, work or study place. This could be local cafes, shops, supermarkets, libraries and other services, often referred to as local accessibility.

The amount walked on an average day by those with good local accessibility at home or near where they worked or studied was around 12 minutes. Those with limited access to local facilities walked only seven minutes.

People with good local accessibility near their homes walked five minutes more per day than those with poor local accessibility. People with good local accessibility near where they worked or studied walked nine minutes more.

But to get our activity to the next level we needed to look beyond what was locally accessible to people.

We looked at people’s relative travel commute time by public transport compared with driving, the level of public transport service accessible from where they lived, worked or studied, and the number of jobs within 30 minutes of people’s homes by public transport. These are sometimes referred to as measures of regional accessibility.

We found that the greater access people had to resources and public transport regionally, the more they walked.

For example, after accounting for local accessibility, people living in places with a higher number of jobs available within a 30-minute public transport journey walked just over four minutes more on average than people in areas with very low job availability.

People living in places where taking public transport was more efficient timewise than driving, walked more than seven minutes extra a day compared with people with low levels of public transport.

A little extra help

Our study also looked at the combination of local and regional accessibility to see if they encouraged people to walk even more.

We found that high exposure to both local accessibility and public transport accessible opportunities beyond the immediate neighbourhood was associated with greater walking benefits than exposure to just one or the other alone.

This combination of factors supported people to do around ten minutes more (give or take depending on the measures used) of walking on average per day.

We know people who travel by public transport are likely to walk more than those who travel by car.
Public transport effectively separates people from their own vehicle, be it at home or a park-and-ride stop. Public transport delivers them as pedestrians close to their destination, which in turn promotes walking throughout the day.

If people walk more in their residential environment (say to the shops, library, or post office), take public transport to their workplace or place of study and then walk more in this environment too (at lunchtime for example), they do ten more minutes of physical activity in a day than their counterparts who drive.

A message to planners

The message this new research tells us is simple.

City and urban design and transport planning have the potential to deliver a regular extra dose of what's been described as the "miracle cure" of exercise by encouraging us to walk more.

A variety of walkable destinations that support people's daily living needs to be designed into existing and, more importantly, new developments. That means at locations where we live, work, and study.

This can be done by locating shops, schools, post offices, GPs and public transport stops within good walking distance. Jobs need to be located close to where people live. This will encourage walking, cycling and public transport commuting. When this is not possible, employment opportunities should be embedded within well connected and efficient public transport networks.

Cities that support people to walk more will provide population health benefits through increased physical activity, helping them to become truly smart and healthy cities.

You can read this article in The Conversation here.

Of all the problems our cities need to fix, lack of car parking isn't one of them

Elizabeth Taylor, Julianna Rozek, Rebecca Clements, Thami Croeser
First published in The Conversation, 17 May 2019. Tracey Nearmy/AAP

Parking is a fiery issue in Australian cities. That's because cars dominate our cities, supported by decades of unbalanced planning decisions favouring space for cars over other land uses or forms of transport. Parking is even an issue in the federal election, with both the Coalition and Labor promising to fund more spaces for commuters.

The issue of parking flared up again recently in Melbourne's inner north. Moreland City Council wants to scrap minimum parking requirements for new apartments around its increasingly dense activity centres.

Victoria's planning minister, Richard Wynne, gets the final say on this plan – and it might be a "no". He said last month the practicalities need more thought and that Moreland must "strike a balance".
Wynne is right, but not in the way he implies.

Australian cities are generous to cars

Minimum parking requirements were introduced across Australia alongside the rise of cars in the 1950s. These set rigid ratios for parking spaces in different types of new developments.

For example, the Western Australia State Planning Policy requires at least at least 0.75–1 parking bay for every one-bedroom dwelling in an apartment building, plus at least one visitor parking space per four dwellings. A review of parking policy in Western Australia found these requirements are largely based on small, outdated surveys in the United States and do not reflect actual demand for parking in Australia.

A result of these policies is a glut of parking in Australian cities. The local council area of the City of Melbourne has over 215,000 parking spaces. However, 40-60% of households in the area do not own a car and around a third of apartment parking spaces are not used.

Removing minimum requirements is an effort by local governments to allow the varying needs of local communities to determine parking outcomes.

But what about tradies, emergency workers, the disabled?

Often proposed changes to parking are criticised for being unfair to people who may rely on cars. It is great that these questions of equity are raised (including by the planning minister), but some of the common concerns are misplaced.

Election promises to increase parking at train stations show the car is still seen as the default option for getting to the station. Nils Versemann/Shutterstock

Firstly, developers are sensitive to market demands and will continue to provide apartments with parking for those who need it. When London removed minimum parking requirements in 2004, new developments still provided car parks – just at half the previous required rate.

Closer to home, the inner-city councils of Sydney and Melbourne have already removed some minimum parking requirements – and many new apartments still provide parking spaces.

Secondly, while apartment dwellers with insufficient off-street parking are often blamed for clogging up on-street parking in residential areas, they are rarely to blame. A recent study in Melbourne found residents of detached houses use 77-84% of on-street parking. Many of them have garages, but choose to use them for storage or living space.

Apartment dwellers were less likely to use on-street parking and more likely to have unused spaces. And more parking in apartment blocks isn't helping people access our cities, even by car.

Finally, providing more housing options without rigidly attached parking spaces will encourage people who don't actually need to drive to choose to drive less or switch to other forms of transport.

Removing minimum parking requirements will not mean that people who need to drive for work, medical or other reasons can't find homes with parking spaces. Indeed, if we make it easier for those who don't need to drive to get around in other ways, congestion could be eased for those workers who do need a car.

Pro-car planning policies are unfair to those who can't drive

Policies that encourage dependence on cars marginalise people who can't or don't drive. These groups are often disadvantaged in other ways. For example, people with disabilities tend to rely on public transport, not cars, to participate in society.

In Australia, households in the most disadvantaged areas are the most likely not to have a car. Older Australians are also less likely to drive. Rates of driver licence ownership decrease from around the age of 60.

Providing quality public transport and walkable streets – not an oversupply of car parking – is critical to ensure children, young and older people and those with disabilities can get around independently.

Minimum parking requirements prioritise cars as the default transport option. The results include increased congestion, urban sprawl and air pollution.

Parking requirements also make apartments less affordable. Land construction costs per parking space average between A$50,000 and $80,000, as well as using valuable space at an average of 21 square metres. A parking space is bigger than a bedroom – and nearly half the size of a typical new Melbourne apartment!.

Design cities around people, not cars

Australian planning policy has favoured cars over other forms of transport for too long. This needs to change if we want our cities to be healthy, liveable and easy to get around for everyone.

Moreland's plan to scrap minimum parking requirements may sound extreme, but it isn't going to take existing parking spaces away, or mean all new developments will have zero parking.

The practicalities of on-street parking policy are important, but mandating the supply of more off-street parking isn't even the best way to meet parking demand.

If we continue to plan our urban areas as if everyone needs a car (or multiple cars) to get around, we will rapidly run out of space. And the space we have left will be unpleasant to spend time in. This means more time spent in traffic for drivers and ugly, hazardous and polluted streets for locals.

Sidestepping this difficult issue in the name of "balance" isn't fair or practical. Improving public transport in these corridors is in the state's power and would be a much more constructive response.

You can read this article in The Conversation here.

Living ‘liveable’: this is what residents have to say about life on the urban fringe

Leila Mahmoudi Farahani, Billie Giles-Corti, Cecily Maller, Melanie Lowe
First published in The Conversation, 21 February 2019. theskaman306/Shutterstock

Recent studies show Melbourne’s and Sydney’s fast-growing outer suburbs lag behind other parts of the city in access to urban design, employment and amenities and services that foster liveability. The National Growth Areas Alliance of local councils launched a national campaign, “Catch up with the outer suburbs”, on Monday. But what is it really like to live in these areas?

Living Liveable is a short documentary film produced by RMIT University researchers showcasing the lived experiences of residents in Melbourne’s outer suburbs. The film includes interviews with 11 residents that highlight their perceptions and experiences of liveability in their suburbs. This article explores their reasons for living where they do and recounts their experiences of life in the outer suburbs.

Why all the fuss about liveability?

Liveability and its underlying indicators have been the subject of substantial research. Most well-known liveability indices produced by the private sector — such as the Mercer Quality of Living Ranking and the Economist Intelligent Unit’s Liveability Index — rank cities against each other. And most Australian capital cities are ranked relatively high in such global liveability indices.

These measures overlook inequities within cities between established inner areas and newer outer suburban areas. Many of these urban fringe suburbs are experiencing rapid population growth. RMIT researchers have developed spatial liveability indicators, showing that residents in outer suburbs lack access to basic amenities that inner-city residents take for granted.

Yet residents’ perceptions of their neighbourhoods and their lived experiences are often unheard in such measures. The interviews show that a combination of factors shapes decisions to live in an outer suburb. These include perceived affordability, people’s aspirations for a good life, and access to public transport. As one resident said:

> *I was looking for an affordable area where I can, you know, buy a decent-size house within a decent budget and all those things. So, this area probably suits me, which is nearest for public transport, but yeah, it’s a bit far from the CBD area, which is alright.* ***– male resident of Wyndham***
>
> Access to green spaces and a sense of community were among the things residents loved most about living in their suburb:
>
> *We live opposite a beautiful park … it’s right at our doorstep. We feel very, very lucky to live opposite this beautiful park, it’s very well maintained by the local council and it’s highly utilised. So even just out there walking, I’ve got to know people in my neighbourhood.* ***– female resident of Wyndham***

Traffic makes life worse

However, traffic volumes and poor access to daily living destinations and public transport had negative impacts on residents' lived experiences. While current liveability indices usually consider access to daily living destinations – such as food outlets, schools, hospitals, and public transport – traffic is often overlooked. Yet, 10 out of 11 people mentioned traffic, in 30 separate instances, as something that makes their neighbourhoods less liveable.

A painter living in the City of Casey described how increasing traffic in recent years was forcing him to wake up half an hour earlier and get back home half an hour later in the afternoon.

> *I'm a painter, so I work anywhere from here to the city. The Monash [freeway] … I call it my driveway. So I'm on that every day, and it just depends which exit I'm taking for the day.*
> *So, I get up at the moment at 4.50am. I get up to beat the traffic, which starts at about 5.20, and then I get to the job, and then I might have a bit of a snooze in my car or eat breakfast. And that's just all just to beat traffic. And I can stay there for an hour before I have to, you know, knock on the client's door, and say, "Oh I'm here to start."*
>
> *And, yeah, then at the end of the working day, which is 4pm, after I've done my eight hours, I just have to grind with the traffic on the way home… I might get home at about 6.10pm.*
> For some, the traffic has affected their mental health and increased stress levels.
> *We've lived in this house for 16 years and just the buildup of traffic … I was used to getting from A to B very quickly. I now have to plan, embed in my day, more time to get from A to B. I think that's the biggest negative.*
>
> *And it's certainly one that impacts my husband. He doesn't work locally. He works in the eastern suburbs and he also has to travel around a lot for his work. And that's becoming a bit of a nightmare for him and actually creating a bit of stress.* ***– female resident of Wyndham***

Lack of access to daily living destinations, including employment and supermarkets, means residents depend on their cars. This adds to their cost of living and reduces neighbourhood liveability.

