PLACES FOR PEOPLE

2015

ESTABLISHING A PLATFORM OF EVIDENCE TO SHAPE MELBOURNE'S FUTURE







A CITY FOR PEOPLE

We support our community members - whatever their age, sex, physical ability, socio-economic status, sexuality or cultural background - to feel like they can be active, healthy and valued. We plan and design for our growing city, including safe, healthy and high-quality public spaces.

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City strategy and place

October, 2015

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1. FOREWORD

Places for People 2015 is a longitudinal research study that investigates the urban conditions of central Melbourne. This is the third edition of the study, which was originally published in 1994 and again in 2005. Places for People 2015 continues to track the built environment and public life of our city and for the first time, expands the analysis to provide a comprehensive and integrated understanding of how the city performs at a local, everyday level for people. Places for People 2015 challenges our thinking, poses new questions, and seeks to revitalise our approach to planning and design so that Melbourne can continue its growth and development as a resilient and accessible city.

Over the last three decades, City of Melbourne strategies and programs have worked towards creating a city that attracts people. These have been profoundly successful in reversing the exodus of residents, workers and shoppers to the suburbs, which became evident by the 1980s when the centre of Melbourne was abandoned after work hours. Since then, Melbourne's turnaround and accelerated growth has created new challenges relating to the quality of life the city offers. How can Melbourne be sustained and improved while population densities continue to rise, and relatively homogenous residential tower and podium development models dominate?

While the traditional survey methods of Places for People capture the number of people attracted to the city's public spaces, they are unable to reveal the quality of life for locals or visitors. To address this limitation, Places for People 2015 takes an expanded approach to investigating Melbourne. It builds on established thinking that has guided city planning and development since the 1980s towards the creation of a vibrant city, but importantly, introduces a new methodology that enables some of these more complex elements and nuanced relationships within the city to emerge. Above all, it is grounded in best-practice urban design and planning for achieving realistic, democratic and sustainable outcomes.

Quality of life in the central city is significantly shaped by the ease of access to civic and commercial services for residents, workers and visitors. In addition to maintaining the integrity of the longitudinal study, Places for People 2015 investigates the city from a user and performance perspective. It asks to what extent do different parts of our city serve our daily needs? Central Melbourne's current liveability is explored as it is experienced in everyday terms. It sets out a series of evidence-based recommendations to provide a platform to further develop performance-based planning and design. Potential for enabling a city that performs for all its people is mapped, drawing out some of the complex correlations and interdependencies involved in shaping the city.

In generating and analysing compelling compounds of data, Places for People 2015 applies an integrated and dynamic lens that allows the urban specialist as well as a general audience to readily comprehend the Melbourne condition. This study presents a clear framework for future recommendations to improve the quality of life in our city, and establishes a comprehensive evidence base to inform future-oriented thinking, planning and design.

2. BACKGROUND

The places for people study

The premise of Places for People is that people are drawn to places of high quality design that feature attractions and other people. A growing number of people over time is an indicator of success. Since 1994, Places for People has collected information each decade to produce longitudinal data to monitor use and qualities of urban space.

Places for People measures particular urban conditions over time, documenting how the city is changing. The first Places for People (1994) focused on attracting people back to the city after a long-term exodus of residents, workers and shoppers to the expanding suburbs, which was compounded by the economic recession at this time. A decade after this, Places for People 2004 documented the city's revitalisation as it redefined its regional and global identity and functions, attracting people back through residential, commercial and retail development and with regional attractions.

Places for People has traditionally been a study designed to measure the extraordinary rather than the ordinary, the special rather than the everyday, and the regional rather than the local. Urban surveys have concentrated on prominent streets and public spaces in the retail core, followed by the commercial district and Southgate and later extended to the growth areas of Southbank and Docklands.

While it remains valid to measure and monitor the city's public environment and public life, the challenge of

a declining population has now reversed, with substantial population growth projected to continue. Measuring success simply on the number of people who live in, work in and visit the municipality is no longer enough. Ensuring that Melbourne remains a functional city that performs for all is now vital.

A different issue demands a different method of urban investigation. The next section outlines how Places for People 2015 has adapted its investigation to generate meaningful and current data to guide the city's future growth and development.

Places for People 2015 expands beyond the traditional focus on the public realm and considers how the city has rapidly changed in its urban form and structure, and the impact these changes have on the daily lives of Melbourne's people. It aims to provide a 'reality check' of some aspects of the city's functionality and to generate a fresh baseline that reflects actual conditions and how they inter-relate.

A review of international best practice and experience gained from previous Places for People studies, highlighted the need to research a broader range of urban components in order to understand the conditions that shape Melbourne. The interdependencies of these components, which influence the intricate complexities of daily life, are examined in Places for People 2015. For example: urban structure influences movement and connectivity; urban form accommodates the many uses characteristic of cities; land uses embed activity generators into the city's fabric and generate economic, cultural and social networks; and population density is vital for viable economies and services. Places for People 2015 explores the correlations between these fundamental

urban components to identify the conditions that enrich or compromise city living.

Results show that urban structure and the relationship of buildings to open space determines the proximity of and accessibility to local land uses. A permeable urban structure (with small blocks) results in larger walking catchments which cultivates greater walkability. Fine grain, smaller scale buildings enable a greater number of land uses and give purpose for walking and alleviating car use. Consolidating land parcels stifle the accrued benefits of proximity and connectivity. Buildings that better knit themselves into the wider urban fabrics by integrating population density with mixed land-use and permeability generate better holistic outcomes. It is apparent that private development has rapidly changed the urban structure with an unfavourable impact on land use, local movement patterns and how communities access the city.

In addition to assessing the impact of built form on land use, urban structure and walkability, Places for People 2015 introduces an investigation to build understanding of local living. It questions to what extent does the city perform for its people in terms of servicing everyday needs? What potential exists for optimising better outcomes in health, the environment and resilient local economies? The local neighbourhood concept requires compact, walkable, highly connected areas where essential everyday needs are on your doorstep and the people, knowledge, skills and culture you want to connect with are just a stroll or tram ride away. Neighbourhoods do not necessarily exist on maps; they exist in the minds of the individual city user. However, the functionality of areas in terms of their provision of services, their nature and density, can be assessed through a series of survey points and related catchments. This is the approach Places for People 2015 takes for its study area in the central city, Docklands and Southbank. The longitudinal data is summarised in chapter five, the expanded investigation synthesised in chapter six.

Places for People 2015 builds on past successes and maps a series of conditions to identify potential for improvement. From these, a set of new key recommendations were developed. In considering urban design as a platform for integration, the recommendations reflect the intricate interdependencies that underpin the development and adaptability of cities. They propose a suite of actions and considerations linking the spheres of policy, planning and performance-based assessment.

3. PREMISE AND APPROACH

This section outlines the project premise and details the urban components researched to test the premise at a district scale according to the traditional Places for People method, as well as at a local scale by applying a newly defined method

The scope and complexity of Places for People has expanded to investigate those urban conditions considered essential to the quality of the public realm as well as the quality of our daily lives.

While the project premise is founded on international best practice, Places for People research was tailored to capture the Melbourne condition relating to how the city has changed and how it currently performs.

Introduction

As with other cities across the world, Melbourne's city provides a centralised and common geograghy of exchange, offering the promise of a good life with opportunities and choice. Cities like Melbourne exist to generate broad forms of wealth for all people. They do this by facilitating the exchange of culture, commerce, knowledge, ideas and skills, fostered by the proximity and connectivity of its component parts: the most vital being people, buildings, land uses, movement networks, and open spaces.

Places for People 2015 expands the traditional investigation into public life and public places to test the established premise that mixed used neighbourhoods are the foundation of a sustainable city, as a way of life and also as an organising principle.

A series of questions guided the framing of the Places for People 2015 research:

- Which areas of the city are well used? Do we know why?
- · To what degree has the city changed?
- What, if any, impact do these changes have on the everyday life of its citizens?
- Does the city serve the everyday needs of its people?
 Where and how?
- What is the nature of the relationship between the vital urban components?
- What combination and configurations of urban components generate compact walkable and highly connected areas, which enable more localised living?
- How can the City of Melbourne guide sustainable growth and enable a basic quality of life for its locals and visitors?

Informed by these questions, Places for People 2015 has two principal methodologies:

- **District level** (Fig. 1) research over time, which incorporates the traditional Places for People survey methods adopted in 1994, 2005 and 2015.
 - Principal findings are outlined in chapter five.
- Local level (Fig. 2) research, which is applied for the
 first time in recognition that some issues do not reveal
 themselves at a district level, nor at an individual
 building scale.

Principal findings are outlined in chapter six.

The entire data is scheduled to be published on the City of Melbourne's digital platform, in the coming months.

Research scales

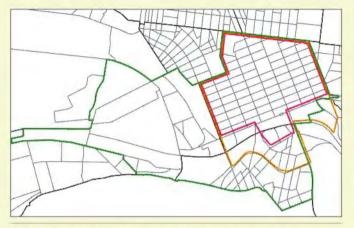


FIG. 1. District level research (refer chapter five).

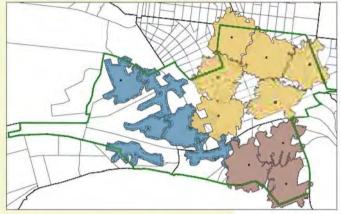


FIG. 2. Local level research (refer chapters six and seven).

DISTRICT LEVEL

HOW THE CITY
IS CHANGING OVER
TIME AND ITS CURRENT

LOCAL LEVEL

Data collected every 10 years from one of two baseline date

- 1993 (1st Places for People).
- 1985 (1985 Strategy Plan; foundation of Council's urban design program).

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District level data for:

- · Central City.
- · Southbank.
- · Docklands.

Research focus is the trends in and changes to the number of people attracted to public space, and the quality of public space, over time.

Single-layered parameters for the quantum of people and quality of public space and built form. TIME, AND ITS CURRENT FORMSAND FUNCTIONS

THE MELBOURNE

CONDITION FROM

DISTRICT TO

LOCAL SCALES

THE NUMBER OF PEOPLE IN THE CITY AND THE QUALITY OF THEIR LIVES AS LOCALS OR VISITORS

THE DISTRICT LEVEL

DATA HAS GUIDED

THE LOCAL SCALE

RESEARCH ACCORDING TO
LIVEABILITY INDICATORS

Data collected for the first time in 2013-15 for a new baseline.

Local level data for 15 five minute walking catchments in:

- · Central City.
- · Southbank.
- · Docklands.

Research focus is the accessibility to everyday needs, and how the urban components facilitate that.

Complex multilayered parameters for liveability, considered together rather than separately to understand interrelationships.

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Research evolution: district level

The research direction of the 2015 Places for People study was refined through a review of literature to identify relevant urban trends, their impacts, and best practice for addressing them. Six urban components or "lenses" were identified as being significant for understanding Melbourne's performance as a liveable, productive and resilient place for people, both through time and for the contemporary city (Fig. 3):

- Population
- Urban Structure
- · Built Form
- Land Uses
- Movement
- · Public Space.

These lenses played a critical role in further defining and guiding the research, particularly in the analysis of data collected through the traditional methods of the Places for People study at the district level, to provide a sophisticated understanding of performance that goes beyond the public environment to consider other components of the city that shape everyday life.

In the formative period of research development, these urban lenses were defined in the following way:

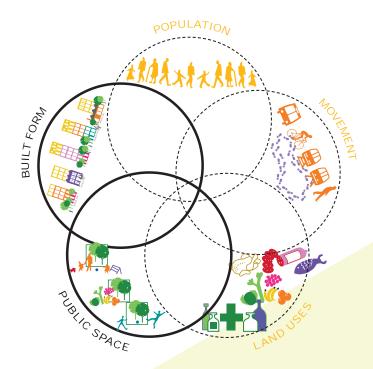


FIG. 3. The district level research lenses.

Population

What is It?

The focus of the Places for People research is Melbourne's communities. These locals may be residents, workers, students and frequent visitors. Local communities are those existing groups of people connected by place and/or social, cultural and economic networks of exchange.

Why is it Important?

Places for People has always been a study about the city's human dimension. Cities only exist because of people and so our urban environments should be assessed to consider population catchments and their needs. The number of residents, workers and daily visitors (including students) allows us to estimate the likely quantum and type of city users throughout the day and week, and the nature of their needs when in the city.

Urban Structure

What is It?

Urban structure is the spatial arrangement of a city's primary organising components: the street blocks, street network, land parcels, and natural physical features such as rivers, floodplains and topography. Other aspects of the city, including the built form and land uses, contribute to and influence a city's urban structure.

Why is it Important?

An investigation of urban structure is critical to understanding a city spatially. The scale and arrangement of a city's urban structure will fundamentally influence the scale and arrangement of buildings, land uses and public space, and so ultimately determine how walkable and legible a city is.

Built Form

What is It?

Built form is the physical shape and scale of building volume in terms of height, width and depth, and how the building is articulated in regards to architectural details. The 'skyline' created by a group of buildings is also considered to be built form, but this is not the focus of Places for People. Rather, the relationship between buildings and public space, and how they shape people's experiences of the city, is the focus of research.

Why is it Important?

Built form has a significant influence on people's everyday experiences in public space. Where the built form is small-scale, rich in land uses and details, and presents many independent entrances to public space, it offers more variety of places to attract people. A range of different land uses also provide opportunities for social and economic exchange, and a purpose for walking. When buildings are designed to accommodate the car their form is profoundly different: large scale with few, if any, pedestrian entrances and a homogenous land use. The building presents a negative interface with the street that is unable to attract or sustain city life.

Land Uses

What is It?

Land uses are those activities that occur inside buildings.

Why is it Important?

The variety and type of land uses are considered fundamental to giving purpose to walking, and have a critical impact on providing access to everyday needs. Of particular importance for creating locally-based opportunities for exchange and reciprocation, are those primary land uses that meet daily needs and generate production¹ (as opposed to consumption).

Public Space

What is It?

Public space is communal social space that is accessible to all people. It may include:

- Streets and malls (e.g. Bourke Street and the Mall)
- Laneways and alleys (e.g. Hosier Lane)
- Urban squares and plazas (e.g. City Square)
- Parks and gardens (e.g. Fitzroy Gardens)
- River ways and promenades (e.g. Southgate).

Why is it Important?

Public space offers outdoor settings for city life beyond the privatised realm of buildings (Wall & Waterman 2010:52). The design and activities within public space are generally interpreted by the community as expressing a city or district's culture, values or history. Promenades, streets and lanes function to channel pedestrians but also provide places to pause where there are seats. Squares, parks and gardens offer communal places for people to socialise or find respite, exercise or to rest. Where public space features planting, it may function as ecological space and provide city dwellers and workers with a connection to nature. Public spaces associated with a vast range of land uses or attractions provide destinations for visitors and locals. Public places designed for the car tend to devalue the space for people. This has on-going implications, as people go where people are.

Movement

What is It?

Places for People focuses on walking as the primary mode of transport in the city. The traditional study considered the design of public space, its built form edges and the connectivity of the pedestrian network as principal determinants for walkability. Places for People 2015 also considers the presence of land uses to provide a purpose for walking, and believes this condition is fundamental to determining if the city is walkable.

Why is it Important?

The degree of walkability is critical for determining a district's ability to attract and support public life in the street, as well as its environmental and economic resilience in facilitating walking rather than car dependency.

¹ Production is the degree to which these land uses contribute to productive networks of exchange, and are generally the antithesis to land uses that generate consumption (e.g. retail).

Research evolution: local level

As the Places for People research developed, it became clear that some issues do not reveal themselves at a district level, nor at an individual building scale.

The research developed a method for investigating the city at the local level, by refining the urban lenses (outlined on the previous page) to examine the Melbourne condition for those urban components considered as shaping the 'essence' of the city and influencing its success in meeting essential needs and expectations of city users. The methodology's primary concern was to capture the integrated nature of the urban components at a local level. Cities are not just buildings, roads, people or land uses in isolation. They are an assemblage of all these things, comprised of interdependencies and flows between each that together determine local neighbourhoods and the quality of people's lives.

The refined series of lenses that are outlined below include (Fig. 4-5):

- Population density
- Urban structure and built form
- Local land uses
- Local movement
- · External space.

For each lens, the premise has been polished, the investigation adjusted, with the aim to generate a sharper snapshot of the Melbourne condition:

Population Density

What is It?

Population density is the number of residents and workers that occupy a research catchment. In Places for People 2015, each research catchment represents a 5-minute walk, determined by the true walkability to 500m from its centre. Using this spatial measure, the area and shape of each research catchment varies according to the permeability and granularity of the urban structure.

The ratio of residential to employment populations provides an understanding of who inhabits the catchment at different times of the day, and by what proportions.

Why is it Important?

Population density as a standard of people per hectare has been evaluated to take into account more complex inter-relationships such as accessibility, car use, parking, open space, and distribution of facilities.

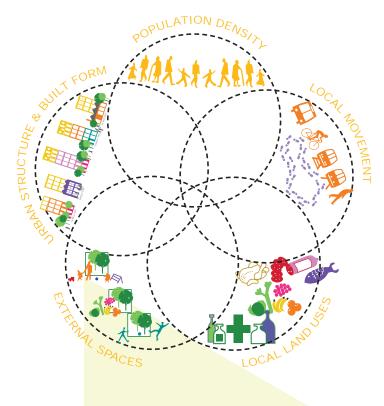


FIG. 3. The local level research lenses.

Urban Structure and Built Form

What is It?

Urban structure is the spatial arrangement of a city's primary organising components: the blocks, street network, land parcels, and natural physical features such as rivers, floodplains and topography. The built form and land uses contribute to and influence the city's urban structure.

Why is it Important?

The urban structure shapes how people live, connect and draw wealth from local areas. The scale and arrangement of a city's urban structure influences the scale and granularity of the buildings and connectivity between the buildings, their uses, and open spaces, public and private.

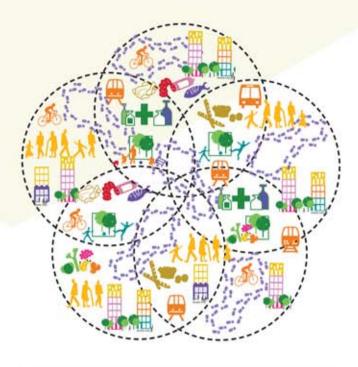


FIG. 5. The local level research lenses were analysed together rather than discretely, for a more informed understanding of how urban components interrelate.

Local Land Uses

What is It?

Individual land parcels influence local outcomes according to the type of activity they house. Land uses give purpose to local trips, fostering economic exchange, social interaction, sense of community and connection to place, determining the ability of people to locally meet their everyday needs.

Why is it Important?

Some land uses have a larger bearing on the quality of local liveability compared with others. People have a need to access goods and services essential to their everyday lives (although varying from person to person, there are land uses in common to all). Places deficient in the essential everyday land uses necessitate travel beyond the immediate area, imposing a range of long-recognised costs onto the individual and society: less free time, greater dislocation from local neighbourhoods, more motorised travel and the environmental and health implications that follow, to name just a few. These costs profoundly diminish the quality of life.

External Spaces

What is It?

