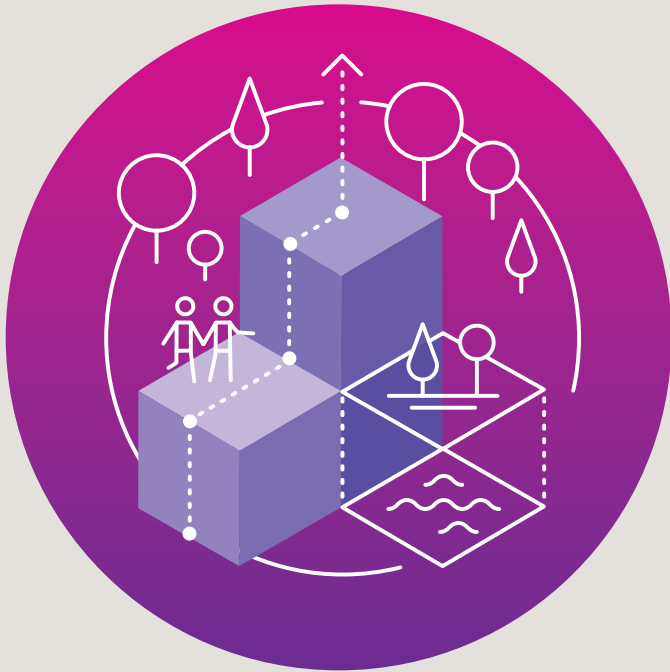


MELBOURNE INNOVATION DISTRICTS CITY NORTH OPPORTUNITIES PLAN 2020



CITY OF MELBOURNE



A CITY PLANNING FOR GROWTH

Melbourne will be a leader in planning for growth and technological advancement. We will guide and influence the future development of the city for the benefit of all city users and in a way that values and celebrates its historical and cultural identity.

Acknowledgement of Traditional Owners

The City of Melbourne respectfully acknowledges the Traditional Owners of the land, the Boon Wurrung and Woiwurrung (Wurundjeri) people of the Kulin Nation and pays respect to their Elders, past and present.

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November 2019

Disclaimer

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MESSAGE FROM THE LORD MAYOR OF MELBOURNE



We have an exciting opportunity to accelerate a knowledge hub in our city's north where innovative ideas can come to life.

This City North Opportunities Plan will help us create invigorating places for people to work, live and study; places that support and enable collaboration and innovation.

Led by the City of Melbourne, this Plan is part of Melbourne Innovation Districts (MID), one of our nation's most future-focussed ventures.

A collaboration between the city, RMIT University and the University of Melbourne, Melbourne Innovation Districts will help cement Melbourne as one of the great university cities in the world focused on the future.

Improving the urban realm is crucial to attracting and retaining talent – and to maximising the benefits of our first innovation district. Our city has major advantages on which to build, given the globally renowned education and research precinct in our city's north. Such clusters allow knowledge, talent and place to intersect.

City North, the first MID, is home to 21 per cent of all knowledge sector jobs in the City of Melbourne. Other impressive attributes include the district's proximity to the two partnering universities, a historic culture of innovation, neighbourhoods full of character and an attractive public realm with wide streets and parkland close by.

As part of this opportunities plan, we're considering enhancements to streets and open spaces, right through to street furniture and art installations. We know that high-quality social and physical infrastructure in a liveable city encourages productivity and prosperity to flourish.

We're confident the Melbourne Innovation Districts will incubate and develop urban innovation with significant social, economic and environmental benefits. Trialling ideas and collaborating advance knowledge. Through such nimble approaches, those in innovation precincts will position our city for growth and for a prosperous and creative future.



Sally Capp
Lord Mayor
City of Melbourne

1. INTRODUCTION

This plan provides an innovation lens with which to view the current and future urban realm of the Melbourne Innovation Districts (MID) City North. This area represents the first district of the MID partnership established in 2017 between City of Melbourne, RMIT and University of Melbourne.

The MID is an opportunity to shape Melbourne's future through open collaborations that deepen the city's capacity for applied innovation. It is a foundation upon which a broad community of institutions, businesses, organisations and people can collaborate to enhance Melbourne's future. It is also an opportunity to guide co-funding opportunities for the urban realm.

The MID partnership has selected MID City North as the first of its innovation districts because of its unique potential to spur inclusive economic development through startup formation and growth, research commercialisation, social innovation and other innovation activities.

The plan outlines guiding principles for MID City North, identifies opportunities for connecting, enhancing and activating priority streets and spaces and encourages the use of City North as a living lab for trialling interventions and activations that contribute to strategic long-term aims.

The opportunities plan addresses:

- guiding principles for design and use of the district
- priority streets and spaces for intervention
- opportunities for enhancement and activation
- pre-existing work underway in the district

The MID partnership will work together in a number of Melbourne locations to create a network of innovation districts. Innovation districts are defined as (The Brookings Institute, 2018):

Places that build on and revalue the intrinsic qualities of cities – proximity, density and vibrancy – to facilitate the creation and commercialisation of new ideas and jobs to support metropolitan economies.

Vision

City North will become a world class urban district and environment that supports and develops next generation Melbourne, a place designed to leverage emerging technologies and innovation and build on our city's unique characteristics to enhance education and economic outcomes, create new knowledge and city experiences and enrich inclusion and public amenity.

Background

The partnership believes innovation districts play a pivotal role in responding to new pressures and possibilities as the city evolves from a mid-sized metropolis of 4.5 million people to a world city with an estimated population of more than 8 million people by 2051 (The State Government of Victoria Department of Environment, Land, Water Use and Planning, 2016).

The area that makes up MID City North has a long and successful history in innovation. Its success is underpinned by the co-location of RMIT University, the University of Melbourne and other research and education institutions, extensive investment in infrastructure and facilities for the generation of knowledge and ideas, and the positive synergy effects from the many professionals, researchers and students working and studying within the area.

It is also home to an established and lively residential community taking in parts of Carlton, North Melbourne and Parkville.

Carlton, well-known for the Italian cafes and restaurants of the Lygon Street Italian precinct is now growing beyond its largely Italian residents with a greater proportion of residents from Eastern Asia, South-eastern Asia and India.

North Melbourne is one of the city's most dynamic and complex areas. Its residences are a mix of established and new housing with commercial, industrial, retail and community facilities scattered throughout. Parkville is known for its leafy streets, heritage houses and the University of Melbourne's bustling campus and residential colleges.

Parkville is home to major hospital, research and institutional facilities including the Royal Melbourne and Royal Children's hospitals.

MID City North is currently being transformed by a number of infrastructure and property redevelopment initiatives. RMIT University and the University of Melbourne are reshaping their campuses, the City of Melbourne is reshaping the Queen Victoria Market precinct, and the Victorian State Government is investing in transport infrastructure projects. The most prominent example of this investment is Melbourne Metro Rail, a major rail project that tunnels through the district with stations to be constructed close to both RMIT University and the University of Melbourne.



- | | |
|--|--|
| 1 Wade Institute for Entrepreneurship | 17 Oxfam |
| 2 Australian Urban Research Infrastructure Network (AURIN) | 18 The Conversation |
| 3 Bio21 Institute | 19 Melbourne Museum |
| 4 Walter and Eliza Hall Institute | 20 Royal Exhibition Building |
| 5 Howard Florey Institute | 21 Slack tech startup |
| 6 Microsoft Social NUI Centre | 22 60L Building: Australian Conservation Foundation, AYCC, |
| 7 Kathleen Syme Library and Community Centre | 22 Earthwatch Australia, Spowers Architects, Going Solar, Viola Design |
| 8 Royal Women's Hospital | 23 RMIT Advanced Manufacturing Precinct |
| 9 The Royal Melbourne Hospital | 24 RMIT The Design Hub |
| 10 Melbourne Connect | 25 Queen Victoria Market |
| 11 Peter Doherty Institute for Infection and Immunity | 26 State Library of Victoria |
| 12 Victorian Platform Technology Network | 27 Save the Children |
| 13 The Grattan Institute | 28 Lowitja Institute |
| 14 Centre for Neural Engineering | 29 Victorian Trades Hall |
| 15 IBM Research Australia | 30 The Readings Foundation |
| 16 Fred Hollows Foundation | |

Figure 1: Map of MID City North

MID City North is an area encompassing the northern fringes of Melbourne's central business district and parts of Parkville and Carlton. The district includes the main campuses of MID partners RMIT University and the University of Melbourne, as well as the Queen Victoria Market, the Victorian State Library, the Parkville West biomedical and hospital precinct, and the Melbourne Museum and Royal Exhibition Building.

