20-Minute Neighbourhoods

Creating a more liveable Melbourne







TANDERRUM 2015, facilitated by ILBIJERRI Theatre Company. Photo by David Harris

Aboriginal acknowledgement

We acknowledge and respect
Victorian Traditional Owners
as the original custodians of
Victoria's land and waters,
their unique ability to care for
Country and deep spiritual
connection to it. We honour
Elders past and present whose
knowledge and wisdom has
ensured the continuation of
culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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Liveability starts in our neighbourhoods

Melbourne's distinct neighbourhoods and urban villages form an integral part of our multicultural identity. Their unique character reflects the diversity of our communities and shapes the personality of our global city.

Like many cities that saw significant growth during the post-war period, cars became central to Melbourne's design.

As Melbourne's population continues to grow, we need to find better ways to reduce traffic congestion and pollution, while enhancing the liveability of our neighbourhoods.

Plan Melbourne 2017–2050 is the Victorian Government's long-term plan to ensure Melbourne remains liveable, sustainable and accessible to people of all ages and abilities.

The strategy is guided by the principle of 20-minute neighbourhoods, liveable places where people can access most of their daily needs locally — without needing a car.

When we design accessible and walkable neighbourhoods, we create a city where people are connected to their community.

Places where people are happier and healthier and neighbourhoods are safer and more inclusive.

This report outlines the learnings of projects from across Melbourne. These projects identified opportunities to design more liveable 20-minute neighbourhoods.

The Heart Foundation, Victoria Walks and our partners in local government have made invaluable contributions to this report, bringing specialist expertise and unique local insights.

The recommendations in this report establish a roadmap to create a more liveable Melbourne.

Together, we have an opportunity to take advantage of our continued growth and enhance our neighbourhoods for the benefit of all Melburnians.

Suchard Wynne

The Hon. Richard Wynne MP Minister for Planning





Executive summary

Melbourne is growing as a global city of opportunity and choice. While this growth has supported investment and productivity, it has created pressure on local infrastructure and maintaining our liveability.

Plan Melbourne 2017–2050 is a long-term plan to accommodate Melbourne's future growth in population. The strategy is guided by the principle of 'living locally — 20-minute neighbourhoods'.

The principle supports a new approach to planning, one that seeks to deliver more inclusive, vibrant and healthy neighbourhoods.

In January 2018, the 20-Minute Neighbourhood Pilot Program was launched to test the delivery of the principle in Croydon South, Strathmore, and Sunshine West.

The projects in established middle ring neighbourhoods enabled the principle to be tested in different metropolitan contexts.

The projects were coordinated by the Victorian Government and supported by Maroondah, Moonee Valley and Brimbank City Council.

The councils developed community partnerships and identified opportunities to practically deliver 20-minute neighbourhoods based on local knowledge.

The projects were supported by the Heart Foundation (Victoria) and Victoria Walks, who brought specific and relevant expertise on how to design the built environment to support better planning and health outcomes.



Community partnerships are key to successful neighbourhood planning

Detailed insights on each of the projects can be found in the three neighbourhood reports:

- Croydon South: Our 20-minute neighbourhood
- Strathmore: Our 20-minute neighbourhood
- Sunshine West: Our 20-minute neighbourhood.

This report outlines findings from the program:

- Place-based planning is effective.
- Community partnerships are key to successful neighbourhood planning.
- Implementing 20-minute neighbourhoods needs to be a long-term commitment by State Government.
- A program is needed to support innovative neighbourhood projects.
- Planning outcomes need to be monitored.

The report details recommendations to embed a whole-of-government approach to living locally. The priority recommendations are to:

- review the Victoria Planning Provisions to strengthen 20-minute neighbourhood policies.
- embed an approach to delivering 20-minute neighbourhoods in infrastructure projects
- investigate a process to streamline approval of best practice development that delivers a 20minute neighbourhood – 'Green light initiative'
- scale up the pilot program approach and investigate funding opportunities
- encourage better neighbourhood design density done well
- support improved whole-of-government coordination of 20-minute neighbourhoods.



Background



Plan Melbourne 2017-2050

Plan Melbourne 2017–2050 is guided by the principle of 20-minute neighbourhoods. The 20-minute neighbourhood is all about 'living locally' — giving people the ability to meet most of their daily needs within a 20-minute walk from home, with access to safe cycling and local transport options.

These daily needs include local schools, services, parks and fresh food.

The Plan Melbourne Five-Year Implementation Plan establishes actions to drive Melbourne as a sustainable, competitive and liveable city.

The Department of Environment, Land, Water and Planning (DELWP) is the lead agency for delivering *Action 75: Whole-of-government approach to 20-minute neighbourhoods*.



Plan Melbourne Five-Year Implementation Plan

Action 75 — Whole-of-government approach to 20-minute neighbourhoods.

Embed the 20-minute neighbourhood concept as a key goal across government. Key steps are to:

- identify and undertake flagship 20-minute neighbourhood projects with the metropolitan regions and the private sector to focus planning and implementation work
- provide guidance to local government on embedding the 20-minute neighbourhood concept into local planning schemes
- build community partnerships to help deliver 20-minute neighbourhoods
- improve information and research to be shared with local government.



Yarraville Pop Up Park, Yarraville

20-Minute Neighbourhood Pilot Program

In January 2018, the Minister for Planning launched the 20-Minute Neighbourhood Pilot Program.

The program is being delivered in five steps in partnership with the Heart Foundation, Victoria Walks, Resilient Melbourne and local government.

The purpose of the program is to test the practical delivery of 20-minute neighbourhoods in different locations across Melbourne.

The Victorian Government will evaluate the recommendations in this report and explore implementation approaches. The relevant agency will then will act on recommendations that are feasible.

This report details steps 1 to 3.





IDEAS



Step 3 DEVELOP



Step 4 **EVALUATE**



Step 5



Plan Melbourne identified the **need** to support a wholeof-government approach to 20-minute neighbourhoods

The pilot projects were established with program implementation partners to help develop ideas to deliver more inclusive, vibrant and healthy neighbourhoods

These ideas were used to **develop** recommendations based on three themes: Policy, Place and **Partnership**

The Victorian Government will evaluate the recommendations in Section 3 of this report and explore implementation approaches

The relevant authorities will then act on recommendations that are feasible

Policy

Embedding 20-minute neighbourhoods in decision-making

Place

Guidance to improve how we design liveable places

Partnership

Connecting government, industry and communities





Rose Street Markets Photo: Visit Victoria



Why our neighbourhoods are important

Neighbourhoods are the places where we live, spend time with our family and friends, and connect with our community. These places are critical in supporting community health and wellbeing.

Neighbourhoods form part of our social history and contribute to our individual identity. Walkable neighbourhoods can foster a sense of community, fundamental to creating a liveable city.