Typically, external space is referred to as 'open space'. However to avoid confusion with the City of Melbourne Open Space Strategy open space is referred to as external space. External space refers to those places at ground level that are open to the sky. External space that is publicly or privately owned and managed is considered, regardless of whether it is accessible to the public. This includes movement networks such as streets, civic spaces such as squares, green spaces like parks and gardens, outdoor sports facilities, children and teenager play areas, spiritual places, productive landscapes, amenity spaces such as courtyards, and undefined spaces including vacant land.

Why is it Important?

Through its design and uses, external space may reinforce a particular physical character or culture, offering places that are distinctive and meaningful to people. External space has value in providing communal venues for social exchange and physical exercise that benefit our physical and mental wellbeing. To meet such an important function for all people, it is essential that a diversity of external space types are accessible and evenly distributed. External space may be designed for the protection and rehabilitation of biodiversity and natural habitats, as well as assist in adapting urban areas to climate change, and mitigating the effects of the urban heat island effect.

Local Movement

What is It?

Local movement considers active modes of transport including walking, cycling as well as public transport to access everyday needs, including work, school and leisure.

Why is it Important?

Compact, mix use local areas with highly connected streets that support a variety of active modes are considered to provide multiple benefits. Walkable proximity supports a range of tangible, and long-proven social, economic and environmental benefits including: the enabling of propinquity (the physical and psychological proximity between people) and more physical exercise, helping to reduce obesity rates and associated health complications as well as pollution, carbon emissions and traffic congestion.

4. KEY RECOMMENDATIONS

This chapter presents the principal recommendations formulated in response to the research findings.

These evidence-based recommendations are intended as a starting point for a conversation with Melbourne's people, and to guide City of Melbourne's ongoing and future work.

Through studying the Melbourne condition we know the recommendations are practical and realistic and will support our city to continue its evolution as an exceptional place for its people.

An integrated toolkit

The release of Places for People data will generate a platform of evidence to shape Melbourne's future. This will be integrated into a toolkit that will facilitate collaboration and provide opportunities for a consistent yet nuanced context and performance-based approach to urban planning and design.

The research study introduces Liveability Indicators, which could be transformed into a guidance and monitoring tool for achieving integrated and sustainable local neighbourhoods. The optimisation of such Liveability Indicators provides scope and direction for future urban growth.

Develop urban structure guidelines that optimise compact relationships between people, buildings, open spaces, public transport nodes and local essential land uses, to establish walkable proximity between all components and to enable an appropriate distribution of density.

Investigate mechanisms to enable the provision of external space in private development to foster a permeable urban structure for greater local access and walkability.

Develop essential land use and local facilities guidelines based on existing and projected population catchments.

Establish development guidelines to foster a diversity of open space types, public, private and communal, for a range of demographic needs.

Explore incentivisation mechanisms to enable existing private and disused external spaces to become more functional to the evolving needs of the population, for example, for productive landscapes and children's play areas.



Develop design guidance that promotes buildings that are adaptable to changing land uses and scales of tenancy over time.

Investigate building typologies that support a greater diversity of land use, housing choice, open space provision and enhance connectivity with the surrounding urban context. Develop density guidance linked to public transport accessibility and minimising onsite car parking provision.

Review the car parking provision rates in the Melbourne Planning Scheme to reduce the amount of development area dedicated to car parking.

Ensure that City of Melbourne's transport policy is embedded in future development of the city.

Develop guidance to cultivate diverse land use arrangements to enable local living for current and future populations.

Investigate economic policy levers that support diverse types of small businesses to foster vibrant and resilient local economies.

5. KEY FINDINGS AT DISTRICT LEVEL

Chapter 5 presents the principal findings for the longitudinal data at a district scale. The data presented in this section has been largely generated from the traditional Places for People methods, first developed by Jan Gehl, and applied to Melbourne's inaugural study of 1993/4. The time range for this data is 1993-2013, while the dates for the secondary data range between the mid 1980s to 2010s, depending on data availability.

1. Research background

2. Urban form

Urban structure

Degree of change

3. People

Population

Public Life

4. Public space

Amount and distribution

Seats and paving

Compromised pedestrian network

Laneways

5. Built form

Towers

Facades

Building entrances

6. Land uses

Attractors

Basic services

Residential dwellings

Car parking

7. From district to local level

Research background

The City of Melbourne's Places for People initiative began in 1993, when Danish architect and urban design consultant, Professor Jan Gehl, was invited to Melbourne to help survey the municipality's public spaces and public life.

In partnership with the City of Melbourne, Professor Gehl explored issues and opportunities relating to public space, and collected data on the city's public life. This data was presented in Places for People: Melbourne City 1994, and set out recommendations to develop and improve Melbourne's public spaces.

In 2004 Professor Gehl returned to Melbourne to assist with the second study. Places for People 2004 compared progress against the 1994 recommendations. It extended the study to include major new public spaces established over the past decade. New issues affecting the quality and use of the public environment were identified and recommendations made for how they could be addressed.

Another decade on, Places for People 2015 replicates the established methodology to continue the longitudinal study. Some aspects of data collection have been extended and further developed to capture data in response to contemporary issues.

Places for People 2015 groups research for the first time according to specific urban components:

- Population
- Urban structure
- Built form
- · Land uses
- Movement
- Public space
- · Public life.

These components were identified through a review of Australian and international literature that considered urban trends and their impacts, and the principles and best practice for addressing them. They are considered critical to guiding Melbourne's growth towards a highly liveable, productive and resilient city for all people and communities.

Principal Year of Data Collection

DATA	1993	2004	2013
POPULATION			
Population			
Population Details (Demographics)			
Business Occupation Numbers			
URBAN STRUCTURE			
Street Network and Blocks over Time			
BUILT FORM			
Building Heights/Floor No.			
Building Age			
Building Entrances			
Building Tower Typologies			
Quality of Facades - Street Level			
Quality of Facades - Upper Level			
Heritage Registered Buildings			
Historic Buildings Incorporated into Redevelopment			
LAND USES			
Attractors (Local to Regional)			
Educational Institutions			
Land Uses - Selected Basic Services			
Principal Land Uses - Ground and Upper Storeys			
Residential Dwellings			
Retail Opening onto Public Space			
Premises Open at Night - Selected land Uses			
MOVEMENT			
Bicycle Network			
Bicycle Parking			
Car Parking			
Public Transport Network			
Street and Laneway Network			
Traffic volumes			

	400=		
con't	1993	2004	2013
PUBLIC SPACE			
Bluestone Paving			
Café Locations and Seats			
Footpath Capacity			
Grade Separations on Footpaths (Docklands + Southbank)			
Laneways, Arcades and Alleys - Locations			
Laneways, Arcades and Alleys - Functions			
Locations and Area (sqm) and/or Length (m)			
Microclimate			
Number of Events in Public Space			
Pedestrian Network			
Public Art			
Public Benches			
Solar Access			
Street Trees			
PUBLIC LIFE			
Public life - Pedestrian Numbers			
Public Life - Stationary Activities			
Public Life - Age and Gender			

FIG. 6. Places for People Data Collection over Time Refer to Appendix A for details regarding the data in this table.



FIG. 7. The Places for People study boundaries over time.

____ 1993 Study

Data Collected 1993-1994 Published 1994

____ 2005 Study

Data Collected 2004-2005 Published 2005

2015 Study
Data Collected 2013-2014
Published 2015





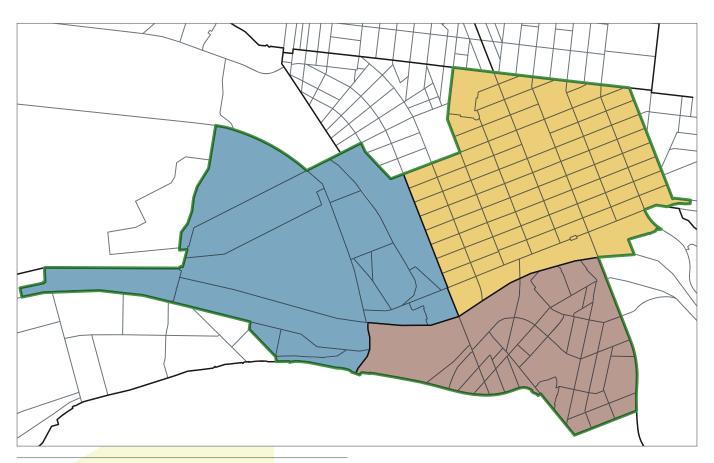


FIG. 8. The 2015 Places for People study has analysed data at a district level for the central city, Docklands and Southbank.

— 2015 Study Area

Central City

Docklands

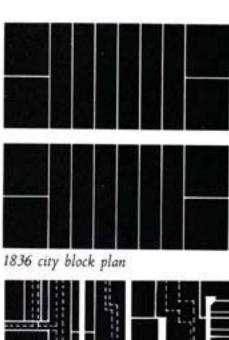
Southbank

Urban form: urban structure (mid 1980s-2010s)

Since the mid 1980s, the urban structure of the Places for People study area has changed to varying degrees in its three research districts. This is due to different scales and types of redevelopment. In the central city, wholesale redevelopment through the consolidation of multiple land parcels has led to the loss of historic fine-grained urban morphology and through block permeability (Fig. 9). For example, the demolition of historic buildings and loss of lanes to construct Melbourne Central in the late 1980s-1991 had a negative impact on urban structure. In the 2000s, a different approach was taken for the QV site: an impermeable former hospital site was redeveloped on newly subdivided land parcels with publicly accessible laneways, to establish through-block permeability (although with mixed success in design execution).

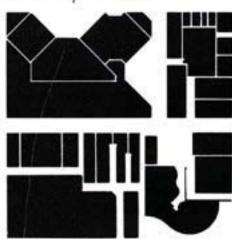
In Docklands, the area has been dramatically transformed from a disused port to a mix of residential, commercial and entertainment/leisure land uses. The pre-existing urban structure has changed from long single streets running east-west with the wharves and large-scale yards, to some additional short north-south streets and small blocks. Although it has become more intricate, the scale of the urban structure is larger than that in the central city, where a longer period of time has led to greater subdivision and the gradual emergence of lanes. In particular, Docklands features blocks occupied by a single building, whereas the central city has blocks of multiple smaller buildings. Bourke Street and Collins Street have been extended westward into Docklands to create a physical and symbolic link with the central city, but Docklands is still separated from the central city by rail and road infrastructure, and from Southbank and Fishermans Bend by the Yarra River. The water front also means that Docklands is divided into discrete areas, which has significant implications for connectivity and walkability.

The industrial and institutional past of Southbank is still evident in this district's urban structure. Large-scale land parcels are mostly situated within impermeable blocks, and surrounded by very wide streets that define a coarse and unwalkable urban structure, which contrasts to that in the central city. The Citylink tunnel development of the 1990s further reduced Southbank's urban structure, with superhuman road infrastructure creating an impenetrable barrier at the centre of the district around Sturt, Miles, Moore and Power streets.





19th century subdivision



20th century consolidation of land

FIG. 9. Change to the central city's urban structure over time. (SOURCE: City of Melbourne, 1987, Grids and Greenery).

1886



2015



FIG. 10. Change to the urban structure of Collins Streets has occurred through land parcel consolidation and wholesale redevelopment. This example at the eastern end of Collins Street (looking towards the Treasury Building) shows discrete land parcels with many buildings facing onto Collins Street (above), compared to redevelopment of Collins Place.

(SOURCES: above - Murray, J and McIntosh, P, no date, The Streets of Melbourne From Early Photographs; below - City of Melbourne, 2015).

Urban form: degree of change (mid 1980s-2010s)

The City of Melbourne has experienced profound change in its built form since 1985. In a single generation, almost half (48%) of sites in the Places for People study area have been redeveloped (Fig. 11).

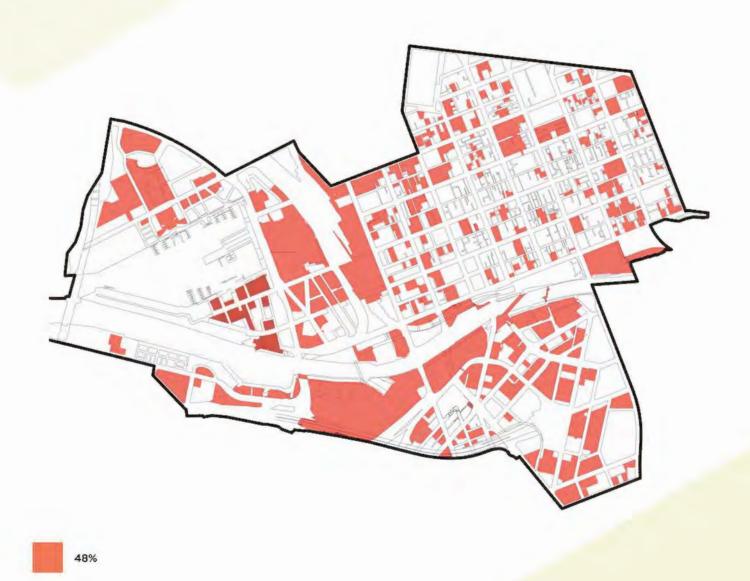


FIG. 11. Sites that have been redeveloped 1985-2012.

1980s



2010s



FIG. 12. These historic and contemporary views of Southbank show the significant change to the area since the 1980s.

(SOURCES: above - James Flood-Harold Paynting Charity Trust, 1985, Melbourne Celebrates 150th Anniversary: Souvenir Portfolio of Melbourne; below - Fedele, A, November 2013, Southbank, Melbourne's iconic waterfront location, continues its skyscraper trend with the approval of a 193-metre residential tower, retrieved 2015 from https://sourceable.net/new-tower-affirms-southbank-melbourne-as-a-skyscraper-magnet/#).

People: population (mid 1980s-2010s)

Residents

 (Places for People 2015 Study Area)

 1996
 4,334

 2006
 27,690

 2011
 37,123

 1996-2006
 539% increase

 2006-2011
 34% increase

 1996-2011
 757% increase

Workers

(Places for People 2015 Study Area)

1997 176,462 2004 219,172 Early 2010s 301,454 1997-2004 24% increase 2004-2012 38% increase 1997-2012 71% increase

Ratio of Workers to Residents

(Places for People 2015 Study Area)

The relationship of the number of workers to residents

	Study Area	Central City	Docklands	Southbank
Mid 1990s	40.7	-	-	-
Mid 2000s	7.9	12.4	1.9	3.5
2012	8.1	11.0	6.6	3.8

Students (Aged 15 Years+)

(Weekday, Melbourne Municipality)

 2004
 64,000

 2011
 82,000

 2004-2011
 28% increase

Daily Visitors

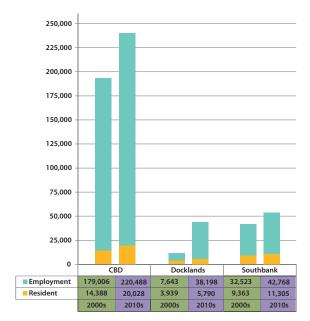
(Weekday, Melbourne Municipality)

 2004
 276,000

 2011
 270,000

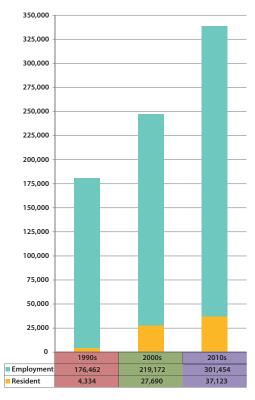
 2004-2011
 2% fall

By district in the study area



Residents and Workers

Whole study area



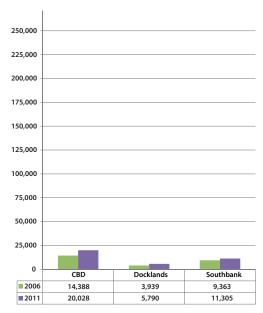
Residents and Workers

Observations

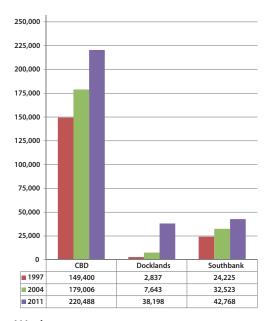
While the recent emergence of Docklands and Southbank as residential and business areas is well documented, and evident via an expanding skyline, the central city continues to hold the majority of total population (workers and residents) within the Places for People study area.

Workers have historically formed the majority of total population in central Melbourne, and in the 2010s continue to do so in each of the study area subdistricts. Increases in residents in the study area, have not matched the growth in residential dwellings (Fig. 13 and pp.70-71).

Since the mid 2000s the central city, Docklands and Southbank have all recorded growth in both worker and residential populations. Within the central city, the residential population recorded a higher percentage increase than for workers: 40% and 23% respectively. In Southbank and Docklands between the mid 2000s and 2010s, the percentage increase observed for workers outpaced that of residents. Docklands experienced a 400% increase in workers, triggered by prominent corporate employers relocating their offices to this area.







Workers

FIG. 13. Population change for the study area over time, from the Australian Bureau of Statistics and City of Melbourne's Census of Land Use and Employment.

People: public life (1993-2013)

Pedestrians

(Original 1993 Places for People Survey Sites)

The following growth has been observed in pedestrian numbers since the first Places for People study:

(190,772 - 249,492)

(194,764 - 266,838)

D = Day E = Evening

WEEKDAY (1993-2013)

+31%

Daytime (10:00-18:00)

1993-2013

Highest Volumes	Recorded	
1993	39,076	Bourke St. Mall (1D)
2004	64,932	Bourke St. Mall (1D)
2013	48 792	Bourke St Mall (1D)

Lowest Volumes Recorded

1993	10,144	Collins St. (9D)
2004	11,058	Russell St. (9D)
2013	9,042	Russell St (9D)

Evening (18:00 -00:00)

1333 2013 13070 (43,000 100,100	1993-2013	+136%	(45,86 <mark>8 - 108,168</mark>)
---------------------------------	-----------	-------	-----------------------------------

Highest Volumes Recorded

1993	10,512	Bourke St. E Mall (1E)
2004	17,328	Swanston St. S (1E)
2013	24,684	Swanston St. S (1E)

Lowest Volumes Recorded

1993	2,040	Collins	St. (9E)
2004	4,512	Collins	St. (9E)
2013	3,870	Russell	St. (9E)

+37%

SATURDAY (1993-2013)

Daytime (10:00-18:00)

1993-2013

Highest Volui	mes Recorded	
1993	62,732	Bourke St. Mall (1D)
2004	73,512	Bourke St. Mall (1D)
2013	69 102	Bourke St Mall (1D)

Lowest Volumes Recorded

1993	3,108	Collins St. (9D)
2004	5,958	Collins St. (9D)
2013	8.178	Russell St. (9D)

Evening (18:00 -00:00)

1993-2013	+92%	(88, 020 - 169,236)
Highest Volumes	Recorded	

 1993
 17,428
 Bourke St. E (1D)

 2004
 19,074
 Swanston St. S (1D)

 2013
 33.786
 Swanston St. S (1D)

Lowest Volumes Recorded

1993	2,492	Swanston St. N (9D)
2004	3,312	Collins St. (9D)
2013	6,030	Collins St. (9D)

Pedestrian survey sites over time (1993-2013)

- 1 Bourke St. Mall
- 2 Bourke St. E
- 3 Little Bourke St.
- 4 Swanston St. N
- 5 Swanston St. S
- 6 Russell St.
- 7 Collins St.
- 8 Princes Bridge
- 9 Elizabeth St.

