

DOCK LANDS THE FIRST DECADE









Produced by VicUrban 710 Collins Street Docklands, Victoria 3008 www.vicurban.com

as at D

ISBN: 978-0-9808211-0-9 Publication Date: 06/2010 Maps shown are for illustration purposes only and are correct as at December 2009.

Foreword

Melbourne Docklands has now enjoyed more than a decade of solid growth - \$6 billion of investment attracting residents, visitors, businesses and jobs.

From one of Victoria's first ports to an industrial wasteland in the 1990's, Docklands is becoming a modern residential, commercial and visitor destination in the heart of Melbourne.



A strong partnership between the Victorian Government and the private sector has helped deliver the investment and urban redevelopment of Melbourne Docklands.

The headquarters of some of the biggest businesses in Australia are now located at Docklands, along with a growing residential community that will help shape the second decade of development.

Now is the time to take stock and objectively examine all aspects of one of Australia's largest urban renewal projects, to give an accurate and up-to-date profile of Docklands as we work together to shape the next decade.

By now, most people have either heard of Docklands, been to a football match or concert at the stadium, or visited its many shops, restaurants and entertainment venues.

But how many people really know Docklands?

Docklands: The First Decade Report is a detailed record of what is at Docklands now - from its physical structures such as the buildings, waterways and parks, to the nature of who lives, works and visits the precinct. For example, some people may not know that Docklands covers approximately 190 hectares – nearly one quarter of which is water. It is also home to around 6,000 people, while facilities include two childcare centres, a supermarket, and the new National Ice Sports Centre.

The report contains a wide range of factual data that is interesting and useful to anyone wanting to familiarise themselves with this rapidly growing part of our city. It also touches on the challenges and difficulties that have been experienced as the area has developed, and provides a brief synopsis of the area's varied history.

This report is a realistic snapshot of Docklands as it exists today, that will also help inform the next decade of development. It helps us appreciate what has been achieved and what still needs to be done to make it the best place to live, work, visit and invest.

I encourage everyone to read this informative stocktake to learn more about Melbourne Docklands and contribute to its planning for the second decade.

Justin Madden MP Minister for Planning



Introduction

Docklands: The First
Decade report is an
opportunity to pause
ten years into the
redevelopment of
Melbourne Docklands
to examine and reflect
upon what has been
created since the first
apartments commenced
construction in 2000.

Over the past decade, Melbourne Docklands has attracted a growing community of residents and workers. This community includes some of the largest corporations in Australia along with a wide range of small businesses, all of whom have chosen to locate their operations in Docklands.

The development of Melbourne Docklands has always been intrinsically linked to the development of both Melbourne and Victoria. It was the site of one of Victoria's first ports contributing to the social and economic growth of the State, and providing a vibrant, if not gritty, side to city life.

Changes to cargo containers in the 1960s spelled the death knell for Victoria Dock and it fell into disrepair with port activity moving west of the city.

However, this waterfront site located within a stone's throw from an expanding city has not lain dormant for long. A visionary effort by successive Victorian Governments, VicUrban, a number of private developers and the City of Melbourne has seen Docklands emerge from a decaying and disused dock site to what is becoming a modern residential, commercial and entertainment precinct.



Melbourne Docklands is still under development. More than half of its land area remains undeveloped while developers have delivered around 44% of the floor area they have approval to construct. When the urban renewal is complete, it will have recast 146 hectares of land to accommodate up to 17,000 residents, millions of visitors and around 40,000 office workers.

This report provides key facts and figures about the development and the buildings, and also provides economic and social data about who lives, works and visits Melbourne Docklands.

This report will help contribute to our understanding of Melbourne Docklands in 2010, and the information it contains will be used to consult widely with the community and key stakeholders as VicUrban and the City of Melbourne plan for the second decade of Docklands.

Pru Sanderson Chief Executive Officer

Introducing Docklands:

This section provides basic facts about Docklands, its history and development, including street networks, parks and transport connections.

This report is broken down into five sections:

Living at Docklands:

This section profiles the growing number of residents, the types of housing on offer and the services and facilities available.

Working at Docklands:

This section examines employees and the commercial tenants at Docklands, office and building typology and sustainable work place practices.

Visiting Docklands:

This section has information on all the attractions including heritage, public art, events, dining, shopping and other entertainment.

Delivering Docklands:

This section has detailed information on the site conditions, development approach and governance of Docklands, as well as the land and floor area under development, the mix of development, and information on developers.

IV

Facts About The First Decade

In 2000, construction commenced on the first apartments at Melbourne Docklands. Ten years later, around \$6 billion has been invested into the area, and Melbourne Docklands is continuing to develop as a place where people chose to live, work and visit.

- Approximately 98% of the developable land at Docklands is contracted to private developers.
- Around 38% of the contracted land has been developed.
- Developers have delivered around 44% of the floor area they have approval to construct.
- Private and public investment into Docklands has occurred at a rate of approximately 38:1.

Docklands has 10 Green Star design rated buildings

There are over 120 restaurants, cafes, bars and eateries at Docklands

6,000

Approximately 6,000 people live at Docklands

35

More than 35 public art works are located throughout Docklands

338

Docklands has 338 marina berths (public and private)

75

Just over 75% of the buildings at Docklands are for residential or commercial use

19,000

An estimated 19,000 workers are employed at Docklands

3,000,000

Over 3 million visitors attended events at Docklands between July 2008 and June 2009

Table of Contents

Foreword I

Introduction III

Docklands - Facts About The First Decade VII

INTRODUCING DOCKLANDS	
Fast Facts	
Location	
Docklands History	
Docklands Timeline	5-10
Areas within Docklands	1
Street Network and Parking	1
Parks, Open Space and Waterways	10
Public Transport Network	19
Bicycle Network and Facilities	19

LIVING AT	
DOCKLANDS	21
Overview	23
Fast Facts	23
Resident Profile	24
Dwelling Profile	27
Sustainable Dwelling Design	30
Community Facilities and Amenities	31

WORKING AT	
DOCKLANDS	35
Overview	37
Fast Facts	37
Commercial Tenant and Employee Profile	39
Commercial Development	4
Sustainable Work Places	44

VISITING DOCKLANDS	47
DOCKLANDS	4/
Overview	49
Fast Facts	49
Visitor Profile	50
Visitor Accommodation	50
Getting to Docklands	
and Information Services	51
Events	51
Key Attractions and	
Entertainment Facilities	53
Public Art	57
Heritage	59
Stormwater Harvest	
and Reuse	62

DELIVERING	
DOCKLANDS	63
Overview	65
Fast Facts	65
Development Approach	66
Docklands Investment	66
Docklands Infrastructure	66
Development Agreements	67
Developable Land and Floor Area	68
Development Mix	69
Developers	69
Development Challenges	71
Sustainable Building Rating Systems	73
Precinct Energy and Water Demand	76
Docklands Partnership	77

RING		REFERENCES	79	LIST OF	MAPS	
ANDS	63			Regional	Context Map	4
	65			Key Area:		12
5	65			Street Ne	twork and Open Space	14
nent Approach	66			Regional	Open Space	16
s Investment	66			Public Tra	ansport and	
s Infrastructure	66			Bicycle N	etwork	20
nent Agreements	67			Local Cor	nmunity cture and Services	70
ble Land						32
Area	68				Developers	40
nent Mix	69				ansport and Facilities	52
rs	69				t Locations	58
nent Challenges	71			Heritage		60
le Building	77			Developn		70
stems 	73			Building E	Environmental Ratings	74
nergy and mand	76			GLOSSA	ARY	
s Partnership	77			ABS	Australian Bureau of Sta	atistics
				CBD	Central Business Distric	t
				DPCD	Department of Planning	g and Community Development
				ESD	Ecologically Sustainable	e Development
				GBCA	Green Building Council	of Australia
				GFA	Gross Floor Area	
				GWh	Gigawatt Hours	
				KI	Kangan Institute	
				kL	Kilo Litres	
				ML	Mega Litres	
				NABERS	National Australian Buil	ding Environmental Rating Scheme

NatHERS Nationwide House Energy Rating Scheme

1803

The first European settlers arrived

1892

Victoria Dock completed

1997

Construction of the stadium began



Fast Facts

- Prior to European settlement, Docklands was a swampy wetland, used by Aboriginal communities as a hunting ground and meeting place.
- Following European settlement, Docklands evolved as an industrial area supporting a range of industries, before being developed as a port in the late 1800s.
- Victoria Dock was completed in 1892, followed by Central Pier in 1916. Between the early 1900s and the late 1950s, Victoria Dock was Melbourne's busiest dock handling a wide range of cargo.
- During the 1980s, Docklands gradually fell into disuse and disrepair as Port activity moved further west.
- The Docklands Authority was established in 1991 to oversee redevelopment of Docklands.
- Construction of the stadium began in 1997, followed by construction on the first apartments in 2000.
- Tram infrastructure and key roads link Docklands with the wider public transport and road network.
- The development of Docklands has helped reconnect Melbourne with its waterfront, with just under seven hectares of new harbour and waterfront promenade completed to date.

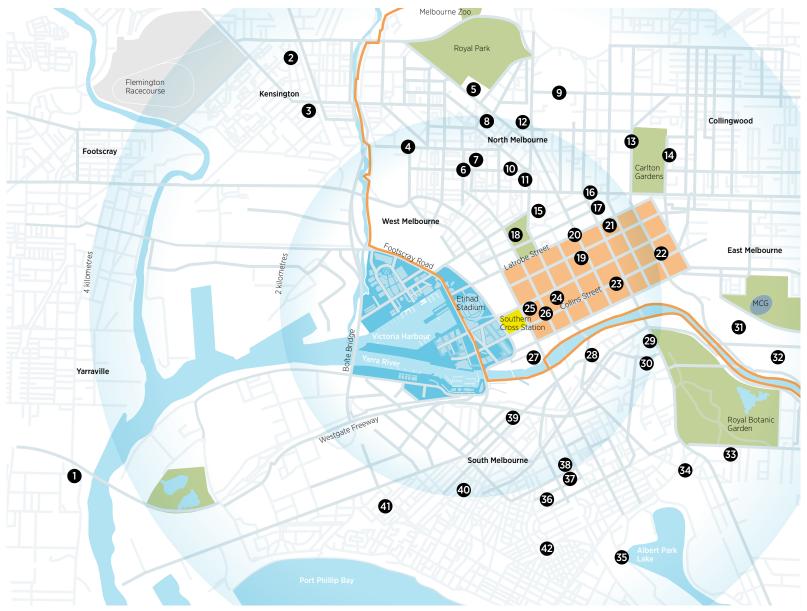
Location

Melbourne Docklands includes approximately 146 hectares of land and 44 hectares of water contained between Spencer Street (to the east), the Bolte Bridge (to the west), Footscray Road (to the north) and Lorimer Street (to the south).

It is approximately the same size as the original Central Business District (CBD) of Melbourne and is now becoming a central business and visitor destination in its own right.

To its west, north and south are light commercial and industrial areas including the Port of Melbourne (Australia's busiest container port), Fisherman's Bend and the area known as 'E-gate' (the former Melbourne rail yards). Melbourne's original CBD lies to its east.

Regional Context



- 1. ScienceWorks
- 2. Kensington Primary School
- 3. Holy Rosary Primary School
- 4. North Melbourne Pool
- 5. Royal Children's Hospital
- 6. Curzon Street Children's Centre
- 7. North Melbourne Library
- 8. North Melbourne Primary School
- North Helbourne Primary School
 University of Melbourne Campus
- 10. North Melbourne Children's Centre
 - llogo 22
- 11. St Joseph's College

- 12. Royal Melbourne Hospital
- 13. Carlton Gardens Primary School
- 14. Melbourne Museum
- 15. Queen Victoria Market
- 16. City Baths
- 17. RMIT campus
- 18. Flagstaff Gardens
- 19. Taylors College
- 20. ABC Melbourne Central
- 21. State Library
- 22. KU Childrens' Services

- 23. City Library
- 24. Expect A Star Education Services
- 25. Kids On Collins
- 26. Sunkids Children's Centre
- 27. Future Kids Child Care
- 28. Crown Casino
- 29. National Gallery Victoria30. Melbourne Recital Centre
 - Dad Lawar Arana
- 31. Rod Laver Arena32. Olympic Park
- 33. Melbourne Grammar School

- 34. MacRobertson Girls High School
- 35. MSAC (Melbourne Sports and Aquatic Centre)
- 36. Galilee Regional Catholic Primary
- 37. Coventry Children's Centre
- 38. South Melbourne Markets39. City Kids Early Learning Centre
- 40. Port Melbourne Library
- 41. Port Melbourne Primary School
- 42. Albert Park Primary School

Capital City Trail

Docklands History

Early History

The area now known as Melbourne Docklands is part of the Lower Yarra Delta, a low lying area that spreads from Princes Bridge to the sea. This was originally a wetland area containing swamps, low-lying vegetation, water fowl and fish.

For many thousands of years, this marshy land between the mouths of the Yarra and Maribyrnong Rivers was used as a hunting ground and meeting place by several Aboriginal communities - the Wurundjeri, the Boonerwrung, Taungurong, Djadja Wurrung and the Wathaurong.

European Settlement

The first European settlers arrived in 1803, when New South Wales **Surveyor General Charles Grimes** sailed into Port Phillip Bay on the Cumberland. These visitors recorded their brief exploration of the forked waterways, known for many years as Salt Water River (later the Maribyrnong River) and Freshwater River (later the Yarra River).

There was little further exploration of Port Phillip Bay and the Yarra River until 1835 when John Batman and John Pascoe Fawkner founded their illegal settlement, later named Melbourne. Sanctioned by Governor Bourke in 1837, the fledgling settlement was surveyed by Robert Hoddle, from the top of Batman's Hill (located south west of where Southern Cross Station now stands).

Early Industry

Early ships visiting the new settlement anchored in Hobson's Bay (now Williamstown) and transferred freight by boat up the Yarra River. At first boats were tied to trees, before the first wharves were built on the banks of the Yarra River in the early 1840s.