To create a liveable city, we must work with communities to design more inclusive, vibrant and healthy neighbourhoods. This process should acknowledge and protect the distinct character of individual neighbourhoods.

Land use, transport and urban design are interconnected systems that have an enormous effect on global issues, from climate change to obesity.¹

Designing walkable neighbourhoods can reduce greenhouse gas emissions, support physical activity and promote healthy eating.²

To respond to global sustainable development challenges, we need community-led projects in neighbourhoods across our city. A community-led planning approach can ensure that the unique characteristics of a neighbourhood are considered. It can also help address social inequalities within and across neighbourhoods to create great places. It is the people living in neighbourhoods who know them best.



The areas in Melbourne that are the most walkable are often the most liveable.³

Walkable areas feature higher density, a diverse mix of uses, a range of destinations, and multiple active and public transport options. While many of the qualities may seem subjective, there is overwhelming evidence that active, walkable places produce a wealth of health, social, economic and environmental benefits.

We need densification and neighbourhoodscale interventions to create mixed-used environments with a range of destinations to which people can easily walk and cycle.

Global Epidemics of Obesity, Undernutrition and Climate — 2019 Lancet Report



Creating a city of 20-minute neighbourhoods aligns with the following United Nations
Sustainable Development Goals













Benefits of a walkable neighbourhood Can halve household transport costs **Enhances** sense of community Walking and social infrastructure cohesion can provide a higher return than rail or road Support health, infrastructure, and environmental savings to Victorian economy



Living within 800m of social infrastructure and destinations leads to higher levels of walking and cycling and is beneficial to self-reported wellbeing.⁴

If 50% of short private-vehicle trips were instead made by walking, it would save the Victorian economy approximately \$165 million a year in congestion, health, infrastructure and environmental costs.⁵

By participating in 15 minutes of walking a day, 5 days a week, the disease burden from physical inactivity would reduce by about 13%. If this is increased to 30 minutes, the burden can be reduced by 26%.⁶



Social

Walkable streets and community spaces can enhance the sense of community and provide critical opportunities for social interaction and social cohesion.⁷

Greenery and street-scale features can increase passive surveillance, increasing actual and perceived safety.⁸





Economic

Household transport costs in walkable neighbourhoods are half of those in car-dependent areas and high walking rates can increase incidental trading in local shops by up to 40%.9

Walkable neighbourhoods alleviate pressure on Melbourne's transport system.¹⁰

Walking infrastructure can provide a higher return than projects such as rail and road. Evidence from 20 different studies shows that the benefit–cost ratio of walking interventions is 13:1 — \$13 of benefit for every \$1 of expenditure.¹¹



Environmental

Compact mixed-use neighbourhoods help reduce pollution.

Walkability and cyclability reduce driving pollutants by as much as 40% and CO2 emissions by 10%.12

Urban greening and street trees remove pollution and increase tree cover by 10%, which can reduce the energy needed for heating and cooling by 5 to 10%.¹³



Our changing neighbourhoods

Melbourne's growth into a global city has created challenges for neighbourhoods.

By 2056, Melbourne's population is expected to grow to 9 million. The percentage of Melbourne's population aged over 65 is also projected to increase from 15.3% to 21.2%. ¹⁴ This change presents significant challenges for how the city functions, including how accessible services are to support people to age in place.

Melbourne will need 1.9 million new homes by 2056.¹⁵ To support equitable growth, we must facilitate the development of housing that is affordable, but also offer a mix of types of housing that cater for different needs, whether that be for a single person, families or others.

An increase in compact residential development has created concern for many communities. Our continued growth has caused uncertainty about our density and the city's capacity to support change. When residential development is not well-designed or supported by improved amenity, communities are understandably apprehensive about change.

Compact mixed-used neighbourhoods were once central to community life. The post-war years brought enormous changes to our city. Rapid population growth and the increasing use of cars expanded the city's boundaries.

Local businesses in neighbourhood centres made way for big-box shopping centres located for convenient access by car, separated from communities and beyond walking distance for most people. This led to an increasing reliance on cars to access the most basic daily needs.

This shift has had lasting impacts on the shape of our city and has been detrimental to our high streets, villages and local economy. The concept of 20-minute neighbourhoods is our plan to address this, support sustainable development and build stronger communities.



Research suggests that for places to be walkable, they need to achieve a minimum density of at least 25 dwellings per hectare

Accessible services and infrastructure

While Melbourne's 'inner ring' neighbourhoods are considered some of the most liveable in the world, the middle and outer neighbourhoods often do not offer the same amenity or access to services and infrastructure.

Residents of our middle and outer neighbourhoods often have limited walkable access to their daily local needs. People have no choice but to drive to access the things they need. This leads to rising household costs and congestion. Low-density development and poor access to services and facilities entrenches social inequalities and locational disadvantage.

To reverse this pattern, we must create neighbourhoods with well designed, diverse and affordable housing within walking distance of services and infrastructure.

Research suggests that for places to be walkable, they need to achieve a minimum density of at least 25 dwellings per hectare. Many of Melbourne's neighbourhoods achieve less than half this amount, which shows there is significant scope for enhancing Melbourne's liveability.¹⁶

Health and wellbeing

Many Victorians are insufficiently active. The built environment is a major contributory factor, particularly when it comes to accessing healthy food locally.¹⁷

By designing neighbourhoods with increased housing diversity, greater street connectivity and more accessible destinations, planning can improve walkability and provide a built environment that supports communities to be healthy and active. When we design neighbourhoods that are walkable — where people can access daily needs locally — we can also create a city where people are connected to their community.

A recent report into neighbourhood impacts on health by the Australian Bureau of Statistics found that those living near supermarkets were more likely to walk for transport and participate in physical activity. This is indicative of living in an area with access to a wide range of facilities and amenities. The detailed results found that adults aged 18 years and over living within 1500m of a supermarket were more likely to:

- walk for transport (59.8% compared with 51.0% without a supermarket within 1500m)
- be physically active (83.0% compared with 79.4% without a supermarket)
- have completed 150 minutes of physical activity a week (57.7% compared with 52.5% without a supermarket).

Our mental wellbeing is affected by the quality of our neighbourhoods. Places with poor walkability and reduced access to green space, typically seen more often in some greenfield growth areas, are associated with reduced mental health and wellbeing.¹⁹

Access to quality green space can lower feelings of stress, provide a place for relaxation, restoration and physical activity. Higher levels of physical activity, which are seen in walkable neighbourhoods, may also reduce the risk of developing some of our most common mental illnesses, such as depression and anxiety.

Locally-led neighbourhood design is essential in ensuring communities have streets and spaces where they feel comfortable and safe. These are places that foster social cohesion, a sense of belonging and ownership.