1993

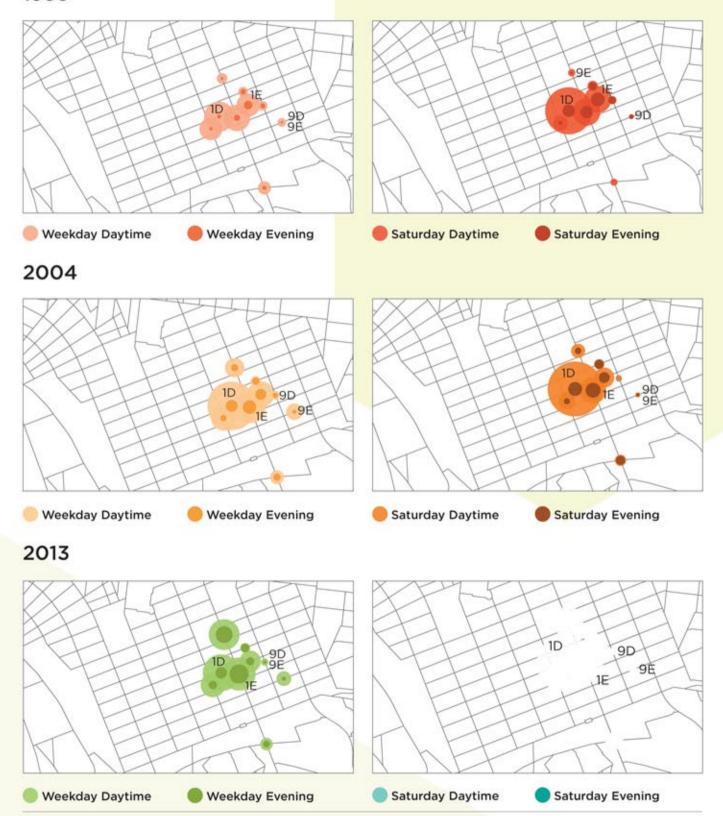


FIG. 14. Pedestrian volumes for the original Places for People survey sites, over time.

D = Day E = Evening

People: public life (1993-2013)

Observations

With the Places for People study now in its third iteration, the original 1993 pedestrian count sites have data entries over thirty years for November-December 1993, 2004 and 2013. Over this time period, the total number of pedestrians counted on the weekday and Saturday have increased by 53%.

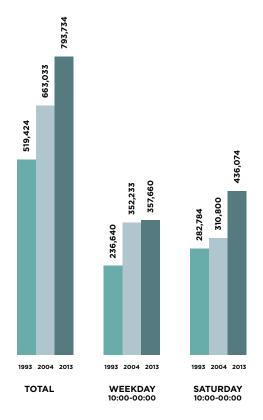
The growth in pedestrians has not been consistent across sites or times of the day and week:

- Between 1993 and 2004, the greatest pedestrian growth occurred on the weekday - 38% for daytime and 95% for evening. Saturday pedestrian volumes only increased by 9% for the daytime and 12% in the evening.
- Between 2004 and 2013, this pattern of growth reversed. Saturday pedestrian numbers experienced the greatest growth, with 26% in the daytime and a significant 72% at night. Weekday daytime volumes decreased by 5%, while evening numbers grew by 21%.

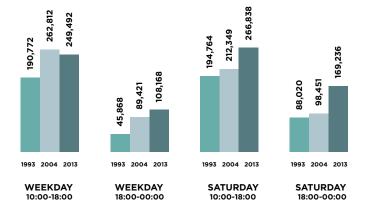
The decrease in weekday pedestrian volumes between 2004 and 2013 is unexpected. However, the overall increase of pedestrians since 1993 does seem to align with growth in both residents and workers, and so reinforces the importance of researching daily life at the local level:

Mid 1990s-2010s

Residents + Workers	+87%	
Pedestrians	Day time	Evening
Weekday	+31%	+136%
Saturday	+37%	+92%



Pedestrians Over Time - All Day



Pedestrians Over Time - By Time of Day

People: Public life (2013)

Pedestrians

(Places for People 2015 Study Area)

D = Day E = Evening

WEEKDAY (2013)

Daytime (10:00-18:00)

Highest Volumes Recorded

48,792 Bourke St. Mall (1D) **45,174** Swanston St. S (2D)

43,764 Swanston St. Central 'A' (3D)

Lowest Volumes Recorded

 1,956
 Queensbridge St. (47D)

 1,806
 Victoria St. E (48D)

 1,662
 City Rd. E (49D)

Evening (18:00 -00:00)

Highest Volumes Recorded

24,684 Swanston St. Central 'A' (1E)
21,768 Swanston St. Central (2E)

21,624 Swanston St. S

Lowest Volumes Recorded

696 Collins St., Docklands (47E) 660 Queensbridge St. (48E)

582 Peel St. (49E)

SATURDAY (2013)

Daytime (10:00-18:00)

Highest Volumes Recorded

 69,102
 Bourke St. Mall (1D)

 48,018
 Swanston St. S (2D)

45,336 Swanston St. Central 'A' (3D)

Lowest Volumes Recorded

 1,374
 City Rd. E (47D)

 1,284
 Queensbridge St. (48D)

 534
 Collins St., Docklands (49D)

Evening (18:00 -00:00)

Highest Volumes Recorded
33,786 Swanston St. Central 'A' (1E)

32,046 Bourke St. Mall (2E) **30,588** Swanston St. S (3E)

Lowest Volumes Recorded

1,074 Peel St. (47E) 936 City Rd., (48E)

552 Collins St., Docklands (49E)

Observations

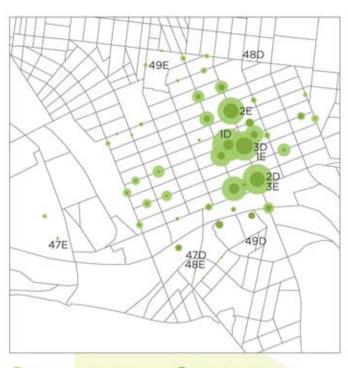
Across the 49 sites surveyed in 2013, the following patterns are apparent in the spatial distribution of pedestrian volume:

- Sites heaviest in pedestrian volumes are clustered in the central city Retail Core along Swanston Street and Bourke Street, where there are pedestrian friendly street designs adjacent to major public transport nodes and high land use intensity.
- For both the Weekday daytime and Saturday daytime, Bourke Street Mall ranks highest for volume; the next highest sites are situated on Swanston Street.
- On both the Weekday evening and Saturday evening, Swanston Street sites recorded the highest pedestrians numbers.
- Those sites with the lowest pedestrian numbers are situated on the periphery of the study area, in Southbank and Docklands, and the western side of the central city.

Pedestrian Sites 2013

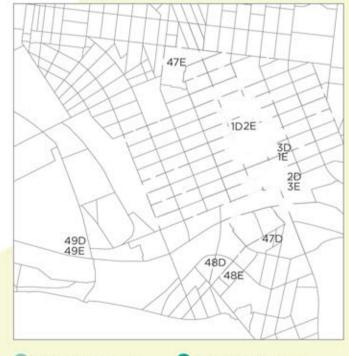
- New in 2004
- New in 2013
 - 1 Bourke St. Mall
 - 2 Bourke St. Central
- 3 Bourke St. E
- 4 Swanston St. N
 - 5 Swanston St. Central
 - 6 Swanston St. Central 'A'
- 7 Swanston St.
 - 8 Princes Bridge
- 9 Northbank
- 10 Southgate E
- 11 Southgate Central
- 12 Southgate W / Crown
- 13 Elizabeth St. at QVM
- 14 Victoria St. E + Central
- 15 Elizabeth St. N
- 16 Elizabeth St. Central
 - 17 Elizabeth St. Central 'A'
 - 18 Elizabeth St. S
- 19 Hardware St.
 - 20 Ltl. Bourke St. + Russell St. N
- 21 City Rd. E + Central St
- 22 City Rd. W + Queensbridge St.
- 23 Bourke St. Docklands
- 24 Collins St. Docklands
- 25 Collins St. W + Spencer St. S
- 26 Bourke St. W + Collins St. Central
- 27 Bourke St. W 'A' + Spencer St. Central
- 28 Victoria St. W + Peel St
- 28 Victoria St. W + Peel St.
- 29 LaTrobe St. W + Spencer St. N
- 30 LaTrobe St. E + King St.
- 31 Degraves St
- 32 Franklin St. E + W
- 33 Flinders St. E + W
- 34 Spring St. N + S
 - 35 Russell St. S + Collins St E

2013



Weekday Daytime

Weekday Evening



Saturday Daytime

Saturday Evening

FIG. 16. Pedestrian volumes for all survey sites in 2013 for the weekday (above) and Saturday (below).

Stationary activity

(Original 1993 Places for People Survey Sites)

The following growth has been observed in pedestrian numbers since the first Places for People study:

D = Day E = Evening **WEEKDAY (1993-2013)**

Daytime (10:00-18:00)

Highest Hourly Average Recorded

 1993
 235
 Bourke St. Mall (1D)

 2004
 264
 Swanston St. N (1D)

 2013
 297
 Swanston St. N (1D)

Lowest Hourly Average Recorded

1993 **20** Elizabeth St. (7D) 2004 **54** Elizabeth St. (7D) 2013 **82** Elizabeth St. (7D)

Evening (18:00 -00:00)

Highest Hourly Average Recorded

 1993
 418
 Southgate (1E)

 2004
 173
 Swanston St. S (1E)

 2013
 379
 Swanston St. S (1E)

Lowest Hourly Average Recorded

 1993
 6
 Elizabeth St. (7E)

 2004
 20
 Elizabeth St. (7E)

 2013
 9
 Elizabeth St. (7E)

SATURDAY (1993-2013)

Daytime (10:00-18:00)

Lowest Hourly Average Recorded

1993 **342** QVM (1D) 2004 **326** QVM (1D)

2013 **694** Bourke St. Mall (1D)

Lowest Hourly Average Recorded

 1993
 52
 Elizabeth St. (7D)

 2004
 64
 Elizabeth St. (7D)

 2013
 126
 Elizabeth St. (7D)

Evening (18:00 -00:00)

Lowest Hourly Average Recorded

 1993
 318
 Bourke St. Mall (1D)

 2004
 319
 Southgate (1D)

 2013
 662
 Bourke St. Mall (1D)

Lowest Hourly Average Recorded

 1993
 12
 Elizabeth St. (7D)

 2004
 8
 Elizabeth St. (7D)

 2013
 13
 QVM (7D)

Please Note:

- Hourly averages rather than totals used due to surveys not being undertaken for each hour during the survey period.
- Evening counts not collected for QVM in 1993.

Stationary activity survey sites over time (1993-2013)

- 1 Bourke St. Mall
- 2 Bourke St. E
- 3 Swanston St. N.
- 4 Swanston St. S
- 5 Southgate
- 6 Elizabeth St
- 7 QVM

1993

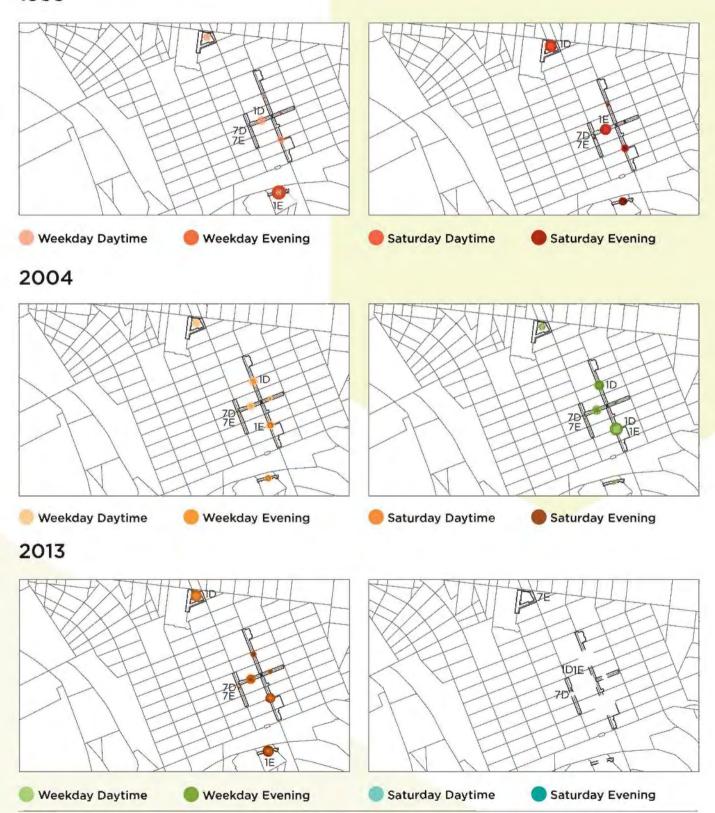


FIG. 17. Stationary activity hourly averages for the original Places for People survey sites, over time.

D = Day E = Evening

People: public life (1993-2013)

Observations

Across the 30 year time-period in which stationary activities have been surveyed, the following is observed:

- The spatial distribution of stationary activity volumes (average per hour) has remained consistent. Across all recording periods, Bourke Street Mall, Swanston Street S and Swanston Street N experienced the highest numbers, whilst Elizabeth Street and QVM (at night) have typically recorded the lowest.
- The number of stationary activities has increased by 93% between 1993 to 2013, with growth of 21% between 1993-2004, and a larger 60% increase from 2004-2013.
- Between 1993-2013, Saturday experienced a greater percentage increase than weekdays (127% compared to 51%), whilst evenings observed more growth than during the day.
- Swanston Street sites and Bourke Street Mall recorded the largest increases since 1993. Of particular significance is Swanston Street N in the evenings, with 1085% growth on the weekday and 1524% on Saturday. Swanston Street N was the only site to have increases over 1000% since 1993.
- Not all sites have observed increases. For example, the 2013 Saturday daytime numbers at QVM are 47% down on 1993 levels

The stationary activities data collected over time are significant for demonstrating what attracts public life. It is not necessarily the amount or even the quality of public space that attracts city life, but rather the land uses on offer within or around that space. The busiest survey sites are those in close proximity to a great range of land uses in the central city; public space in Docklands is vast but in an area of poor quantities of land use diversity.

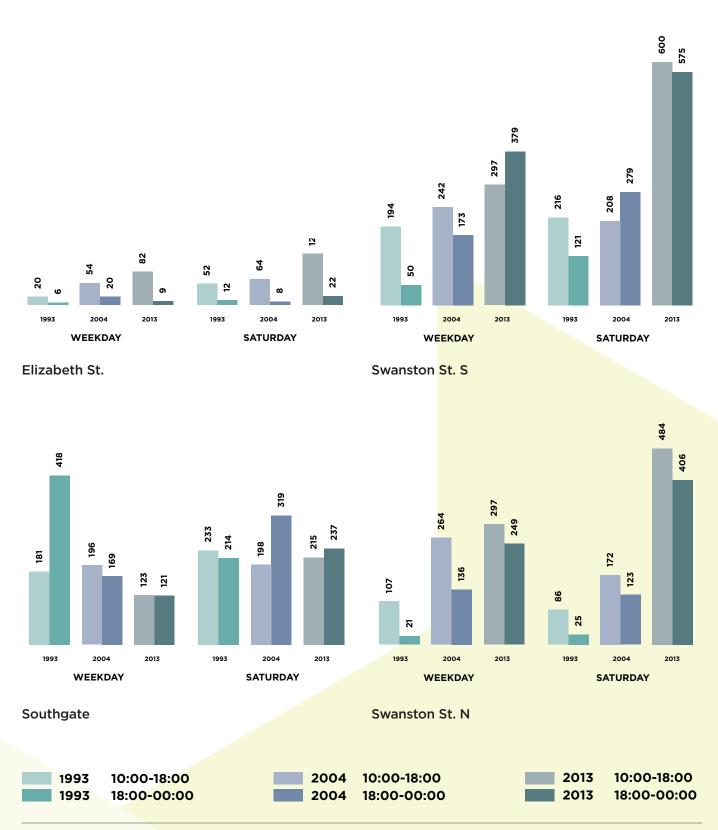


FIG. 18. Stationary activities over time for selected survey sites.

People: public life (2013)

Stationary activity

(Places for People 2015 Study Area)

D = Day E = Evening

WEEKDAY (2013)

Daytime (10:00-18:00)

Highest Hourly Average Recorded

384 Federation Sq. (1D)291 Bourke St. Mall (2D)

260 Degraves St./Centre Pl. (3D)

Highest Hourly Average Recorded

Elizabeth St. S (19D)
 Elizabeth St. N (20D)
 Northbank (21D)

Evening (18:00 -00:00)

Highest Hourly Average Recorded

495 Federation Sq. (1E)

Bourke St., Docklands (2E)
Southgate Central (3E)

Highest Hourly Average Recorded

18 Elizabeth St Central (19E)

10 QVM (20E)

9 Elizabeth St. Central 'A' (21E)

SATURDAY (2013)

Daytime (10:00-18:00)

Highest Hourly Average Recorded

703 Bourke St. Mall (1D)
 665 Federation Sq. (2D)
 481 Swanston St. S (3D)

Highest Hourly Average Recorded

38 Bourke St., Docklands (19D)
35 Collins St., Docklands (20D)

Northbank (21D)

Evening (18:00 -00:00)

Highest Hourly Average Recorded

Bourke St. Mall (1E)
Federation Sq. (2E)
Southgate Central (3E)

Lowest Hourly Average Recorded

21 Collins St., Docklands (19E)20 Elizabeth St. Central (20E)

16 QVM (21E)

Observations

The 2013 surveys (for the 2015 study) recorded stationary activities at 21 locations. Observations for the spatial trends in both stationary activity numbers and types of activities include:

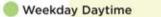
- The highest volume of stationary activities were recorded at Federation Square and Bourke Street Mall. Northbank consistently had low numbers during the day, and QVM at night after the market had closed.
- Although they are situated parallel to one another as northsouth routes through the central city, Swanston Street and Elizabeth Street are remarkably different in the numbers of stationary activities they attract.
- QVM observes the largest volume discrepancy of any site between daytime and evening periods, whilst Southgate sites attract heavier numbers of people on the weekend than the week. Surprisingly, Bourke Street in Docklands ranks second for stationary activity on the weekday evening, which may be an anomaly (e.g. due to an event that attracted large number of people).
- The stationary activities of standing or sitting in cafes tended to be the most dominant types. It is apparent that numbers for sitting on public seats or cafe seating is determined by the degree of provision. Federation Square had a high number of cafe and secondary seating, Swanston Street N attracted more people sitting on benches, while the outdoor cafe precincts of Hardware Lane and Degraves Street were dominated by cafe seating.

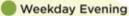
Stationary Activity Sites 2013

- New in 2004
- New in 2013
 - 1 Bourke St. Mall
 - 2 Bourke St. Central
- 3 Bourke St. E
- 4 Swanston St. N (extended)
 - 5 Swanston St. Central
 - 6 Swanston St. Central 'A'
 - 7 Swanston St. S
- 8 Federation Sq.
- 9 Northbank
- 10 Southgate E
 - 11 Southgate Central (extended)
- 12 Southgate W / Crown
 - 13 QVM (extended)
- 14 Elizabeth St. N
- 15 Elizabeth St. Central
- 16 Elizabeth St. Central 'A'
 - 17 Elizabeth St. S
- 18 Hardware St.
- 19 Bourke St., Docklands
- 20 Collins St., Docklands
- 21 Degraves St. + Centre Pl.