The swampy land on the western edge of the developing city quickly became the preferred site for industry due to the cheap leases that were available, and the close proximity to water transport. By 1860, Docklands was home to the West Melbourne gas works, railway industry, an explosives magazine and a pottery works.

A number of other industries such as abattoirs, fellmongeries (dealers in animal skins and hides) and tanneries set up in the area because of its isolation from the township and proximity to water. One of the tallow-rendering plants in the area notched up an environmental first in 1867 by being the first Victorian industry to be fined for polluting.

Industrialisation would continue to shape the area's future over the next century.



8,000_{bc} 1803

Tribal land used by Aboriginal people as a hunting and meeting place

First European visitors arrive in Port Phillip Bay 1835

John Fawkner and John Batman arrive in Melbourne 1837

Melbourne becomes a city

1852

Melbourne Chamber of Commerce investigates need for better wharf facilities for Melbourne

1857

Melbourne gasworks are developed at Docklands

1860^s

Intensive industrial development leads to a pollution problem at Docklands

1878

Sir John Coode retained to advise on how to achieve improved wharf facilities for Melbourne



Development of the Port

Victoria formally separated from New South Wales in 1851. In that year the Melbourne Chamber of Commerce was formed and began campaigning for a Harbour Trust to develop wharf and water traffic. The Trust was established in 1877 and shortly thereafter engaged engineer Sir John Coode to advise on developing the docks as a deep water port suitable for heavy shipping.

Sir John Coode eventually recommended that the course of the Yarra be altered and that the lands south west of the rail yards be used for another major dock facility. This led to a major dredging exercise to create a new route for the Yarra known as 'Coode Canal'.

Construction of Victoria Dock commenced in the late 1880s and was completed in 1892. Constructed in local timber, the dock was applauded as a feat of engineering and testament to Melbourne's stature as an international city. Excavating the dock involved removing some 2.3 million cubic metres of earth that was used to improve the land around the dock and to fill the West Melbourne Swamp.

Port Operations and Decline

By 1908, Victoria Dock was handling an estimated 90% of Victoria's imports. A central pier was constructed between 1914 and 1916 to further enlarge the dock's capacity.

Between the early 1900s and the late 1950s, Victoria Dock was Melbourne's busiest dock, handling a wide range of cargo including coal, steel, animals, wool, wheat. It maintained this status notwithstanding the economic downturns associated with the first and second world wars.

In the 1960s, the Harbour Trust began using containerised cargo which required very different storage to the long sheds lining the docks. New docks and transport infrastructure were built west of Victoria Dock in the 1970s, rendering redundant the dock and the wharves on both sides of the Yarra. By the end of the decade, these new docks were handling around 68% of the Port's cargo.

Port activity at Docklands continued to decline steadily over the next few years, and by the late 1980s it was largely disused and had fallen into disrepair.

Regeneration

In 1991, the Docklands Authority (later becoming part of VicUrban) was established to oversee the area's renewal. The Docklands Authority was tasked with creating a waterfront development that would extend the western edge of the Central City, enhancing its connection with the waterfront.

After a period of extensive consultation with the community and key stakeholders, a plan for Docklands was released in 1995. In conjunction with the plan, a commitment was made by the State Government to develop the area.

The first project to commence construction at Docklands was the new stadium in 1997. Commencement of works on the stadium also triggered the construction of key roads and tram infrastructure to help link it, and the whole precinct, to surrounding areas.

Construction on the first apartments at Docklands commenced in 2000.

1887

Excavation of Victoria Dock commenced

1892

Victoria Dock completed

1912

First Australian bank notes are printed at the Queens Warehouse in Docklands

1916

Central Pier at Victoria Dock completed

1925

An entire American navy squadron docks at Victoria Harbour

1930

Spencer Street bridge opens leading to more intensive use of Victoria Dock

1930_s

Introduction of the first electric wharf cranes

1940^s

Between 1920 and 1940, Victoria Dock and North Wharf collectively handle about half of the total Port of Melbourne trade

7 Introduction

Early

Containerisation of cargo commences

Late

Changing nature of shipping and cargo handling causes Port activity to start moving west

Construction of the **Charles Grimes Bridge**

1995

State Government releases a plan for Docklands and commits to developing the area

First 'Expressions of Interest' for development are called for

First Development Agreements signed for the stadium and Yarra's Edge, Stadium construction commences

The Docklands Authority merges with the Urban and Regional Land Corporation to become VicUrban. City Circle tram extended through Docklands

2003 2004 2005

Collins Street bridge opens, extending Collins Street into Docklands. NAB office opens

Tram lines extended to north west Docklands

1980%

Docklands gradually falls into disrepair and disuse as port activity continues to relocate west

The State Government releases 'Melbourne's Docklands: A Strategic Planning Framework' for public consultation

Docklands Task Force established

Docklands Authority established to oversee regeneration of Docklands

Municipal powers transferred from the City of Melbourne to the **Docklands Authority**

The stadium, La Trobe Street bridge and Bourke Street bridge open. Construction begins on the first apartments at Docklands

First residential apartment tower completed

Webb Bridge opens. Construction on NAB office commences

Docklands is the venue for three **Commonwealth Games events** and a stop-over point for the Volvo Ocean Race

2006 2007 2008 2009

Construction starts on the ANZ and Fairfax Media headquarters. Municipal powers transferred from VicUrban to City of Melbourne

Harbour Town Shopping Centre opens at Docklands

Estimated population is 6,000 residents and 19,000 workers

Areas within Docklands

Docklands is made up of a number of distinct areas. For the purpose of this report, four main areas have been identified:

North West Docklands

North West Docklands is the triangular area of land bounded by Footscray Road on the north east, the water of Victoria Harbour on the south east and Moonee Ponds Creek and the Bolte Bridge on the north west. It includes the Docklands Studios, NewQuay and Waterfront City developments.

2

Stadium and Surrounds

Stadium and surrounds is the area located between the rail infrastructure associated with Southern Cross Station and the water of Victoria Harbour. It encompasses the land from Dudley Street in the north to Flinders Street in the South and includes the Digital Harbour, Stadium, Kangan Institute, Batman's Hill and Central Pier developments.

3

Victoria Harbour

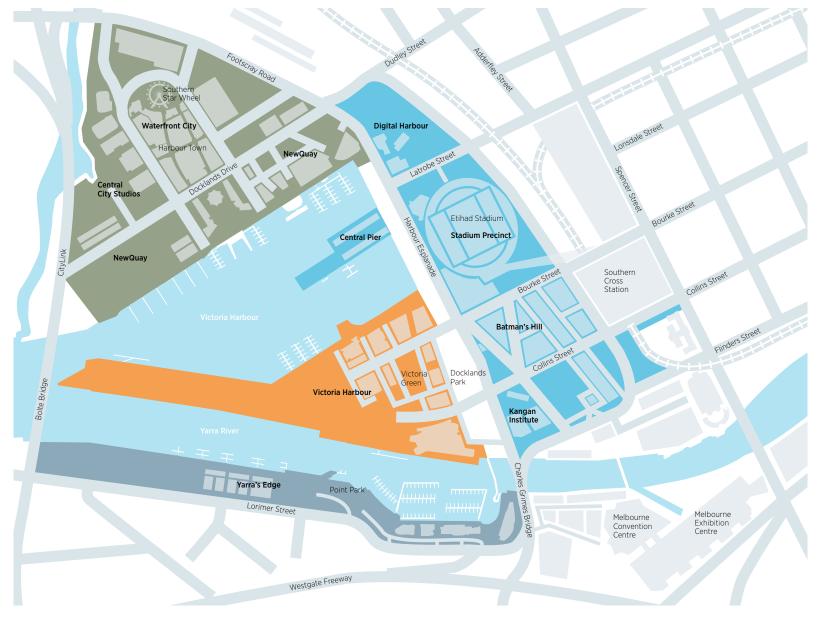
Victoria Harbour is the land that separates the water of Victoria Harbour from the Yarra River. It is bounded by Docklands Park to the east, the harbour to the north and the Yarra River to the south. The area has a western 'finger' of land that extends almost to the underside of the Bolte Bridge and includes the Victoria Harbour development.

4

South of the Yarra

South of the Yarra is the area between Lorimer Street on the south and the Yarra River on the north. Charles Grimes Bridge forms its eastern boundary and the Bolte Bridge its western boundary. This area includes the Yarra's Edge development.

Key Areas





Street Network and Parking

Streets

Docklands has good access to the metropolitan and regional road network. The precinct is easily accessible from CityLink and the West Gate Freeway whilst Wurundjeri Way provides an important route for commuters along its eastern boundary.

Harbour Esplanade is Docklands' main street. It links the harbour to the Yarra River and connects the northern and southern areas of the precinct, while Collins, Bourke and LaTrobe Streets provide the main east west links and extend the 'Hoddle' grid into the area.

Other main roads which connect Docklands to surrounding areas of Melbourne include:

- Dudley Street which continues into Docklands as Docklands Drive.
- Footscray Road which links to Harbour Esplanade.
- Lorimer Street which connects development south of the Yarra to South Melbourne.

A number of other smaller streets provide local connections and help create the Docklands street network.

Collins Street Extension

The extension of Collins Street into Docklands via a bridge over the railway lines and Wurundjeri Way extended one of Melbourne's premier business addresses into the precinct.

Construction works on the new street extension and bridge commenced in 2001 and were completed by 2004.

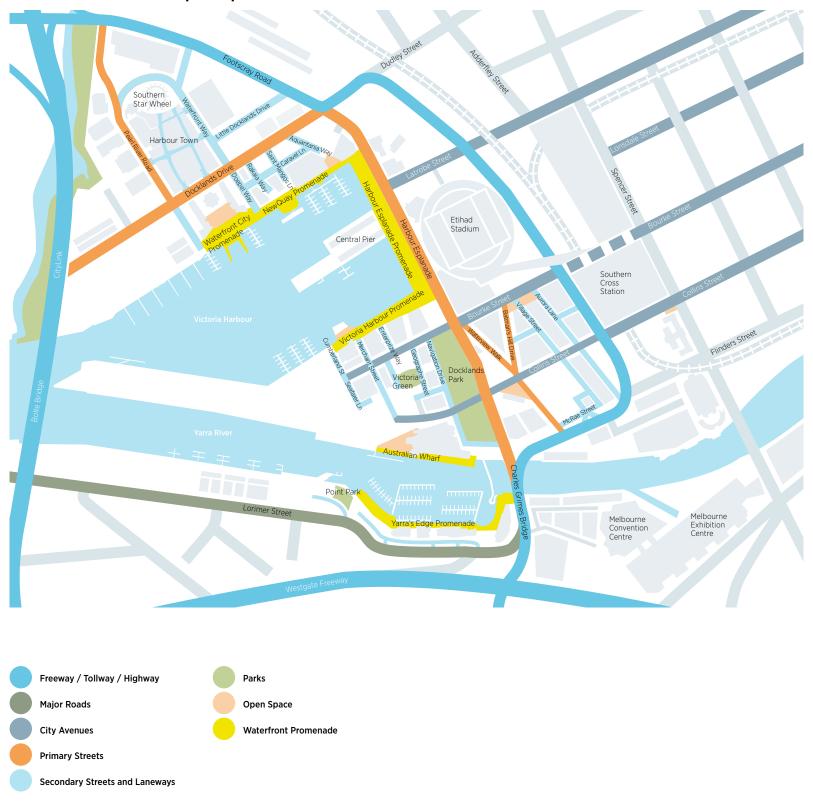
The design and layout of the extension closely resembles the original section of Collins Street including tram tracks, cycle access and some onstreet car parking.

Parking

As at December 2009, there are an estimated 14,600 permanent car park spaces either existing or under construction at Docklands. These car parks are split between private and publicly accessible spaces as follows:

- Approximately 4,300 private car parks for the exclusive use of residents.
- Approximately 2,300 private car parks for the dedicated use of commercial tenants.
- Approximately 7,400 public car parks contained in public parking facilities throughout Docklands, including Etihad Stadium and Harbour Town.
- Approximately 600 metered on-street, short term car parks.

Street Network and Open Space



Parks, Open Space and Waterways

Parks and open space at Docklands contribute to a ring of regionally significant open spaces around Melbourne. These include Royal Park, Carlton Gardens, Yarra Bend Park, Royal Botanic Gardens, Yarra Park (MCG), Birrarung Marr and Southbank Promenade.

As at December 2009 approximately 12 hectares of parks and open space have been completed at Docklands. Docklands Park, located at the southern end of Harbour Esplanade, is the precinct's largest area of green space and includes a permanent children's playground.

The opening up of the Docklands' waterfront has also added a new dimension to the recreation experience available in and around Melbourne. As at December 2009, just under seven hectares of new harbour and waterfront promenade have been completed.

The waters of Victoria Harbour and the upper area of the Yarra River are also now available for recreational and sporting activities.

Key Parks, Promenades and Waterways	Area (approximate)	Description	
Parks			
Docklands Park	2.7ha	Docklands Park is the largest park at Docklands, containing barbeque and playground equipment as well as urban art.	
Point Park	1ha	Point Park provides local greer space for Docklands residents living south of the Yarra.	
Victoria Green	0.4ha	Victoria Green is a local park for residents and workers.	
Open Spaces			
Waterfront City Piazza	1ha	The Piazza is designed to hold large and small public events and is edged by restaurants and retail outlets.	
Collins Landing	O.3ha	Collins Landing is an open plaza containing a mixture of paved and grass surfaces. It is edged by trees that provide shade and shelter.	
Promenades			
Waterfront Promenades	6.7ha	Docklands' waterfront promenades reconnect Melbourne with its waterfront by providing public access to the water.	
Waterways			
Victoria Harbour Yarra River Moonee Ponds Creek	44ha	Docklands' waterways support a range of recreational and sporting activities including fishing, sailing, out-rigging and dragon boating.	