Neighbourhoods that are poorly connected, with an absence of spaces that allow people to come together, have high rates of social isolation and loneliness, which are being increasingly understood as public health issues.²⁰

Melbourne will need
1.9 million new homes
over the next 35 years



Housing choice and affordability

Housing affordability in Melbourne is a challenge to many, with the most severe and chronic housing affordability problems experienced by lower-income households in the private rental market.

Plan Melbourne outlines the need for affordable housing and for more variety of housing to cater for different household needs and lifestyles, with medium to higher-density housing close to jobs and services.

For Melbourne to become more equitable and accessible, residents need to have a choice of housing within their neighbourhood.

Many of Melbourne's established neighbourhoods are unaffordable for middle and low-income people looking to buy or rent. This creates social inequity because these are often the places with the most access to jobs, services and social infrastructure.

Conversely, while new housing in 'outer ring' neighbourhoods are often more affordable, they often have limited access to jobs, services and transport.

If these issues are not addressed, Melbourne will become unaffordable for many, creating social inequity, slowing economic growth and negatively impacting liveability.

Neighbourhood Activity Centres provide the infrastructure and services to service the needs of a growing population. They are appropriate locations for delivering diverse and affordable housing.





CASE STUDY NEW ACTON, CANBERRA

Better neighbourhoods

Adjacent to Lake Burley Griffin, New Acton is a recent mixed-use neighbourhood in Canberra.

The neighbourhood's distinct architectural form is enhanced by well considered and fine grain public spaces and landscaping, incorporating both the new and heritage buildings.

The neighbourhood features diverse multi-story housing, commercial offices, galleries, multi-functional retail spaces with cafés and bakeries transitioning into wine bars at night with regular cultural events.

The award winning mixed-use Nishi building is filled with local art and accommodates a boutique hotel, high quality restaurant, independent cinema and a regular program of markets and adult learning classes, making it a destination for the community.

New Acton demonstrates why good design matters and how to build places that are people oriented, dense and highly walkable.







Planning Neighbourhood Activity Centres

The importance of Neighbourhood Activity Centres in accommodating growth is reinforced in Plan Melbourne outcomes, directions and policies.

The role and function of every Neighbourhood Activity Centre varies depending on its size and context within the metropolitan region. These places should have the capacity to support a range of local services that complement the wider network of centres and needs of the community.

Planning controls should respond by facilitating diverse housing and supporting mixed-use neighbourhoods around these centres.

The Victorian Government currently provides no formal guidance to support the identification and planning of these centres. A recent analysis has shown that there is no consistency in the approach to designating and planning these centres. There can be anywhere between 2 and 60 identified by individual councils with multiple designations and terminology.

Consistent guidance would improve the effectiveness of planning and managing the network of Neighbourhood Activity Centres.



CASE STUDY

Neighbourhood portals

Moonee Valley City Council is developing an online neighbourhood coordination portal to improve planning for neighbourhoods. The portal will coordinate engagement, events and other information about the neighbourhoods within its municipality.

This provides a central information portal for the whole council; it enables information sharing and avoids event clashes and duplication of engagements.

Place-based planning

outcomes.

The demographic profile, character, and needs of communities varies substantial between neighbourhoods. This diversity creates unique places that require context based strategic planning and service delivery.

Infrastructure and planning projects can often be delivered in isolation by individual state or local government departments, resulting in fragmented and overlapping community consultations.

This often leads to inefficiencies in process and coordinating projects and can create inconsistent

To respond to these problems, a 'place-based' approach aims to reconnect planning, infrastructure and service decision-making with the place and the needs of a community at a local level. It reflects the need for more flexible, locally led solutions to neighbourhood challenges.

A place-based planning approach means all government departments and agencies focus on the outcomes of a place rather than on individual projects and services.

It is a multidisciplinary approach that involves integrating capital works, strategic planning, economic development, urban design, environmental management, transport, services, programs and community-development projects.

Place-based planning leads to a more inclusive conversation about the future of a place and ensures the community's priorities are reflected in future service and infrastructure delivery.

PLACE-BASED TRANSPORT

Movement and Place

Movement and Place is a new roadmanagement framework for Victoria. It recognises the role of streets in moving people and goods, as well as being places for people to live, work and enjoy.

The framework takes a place-based approach to network planning. It takes into consideration the diverse role places play in planning the types of transport modes appropriate for a local street. The Department of Transport prepared a local assessment for pilot program neighbourhoods using this framework. The assessment evaluated road network performance and place classifications.



A place-based planning approach means all government departments and agencies focus on the outcomes of a place rather than on individual projects and services

Strathmore Street Party

Community partnerships

Place-based planning begins by uncovering the needs of a neighbourhood through developing community partnerships. No one understands the challenges and opportunities of a place better than those who live and work there.

Partnerships involve government communicating openly and honestly with the community to understand the issues, aspirations, trade-offs and future realities for a neighbourhood. Community ideas are then shared with relevant government areas to help shape the planning process. Strong partnerships also improve government and community trust.

Developing community partnerships and undertaking place-based planning provides an opportunity to increase community understanding of the benefits of growth in housing brings, such as enabling improved services and destinations. Community partnerships should involve open discussion about the trade-offs and should enable communities to be a part of the decision making process.

INTERNATIONAL CASE STUDY

Community-led planning

The UK government has taken a stronger approach through the introduction of the Localism Act 2011, which gives communities statutory powers to plan for their neighbourhoods. The plans are developed by the local community, the people who know and love the area, rather than the Local Planning Authority. While this approach is quite different from the way we plan for places in Victoria, it demonstrates the need to think differently about engaging and involving the community in the future development of their neighbourhoods.

Effective engagement

The community partnerships were a successful approach used in the pilot program, generating a wealth of information, ideas and feedback.

A common concern raised by councils and other government agencies and departments during the program was that there was no central area to hold and share information, which can often lead to duplication of consultation and 'consultation-fatigue' in the community.

Various organisations and governments are trying to resolve this deficiency through either technological solutions, such as portals or online hubs where information is stored and shared or through other approaches such as empowering the community to plan for their areas themselves.



CASE STUDY

Strathmore Street Party

A community street party led by the Let's Make a Park youth group was held in June 2018. 400 community members, council officers, community organisations and local traders attended the event. The open event allowed council to engage on a range of local issues and projects in a meaningful way.





Gertrude Street, Fitzroy Image: Visit Victoria



What are 20-minute neighbourhoods?

The 20-minute neighbourhood is all about 'living locally' — giving people the ability to meet most of their daily needs within a 20-minute walk from home, with access to safe cycling and local transport options.

Human settlements over the centuries have often been compact and walkable. Planners have tried to create models to achieve this through the 'Garden Cities' theory by Ebenezer Howard in the 1890s, the 'Central Place' theory by Christaller and Losch in the 1930s, and now the Plan Melbourne 20-minute neighbourhood principle.

These models are all about creating compact places where people can access daily needs locally.