2013







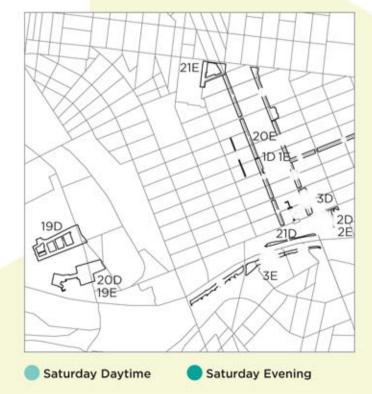


FIG. 16. Pedestrian volumes for all survey sites in 2013 for the weekday (above) and Saturday (below).

Public space: amount and distribution (mid 1980s-2010s)

Observations

Since 1985, public space in the Places for People study area has increased from 27 Ha to 85 Ha. While a portion of this growth (11 Ha) is due to changes in Municipal boundaries over time, City of Melbourne has gained 47Ha of additional publicly accessible spaces by extending footpaths and establishing new public places.

In the central city, new public space has replaced surplus railway infrastructure and road reserve, to create Birrarung Marr Park and Batman Park, for example. Other spaces have been reconfigured and redesigned, including the transformation of Princes Gate Plaza to Federation Square.

While open space has been developed along the Yarra River, including the Southgate Promenade, there has been minimal new local public space established in Southbank.

Since the early 2000s, a significant contribution to the quantum of new public space has come through redevelopment in Docklands. However, the 2013 stationary activity data shows that this open space is not yet attracting the same degree of public life as in the central city. This may be due to differences in population numbers, as well as the amount of land uses available in Docklands to attract public life.

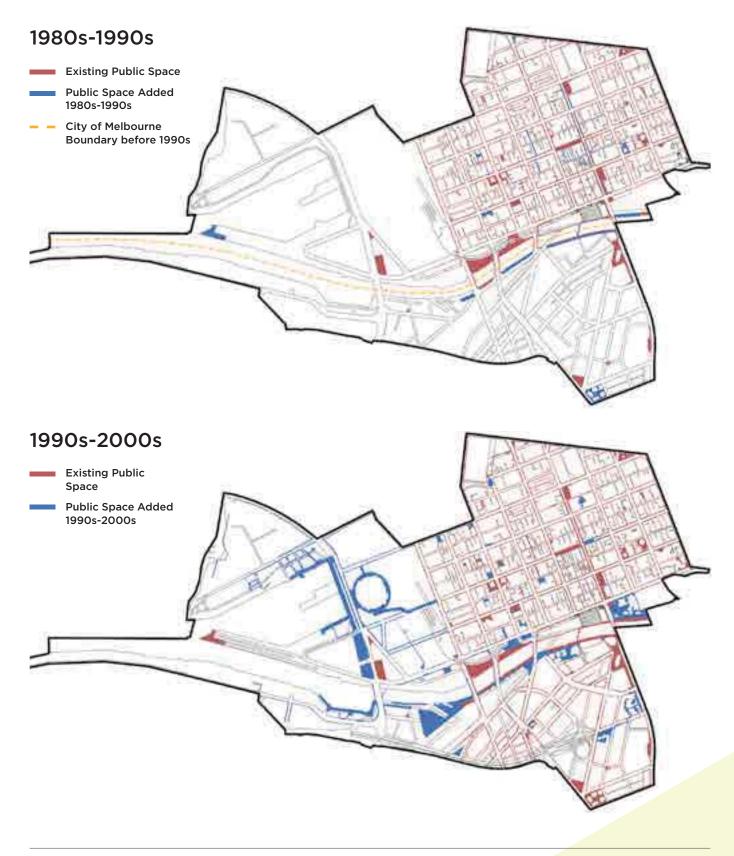


FIG. 20. (Above and on p. 49) Changes to the amount of public space over time.

Public space: amount and distribution (mid 1980s-2010s)







FIG. 21. (A-C) Bourke Street Mall was the first City of Melbourne project that created public space for people by limiting vehicular access.

(SOURCES: A - City of Melbourne, 1980s; B - Smart, T et al, 1984, Colourful Australia: Melbourne; C - City of Melbourne, 2005).





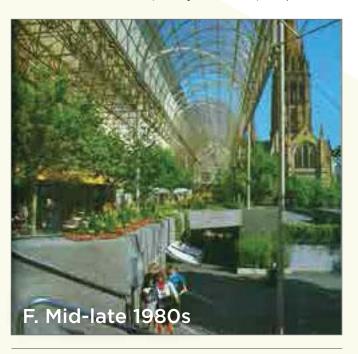
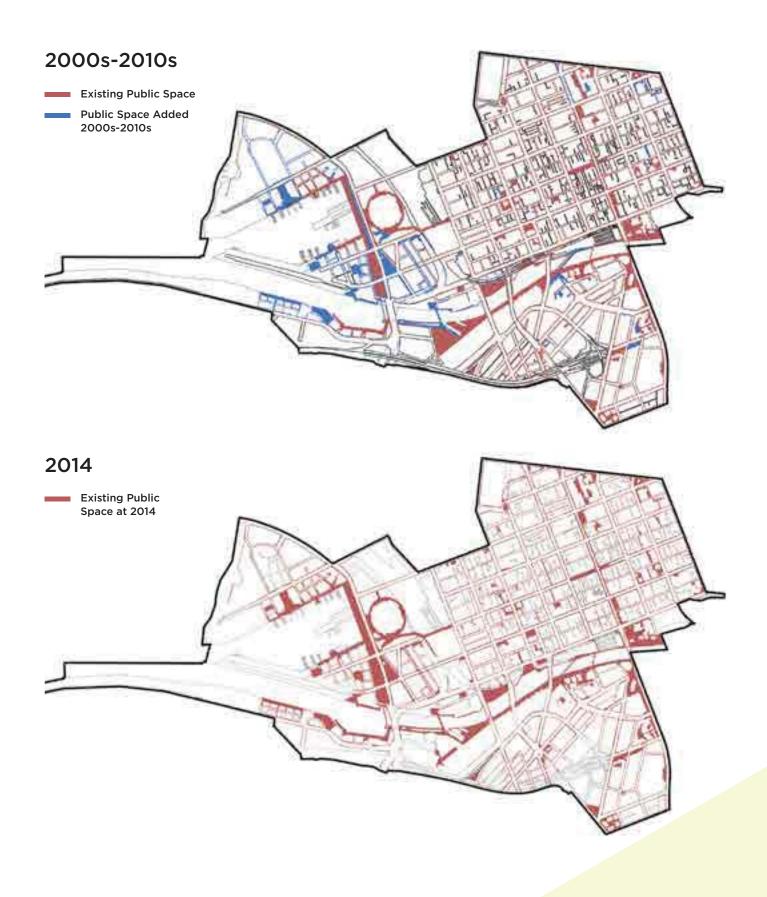


FIG. 22. (D-F) City Square was the first public space created within the central city, in 1968.

(SOURCES: D - Sievers, W., 1970, City Square from Swanston Street, looking east, SLV image H2003.100/910; E - City of Melbourne, 2000s; F - Smart, T et al, 1984, Colourful Australia: Melbourne)



Public space: seats and paving (mid 1980s-2010s)

Seats

(Original 1993 Places for People Study Area)

Between the 1994 and 2015 studies, the number of café seats has grown from 1,938 to 9,332 (+382%), while public seats have fallen from 3,493 To 3,368 (-4%). The growth of café seating has contributed much to the life of public space, but what has been apparent since the 2005 study, is that café seating comes at a cost to public seating by privatising public space.

Amount and Distribution of Bluestone

(For Central City and Places for People 2015 Study Area)

Between the mid 1980s and mid 2000s, bluestone installation was exclusive to the central city (with some exceptions), particularly in Swanston Street, Bourke Street, Collins Street, and little streets such as Little Collins Street and Flinders Lane. Since redevelopment of Docklands, bluestone has also been installed there, especially along Bourke Street and Collins Street extensions, to apply the same suite of materials that has historically defined the central city.

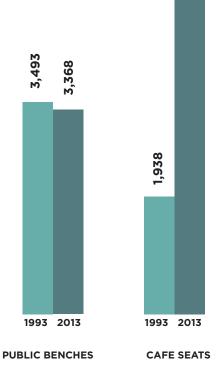


FIG. 23. Changes to the number of seats on public benches and the number of outdoor cafe seats, over time.

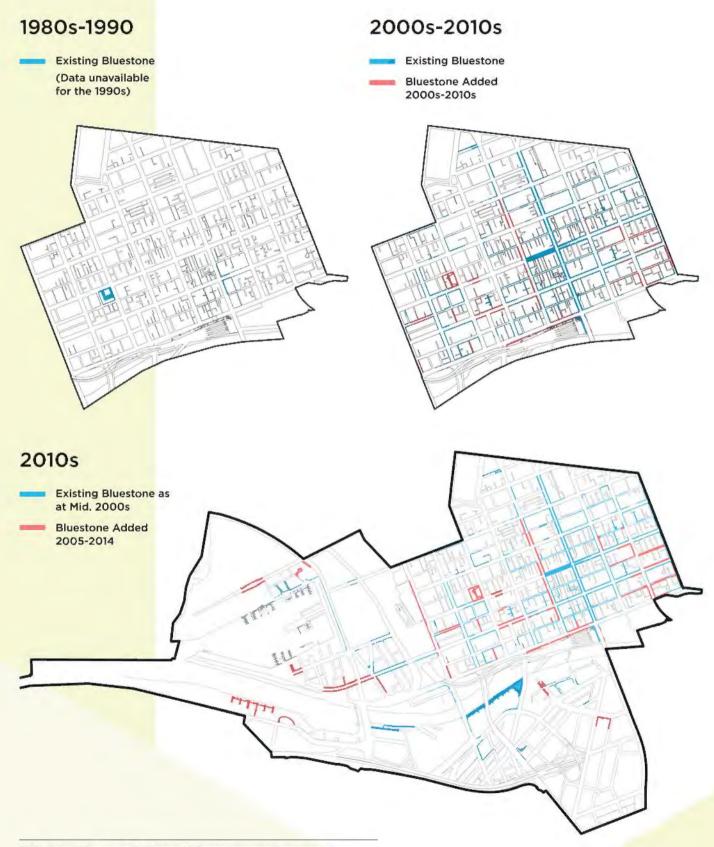


FIG. 24. The installation of bluestone paving over time.

Public space: compromised pedestrian network (2013)

For the first time in the Places for People 2015 study, compromises to the pedestrian network were surveyed for Docklands and Southbank! It was found that in Docklands, the success of the east-west connections to integrate the district with the central city are compromised by railway infrastructure of Southern Cross Station. The Collins Street and Bourke Street extensions have had to bridge over the railway, thus requiring stepped level changes where they intersect with new streets such as Village Street. These level changes are not only onerous and inconvenient for pedestrians, but contribute to an indirect and confusing pedestrian network. Wurundjeri Way offers no pedestrian links for people, and both in its physical form and traffic, it severs Docklands from the central city (Fig. 25-26).

Southbank streets are designed for the car, with wide carriageways and minimal footpath widths. Level changes have been introduced at the intersection of St Kilda Road, City Road and Sturt Street, where this intersection once existed at a single ground level. The resulting complex and ambiguous series of stairways and ramps create isolated places that may discourage rather than invite pedestrians (Fig. 25-26).

A



B.



C.



D.

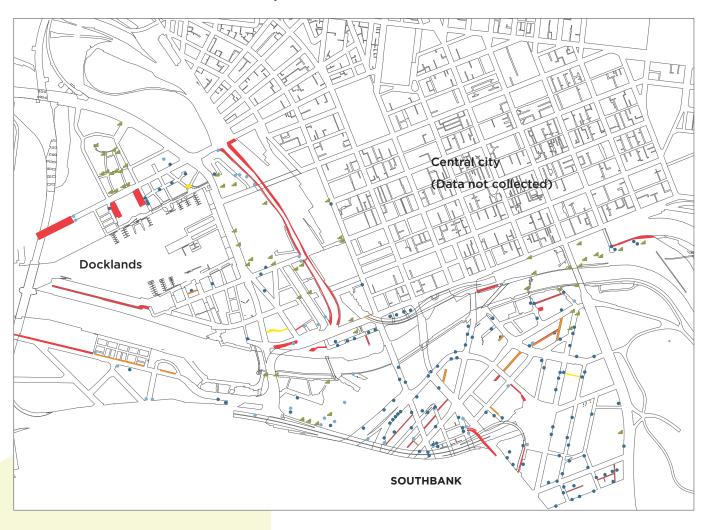


FIG. 25. Examples of poor pedestrian conditions in Docklands and Southbank, including a lack of footpaths in Wurundjeri Way (A) and very wide roads with narrow footpaths in City Road (B), as well as stepped and ramped level changes over the Southern Cross railway lines (C) and from St Kilda Road to Southbank (D).

(SOURCES: A - Retrieved 2015 from https://www.google.com.au/search?q=wurundjeri+way&hl=en-AU&biw=1680&bih=882&site=webhp&source=lnms&tbm=isch&sa=X&sqi=2&ved=0CAgQ_AUoA2oVChMllrOM5-OMyAIVIRamCh3S7wFF#hl=en-AU&tbm=isch&q=wurundjeri+way+docklands&imgdii=CiQ3UbYmPNi2iM%3A%3BCiQ3UbYmPNi2iM%3A%3BZjYJHccrkag4qM%3A&imgrc=CiQ3UbYmPNi2iM%3A; B - City of Melbourne, 2010s; C - City of Melbourne, 2010s; D - City of Melbourne, 2014).

¹ The central city was not surveyed as it was seen to not have the same degree of issues with its pedestrian network.

Docklands and southbank, 2014



- Stairs (e.g. to streets, bridges or subways)
- Shared Footpath
- Narrow Footpath
- No Footpath
- Footpath Ends
- Footpath Interrupted by Car Access (e.g. Driveways)

FIG. 26. Poor pedestrian conditions in Docklands and Southbank, surveyed in the field, 2013.

Public space: laneways (mid 1980s-2010s)

The central city is defined by an intricate and permeable urban structure, primarily due to subdivision of the original Hoddle blocks and the addition of laneways, arcades and alleys to provide access to the newly subdivided land parcels (Fig. 9). This trend towards greater complexity and permeability began to be reversed from the 1960s-1970s, as multiple land parcels became consolidated and redeveloped (Fig. 9). Collins Place was one of the early such projects, opening in 1981, and Melbourne Central was opened a decade later in 1991. Such redevelopment has removed laneways or internalised them as arcades that are not open to the public throughout the day and week. This phenomenon is particularly evident in the central Retail Core (Fig. 28).

From the mid 1980s, City of Melbourne recognised that the central city's through-block laneways and arcades were critical to augmenting the pedestrian network; in particular, for providing north-south links. The Council began a program of urban design improvements to lanes, with Degraves Street and Hardware Lane being two of the earliest projects in the mid to late 1980s (Fig. 27). During the 1990s and 2000s, more laneways throughout the central city underwent pedestrian improvements to extend footpaths (often to a single surface), limiting vehicular access and allowing for outdoor dining. The laneway surveys in 2012 and 2013 revealed that many lanes have still not been improved for people, despite serving as important pedestrian links (Fig. 29). These surveys have shown that the central city laneways vary in form, function, and the land uses and activities they harbour, often balancing competing but equally crucial activities vital to inner city locals and visitors. The laneway network facilitates better connectivity and linkage by foot, but also serves an important service function by providing back of shop access.

As individual places, laneways offer a welcome juxtaposition to the central city's uniform street grid. Their smaller scale intensifies sensory interaction, with the physical space positioning aesthetic details, sights and smells at a range more easily discernible to humans; this is known as the 'human scale'.



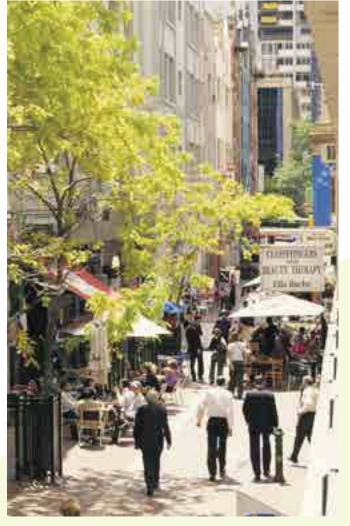


FIG. 27. Hardware Lane was one of the first lanes to be upgraded for pedestrians in the 1980s. Narrow footpaths, barely wide enough for a single pedestrian (above) were converted to a single pedestrian surface and trees (below).

(SOURCES: Above - City of Melbourne, 1985, Streets for People; Below - City of Melbourne, 1990s).

1980s-2013



FIG. 28. Changes to the laneway and arcade network over time.

Some laneways have been reconstructed and so are not to scale, and are representative only.

1980s-2013

Laneways

Upgraded for pedestrians

(e.g. footpaths widened, new paving, trees, street



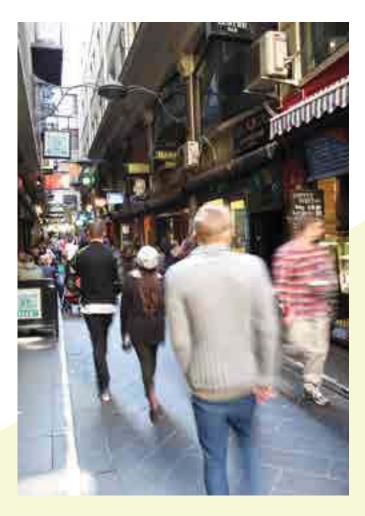
FIG. 29. Laneways upgraded since the mid 1980s (preliminary map). Approximately 42 of the central city's 270 laneways have been upgraded (excluding alleys and arcades).

Some laneways have been reconstructed and so are not to scale, and are representative only.

Public space: laneways (mid 1980s-2010s)

Day v. Night

Most laneways are open to the public during the day and night, whereas arcades are generally closed at night. This impacts on not only the permeability of the pedestrian network, particularly in the Retail Core (Fig. 31), but also changes the nature of the immediate area, including those streets and lanes that connect with arcades during the daytime (Fig. 30).



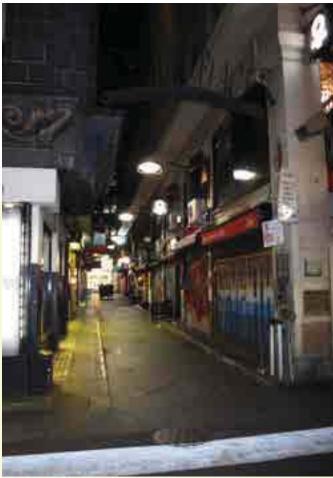


FIG. 30. Centre Place by day (above) vs. by night (below).

Centre Place forms part of the popular north-south pedestrian link between Flinders Street Station and Bourke Street Mall. The lane relies on the Centre Place Arcade for a connection through from Flinders Lane to Collins Street, and so when the arcade is shut at night, the pedestrian link is no longer available. This changes the nature of Centre Place, from a bustling, congested space to one that is very quiet.

(SOURCES: Above - City of Melbourne, 2012; Below - City of Melbourne, 2012).

2013

Open Day and Night

Closed at Night



FIG. 31. The network of lanes that are accessible during the day and night. The permeability of the retail core is greatly reduced after hours when arcades are closed.