Regional Open Space



- Royal Park
- 2. Carlton Gardens
- 3. Fitzroy Gardens
- 4. Treasury Gardens
- 5. Yarra Park/MCG

- 6. Royal Botanic Garden
- 7. Albert Park
- 8. Southbank Promenade
- 9. Birrarung Marr
- 10. Westgate Park

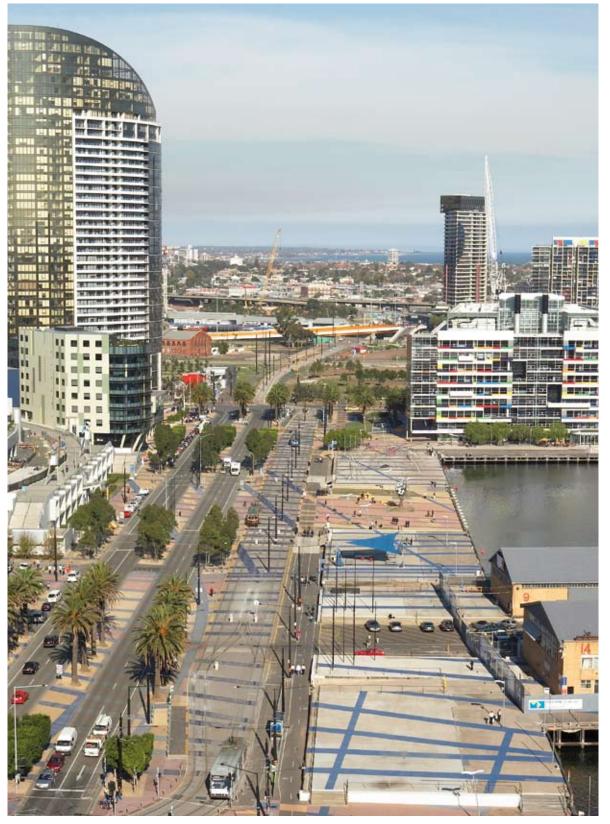
- 11. Docklands Park
- 12. Docklands Waterfront Promenade
- 13. Flagstaff Gardens

Harbour Esplanade

Linking the Yarra River to the harbour, Harbour Esplanade is the main street of Docklands. Parks, trails and promenades along its length provide different experiences and recreation opportunities for both residents and visitors.

At its southern end the Charles Grimes Bridge provides an important access point for vehicles, complemented by the Webb Bridge which enables pedestrians and cyclists to cross the Yarra River. At its northern end, Harbour Esplanade runs alongside the waterfront providing views of the harbour and the Bolte Bridge.

Plans are underway to redevelop Harbor Esplanade where it adjoins the harbour, changing the current space into a new harbourside park and a tree-lined boulevard. This redevelopment will improve the way people use the space by realigning vehicle, tram, bicycle and pedestrian traffic and creating space for the new park. The redevelopment will also provide shade and shelter for pedestrians, and create points of interest along the harbour promenade.



Harbour Esplanade | Docklands



Public Transport Network

Docklands is located next to Southern Cross Station, the centre of Victoria's metropolitan, regional and interstate rail network. Tram and bus services also connect Docklands to the wider metropolitan area.

This is consistent with the planning for Docklands which has been focused on reducing the need to rely on cars by providing a range of public transport options for residents and workers.

All existing residential dwellings are located within 400 metres of either a tram or bus stop, and/or within an 800 metre radius of Southern Cross Station.

Public transport services operating locally in Docklands include:

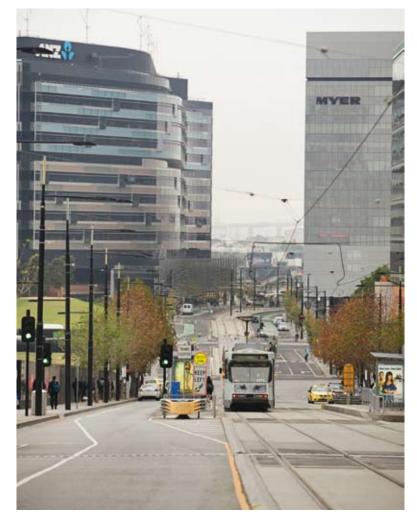
Tram

Docklands is serviced by six city tram services as well as the free City Circle Tram. Commercial tram services operating in Docklands are routes 11, 30, 42, 48, 70 and 86.

Bus

Four bus routes pass by or through Docklands using Lorimer Street, Footscray Road and Dudley Road. These routes are 220, 232, 237 and 238.

Source: Metlink



Collins Street | Docklands

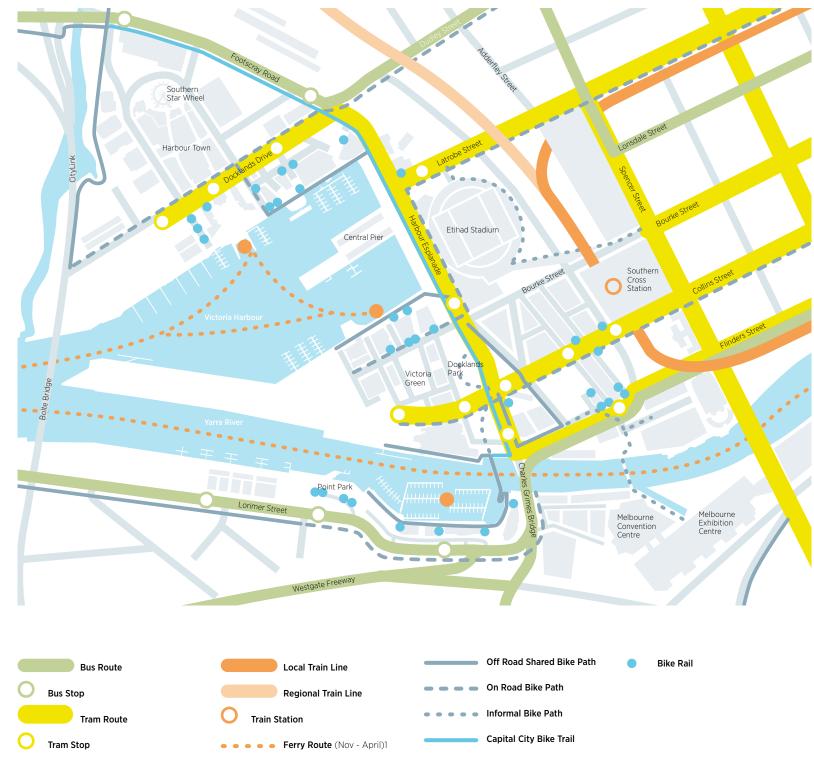
Bicycle Network and Facilities

The bicycle network at Docklands includes approximately 15km of on-road, dedicated off-road and shared paths. Bike trails that converge in the precinct include the Yarra Trail, the Bayside Ride, the Capital City Trail and the Maribyrnong Trail.

In March of each year, Bicycle Victoria undertakes formal head counts of cyclists on its annual 'Super Tuesday' census. Headcounts from 2008 and 2009 show that over the two hour morning peak period (7-9am) an average of around 900 cyclists enter Docklands from all directions.

Public facilities available to cyclists in Docklands include bicycle hoops and drinking fountains at various locations throughout the precinct.

Public Transport and Bicycle Network



6,000

Approximately 6,000 residents

3,400

3,400 dwellings existing or under construction*

81

Around 81% of the dwellings at Docklands have either 1 or 2 bedrooms*



Overview

Since 2001 the population of Docklands has grown tenfold, from around 650 residents to approximately 6,000 in 2009.

According to the 2006 Census, Docklands residents were predominantly professional singles or couples, with higher income and labour force participation rates than was average for either the Melbourne CBD or Victoria. Residents were also younger than the Australian average, and more than half of them were born overseas.

This demographic profile is consistent with the precinct's innercity location and the one and two bedroom high-rise apartments that are its main residential offering.

As the population has grown, a range of vital community services such as shops, banks and health and child care facilities have also located in Docklands, in addition to a range of existing facilities in the surrounding suburbs.

Fast Facts As at December 2009

- An estimated 6,000 people live at Docklands.
- Almost 3,400 dwellings exist or are under construction.
- Around 97% of dwellings are apartments.
- More then 80% of existing dwellings have either one and two bedrooms.
- · Community facilities include medical centres, pharmacies, a supermarket, bank branches, childcare and a post office.

Resident Profile

The data in this section is taken from the 2006 Census, and provides a profile of Docklands at that time. The next Census will occur in 2011. and will provide an updated profile of Docklands' residents.

Population

The 2006 Census estimated there were just under 4,000 people living in Docklands. As at December 2009. VicUrban estimates the population to be approximately 6,000 residents based on the residential development that has been completed since the Census.

Docklands Population Estimates

	2001	2006	2009
Residents	658	3,939	6,000*

Source: ABS Census 2001 and 2006; VicUrban

* Based on an estimate of 1.9 people per dwelling for around 3,150 private dwellings (not including 250

Age Profile

As at 2006, Docklands residents were younger than the Australian average with a median age of 30 compared to 37.

Young adults (15-24 years) made up nearly 25% of the population compared to an average of 14% across Victoria. However, this was still significantly less than in the Melbourne CBD where this age group made up nearly 45% of the population.

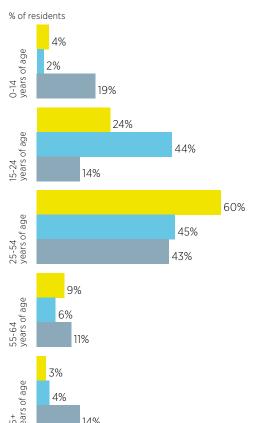
By comparison, there were fewer people aged over 60 living at Docklands than was average for Victoria. However this age group made up a similar proportion of the population as in the Melbourne CBD

There were also significantly fewer young children (12 years and under) living at Docklands than was average for Victoria.

Age Profile: Docklands, Melbourne CBD and Victoria as at June 2006

Source: ABS 2006 Census Quick Stats





Making the most of Docklands a young resident's perspective

Jessie Xin Xu, a medical student at the University of Melbourne, moved to Docklands two years ago and was looking for a place that was close to the city, but without the hustle and bustle of the CBD.

"I wanted to move to a place where I could relax after coming home from work, and Docklands was perfect in that sense. One day I got off the city circle tram to explore Docklands and fell in love right away"

For Jessie, there were many things that attracted her to Docklands. "It has a very modern feel, it's close to the water, has good views and there are lots of exciting new developments happening.

In the two years that Jessie has lived at Docklands, she has noticed many changes. "There are definitely a lot more people and traffic moving through the area. There is also a lot more events and festivals being hosted here.

Jessie has many interests including food and shopping and loves the variety that Docklands has to offer. She is also the current treasurer of the **Docklands Community Association** "I enjoy getting involved in community activities."



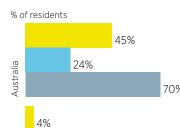
Country of Birth

The 2006 Census revealed that Docklands residents came from diverse backgrounds. Over half the residents were born outside Australia, mainly coming from New Zealand, China, the United Kingdom, Malaysia and Indonesia.

Country of Birth: Docklands, Melbourne CBD and Victoria as at June 2006

Source: ABS 2006 QuickStats (Docklands)











3% 7% 0.3%

Employment Status and Income

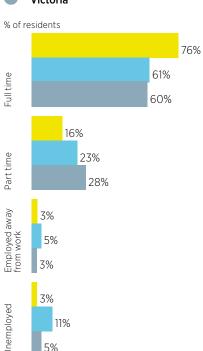
In 2006, Docklands residents had a very high employment rate with about 76% in full time work. This was significantly higher than for either Victoria or the Melbourne CBD.

They also earned substantially more on average than other Melburnians or Victorians.

Labour Force Participation: Docklands, Melbourne CBD and Victoria as at June 2006

Source: ABS 2006 QuickStats (Docklands)





As part of each
Census, the Social
and Economic Index
for Areas (SEIFA) is
prepared. The SEIFA
is a summary index
based on selected
data from the Census
and summarises the
characteristics of
people and households
within an area.

The Docklands SEIFA data based on the 2006 Census indicate that overall, residents of Docklands are experiencing a lower level of disadvantage, or alternatively, a higher level of advantage than other City of Melbourne residents.



Household Composition and Tenure

The 2006 Census indicated that most Docklands households consisted of either couples or singles with no children.

Docklands households were closely split between family households (55%) and non-family households (45%). Family households were mainly couples with no children, while people living alone made up most of the non-family households.

Approximately 65% of Docklands residents were renting their homes in 2006. This was comparable with the Central City at around 68%, but was significantly higher than the Victorian average where only 24% of people were renting their homes.

In comparison, the number of Docklands residents purchasing their own home was around 12%, which was lower than both the Central City (at 16%) and Victoria (at 34%).

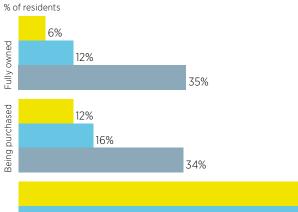
The remainder of Docklands residents either fully own their own home (around 6%) or did not state their tenure status in the Census form (around 18%).

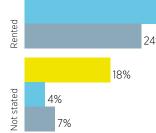
Household Tenure in Docklands

Source: ABS 2006 QuickStats (Docklands)



Victoria





The type of people who live at Docklands is influenced by the type of housing available, access to employment, services and facilities and housing costs.

Developers at Docklands build dwellings to cater for market demand, which is in turn influenced by the lifestyle owners and tenants are seeking. The inner-city apartment lifestyle is generally sought after by younger people looking for a lowmaintenance housing option with easy access to the CBD, public transport and jobs.

In turn, the limited access to facilities such as primary schools and family orientated housing options means that families may be less likely to stay in Docklands once their children reach a school age.

This profile is expected to change over time as additional community facilities are provided at Docklands.

65%

68%

25 Living

Dwelling Profile

Dwelling Numbers

As at December 2009, Docklands has nearly 3,400 dwellings either completed or under construction. Most of these dwellings are located around the stadium, north west Docklands and south of the Yarra River.