There is a challenge in applying these approaches to places such as Melbourne, which experienced significant development during the post-war period, a time when cities were shaped around cars. The growing reliance on cars has caused congestion, pollution and many other social and environmental problems.

We often look to North America for examples of addressing this, as it faces similar challenges. The 20-minute neighbourhoods principle reflects North American planning concepts (such as 'complete communities' or 'new urbanism') that are increasingly being implemented in towns and cities around the world, drawn particularly from Portland, Oregon.



The 20-minute neighbourhood principle is based on building walkable compact places. It recognises that liveable places are built on a human scale, primarily for people, that encourages walking rather than the use of cars.

Research suggests that this approach to planning has multiple benefits, including improved public health (mental and physical), increased safety and stronger social connections. It also reduces emissions, lowers household costs and increases environmental, economic and social sustainability.²¹

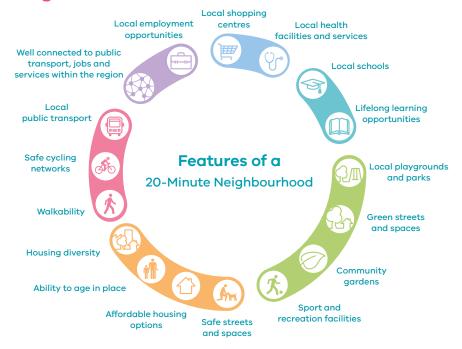
If 20-minute neighbourhoods existed across Melbourne, they could reduce travel by nine million passenger kilometres and cut Melbourne's daily greenhouse gas emission by more than 370,000 tonnes.²²

20-minute neighbourhoods are the way we can think and act locally to resolve global challenges, such as reducing emissions and creating more sustainable ways of living. Directions and policies as outlined in Plan Melbourne that relate to 20-minute neighbourhoods are practical measures in delivering on the United Nations Sustainable Development Goals and New Urban Agenda.

Features of a 20-minute neighbourhood

Plan Melbourne outlines the following features of a 20-minute neighbourhood. These are fundamental to creating liveable places.

Figure 1 20-minute neighbourhood features



Hallmarks of a 20-minute neighbourhood

The 'hallmarks' are established in *Plan Melbourne's Direction 5.1* — *Create a city of 20-minute neighbourhoods.* They provide a foundation and outcome measures for the delivery of inclusive, vibrant and healthy neighbourhoods.

The 'hallmarks' were developed in partnership with the Department of Health and Human Services and the Heart Foundation (Victoria) during the preparation of Plan Melbourne. The 'hallmarks' were refined through whole-of-government workshops involving a range of departments and agencies.

The 'hallmarks' outline that a 20-minute neighbourhood must:

- be safe, accessible and well connected for pedestrians and cyclists to optimise active transport
- offer high-quality public realm and open spaces
- provide services and destinations that support local living
- facilitate access to quality public transport that connects people to jobs and higher-order services
- deliver housing/population at densities that make local services and transport viable
- facilitate thriving local economies.

Neighbourhood Activity Centres — community anchors

Neighbourhoods range in size and each have their own distinctive characteristics. Just as every neighbourhood is distinctive, individual perceptions of our own neighbourhood vary from person to person.

Traditionally, the focal point of neighbourhoods were the high streets and local villages. A 'Neighbourhood Activity Centre' is the land-use planning term used to describe these local shopping centres, generally designated and planned for by local government. These places are small in scale and may have several retail shops and services to meet people's daily needs, such as bakeries, grocers and local health services.

Neighbourhood Activity Centres are an integral part of community life and fundamental to creating a city of 20-minute neighbourhoods.

While these places are critical to community health and wellbeing, there is often limited investment in them when compared to places of state significance such as Metropolitan Activity Centres.

The pilot program focused on Neighbourhood Activity Centres. While individually these places may only serve a local community's needs, the network of these centres plays a significant role in supporting an accessible city where people can walk to access their daily needs.

800-metre walkable catchments

Research shows that 20-minutes is the maximum time people are willing to walk to meet their daily needs locally.²³ These daily needs may include accessing local health facilities and services, local schools and local shopping centres.

This 20-minute journey represents an 800m walk from home to a destination, and back again.

800m has been adopted as the spatial accessibility measure of a walkable neighbourhood. This distance should be used as a guide only, as there are many factors that influence people's ability, or desire, to walk.

Walkable neighbourhoods must be accessible for people of all ages and abilities to enable independent living and participation in community life.

As outlined in Plan Melbourne, people walk more when they have access to pedestrian routes and connections that are safe, direct and pleasant to use. Improving the pedestrian environment in existing areas can be achieved by creating quality pedestrian links and short cuts.

High-quality pedestrian infrastructure like footpaths and crossings are also important to ensure communities, businesses and services are accessible to people with mobility limitations and to parents with prams.



While cycling and local transport provide people with alternative active travel options to walking, these modes do not extend neighbourhoods, or access to 20-minute neighbourhood features beyond walkable catchments of 800m.

To establish a network of walkable Neighbourhood Activity Centres based on the 800m catchment, planning needs to direct population and housing growth near Neighbourhood Activity Centres. The application of zones, such as the Residential Growth Zone and the Mixed Use Zone, can facilitate diverse housing and a greater mix of uses at varying densities.



Walkable
neighbourhoods
must be accessible
for people of
all ages and
abilities, to enable
independent living
and participation
in community life

Brunswick Street, Fitzroy



20-Minute Neighbourhood Pilot Program

The pilot program was established in response to consultation with local government on how to implement the *Plan Melbourne Five-Year Implementation Plan: Action 75 — Whole-of-government approach to 20-minute neighbourhoods.*

The program identified the need to:

- work in partnership across State and local government
- test the implementation of 20-minute neighbourhoods
- provide clearer guidance on 20-minute neighbourhoods.

The purpose of the program is to test and evaluate the practical delivery of 20-minute neighbourhoods.

The program is being delivered in two project stages led by DELWP, in partnership with local government, Victoria Walks, the Heart Foundation (Victoria), and Resilient Melbourne.

Stage 1 Existing neighbourhoods
Stage 2 Greenfield neighbourhoods

To identify the project locations in Stage 1, a targeted expression of interest was provided to local government in 2017.

The selection criteria was that:

- 20-minute neighbourhoods form part of local governments strategic planning work.
- Neighbourhoods have characteristics that reflect the 20-minute neighbourhood features.
- The council's internal structures can support implementation and align capital spending.

The neighbourhoods selected for the projects were Strathmore in the City of Moonee Valley, Croydon South in the City of Maroondah and Sunshine West in the City of Brimbank.

Details on research projects on **Stage 2 Greenfield neighbourhoods** will be released in late 2019.



Stage 1 Existing neighbourhoods

The projects were delivered in three stages

1.1 Community partnerships

Place-based engagement to understand community concerns and capture their ideas.

1.2 Technical assessments

Technical assessments undertaken on walkability, transport network, land use, housing density and vegetation cover.