Built form: towers (mid 1980s-2010s)

Within the 2015 study area, there are 186 sites that feature towers (buildings 18 storeys or over), of which 128 (69%) have been constructed since 1985. According to the City of Melbourne's Development Activity Monitor (August 2014), there are 145 towers proposed for the study area, likely to be constructed in the next five years (2014-2019). Of these proposed towers:

- 14% are over 60 storeys (at least 180m tall).
- 95 have been granted planning permits.
- 50 are under consideration by the Planning Minister.

Between the mid 1950s, when the first tower was built (ICI House), and 2013, there was an average of 3.3 towers constructed per year. If all 145 proposed towers are constructed within the next five years (2014-2019), there will be 29 towers constructed annually. This represents an increased growth rate in tower construction by 779%.

The increase in the number of towers is significant for impacts to local areas. A comparison of three blocks, one each from the central city, Docklands and Southbank, demonstrates compelling evidence that towers generally, and podium towers in particular, lead to a poorer interface between building and public environment, both in the number and type of doors, and quality of street level and upper level facades (Fig. 34-35).

Podium towers also restrict the potential for land uses. By accommodating onsite car parking at street and upper levels, these buildings offer few land uses for locals, and without internal occupation they provide no passive surveillance in the critical first several building storeys where people in the street and building occupants can see each other (Fig. 34-35).

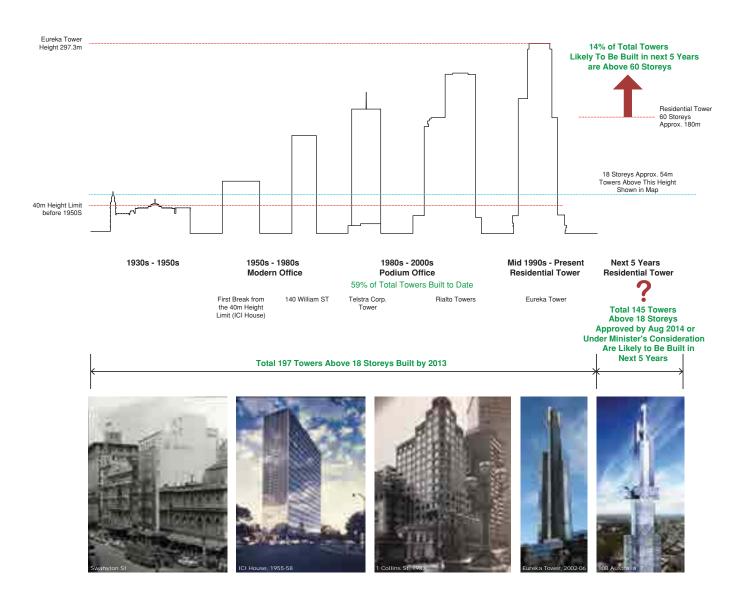
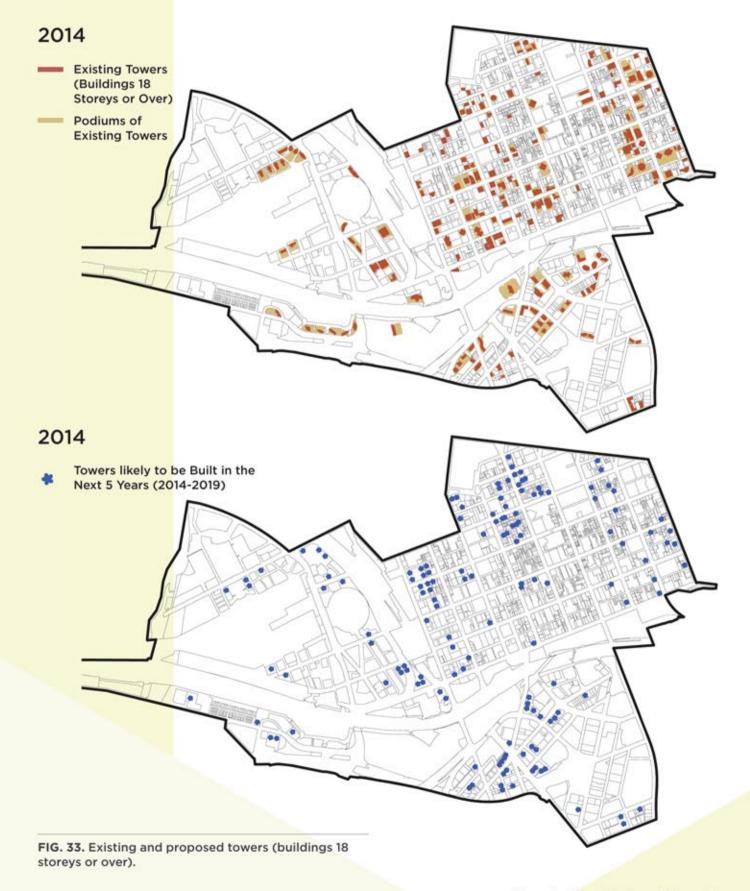


FIG. 32. The trajectory of tower development in Melbourne, over time.

(SOURCES: Left to Right - Author Unknown, 1955, Swanston Street, Melbourne, Victoria, SLV image H2009.95/10; Photo by Wille, P., ca 1950s-1971, ICI House, E. Melbourne. Bates, Smart McCutheon, SLV image H91.244/5562; Goad,P. and Bingham-Hall-P., 1999, Melbourne Architecture; Wikipedia, No Date, Fender Katsalidis Architects, retrieved 2014-2015 from https://en.wikipedia.org/wiki/Fender_Katsalidis_Architects; Inhabitat, No Date, Australia 108: Tallest Skyscraper in the Southern Hemisphere coming to Melbourne, retrieved 2014-2015 from http://inhabitat.com/prefabaustralia-108-will-be-the-tallest-skyscraper-in-the-southern-hemisphere/australia-108-fender-katsalidis-4/?theme=responsive).



CENTRAL CITY



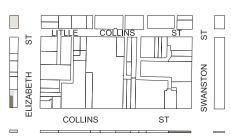
DOCKLANDS

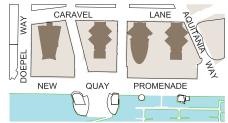


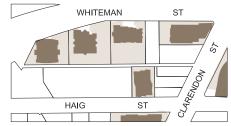
SOUTHBANK



Towers and Podium Towers

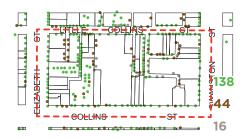


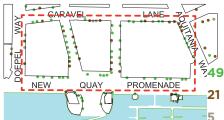




- Towers
- Podium Towers

Building Entrances







- Uncontrolled (Unsecured) Entrance
- Controlled (Secured) Entrance
- Controlled (Secured) Roller Door
- ·--- Block Boundary

CENTRAL CITY

DOCKLANDS

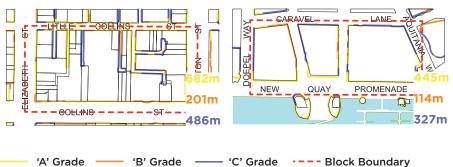
SOUTHBANK

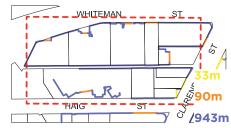






Quality of Street Level Facades





Quality of Upper Level Facades

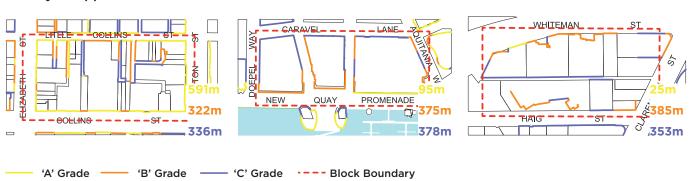


FIG. 34. Three block comparison of central city, Docklands and Southbank, showing the relationship between building type and interface with the public environment, where 'A' is the highest quality and 'C' the poorest.

(SOURCES: Photos Left to Right - SkyscraperCity.com, No Date, Block Arcade, retrieved 2014-15 from http://www.skyscrapercity. com/showthread.php?t=364197; SkyscraperCity.com, No Date, The Docklands, retrieved 2014-15 from https://www.google.com.au/ search?q=docklands&hl=en&biw=1680&bih=882&site=webhp&source=Inms&tbm=isch&sa=X&ved=OCAcQ_AUoAmoVChMli66t eGOyAIVByWmCh2W5Ab2#hl=en&tbm=isch&q=new+quay+melbourne&imgrc=KKE7s_FljAdvXM%3A; City of Melbourne, 2015).

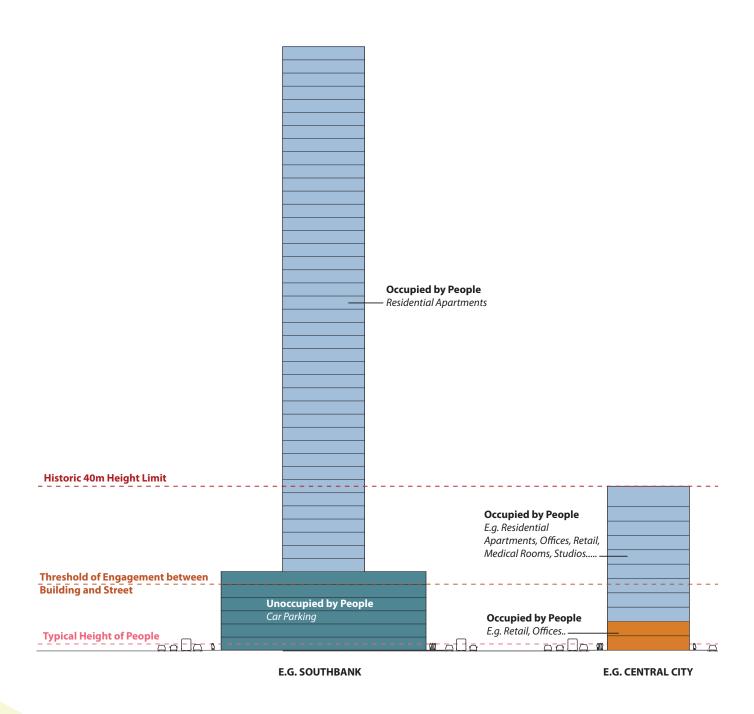


FIG. 35. A comparison between the podium tower and building within the central city's 40m height limit, which shows the differences between degree of interaction with the public environment, and the types of land uses occupied.

Built form: facades (1993-2013)

Street level

The survey of street level facades since 1993, demonstrates the importance of development scale and intricacy of land uses to produce animated streets. The quality of street level facades has improved in the central city, in particular the western portion (Fig. 34-35 and 38). This may be attributed to Council policy for improving the pedestrian appeal of facades at ground level, but also due to a maturing city that is acquiring greater complexity through smaller ground floor tenancies. However, there are redevelopment projects that diminish rather than contribute to a more vibrant and animated city, by demolishing small scaled tenancies with large scaled and internalised buildings (Fig. 36-37).

In Docklands, a pattern is evolving for ground floor tenancies that front onto the water or main streets, and with this, richer and more permeable street facades compared to the "back of house" that accommodate car park entries and services. This "front of house" vs. "back of house" dichotomy is particularly pronounced in Victoria Harbour and Waterfront City, creating two extremes of engagement and disengagement (Fig. 34-35).

In Southbank, the primary form of development is podium towers with few land uses at street level. The fact that so many towers have a limited interface with the street, creates not only a dormant urban form, but a place with little passive surveillance that is critical to people's sense of safety and security (Fig. 34-35).



FIG. 36. In Caledonian Lane, the recently developed Emporium with "back of house" loading and services (right) has replaced multiple small shop fronts (above).

(SOURCE: Author Unknown, No Date, Lonsdale House Barbar Shop, retrieved 2015 from http://www.butterpaper.com/cms/resources/1101/lonsdale-house-barber-shop).

Α.



В.

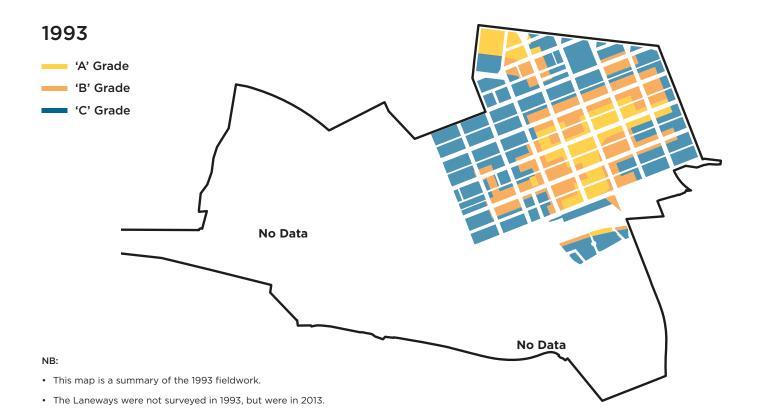


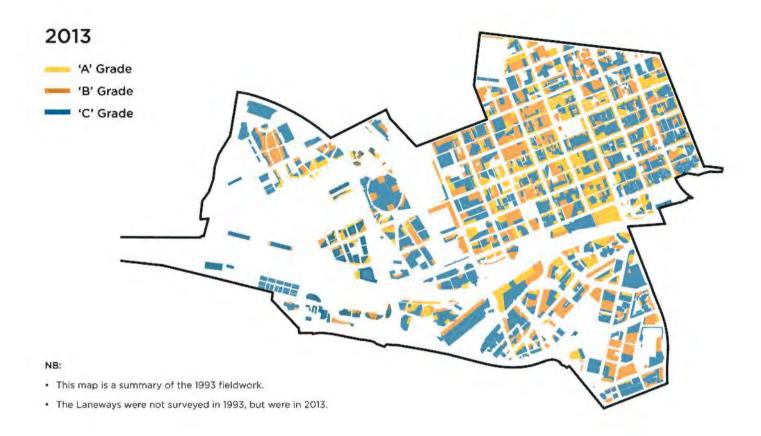
C.



FIG. 37. Examples of the difference in 'A' to 'C' graded street level facades, according to the Places for People survey.

(SOURCES - City of Melbourne, 2013).





Built form: facades (2013)

Upper levels

The survey of upper level facades is new to the Places for People 2015 study, introduced to capture the first few building storeys that are critical for people in the street to engage with internal activities and occupants, and vice versa (Fig. 35, 39-40).

This survey has revealed a similar relationship as to street level facades: the scale of tenancies and the number and mix of land uses is generally associated with the quality of facades. In the central city, Docklands and Southbank, the presence of podium towers with onsite car parking has a diminishing affect on the quality of facades (Fig. 34-35). Where buildings have tenancies for people rather than cars, the quality of the upper facade is higher.

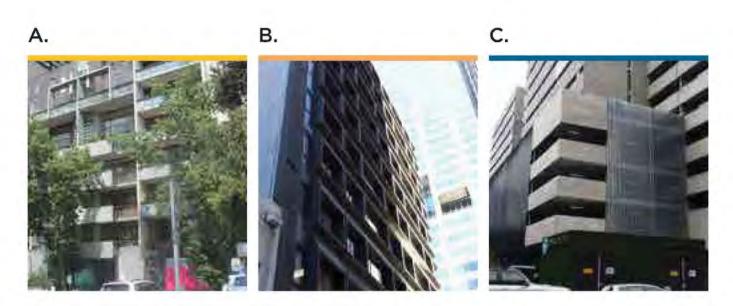


FIG. 39. Examples of the difference in 'A' to 'C' graded upper level facades, according to the Places for People survey.

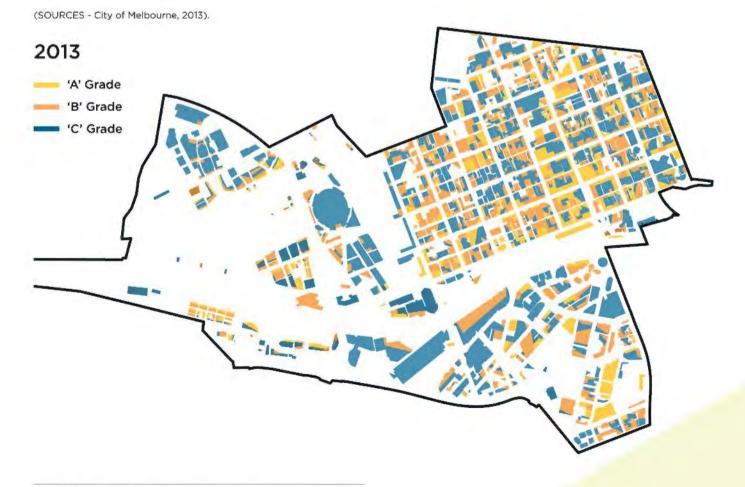


FIG. 40. Quality of upper level facades in 2013.

Built form: building entrances (2004-2013)

There has been an overall increase in the number of building entrances1 in the central city (Fig. 41).

The 2013 survey data shows that the central city features significantly more building entrances compared to Southbank and Docklands (Fig. 42). This can be attributed to a finer urban structure with:

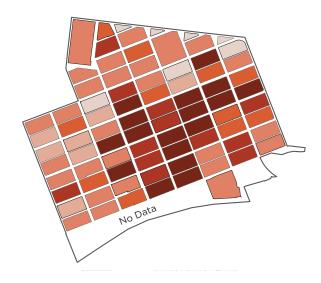
- Smaller land parcels.
- Smaller buildings and tenancies at street level.
- More street frontages created by a fine urban structure of laneways and little streets.

The significance of a greater number of building entrances in the central city is that there are:

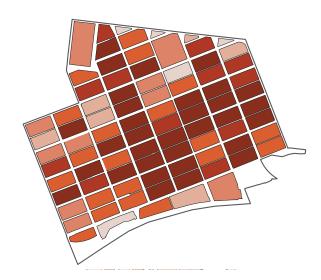
- More land uses for people to access.
- Greater visual richness in street level building facades.
- More opportunities to encounter people and see public life; building entrances provide a point of entering/exiting buildings, and popular locations for people to meet.

Those conditions that contribute to a higher number of building entrances, and what they mean for the walkability of the study area, are explored in the local area research (chapter 6).

2004



2013



No. Entrances along the Street (Excluding doors in Lanes and Roller Doors)

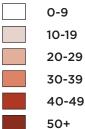


FIG. 41. The number of entrances in the central city in 2004 and 2013 (excluding laneways to make the two surveys comparable).

¹ The mapping of entrances over time has excluded laneways, as these were not surveyed in 2004.

2013



FIG. 42. The location of building entrances throughout the study area according to the degree of how "public" they are (secured vs. unsecured).

Land uses: basic services (mid 1980s-2010s)

For the district level research, basic services include land uses within the following categories, at all building levels (not just at street level):

- · Hospitality & Entertainment
- Retail Goods
- Retail Services
- Medical
- · Health / Fitness
- Education
- · Community Services and Facilities

Between 2004 and 2012 for the Places for People study area, basic services as a whole (all categories) increased by 43%. Each of the eight categories individually recorded an increase in number, with the highest percentage growth in:

 Hospitality and entertainment 	+62%
Health and fitness	+138%
• Education	+ 73%
Community services	+ 98%

Growth in the Hospitality and entertainment category is attributed to continual growth in the number of cafes and restaurants, which between 2004-2012 increased by 74% (from 703 to 1,223). Cafes and restaurants are the most populous of land uses counted within the Hospitality and entertainment category.