Lack of public transport or infrequent services also has negative impacts on residents' quality of life and well-being.

> *I take my hubby to work in Derrimut and so that normally takes me … about two hours easy; just over two hours. … he doesn't drive. He can't use the train simply because the train doesn't go anywhere near where he works. There's nothing. No public transport to take my husband to work.*
> *S0 … we've got no choice. So, if something happens to me, uh, we're in a load of trouble. That's where it's difficult. We need more public transport. We really do.* ***– female resident of Wyndham***

Planners need to hear what residents say

The film highlights the gaps in current measures of liveability. For example, future liveability indices should consider including traffic and car-dependency indicators. Increasing traffic, the time spent travelling, and the financial burden of car dependency can detract from some of the key reasons residents choose to live in Melbourne's outer suburbs – namely, affordability and sense of community.

We need to engage with communities and hear from them about their lived experience to better understand and measure their quality of life, their health and their neighbourhoods' liveability. Objective measures of the quality of access should be accompanied by insights from residents about their lives in the suburbs. The voice of residents needs to be included in the planning of our cities as they grow, as well as the metrics of how successful we are in delivering equitable cities that foster healthy, affordable and prosperous lives for all.

You can read this article in The Conversation here.

2018

Working out what makes a good community where young children can thrive

Sharon Goldfeld, Billie Giles-Corti, Geoffrey Woolcock, Hannah Badland, Ilan Katz, Karen Villanueva, Robert Tanton, Sally Brinkman
First published in The Conversation, 24 October 2018. Tracey Nearmy/AAP

The international research is clear. Stimulating and positive environments early in life provide optimal foundations for children's ongoing development into adulthood. This in turn makes a difference to the productivity of society at large.

Communities are important environments in which young children grow and develop. There is limited research, however, on how communities can best influence early childhood development.

To address this evidence gap, the Kids in Communities Study (KiCS) set out to investigate the influence of community-level factors on young children's development. This research has identified a promising set of factors (listed in table 1) that lay the foundations of a good community for early childhood development.

What we currently know is that by the time Australian children start school, those in more disadvantaged communities have three times the level of developmental vulnerability compared with those who are most advantaged (18.4% vs 6.7%). In simple terms, young children living in Australia's poorer areas are already on a more disadvantaged trajectory. The evidence suggests these trajectories are challenging to change once established.

What is it about where you live that makes a difference?

The design of communities can impact the healthy development of children. In particular this involves family access to resources to promote good development.

International research shows that disadvantaged communities with limited resources and opportunities can generate poor child development outcomes. And these can then persist from one generation to the next.

Conversely, there are also many factors that can promote healthy child development, even in low-income communities. These factors include parents and families who actively participate in the community, active community organisations, and neighbourhoods that are safe to walk in and have good places to play.

As Australia faces increasing pressure to accommodate population growth, well-designed communities offer real potential as a platform for impact. Indeed, there is interest globally – e.g. "child-friendly cities" – and in Australia –

e.g. "collective impact" – in place-based approaches. This is stimulating the policy agenda at all levels of government.

This policy agenda recognises "communities" as central for delivering better and more equitable early childhood development. However, this enthusiasm is hampered by the limited available evidence about the most effective ways communities can support good early childhood development.

The Kids in Communities Study

The Kids in Communities Study investigated the potential influence of community-level factors in five domains on early childhood development. These domains are:

- physical environment
- social environment
- socio-economic factors
- access to services
- governance.

Table 1. The list of Foundational Community Factors

Differentiating Foundational Community Factor – What KiCS found differentiates disadvantaged communities doing well or poorly on ECD		
Compared with disadvantaged areas doing poorly on ECD, in disadvantaged areas doing well on ECD:		
1	**Income**	Median household income[1] and degree of economic diversity[2] is greater
2	**Highest level of schooling**	A higher proportion of the community have completed Year 12 or equivalent[1]
3	**Gentrification**	Relatively higher income (but still disadvantaged) families are moving into the area[2]
4	**Housing affordability**	Housing is perceived as more affordable[2]
5	**Housing tenure (stability)**	There are less renters compared to private home owners[1]
6	**Public housing**	There are less public renters[1] and fewer perceived presence of public housing[2]
7	**Housing density***	There is less high-rise density housing (three or more storeys)[1] and fewer perceived higher density housing[2]
8	**Stigma**	There is less community stigma (negative reputation)[2]
9	**Perceived primary school reputation**	Perceived primary school reputation is better[2]
10	**Perceived Early Childhood Education and Care (ECEC) availability**	There is more perceived ECEC services available[2]
11	**Perceived crime**	There is less perceived crime[2]
12	**Historical events**	There is a greater response of leaders to events that bring community members together[2]
13	**Local decision-making**	'Novel approaches' or locally tailored initiatives or solutions (including any with a focus on social capital) have been developed because of local decision-making2
Important Foundational Community Factor – What KiCS found is important for communities[2]		
14	**Physical access to services**	Perceived ability to travel or 'get to' services
15	**Walkability**	Perceived walkability to facilities and services is important for physical access
16	**Public transport availability**	Perceived presence of/access to public transport is important for easy access
17	**Traffic exposure**	Being away from traffic is important for children being safe
18	**Public open space – availability and quality**	Having local parks is important for young children and families. Having *good quality* parks was important for use, play and social interaction
19	**Facilities – availability and diversity**	Having a range of family-friendly destinations and activities is important for young families and children
20	**Early Childhood Education and Care (ECEC) cost**	Perceived affordability of ECEC is considered important and affects use
21	**Leadership**	Having local champions, leaders and boundary spanners driving local governance

[1]Quantitative; [2]Qualitative; *related to Public housing; ECD: Early Childhood Development

A mix of surveys, focus groups and interviews were conducted with community members (families, service providers, stakeholders). The results were combined with data from 25 Australian urban and regional communities. This mixed methods approach was essential to better understand local context and make sense of the data.

We were particularly interested in understanding why some communities, when matched by disadvantage, showed better ("off-diagonal") or as expected ("on-diagonal") child development outcomes relative to their socio-economic profile. This is measured by the Australian Early Development Census. Teachers complete this census every three years for all children starting school.

Foundational community factors: using data to drive action

From this work, KiCS identified the set of *foundational community factors* associated with early childhood development. These are the factors that lay the foundations of a good community for early childhood development.

Foundational community factors can help better understand what helps or hinders early childhood development at the community level. They provide a source of local information that can contribute to developing interventions that move beyond the individual level, which have shown limited *sustained* success, to the broader community level (e.g. place-based initiatives), which has the potential to benefit many children and families in the long term.

They are a combination of factors that showed a difference in disadvantaged communities that had "good" versus "poor" early childhood development outcomes (differentiating factors), as well as those that most KiCS communities perceived as important for families with young children (important factors). Table 1 shows which foundational community factors were related to these outcomes.

Foundational community factors are important; they allow us to move beyond anecdotal information to a discussion grounded in evidence about how the community is tracking to inform place-based initiatives.
These factors help communities strengthen stakeholder engagement and can inform policy recommendations using the best local data. Examples include informing and involving local residents and organisations, discussing key "shared" issues, identifying priorities, planning and implementing community interventions, and monitoring change over time.

This can empower communities to better understand and recognise their resources and opportunities to improve early childhood development. That in turn helps to direct effort into areas that make the most sense.

The full technical report on Foundational Community Factors for Early Childhood Development: A report on the Kids in Communities Study is available here.

You can read this article in The Conversation here.

Melbourne or Sydney? This is how our two biggest cities compare for liveability

Lucy Gunn, Billie Giles-Corti, Julianna Rozek, Melanie Davern
First published in The Conversation, 10 September 2018. Julian Smith/AAP

The question of which city is the most liveable is an annual hot topic. Competition is fierce, especially between Melbourne and Sydney. We have previously highlighted the limitations of The Economist Intelligence Unit Global Liveability Index. In this article we analyse the differences between Sydney and Melbourne using clearly defined liveability indicators based on objective spatial data.

Liveability is an important concept with implications for health and well-beingthat go beyond promotional material or the prestige of being named number one. As part of our Creating Liveable Cities project, in July we released a scorecard looking at the liveability of Sydney. The scorecard for Melbourne comes out today.

For this research, we mapped policies designed to create liveable cities. We found great variation in these policies. Both cities do well on some but not all aspects of liveability.

We also found inequities in the delivery of infrastructure relating to liveability policies in both cities. Some suburbs do better than others, but in both cities suburbs on the urban fringe are less liveable. These areas often have poor access to the basic amenities needed for daily living.

So, let’s take a closer look at the liveability of Melbourne and Sydney.

Public transport access

Melbourne has an ambitious policy for public transport access. This requires 95% of residences to be within a 400-metre walk to a bus stop, 600m to a tram stop, or 800m to a train station. At present, 69% of residences meet this target.

The policy we measured spatially for Sydney is even more stringent. It requires 100% of residences to be close to public transport – within 400m of a bus stop with a service every 30 minutes, or 800m of a train station with a service every 15 minutes. Only 38% of residences and 2% of suburbs meet this target.

To create a consistent comparison between Sydney and Melbourne, we developed a common national liveability indicator that measures access (within 400m) to frequent public transport (a 30-minute service frequency). Results using this indicator were very similar: 36% of residences in Melbourne achieved this, compared to 35% in Sydney.

In both cities, however, inner and more established suburbs have the best public transport access. Many middle and outer suburbs miss out (Figure 1).

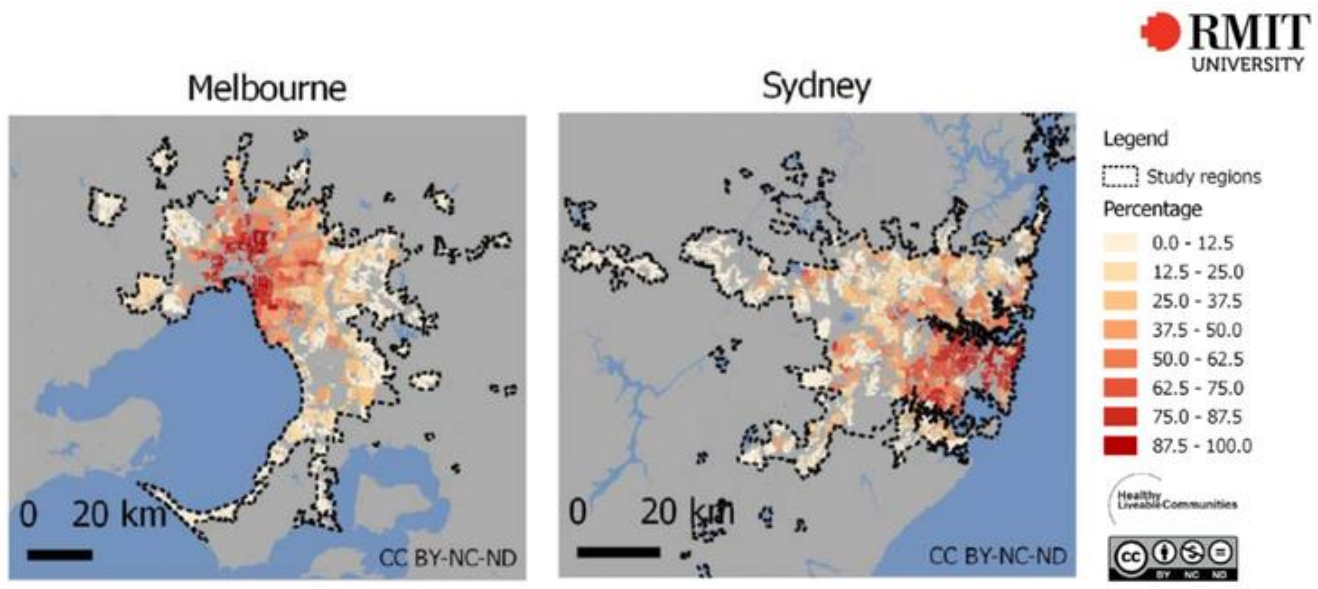


Figure 1: Percentage of residences by suburb within 400m of a public transport stop with a service every 30 minutes. Author provided

Another important liveability indicator measures how people get to work. This is especially important with growing population, increased traffic congestion and longer commuting times. Our research shows cities are healthier, more liveable and sustainable when walking, cycling and public transport are more convenient than driving.