1.3 Future opportunities

Initiatives and infrastructure opportunities identified for the pilot neighbourhood.

These places were chosen for their differing locations in Melbourne's middle-ring neighbourhoods, and because of their diverse economic, social and built form profiles. This provided an opportunity for unique insights to support the delivery of the program.

The project approaches and findings are detailed in the Neighbourhood Reports developed for each neighbourhood. As part of the project, the three councils worked with Victoria Walks to identify Principal Pedestrian Networks (PPN) for each Neighbourhood Activity Centre. Victoria Walks then undertook a comprehensive assessment of the walkability of the PPN routes, including recommended changes. The Heart Foundation (Victoria) supported project delivery and provided training workshops to council staff using the *Healthy Active by Design* guidelines.

Summary of neighbourhood projects







Croydon South

The project was led by Maroondah City Council's Council and Community Planning team. The project focused on developing an integrated neighbourhood plan in partnership with the local community.

Key opportunities for Croydon South include:

- Streetscape improvements to revitalize the Activity Centre
- Enhancing connectivity and amenity of Tarralla Creek through improved walking and cycling paths
- · Exploring housing diversity options.

Council are exploring strategies to scale up the project approach to apply to other neighbourhoods across the municipality and are developing tools to support broader implementation.

Strathmore

The project was led by Moonee Valley City Council's Strategic Planning team. It focused on delivering a place-based approach to support councils strategic plan, MV2040.

Key opportunities identified for Strathmore include:

- Improve pedestrian safety, particularly around schools
- Install bicycle lanes to improve connectivity to the Activity Centre
- Review planning controls to support housing diversity.

Council are extending the project approach (including successful internal governance approaches and place approach) to other neighbourhoods in the municipality.

Sunshine West

The project was led by Brimbank City Council's Economic Development team. The project was delivered in partnership with local traders and focused on supporting a thriving local economy by building business strategies to revitalise Glengala Village.

Key opportunities identified for Sunshine West include:

- Support housing diversity around Glengala Village Activity Centre
- Encourage 'pop up' shops and street trading
- Explore streetscape improvements in the Activity Centre
- Support public art installations and 'creative spaces.'

Council are exploring similar business and community development approaches in the municipality.

For more information on each project click here



LAINE BUSINESS OWNER OF FLORAL ACCENT

Meet a local trader in Strathmore

Before becoming a florist, I was a corporate tax accountant working here in Melbourne and overseas. While working in England, I had the opportunity to live in a couple of picturesque small villages, which I really enjoyed. When I made the decision to change careers, become a florist and buy my own business back in Melbourne, I really wanted to find somewhere that had that same wonderful village feel — and I discovered Woodland Street in Strathmore

Our little village is special. We offer a great variety of services — there are some fantastic shops! We are also close to public transport, surrounded by lots of great schools, and have good access to lovely parks and open spaces.

Owning a business in Strathmore has been great. Even though I am kind of the `new kid on the block' everyone has been friendly and supportive. I just love the village feel of Woodland Street, the strong sense of community, and the fact that everyone knows and looks out for each other.

I love all my wonderful customers. I have a lot of regulars, including mums dropping off and picking up children from the school up the road as well as many people who live close by.

I'm very happy being the village florist!

The Strathmore community is strong on supporting local business. And this is not a new thing — the business I purchased has been operating as a florist in Woodland Street for over 20 years.

I also really like all the community activities that happen here — like the regular dinners featuring amazing regional Italian food that are hosted by Rhonda from the corner cafe.

Woodland Street is a great place to run a business. It is for local people, servicing the local community, and creating a personal and friendly environment.





Welcome to Thornbury, Northcote Image: Visit Victoria



Findings from the projects

The program insights and key learnings are established below.

Place-based planning is effective

Government is responsible for planning and delivering services and social infrastructure to support communities and create liveable places.

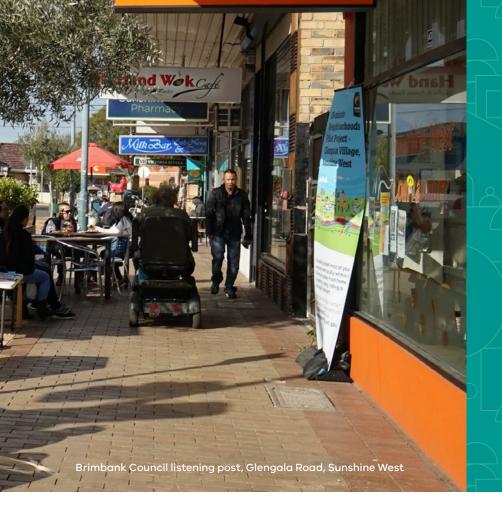
The projects highlighted that planning and service delivery are divided between government departments and agencies, as well as within different council departments. This often leads to fragmented delivery and can create challenges when coordinating projects and public engagement. This leads to uncertainty for communities, resulting in poor experiences of growth and planning.

'Place-based' planning is an integrated approach to neighbourhood planning that involves whole-ofgovernment coordination in a place.

It involves government communicating openly with communities to understand local challenges and needs.

This approach supports local solutions to addressing the unique needs of individual places. It also ensures each community's priorities are reflected in future service and infrastructure delivery. The projects reinforced the importance of integrated planning. They provided an opportunity for all levels of government to collaborate with communities to address transport, health, environmental and economic aspects of the neighbourhoods.

The projects also highlighted that land-use planning, particularly in Neighbourhood Activity Centres, should be developed in coordination with the range of stakeholders in the neighbourhoods such as students and people with limited mobility. Furthermore, land use policies and plans should be supported by economic development strategies and investment to encourage the market to respond and support a thriving local economy.



Place-based planning is an integrated approach to neighbourhood planning that involves cross-government coordination

Community partnerships are key to successful neighbourhood planning

Developing partnerships with the community through a variety of engagement initiatives was fundamental to the success of the projects.

The councils reported that the overall relationship with the community had improved due to the partnership approach. Data obtained during the program showed increased community participation and engagement with their neighbourhoods.

The projects demonstrated the desire of communities to revitalise their neighbourhoods. With the support of the community, the projects elevated the priority of all three pilot neighbourhoods for funding, advocacy, capital works and increased development in the future. Of note was the desire from all three communities to improve pedestrian amenity and housing diversity in and around the neighbourhood centres, which supports the 'hallmarks' and direction of delivering 20-minute neighbourhoods.

Creating 20-minute neighbourhoods is a long-term commitment

The program delivered *Action 75: Whole-of-government approach to 20-minute neighbourhoods* and partially addressed *Action 76: Metropolitan-wide 'neighbourhoods index'* of the Plan Melbourne Five-Year Implementation Plan.

Throughout the program, councils expressed the need for long-term investment and engagement, requiring ongoing support to maintain the momentum built during the projects. This will also help to deliver on the opportunities established in the neighbourhood project reports.