The trend for land uses falling within the Retail goods and Retail services categories is also of note. While each category observed modest growth between 2004-2012, individual uses recorded significant gains and falls that speak to observed trends within the inner city and wider economies. Clothing retailing, footwear retailing and supermarket and grocery stores increased significantly, while land uses vulnerable to recent changes in technology and the emergence of online shopping experienced decreases, including:

• N	ewspaper and book retailing	-27%
• Vi	deo and electronic media	-57%
• Tr	avel agency and tour arrangements	-18%
• Pł	notographic film processing	-95%

The following maps show trends in diversity and dispersal of basic services within the Places for People study area from 1997-2014, a time period in which the city underwent substantial physical and economic transformations through redevelopment of Southbank and Docklands, and a residential apartment boom.

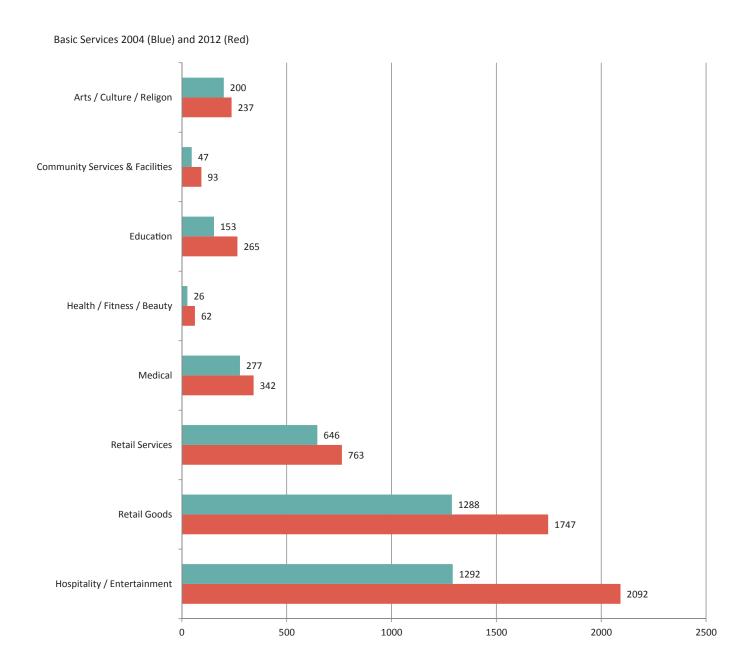
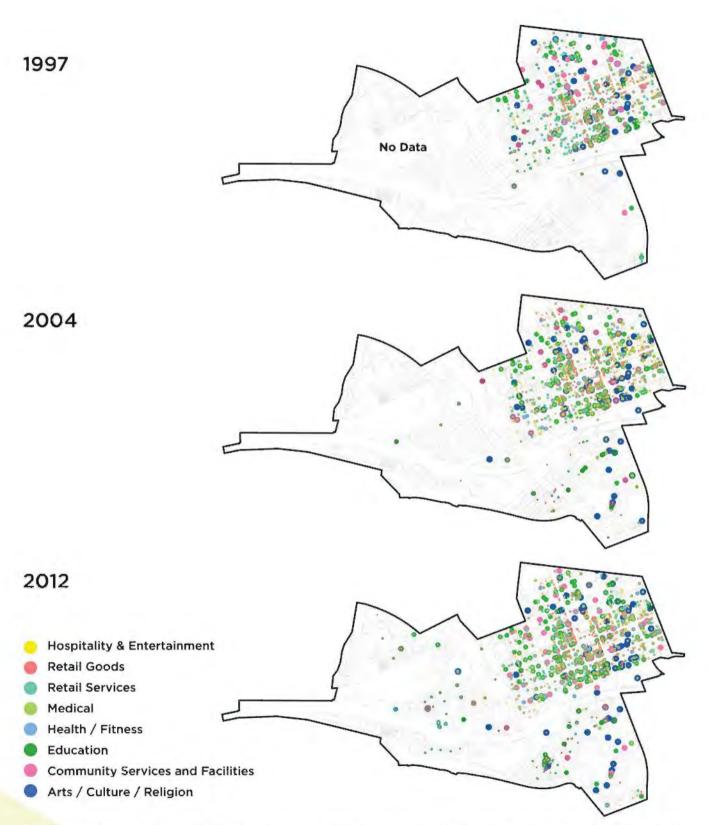


FIG. 43. Land use numbers within each of the eight basic services categories for 2004 (blue) and 2012 (red), for the Places for People 2015 study area.



Please Note: The variability in dot sizes does not represent different amounts of land uses, but rather allows for the range of land uses within each land parcel to be visually distinguished.

FIG. 44. The distribution of land uses within basic services categories over time. Please note that the size of the circles does not represent volumes but rather has been created to enable each category to be visible for each land parcel.

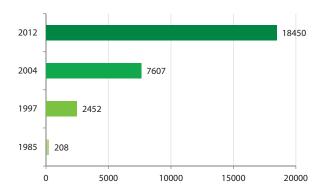
Land uses: residential dwellings (mid 1980s-2010s)

In 1985, the City of Melbourne aspired to add "a minimum of some 8,000 dwellings...to the city's housing stock over the next ten to fifteen years" (City of Melbourne, 1985:99). A generation after this target was set for the whole of the municipality, the smaller Places for People study area of central city, Docklands and Southbank had 2,452 dwellings by 1997, then 7,607 in 2004, followed by 18,450 in 2012. This represents an increase by 8,870% in dwelling numbers (Fig. 45 and 47).

This growth of residential numbers was initially achieved through commercial building conversions and some new towers, mainly in Southbank. A recent and ongoing construction boom has fuelled the development of new residential towers in the central city, Docklands and Southbank.

The contemporary residential dwellings landscape is dominated by apartments, with houses as only a fraction of all dwellings, totalling less than 1% for both the central city and the Places for People study area as a whole (Fig. 46).

The following maps show the land parcels that contain residential dwellings (note that for Docklands and parts of Southbank no data was available for 1985 and 1997). The difference in residential land parcel size between the central city and newly developed Southbank and Docklands are significant, and this is explored in the proceeding chapter 6.



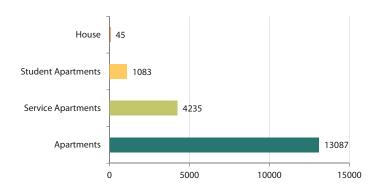


FIG. 45. Growth in the number of residential dwellings in the central city over time.

FIG. 46. The number of residential dwellings in the central city by type, 2012.

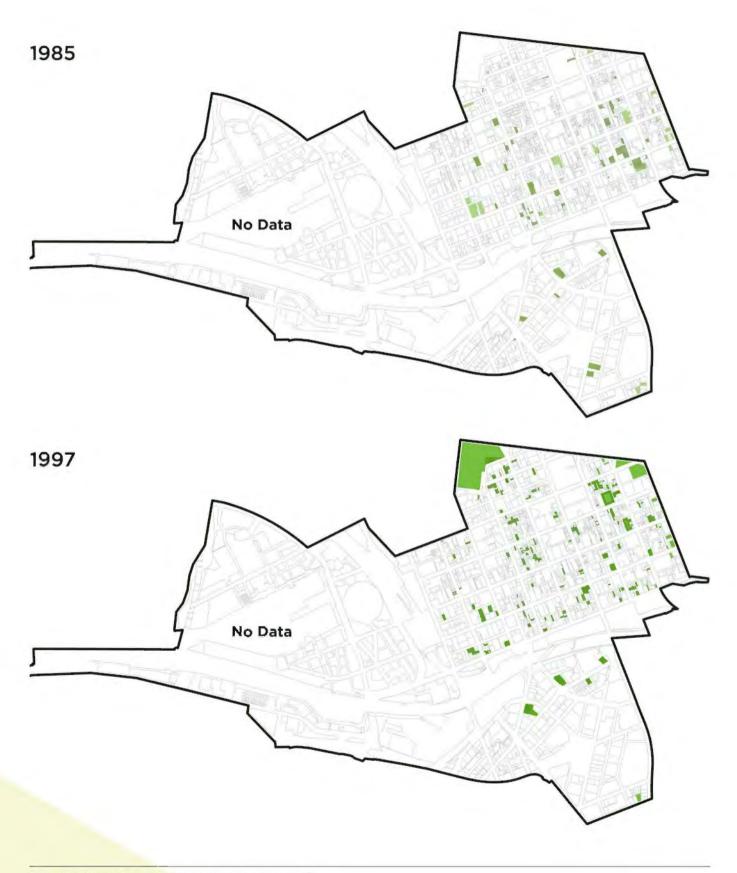


FIG. 47. Sites with residential dwellings, over time.

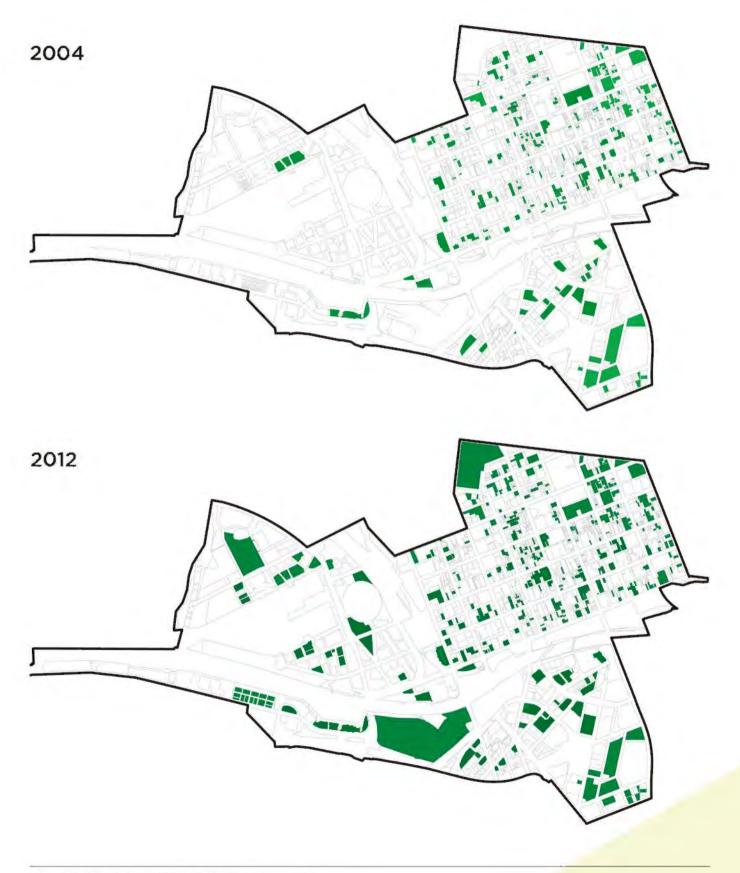


FIG. 47. Sites with residential dwellings, over time.

Land uses: car parking (mid 1980s-2010s)

Onsite car parking refers to those private and commercial car parks situated within land parcels rather than on the street. Within the entire Places for People study area, onsite car parking grew by 28% between 1997-2012, fostered by car-friendly development in Docklands and Southbank.

The maps (Fig. 49) show the quantity of onsite car parking that each land parcel holds for the years 1997, 2004 and 2012. The highest numbers of onsite car parking (in red) have tended to emerge as part of redevelopment in Docklands and Southbank, although there are some central city sites that also accommodate a high number of cars including the Queen Victoria Market, Queen Victoria site (Swanston Street), Southern Cross Site (Russell and Bourke Streets), and Melbourne Central (Elizabeth Street).

While onsite car parking is often accommodated below ground in the central city, the inclusion of car parking above ground in Docklands and Southbank imposes a need for wide building footprints, and displaces possible floorspace that could occupy active land uses for people (Fig. 34-35).

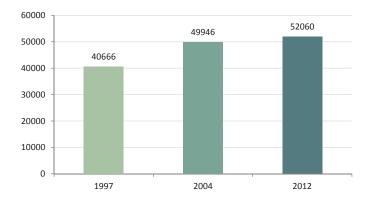


FIG. 48. The number of onsite car parking spaces in the Places for People 2015, study area over time.

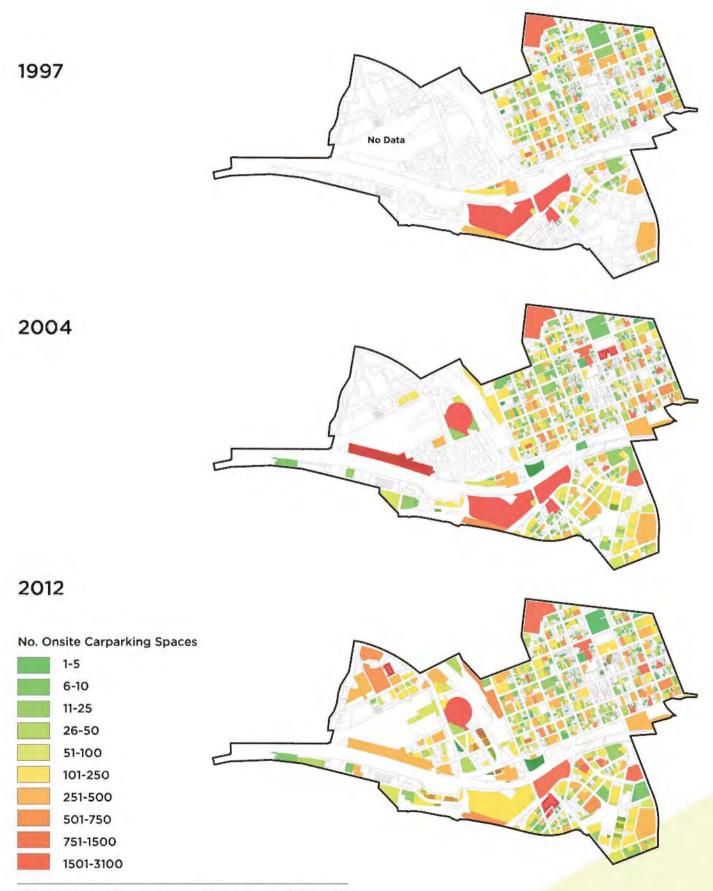


FIG. 49. Sites with onsite car parking between 1997-2012.

From district to local level

Whilst pedestrian counts continue to rise in the central retail core (Fig. 15) this 'bustling activity' is not replicated in other parts of the city, especially in areas of high density growth in Docklands and Southbank. This highlights the duality of the city as a regional / national / international destination, and a city for local people. Most people live most of their daily lives locally, not city wide. Their wellbeing is therefore at least as much tied up in how well their local neighbourhood functions as it is in how the wider city functions. Both are important but one (the neighbourhood level) is rarely part of the urban land use / transport conversation or planning process (Victorian Government, May 2014).

Beyond the retail core of the central city (focusing on Swanston and Bourke streets) the residential and employment population data (2012) (Fig. 50-51)shows a disconnect between high concentrations of where people live or work, and low concentrations of walkable (essential) land uses (ABS 2012). With so many people living and working in Docklands and Southbank, why were pedestrian counts so low? Further evidence was gathered to understand how these areas were performing at a local level. The block comparison studies on the following pages explore how the built form cultivated mix use walkable neighbourhoods.

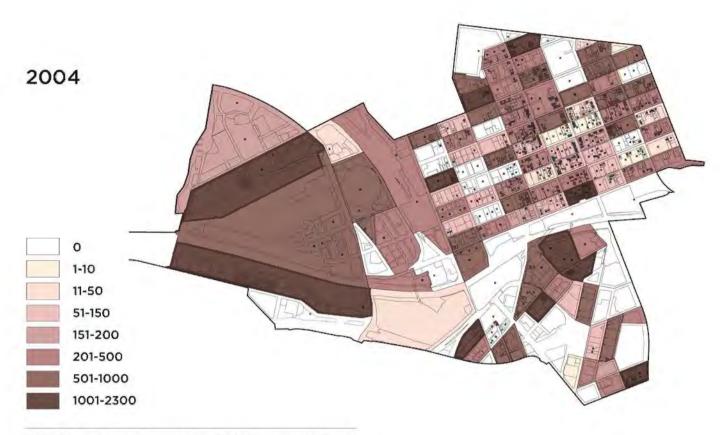


FIG. 50. Residential Population (2012) + Essential Land Uses (ABS 2012)

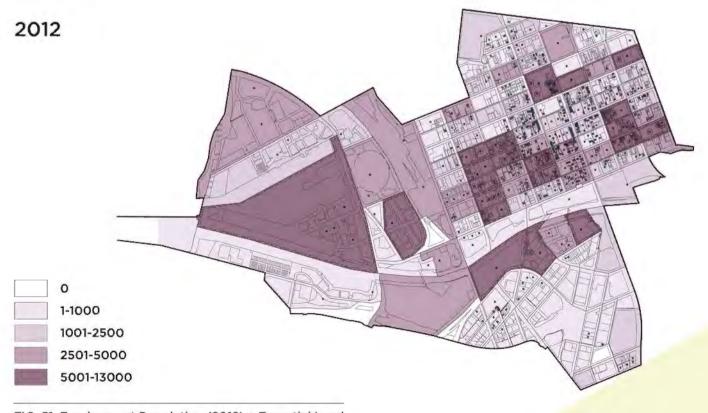


FIG. 51. Employment Population (2012) + Essential Land Uses (ABS 2012)

Places for People 2015 expands beyond the traditional focus of the public realm and highlights the congruencies between private development and connected local living. The comparative block studies reveal the impact of built form on land use, urban structure and walkability in three different locations within the study area; the central city, Southbank and Docklands.

Significant observations were made in relation to the podium tower blocks in Southbank and Docklands. The large-scale building footprints of the podium tower blocks generated a coarsely grained urban structure. Above-ground car parking discourages walkability and increases car dependence. Large occupancies for businesses provide few entrances onto the public realm where there are low levels of social interaction (low pedestrian counts). The large floor plate dimensions with towers above impose a reliance on mechanical systems for ventilation, cooling and lighting. There is a prevalence of tall towers on top of podiums offering only a homogenous housing 'choice' aimed at a narrow purchaser market, and so limiting the diversity of occupants. These typologies avail themselves to limited adaptability to suit peoples' changing needs. The height of towers and their set back from the street diminishes peoples' sense of connectedness to the street, and passive surveillance of the public realm.

The central city block consists of smaller-scale buildings with a finer-grain urban structure. This enables a more diverse and higher quantity of land uses around small-scale streets and laneways, favouring a range of small to medium businesses with multiple entrances, giving more purpose and interest to walking. There is no car parking in the central city block. The central city buildings feature narrow floor plates and higher floor-to-ceiling heights that are adaptable to changing land uses over time.

CENTRAL CITY

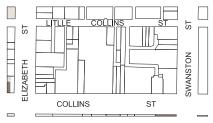
DOCKLANDS

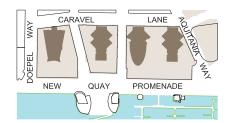


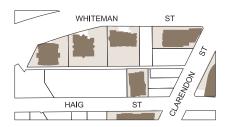
SOUTHBANK



Towers and Podium Towers



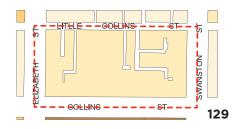


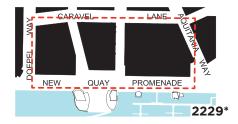


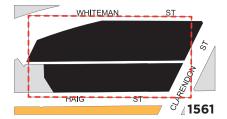
Towers

Podium Towers

Residents

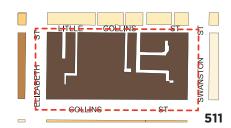


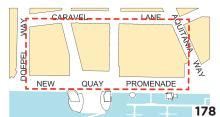


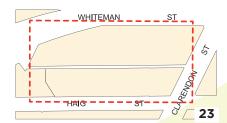


 * Including blocks beyond the dotted line

Business Occupants







---- Block Boundary

FIG. 52. Comparison of a block in central city, Docklands and Southbank, demonstrating the relationship between building typology and land uses.