Docklands Residential Dwelling Numbers as at December 2009

Location	Dwelling Numbers as at December 2009	Estimated Dwelling Numbers at Project Completion
Stadium and Surrounds	1,061	2,097
Victoria Harbour	433	2,784
North West Docklands	1,097	3,006
South of the Yarra	804	1,791
TOTAL	3,395*	9,678

Source: VicUrban Docklands Build out Forecast - 2009

* It is estimated that at December 2009, around 250 of these dwellings are being used as serviced apartments.

Affordable Housing at Docklands

Docklands' first affordable housing project - The Merchant - was completed in late 2009.

Undertaken as a joint partnership between State Government, the precinct developer and Housing Choices Australia, the project presents an innovative model to deliver affordable housing in the inner-city.

The eight-storey development includes 133 apartments of similar design and fit out, ground floor retail space and limited tenant car parking.

Housing Choices Australia owns 57 apartments spread over three floors of the building. These are available to rent by low to medium income tenants.

The Merchant's inner-city location benefits tenants who may work in the city, assisting them to live closer to their employment. This means less time and money commuting to and from work, ensuring these workers can stay in the jobs that are essential to the running of our city.

The remaining 76 apartments are either owner occupied or owned by private investors.

With a growing number of people opting for an inner-city lifestyle, all apartments within The Merchant sold at least nine months prior to its completion.

The Merchant | Docklands





Yarra's Edge Apartment Towers | Docklands

Dwelling Type

As at December 2009, apartments make up almost 97% of the dwellings complete or under construction in Docklands. Townhouses make up the remainder and are under development south of the Yarra and in north west Docklands.

Of the existing dwelling stock, one and two bedroom dwellings make up just over 80% of all the living accommodation in the precinct, while dwellings with more than three bedrooms make up only 5% of the total stock.

Docklands Dwelling Types

Number of Bedrooms	Apartments	Townhouses	% of Total Dwellings
1	920	4	27%
2	1,779	58	54%
3	478	-	14%
4+	106	50	5%
TOTAL DWELLINGS	3,395		100%

Source: VicUrban Docklands Build out Forecast - 2009

27 Living

Apartment Design

The design of residential apartments at Docklands generally consists of an apartment tower built above what is known as a 'podium' base. The podium is that part of the building which in particular accommodates car parking for the building tenants.

Most building podiums in Docklands are between five and nine stories in height. On the ground floor, there is generally a building foyer, some shops and building services (e.g. electricity substation, car park entry and back of house areas).

The remaining floors of podiums are generally used to accommodate car parking for building tenants. This is more cost effective than providing basement car parking, which is very expensive in the area due to the high water table and soft nature of the soil in Docklands.

However, having so much above ground car parking can impact on how people experience the look and feel of a street at ground level. Back of house and service areas at street level can also detract from the look and feel of a street.

Buildings which screen car parks from view minimise these impacts. This screening is often achieved by having other uses located around the outside of the car park (where possible) and using semi transparent screening on the remainder.









NewQuay East 'Arkley' - Docklands

77 metres - 22 floors

251 metres - 63 floors

Sustainable Dwelling Design

Over the last ten years there has been a focus on encouraging the development of sustainable and efficient buildings at Docklands. Developers have been encouraged to design buildings with improved water and energy efficiency and reduced car dependency, which has resulted in the precinct developing a reputation for its environmental commitment.

Energy

In 2008, dwellings were estimated to have used around 26% of the total energy used in buildings at Docklands. They used relatively less energy per square metre of floor space than commercial buildings at Docklands.

Using the Nationwide House Energy Rating Scheme (NatHERS), a building's design can be rated using a scale of 0 to 10 Stars on how much energy it is predicted will be required to heat and cool the building. The higher the Star rating, the lower the predicted energy use requirement.

Following the introduction of the minimum 5 Star NatHERS energy efficiency standard in 2005, eight residential buildings have been delivered at Docklands. Of these, four have achieved a 6 Star NatHERS design rating, exceeding the minimum requirement.

Water

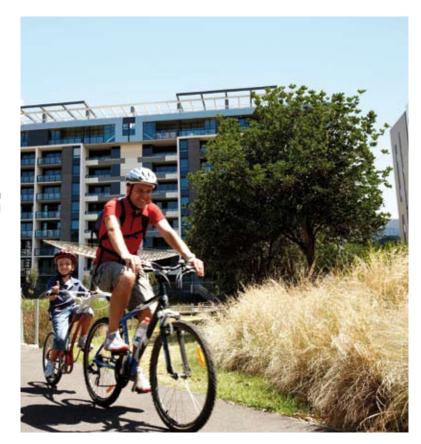
In 2008, dwellings were estimated to have used 45% of the total building water use at Docklands, even though they make up just over a third of the total floor space. Only Docklands' restaurants were estimated to have used more water on a per meter square basis than dwellings.

The amount of water used in residential buildings can be influenced through design. This includes installing water efficient fixtures and fittings and implementing water treatment and reuse systems that reduce potable water demand.

Based on the standard use of the fixtures and fittings installed in each building, it is possible to estimate the amount of water a person is likely to use per day. This is referred to as a Water Design Target.

Of the 23 residential buildings delivered to date in Docklands:

- 16 buildings have a Water Design Target of between 175 - 195 L/cap/day; and
- Seven buildings have a Water Design Target of 130 L/cap/day or less.



Car Parking

Docklands' residents are well serviced by public transport, and have access to the established pedestrian and bicycle connections to surrounding areas. As a result, there has been a focus on achieving greater car parking efficiency in the area's residential developments.

This approach has been supported through the Melbourne Planning Scheme which applies a maximum car parking ratio of between 1.5 and 2 parking spaces per dwelling in Docklands.

As at December 2009, the average number of private car parks provided per dwelling in Melbourne Docklands is approximately 1.3 spaces.

This strategy of imposing maximum car parking limits to achieve greater car parking efficiency has recently been extended by the City of Melbourne to include other parts of the municipality.

Carlton, Southbank and parts of North Melbourne, West Melbourne and East Melbourne now have a maximum car parking limit of one space per new dwelling.

Community Facilities and Amenities

The central location of Docklands means there are a number of health, sporting, cultural, educational and community facilities located within a two kilometre radius.

These include (amongst others) the State and City Libraries, RMIT Campus, North Melbourne Primary School, North Melbourne Pool, City Baths, several childcare centres and the Queen Victoria markets.

As at December 2009, Docklands residents also have access to a range of local facilities and amenities including:

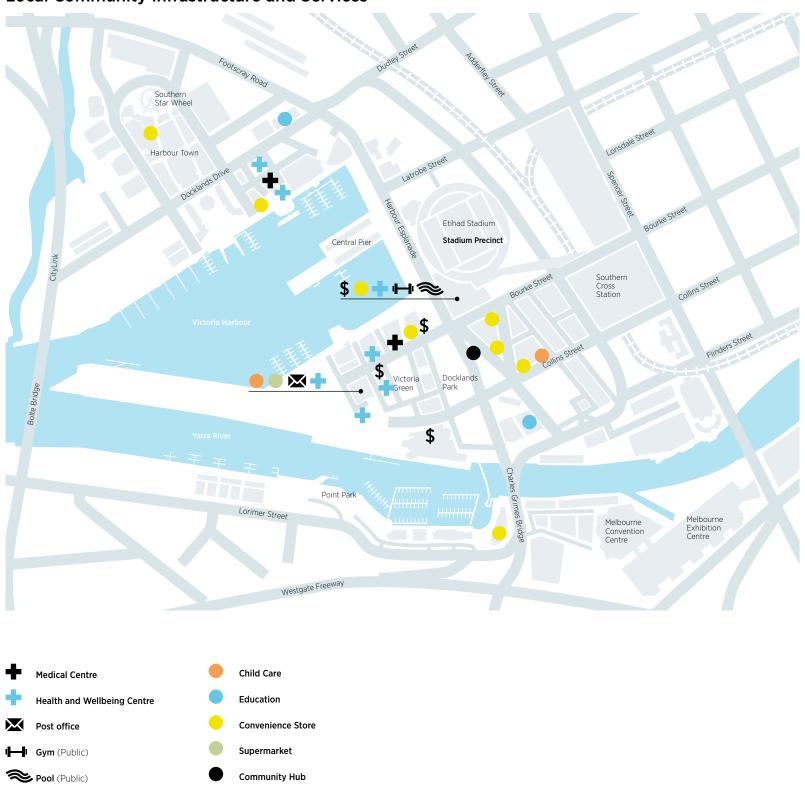
- Two medical centres, two pharmacies and one dentist.
- One public gym and one public lap pool.
- Two childcare centres.
- Four bank branches and one post office.
- One supermarket and eight local convenience stores.

Docklands residents still need access to some key local facilities including a primary school, a library and a permanent community centre with meeting rooms. These have been identified as priority community projects by VicUrban and the City of Melbourne.



Post Office | Docklands

Local Community Infrastructure and Services



31 Living

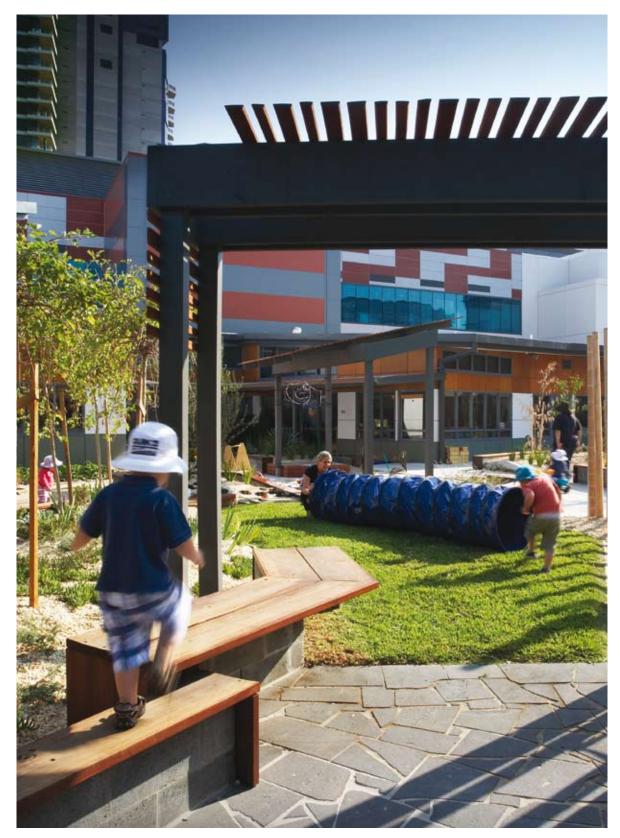
Raising the Bar for Inner-city Child Care

The Harbour Family and Children's Centre is one of Melbourne's newest children's centres. It was also the first purpose built community facility delivered at Docklands to help address the growing need for child care in the precinct and the inner-city area.

Delivering 150 new child care places, the centre opened in 2009 and is located at first floor level on top of a supermarket. Around a third of the centre is dedicated to an outside living and learning environment featuring a sandpit, veggie garden, climbing and digging areas, grass, plants and trees.

Internally, the building has been planned from a child's perspective and includes a dining room, art spaces and rooms that all open out onto the external garden. A key aspect of the centre is its focus on sustainable design, with some of its environmental features including energy efficient lighting, natural ventilation, low energy air conditioning, and water harvesting and reuse.

The centre was developed via a partnership between State and local government and the precinct developer. In addition to child care, the centre also offers a Maternal and Child Health service, a kindergarten service and early childhood education and training.



The Harbour Family and Children's Centre | Docklands



Merchant Street | Docklands

Merchant Street - Docklands' Local Neighbourhood Hub

Merchant Street in Victoria Harbour has been designed as a local neighbourhood shopping hub for surrounding residents and workers.

Containing a mixture of local shops and services, the Merchant Street hub includes a full line supermarket, cafes, pharmacy, a post office, dry cleaner and a co-located child care and Maternal and Child health centre. Providing a north-south link between Collins and Bourke Streets, Merchant Street also has views to both the Harbour and the Yarra River.

The street itself has been designed to ensure cars travel more slowly. A shared underground car park provides for the majority of parking requirements in the area and is available for use by shoppers.

A range of design features help create a local neighbourhood feel on the street, including:

- A number of small shops located on both sides of the street contributing to an 'urban village' feel.
- Continuous shop front canopies which provide shade and weather protection for pedestrians.
- Trees along both sides of the street that provide shade and greenery.
- Use of reclaimed and contemporary materials that help create a unique character for the street.

33 Living

85

Over 85% of Docklands' office space is contained in 'campus style' buildings*

500k

Approximately 500,000m² of office space is complete or under construction in Docklands*

19,000

An estimated 19,000 people work at Docklands*



Overview

Over the past decade, many of the leading corporations in Australia have moved into Docklands. Driven by this demand for office space, around 45% of the development complete or under construction at Docklands is for commercial office use.

The type of office space developed to date ranges from small strata offices to very large 'campus style' developments (which comprise the majority of commercial space).

This commercial development has resulted in Docklands becoming the workplace for thousands of office workers.

Fast Facts As at December 2009

- An estimated 19,000 people work at Docklands.
- There is approximately 500,000 m² of office space either complete or under construction
- Many large corporations have established offices at Docklands, including ANZ, NAB, AXA Ericsson, Myer, National Foods, Channel 7 and Fairfax Media.
- Docklands is estimated to account for around 11% of the commercial office stock (existing and under construction) in the Melbourne CBD.
- Docklands has nine commercial buildings with a Green Star design rating of 5 Stars or higher.
- There are approximately 2,300 private car parks (existing and under construction available for commercial tenants.

Changing the Nature of Office Design

Docklands is home to a new generation of 'campus' style' office buildings that are changing the form and feel of traditional office space. NAB, ANZ, AXA and Myer are all examples of this type of building.

More than 80% of the development sites in Docklands are currently bigger than 2,000m² and offer a level of design flexibility that can be difficult to find elsewhere in the centre of Melbourne.

Commonly stated advantages of the campus style office are the ability to both reduce physical barriers and achieve a more flexible and efficient use of space.

These outcomes are perceived to encourage more face-to-face interaction, collaboration and better communication between staff.