The projects confirmed that implementation of 20minute neighbourhoods should be led by local government in partnership with communities. This must be supported by continued guidance, resourcing and facilitation by State Government departments and agencies.

The Plan Melbourne Five-Year Implementation Plan Action 75 should reflect this and be established as a longer-term commitment. To achieve this, recommendations have been developed to help implement 20-minute neighbourhoods long-term.

Planning outcomes need to be monitored

The term 'liveability' is used across the world to describe and compare cities.

Despite extensive use of the word, the term is not consistently defined or monitored.

Currently, there is no monitoring framework to track planning policy and the liveability of our neighbourhoods at a local level.

In 2018, RMIT University developed a liveability scorecard for Melbourne, building on the Creating Liveable Cities in Australia 2017 report.

Key recommendations were:

 measurable standards be included in policies, regulations and guidelines for urban planning, transport and infrastructure

- spatial policies be included for improving the food and alcohol environment
- spatial indicators be adopted to measure and monitor the implementation of state government policies designed to create liveable communities.

RMIT will be developing a liveability framework to measure public health and wellbeing. This framework and others should be monitored to assist in delivering *Plan Melbourne Action 76 Metropolitan-wide 'neighbourhoods index'*.

Implementation
of 20-minute
neighbourhood
projects should be led
by local government
in partnership
with communities



Better design — innovative development

Following discussions with councils, experts, developers and the community, it emerged that there was a need for better designed medium density development in neighbourhoods.

The communities demonstrated a strong desire to build well designed neighbourhoods. It was highlighted by councils and industry that there is no program or statutory approvals process to facilitate best practice mixed-use developments, despite there being clear policies in Plan Melbourne supporting high quality built form outcomes.

As part of the wider program of work, DELWP held workshops with international urban planning experts. All advised that there was a need to facilitate innovative development to deliver walkable 20-minute neighbourhoods in different development settings (inner, middle and outer metropolitan locations). The international experts also indicated that if the planning system makes it too complex to deliver these developments, streamlined processes could be developed to facilitate desired development outcomes.

Neighbourhood renewal and development is largely led by the market, therefore planning should encourage innovative development that helps create a 20-minute neighbourhood.

It is important that the government facilitates and incentivises the delivery of development that meets the 20-minute neighbourhood 'hallmarks'. Through consultation during the program it became apparent that there are many in the development industry and councils who were seeking to deliver this, but were finding existing statutory processes and provisions were not adaptable, and that there was no state government agency supporting delivery of localised planning projects.

The Planning and Environment Act 1987 establishes a framework for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians. Responsible authorities assess permit applications against provisions established under this framework.

While the framework ensures consistent decision-making, it can restrict approval of developments that may not meet prescribed planning provisions. These developments cannot be considered by responsible authorities, (generally local government), even if they align with Plan Melbourne directions and policy and would deliver a more liveable neighbourhood.





CASE STUDY THE COMMONS, BRUNSWICK

Better development

One of the challenges facing Melbourne is how we maintain and improve the quality of our built environment. Rapid development has in many cases led to poor quality buildings and a lack of integration with the neighbourhood.

Poor design has understandably led to community opposition, which makes the job of accommodating growth much harder. Throughout the pilot program, communities and councils reflected this view — so there is a need to demonstrate that better buildings can be built and to encourage good design that integrates well. Once the community sees the benefits, this could lead to a more constructive and positive discussion around growth.

The Nightingale Model is an example of a sustainable apartment design that, while remaining affordable, focused on the building's wider contribution to the neighbourhood.

The Commons in Brunswick, which was based on the Nightingale Model, provides an example of:

- an environmentally sustainable development by being 100% fossil fuel free
- a financially affordable development, through capped profits and reduced operating and maintenance costs
- an integrated development with the surrounding neighbourhood through active street frontages, that provide fine-grain and tactile pedestrian experiences.



Next steps for the Victorian State Government

Recommendations

Policy

decision-making

Based on findings from the projects and the wider program, recommendations were developed to help create a city of 20-minute neighbourhoods. The recommendations establish a roadmap to create a more liveable Melbourne and are based on three themes:

Embedding 20-minute	Guidance to improve how	Connecting government,
neighbourhoods in	we design liveable places	industry and community

Place

The Victorian Government will evaluate the recommendations and will explore implementation approaches to each. The relevant authorities will then act on recommendations that are feasible.

Partnerships



Policy

RECOMMENDATION 1

Review the Victoria Planning Provisions to strengthen 20-minute neighbourhood policies Strengthen the Victoria Planning Provisions to support delivery of the 20-minute neighbourhood principle, 'hallmarks' and policies that underpin Plan Melbourne.

The concept of 'living locally — 20-minute neighbourhoods' and the need to deliver healthy communities is not integrated effectively in the policy framework.

The proposed review should strengthen the policy basis for delivering mixed-use neighbourhoods at varying densities, while balancing policy objectives to protect and enhance neighbourhood character.

RECOMMENDATION 2

Develop guidelines, resources and evidence to support implementation Develop guidance to support a coordinated approach to delivering 20-minute neighbourhoods. Clear guidance and a toolkit will enable a more consistent approach to planning for Neighbourhood Activity Centres. The guidance should detail strategies to enhance and protect neighbourhood character while delivering housing and population at densities that make local services and transport viable. This guidance should detail best-practice approaches to place-based planning. These could be adapted to meet varying local government capacities and capabilities.

Providing strong evidence-based research will help inform the community on the need for 20-minute neighbourhoods and the potential benefits this approach creates. It may also highlight best practice approaches for industry.

Embedding place-based planning into local government processes will ensure delivering 20-minute neighbourhoods becomes core business. Further guidance and resources could include process toolkits, along with criteria to identify suitable locations for 20-minute neighbourhood projects. This may involve providing a scorecard or checklist based on the 20-minute neighbourhood 'hallmarks', which establish the foundation for undertaking a 20-minute neighbourhood project.

RECOMMENDATION 3

Embed an approach to delivering 20-minute neighbourhoods in infrastructure projects

Victoria is currently in a transport construction boom with major road and rail projects being delivered. Every infrastructure project is an opportunity to support sustainable development and deliver a 20-minute neighbourhood.

A place-based community partnership approach to delivering 20-minute neighbourhoods has been successfully tested through the pilot program.

There is an opportunity to model this approach in the delivery of state (and other) infrastructure projects to ensure the wider planning around investment is effective, delivers state policy and ensures that communities are partners in delivery. This could be achieved by developing neighbourhood plans to support major infrastructure projects.

Embedding the 20-minute neighbourhood 'hallmarks' into major infrastructure projects will ensure there is a coordinated outcomes framework to deliver more inclusive, vibrant and healthy neighbourhoods as part of major infrastructure investment.