The MID partnership

MID aligns the City of Melbourne, RMIT University and the University of Melbourne in a historic, collaborative partnership, formed to achieve our common goals in creating new jobs, enterprises, services, and spaces that will contribute to Melbourne's success as it grows.

The role of the MID partnership is unlocking the innovation potential of MID City North. This will be achieved by encouraging new connections, collaborations, culture and practices combined with a physical reshaping of the urban realm in the district to support innovation. The MID partnership will implement five workstreams as part of its joint-effort framework.

- **The urban realm** – rethinking the ways spaces can enable innovation activities such as testing, showcasing and engagement.
- **Enterprise activation** – providing targeted support for startups and small to medium enterprises to establish and grow within the district, and make productive connections with other parts of the innovation ecosystem.
- **Advanced technology** – enabling better analysis, insight and collaboration through accessible state-of-the-art and experimental technology.
- **Social innovation** – developing, collaborating and researching in new ways and combinations to better meet social needs.
- **Institutional design** – purposefully designing institutions and district 'sub-culture' to foster dynamics of collaboration, learning and creativity.

The role of the City of Melbourne

The City of Melbourne will play a range of roles across the five workstreams outlined above. In coordination with RMIT University and the University of Melbourne, we will identify our optimal role in a given context with consideration of:

- the interests of the community, stakeholders and beneficiaries and their feedback as to the City of Melbourne's optimal role
- the City of Melbourne's jurisdictional powers
- the policies and initiatives of state and federal governments and other placemaking and economic development agents
- existing assets, capabilities and resources.

Why MID City North, and why now?

The unique mix of attributes described make MID City North an ideal place for innovation. These attributes have characterised MID City North since the early years of Melbourne, sustaining the area's reputation as Victoria's preeminent location for knowledge generation, education and innovation from the mid-1800s to this day.

Why then, have we now designated MID City North as the partnership's first district?

1. The district's existing attributes are important foundations for any coordinated district-shaping actions. In many cases, MID interventions will be adding to pre-existing momentum to unlock potential and efficiencies.
2. There is a rare opportunity to leverage a coincidence of major planned projects in the district.
3. The area connects to the main campuses of two universities. This makes it a prime location to support research commercialisation, for-profit and social enterprise development, and community exposure to innovation. These are all vital roles the Council can play in addressing the city's economic and social development imperatives in a time of growth and structural changes to the economy.
4. The district has wide streets and large amounts of on-street parking. It also has an under-utilised network of laneways. Together these present an opportunity to create new open spaces or temporary activation spaces.
5. There is a lack of activities in the urban realm, particularly at night and on the weekends, leading to areas feeling unsafe at these times.
6. There are significant pedestrian barriers in the form of major roads such as Victoria Street and Haymarket roundabout.
7. MID City North's streets present an opportunity to re-prioritise pedestrians over motor vehicles to enhance and foster active connections between institutions, and between MID City North and the rest of the city.



2. ABOUT THIS OPPORTUNITIES PLAN

Urban realm refers to publicly accessible areas of a city. It comprises streets, laneways, footpaths, parks, squares, and public buildings and facilities. It also includes private property that has been made accessible, either temporarily or permanently, for community use or access.

The urban realm influences the function and character of districts within a city. It impacts the appeal of districts as places to live, work, study or set up businesses. It also impacts the movement of people, and the interactions people have with each other and their surroundings. The planning and design of the urban realm therefore has far-reaching implications for the liveability of cities.

This plan outlines opportunities for enhancing and connecting spaces to make them accessible, inclusive, safe and inviting. This opportunities plan seeks to achieve these outcomes but also has an added targeted outcome: to ensure the district's spaces support innovation, research, experimentation and engagement activities as a part of its function as an innovation district.

Section A of this plan introduces the MID partnership (including the vision and principles that will guide its work) and describes the MID City North district. Section B highlights the streets, spaces and other opportunities for urban realm enhancements.

The development and use of this plan

The opportunities plan has been developed following multiple stakeholder workshops, site research and analysis, and analysis of existing context, strategies and policy. The opportunities identified in Section 2 of this document were presented to City of Melbourne by independent consultants to inform the development of next steps as outlined in section 5.

There are a number of existing and approved strategies, precinct-level masterplans, and structure plans that have influenced the development of this plan and will continue to apply to MID City North (line 1 in Figure 2). This plan has been developed to support or add to these existing and future plans, the most aligned being the *City North Structure Plan* developed by the City of Melbourne in 2012.

The *City North Structure Plan* provides a framework to guide urban renewal and to fulfil the area's potential as an extension of the central city. While the geographic boundaries of the area addressed in the *City North Structure Plan* differ to those of MID City North (which extends slightly more eastward to encompass the whole of RMIT University city campus, the State Library and the Melbourne Museum and Royal Exhibition Building) the two plans are complementary. This opportunities plan acts as an accompanying document to the *City North Structure Plan* to update it with the specific focus on enhancing the urban realm to support innovation activities. An update to the City North Structure Plan is recommended to maximise the potential of City North.

The 30-year vision for public realm in the City North Structure Plan that will inform ongoing work in this area is as follows:

'City North is characterised by leafy streets and boulevards that link together beautiful parks and vibrant and welcoming public urban spaces, where neighbours, local workers, students and visitors socialise, exercise, play and relax.'

Following community consultation and Council endorsement, this plan will be used across Council to assist with the planning, design and management of urban spaces in the district, and when considering the yearly budgets for capital works. The opportunities plan is intended to be a 'living' document which will require regular updates and revision every four to five years to ensure it remains relevant and useful.

SECTION A: MID'S FIRST DISTRICT



MID City North Guiding Principles

The City of Melbourne will be guided by five principles as it undertakes the design, planning and implementation work in the urban realm of MID City North:

- 1. A learning lab for inspiring, engaging and sharing.** MID City North will be a 'living lab', committed to testing, learning and sharing knowledge about our best possible futures in public, in the urban realm.
- 2. Integrated technology and hyper-connection.** New technology and data governance will be integrated into the public and digital realms to monitor, assess and improve the quality of the social and urban environments.
- 3. A place that supports innovators, creatives and startups, and welcomes all people.** The urban realm of MID City North will support, enable and enhance the visibility and viability of creative and social disciplines, the knowledge and innovation sectors, and startup ecosystem.
- 4. Active, adaptive and flexible places.** MID City North will foster responsive environments and adaptive, flexible places, capable of rapid, iterative augmentation and ongoing activation.
- 5. Sustainable and healthy environments.** Activities in MID City North will actively address the environmental sustainability of our future city and seek to create healthy environments.

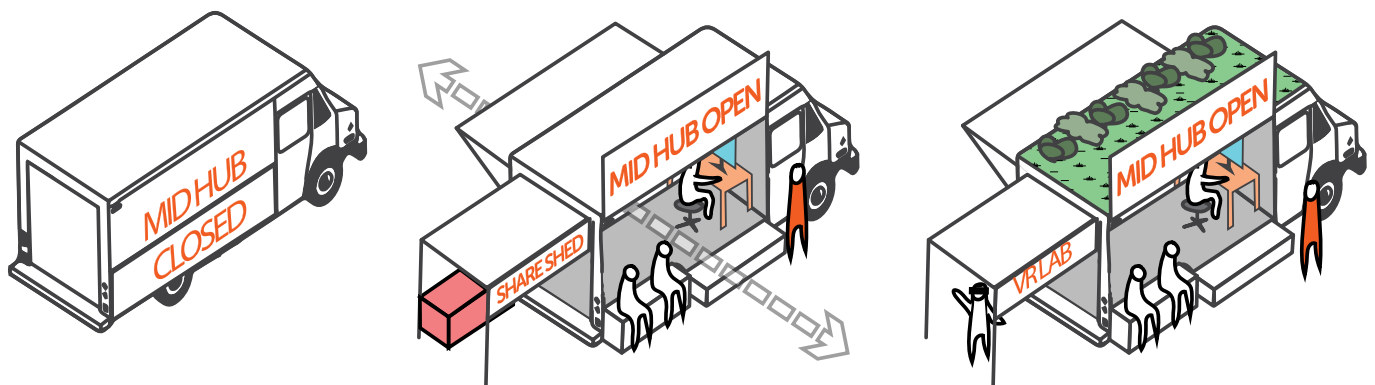


Image 1. Vans, trucks or trailers modified to act as mobile innovation hubs are examples of design principles 3 and 4.