The AXA Centre | Docklands

Characteristics of a 'campus style' office building include:

- A building that is wider than it is tall; and/or
- A building which has large open-plan floor plates (2,000m² plus); and/or
- A building that is designed to reinforce the culture of the organisation that occupies the building; and/or
- A building which seeks to meet a wide range of needs of both the tenant and employees. This can include providing external services and facilities (shops, cafes, gyms) internally within the building.

Using this definition, there are 14 commercial office buildings in Docklands that use a campus style design.

 $oldsymbol{37}$ Working

Commercial Tenant and **Employee Profile**

Tenants

As at December 2009, tenants that have selected Docklands as the location for their offices include:

Finance and Insurance

- ANZ
- NAB
- Bendigo Bank
- Medibank Private
- AXA Asia Pacific
- Lucrf Super
- AMP
- AIG
- Financial Ombudsman Service

Media, sport and entertainment

- Channel 7
- Melbourne Stadiums Limited (Etihad Stadium)
- Australian Football League (AFL),
- Melbourne CBD Studios
- Atlantic Group V
- Fairfax Media
- 3AW

Education

- Kangan Institute
- Carrick Institute of Education
- Sarina Russo Hospitality School
- Open Channel

Government

- Bureau of Meteorology
- Australian Customs Services
- VicTrack
- VicUrban
- Victorian Building and Plumbing Commission

IT and Telecommunications

- Ericsson
- Telstra Research and Development
- Infosys

Retail, Business and Consumer

- Myer
- National Foods
- BP
- Fujitsu
- Jemena
- Melbourne Water

Property and Construction

- Lend Lease Development
- Bovis Lend Lease
- ING Real Estate Development
- MAB Corporation
- Metier 3

Employee Population

The working population of Docklands has grown significantly over the last decade. As at December 2009, about 19,000 people are estimated to work in the precinct.

Docklands Worker Population Estimate

2002

600

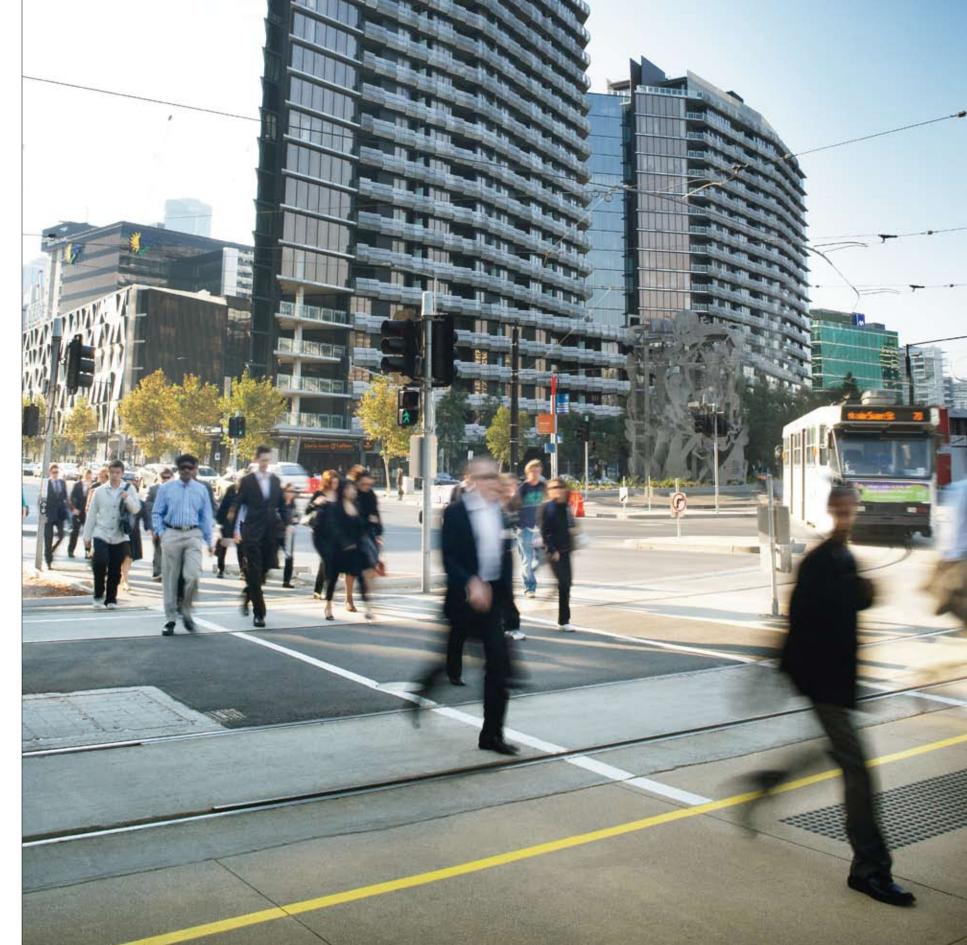
2006

6,000

2009

19,000

Source: VicUrban Docklands Build out Forecast - 2009



NAB

Commencing operations in 2004, NAB was an early Docklands pioneer. Its Australian headquarters are easily recognisable by its colourful façade which was inspired by the coloured shipping containers found in the nearby Port of Melbourne.

The NAB office consists of two low-rise, interconnected, highly transparent buildings set among light-filled atriums that allow for natural light and air circulation among floors joined by criss-crossing walkways.

Featuring a saw-tooth roof, sunlight penetrates the building even on overcast days, reducing the reliance on conventional lighting. The north facing waterfront elevation has windows which open plus balconies and sunshading elements allowing staff to enjoy the outdoors.

The building design results in an efficient workplace that not only supports the needs of the business but contributes to the health and well being of employees and the environment.

The NAB headquarters achieved a number of Docklands 'firsts', including:

- It was the first large scale commercial development at Docklands with a gross floor area of around 70,000m².
- It was one of the first developments to be designed in a 'campus style' format to make the most of the large building sites available.
- It was one of the first developments at Docklands to incorporate a range of leading sustainable design initiatives at the time of its construction.

NAB @ Docklands



Commercial Development

Office Space

As at December 2009, Docklands has around 500,000m² of commercial office space, of which approximately 84% is complete with 16% under construction. Commercial development is particularly concentrated around Collins and Bourke Streets, and the areas surrounding the stadium.

As at December 2009, the City of Melbourne municipality was estimated to have around 6 million m² of commercial office space, of which nearly four million m² is located in the Melbourne CBD and Docklands.

Taking into account completed office space only, Docklands makes up approximately 11% of the existing commercial office space in the Melbourne CBD as at December 2009.

Vacancy Rates

Commercial office vacancy rates in both the Melbourne CBD and Docklands hit a 20 year low in 2008. In 2009, vacancy rates rose slightly, except in Docklands where the vacancy rate dropped as tenants took up completed office space.

Commercial Property Vacancy Rates

	December 2008	December 2009
Metropolitan Melbourne	5.7%	6.4%
Melbourne CBD	4.8%	6.6%
Docklands	3.9%	2.3%

Source: BIS Shrapnel Melbourne Commercial Property Prospects 2009 – 2019 Property Council of Australia - February 2010

Product Mix

Docklands contains a variety of office space in a mixture of strata, 'campus style' and conventional office buildings.

Over 85% of Docklands' office space is contained in 'campus style' buildings. However strata offices and small office home offices (SOHO) are growing in popularity with three developments being purpose-built to cater to this market.

As at December 2009, Docklands has an estimated 317 strata offices and 89 SOHO offices which are supporting the growth of the emerging small business market in the precinct.

Commercial Buildings in Docklands (completed or under construction)

	Campus Office	Strata Office	Conventional Office
Number of Office Buildings	14	3	4
Proportion of Total Office GFA	86%	6%	8%

Source: VicUrban Docklands Build out Forecast - 2009

Building Size

Commercial development at Docklands has predominantly occurred on a building by building basis in response to specific tenant or market requirements. This means there is considerable variety in the size of commercial office buildings in the precinct.

A key dimension of building size is the size of each building floor. The existing office buildings at Docklands have a range of floor sizes, but notably nearly half of the commercial office space in the precinct is contained in just four buildings with floor sizes of 4,000m² or above.

Docklands Commercial Building Floor Size Mix as at December 2009 (completed or under construction)

Building Floor Size (m²)	Less than 1,500m²	1,500 - 1,999m²	2,000 - 2,999m²	3,000 - 3,999m²	4,000m² +
Number of Office Buildings	1	6	7	3	4
Proportion of Total Office GFA	2%	11%	25%	18%	44%

Source: VicUrban Docklands Build out Forecast - 2009

While this development may meet tenant requirements, the tendency towards delivering large buildings with big floor areas has contributed to a generic look and feel at Docklands. The cost of building in Docklands has also limited opportunities for smaller, lower cost buildings to be developed that could accommodate smaller tenants with smaller budgets.

41 Working

Media House - overcoming unique design challenges

Media House, Fairfax's new head office on the corner of Collins and Spencer Streets, is built over one of the busiest parts of Melbourne's rail network. Completed in late 2009, the new office houses around 1,400 employees.

Building in this location, above the rail and adjacent to Southern Cross Station, has helped create continuity for the extension of Collins Street into Docklands.

Construction of Media House required a collaborative approach. Precise coordination and pre-planning was required between a number of parties including the building contractors and road, rail, station and planning authorities to safely manage construction over railway lines.

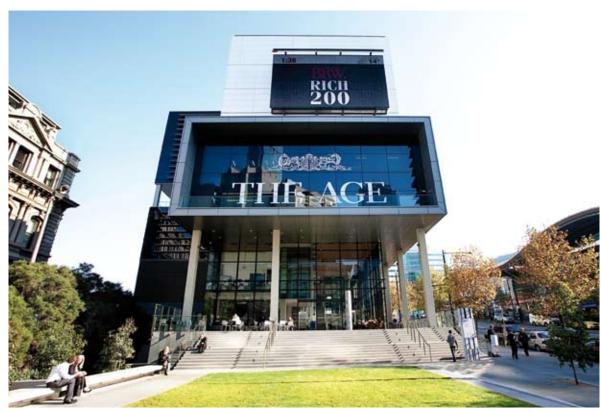
To limit disruption to trains and commuters, the builder used innovative construction techniques to reduce the number of hours it actually worked above the railway lines. This was further assisted by scheduling much of the construction works to occur out of normal working hours such as at weekends or overnight.

The building incorporates crashwalls of up to 1m thick that are designed to withstand an impact from a train. The building also includes special support bearings designed to reduce noise and vibrations from the numerous trains passing underneath it on a daily basis.

Strata office developments work on a similar principle as an apartment building where tenants purchase or rent space within a building and share common facilities.

This allows tenants with smaller space requirements to locate in a modern office building and share the cost of shared facilities such as meeting rooms, foyers and other amenities.

Media House | Docklands



Sustainable Work Places

Sustainable Office Design

Nearly all the office buildings at Docklands have been designed to meet the environmental standards outlined in the Docklands Ecologically Sustainable Development (ESD) Guide. More recently, office buildings are also being designed to the standards required by the Green Building Council of Australia's (GBCA) Green Star Rating System.

More information on both the Green Star and ESD Guide rating systems can be found in the Delivering Docklands chapter of this report.

Of the 21 commercial buildings at Docklands, nine (43%) have achieved a Green Star office design rating of 5 or 6 Stars. This translates to more than half (52%) of the total commercial floor area in the precinct having either a 5 or 6 Star Green Star design rating.

As a comparison, the GBCA currently estimates that around 11% of Australia's CBD commercial office stock is Green Star certified.

Energy

Docklands' commercial office buildings have been designed to use on average 169 kWh/m² of energy. By comparison, the average new commercial building in Victoria is estimated to use 236 KWh/m² of energy.

In 2008, commercial office buildings at Docklands were estimated to have used significantly more energy per square metre than residential buildings due largely to the heating, cooling and ventilation systems used in offices.

The greenhouse impact of a building can be measured through the Energy component of the National Australian Building Environmental Rating Scheme (NABERS). This uses a 5 Star system where the average building rating is 2.5 Stars.

To date:

- All 21 of the existing commercial office buildings at Docklands have a NABERS Energy Design Rating of 4 Stars or higher.
- Six out of the 21 commercial office buildings at Docklands have a NABERS Energy Design rating of 5 Stars or higher. These buildings include The Gauge, ANZ, 717 Bourke, AXA and 710 Collins Street.

Water

All existing commercial office buildings at Docklands have been designed to either meet or perform more efficiently than a water consumption target of 60L per person per day.

To achieve this target, a range of design measures including the installation of water efficient fixtures and fittings and the implementation of water treatment and reuse systems that reduce potable water demand have been employed.

Of the 21 commercial office buildings delivered to date:

- Six buildings have a design water performance rating of 60L per person per day.
- 15 buildings have a design water performance rating of 40L per person per day.

As at December 2009, Docklands has 21 commercial buildings. Of these:

- Seven have a GBCA 5 Star office design rating, with another application currently in progress.
- Two have a GBCA 6 Star office design rating.

Including the two buildings at Docklands, there is estimated to be only 16 GBCA 6 Star design rated office buildings in Australia.

43 Working

Travelling to Work

Access to a good public transport network has been a factor for many businesses choosing to locate in Docklands.

Many businesses encourage staff to take public transport to work. Increasingly, businesses are also encouraging staff to ride to work by providing support facilities such as bike storage, lockers, and shower and change facilities. This approach is encouraged under both the Green Star and ESD Guide rating systems.

Many larger businesses also provide some dedicated employee car parking. As at December 2009, there is approximately 2,300 dedicated car parks for the private use of commercial building tenants across Docklands. This equates to approximately one car park for every 8.3 employees.

The ANZ Centre Setting a Benchmark

The new ANZ Centre at Docklands houses around 6,500 office workers. As the bank's new national headquarters, the building consolidates many of the bank's operations under one roof, which were previously operating from several different locations.

ANZ's new office has been designed to be one of Australia's most environmentally progressive financial sector workplaces. Compared to a standard Australian commercial building, ANZ's new office is expected to produce 70% less greenhouse gas emissions, generate a significant proportion of its own electricity using the on-site gas-fired tri-generation plant, solar cells and wind turbines and use about 50% less drinking water.