RECOMMENDATION 4

Improve planning of Neighbourhood Activity Centres

Support local government to apply the 20-Minute neighbourhood principle to Neighbourhood Activity Centres.

Melbourne has more than 700 local shopping strips, villages and high streets. Despite rapid population growth, many of these Neighbourhood Activity Centres are not benefiting from investment. These places should be a stronger focus for growth, as well as services and infrastructure investment that improve liveability and support people to 'live locally'.

A consistent approach to identifying these activity centres will support a more coordinated approach to strategic planning and support targeted future investment.

RECOMMENDATION 5

Monitor neighbourhood liveability — measure the impact of planning on public health and wellbeing

Align the 20-minute neighbourhood approach with the *Victorian Public Health* and *Wellbeing Outcomes Framework*.

The framework provides a clear approach to monitoring community health and wellbeing.

The indicators set out in the framework should be used to measure neighbourhood liveability, along with outcomes from Plan Melbourne. This will help monitor the effectiveness of implementation actions, including the Plan Melbourne Five-Year Implementation Plan — Action 76 Metropolitan-wide 'neighbourhoods index'.

RECOMMENDATION 6

Investigate a process to streamline approval of best practice development that delivers a 20-minute neighbourhood — 'Green light initiative' Investigate a streamlined approach to support best practice developments that deliver on the 20-minute neighbourhood 'hallmarks.' This process must be supported by a collaborative community partnership approach.

Plan Melbourne is driven by the delivery of more inclusive, vibrant and healthy neighbourhoods. There is a need for the Victorian Government to work with the development industry to test innovative development models that deliver on this outcome. Promoting alternative development approaches should be based on the provision of development that aligns with the 20-minute neighbourhood 'hallmarks. It is important to promote development that is seen as international best practice mixed-used development, which can support wider change and better planning practices.

Any projects will require a deliberative design and community partnership approach early in the planning process and must deliver exemplary design.

This may support the mandate of the Red Tape Commissioner, through the review into Victoria's building and planning approval processes.



Place

RECOMMENDATION 7

Scale up the pilot program approach and investigate funding opportunities

Investigate ways to scale up the approach to 20-minute neighbourhoods. This may be by providing the tools and resources to other councils, or connecting delivery of opportunities in neighbourhoods to regional policy and investment priorities identified by communities through the Metropolitan Partnerships.

Investigating funding programs to support placemaking and neighbourhood planning projects, which are essential in creating a city of 20-minute neighbourhoods. Targeted funding will help councils deliver projects in priority areas, by bringing forward local infrastructure projects.

It is important for councils to link their grants programs and other funding avenues to small-scale projects that have been raised through the community partnerships. This could reflect similar funding programs such as the Growing Suburbs Fund.

Investigating strategies to streamline approval of small-scale placemaking projects across government departments and agencies is also critical in scaling up an approach to placemaking. This should address administrative barriers that local government and communities experience when seeking approval for community projects.

Work to deliver this recommendation could be aligned with *Plan Melbourne Five-Year Implementation Action 53: Place-making for public places.*

RECOMMENDATION 8

Support delivery of pilot program opportunities

Support councils to deliver the opportunities identified in the Neighbourhood Reports for Croydon South, Strathmore and Sunshine West.

Councils require continued support to deliver on the opportunities to ensure momentum built with the community and commitment from government is maintained. Continuing support will also help monitor program outcomes, to inform future longitudinal studies.

RECOMMENDATION 9

Support implementation of the Movement and Place framework

Facilitate a partnership between the Department of Transport and local government to refine Movement and Place classifications based on local strategic planning work and localised knowledge of places.

The review may also assess pedestrian movement around activity centres and local infrastructure, e.g. schools, libraries and public open spaces. This review may utilise a Principal Pedestrian Network methodology.



Partnerships

RECOMMENDATION 10

Encourage better neighbourhood design density done well Local government and communities continue to raise the need to improve medium density development to support better neighbourhood design. There is also a need to better integrate the planning of mixed-use developments and social infrastructure.

To support better neighbourhood design, it is proposed to:

- develop tools and/or offer a design competition to facilitate delivery of better medium density housing projects in existing neighbourhoods
- recognise projects that deliver quality buildings and places.

RECOMMENDATION 11

Promote 20-minute neighbourhoods

Develop communication tools and messaging to support a coordinated whole-of-government approach to 20-minute neighbourhoods. Clear messaging will help align departmental priorities and support the delivery of place-based planning.

The following resources and tools could be established:

- a 20-Minute Neighbourhood Hub with online resources, research case studies and projects
- a 20-Minute Neighbourhood Network, a space for people across government and the sector to connect, find and share resources and experiences
- a professional-development program for government departments and agencies
- a communications program including presentations by DELWP and a social media campaign
- communication tools for community consultation framed around liveability and the need to 'live locally'.

Develop education programs for primary, secondary and tertiary students, to convey the importance of 20-minute neighbourhoods. Student resources can provide young people with the opportunity to be involved with neighbourhood planning and could include a design competition that aligns with the Victorian and Australian Geography curriculum.

RECOMMENDATION 12

Encourage councils to take a coordinated place-based approach The program highlighted the importance of place-based planning and the need for local coordination. It is therefore important for there to be a single point of contact in local government for community members to discuss local planning issues.

Place managers for example can be one way to provide a direct conduit between community and government. Place managers can be responsible for issues such as place curation, coordination and communication. An important part of their role is to build long-term relationships with people as well as government agencies, landowners, business owners, developers and other stakeholders.

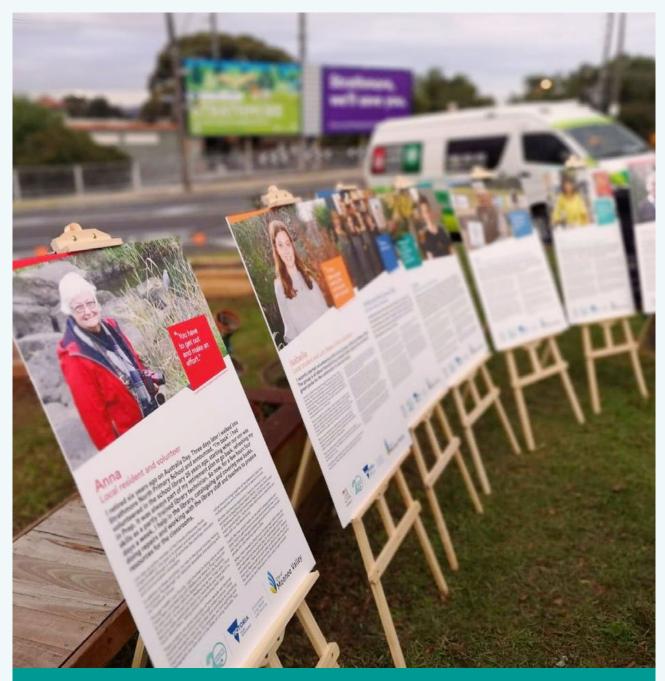
For this type of role to be effective, place managers or similar need to hold a strategic position and have capability to influence decision-making.