Residents of Sydney are more likely to use public transport (26%) than residents of Melbourne (18%). The proportions who walk or cycle to work in each city are similar (6% Sydney, 5% in Melbourne). Both Melbourne and Sydney are doing well relative to other Australian cities.

By international standards, though, we have a long way to go. For instance, 50% of people (and 63% of MPs!) in Denmark's capital, Copenhagen, commute daily by bike.

Walkability

Coinciding with good access to public transport are walkable areas, which combine somewhere to walk (to local shops and services), population density (to support the services) and a way to get there (connected road network). Walkable neighbourhoods are the backbone of a liveable city.

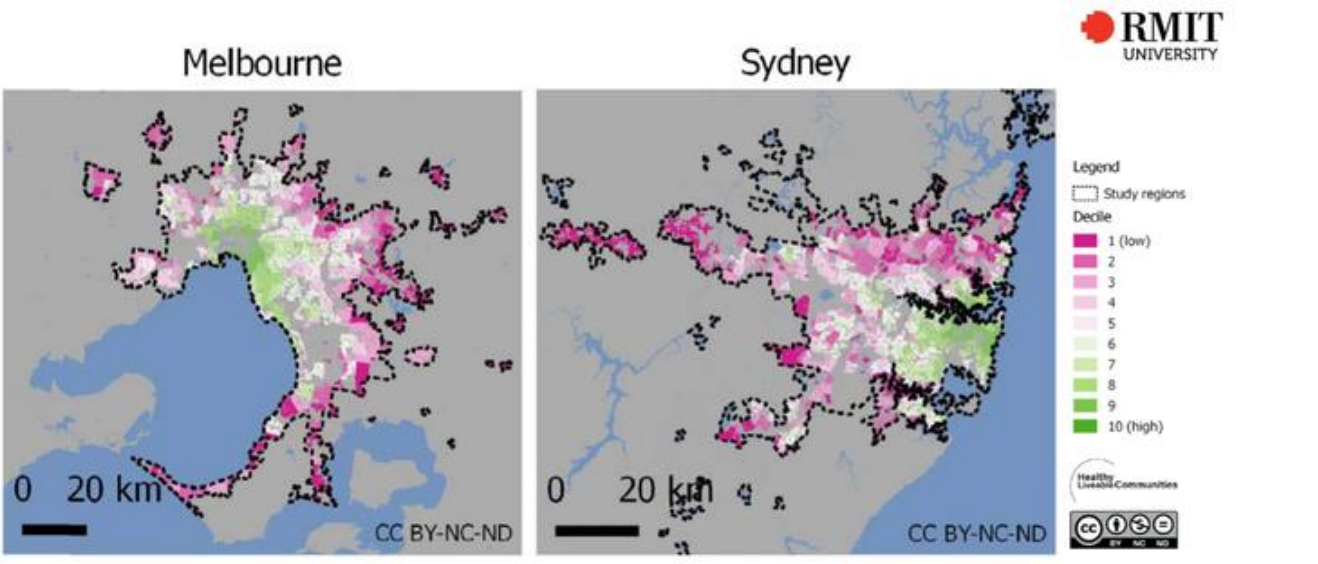


Figure 2: Composite walkability indicator* for suburbs within each capital city

Figure 2 shows that in both Sydney and Melbourne inner areas have the highest walkability. This declines dramatically towards the urban fringe. Yet neither city has policies in place to achieve walkable neighbourhoods in the suburbs.

Walkability is also unlikely to be achieved with population density requirements set at only 15 dwellings per hectare. That's too low to achieve walkable neighbourhoods.

Higher residential densities ensure there are enough people and the associated demand to support the transport and everyday services that help make cities liveable. Research is now showing that this requires higher densities of at least 25 dwellings per hectare, and even higher around activity centres and transport nodes.

Suburban densities are higher in Sydney, at 19 dwellings per hectare, than in Melbourne, which has only 13 dwellings per hectare.

Better policies create better cities

So to the question: which is the most liveable city? The answer in turn depends on another question: liveable for whom? Both cities have areas performing well on some liveability domains and other areas where more could be done.

The findings of these reports show a need for more ambitious policies, research evidence linking liveability indicators to health and well-being, and investment in infrastructure and spatial planning to improve liveability, health and well-being for all residents of all cities.

You can read this article in The Conversation here.

The world's 'most liveable city' title isn't a measure of the things most of us actually care about

Julianna Rozek, Billie Giles-Corti, Lucy Gunn
First published in The Conversation, 15 August 2018. shutterstock.com

Melbourne lost its "most liveable city" title yesterday and is confronting being runner-up to Vienna after seven years at the top. These rankings are based on The Economist Intelligence Unit's Global Liveability Index, which "assesses which locations around the world provide the best or the worst living conditions".

But the tool was actually designed to help companies decide how much "hardship" allowance they would need to pay employees who relocate. So, The Economist suggests that none of the top cities – including Melbourne, Vienna and other Australian cities – need a hardship allowance at all. But it recommends a 20% allowance for cities at the bottom of the ranking like Port Moresby, Tripoli and Karachi.

Despite the hype, the Global Liveability Index focuses on things that matter to expats, not citizens. This is different to what is important to the average person living in Vienna, Melbourne or any other city – such as housing affordability, walkability, access to public transport and education, and the number of bike paths.

What the index measures

The Economist's Global Liveability Index uses 30 indicators to measure five categories of liveability: stability (safety), health care, culture and environment, education, and infrastructure. And 26 of the indicators are based on the "judgement of in-house expert country analysts and a field correspondent based in each city".

These unknown critics score the performance of a city as acceptable, tolerable, uncomfortable, undesirable or intolerable.

There is no freely available information about the qualifications of these judges, why the categories were chosen to represent liveability, or how indicators in a category are weighted. While the summary report is free, a more detailed report will set you back US$620 and the actual data sets a smooth US$9,210, which we didn't purchase. Our comments are based on the freely available information.

Osaka came in third in 2018's global liveability ranking. from shutterstock.com
It appears that, beyond the well-designed league tables and flurry of media attention, The Economist's Global Liveability Index is a mostly subjective rating with opaque methods for comparing cities.

Take for example the stability category. This includes crime, terror attacks and civil unrest, and makes up 25% of the total liveability score. Out of 100, Melbourne, Sydney and Adelaide are judged to be five points less “stable” than Vienna, Osaka and Toronto. But there is no information on how The Economist’s experts came up with this conclusion.

Some of the indicators could be objectively measured, such as the prevalence of violent and petty crime, but they are still given a rating by The Economist’s experts. It isn’t clear what types of crime are included in this decision or how they are weighted.

Two indicators rate the availability and quality of private education, but there are no equivalent indicators for public education. Most students (65.6%) in Australia are enrolled in government schools. So, for the average family in Australia the availability and quality of the public education system is more important than private.

And, most importantly, the index seems to miss the things that affect the lived experience of city residents. Although housing “quality” and the availability and quality of private education are included, housing affordability, traffic congestion, walkability and lack of public transport, bike paths and essential services don’t appear to be in the index.

Yet these are some of the real problems facing Australians.

What it doesn’t measure

Both Sydney and Melbourne got full points in the “infrastructure” category. This includes the quality of public transport and roads, international links and quality of water provision and telecommunications.

While this may be true for inner-city residents, our research has found that some suburbs – particularly those on the urban fringe – are less lucky. Public transport in particular is often missing in outer suburbs. The index doesn’t consider how liveability is distributed across a city and if some people are missing out.

It also doesn’t take into account the environmental sustainability of cities. One study, which compared the liveability score of cities with their ecological footprint, found that Vienna’s is almost half that of Sydney, Melbourne and Brisbane. However, none of these cities was found to be sustainable.

Better measures of liveability

If we really want to create liveable cities that promote the quality of life of citizens, we need transparent and objective measurements.

Our team has previously defined the key ingredients of a liveable city. These include safety, environmental sustainability and affordable and diverse housing linked by public transport, walking and cycling infrastructure to employment and the amenities needed for daily living.

These measures are based on our research of what affects the health and well-being of communities.
Chasing the hollow crown of the Global Liveability Index will not make Melbourne or any other city a better place to live. Instead, all levels of government should focus on creating and implementing policies that improve the liveability of cities for their residents.

You can read this article in The Conversation here.

Rail access improves liveability, but all regional centres are not equal

Melanie Davern, Carl Higgs, Claire Boulange, Jonathan Arundel, Lucy Gunn, Rebecca Roberts
First published in The Conversation, 13 June 2018.

Our research on the liveability of regional cities in Victoria has identified an important element: liveability in these areas requires fast, reliable and frequent rail connections to capital cities.

Previous research has established that we need better models of early transport delivery in growth areas of Melbourne. Public transport, in particular, is an essential ingredient for a liveable community. Less attention has been paid to transport in regional areas, particularly regional areas with growing populations.

People living in regional areas still need access to capital cities. The reasons include employment, education, medical services, shopping, arts, culture and visits to family and friends.

Regional Victorians who lack access to reliable rail services remain deprived of non-car travel options. This forces them to drive and that adds to traffic congestion in our capital cities. Car dependency is costly for health and wealth.