CENTRAL CITY



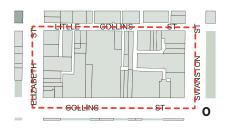
DOCKLANDS

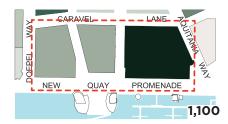


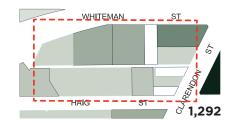
SOUTHBANK



Onsite Carparking

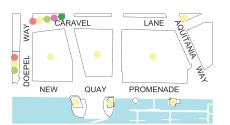


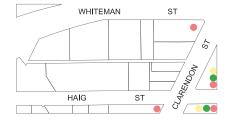




Essential Land Uses







- Arts, Culture and Religion
- Community Services and Facilities
- Education
- Health, Fitness and Beauty
- Retail Goods
- Hospitality and Entertainment
- Medical

---- Block Boundary

FIG. 52. Comparison of a block in central city, Docklands and Southbank, demonstrating the relationship between building typology and land uses.

6. KEY FINDINGS AT LOCAL LEVEL

This chapter outlines the principal findings of Places for People 2015. It outlines key observations before detailing what the data reveals about the performance of and interrelationships between urban conditions.

1. Introduction

The neighbourhood concept
Research catchment selection
Neighbourhood liveability indicators

2. Liveability indicators

Catchments matrix

Key correlations

Performance

3. Research with the community

Introduction

Preliminary findings

Introduction: the neighbourhood concept

Cities provide the locus for the exchange of culture, commerce, knowledge, ideas and skills. This exchange is fostered by proximity and connectivity to and between people, buildings, land uses, open space, transport routes, nodes and so on. These exchanges define the 'essence' of cities. A review of international best practice undertaken as part of this study highlights this 'essence' is best optimised by local living where people reside in compact, walkable, mixed use and highly connected neighbourhoods, where essential everyday needs are on your doorstep and the people, knowledge, skills and culture that you connect with to generate wealth, are just a walk or tram ride away. Where you live, work and relax, are all contained within a local area.

Walkable mixed use neighbourhoods enable local living. They are the foundation of the sustainable city, as both an organising principle and a way of life. In order to achieve sustainable urban growth, Melbourne will need to explore the local neighbourhood as the locus of social cohesion, and as a means of planning for proximity. Walkable neighbourhoods provide individuals and communities with a range of tangible health, economic and environmental benefits by: increasing physical activity levels that reduce the risk of obesity; improving neighbourhood social capital and sense of community; lowering the risk of traffic incidents; increasing local economic spend, and reducing greenhouse gas emissions (Giles-Corti 2014:9). This study assesses the correlations between urban structure (as expressed by walkable catchment areas), population density and the accessibility and availability of a variety of services, facilities and community goods that are essential to daily life in the city.

Local level research seeks to understand the neighbourhoods we have, the neighbourhoods we need, how physical neighbourhoods form community life, and how our communities shape local neighbourhoods.

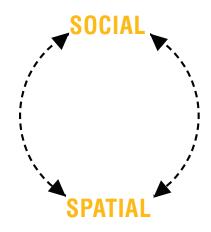


FIG. 53. Our investigation seeks to assess local social and spatial relationships to understand how the study area's changing form influences the daily lives of its people.

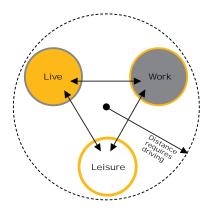


FIG. 54. Zoning of activities leads to reliance on the private car

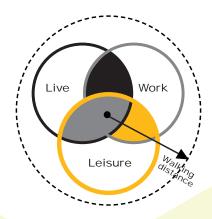


FIG. 55. Optimisation of 'Local Living' where the exchange of knowledge, culture and skills is based on proximity and connectivity

The local neighbourhoods study seeks to demonstrate the relationship between denser urban structures and the accessibility and availability of a variety of services, facilities and community goods that are essential to daily life in the city, to gain a greater understanding of the conditions that best facilitate sustainable walkable neighbourhoods such that future urban design and planning initiatives foster optimal urban outcomes in the most targeted, integrated and nimble means possible.

The local neighbourhoods study seeks to understand local living and its optimisation for better outcomes in health, the environment and resilient local economies. In understanding the 20 Minute Neighbourhood of Plan Melbourne, and its application to the city, neighbourhoods are fundamental building blocks for a strong and resilient city (State Government of Victoria, May 2014).

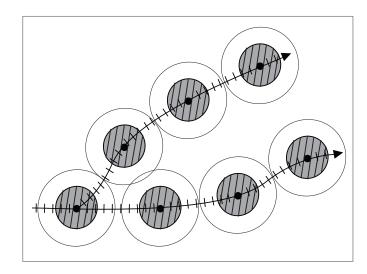


FIG. 56. Indicative arrangement of 400m and 800m walking catchments as per Plan Melbourne's 20 Minute Neighbourhood concept.

The inner city blurs the traditional understanding of the neighbourhood. The intensity of land uses breaks down easily discernible segregations of civic, commercial and residential use. That is not to say that neighbourhoods do not exist, or that people do not require compact local living to fulfil their needs and expectations.

The study seeks to explore how the inner city density drives requirements in civic use, commercial use and open space, and how a hierarchy of need determines proximity of civic use, commercial use and open space by foot and public transport.

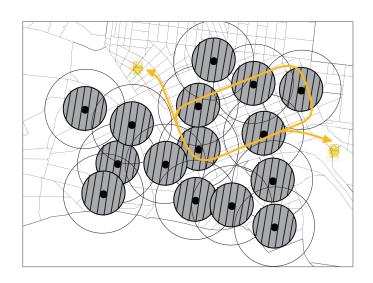


FIG. 57. The inner city blurs the traditional neighbourhood concept. With the high densities of the inner city, our access to essential daily needs focuses the study on the 5 minute walk (400m) whilst the 800m walk overlaps with adjoining neighbourhoods.

A hierarchy of local land uses span a 400m-800m range reflecting people's daily needs and economies of scale in relation to population thresholds.

A diversity of land uses within a 400m walking catchment benefit from mutual proximity and clusterings that promote economic viability through multi-purpose trips and networks of exchange.

Accessibility levels of 800m serve a wider district function for economies of scale and frequencies of use, but 200m-400m accessibility facilitates higher frequency of use to a wider population.

"The average threshold for walking is 5 minutes (400m). When most daily needs of residents and workers can be met within walking distance, not only do they walk more but they use the car significantly less"

(Condon 2010:68-9).

The "ability of residents to walk locally depends on the way their neighbourhood is designed. Walking is more likely if neighbourhoods have well-connected street networks, a variety of local destinations including public transport, and there is adequate residential and employment density to support local shops, services and public transport"

(Giles-Corti 2014:9).



FIG. 58. Indicative Essential Landuse Population Thresholds, based on international best practice

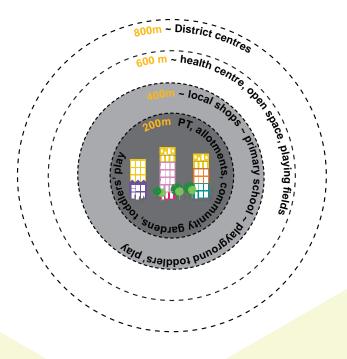


FIG. 59. Proximity of land uses based on international best practice

Introduction: research catchment selection

To understand the Places for People study area at a local level, 5-minute walking catchments were identified across the study area to effectively act as a sieve and allow for disparate urban geographies and their components to be compared 'apples for apples'. For greater rigour and to reflect the true local urban conditions, real 5-minute walking catchments were determined rather than standard 'as-the-crow-flies' walking radii.

The standard convention of the 5-minute walk is 400m. This is an international convention that averages a diverse range of human capabilities. In assessing the real walking catchments across the city an additional 100m radius central to each catchment was accommodated to represent a conceptual spatial component from which to measure the 400m from (Fig. 60.).

Neighbourhoods are utilised as the defining concept to measure the performance of different parts of the city 'apples for apples'. The survey points in the central city area based on the City Loop Stations, not necessarily as the centre of a community but merely a series of places distributed evenly around the City from which distances could be measured. The 1974 Strategy Plan showing the stations distributed to ensure there was no gaps reinforces this justification. (Fig. 61.)

Outside the central city, the survey points are distributed to provide an even coverage and are, by and large edged by natural boundaries such as the River Yarra and Docklands Harbour.



FIG. 60. Real walking catchments were spatially determined across the city reflecting true walkabilty rather than standard 'as-the-crow-flies' radii.

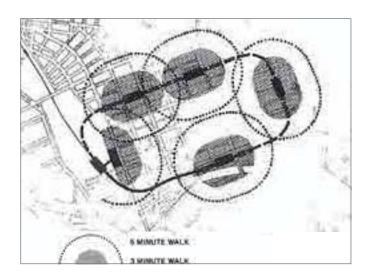


FIG. 61. City Loop Station Walking Catchments in CoM's 1974 Strategy Plan

(SOURCE: InterPlan for City of Melbourne, 1974, City of Melbourne Strategy Plan).

Real walking catchments were spatially determined across the city reflecting true walkabilty rather than standard 'as-the-crow-flies' radii. Every catchment selected was within 200m from a public transport node and was located to maximise the population within. There were 15 Catchments selected to cover maximum walkable areas of the study area:-

Central City

 Primarily informed by the five City Loop train stations, as originally conceived in the City of Melbourne's 1974 Strategy Plan (Fig. 61).

Queen Victoria Market:

 To reflect the City North Structure Plan (City of Melbourne 2012), which identified the Queen Victoria Market as a local centre.

Southbank

- · Informed by City of Melbourne structure plans.
- Further adjustments made for optimal coverage of Southbank.

Docklands

- · According to existing private development hubs.
- Additional catchments to cover in-between areas to permit observations to be drawn from the widest expanse of the area possible.

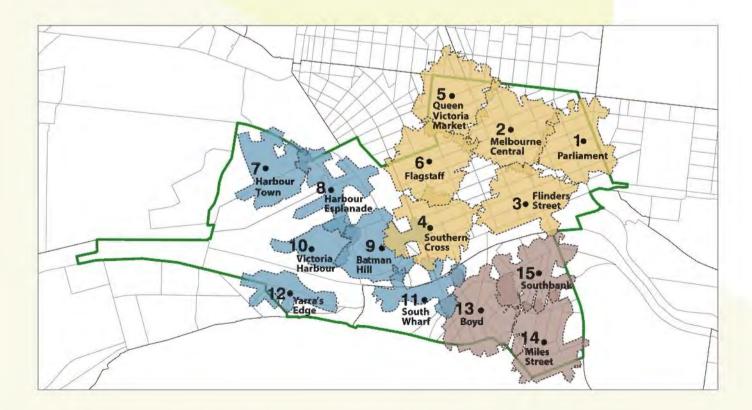


FIG. 62. 15 Catchments were selected to cover maximum walkable areas of the study area

Introduction: neighbourhood liveability indicators

The following Liveability Indicators were compared across the 15 catchments to measure their comparative performance. The Liveability Indicators are derived from the neighbourhood concept in relation to the Urban Components.

POPULATION DENSITY

Residential Population

(No. People per Catchment)

The number of people living in the research catchment and the proportion of residents in relation to the number of workers.

Employment Population

(No. People per Catchment)

The number of people working in the research catchment and the proportion of workers in relation to the number of residents.

Total Population

(No. People per Catchment)

The combined number of people living and working in the research catchment

Residential Gross Density

(No. People per Hectare)

A common unit of measurement for assessing the spatial distribution of people to make like-for-like comparisons with other parts of the city. Residential gross density calculates the whole catchment area including streets and open space.

Residential Net Density

(No. People per Hectare)

A common unit of measurement for assessing the spatial distribution of people to make like-for-like comparisons with other parts of the city. Residential net density calculates the portion of the catchment area excluding streets and open space.

Employment Gross Density

A standard unit of measurement for assessing the spatial distribution of people to make like-for-like comparisons with other parts of the city. Employment gross density calculates the whole catchment area including streets and open space.

Employment Net Density

A standard unit of measurement for assessing the spatial distribution of people to make like-for-like comparisons with other parts of the city. Employment net density calculates the portion of the catchment area excluding streets and open space.

URBAN STRUCTURE AND BUILT FORM

Number of Blocks

An indicator for the scale of urban structure, with a greater number of blocks generally correlating with smaller block sizes and a larger number of intersections.

Average Length of Blocks

Closely related to the number of blocks as an indicator of spatial scale, average block length determines the location of intersections, and so the permeability of the urban structure.

Number of Intersections

Determined by the size and shape of blocks and the width of streets, the number of intersections indicates the degree of permeability and connectivity within the urban structure.

Number of Land Parcels

An indicator for the scale of the built form and land use patterns within blocks, the number of land parcels provides a sense of the degree of granularity that may be experienced.

Land Parcel Sizes [S, M, L, XL, XXL, Super]

The number of land parcels may or may not correlate with the number of blocks; the proportion of different parcel sizes contributes to a clearer understanding of the scale of built form and land use patterns.

Gross Catchment Area (Sq.M)

Gross catchment area includes land parcels, streets and open space.

Net Catchment Area (Sq.M)

The net catchment area includes land parcels but excludes streets and open space.

Unbuilt Space (%)

The area of unbuilt space is the opposite of net catchment area: the total catchment area excluding land parcels but including streets and open space. This is measured as a percentage of the gross catchment area.

LOCAL MOVEMENT

Car Spaces per Resident

The number of residential car parking spaces is an indication of residential car dependency, and so symptomatic of how walkable the research catchment is in its urban structure, types of land uses, and the provision of public transport to connect to other areas.

Car Spaces per Employment

The number of worker and commercial car parking spaces is an indication of employee car dependency, and as for residential car dependency, symptomatic of how walkable the research catchment is in its urban structure, types of land uses, and the provision of public transport to connect to other areas.

Number of Train Stations

The number of train stations is an indication of train accessibility within the catchment, and train connectivity to external destinations to other catchments.

Number of Tram Stops

The number of tram stops is an indication of tram accessibility within the catchment.

Number of Tram Routes

The number of tram routes is an indication of tram connectivity within the catchment and to other catchments.

Number of Bus Stops

The number of bus stops is an indication of bus accessibility within the catchment.

Number of Bus Routes

The number of bus routes is an indication of bus connectivity within the catchment and to other catchments.

LOCAL LAND USES

Number of Essential Land Uses* per Neighbourhood

The number of essential land uses accessible within the research catchment (i.e. a 5 minute walk).

Number of Total Land Uses* per Neighbourhood

The total number of land uses accessible within the research catchment (i.e. a 5-minute walk).

Number of Residents per Essential Land Use

To understand the distribution and accessibility of essential facilities and services for residents.

Number of Employees per Essential Land Use

To understand the distribution and accessibility of essential facilities and services for workers.

* For definition of Essential Land Uses see Section 9: Methodology

EXTERNAL SPACES

Diversity (No. External Space Types Available)

The diversity of external space types offers an indicator of the degree of choice in locally accessible spaces, and so to what extent external spaces may function to an optimum.

Quantity of Provision (External Space sp.m per Capita)

Quantity of provision per resident and worker was measured to assess the sufficiency of external space provision to fulfil social, environment and economic benefits locally.

Quantity Distribution

This indicator tests how balanced the quantity distribution of all external space types are within walking proximity, and so to what extent external spaces as a system may function to an optimum.

Spatial Distribution

This indicator determines how balanced the spatial distribution of all types of external space are within a 500m walking catchment.

Potential Provision through Future Development

The potential for external space provision through future development (20% of the total area of each potential development site in next 5 years, 2015-2019). This measure is unlike all other indicators in the audit; it quantifies the latent potential of existing land to meet local external space needs if policy change was to occur.

The area of unbuilt space is the opposite of net catchment area: the total catchment area excluding land parcels but including streets and open space. This is measured as a percentage of the gross catchment area.

Liveability indicators: catchments matrix

Correlations matrix

The Catchments Correlations Matrix (on the following double page) illustrates how the Liveability Indicators relate and compare to each other across the 15 research catchments.

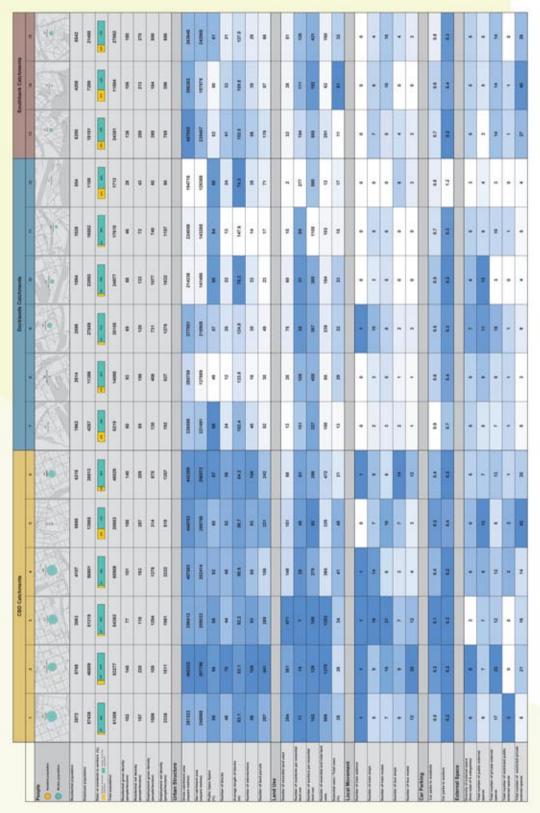
To assess trends and correlations spatially, each individual data set was ranked from highest to lowest performance (blue to white) across all catchments (e.g. higher quantity of land uses rank higher; greater number of public transport connections rates higher.)

The colour range reflects the Liveability Indicator's performance spectrum where darkest blue indicates HIGHEST PERFORMANCE outcomes and white indicates LOWEST PERFORMANCE outcomes.

The grouping of similar colour shades within similar geographic areas suggests that individual indicators may be correlated, meaning the variability in one indicator informs the variability of another indicator. As shown in the matrix, different geographic areas tend to inform similar colour schemes (degrees of performance) or most urban structure, land use, local movement and car parking indicators.

The optimisation of the Liveability Indicators as outlined in the Recommendations set out in chapter 4 provides scope and direction for future urban growth. The Liveability Indicators could be transformed into a guidance and monitoring tool for achieving integrated, sustainable local neighbourhoods.

Catchments matrix



click here to view

Liveability indicators: key correlations

The key observations are as follows:

- 1. Larger real walking catchments have a greater number of blocks, number of intersections, and number of land parcels within them.
- 2. Larger real walking catchments have a greater number of essential and total land uses within them.
- 3. Larger real walking catchments have greater access to public transport nodes and routes.
- 4. The ratio of car spaces to residents is observed to be smaller in larger walking catchments.