RECOMMENDATION 13

Support improved whole-of-government coordination of 20-minute neighbourhoods Work with an existing cross government group to better coordinate the delivery of 20-minute neighbourhoods.

The program identified a common frustration — while multiple departments and agencies deliver projects that support 20-minute neighbourhoods, their planning and delivery is not always coordinated effectively.

A coordination group can build on the interest already shown from several departments and agencies to better align their work with DELWP's 20-minute neighbourhood program. This group should also collaborate with the Metropolitan Partnerships (aligning with Recommendation 9) to coordinate a broader approach to delivering 20-minute neighbourhoods across the six metropolitan regions.



CASE STUDY LOCAL VOICES AND STORIES SHAPE COMMUNITIES

Stories of Strathmore

Stories of local business owners and residents were celebrated as part of the program. Council value the role of storytelling as a mode of engagement and its potential to enhance the sense of community and this pilot provided an opportunity to undertake this approach.

Ten stories highlighted the contribution of individuals to the Strathmore community through story boards. The story boards were posted up on the exterior of local businesses providing interesting insights of local traders and their stories.



Partners











References

- Boyd et al. The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report, 2019
- 2 World Health Organization & UN-Habitat 2016, Global report on urban health: Equitable healthier cities for sustainable development. Italy: WHO
- 3 Gunn LD, Rozek J, Hooper P, Lowe M, Arundel J, Higgs C, Roberts R, Giles-Corti B. Creating liveable cities in Australia: A scorecard and priority recommendations for Melbourne. Melbourne: RMIT University, Centre for Urban Research, 2018
- 4 Davern M et al. (2017) Using spatial measures to test a conceptual model of social infrastructure that supports health and wellbeing, Cities & Health, 1:2, 194-209, DOI: 10.1080/23748834.2018.1443620
- 5 Badawi, Y, Maclean, F, and Mason, B, (2018). The economic case for investment in walking, Victoria Walks, Melbourne
- 6 Australian Institute of Health and Welfare 2017. Impact of physical inactivity as a risk factor for chronic conditions: Australian Burden of Disease Study. Australian Burden of Disease Study series no. 15 Cat. no. BOD 16. Canberra: AIH
- 7 Andrade et al. Designed to Move: Active Cities, 2015
- 8 Badawi, Y, Maclean, F, and Mason, B, (2018). The economic case for investment in walking, Victoria Walks, Melbourne
- 9 Badawi, Y, Maclean, F, and Mason, B, (2018). The economic case for investment in walking, Victoria Walks, Melbourne
- 10 Badawi, Y, Maclean, F, and Mason, B, (2018). The economic case for investment in walking, Victoria Walks, Melbourne
- 11 Andrade et al. Designed to Move: Active Cities, 2015

Image references

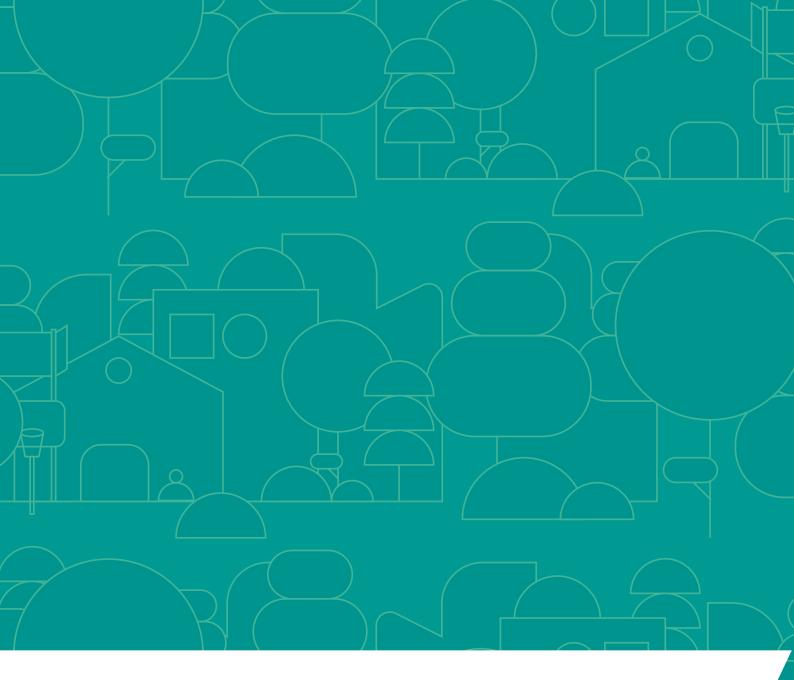
Better neighbourhoods - New Acton, Canberra p.16

- Goodspeed Bicycle Co, http://newacton.com.au/ place/godspeed-bicycle-co/
- Canberra District's Wine Week Launch Event, https://allevents.in/canberra/canberra-districtswine-week-launchevent/

- 12 Andrade et al. Designed to Move: Active Cities, 2015
- 13 Andrade et al. Designed to Move: Active Cities, 2015
- 14 Victoria in Future 2019, Department of Environment, Land, Water and Planning
- 15 Victoria in Future 2019, Department of Environment, Land, Water and Planning
- 16 Gunn LD, Rozek J, Hooper P, Lowe M, Arundel J, Higgs C, Roberts R, Giles-Corti B. Creating liveable cities in Australia: A scorecard and priority recommendations for Melbourne. Melbourne: RMIT University, Centre for Urban Research, 2018
- 17 Badawi, Y, Maclean, F, and Mason, B, (2018). The economic case for investment in walking, Victoria Walks, Melbourne
- 18 ABS (Australian Bureau of Statistics) 2018, National Health Survey: First Results, 2017-18, cat. no. 4364.0.55.001
- 19 Yoon, H, Kwangyul, C, Jang, Y, (2018), The Role of Neighborhood Walkable Design and Walking Behavior in Mental Health
- 20 Andrade et al. Designed to Move: Active Cities, 2015
- 21 Andrade et al. Designed to Move: Active Cities, 2015
- 22 Victorian Department of Transport, Planning and Local Infrastructure provided to Ministerial Advisory Committee for Metropolitan Planning Strategy, 2013
- 23 Badland H, Whitzman C, Lowe M, Davern M, Aye L, Butterworth I, Hes, D and Giles-Corti B 2014, Urban liveability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health, Social Science and Medicine, 111: 64–73.
 - Tash, Mocan & Green Grout, https:// akitchencat.com.au/mocan-green-grout/

Better buildings - The Commons, Brunswick p36

 Andrew Wuttke, https:// www.smallgiantsdevelopments.com.au/pastprojects



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