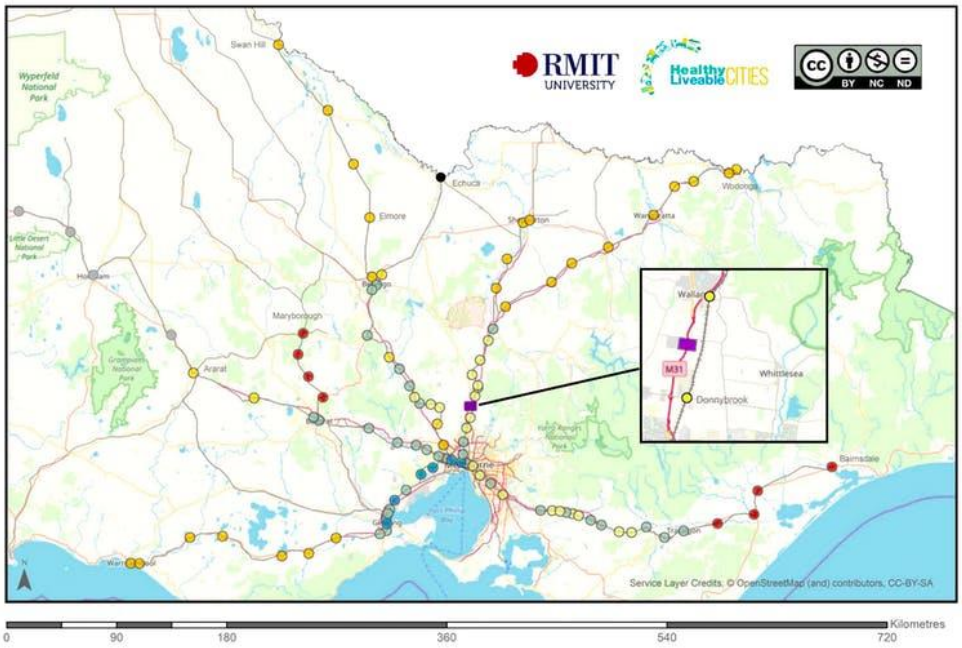
Regional rail is important both to meet the needs arising from predicted population increases across regional areas and to manage the rapid population growth and sprawl of our capital cities. Australia's population is predicted to increase by 45 million by 2100 and our cities are already expanding rapidly. We need to start thinking about where these extra people are going to live.

At present, most people (more than 80%) in Australia live in capital cities. However, as populations grow, more people will start moving to regional areas. This means we need to pay more attention to the liveability of regional Australia as well as capital cities.

Wherever they live, people need transport to get to employment, education, shops and services, and to socialise with friends, family and community members. Furthermore, our research has found that having close access to a range of these things is associated with better health and well-being. Good access to frequent, reliable and fast transport is not a luxury. It is a critical factor influencing liveability and is described as a social determinant of health – one of the conditions (where we live, learn, work and play) that influence our health.

Liveable places promote health and well-being among the people who live there. However, they also require transport options, including public transport such as trains, buses, trams as well as walking and cycling. In regional areas expansive distances make it hard to get by without a private vehicle.

A good example of this is Mitchell Shire. It begins at the northern edge of metropolitan Melbourne and extends to the regional town of Seymour in northeastern Victoria.



Legend

Beveridge

No daily service

Only one daily service

On average, how long do you have to wait for a train on a weekday?

- Less than 30 mins
- 30 mins to 1 hour
- 1 to 1.5 hours
- 1.5 to 3 hours
- 3 to 6 hours
- More than 6 hours

The population is booming in this non-metropolitan shire. The small town of Beveridge is expecting to accommodate at least 150,000 people in new urban development over the next 30 years. To put that into context, the town had a population of just over 2,300 people in 2016.

To understand the current regional rail services (and liveability) for areas like Beveridge we produced the summary map below.

Developers' signs in the Beveridge area are advertising "40 minutes to the city" along the Hume Highway. Perhaps they are including a helicopter in their house and land packages. Based on current regional rail options, residents must drive to their nearest station 10-15 minutes away, wait for a train – services depart at intervals of 34-105 minutes – and then travel up to an hour to the city during peak hour.

Alternatively, these developments might be encouraging car use as the main means of transport. In that case, Google Maps suggests peak-hour travel from Beveridge to the Melbourne central business district takes between one and two hours on a weekday. Again, as well as being associated with poor health outcomes, long commutes by car will increase traffic congestion along the route and in the city.

Regional rail services are highly uneven

The map above also suggests that some areas of regional Victoria are doing better than others in terms of regional rail connections to Melbourne.

Consider the examples of Bendigo and Shepparton in central and north-eastern Victoria. Shepparton is a large regional centre, with an economy established in health services and agriculture. Its population is projected to grow to 315,000 people by 2046.

Shepparton Council planning is guided by a liveability framework, a 30-year plan and has recently completed a liveability assessment. However, Shepparton's economic and social development is restricted by only four train services to Melbourne per day compared to Bendigo's 27 services.

Similarly, Geelong has a projected population increase of 56% to 445,000 people by 2046. However, duplication and electrification of the overcrowded line remains an unfunded long-term project.

Car dependency, transport planning and urban design are critical social determinants of health that also need to be considered in creating liveable, well-connected communities in regional areas. We need to act now if we are to learn from the liveability lessons of our capital cities and avoid repeating the mistakes.

You can read this article in The Conversation here.

This is why health has to be at the heart of the New Urban Agenda

Melanie Lowe, Alexei Trundle, André Stephan, Billie Giles-Corti, Hayley Henderson, Hesam Kamalipour
First published in The Conversation, 14 February 2018.

Urban experts gathered at the ninth World Urban Forum in Kuala Lumpur over the past week to discuss progress on a global commitment to sustainable urban development. UN member states adopted the New Urban Agenda 15 months ago to guide the implementation in cities of the 2030 Agenda for Sustainable Development. And health is central to the New Urban Agenda – health is its "pulse", as the World Health Organisation puts it.

Health must be at the heart of decisions about how to equitably house, feed, mobilise and economically support growing urban populations. Health is not just a desirable outcome but a fundamental driver of sustainable development.

Sustainable development and health are linked

Many sustainable development actions also have health benefits. The New Urban Agenda recognises that decent housing and access to health care, water and sanitation are the basic building blocks of health.

To add to the challenges of achieving these goals, the world's cities are expected to gain 2.5 billion inhabitants by 2050. This reinforces the urgent need to provide equitable access to infrastructure and to upgrade informal settlements worldwide.

There is an urgent need to reduce inequities in access to decent housing, health care, water and sanitation worldwide. Hesam Kamalipour

The agenda has a focus on social inclusion and civic engagement in city planning. Such participation can improve mental well-being and empower communities to overcome urban health inequities. This is important for all urban residents, but particularly for disadvantaged communities.

The agenda proposes compact urban development which prioritises walking and cycling over private car use. Multiple health benefits flow from more physical activity and less air pollution.

Walking and cycling can also help mitigate climate change, which is predicted to contribute to an extra 250,000 deaths between 2030 and 2050 alone. Cycling, for example, can reduce an individual's transportation carbon footprint by 58% compared to driving a car.

The natural environment is a vital health determinant, as it underpins all human life. The agenda promotes reducing cities' environmental impact, building resilience to natural disasters, and preserving nature within cities.

Again, this has many implications for health. Greenery can reduce urban heat islands to protect against heat stress. Contact with nature improves mental health. Attractive green spaces encourage recreational physical activity.

The agenda emphasises the need to provide decent and productive work, end poverty and reduce income inequalities. This could minimise the social gradient in health – people with less income have poorer health.

Uncontrolled growth is unhealthy

Attaining these sustainability and health benefits will depend on how the New Urban Agenda is implemented. The World Urban Forum showcased many sustainable development achievements by governments and civil society. But we still have a long way to go to realise the NUA vision.

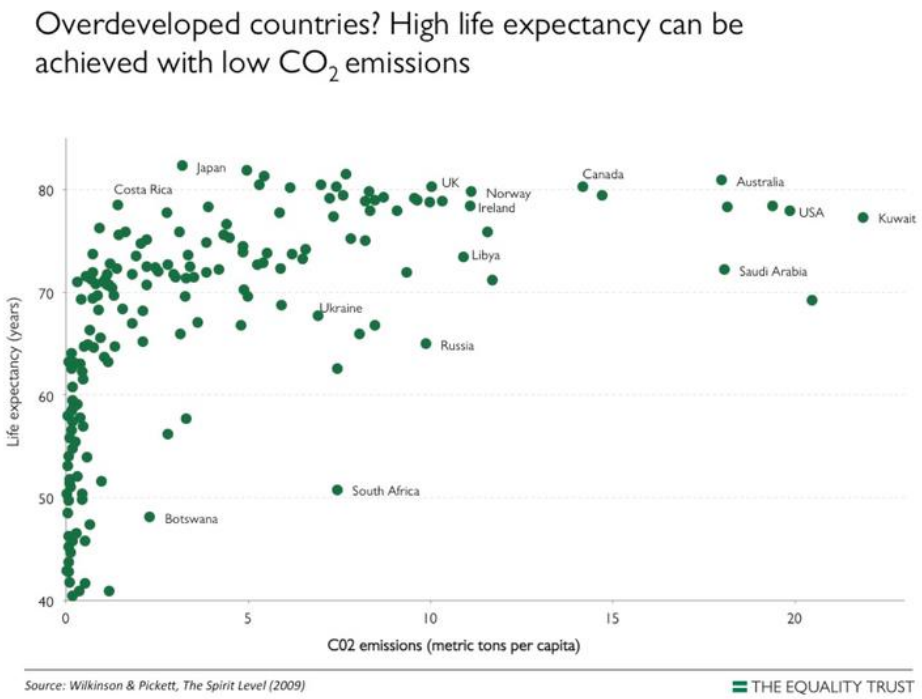
As the world urbanises and cities promote development and innovation, we must take care to balance economic growth with environmental preservation. Only then will we achieve truly sustainable health improvements.

Most countries have a bad track record of pursuing social and economic development at the expense of the natural environment. While the New Urban Agenda does recognise the need to balance environmental and health goals with economic development, it does not acknowledge the ecological limits to growth.

Currently, the top-ranked nations on the Sustainable Development Goal Index and the Human Development Index, such as Sweden and Denmark, have high ecological footprints per person. If everyone in the world lived like them, we would need more than three planets. This is clearly unsustainable.

As research by Wilkinson and Pickett shows, after a certain point, continued natural resource depletion for economic growth is not necessary to achieve good population health.

After a certain point, higher emissions do not increase life expectancy, as Wilkinson and Pickett demonstrated. The Spirit Level: Why More Equal Societies Almost Always Do Better, R. Wilkinson and K. Pickett



Agenda relies on inclusive, integrated planning

While the New Urban Agenda encourages consideration of health in urban policies, it does not detail the specific actions required.

Urban planning interventions must be consistent with the evidence on how to create healthy and less resource-intensive cities. A recent Australian study found that many urban policies are not evidence-based and are often not fully implemented.

Countries across the globe are looking at indicators to help monitor policy implementation. This

includes spatial indicators that highlight inequities in access to infrastructure and amenities within and between cities.

It is widely recognised that implementing the New Urban Agenda will require the involvement of many sectors, including housing, transport, urban design, energy, employment and open space. National governments adopted the agenda, but city planning is often a responsibility of sub-national governments. The private sector and communities also have important contributions to make.

In all cities, there is a need to clarify responsibilities and balance national government leadership with local government and community action. Integration between policy areas requires supportive legislative frameworks, political commitment, leadership, strong governance arrangements and personnel trained in collaboration.

Low- and middle-income countries are further behind on urban health, so have much to gain from implementing the agenda. Nevertheless, all countries, including Australia, have room for improvement. Australian cities continue to face issues with car dependence and inequities in access to public transport, jobs, services and amenities.