Other key sustainability features include black water recycling, rainwater harvesting, and an underfloor air-conditioning system that uses cool water from the Yarra River to reduce demand for conventional cooling.

The ANZ office has been awarded a 6 Star Green Star Office Design rating by the Green Building Council of Australia. It is one of two commercial buildings in Docklands to achieve this standard, the other being The Gauge (also in Victoria Harbour).



ANZ Centre | Docklands

45 Working

35

More than 35 public art works are located throughout Docklands*

100

More than 100 public events were held at Docklands in 2008/09

250

Docklands has an estimated 250 serviced apartments and around 430 hotel rooms*



Overview

Visitor numbers to Docklands have grown over time. Visitors come to Docklands to attend a range of events and also to shop, dine and sightsee.

The number and range of Docklands events is broad, encompassing sports, fashion, community and lifestyle interests.

The key attractions at Docklands are the Harbour Town Shopping Centre and Costco, Etihad Stadium and Central Pier function venues. Waterfront dining along the waterfront promenades in north west Docklands is also a key attraction.

Fast Facts

- Docklands contains a mixture of both local and regional attractions, including Etihad Stadium, the National Ice Sports Centre, Central Pier function venues, Harbour Town Shopping Centre and Costco.
- More than 100 public events were held at Docklands in 2008/09, including at least 60 events at Etihad Stadium.
- Almost half the visitors to Docklands in 2008/09 were first time visitors, who tended to visit in a group.
- A curiosity factor, along with major events, dining, shopping and sightseeing are the main reasons for visiting.
- A dedicated tourist tram and shuttle, an estimated 7,400 public car parks and 20 full time taxi spaces help visitors get to, from and around Docklands.

Docklands Stadium - Paving the Way

In the mid-1990s, Docklands was an industrial wasteland. Interest in its development potential was limited by a lack of awareness, constraints from previous industrial uses and lack of infrastructure.

In the late 1990s, there was increasing demand for a new multi-purpose stadium in Melbourne that could support a range of football codes. After much consideration, the Government chose Docklands as the site for the new stadium.

Construction began on the new stadium in late 1997. Opening in March 2000, this multi-purpose venue cost \$450 million to build and was the first major development at Docklands.

The delivery of the stadium played an important role in opening up the development potential of Docklands. In conjunction with the delivery of the stadium, the old Footscray Road was relocated to the new Wurundjeri Way, which freed up the waterfront for other uses.

The stadium helped raise awareness of Docklands as a new part of Melbourne and as an area for development, helping to attract investment and build confidence.

The Docklands stadium – which started out as the Colonial Stadium, then Telstra Dome and is currently known by its sponsored name, Etihad Stadium – is one of the most recognised facilities at Docklands.

Originally designed to replace Waverley Park as a stadium for AFL matches, Etihad Stadium now hosts a number of sports including AFL, soccer, rugby league and union, and cricket. The stadium is also a major entertainment venue hosting concerts for a variety of big name acts.

The largest attendance at the stadium to date was in November 2000, when approximately 70,000 people attended the Catholic Jubilee Mass.



Docklands Stadium | Docklands

Visitor Profile

Visitor surveys indicate that the 'newness' of Docklands continues to be a major draw card. Docklands is still attracting many first time visitors who are attracted to its 'newness' and visit out of curiosity.

Of those visitors surveyed in 2009, almost half were first time visitors and most arrived in a group and stayed for an average 2.5 hours.

Weekend visitors spend an average \$69 and weekday visitors \$41 (May 2009).

Visitor Accommodation

Docklands has nearly 700 serviced apartments and hotel rooms, which are located mainly in the precinct's north west and around the stadium.

Purpose built visitor accommodation at Docklands includes the Quest Apartments in Bourke Street and the Travelodge Hotel in Aurora Lane. These provide around 430 rooms between them.

As at December 2009, a number of operators collectively provide an estimated further 250 serviced apartments at Docklands.

Getting to Docklands and Information Services

Nearly 70% of visitors surveyed thought no information is needed before visiting Docklands, however non-Melbourne visitors like to have a map.

The Internet and word of mouth are both key sources of information about Docklands, along with hotels for tourists visiting from out of Melbourne. Within Docklands, visitor information is available in two locations: The Hub @ Docklands and the Harbour Town Tourism Lounge.

For visitors wishing to come to Docklands, there are a number of tourist or visitor orientated transport options available, in addition to public transport. These include:

- City Circle Tram a free service for visitors to get around Docklands and the Central City;
- Melbourne City Tourist Shuttle

 a free service that stops at key destinations around Melbourne; and
- 20 full time "taxi zone" spaces and 11 night-time "taxi zone" spaces spread across nine taxi ranks.

Up until December 2009, the Docklands Shuttle Bus also provided a free visitor shuttle bus service operating daily between Southern Cross Station and the Harbour Town Shopping Centre.

Visitors have access to 12 public toilet facilities, mostly privately owned and operated. City of Melbourne public toilets are in Point Park and Docklands Park.

Within Docklands, visitor information sources include:

- The Hub @ Docklands.
- Harbour Town Customer Service and Tourism Lounge.
- Promotional brochures available at restaurants and shops.
- Local publications including 3008 Docklands and Docklands Community News.

Events

Visitors come to Docklands to attend a range of events.

In the 2008/09 financial year, more than 100 public events were held at Docklands covering a range of entertainment, sporting, fashion and community interests. Some of the larger annual events include:

- Melbourne International Boat and Lifestyle Festival.
- Docklands Community Safety Day.
- New Year's Eve fireworks displays.

• L'Oreal Melbourne Fashion Festival.

Over the past decade, Docklands has also played host to a number of high profile events including:

- Melbourne Stopover for the Volvo Ocean Race (2006).
- Melbourne Commonwealth Games walk events and Rugby 7s (2006).
- Australian Film Industry Awards (2005).

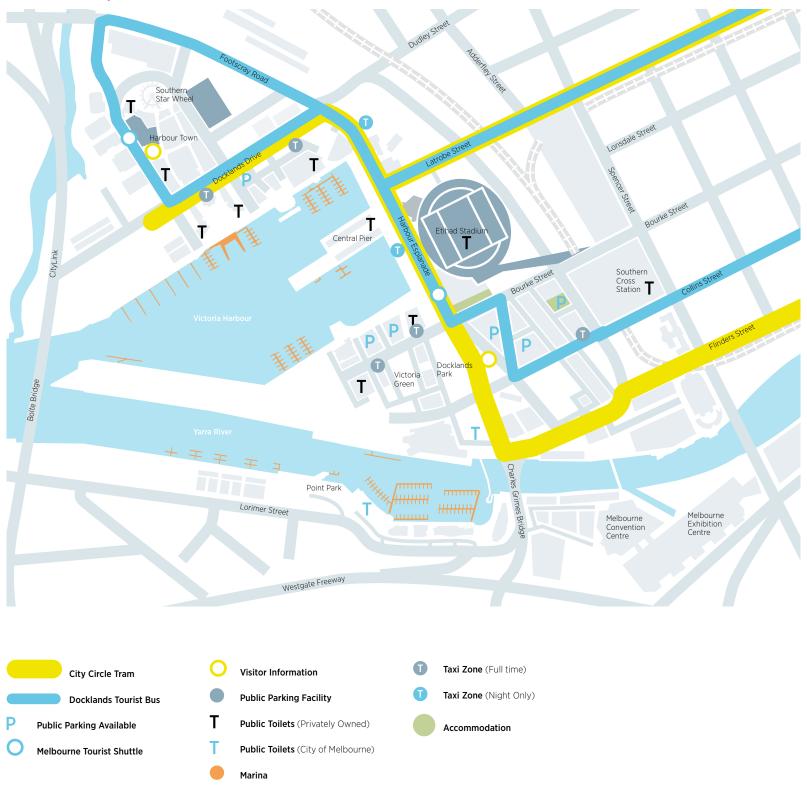
Etihad Stadium

Etihad Stadium contains a variety of function and event venues in addition to its main stadium capacity. This allows it to host conferences, concerts and other events in addition to its sporting fixtures.

Events at Etihad Stadium attracted just over 2.6 million visitors to Docklands in 2009. Some notable events included the Good Friday Royal Children's Hospital appeal, NAB Cup Grand Final, RMIT Graduation Ceremony, and Sensation New Year's Eve dance party.



Visitor Transport and Facilities



51 Visit

Key Attractions and Entertainment Facilities

Docklands has a diverse range of visitor attractions and facilities, while the waterfront location offers unique views of the city and skyline.

Key attractions include the Harbour Town Shopping Centre and Costco, Central Pier function venues and Etihad Stadium. The recently opened National Ice Sports Centre is also expected to grow in popularity as awareness of the facility grows.

The harbour is considered a major drawcard. Boat charters, dragon boating, sailing, recreational fishing and just being near the water are all experiences to be enjoyed, while waterfront dining along the waterfront promenades in north west Dockland is a popular attraction.

Central Pier

Central Pier's historic sheds have been refurbished to become a new cultural, community, entertainment and events hub.

Central Pier includes a range of event and function spaces of different sizes and capacities. These are complemented by an adjacent mix of tourism and leisure tenancies including a cocktail bar, pub and bistro, photography studio and pizzeria.

In 2008/09, Central Pier attracted approximately 464,000 visitors to Docklands. Some of the diverse events included the Redken Conference, L'Oreal Paris Gala dinner, Ovarian Cancer Research Foundation Gala dinner, L'Oreal Melbourne Fashion Festival, Interior Design Awards, and Australia-Israel Chamber of Commerce luncheon.



Southern Star Observation Wheel

The Southern Star Observation Wheel has been a topic of discussion within the community since the project's inception.

Construction on the wheel began in late 2006 and was completed in late 2008. At 120 metres in height, the wheel created a new Melbourne landmark and tourist attraction for thousands of visitors. However shortly after opening, the wheel was found to be damaged, and was closed to the public in January 2009.

Rectification works are currently being undertaken, following which the wheel will reopen.

The failure of the wheel has been a setback for Docklands and Harbour Town Shopping Centre, both from a financial and reputation perspective. Without the additional visitors that the wheel was expected to attract, retailers in the adjacent shopping area have found the operating environment more challenging than expected.





Dining

Waterfront dining is one of the most popular reasons for visiting Docklands. There are over 100 restaurants, cafes, bars and eateries catering for all tastes and budgets.

Type of Dining as at December 2009	Number
Restaurants	34
Bars and cafes	42
Fast food and sandwich bars	29
TOTAL	105

Source: Docklands Shopping and Dining Guide

For a destination dining experience, the restaurants and eateries along the waterfront promenades in north west Docklands are well promoted and have become established in this regard.

In addition to these waterfront eateries, Docklands also has a number of other dining options, including:

- Harbour Town Shopping Centre which provides a mix of popular chain outlets for snacks and takeaway food.
- The stadium and surrounds and Victoria Harbour which offer a smaller selection of dining options including many smaller cafes and food outlets targeting the thousands of workers in surrounding office buildings.
- South of the Yarra which has several restaurants and cafes that capitalise on the north facing river aspect and which cater to local residents and nearby workers.

The Waterfront Experience

Public access to the waterfront is one of the key features of Docklands, and a point of difference in the redevelopment of the docks areas in other major cities.

An average distance of 30 metres of publicly accessible waterfront promenade has been required for the majority of waterfront developments. Promenade widths have been varied in places to provide variety and interest in the waterfront experience.

The NewQuay East promenade was one of the first waterfront promenades developed at Docklands.

Apartment towers are set back from the promenade with restaurants providing activity and interest at ground floor level. At the water's edge, a number of small buildings (referred to as 'follies') house a fish and chip shop, an ice cream shop and two restaurants. These unique looking buildings project out over the water and provide points of interest and activity along the promenade.

The artwork 'Silence' by Adrian Mauriks sits in the middle of the promenade and is a popular spot with children and adults alike.



 $\textbf{NewQuay and Waterfront City Promenade} \mid \mathsf{Docklands}$

Shopping

Harbour Town Shopping Centre is Docklands' major shopping destination. More than 135 stores are trading catering predominantly for fashion, homewares and leisure. Some of the major brands found at Harbour Town Shopping Centre include Levis, Espirit, Rebel Sports, Pumpkin Patch and Royal Doulton.

In August 2009, specialty retailer Costco Wholesale opened next door to Harbour Town, and has already attracted tens of thousands of members.

Merchant Street in Victoria Harbour is emerging as a local neighbourhood shopping strip to service local residents and workers.

Collectively, more than 220 retailers are currently trading in Docklands. The majority of retailers are focused on fashion, followed by services, health, beauty and well being and grocery and convenience stores.

Type of Retail Number as at December 2009 Grocery and convenience 23 31 Services (Financial, tax, real estate, legal) Health Beauty and well-being 29 114 Fashion Homewares and leisure 21 Galleries TOTAL 224

Source: Docklands Shopping and Dining Guide

Shop top living

While Harbour Town is best known as a shopping precinct, an innovative approach has been taken to the development of a number of dwellings within the precinct.

With a focus on creating a true 'mixed use' precinct, a mixture of apartments and townhouses have been built above the two-level shopping precinct. Ranging from one to three bedrooms these homes help introduce a different feel into the precinct and contribute to a 24-hour lifestyle in the area.

Harbour Town and Costco Wholesale

Harbour Town Shopping Centre is a major shopping destination in Docklands. Open seven days a week, it comprises a combination of specialty retailers and brand direct outlets. There are also a number of family attractions, cafes and eateries to ensure shoppers enjoy their shopping experience.

Costco Wholesale commenced operations at Docklands in August 2009. As the first Costco Wholesale warehouse in Australia, trading in the first few months exceeded expectations, with visitors coming from all over Melbourne and the state to partake in the unique shopping experience.

Licensed Premises

As at December 2009, there were 87 active liquor licences in Docklands, compared to approximately 1,020 liquor licenses in the Melbourne CBD (postcode 3000). This equates to approximately 0.6 licensed premises per hectare in Docklands compared to five licensed premises per hectare in the CBD.