MaRS Discovery District

Toronto's MaRS Discovery District is North America's largest building-precinct innovation hub. It provides a range of accommodation, business networking and other support services to the city's innovation ecosystem, and in particular to its startups looking to start, grow or scale.

Its aim is to create the chemistry for innovation and commercialisation to flourish. Through the co-location of science and research based organisations, the MaRS precinct and its associated programming services, stimulate collisions between groups that wouldn't normally interact.

At any given time, MaRS accommodates 150 tenants across 1.5 million sq. ft. of offices and science labs. Current tenants include:

- a number of Torontonians startups;
- capital and service providers such as Autodesk, Facebook, PayPal, Airbnb Inc., Merck & Co. and Jlabs;
- academic or public-sector institutions such as the University of Toronto.

The programming aspects of services aim to connect startups with venture funding or business partnerships opportunities with other tenants or from potential investors and partners from across North America.

Much like the partnership that created MID, MaRS was borne and continues to benefit from the collaborative efforts of a number of city institutions including its city and state government and its university sector.



Image 2. Interactive technologies that encourage learning, inspiration and playfulness are reflected by design principles 1 and 2.

3. MID CITY NORTH

About MID City North

MID City North encompasses a crucial junction point for Melbourne. Its central location spans links to key north-south and east-west transport corridors, and sits immediately adjacent to the central business district. MID City North merges with other important centres such as the Parkville health and biomedical precinct and retail centres, open space corridors and residential areas. It is also home to a significant number of 'think tanks', research institutes of a range of fields, and social and non-profit enterprises.

MID City North is home to buildings and places of rich cultural and historical significance. It features heritage buildings, mixed-use building types and university campuses that integrate with the city. It is also characterised by its wide streets, parks and a network of under-utilised laneways.

The following is a snapshot of MID City North today.

- Almost two thirds (64 per cent) of the population of MID City North is aged from 15–24 years (City of Melbourne, 2016).
- 56 per cent of all residents attend an educational institution (City of Melbourne, 2016).
- The majority of residents (77 per cent) were born overseas (City of Melbourne, 2016).
- The streets in MID City North contain 2535 on-street car parking bays. Compared to the rest of the municipality, a high proportion of streets have on-street parking (City of Melbourne, 2018).

History of innovation in City North

MID City North has always been Melbourne's innovation epicentre. It is home to Victoria's first university, the first technical college, the Royal Exhibition Building – once Australia's largest building, and the Royal Women's Hospital – the first to offer training in obstetrics and gynaecology. Following the establishment of the University of Melbourne and adjacent hospitals in the latter 1800s, the district began to mature as a hub of knowledge activity. More organisations have located themselves in the area since then and synergistic relationships between them continue to strengthen.

New players continue to enter the district to this day, adding to its remarkable history. Leading technology companies, such as IBM, have set up facilities in the area. New public policy institutes and think tanks have found their home in the district, as have social enterprises and non-government organisations. Each new entrant brings new ideas, new dynamics, and new possibilities for ingenuity.

- The largest landowners in the district are MID partners, with University of Melbourne property (owned or occupied) spanning 45 hectares, and RMIT University property spanning 9 hectares (City of Melbourne, 2016).

Barcelona's 22@ initiative

The 22@Barcelona initiative began in 2000 with the aim of transforming 200 hectares of low-density and largely inactive industrial land into a district suitable for knowledge-intensive activities.

The successful transformation of the Poblenou Quarter, close to Barcelona's city centre, has seen it become an exemplar case for the development of innovation district initiatives elsewhere. In particular, there are lessons in how 22@Barcelona attracted an influx of diverse new district users: enterprises of varying scales and maturity, university and other research and development entities, and public service agencies. Importantly, the 22@Barcelona planners designed the district not only to attract professionals, but also to create a vibrant place for new residents to live.

The coexistence and integration of these district users was seen as the defining success factor to encourage the types of interactions and networking that lead to innovation and entrepreneurial outcomes.

The model adopted to achieve this mix prescribed a balance between private land (70 per cent), open space (10 per cent), university space (10 per cent) and social housing (10 per cent). Planning controls within the jurisdiction of Barcelona City Council were used as the mechanism to achieve the desired district composition of activities, and the most appropriate built forms to support them. The planning controls determined building heights and building floor-to-height ratios, the protection of heritage character, and the prevalence of open spaces in the district.



Image 3. A feature of MID City North is the large amount of unused space in the urban realm. A small open space on the corner of Queensberry and Barry Streets (top). Example of large amounts of on-street parking in MID City North (bottom). The parking bays on Queensberry Street are currently unavailable due to Metro Tunnel works, and extra lanes of traffic have been added along Queensberry Street.

People and activity

A strength of MID City North is the diversity of the people that congregate there to live, work and study. The district's innovation ecosystem benefits from ready access to a community of leading professionals and students who are attracted to the area for a number of reasons. It offers the very best facilities and infrastructure across a range of disciplines, and an appealing network of peers, mentors and services.

People are also attracted to this area because the nearby residential and lifestyle possibilities of inner Melbourne are excellent. These liveability factors have contributed to the increased diversity of the community over recent decades, which in turn has strengthened MID City North's global academic and business connections. The international character of this area is particularly evident within its student population. More than 46 per cent of students enrolled at RMIT University and 36 per cent of students enrolled at the University of Melbourne are from overseas. They have come from countries all around the world to benefit from the high-calibre learning and research at these institutions.

While the MID City North ecosystem is a global leader in life sciences and other Science, Technology, Engineering and Mathematics (STEM) fields, it has genuine strengths across all disciplines and sectors. This places the MID City North ecosystem in a unique position to make significant contributions to the urban challenges facing Melbourne and the world.

Existing major projects in MID City North

MID City North is undergoing significant transformation with a number of large-scale infrastructure and property redevelopment projects planned or being undertaken by MID partners or the Victorian State Government. These projects directly influence the urban realm and represent major investment in the area. This plan identifies opportunities to coordinate with and influence major projects in City North to minimise disruption and enhance the experience of people.

Some of these major projects are highlighted in Figure 3.



Image 4. MID City North is home to one of the world's most prominent biomedical precincts.