All urban actors have a role to play in pursuing the New Urban Agenda's vision of a sustainable and healthy urban future. As we hurtle towards doubling our population with rapid city growth, now is the time for action.

You can read this article in The Conversation here.

2017

This is how to create social hubs that make 20-minute neighbourhoods work

Leila Mahmoudi Farahani, Cristina Garduño Freeman, David Beynon, Richard Tucker
First published in The Conversation, 17 November 2017. Leila Farahani, Author provided

Successful neighbourhood centres are important as places to meet and for social activity. People's access to neighbourhood centres and the diversity of buildings and commercial uses found there can significantly influence how, and to what extent, we interact.

Developing successful neighbourhood centres is at the core of Plan Melbourne'sstrategy to create 20-minute neighbourhoods. These are neighbourhoods where people can access most of their needs within a 20-minute walk, cycle or public transport trip.

We recently studied the impacts of having diverse shops, businesses and eating places in suburban neighbourhood centres. Recently published in Urban Design International, our study looked at three such centres in Geelong, Australia.

Good planning can reduce suburban isolation

Often in today's suburban communities, their only direct connection to cities is through roads and freeways. Immobile residents and people without access to private vehicles, such as teenagers and the elderly, can feel trapped in their homes. Even mobile residents can feel isolated when social interactions depend on using their cars.

Evidence suggests the design and planning of neighbourhoods have impacts on the sense of community and social life in them. Ensuring people have opportunities to interact with others, improving liveability and encouraging a sense of community are now key objectives of government agencies like VicHealth.

Neighbourhood planning and design can encourage face-to-face social interaction in various ways. Promoting diverse commercial uses in local centres is considered to be effective.
Diverse uses promote social activity

Our study mapped users' activities through observation of how they socialised. The study explored how the arrangement and diversity of commercial uses in neighbourhood centres might better promote or affect the social life of neighbourhoods and reduce isolation. The goal of such strategies is to generate a sociable atmosphere, attract a diversity of users and create more vibrant places at night.

Pavement dining was found to play an important role in generating social activities in neighbourhood centres. Several socialising activities – such as people chatting, having a coffee or meal together – happen around cafés and restaurants. These are also the longest-lasting social interactions.

The areas of greatest social activity on pavements are the ones claimed by café chairs and shades. To encourage social activities on streets, local councils should promote the use of pavements by eateries and other traders.

Food stores and other convenience stores attract many visitors to local centres and enhance the chances of interaction among residents. Besides diversity of uses, the number of stores allocated to each group of uses is important. The right mix of stores and services provides the balance neighbourhood centres need to successfully meet local requirements.

Diversity of uses – rather than housing multiple traders in single-tenant “super” markets – can also enhance the character of a street. Diversity can give a street or a local centre an attractive, sociable atmosphere. Pakington Street, crowded with bars and restaurants, is an example of a vibrant social hub in Geelong.

Diversity of uses also leads to a diversity of users. Co-locating different commercial uses, such as boutiques and clothing, specialty food shops or gaming parlours, can make streets more appealing to various groups of people. Planning neighbourhood centres that appeal to a diverse range of people in terms of age, gender, physical ability and cultural background can guarantee the vitality and success of local centres.

As well as planning, it’s vital that these social hubs are close to the homes of the people who use them. Suburbs can still be isolating environments if people have to get into their cars to visit their nearest social hub.

Diversity is also important in determining a street’s nightlife and evening economy. This is because certain uses are more prominent in the evening, and enhancing social activity on streets creates a safer night-time environment.

More social, happier and healthier

Why should planners work to promote social interactions? The suburban lifestyle is associated with weaker social ties and increased social isolation. The lower the density the greater these associations.

Social isolation is a major risk factor for morbidity and mortality. Socially isolated people are at risk of low self-esteem and higher rates of coronary heart disease, depression and anxiety. So people living in low-density suburbs are at particularly high risk.

Feelings of isolation in low-density suburbia are harder on some residents than others. People who spend much of their time at home, such as the elderly or those with debilitating disability, are more vulnerable. The story of Natalie Wood, found in her home eight years after her death, is a sad example.

While communication technology sometimes can reduce isolation, this does not replace the value of face-to-face interactions. By analysing and understanding the diversity of uses needed for a local centre and carefully planning a balanced mix of functions, planners can help encourage these interactions and social cohesion in suburbs.

You can read this article in The Conversation here.

How do we turn a drain into valued green space? First, ask the residents

Leila Mahmoudi Farahani, Cecily Maller
First published in The Conversation, 8 November 2017. Author provided (No reuse)

The green infrastructure of our cities includes both publicly owned, designed and delineated areas and less formal, unplanned areas of vegetation — informal green spaces. These spaces account for a large proportion of urban green areas. However, they are often among the most overlooked and neglected urban spaces, which contributes to negative perceptions, a recent study has found.

Yet informal green spaces represent a largely untapped opportunity to improve liveability and residents' health and social well-being. Especially in lower socioeconomic areas that lack formal green spaces, improving the condition of informal green spaces can promote their use and enhance neighbourhood liveability.

We can't afford to waste green space

Green spaces are important indicators of quality of life in cities and suburbs. They are shown to have a wide range of positive impacts.

For residents, the benefits include physical, mental and social health and wellbeing. The multiple environmental benefits include ecosystem services, improving microclimate and reducing air pollution, alongside biodiversity conservation.

Owing to such benefits, governments invest a lot in greening projects or improving green spaces. Sometimes these interventions include informal green spaces to increase their accessibility, use and potential benefits to residents.

Upper Stony Creek, an urban waterway restoration in Melbourne's west, is a good example. Work will soon transform the concrete drainage channel, now separated from the residential area, into an accessible urban wetland and park.

Residents' perceptions and uses

Clean Air and Urban Landscapes (CAUL) Hub researchers from RMIT University investigated residents' perceptions and uses of Upper Stony Creek and the adjacent informal green space before the start of the intervention.

Interviews with residents showed overall impressions of the site were negative. An overwhelming majority of them commented on the site's undesirable features.

Lack of regular maintenance, lack of access, feeling unsafe and litter were among their main concerns. Safety concerns included natural hazards, such as the presence of snakes (encouraged by a lack of regular maintenance), crime and local drug trade. These concerns affected when and how often residents used the site.

The negative perceptions suggested residents were looking forward to the intervention. They believed it would improve the informal green space and their neighbourhood.

Residents do use the informal green space alongside the concrete channel.

In spite of their misgivings, residents found value in using the area for practices typically found in formal green spaces such as dog-walking. They also used it for less typical practices such as motorbike riding. The lack of restrictions in these spaces allows for uses that might not be acceptable in more formalised urban spaces.

In fact, residents appreciated the sense of exploration, informality and feelings of being away from urbanisation that the site provided.

Informal green spaces are filling a niche not met by more formal green spaces. This means interventions to transform informal green spaces should, where possible, take into account residents' current uses of these areas.

Ensuring work improves these spaces

Our findings highlight the importance of considering and understanding residents' perceptions and concerns about informal green spaces for informing work on these spaces.

Our case study suggests small interventions, which aim to resolve the main concerns such as lack of maintenance and safe access, can increase the use of informal green spaces without resorting to entirely formalising the space. In fact, understanding residents' needs and expectations could result in more cost-effective interventions that won't jeopardise the informal character of such areas.

Each informal green space will be unique in its features and characteristics, as will residents' perceptions of it. Therefore, understanding these sites and residents' lived experiences and concerns more completely through in-depth consultation will be important to ensure interventions meet community needs and expectations.

A sound knowledge of how informal green spaces are used, or of why they are not being used, can inform planners and decision-makers when intervening in such spaces to increase the liveability of urban neighbourhoods.

You can read this article in The Conversation here.

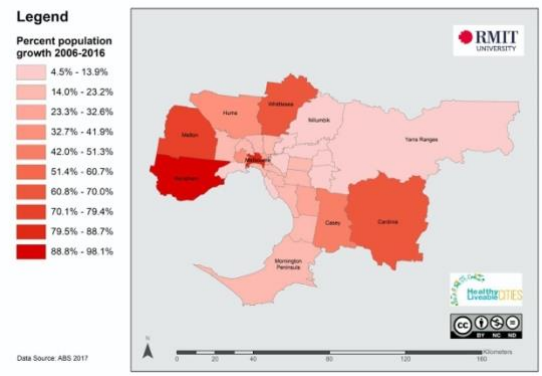
Some suburbs are being short-changed on services and liveability – which ones and what's the solution?

Melanie Davern, Carl Higgs, Claire Boulange, Lucy Gunn, Rebecca Roberts
First published in The Conversation, 18 October 2017.

Australia's population has grown by 3.8 million over the last decade. Of the capital cities, Melbourne has grown the fastest – close to 1 million newcomers in the ten years to June 2016.
With such growth comes a need to expand social infrastructure – all the common social services and facilities people need over their lives which are critical for an area's liveability. However, our analysis shows a noticeable mismatch between the fastest-growing areas and the social infrastructure available to these communities.

The suburbs in the outer growth corridors of Melbourne are growing fastest, with large increases in young families and school-age children. The concentration of population growth is clearly visible when growth rates across metropolitan Melbourne are mapped in Figure 1 below.

Figure 1: Population growth rates across Melbourne



Local Government Areas with the fastest population growth between 2006 and 2016 include Whittlesea, which increased by 62%, Cardinia by 69% and Wyndham by a staggering 98%, or 113,000 people. In stark contrast, Nillumbik had the smallest population growth of 4.5%, or 2,765 people.

Population growth has a huge impact on the planning of communities and the services to these. Governments use demographic data like the population statistics from the Australian Bureau of Statistics Census to inform policy and planning decisions on the location and funding of schools, hospitals, parks, roads and public transport. These are the physical infrastructure needed for human settlement. Most attention is usually directed to such "hard" infrastructure – such as transportation, power, water and telecommunications – which is of great significance to economic development. In comparison, social infrastructure is often described as "soft" infrastructure. It's a name that fails to reflect its important role in society and the importance to health, wellbeing and liveability.

What is social infrastructure?

Social infrastructure describes the common services and facilities people need across their lives. These are very important influences on the liveability of an area. It also refers to the amenities most people look for when making decisions about real estate or where to live. These include:

- hospitals, health services and medical centres
- primary and secondary schools, kindergartens and child care
- libraries, community centres and neighbourhood houses
- public transport, walking and cycling options
- community support agencies
- movie theatres, museums and art galleries

- pools, gyms, parks and public open spaces
- police, ambulance and fire stations
- aged care and retirement accommodation, social housing and a diverse range of housing options for all ages and demographic groups.

These are key ingredients for liveable cities. They create the conditions needed to promote the health and wellbeing of all city residents – not just those living in affluent, well-serviced suburbs.
The quality and range of services available where people live, learn, work and play have a direct influence on their long-term health and the future development of chronic health conditions.
Importantly, this means that government-funded social infrastructure has longer term benefits for universal health prevention. As a result, good design and planning of well-serviced communities directly benefits all levels of society.