The majority of liquor licenses in Docklands (approximately 80%) are for cafes, restaurants and the Central Pier function venues. These facilities are licensed to accommodate the supply of alcohol to customers for drinking on the premises.

The remaining licenses are for shops and other facilities that allow customers to buy and take away alcohol, and for venues that allow the temporary or short-term supply of alcohol for drinking on the premises.

The only full club licence in Docklands is Etihad Stadium.

100

There are over 100 restaurants, cafes, bars and eateries catering for all tastes and budgets

220

Collectively, more than 220 retailers are currently trading in Docklands

20

To date, approximately \$20 million has been invested in public art





Public Art

The character and sense of place of Docklands is enhanced by the public art program which plays an important part in contributing to the area's evolving identity. To date, approximately \$20 million has been invested in public art, and there are more than 35 artworks located in the precinct's parks and promenades or built into its architecture and landscape.

Artworks by established and emerging Australian artists include Bruce Armstrong's *Eagle*, John Meade's *Aqualung*, Troy Innocent's *Colony* and John Kelly's *Cow Up A Tree*.

In addition to stand alone artworks, artists have also contributed to the design of various landscapes and landmarks in the area. For example, artist Robert Owen was a key collaborator in the design of Webb Bridge, which has a functional use in providing a pedestrian link across the Yarra River but also has a unique design that references the Indigenous history of the area.



Webb Bridge | Robert Owen & Denton, Corker Marshall



Cow Up A Tree | John Kelly

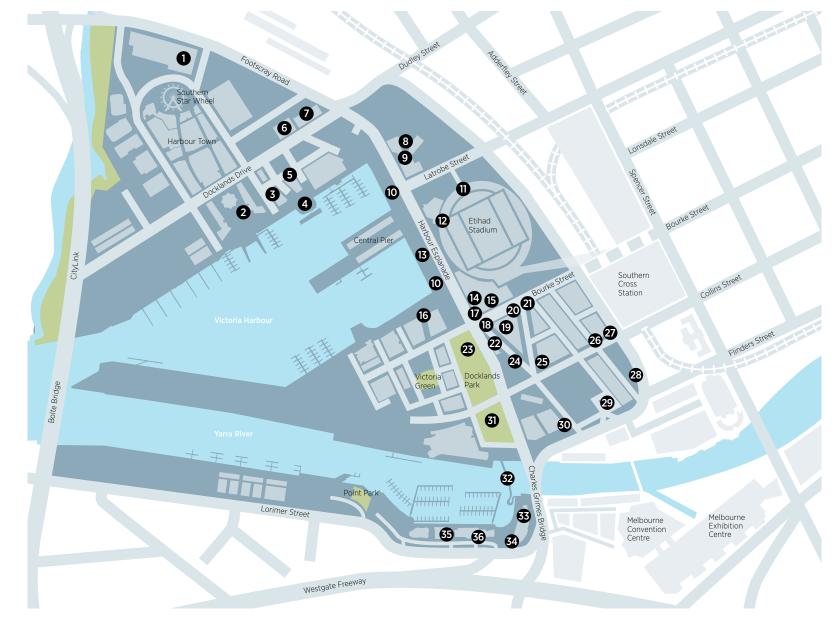


Reed Vessel | Virginia King



Ned and Dan | Alexander Knox

Public Art Locations



- 1. Heavy Metal Jam Session | Louise Paramor
- 2. Walk of Stars | Peter Cortlett and Jamie Cooper
- 3. Ned and Dan | Alexander Knox
- 4. Silence | Adrian Mauriks
- 5. Outside Inside Out | Matthew McCarthy and Andrew Trevillian
- 6. Salt/Fresh | Jonathon Jones
- 7. Column Wall Hidden & Revealed | Adrian Page
- 8. Colony | Troy Innocent
- 9. Field of Play | Troy Innocent

- 10. Shoal Fly By | Cat Macleod and Michael Bellemo
- 11. Threaded Field | Simon Perry
- 12. Art Wall | Peter D. Cole
- 13. Cow Up A Tree | John Kelly
- 14. Poise | Warren Langley15. Anchor | Neil Dawson
- 16. Aqualung | John Mead
- 17. Aurora | Geoff Bartlett
- 18. Continuum | Michael Snape

- 19. It's Hard Not To See What This All Means | Rose Nolan
- 20. On the Beach | Janet Burchill
- 21. Unfurling | Andrew Rogers
- 22. Signature Work | Emily Floyd
- 23. Reed Vessel | Virginia King
- 24. IOU | Mikala Dwyer
- 25. AXA Building | Jonathon Jones
 - & Cox Architects
- 26. Feng Shui | Guan Wei
- 27. Parallax | Ari Purhonen

- 28. Eagle | Bruce Armstrong
- 29. The Wave | Vashti Gonda
- **30. Car Nuggets** | Patricia Piccinini
- 31. Blowhole | Duncan Stemler
- **32. Webb Bridge** | Robert Owen and Denton, Corker Marshall
- 33. Heartland | Karen Casey
- **34. Photo Art Billboard** | Various Artists
- **35. Windscreen Art Installation** | Dale Jones Evans and Dani Marti
- **36. Slipstream** | Peter McGregor and Bruce Slorach

Heritage

Docklands has a number of sites and structures of heritage significance. Sites that are protected by inclusion on the Victorian Heritage Register include:

- The Queen's Warehouse.
- The Railway Goods Shed No. 2.
- Victoria Dock (including Central Pier and associated sheds).

Victoria Dock has been assessed as the oldest, large, single dock remaining in the world. It was constructed between 1887 and 1892 to accommodate large ships of the time and is up to 9.5m deep.

At the time of its opening, Victoria Dock was the second largest single dock in the world. Its simple linear wharfage was revolutionary, pre-empting similar British designs by at least two decades.

The Queen's Warehouse and Classic **Car Collection**

The historic Queen's Warehouse currently houses a classic car collection, which is operated as a private museum. The collection includes more than 50 rare and prestige vehicles and includes models from Bentley, Ferrari, Jaguar, Porsche and Mercedes Benz. The collection can be viewed by the public during opening hours, and can also be booked for tours and functions.

Prior to being used as a private museum, the Queen's Warehouse has had an interesting history. Prior uses include a Customs Warehouse, the site of Australia's first postage stamp and bank note printing works and a key storage and distribution point supporting Australia's World War Two effort.



Bringing Docklands' Heritage to Life

The old storage sheds at Docklands that were left vacant after the decline of the area's industrial and port activity have been used over the years for a variety of interesting and 'off-beat' activities.

Central Pier

The old sheds on Central Pier, both of which are heritage protected, were a venue for dance raves from 1998-2002 bringing a sub-culture to the Docklands. These sheds have now been restored and are used as an event, function and entertainment precinct.

North West Docklands

One of the old sheds in this area was used as a training facility for the 2002 Australian Winter Olympic bob sled team. The team installed tracks along the length of the shed and could be seen practicing their take off and coordinated 'jump' into the sled.

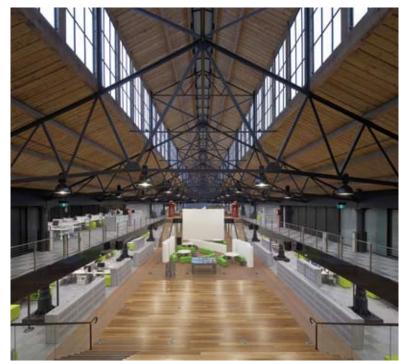
Victoria Harbour

The old sheds in Victoria Harbour currently house a variety of community based activities, including the Wooden Boat building school, Open Channel and a community boating hub. These uses provide important space to support community groups and activities.

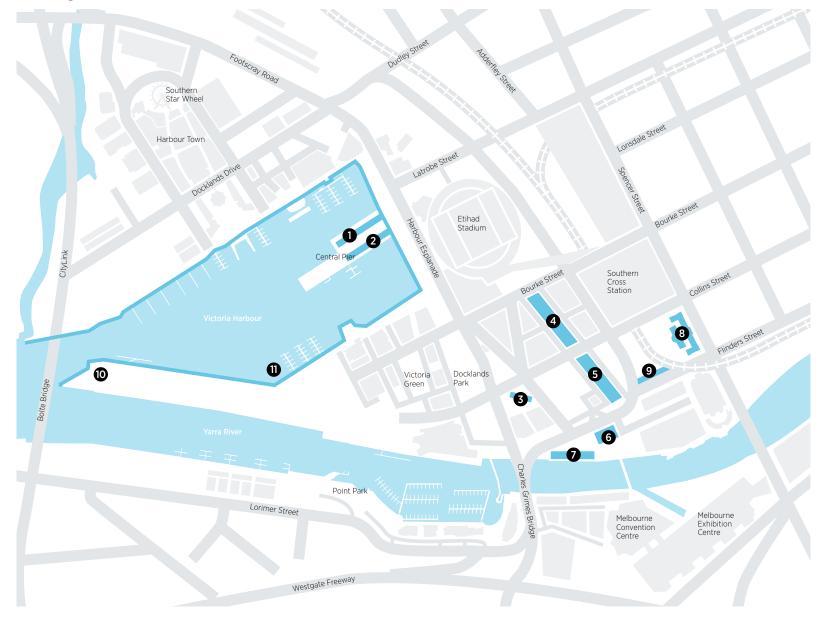
Stadium and Surrounds

The old Railway Goods Shed No. 2 has been redeveloped to create a modern 5 Star Green Star design rated office which is used as the headquarters for VicUrban and the Victorian Building and Plumbing Industry Commission.

Railway Goods Shed Number 2 (north) | Docklands



Heritage Locations



- 1. Central Pier Shed 14
- 2. Central Pier Shed 9
- 3. Queen's Warehouse
- 4. Goods Shed North
- 5. Goods Shed South
- 6. Mission to Seafarers
- 7. North Wharf Shed 5

- 8. VicRail Admin Grand Hotel
- 9. Flinders Street Retaining Wall 10. Watch Tower
- 11. Victoria Dock
- Heritage



Boating

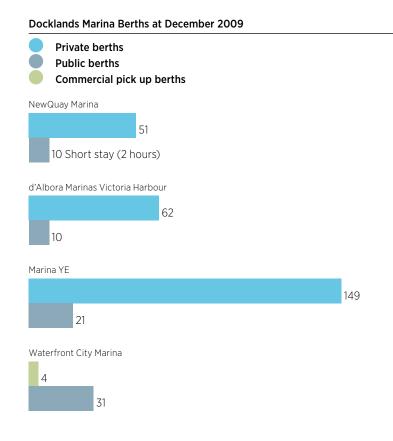
As at December 2009, around 35 charter boats are berthed at Docklands.

Charter boats have been operating at Melbourne Docklands for a number of years, and include a diverse fleet of party boats, boat schools, charter vessels, taxies, gondolas and heritage vessels. The City of Melbourne is responsible for managing the berthing leasing arrangements with charter boat operators at Docklands.

Visitors arriving by boat to Melbourne Docklands have access to four marinas offering public short term berthing for recreational vessels. These are located on both the Yarra River and Victoria Harbour, along with a Super Yacht Marina adjacent to Central Pier which caters for vessels up to 65 metres long.

Subject to availability, day visitors to all marinas can berth for free in the public berths. Overnight berthing is available at the d'Albora Marinas Victoria Harbour, Marina YE and Waterfront City marinas, although charges apply to cover access to on-shore facilities.

Private long term berthing is also available at all four marinas.



Community Boating at Docklands

The Docklands Community
Boating Hub operates out of
Shed 2 in Victoria Harbour.
The shed accommodates
storage and support facilities
for water-based activities, and
provides access for community
groups and the public to launch
and retrieve small vessels safely.

The Boating Hub is home to the Victorian Dragon Boat Association, the Melbourne Out-rigger Canoe Club, the Docklands Yacht Club and Sailability Victoria.



Stormwater Harvest and Reuse

Over the past decade VicUrban has focused on the harvesting and reuse of stormwater within Docklands. As a result, many of the precinct's parks and public spaces incorporate systems that capture, treat and reuse stormwater for irrigation purposes, which reduces the demand for potable water.

Stormwater runoff is harvested from a number of sources, including the runoff from roads, rooves, footpaths and other hard paved surfaces. Once captured in drains or pits, the runoff is generally directed either into landscaped areas for passive irrigation purposes, or into swales, tree pits or wetland areas for treatment.

Treatment occurs by naturally filtering the storm water runoff to remove sediment and pollutants in the water.

Once treated, the stormwater is stored in underground tanks in many of the key public parks and spaces across Docklands, including:

- Docklands Park.
- Point Park.
- · Victoria Green.
- · Collins Landing.
- Water Plaza promenade.

Collectively, these storage tanks have a storage capacity of 1,150,000 litres.

This stored, treated stormwater is used to meet some of the annual irrigation needs of the grass and vegetation within Docklands' public spaces.



 $\textbf{Rainwater Gardens, NAB Forecourt} \mid \texttt{Docklands}$

35

Around 35 charter boats are berthed at Docklands

72

Docklands has 72 public marina berths

262

Docklands has 262 private marina berths

61 Visit

75

Just over 75% of buildings existing or under construction at Dockland are for residential or commercial use

1.1

Developers at Docklands have delivered just over 1.1 million manner of floor area*

6

into Docklands over the last decad



Overview

During its first decade, land at Melbourne Docklands was contracted in parcels to a range of individual developers. This land has subsequently been developed in accordance with an agreed Masterplan in response to market demand.

In the first decade, developers have collectively delivered around 44% of the floor area they have approval to construct. This has utilised around 38% of the land to which development rights have been contracted.

This means that after the first decade, more than half of Melbourne Docklands remains to be developed.

Fast Facts As at December 2009

- Approximately 98% of the developable land at Docklands is contracted to private developers.
- Developers have delivered around 44% of the floor area they have approval to construct.
- Around 38% of the contracted land has been developed.
- Just over 75% of buildings existing or under construction at Docklands are for residential or commercial use.
- Private and public investment into Docklands has occurred at a rate of approximately 38:1.
- The City of Melbourne is the municipal authority for Melbourne Docklands.