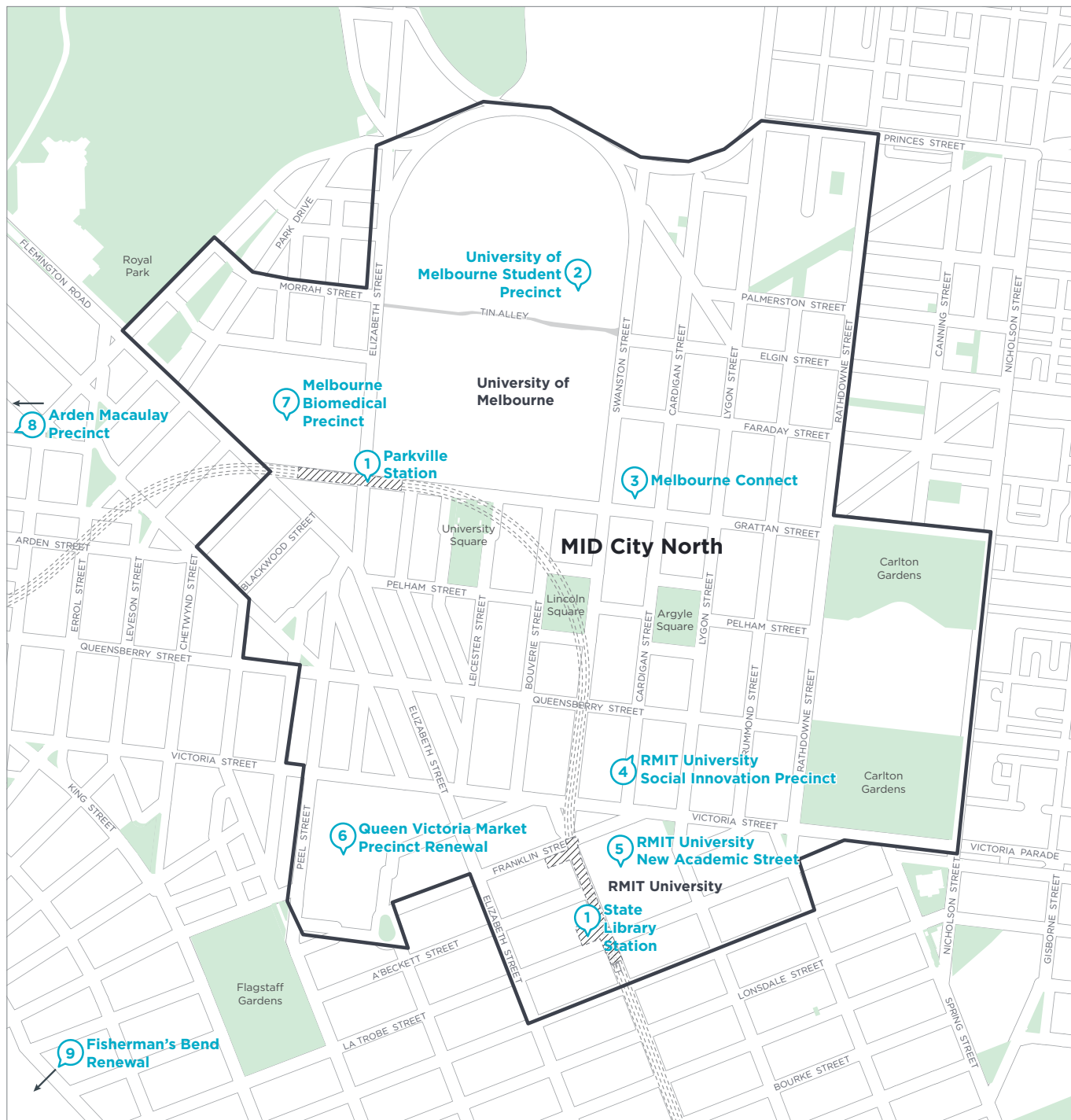


Figure 3: Existing major projects in MID City North.

Melbourne Metro

The Melbourne Metro Rail Project will create a rail line connecting Melbourne's west to the south-east, with high-capacity metropolitan trains. Five new underground stations will be built, including stations next to the main campuses of RMIT University and University of Melbourne. These stations will change the shape of MID City North, creating a new flow of people and providing a unique opportunity to create new value and connections with other parts of Melbourne. Early works to prepare major construction sites are taking place throughout 2018 and construction will continue through to 2025.

The project will also alter the landscape of the district itself, both temporarily during construction and permanently once the rail line is in operation. There is a need to both mitigate construction disruption and leverage the opportunities created by construction disruption for experimentation around road and streetscape usage over the next several years.



Image 5: The development of Melbourne Metro stations is a source of disruption but also an opportunity to use temporary conditions for innovation.

The University of Melbourne's New Student Precinct

University of Melbourne's New Student Precinct will be located at its Parkville campus between Monash Road to the north, Grattan Street to the south, and Swanston Street to the east. The precinct aims to revitalise the on-campus student experience by co-locating a range of student services, study and recreation activities, and hospitality and retail facilities. The precinct is being co-created by the students themselves with over 1500 students having provided input into the design stages of the initiative.

The University of Melbourne's Melbourne Connect

Melbourne Connect is the University of Melbourne's flagship innovation precinct. Melbourne Connect will include a major redevelopment of the former Royal Women's Hospital site (Image 6) incorporating space for co-location of industry, the University's Engineering School, startup incubator space and a home for the Melbourne Accelerator Program. The precinct will act as a platform to showcase technological innovation and research outcomes and will have new public and student spaces, exhibition spaces (including the Science Gallery Melbourne) and student accommodation.



Image 6: The Melbourne Connect initiative by the University of Melbourne will redevelop the site of the former Royal Women's Hospital into a multi-use hub of innovation, exhibition and student activity.

RMIT University's Social Innovation Precinct

RMIT University's Social Innovation Precinct will transform a block with MID City North defined by Cardigan Street, Victoria Street, Lygon Street and Queensberry Street. This area currently comprises diverse buildings of varying ages, styles and uses including warehouses, storage, teaching, studio and manufacturing spaces. RMIT's proposed approach is to design and create a 'social innovation cluster' which enhances the accessibility and practical usefulness of the built infrastructure for learning, collaboration and enterprise, and creates flexible and scalable spaces for future use. The activity mix for the precinct will bring RMIT's design, technology and enterprise expertise to bear on the social challenges of health, inclusive and vocational education, justice, family and social services.

RMIT University's New Academic Street

RMIT University's New Academic Street project has re-oriented its city campus, creating new openings to Swanston Street, a garden building and terraces, and a series of arcades and laneways between Swanston and Bowen Streets (see Image 7). The development has included upgrading facilities for students – the Swanston Library, the Student Hall, collaboration spaces, retail and food options – to improve life on campus, as well as a state-of-the-art media precinct for media production. New Academic Street was completed in 2017 creating a new connection between the city and the RMIT campus, and a gateway to MID City North.



Image 7: A revitalisation of Bowen Street (Melbourne) was a part of RMIT University's New Academic Street initiative.

Queen Victoria Market precinct renewal

The Queen Victoria Market precinct will undergo significant redevelopment from 2018, with a \$250 investment in its future. Construction of the new mixed-use development of the Munro site is poised to commence and represents an important milestone for the renewal program. The Community Hub on the Munro site includes childcare, a community kitchen, community services and meeting spaces and affordable housing, it will adjoin a new hotel, apartments, retail and hospitality facilities on the site. A 40-person People's Panel, comprising market traders, customers, residents and critical stakeholders been established to deliberate on how best to integrate much-needed new facilities and car parking in the market precinct.

The precinct renewal provides a vehicle for exploring wider opportunities for the district, including;

- public realm improvements involving innovative approaches to planning, engagement, sustainable design and implementation
- innovation surrounding food and waste systems, including circular economy systems
- retail and business model innovation, particularly from small businesses in the food sector
- food tech and food supply chain innovation
- urban logistics and freight innovation

The Parkville Biomedical Precinct

The Parkville Biomedical Precinct has established itself as a major global research and teaching powerhouse with its 25 clinical, research and academic partners sharing a formidable history of ground-breaking medical discoveries and developments.

Institutions within the precinct include the Royal Melbourne Hospital, Walter and Eliza Hall Institute, Peter MacCallum Cancer Centre, Biomedical Research Victoria and CSL Ltd, Royal Children's Hospital, Royal Women's Hospital, the Murdoch Children's Research Institute, the Florey Institute of Neuroscience and Mental Health and CSIRO. The strength of these institutions, their relationships and existing collaborations along with their co-location means that the precinct can rival the top biomedical precincts in the world.

Arden and Fishermans Bend urban renewal precinct

The transitioning industrial area north of the city identified as the Arden urban renewal precinct will be redeveloped as an innovation precinct, with a focus on technology, life sciences, health and education sectors. Arden is also expected to offer a mix of housing to accommodate 15,000 residents by 2051. Like MID City North, this precinct will benefit from Metro Melbourne Rail with the construction of the new North Melbourne underground station to be the centrepiece of the Arden precinct, due to open by 2025. This new station will provide direct links to the CBD and the Parkville National Employment and Innovation Cluster/ MID City North.

Fisherman's Bend is Melbourne's largest urban renewal area at approximately 485 hectares, and will be home to 80,000 residents and provide 80,000 jobs by 2050. This includes the growth of a National Employment and Innovation Cluster for Advanced Manufacturing in the Employment Precinct centred on the Former GMH site.

MID City North will have strong transport links to Arden through the new North Melbourne metro station, and is well positioned through these works to realise strong industry and employment linkages to Arden. However, public transport connections to Fishermans Bend from MID City North are less direct with only bus connections at present. Commitment to the delivery of the tram extension and Metro 2 to Fishermans Bend is critical to the overall success of the precinct, and will enable more direct access between the MID City North and Fishermans Bend precincts.

Australian Integrated Multimodal Ecosystem (AIMES)

AIMES is a transport technologies test bed area located partly within MID City North (see Figure 4).

The goal of AIMES is to test connected transport technologies at a large scale, and in a complex urban environment. It will include a range of distributed sensors and other technologies communicating data across multiple transport modes, including light and heavy vehicle travel, public transport commutes, cycling, and walking.

The project is being led by the University of Melbourne, and involves a consortium of over 30 stakeholders from across industry, academia and government, including the City of Melbourne, the City of Yarra, VicRoads, Public Transport Victoria, and the Victorian State Government Department of Economic Development, Jobs, Transport and Resources.

City of Melbourne existing capital works projects

A number of major capital works projects have additionally been endorsed or considered by the City of Melbourne within MID City North, including (but not limited to) significant upgrades to University Square and Lincoln Square, and an expansion of Argyle Square.