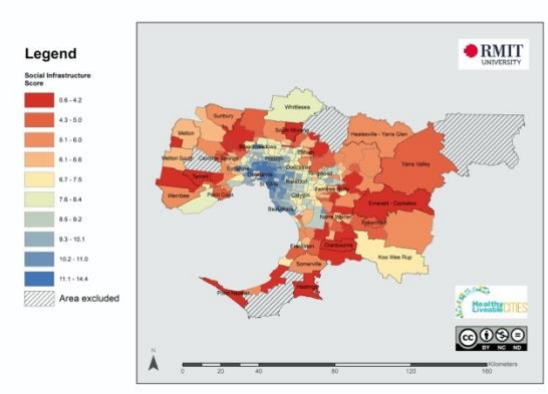
Social infrastructure in Melbourne

Social infrastructure should be fairly and equitably distributed across cities. However, the fastest growing suburbs of Melbourne, with increasing numbers of families and children, are the areas with the least services (Figure 2).

This disparity is largely because current methods of planning social infrastructure are based on projected population targets measured before services are delivered to new areas.

People living in new suburbs have to wait for enough people to move in before government can justify delivering new social infrastructure. This means it can be years before important services like local schools, parks and community facilities are built.

Figure 2: Levels of social infrastructure across Melbourne



The current approach to social infrastructure planning encourages car dependence, social isolation and stark inequity across our cities. This has a devastating impact on the liveability of some areas and the health and wellbeing of residents.

It's particularly unfair when people are often forced to move to outer growth areas in search of affordable housing. This creates a breeding ground for complex social problems, mental and physical health disparities. The result is communities where people have less time and opportunity to live a healthy, active lifestyle and connect with each other.

Creating more liveable communities from the start

Building new infrastructure is very costly. The simple solution is for well-serviced inner and middle suburbs to share their existing social infrastructure with new neighbours.

This means increasing densities in these areas and sharing existing services (take note "not-in-my-backyard" development opponents). This is a key recommendation of the Infrastrcture Victoria 30-year plan and consistent with the Plan Melbourne goal of maintaining liveability.

New suburbs will also continue to be developed. Here, social infrastructure needs to be in place before people move in. This is important because changing the methods used to determine social infrastructure requirements in advance will also dramatically improve the liveability of these areas.

A more equitable method for social infrastructure planning is based on access. Hard infrastructure, like roads, is built as development occurs, and the same model should apply to the provision of social infrastructure. This will ensure easy and close access to social facilities and services, which in turn will create healthier and more liveable communities.

Government planning processes and developer contributions need to be rethought. We have much to learn from the Canadians, who have been using these methods for years.

You can read this article in The Conversation here.

This is what our cities need to do to be truly liveable for all

Julianna Rozek, Billie Giles-Corti
First published in The Conversation, 12 October 2017. kittis/shutterstock

Urban planners, governments and developers are increasingly interested in making cities “liveable”. But what features contribute to liveability? Which areas in cities are the least and most liveable? The various liveability rankings – where Australia tends to do quite well – don’t provide much useful guidance.

In a recently released report, Creating Liveable Cities in Australia, our team defined and produced the first baseline measure of liveability in Australia’s capital cities.

We broke down liveability into seven “domains”: walkability, public transport, public open space, housing affordability, employment, the food environment, and the alcohol environment. This definition is based on what we found to be critical factors for creating liveable, sustainable and healthy communities.

Each of the liveability domains is linked by evidence to health and wellbeing outcomes. They are also measurable at the individual house, suburb and city level. This means we can compare areas within and between cities.

While all seven domains are important, three are explored here in more detail.

Walkability

Urban planning that encourages walking is crucial for liveable cities. Julianna Rozek/Author provided
In liveable cities, streets and neighbourhoods are designed to encourage walking instead of driving. Homes, jobs, shops, schools and other everyday destinations are within easy walking distance of each other. The street network is convenient for pedestrians, with high-quality footpaths, short blocks, few cul-de-sacs and higher-density housing.

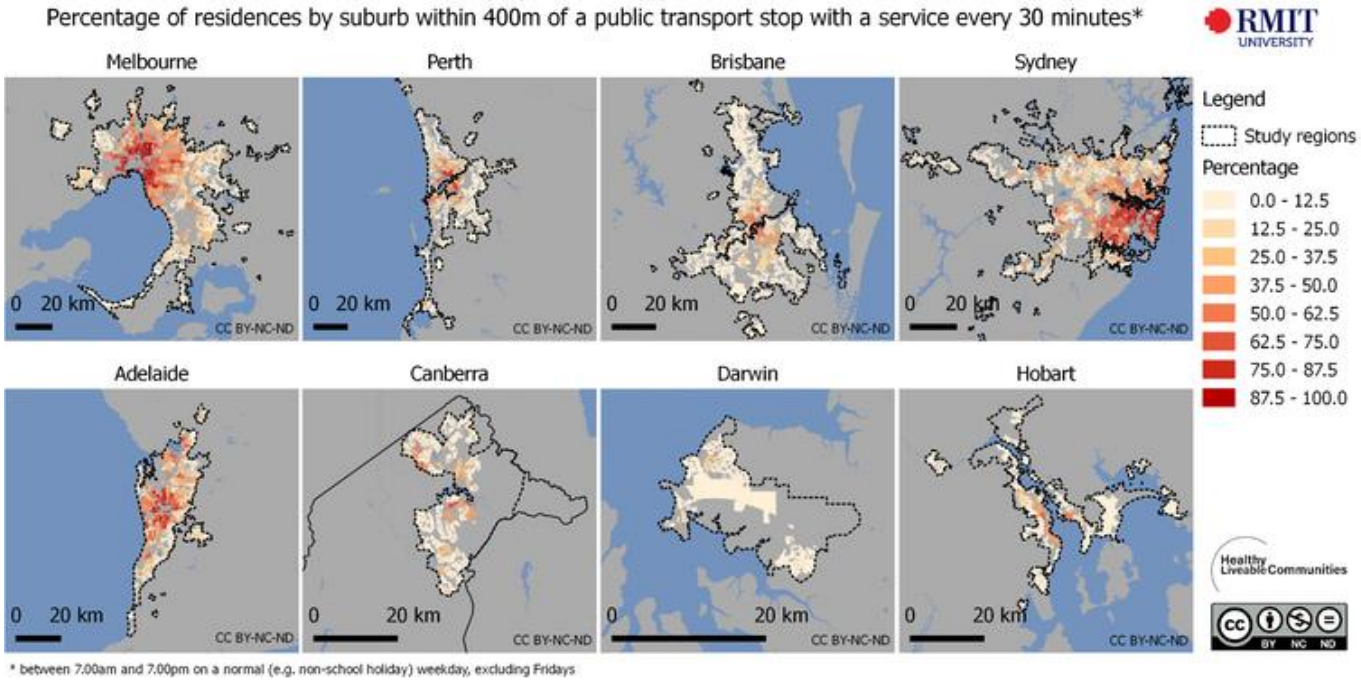
Walkability is an important factor in liveability because it promotes active forms of transport. Increasingly physically inactive and sedentary lifestyles are a global health problem, and contribute to around 3.2 million preventable deaths a year. In Australia, 60% of adults and 70% of children and adolescents do not get enough exercise.

We measured walkability using a combination of features that are linked to health benefits. Our “walkability index” included housing density, access to everyday destinations and street connectivity within 1,600 metres of a residence. This is a commonly used “walkable” distance, equivalent to about 20 minutes’ walk, and features within this affect how likely a person is to walk.

However, walkable neighbourhoods achieve their full potential only when residents have easy access to employment – particularly by public transport.

Public transport

Liveable cities promote public transport use instead of driving. Most homes are within easy walking distance of transport stops, and services are frequent enough to be convenient.
Good access to public transport supports community health in two ways: by encouraging walking and by reducing dependence on driving.



Australian cities have largely been designed for cars, at the cost of community health. Each hour spent driving can increase a person's risk of obesity by around 6%. Road-traffic accidents are the eighth-leading cause of death and disability globally, and one of the leading causes of death in Australians up to the age of 44.

Cars are also a major source of urban air pollution and noise, which are harmful to mental and physical health.

In previous work, our team found that people were more likely to walk for transport if they had a public transport stop within 400 metres of their home. The service frequency was also important – it needed to be least every 30 minutes on a normal weekday.

In Creating Liveable Cities in Australia we used this combined measure to map the percentage of homes in a suburb, local government area, or city with close access to frequent public transport.

Public open space
In liveable communities, most people live within walking distance of a green, publicly accessible open space such as a park, playground or reserve.

Green space has many physical and mental health benefits for people, and social and environmental benefits for communities. Parks provide opportunities for physical activity, such as jogging, ball sports and dog walking.

Increasingly, research is finding clear links between living in neighbourhoods with lots of parks and higher physical activity.

Urban green spaces are also important for plants and animals displaced by urban development and provide other environmental benefits. The cooling effect of trees and green spaces can play an important part in maintaining the liveability of Australian cities, particularly as heatwaves in Melbourne and Sydney are likely to reach 50°C by 2040.

In soon-to-be-published work, having access to a public open space within 400 metres (about a five-minute walk) of at least 1.5 hectares in area was associated with recreational walking.
For this report, we struggled to find a dataset of public open space that was consistent and available nationally. Some areas have high-quality data available from previous research projects or local councils, and satellite imagery provides useful information about tree cover.

However, national data standards are needed to enable cities to benchmark and monitor their progress in meeting liveability targets.

The liveable city is greater than the sum of its parts

The phrase “liveable city” conjures up a vision of leafy streets, happy residents walking, cycling or catching public transport, and children playing in neighbourhood parks. This image, while inspiring, is not useful for urban planners and governments who are working to make cities more liveable.
Distilling liveability into seven domains, which can be measured and are linked to health and wellbeing outcomes, provides policymakers and practitioners with what they need to ensure we maintain and enhance the liveability of our cities as they grow.

You can read this article in The Conversation here.

Higher-density cities need greening to stay healthy and liveable

Melanie Davern, Alison Farrar, Dave Kendal, Lucy Gunn
First published in The Conversation, 5 May 2017. Joe Castro/AAP.

Access to high-quality public open space is a key ingredient of healthy, liveable cities. This has long been recognised in government planning policy, based on a large body of academic research showing that accessible green spaces lead to better health outcomes.

However, cities are home to more than just people. We also need to accommodate the critters and plants who live in them. This includes the species who called our cities home before we did.

Greening cities that are becoming denser is a major challenge. Green spaces and density are both good for health outcomes when designed well. However, higher-density development can place added pressure on green space if not well planned and managed.

The South Australian government is leading the way in the design of public green spaces in denser cities by bringing together the multiple actors needed to create change. This includes the Heart Foundation, Departments of Health and Ageing, Environment Water and Natural Resources, Office for Recreation and Sport, the South Australian Local Government Association and the Office of the Chief Architect, as well as researchers from RMIT University and the University of Melbourne.

This is the new shift required for urban greening practice – led by practitioners with support from research evidence provided by (and in collaboration with) academics.

In Victoria, Planning Minister Richard Wynne has called for the suburban backyard to be maintained in the refreshed Plan Melbourne 2017-2050. This policy recognises the importance of private green space by establishing minimum garden areas in new developments.