High performance (positive)

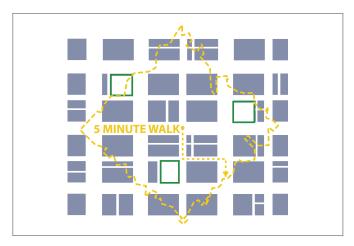
The central city has a more permeable urban structure enabling a larger walking catchment. This enables access to a larger area on foot in a given period, cultivating greater walkability and thus determining the proximity of and accessibility to local land uses.

The finer granularity (the size/quantum of land parcels) of the central city's urban structure allows for smaller-scale buildings, resulting in greater opportunities for multiple tenancies and a greater number of land uses. This gives purpose to walking and alleviates the need for car use.

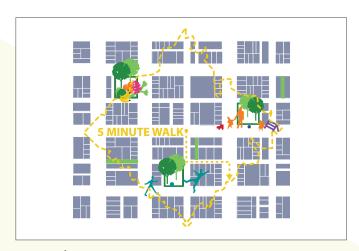
Buildings that better knit themselves into wider urban fabrics by integrating population density with 'granularity' (to hold mixed use), and 'permeability' (to connect land uses), are those generating better holistic outcomes.

There is a significant amount of existing private external spaces with potential to be made accessible to the public, increasing the amount and diversity of external space types within local areas.

There is much 'undefined' external space that holds significant latent potential for establishing future external space.



Fine urban structure, larger walking catchment



Smaller/more land parcels & open spaces



More land uses, less car parking per capita

FIG. 64. Illustrative diagrams of key correlations (high performance)

Low performance (Negative)

There is a poor relationship between high concentrations of where people live or work and low concentrations of walkable (essential) land uses (particularly in Docklands and Southbank).

There is a mismatch between high concentrations of where people live or work (particularly in Docklands and Southbank), with high levels of car parking provision. This discrepancy suggests an inappropriate allocation of car parking rather than there being a lack of other viable transport options.

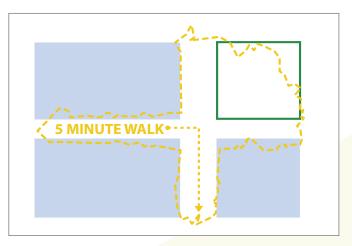
Private development has maximised site coverage resulting in an absence of external spaces that integrate with development sites (e.g. pocket parks, squares, streets, laneways, public, private or communal). This has created an impermeable urban structure, proportionately greater depending on the size of the site.

Development that consolidates large tracts of land featuring oversized building footprints, stifle the potential for accrued benefits of proximity, fine granularity and connectedness.

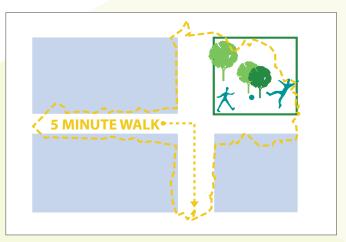
Buildings that accommodate car parking rather than mixed land uses, undermine the purpose for walking and impose car dependency.

Buildings that accommodate single occupants rather than multiple tenancies disable opportunities for mixed land uses and so undermine the purpose for walking and imposing car dependency.

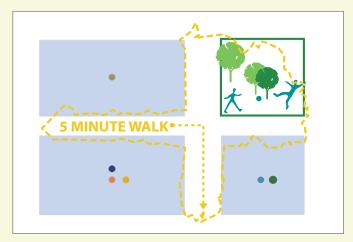
There is a shortage of small to medium-sized external spaces in Docklands and Southbank, with existing parks very large and functioning at a wider district rather than local level.



Fine urban structure, larger walking catchment



Smaller/more land parcels & open spaces



More land uses, less car parking per capita

FIG. 65. Illustrative diagrams of key correlations (low performance)

Liveability indicators: performance

The following pages show the urban conditions that are found in a HIGH PERFORMING research catchment - Catchment 2 (Melbourne Central) and a LOW PERFORMING catchment - Catchment 12 (Yarra's Edge).

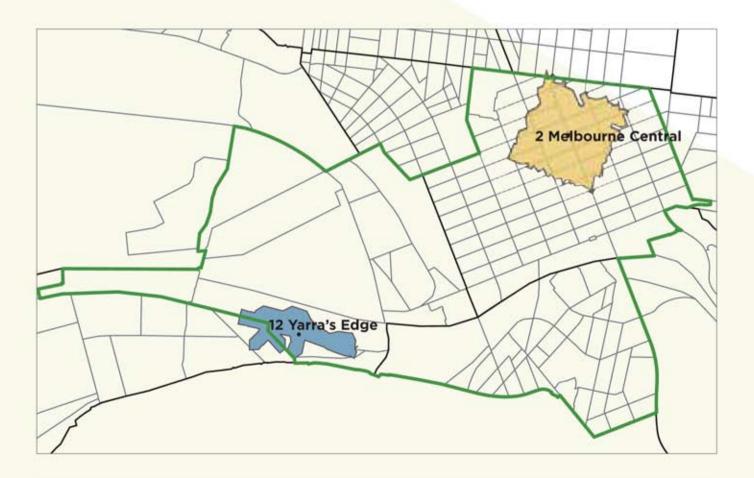
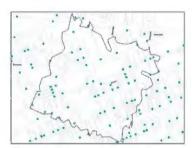


FIG. 66. Catchment examples 2 (Melbourne Central) and 12 (Yarra's Edge)

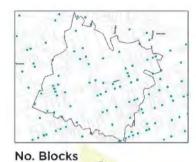
Liveability indicators: high performance

Catchment 2: Melbourne Central

The key correlations are illustrated in Catchment 2 (Melbourne Central) as an example of a catchment with high performance Liveability Indicators.



Urban structure indicators (number of blocks, intersections and land parcels) inform the size of real walking catchments.



Urban structure indicators (number of blocks, intersections and land parcels) inform land use quantity and intensity found within real walking catchments.

No. Blocks



No. Intersections

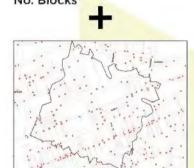




No. Land Parcels



Walking Catchment



No. Intersections





No. Land Parcels



Land Use Intensity



Local movement indicators (public transport nodes and routes) inform land use quantity and intensity within finite geographies.



Ratios of car spaces to people within finite geographies inform urban structure measures, the size of real walking catchments, and quantity of land use within finite areas.

Public Transport Nodes & Routes



Land Use Intensity





No. Intersections



Walking Catchment

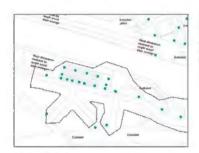


Land Use Intensity

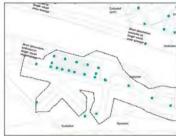
Liveability indicators: low performance

Catchment 12: Yarra's edge

The key correlations are illustrated in Catchment 12 (Yarra's Edge) as an example of a catchment with low performance Liveability Indicators.



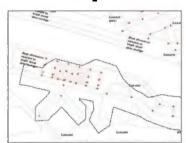
Urban structure indicators (number of blocks, intersections and land parcels) inform the size of real walking catchments.



Urban structure indicators (number of blocks, intersections and land parcels) inform land use quantity and intensity found within real walking catchments.

No. Blocks





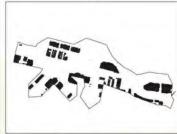
No. Intersections



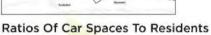


No. Land Parcels





Walking Catchment





No. Intersections



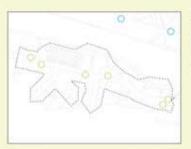


No. Land Parcels





Land Use Intensity



Local movement indicators (public transport nodes and routes) inform land use quantity and intensity within finite geographies.



Ratios of car spaces
to people within finite
geographies inform urban
structure measures,
the size of real walking
catchments, and quantity
of land use within
finite areas.

Public Transport Nodes & Routes



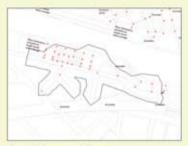


Land Use Intensity



Ratios Of Car Spaces To Residents





No. Intersections





Walking Catchment





Land Use Intensity

Liveability indicators: high performance

Catchment 2: Melbourne Central

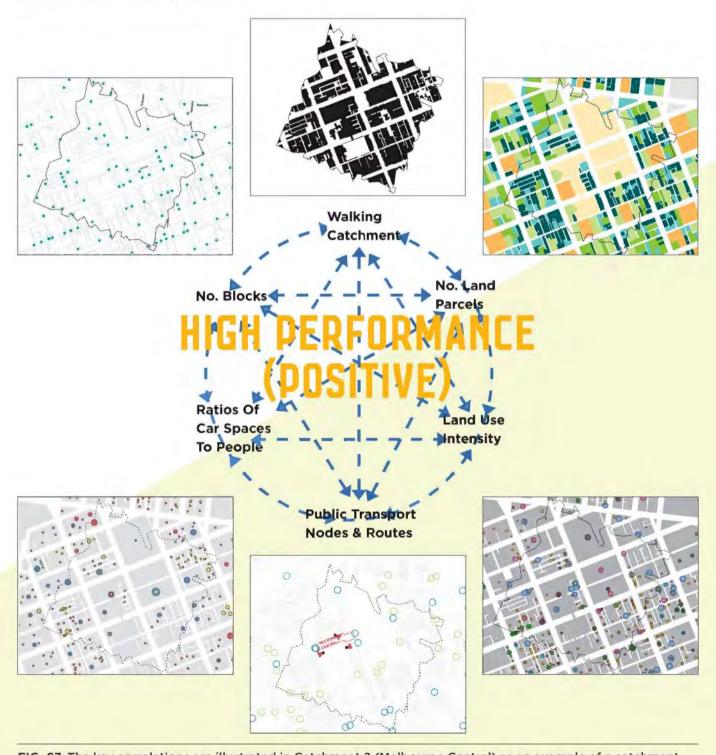
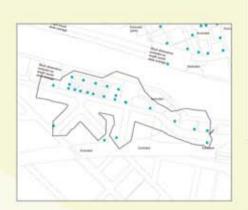
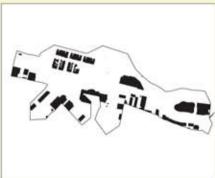


FIG. 67. The key correlations are illustrated in Catchment 2 (Melbourne Central) as an example of a catchment with high performance Liveability Indicators.

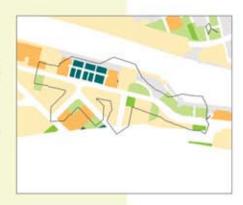
Liveability indicators: low performance

Catchment 12: Yarra's Edge





Walking Catchment



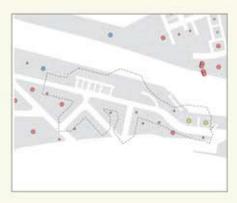
No. Blocks

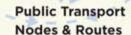
No. Land Parcels

LOW PERFORMANCE (NEGATIVE)

Ratios Of Car Spaces To People

Land Use Intensity





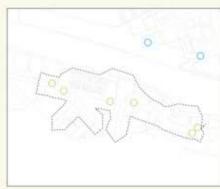




FIG. 68. The key correlations are illustrated in Catchment 12 (Yarra's Edge) as an example of a catchment with low performance Liveability Indicators.

Research with the community: introduction

Over a period of five weeks in March/April 2015, Places for People conducted research with the community to collect unique and valuable data from a city user perspective. The online engagement via Participate Melbourne, a key component of the program, recorded 6068 page visits; 848 participants filled in a detailed survey that was designed to capture the people's experience in accessing their daily needs being a selected number of key services and facilities a city should provide.

The following provides a snapshot of the feedback received. It will be further analysed in conjunction with the significant amount of spatial data obtained through this engagement program.

For illustration purposes we are also including a selected number of mind maps created by the participants as they capture eloquently the very personal nature of experiencing the city, while highlighting common needs.







FIG. 69. A selection of photos from Community Engagement pop-ups around the city as part of the Places for People research with the community.

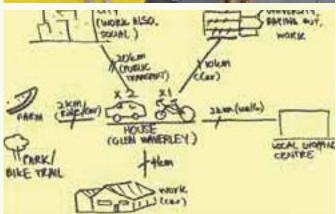
(SOURCES: All pp. 104-105 - City of Melbourne, 2015).





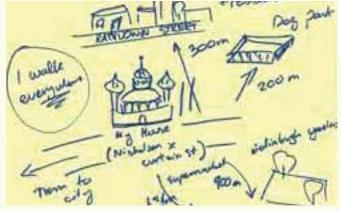






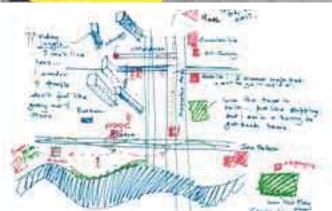






















Research with the community: preliminary findings

Workers

A total of 198 workers responded to the Local Neighbourhoods Online Survey; 130 from the central city, 22 from Docklands, 9 from Southbank, 30 from within the remainder of the municipality, and 7 workers from just outside the municipality.

Of 130 workers from the central city, 83 access fresh food, 86 access their groceries, 80 access medical services and 89 accessed cultural services.

Whilst 9 workers from Southbank responded to the online survey, none accessed fresh food or general services in the area locally. Of the 22 workers in Docklands, none accessed cultural services there.

Of the three districts, Southbank has the lowest percentage of workers who access daily needs locally; with fresh food 0%, groceries 22%, medical services 11%, general services 0% and community services 11%.

Of the workers who access open space locally, the highest percentage was in Docklands (45%) followed by the central city (27%) and Southbank (11%).

77-91% of workers in all three districts do not access education locally.

"... Assuming where I work i.e city is my neighbourhood I'd say almost everything important to me is missing such as affordable housing, affordable & good medical service, affordable fresh food etc..."

Central City Worker

'... It is disappointing that there is not closer access to fresh food and groceries. I would buy fresh supplies for lunch etc. at work if I could access it more quickly rather than from a cafe. I would also do food/grocery shopping on the way home if there was any facility for this between my work location and Flagstaff Station. Unfortunately there isn't....'

Central City Worker

"... More small businesses. Please don't build any more shopping centres or Coles or Woollies..."

Parkville Worker

"... Affordable and accessible fruit and veg not just buried away in the corners of supermarkets!! An initiative on spreading awareness of ethical/sustainable cafe locations and incentives to visit them. ..."

Central City Worker

Residents

A total of 324 residents responded to the local neighbourhoods online survey; 62 from the central city, 20 from Docklands, 49 from Southbank, 187 from within the remainder of the municipality, and 6 residents from just outside the municipality.

Whilst only 6 residents who responded live outside of the municipality, 107 residents access their groceries outside the municipality. A total of 97 access fresh food outside the municipality. Approximately half of these residents travel by car to access these services.

While 49 residents from Southbank responded to the online survey, only 7 residents accessed fresh food there.

A high proportion of Docklands residents access open space in their local area (90%), compared with just 31% of residents in the central city and 18% in Southbank.

A high proportion (71%) of central city residents socialise in their local space compared with those living in Docklands (40%) and Southbank (49%).

Just 11% of central city residents access community facilities locally, compared with 35% in Docklands and 41% in Southbank.

73–81% of residents from the three districts do not access education locally.

'... Good neighbourhood (with) many close by facilities and community spirit. Neighbourhood is in danger from over development of the area. Too many high rise developments (residential and commercial putting strain on infrastructure traffic and blocking out light creating wind tunnel and canyon effect. Historic buildings and character are being destroyed turning the area into a bland ugly soulless place - not "most liveable city". Poor development is destroying the quality of life of the area. Small business will suffer if residents are driven out by the poor development (residents contribute the most to the local economy - more than tourists or workers). The area will become a slum if action is not taken to improve planning and planning controls - already area is super dense -far in excess of residentially density permitted in other large cities. ...'

Central City Resident

'... The thing I dislike about our area is that the local convenience stores are too expensive and low quality so we have to drive to do our shopping in South Melbourne. If we need to pick up a parcel from the post office we also need to drive to South Melbourne and it would be nice to have a post office closer...'

Southbank Resident

'... I live in the 'law district' and it is dead on the weekends and after lunch during the week. There are no community services within close proximity and you can't even go out for coffee/brunch on the weekend. I usually travel to South Melbourne for fresh food groceries coffee and socialising on the weekends because there is no life or soul in my neighbourhood. This seems out of touch to me because there are so many residential towers in the area and many more under construction but this isn't a neighbourhood that caters to residents. It is a permanent construction site that is unwelcoming for pedestrians and businesses don't operate outside week-day mornings. There is one supermarket and it is overcrowded to the point of being unbearable but there are no other options except convenience stores (which are too expensive). This end of the city is in desperate need of life soul green and pedestrian-friendly projects. After living in this location for almost a decade my partner and I are currently looking to move elsewhere as a result of the lack of character detailed above...'

Central City Resident

"... I would like more low-priced and quality doctor and chemist services. It is very expensive. I find that I have to travel far for these services. I would would like more cafes and restaurants to open after hours on the weekend especially Sunday. It is very frustrating - you want to support local but the only places that are open are big chains! Makes it impossible! ..."

Central City Resident

'What's missing: ...resident community, social activities-facilities for families kids seniors to broaden the demographic in the city more like other international cities, a school, another large super market, a city wide compost collection program (I see other cities have them), a rail link to the airport, more dedicated bike lanes in the city and bike paths out to the suburbs...'

CBD Resident

Research with the community: preliminary findings

The maps provide a sample of the breadth of data collected through online engagement via Participate Melbourne. There were 848 participants who filled in a detailed survey that was designed to capture the people's experience in accessing their daily needs, key services and facilities in their local neighbourhood. These maps capture the percentage of daily needs met per travel mode for local residents only. Further analysis of the breadth of findings and correlations has yet to be conducted.



FIG. 71. Percentage of local residents cycling to access their daily needs.

0 - 20%
21 - 40%
41 - 60%
61 - 80%
81 - 100%



FIG. 72. Percentage of local residents driving to access their daily needs.

0 - 20%
21 - 40%
41 - 60%
61 - 80%
81 - 100%

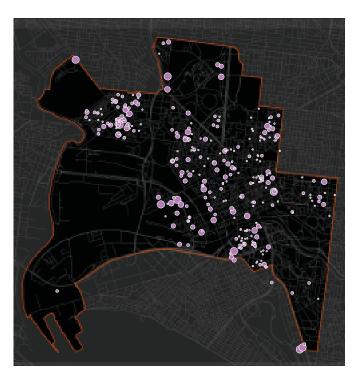


FIG. 73. Percentage of local residents travelling via public transport to access their daily needs.

- · 0 20%
- 21 40%
- 41 60%
- 61 80%
- 81 100%

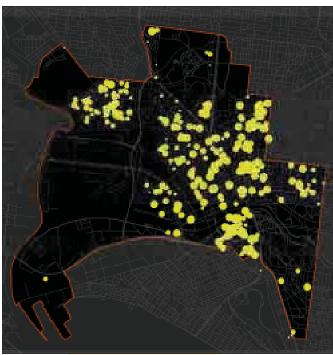


FIG. 74. Percentage of local residents walking to access their daily needs.

- · 0 20%
- 21 40%
- 41 60%
- 61 80%
- 81 100%