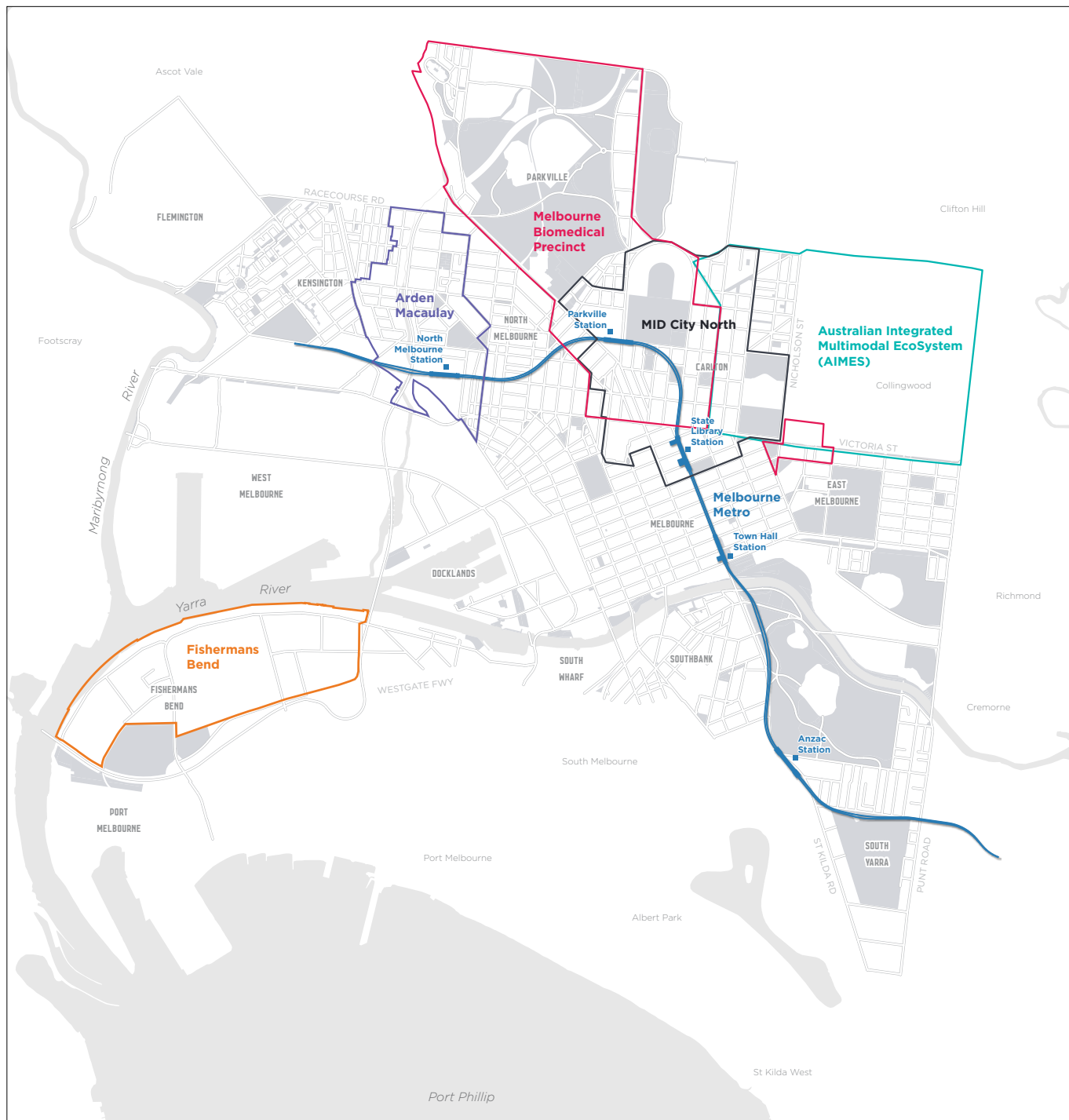


Figure 4: Inner Melbourne areas with strategic linkages to MID City North.

SECTION B: THE MID CITY NORTH URBAN REALM



4. OPPORTUNITIES FOR ENHANCEMENT

To develop this plan, a district-wide analysis was undertaken to understand what opportunities and constraints applied to sites across MID City North. The analysis sought to determine what types of innovation activities and urban realm enhancements could take place, and where they are most appropriately located. The following opportunities were identified and are discussed in this section:

1. enhance mobility and connectivity
2. undertake innovation in infrastructure and environmental management
3. set up test and engagement sites
4. establish innovation streets and spaces
5. set up innovation hubs
6. review planning controls.

These enhancement opportunities function as a toolkit that brings together people, institutions, activity and place to catalyse an innovation district and enhance the urban realm for the entire community.

Mobility and connectivity

The urban realm of a well-functioning innovation district should support walkability, cycling and a range of short and long-distance transport modes. Such districts should be porous and accessible to allow connectivity between nodes of activities and to encourage social and professional interactions.

Initial assessments of MID City North suggest that enhancements to the urban realm can improve its mobility and connectivity attributes.

Five intersections have been identified to act as key intersections to enable safer and easier pedestrian and cyclist access within MID City North:

- Leicester Street and Victoria Street
- Franklin/Cardigan Street and Victoria Street
- Queensberry Street and Cardigan Street
- Queensberry, and Leicester Street
- Haymarket Roundabout

These intersections have been identified as pedestrian barriers which inhibit the flow of people from north to south and east to west. They are at the nexus of streets that have received increased vehicular traffic volumes as a result of the closure of Grattan Street for the construction of the Parkville Station of Melbourne Metro Rail. These intersections also present an opportunity to trial new traffic and pedestrian management measures as the Melbourne Metro Rail disruption unfolds across the district.

Innovation in infrastructure and environmental management

In addition to supporting Melbourne's innovators, the City of Melbourne is an active innovator itself. We pursue innovation across the full gamut of our local government functions in order to achieve service excellence and operational efficiency.

MID City North is an ideal place for such innovation and can act as the preferred prototyping location for new forms of infrastructure and environmental management before it is deployed elsewhere in the city. MID City North is therefore an opportunity for City of Melbourne designers, strategic planners, engineers and environment managers to explore and trial new designs, techniques or materials in the urban realm (see Image 8 for an example).

The district is ideal for the prototyping of municipal innovation due to:

- the current and future disruption caused by major projects in the district
- the close proximity of students and researchers who may be involved as contributors or observers of innovation
- a range of ecosystem attributes (e.g. open and forested spaces, varied topology) and civic infrastructure and facilities (e.g. squares, libraries) that allow innovation trialled there to be replicated elsewhere in the municipality.



Image 8: 'Solar tree' (Birrarung Marr, 2018) is an award-winning example of innovation developed by City of Melbourne's own designers. The tree captures solar energy to charge LED lighting and USB sockets.

Test and engagement sites

District analysis found that MID City North offers potential to accommodate innovation activities in specially arranged urban realm sites. The sites can hold engagement or demonstration activations or installations of prototypes to be tested with an interacting public. They can enable researchers, students, startups and community groups to test their innovations with potential users.

The main aim for such sites is to be as visible as possible in order to enable public engagement, inspiration and collaboration. Sites can be inside campuses, parks, laneways or street spaces. As outlined in Figure 5, a permitting framework could manage any potential risk with respect to the positioning of different types of activations in the urban realm. Images 9 and 10 are international examples of test site initiatives).

No risk to others

For example: a simple display structure without any fragile or moving parts.

- Limited, or potentially no signage required
- Can be close to other public uses
- Public can openly engage
- Permits are easy to acquire

Minor risk to others

For example: a structure with some fragility or moving parts.

- May need warning signage
- Set back from other public uses
- May require physical barriers and security present
- Public can engage with caution
- Permits are moderately easy to acquire

Potential risk to others

For example: A structure with machinery or electrification, moving parts or other potential hazards

- Fencing, physical barrier or indoor venue required
- Security presence required
- Warning signage required
- Waiver form signed before public can engage

Figure 5: A sample permitting framework for test and engagement sites.



Image 9: The Block by Block installation as part of the Living Innovation Zone in San Francisco, USA.



Image 10: An urban agriculture prototyping temporary site, London, UK.

Innovation streets and spaces

Innovation streets and spaces are prime locations for the test and engagement sites described above. They are areas of the urban realm that demonstrate suitability for temporary activation due to their idleness or under-utilisation, high visibility to passers-by and logistical feasibility to accommodate testing and engagement activity.