Another major challenge is increasing urban heat and climate change. Some tree species we know and love will no longer be viable in cities that are several degrees warmer than they were.
Suitable species for future climates need to be selected, as the City of Melbourne has recently demonstrated. Increasing temperatures and the resulting loss of old trees will have adverse consequences for public health, ecology and biodiversity.

Understanding how best to achieve these benefits, and the trade-offs involved in delivering them, is particularly important today. Our cities are growing rapidly. We are seeing increasing populations, greater housing density, rising temperatures, growing rates of obesity, diabetes, stress and depression, and declining native biodiversity.

Why is greening on the agenda?

Urban greening is now recognised as a public health issue. New research has found its benefits include:

- lower rates of anti-depressant prescriptions in neighbourhoods close to woodlands in the UK;
- happier people living in areas with more birdlife; and

- better health outcomes with increased neighbourhood tree coverage in the US.

Ecological research also shows that urban green spaces can support many kinds of birds, bats, bees and plants. Urban greening has even been found to lead to safer neighbourhoods.
Australian urban planning and policy need to embrace these findings. Multiple government portfolios must work together to better plan for green cities that achieve maximum impact for economic, environmental and public health outcomes.

What do we mean by green space?

Green spaces are areas of public and private land covered with vegetation. This includes most areas we traditionally see as public open space: parks, gardens and sports ovals.

Green space also includes other areas of public land: street trees and streetscapes, nature conservation reserves, community gardens, school grounds and public buildings with green walls, facades and roofs. On private land, green spaces include residential gardens, golf courses and greening on and around private buildings.

All these green spaces together provide multiple benefits. The Heart Foundation and South Australian government recently commissioned an evidence review of how quality green space is supporting health, wellbeing and biodiversity. This report shows that green spaces can be designed to provide multiple benefits.

These benefits are delivered by including features that are known to influence physical activity, mental health, social, cultural, environmental and biodiversity outcomes. For example, planting trees in parks, gardens or streets can have many benefits:

- cool cities;
- slow stormwater runoff;
- filter air pollution;
- provide habitat for some animals;
- make people happier; and
- encourage walking.

Greening solutions aren't simple

The benefits green spaces provide are also influenced by local context: climate, inequity and social disadvantage, culture, or resident/user age and gender.

However, if green spaces are well designed with community input, these local factors can provide opportunities to maximise impact. For example, green space can be more beneficial when provided in areas of social disadvantage with limited existing green space, and trees provide more cooling benefits in hotter cities.

There are no magic bullets. If green spaces aren't well designed, for example, trees can:

- reduce the area available for some active sports;
- shade rooftop solar panels;
- reduce flower, fruit and vegetable production;
- create mess through fallen leaves; and
- create unsuitable habitat for other kinds of plants and animals.

These complex interactions highlight the need for academics and practitioners to work collaboratively across disciplines and sectors. These should include urban planning, public health, urban ecology, urban forestry, engineering, community development and economics. Knowledge needs to be shared and translated into action.

Our green cities of the future need to be designed to benefit human (and non-human) residents equitably. We need to move beyond a reliance on backyards and parks that were designed according to 19th-century principles (and using 19th-century species).

Cities need green spaces that are well designed, creatively delivered, accessible to all, and managed and maintained with appropriate resources to ensure long-term quality and availability.

You can read this article in The Conversation here.

2016

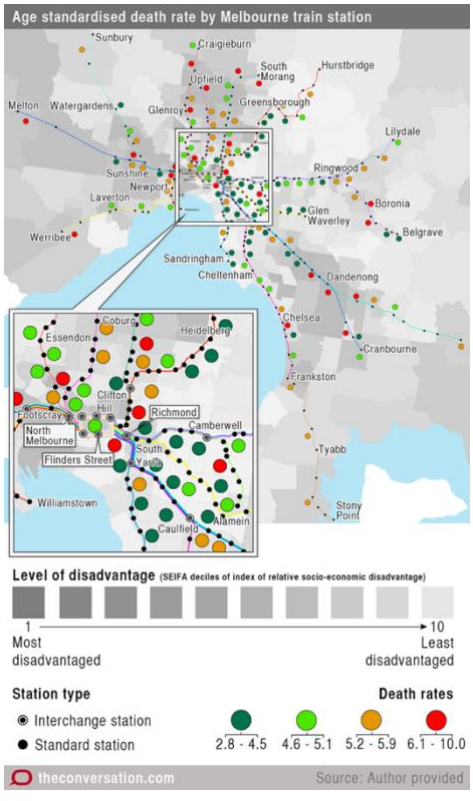
Your local train station can predict health and death

Melanie Davern, Lucy Gunn, Rebecca Roberts
First published in The Conversation, 29 February 2016. AAP/Tracey Nearm.

The association between life expectancy and postcodes, neighbourhood locations or train stations has been demonstrated in many different locations around the world. These include London and Glasgow in the UK and across the US including California. These studies paint a powerful picture of health inequalities across neighbourhoods and cities. They also concisely communicate the importance of social determinants of health. More simply, they tell us that health starts where we live, work, learn and play.

In an earlier article, we have argued that the liveability of an area is closely associated with the social determinants of health. A liveable neighbourhood should include the following key ingredients:

- is safe, socially cohesive and inclusive
- environmentally sustainable and supported by trees and biodiversity
- has affordable and diverse housing supported by public transport, walking and cycling
- is linked to employment, education, public open space, local shops, health and community services, leisure, arts and culture.



So what happens if you live in an area with more or less of these key ingredients?
The answer is postcode-related differences in health outcomes. These differences can be measured by death rates and life expectancy.This has led to the development of clever communication tools that map life expectancy to train stations. Until now, such maps have not been produced for Australian cities.

Living on the line in Melbourne

Community Indicators Victoria at the University of Melbourne seeks to translate data into action. The project has developed a map that demonstrates the existence of health inequalities across Melbourne using data from the Australian Bureau of Statistics (ABS). We have mapped area-level disadvantage using the Index of Relative Socio-Economic Disadvantage (IRSD) with age-standardised death ratesand linked these data to the Melbourne metropolitan rail network.

Large cities in the UK and US have large populations that enable the development of life expectancy data for small areas. In Australian cities we don't have the population numbers to reliably create these same life expectancy statistics at very small neighbourhood areas.

We have chosen age-standardised death rates as the best statistical approximation to life expectancy to create our map for Melbourne. The map investigates the relationship between area-level deprivation (IRSD), death rates (taking into account age differences for areas) and nearest train station as an approximation for location.
The map shows that areas with greater disadvantage (shown in darker grey) tend to have higher death rates. This is most easily seen in the western and northern areas of Melbourne, but can also be seen along the Dandenong-Pakenham train line. In comparison, the majority of areas across the eastern suburbs have both low death rates and low levels of area-based disadvantage.

Mapping other cities

With the support of publicly available ABS data, such maps can be reproduced for cities across Australia. These will no doubt produce more interesting and thought-provoking results, which should stimulate future debate about area-based health inequities across the country. Health-based inequities occur for many reasons. They are exacerbated, however, by a lack of access to job opportunities and services – such as public transport and mental and physical health care – which determine health outcomes.

These services are harder to access in outer suburb growth areas such as those in the western, northern and southern areas of Melbourne. Without these services people's livelihoods and health suffer as shown in the Melbourne version of the "Living on the Line" map.
Such maps are a powerful reminder that good health planning should be integrated across government portfolios. Health budgets also need to be spent on broader public health promotion and planning that extends well beyond hospital funding and basic health service provision.

You can read this article in The Conversation here.

2015

How do we create liveable cities? First, we must work out the key ingredients

Melanie Davern, Billie Giles-Corti, Carolyn Whitzman, Hannah Badland
First published in The Conversation, 7 December 2015. flickr/US Department of Agriculture

Liveable communities and resilient cities are buzzwords of the moment. But exactly how do you define a “liveable” community or city? Our research focuses on this exact question.

In an extensive review of liveability definitions used in academic and grey literature in Australia and internationally, we found some consistent factors. Critical factors for liveable communities are:

- residents feeling safe, socially connected and included;
- environmental sustainability; and
- access to affordable and diverse housing options linked via public transport, walking and cycling infrastructure to employment, education, local shops, public open space and parks, health and community services, leisure and culture.

These are the essential ingredients for a liveable community. They are needed to promote health and wellbeing in individuals, build communities and support a sustainable society.

The Victorian Department of Health and Human Services agrees with our definition. It has been adopted in the recently released Victorian Public Health and Wellbeing Plan 2015-2019. This plan provides the overarching framework to support and improve the health and wellbeing of all Victorians.

Liveability requires broad wellbeing

We live in an urbanising world. Cities are increasing in prominence as major social and economic hubs. For such cities, liveability rankings and awards can provide welcome global recognition and marketing tools.

Such rankings can operate to attract (or detract) people to a community. For example, many people will know Melbourne has been repeatedly voted the “world’s most liveable city”. A key question is: liveable for whom?

While helpful at the broadest level, these rankings focus on the inner city, remuneration packages and economic productivity. The rankings mask intra-city inequities.

To overcome this, our definition of liveability considers the underlying conditions that support health. Our definition focuses on equity and recognition that where you live can predict health outcomes and life expectancy.

Location shapes life expectancy. The interactive Health Happens Here exhibition at the California Museum offers a great explanation of how many key factors beyond diet and exercise influence health.

We are creating liveability indicators that are linked to urban, transport and infrastructure planning policy. This is guided by our understanding that health is influenced by individual personal factors, social and community supports and broader socioeconomic, cultural and environmental conditions. These conditions include housing, education, workplaces and access to services.

Developing these liveability indicators is a key component of our research at the NHMRC Centre of Research Excellence in Healthy Liveable Communities led by the McCaughey VicHealth Community Wellbeing Unit at the University of Melbourne. The policy-focused research is governed by advisory groups in Victoria, Western Australia and Queensland and links evidence to state-based policies and practice.

In Victoria, liveability indicators developed through our research are made freely available to all members of the community through Community Indicators Victoria. This supports the democratisation of data, engagement and measuring progress in communities.

Designing cities for good health

We need to build cities based on a clear and consistent definition of liveability. The goal is that it can be objectively measured and tracked over time using indicators that provide an understanding of each city's strengths and challenges.

Our definition is not values-free: it is guided by the view that cities must be designed to promote health.

A city built well is a healthy city that provides all residents (not just the fortunate few) with opportunities to live in areas with all the essential ingredients of a liveable community. It is a place that promotes healthy and happy people and community wellbeing – a place where people want to live.

A more liveable city is a great place to live. It is more resilient as well, with competitive social, economic and environmental advantages. Using our definition, a liveable city is also a healthy city, promoting health, wellbeing and equity.

This would be an excellent outcome for all Australians and all government ministries. Let's hope our new federal minister for cities and the built environment is listening.

You can read this article in The Conversation here.

2014

Lonely over Christmas: a snapshot of social isolation in the suburbs

Melanie Davern, Lucy Gunn
First published in The Conversation, 10 December 2014. Scorpions and Centaurs/Flickr

Social isolation and loneliness are becoming common in our large cities. Our cities are sprawling, housing is becoming more unaffordable, people are travelling further and longer in their cars and household size is shrinking.