Innovation streets are also key connecting streets within the district, linking key destinations (including MID partner properties) or public open space. As they are typically 30 metres wide, they have extensive, but often under-utilised, on-street parking and large amounts of space for increased pedestrianisation and public use.

Enhancing connectivity in these key streets will support the innovation and knowledge activities in MID City North, much of which relies on face-to-face interaction between people in the district. There is a strong relationship

between connectivity and productivity, which is why dense urban centres are so important to the economic prosperity of cities. The large number of people located in close proximity to each other allows ideas to be quickly generated, refined into knowledge and put to work solving complex problems (City of Melbourne, 2014, p. 6).

Key streets in the district with the potential to be innovation streets are profiled below. The innovation spaces profiled below are parks and laneways in the district.



Image 11. Blackwood Street (North Melbourne) was prototyped as a future innovation street as part of Melbourne Knowledge Week 2019.

Cardigan Street

The southern end of Cardigan Street directly connects with Melbourne Metro, RMIT University's New Academic Street. Further north it connects with Argyle Square, University of Melbourne's Carlton Connect and City of Melbourne's Kathleen Syme Library.

There is potential for significant changes to pedestrianise the street, establish test sites and other innovation spaces and new infrastructure along the length of Cardigan Street. By reducing parking, consolidating lanes of traffic, and repurposing central median strips, there could be an increase in public open spaces and an opportunity to integrate new public uses along the street.

Franklin Street

Franklin Street connects Queen Victoria Market (QVM) at its western end to the new State Library Metro station and RMIT's City Campus in and around Swanston Street. It is under significant change due to the construction of the station and an opportunity exists to develop new streetscapes as an outcome of this development. In particular, there is an opportunity to develop new public open space along sections of Franklin Street.

Any development along Franklin Street should reflect the history and knowledge of Aboriginal culture. Cultural walks already exist within this street, and the street links important Aboriginal historical sites at QVM, the old Melbourne Gaol and the monument to Tunnahminnerwait and Maulboyheenner. Therefore, there are significant opportunities to integrate Aboriginal storytelling and interpretive elements on Franklin Street. The elements could be engaging and teach the history, culture and practices of Aboriginal culture or offer interpretive design features.

Grattan Street

Grattan Street is a key east west corridor that connects the Royal Melbourne Hospital at the heart of the biomedical precinct with the University of Melbourne Parkville campus, University Square and the Lygon Street retail and cultural spine. In 2018 Grattan Street was closed between Royal Parade and Leicester Street for up to five years due to the development of the Parkville Station as part of the Melbourne Metro works. This temporary closure presents opportunities for innovation and rapid urban realm intervention.

Swanston Street (North)

Swanston Street North connects the Central City and RMIT University campus with the University of Melbourne and City North. The Swanston Street tram route is the busiest in the world, making Swanston Street a key public transport spine that travels through the heart of the Central City to connect with the Arts Precinct. Swanston Street also connects important open and community spaces, interfacing with Lincoln Square and Kathleen Syme Library and Community Centre.

There is an opportunity to extend the existing pedestrian spine of Swanston Street beyond the Hoddle Grid to re-imagine Swanston Street as a people-oriented connector street. By significantly reducing vehicle movement and car parking along Swanston Street, new space can be allocated to people and public transport movement. By widening footpaths and removing clutter, providing unencumbered continuous separated bike paths, increasing the tree canopy and greening the tram tracks, an improved urban realm is likely to result in improved ground floor activation in adjacent buildings.

Leicester/Barry Street

The northern portions of Barry Street and Leicester Street connect with Grattan Street and the future Parkville Metro Rail station. These streets offer direct connection with QVM via Therry and Queen Streets and are already considered key thoroughfares of pedestrian activity on market days.

The public realm works associated with the University Square Master Plan are under construction (in 2018) with staging of this project synchronising with Metro works. Through the Master Plan's implementation, both Barry and Leicester Streets will have increased pedestrian priority. This pedestrian prioritisation can be extended along the entire length of both streets; Barry Street is already being redesigned by City of Melbourne. There is long term opportunity for the University of Melbourne to coordinate its key thoroughfares with these streets and further activate the urban realm, especially as many of their buildings already exist on these streets.

As with Franklin Street, any development along Barry Street should reflect the history and knowledge of Aboriginal culture. Barry Street connects directly with the QVM burial site, and Billibellary's Walk currently runs to the University of Melbourne. There could be potential to expand upon this network.

Pelham Street

Pelham Street presents an opportunity to activate the district through test and engagement sites. It is 30 metres wide, has little through traffic, connects with multiple public squares, and offers one of the only strong east-to-west pedestrian connections between key destinations in MID City North. Pelham Street has also been identified in multiple City of Melbourne plans and strategies as a biodiversity corridor within MID City North.

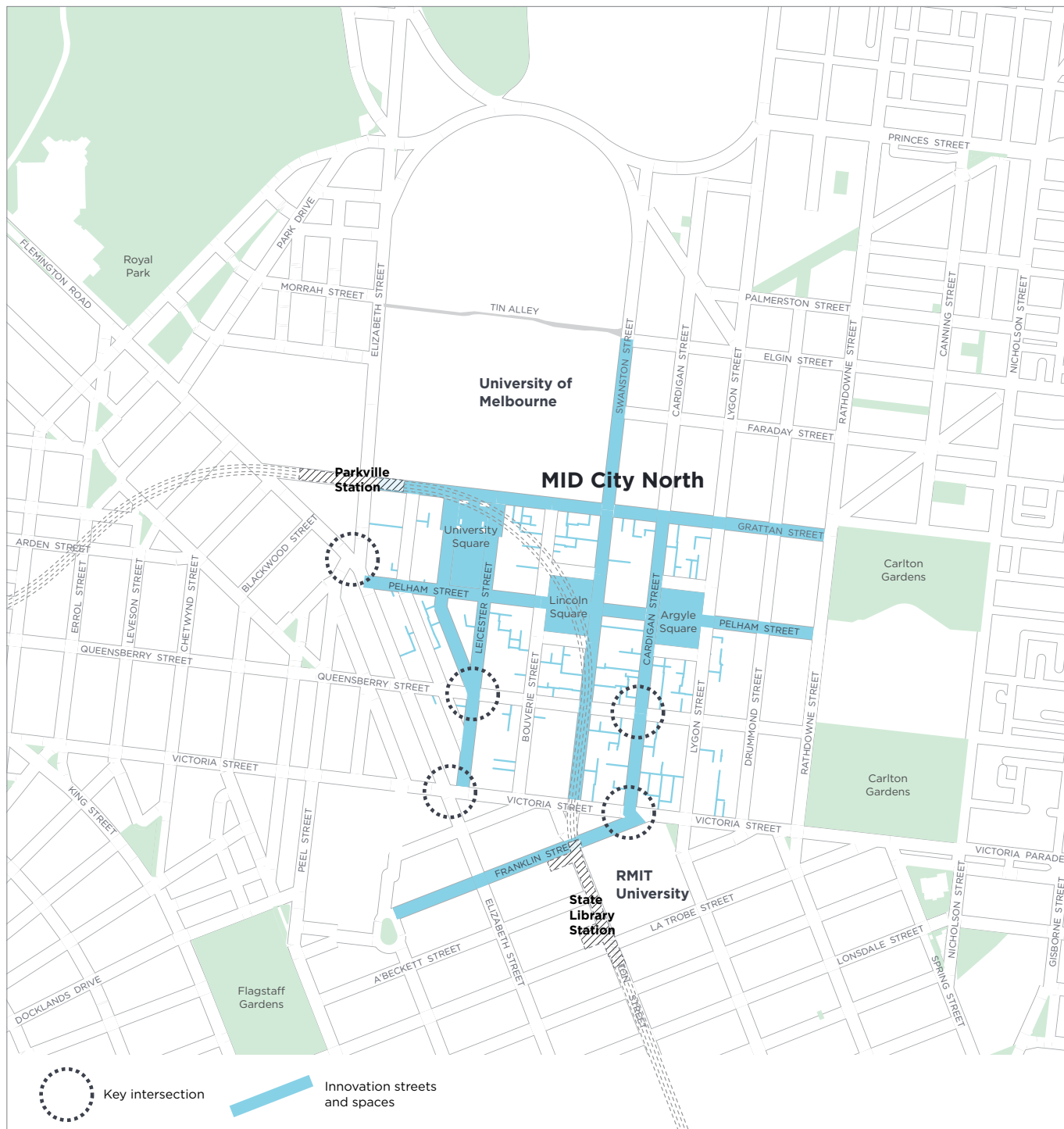


Figure 6: Key streets, intersections and places of MID City North.

MID City North current street character



Figure 7: MID City North streets – current typical street character.
3D image of Leicester Street

1

Many MID City North streets are wide, have low traffic volumes and existing traffic-calming measures or dead ends. There is also frequently middle-of-street parking and ample under-utilised space on, or at the margins of, these streets.



Leicester Street is 30m wide with extensive parking and vehicle prioritisation over pedestrians.

MID City North alternative street character

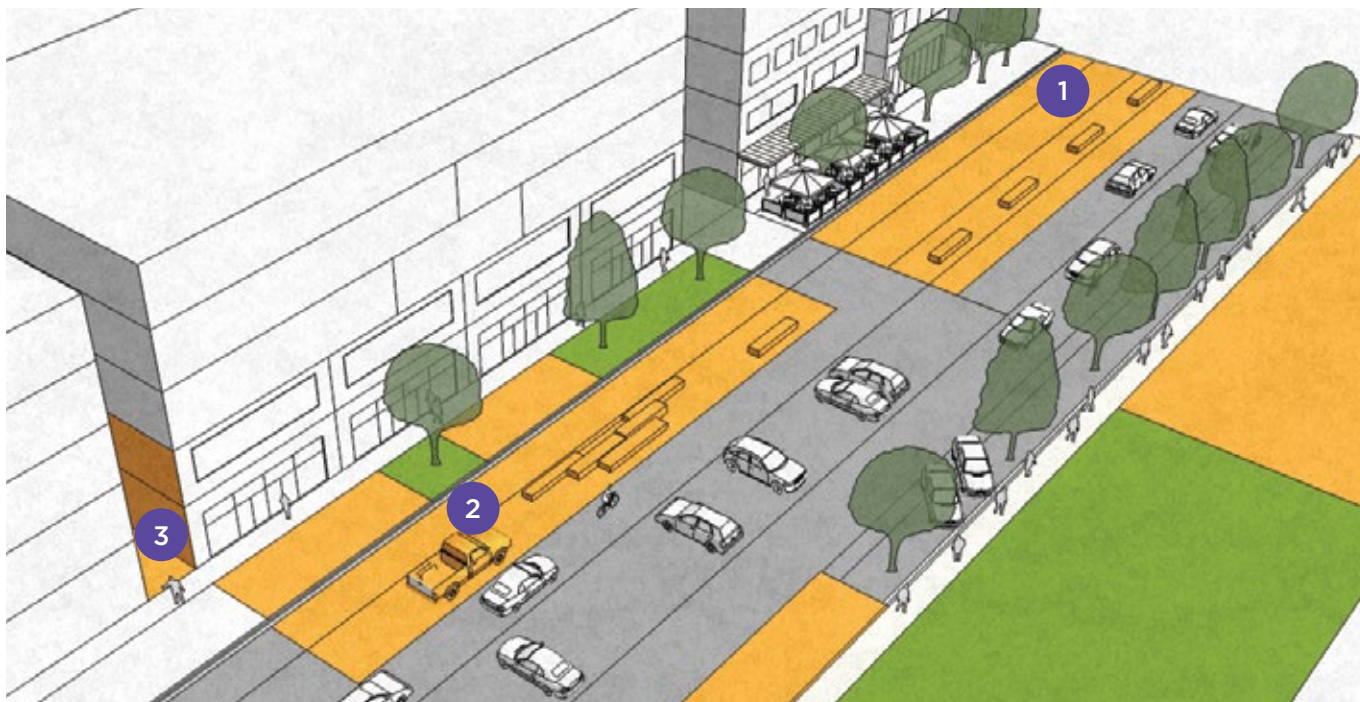
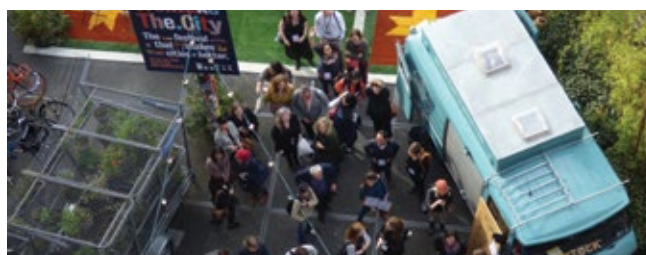


Figure 8: MID City North streets - alternative street character.



- 1 Image 12 - Parks and streets (temporarily closed) can accommodate activation events in a range of forms and scales.



- 2 Image 13 - Vehicles and trailers suitably modified are effective engagement and showcasing units.



- 3 Image 14 - Facades, street furniture, screens, etc. can be designed to be interactive enlightening, and provide creative stimuli.



Parks

MID City North is home to a number of important and historical parks and open spaces including Lincoln Square, University Square and Argyle Square. These parks were identified as potentially hosting test and engagement sites for creative and learning activities, prototyping and other community uses. The potential use of parks for temporary activation as innovation spaces is demonstrated by Argyle Square in Figure 9.

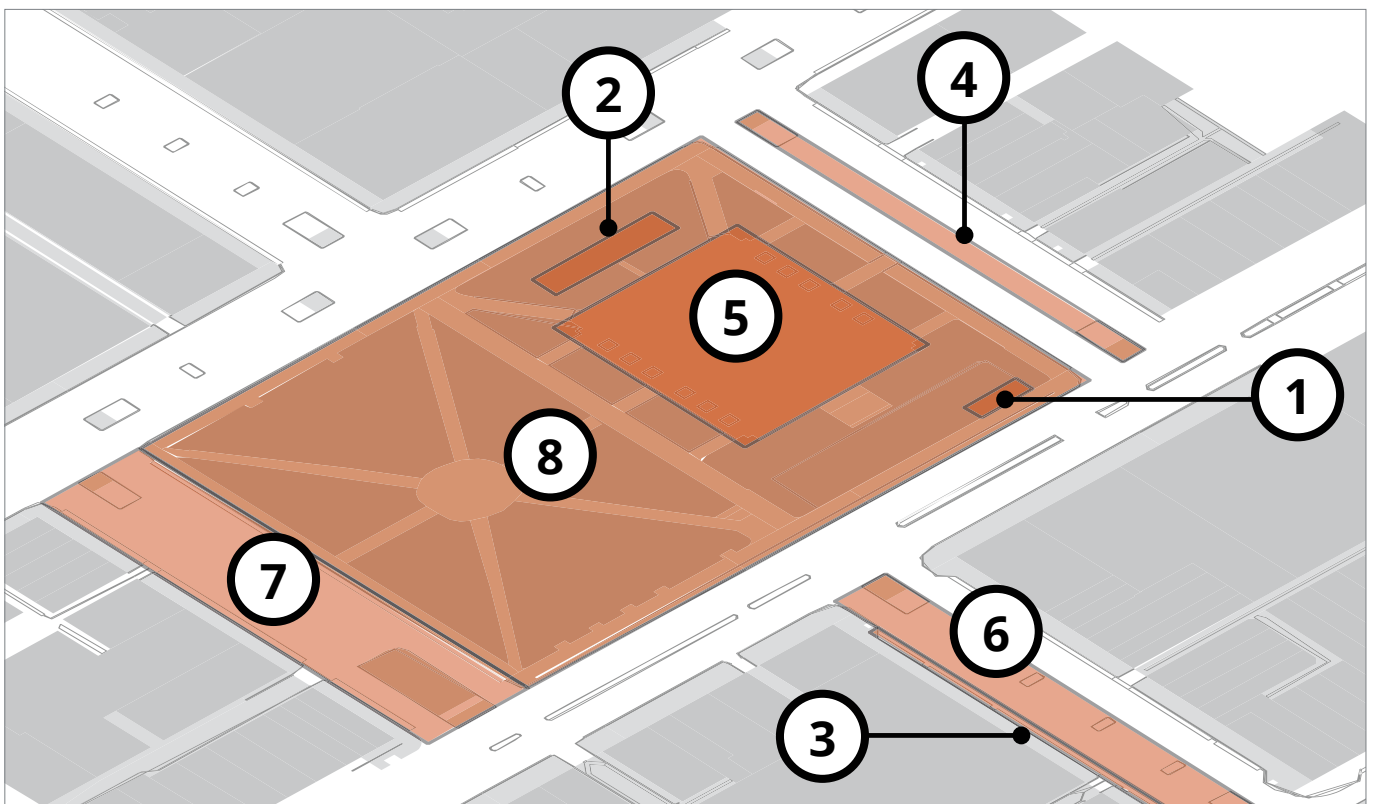


Figure 9: Argyle Square (Carlton) used as an example to highlight the diversity in scales of innovation spaces

Legend:

- 1. Small event or prototyping area (2.5 x 10m)
- 2. Disused area (6 x 28m)
- 3. Footpath widening (129 x 2.4m)
- 4. Median use (110 x 6m)
- 5. Median use and partial road closure (105 x 15m)
- 6. Existing plaza use (50 x 40m)
- 7. Full street with median closure (25 x 110m)
- 8. Entire square use

The planned major upgrades to these three parks are also opportunities for the City of Melbourne to be innovative in park infrastructure and engineering.