These factors all affect our physical and mental health resulting in increasing chronic diseases and often more socially isolated and lonely people. During the festive season, these problems can be intensified.

So what exactly is social isolation? Socially isolated people don't have strong social connections or interactions with other people placing them at risk of low self-esteem, higher levels of coronary heart disease, depression, anxiety and below normal levels of happiness or subjective wellbeing.

A community snapshot of metropolitan Melbourne, Melbourne Vital Signs 2014, reveals a number of factors likely to influence social isolation.

The report reveals that in Melbourne one in five households spent more than 30% of their household income on housing. It shows that incidences of family violence have increased by 16% between 2012 and 2013. More than 13% of youth aged 15-19 years are not engaged at all in work or study. Finally, more than 18,500 people are estimated to be homeless in metropolitan Melbourne. These are just a few of the factors related to where and how people live that contribute to social isolation in the suburbs.

Transport accessibility is another important influence of social isolation.

It not only links people to work and study opportunities but also to socially connect with people, linking people to places where social interactions occur. Getting around is difficult for many people living beyond the transport rich areas of inner city and close to 25% of Melburnians report inconvenience to their daily lives arising from transport, with the oldest and youngest having the most trouble getting around.

Life also becomes more car-dependent in the outer suburbs and a recent local government community survey found that 81% of residents drive to work, leaving little time or energy to connect or volunteer with local community.

Limited transport affects people's ability to access employment and education opportunities associated with feelings of achievement and productivity and social interactions. More generally, it's very hard to socialise, build relationships and new networks (needed to get a job) when transport is limited or restricted to car ownership.

So what would the ideal neighbourhood look like if it promoted wellbeing and reduced social isolation?

It would be safe, attractive, socially cohesive and inclusive – and environmentally sustainable. It would include diverse and affordable housing. There would be convenient public transport, walking and cycling infrastructure that was linked to employment, education, public open space, local shops, health and community services, and leisure and cultural opportunities.

It would be a neighbourhood that provides for the needs of all people across the lifespan – children, youth, adults and older adults - embraces diversity and difference, and has active, informed and engaged residents.

Melbourne has been named the world's most liveable city for the last 4 years. There remain, however, many challenges we need to work at to reduce social isolation in this city and many others across the country.

People need to access services they need within close distance, a "20 minute city" where neighbourhoods have key services available within a 20 minute distance. Higher densities that provide more local employment opportunities and greater services reducing sprawl and helping to connect people to places, and most importantly, more easily to each other.

Social isolation is not an issue specific to the festive season but it can be harder for those people who have few people to connect with. So over the coming weeks, as life becomes busier in the lead up to Christmas and the end of the year, it might also be a good time to reflect on our own lives and think about how we can create more connected and inclusive communities.

It might be as simple as saying "hello" to someone on the train, talking to a neighbour or smiling at someone when you're shopping or walking in your local area. Think about donating a gift or toy for someone who needs it more than you, volunteering your time like 6 million other Australians, or inviting someone without family or friends to join your Christmas meal.

These might sound like very simple activities – but if everyone put their phone down for a little while maybe we could just bring a little more human kindness to the world and improve social isolation in the suburbs.

You can read this article in The Conversation here.

2011

Death by suburban sprawl: better urban planning will combat sedentary lifestyles

Billie Giles-Corti
First published in The Conversation, 28 September 2011. Elsie esq./flickr

***Non-communicable diseases* – Billie Giles-Corti looks at how the built environment impacts the development of NCDs.**

Never before in human history have so many people been able to be so sedentary in the course of daily life.

Since World War II, technological advances have transformed the design and development of buildings and communities, the way populations are mobilized and fed, the nature of work, and methods of communication.

Industrial and home labour-saving devices – from the remote control of garage doors to televisions and everything in between – maximise convenience and minimise effort.

So compared with our parents and grandparents, feeding and clothing ourselves has never been so effortless.

But while offering convenience, our use of motor vehicles – even for short trips to the local shop – or a blower to "sweep" garden leaves, appears to be having a profound impact on the health of human populations.

Sitting to death

Diseases previously associated with affluence – cardiovascular disease, cancer, respiratory illnesses and diabetes – are now prevalent in disadvantaged populations.

The problem is so big that an emergency long-term response is required – not just by the health sector but by everyone.

The United Nations declaration calling for action on the prevention and control of non-communicable disease highlighted the need for a "whole of society effort" to tackle this enormous global problem, which is crippling already overburdened health systems.

This is a call for all hands on deck: no one sector – and certainly not the health sector – can solve this problem. Fixing up people when they are ill is not the solution.

The number of people with non-communicable diseases are growing exponentially not because we have changed genetically, but because we have changed our lifestyles in response to a rapidly changing environment.

We now sit too much, move too little and over consume energy dense food – just because we can.

Built environment

The UN call for action specifically mentions the role of urban planning in the development of non-communicable diseases.

Research consistently shows that people are more likely to walk if they live in compact, pedestrian-friendly neighborhoods characterised by connected street networks, access to mixed-use planning, with presence of local destinations and higher density housing. And that time and distance influences walking and cycling as preferred modes of transport.

Neighbourhood design has a powerful effect on active travel options of all residents, particularly young people.

Children's independent mobility is influenced by traffic exposure and parental concerns (real or perceived) about safety, as well as access to local destinations including schools.

Locating schools in neighborhoods with disconnected street networks and heavily trafficked roads is contributing to the rapid decline in children and young people using active modes of travel.

In fact, parents chauffering their children to school are themselves contributing to the traffic congestion that makes roads unsafe for children to walk or cycle.

The power of planners

In the course of their professional lives, urban planners, transport planners, urban designers, civil engineers, property developers and architects make decisions with long-term impacts on the health and well-being of generations of residents.

They make design decisions that determine whether neighborhoods have connected street networks and footpaths so that residents – including children – can easily and safely walk to local destinations.

They decide whether shops and services are part of communities and in places where people can walk to them.

And whether communities have well-designed parks that meet the needs of a range of users from sporting groups, children, dog walkers through to our ageing population.

These planners decide whether streets are wide enough to allow access by public transport.

And underpinning all these decisions are land use and regional transport system planning policies made by state and local government and politicians.

Networking for a healthier society

So there's an urgent need for policies that encompass social, economic, sustainability, and health policies to create more vibrant, pedestrian-friendly communities serviced by public transport.

Multiple sectors now promote active transport because of concerns about the health, social, environmental, and economic impacts of a range of agendas.

These include rising levels of obesity and inactivity, climate change, population growth, declining oil supplies and rising fuel prices.

Active transport can achieve outcomes for all of them, from improved health and traffic management through to environmental protection and climate change mitigation.

As Australian cities expand rapidly with continued growth on the urban fringe, the challenge is to adopt joined-up approaches involving creative ways of producing supportive land use and transportation planning that ensures compact pedestrian-friendly neighborhoods.

But a plan is one thing and a "populated plan" is another – new communities can take decades to build.

To ensure people on the fringes of cities are not deprived for decades, we need to move from planning to populating the plan.

New business development models that ensure access to local employment and alternative government service delivery models that provide access to local health and public transport are needed.

Without joined-up approaches, we can stick on band aid after band aid but the true nature of what ails us will remain unheeded.

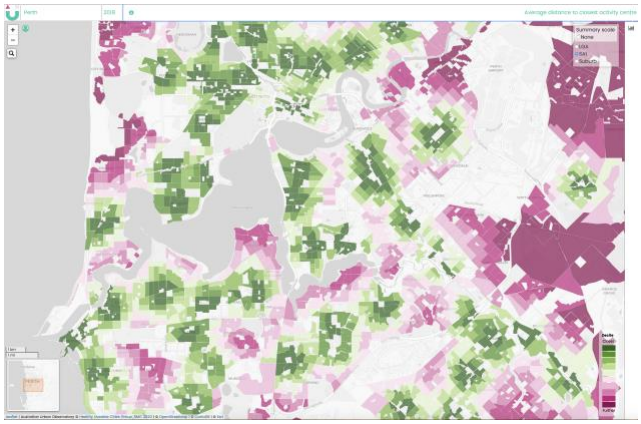
This is the eighth part of our non-communicable diseases series. To read the other instalments, follow the links here:

- Part One: Sir George Alleyne discusses why we need a new paradigm to tackle NCDs
- Part Two: Regulating alcohol to control NCDs
- Part Three: Stopping the obesity epidemic will require action on the population-level
- Part Four: The results of the UN High-Level Meeting on Non-Communicable Diseases on New York September 19-20
- Part Five: How plain packaging works to reduce smoking – one of the biggest causes of non-communicable diseases
- Part Six: Blueprint for making medicines more affordable for everyone
- Part Seven: Action on salt will mean longer, healthier lives
- Part Nine: Where we come from determines how we fare – the fetal origins of adult disease
- Part Ten: Social inclusion brings respect and better health Sri Lankan elders

You can read this article in The Conversation here.

Australia Urban Observatory

The Australian Urban Observatory (AUO) is an important new digital planning tool that maps liveability across Australia's 21 largest cities. The AUO's spatial maps translate policy-based urban research into real-world practice.



Our liveability maps enable a deeper understanding of how social, economic, natural and built environments connect to support community health and wellbeing.

Through the AUO, decision makers can create a positive impact for people in local communities by establishing a strong evidence base for future infrastructure planning.

The AUO's liveability indicators are underpinned by years of policy-relevant urban research by RMIT's Healthy Liveable Cities Group. Research that connects the built environment with public health, social equity and the UN Sustainable Development Goals.

The AUO provides comprehensive liveability information across Australia's 21 largest cities. These 21 cities, including 8 capital cities and 13 other major regional cities with a population of 80,000 or more, link the AUO to the National Cities Performance Framework. Our maps cover 170 Local Government Areas, 3,101 Suburbs and 39,967 Neighbourhoods (ABS SA1s).

Partner with us

If you want to be part of the solution to improving liveability in Australia, and supporting healthy, equitable and sustainable cities for all Australians, then become a Paid Partner with us.

You'll be leveraging the Australian Urban Observatory's key liveability indicators, utilising our groundbreaking policy-relevant urban research linking the built environment and public health, developed by our team at RMIT University's Healthy Liveable Cities Group.

The AUO has two levels of accessibility. All indicators to a Local Government Level, as well as the Liveability Index and Social Infrastructure Index to Suburb and Neighbourhood levels, are available without charge.

Click here to register for free access to the AUO.

All other Suburb and Neighbourhood indicators are available through AUO Paid Partnerships.

LGA Paid Partner	State Paid Partner	National Paid Partner
A Single LGA Interactive indicators and scorecards for Suburbs and Neighbourhoods for a	A Single State Interactive indicators and scorecards for Suburbs and Neighbourhoods for a	All 21 Cities Interactive indicators and scorecards for Suburbs and Neighbourhoods for
Single Local Government Area	**Single Australian State**	**All 21 Cities Nationally**
12 months online access	12 months online access	12 months online access

Contact us to learn more about Paid Partnerships with the Australian Urban Observatory.

Our key supporters

Healthy Liveable Cities Group research is recognised and funded by top Australian medical and scientific research organisations including:

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Systems and solutions for better health

Clean Air and Urban Landscapes Hub
National Environmental Science Programme

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