Laneways

MID City North is home to a network of laneways running through the heart of the district. While they are often not clear thoroughfares, many have the potential to offer increased connectivity from east to west. This network of laneways presents an opportunity to enhance people's navigation through MID City North by developing unique and innovative wayfinding techniques. There is also the potential to activate these spaces and re-interpret them as public space.

Innovation hubs

Innovation hubs are places that bring together industry, researchers, students and other district stakeholders to enable collaboration and knowledge-sharing, and to offer co-working, learning and other services to support innovation activities.

There is opportunity to establish such a hub to act as a “front door” to the district – providing a welcoming service to connect people with services and the innovation community. Boston's District Hall is an example of an innovation hub serving the city's innovation district. Centrally located within its innovation district, District Hall operates under a public-private partnership model to “connect, support, and strengthen innovators while expanding the reach, visibility, and benefits of Greater Boston's innovation economy” (Venture Café Foundation). A similarly co-sponsored hub could achieve the same outcomes for MID City North.

Innovation hubs can also be smaller, mobile and/or temporary. For MID City North, such hubs can be put in place either as an interim or supplementary offering to the establishment of an ongoing central of the type described above. The cluster of institutions and spaces in MID City North also present an opportunity to trial a distributed model of an innovation hub through public programming and activations that bring key stakeholders together to co-mingle and collaborate.

Planning controls

MID City North includes retailing, residential, education and health services areas. The planning controls that determine the type of activities that are permissible in areas within the district are zones, overlays and provisions. The zones that are in currently in effect in MID City North are:

- the Capital City Zone, which was recently expanded from the Central Business District to areas south of Grattan Street and west of Swanston Street
- a Mixed Use Zone south of Grattan Street and east of Swanston Street
- a Commercial Zone along Lygon Street and Elgin Street
- Public Park and Recreation Zones
- Residential Zones, particularly in the north-east of MID City North

An opportunity exists to revisit the existing land use and other planning controls to reflect the vision of the MID partnership. Recently devised zones in other parts of Melbourne have demonstrated the appetite of the State Government to apply tailored zones to innovation precincts, and an exploration of all planning control options potentially available to the City of Melbourne is prudent.



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5. BUILDING ON OPPORTUNITIES IN 2020

The opportunities found through district analysis described in section 2 have informed the development of five overarching urban realm objectives and a number of key next steps that align with City of Melbourne's role in activating an innovation district (as identified on page 6), and the vision and guiding principles of the MID partnership.

Urban Realm Objectives

The City of Melbourne will work with MID partners, State Government and other partners to deliver on five key objectives in MID City North.

- 1. Enhance the amenity and function of the district's built environment, streetscapes and open spaces to make a great place for people.**
This objective aims to create places that attract people to live, work and play through a coordinated and holistic approach to placemaking.
- 2. Use the urban realm as a testbed for City of Melbourne innovation in infrastructure and environmental management.**
This objective aims to make MID City North an exemplar in urban infrastructure and environmental management by utilising the most advanced design and technology, and new processes, to support operational efficiency, service excellence and a resilient thriving urban ecology.
- 3. Facilitate the use of the urban realm by businesses and researchers for testing, demonstrating and engaging new ideas.**
This objective aims to adapt, manage and regulate urban spaces to enable public demonstration of new technologies, applied research, and business ideas to inspire and engage, build literacy, and stimulate economic growth.
- 4. Influence design and delivery of external infrastructure and urban realm projects.**
This objective aims to ensure that there is alignment, integration and consistency between the MID vision and principles and the major infrastructure and urban realm projects delivered by RMIT University, the University of Melbourne, the State Government and its major infrastructure bodies, and private developers.
- 5. Improve transport, mobility and connectivity.**
This objective aims to create a district that is hyper-connected and accessible via all modes of transport throughout the area and to other areas of Melbourne.

Next steps

Following community and key stakeholder consultation, a number of key next steps have been identified to advance the urban realm in City North.

- **Refresh of the City North Structure Plan (2012).**
An update to the City North Structure Plan will maximise the potential of MID City North and outline a vision for this area as a great place for all people.
- **Identify and implement appropriate planning controls.**
The City of Melbourne is reviewing the current planning provisions for the MID to better support land use and built form outcomes that align with the vision for the area to support innovation.
- **Respond to major State Government projects and commence design on Franklin and Grattan Streets.**
Prioritise design on Franklin and Grattan Streets to realise some of the principles of the MID partnership and mitigate and harness disruption caused by Melbourne Metro.
- **Continue to work with partners to activate MID City North via test sites and other MID initiatives and programming.**
Continue to work with MID partners and other key stakeholders to activate MID City North via the Open Door initiative, test sites, Melbourne Knowledge Week and other programming.

Prototype Street

Prototype Street is run as an activation in City of Melbourne's Melbourne Knowledge Week as a pilot for the test sites program in MID City North.

The test sites program will see the establishment of designated activation spaces for prototyping and testing new technologies, business models and citizen experiences within the urban realm across our municipality.

In 2019, Prototype Street transformed Blackwood Street in North Melbourne into an experimental space where Melburnians tackled the opportunities, urgent challenges and everyday issues facing our future.

Exhibitions and activations throughout the week included an autonomous bus offering passengers a taste of a driverless future, a virtual reality biking experience, an artificially intelligent see-saw designed to have a conversation with it's users, a tiny house incorporating smart design principles, a 'Cooling the City' experiment using temperature sensors and the internet of things.



6. APPENDIX

Image and graphic credits

Image 1. Aspect Studios, *Mobile Innovation Hubs*, 2018. Pg10

Image 2. Electroland, *The Enteractive*, 2006. Pg11

Image 9. Stephanie Secrest/Kenneth Rainin Foundation,
Block by Block by Marissa Farnsworth, 2015. Pg22

Image 10. Better Bankside, *Urban Orchard*, 2016. Pg22

Figure 7. Aspect Studios, Leicester Street, 2018. Pg26

Figure 8. Aspect Studios, Leicester Street, 2018. Pg27

Image 12. Andrew Curtis, *Laugh Out Loud 1*, 2016. Pg27

Image 13. Project for Public Spaces,
Placemaking Week, 2017. Pg27

Image 14. Electroland, *The Google Touchwall*, 2012. Pg27

Figure 9. Aspect Studios, *Argyle Square*, 2018. Pg29

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REFERENCES

Brookings Institute, *Innovation Districts*, accessed 18 October 2018: <https://www.brookings.edu/innovation-districts>

City of Melbourne, 2016, *Census of Land Use and Employment*

City of Melbourne, 2016, *Census of Land Use and Employment*

City of Melbourne, 2016, *Census of Land Use and Employment*

City of Melbourne, 2016, *Census of Land Use and Employment*

City of Melbourne, 2018, *On-Street Parking Bay Data*, Open Data Platform

City of Melbourne, 2014, *Walking Plan 2014-17*, City of Melbourne website, accessed 18 October 2018: <https://www.melbourne.vic.gov.au/SiteCollectionDocuments/walking-plan-2014-17.pdf>

The State of Victoria Department of Environment, Land, Water Use and Planning, 2016, *Victoria in Future 2016: Population and household projections to 2051*, Melbourne, viewed 18 October 2018: https://www.planning.vic.gov.au/__data/assets/pdf_file/0014/14036/Victoria-in-Future-2016-FINAL-web.pdf

The State of Victoria Department of Environment, Land, Water Use and Planning, 2018, *The Commercial 3 Zone and Schedule*, accessed 18 October 2018: https://www.planning.vic.gov.au/__data/assets/pdf_file/0020/391142/Commercial-3-Zone-and-Schedule.pdf

Venture Café Foundation, *District Hall: Our history*, accessed 18 October 2018: <https://districthallboston.org/our-history>

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