Development Approach

The Docklands Act 1991 places an obligation on VicUrban to promote, encourage and facilitate development of Docklands.

Generally through a competitive bid process, VicUrban sells the right to develop land at Docklands to developers. At the time of sale, the developer and VicUrban enter into a binding contract (known as a Development Agreement) that outlines how the land will be developed.

A key component of the Development Agreement is a Masterplan, which is agreed between VicUrban and the developer and outlines the design intent and development approach for the contracted land. All subsequent development of the land must be in accordance with the agreed Masterplan.

Land is generally developed on an individual building basis in response to market demand.

Prior to commencing development, the developer must submit a detailed planning submission to the Department of Planning and Community Development (DPCD). Statutory planning approval is granted by the Minster of Planning as the Responsible Authority for Docklands.

Land ownership is transferred from VicUrban to the developer once a number of conditions regarding financing, planning and design approval and financial feasibility are satisfied. Upon receiving title to a parcel of land, the developer can begin construction in accordance with approved plans and design.

At completion of construction, VicUrban and the City of Melbourne certify that development is complete to agreed design standards.

As municipal authority, the City of Melbourne receives all rates from completed development. It also maintains completed areas of the public realm, such as roads, parks and footpaths.

Docklands Investment

Over the last decade, Docklands has attracted investment of approximately \$6 billion. This investment has occurred at a private to public ratio of approximately 38:1 as at December 2009.

Investment has been directed into development, as well as the provision of civil, transport and community infrastructure. Notably, much of the public investment has been spent upfront on key infrastructure works intended to enhance the precinct's overall development potential.

The ratio of private to public investment at the end of the Melbourne Docklands project is expected to be at least 80:1 as further privately funded development occurs over the coming years.

Docklands Infrastructure

Docklands' civil infrastructure comprises bridges, roads, promenades, wharves, parks and utilities. To date this infrastructure has been delivered by either VicUrban or developers, and is funded directly or indirectly by revenues from development.

Under this approach, approximately \$350 million of public infrastructure has been delivered at Docklands as at December 2009.

Infrastructure delivered at Docklands by VicUrban includes major roads, the Collins Street and La Trobe Street bridges, drainage and major parks. Delivery of this core infrastructure has been debt funded and delivered by VicUrban, with the cost being progressively repaid to VicUrban by developers through infrastructure payments generated from development revenues.

How does Docklands compare with other similar development projects?

It is useful to understand how the Melbourne Docklands project compares with other projects of a similar nature around the world, including London Docklands and Sydney Darling Harbour.

In 2003, accounting firm Ernst & Young undertook a review on behalf of VicUrban to compare these three projects on a variety of key metrics, in particular the level of private to public investment. The results indicate that based on the data available in 2003, Melbourne Docklands was expected to perform well against the other two projects.

London Docklands

The London Docklands Development Corporation was established on 2 July 1982. Its aim was to regenerate 1,568 hectares of derelict land left over from the decline of London's docks, into more productive uses by encouraging development for housing, office and recreation purposes.

Darling Harbour (Sydney)

The Darling Harbour Authority was set up in 1984. The aim was to transform 60 hectares of Sydney's derelict docklands and rail yards into a tourism, recreation and conference space.

Comparison	Melbourne Docklands	Darling Harbour Sydney	London Docklands
Total development period	15 - 20 yrs	20 yrs	30 - 35 yrs
Ratio of private to public investment estimated at completion*	80 to 1**	2.5 to 1	2.7 to 1

* Note - all data in this table is based on estimates only and was prepared based on data available in 2003. Ernst & Young does not warrant the accuracy or reliability of the information supplied to it, nor the conclusions drawn from such information.
** As at December 2009, the actual private to public investment ratio is approximately 38:1.



Development Agreements

Development Agreements are the key contractual document between VicUrban and developers, setting out the rights and obligations of the parties in relation to finance, programme and project scope. A Development Agreement applies to each precinct or stage to which the development rights have been sold.

Each Development Agreement includes an approved Masterplan, which sets out the design intent and a benchmark for the project. Developers may modify their Masterplans with the approval of VicUrban.

Developable Land and Floor Area

Docklands has approximately 113 hectares of developable land (excluding major roads, Western Park and Moonee Ponds Creek Park). To date, around 111 hectares of this land has been contracted for development with 43 hectares completed to date.

Both undeveloped and uncontracted land at Docklands remains under VicUrban's control. Land ownership is only transferred to developers in stages to facilitate approved development projects.

In terms of built floor area, as at December 2009, developers have delivered just over 1.1 million m² of floor area. This equates to around 44% of the floor area which developers have approval to construct.

Docklands Developable Land Status as at December 2009

TOTAL DEVELOPABLE LAND AREA	113 hectares	100%
Developable land - contracted	111 hectares	98%
Developable land - uncontracted	2 hectares	2%
Proportion of Developable land (contracted)		
which is complete or under construction	43 hectares	38% of total

Source: VicUrban Build Out Forecast 2009

Docklands Developable Floor Area Status as at December 2009

Approved and Contracted Floor Area	2,597,066 m ²	100%
Proportion of Approved and Contracted Floor		
Area which is complete or under construction	1,144,983 m ²	44% of total

Source: VicUrban Build Out Forecast 2009

The ratio of private to public investment in Docklands as at December 2009 is approximately 38:1

Developers have delivered around 44% of the floor area they have approval to construct

Approximately 111 hectares of developable land at Docklands is contracted to developers



Docklands | 2000



Docklands | 2009

Development Mix

Docklands is a mixed use project that incorporates a range of residential, commercial, retail, hotel, community and other uses.

GFA has been completed or is under construction at Docklands. Most of the development delivered to date (around 76%) has been either for residential or commercial use.

At project completion, it is estimated there will be approximately 2.7 million m² of GFA constructed in Docklands (based on current projected forecasts). This means a further 1.5 million m² (approximately 58%) of GFA remains to be built.

The mix of uses developed in Docklands to December 2009 (and expected to be delivered at the completion of Docklands) is approximately as follows:

Docklands Development Mix by Floor Area (m2) as at December 2009 (complete or under construction)

Source: VicUrban Build Out Forecast 2009

Docklands Forecast Development Mix by Floor Area (m²) at Project Completion

Source: VicUrban Build Out Forecast 2009

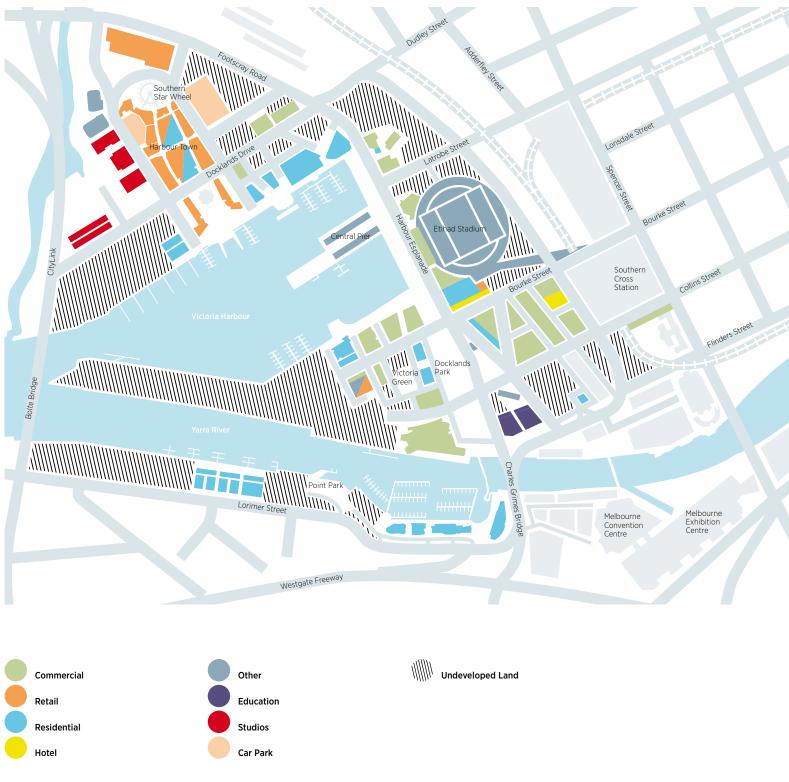
- Commercial 44% Residential 41% Retail 7%
- Other 5% Hotel 3%

Developers

Over the last decade a range of developers have been, or remain, active in Melbourne Docklands.

Developers with development rights over the largest areas of land at Docklands include Lend Lease Development, MAB Corporation, Mirvac, ING Real Estate and Digital Harbour Holdings.

Development Use



Other 11% Hotel 2%

Training up the workforce of the future - Apprenticeships at Docklands

Jason O'Hara knows how important apprenticeships and 'on the job' training are to developing Victoria's skills base for the future.

"It's absolutely vital," says Grocon's executive project manager, who has been with the company since he began as an apprentice 25 years ago. His interest in training up a new generation of workers led him to take on the additional role of managing Grocon's apprenticeship program.

"Docklands has been fantastic over the last decade with a continued stream of work for the construction and development industry," he said.

Grocon has had an extensive apprenticeship program for the past 25 years, as it directly employs the vast majority of its construction team. This traditional model has served the Melbourne-based company well. In the last five years, 100 % of apprentices have reached their proficiency levels of a four-year apprentice in 3.5 years.

"We also tend to hold on to our apprentices at the end, which shows we are holding up our end in terms of building a skilled workforce Victoria needs going forward."

Bovis Lend Lease, another of the major building contractors operating in Docklands also has an active apprenticeship programme. David Jenkins, 24 of Surrey Hills, considers himself fortunate to be one of three apprentices taken on by Bovis Lend Lease each year.

Bovis Lend Lease currently has 12 apprentices in its construction team – and half are working on Victoria Harbour.

Now half-way through his 3.5 year apprenticeship, David has spent the last six months building Myer's new national headquarters at Victoria Harbour.

"It's really starting to look like there's something happening here now, with a lot of people down here."

David is enjoying the apprenticeship, where he gets to work with various subcontractors to learn different trades, from formwork to fit-out to inserting ceilings and cabinetry. When his day-time shift is over, David is also studying for a diploma in project management two or three nights a week.

"At the end, they want you to be a site manager, so we are learning the construction techniques as well as the management side of things," he said.



Development Challenges

Development challenges at Docklands arise as result of both the area's geology and its former industrial use. These challenges contribute to the cost of development at Docklands.

Dockland is also in a high wind climate, which can lead to high wind speeds and gusty wind conditions. This can create challenges for designers as they attempt to reduce wind speeds and impact through the design process.

Geology

Until its development as a port and industrial area, Docklands was a wetland. Its location at the mouth of the Yarra River and the confluence with Moonee Ponds Creek, the Maribyrnong River and Port Phillip Bay created an estuarine environment where significant amounts of sediment built up over the years.

This sediment is known as Coode Island silt, which still exists in layers between one and 10 meters thick over much of Docklands. Its jelly like nature, softness and chemical properties create significant engineering challenges for construction.

All buildings at Docklands therefore require piles to create a secure foundation on the bedrock below. Coode Island silt can also affect tree and other plant growth due to its salinity.

Wind Climate

Like many harbour locations around the world, Docklands is windy. The strongest winds in Docklands come from the north. Westerly and southwesterly winds can also be strong, influenced by the open water of the harbour.

The way buildings and open space are designed in Docklands can alter the behaviour of the wind at ground level.

There are areas in Docklands which experience fast wind speeds and wind gusts at ground level which can be unpleasant for pedestrians. There are also streets and public areas in Docklands where pedestrians are exposed without adequate shelter to the wind and bad weather. At times, this can affect the experience of walking around parts of Docklands during adverse weather or windy conditions.

Wind tunnel modelling is now required for all new developments so wind impacts can be understood and mitigated. Much of the development in Docklands now also incorporates design features to reduce the impact of wind, including the shape and orientation of the buildings and the use of canopies and windbreaks.

Contamination

Its prior use as a port and industrial area has meant that Docklands has been heavily worked and modified over the last 100 or so years.

As a result of its longstanding industrial use low levels of contamination have been detected in the surface fill over most of Docklands. As a result, most development projects at Docklands must obtain a Statement of Environmental Audit from the Environment Protection Authority declaring the land suitable to be developed for its intended purpose.

A significant area of land contamination was the former West Melbourne Gasworks site, although an extensive clean-up of this area has been largely completed.

Planning for Climate Change

One of the main predicted changes from climate change that could affect Docklands is rising sea levels. Other potential risks include increased wind speeds and increased rainfall intensity (which heightens flood risks and impacts).

While these effects and risks are difficult to accurately predict, development at Docklands must comply with the stipulations relating to flooding from Melbourne Water (as the relevant flood plain authority). These stipulations recommend that development at Docklands must:

- Not cause any increase in flooding to adjacent areas from a 1 in 100 year storm.
- Provide an escape path for storm flow associated with a 1 in 100 year storm.
- Set building floor levels at least 0.6 metres above the flood level for a 1 in 100 year storm.

The 1 in 100 year flood level established by Melbourne Water for Docklands is 1.6 metres Australian Height Datum (AHD) above sea level. Accordingly the minimum building floor level is 2.2 metres (including a freeboard of 0.6 metres).

Developers at Docklands are therefore required to utilise a minimum building floor level of 2.2 metres above sea level for all habitable rooms.

In accordance with the Melbourne Docklands Design and Construction Standards for Infrastructure (2005), non-habitable floor levels set below this 2.2 metre level are required to accord with the indemnity provisions stipulated by the Office of the City Manager (City of Melbourne).

As at December 2009:

- The lowest habitable room in Melbourne Docklands is set at 2.2 metres above sea level.
- 89 out of the 111 buildings at Docklands (80%) have been constructed with a habitable floor level of 2.39 metres above sea level (or greater).
- Non-habitable floors and spaces below 2.2 metres include car parks, back of house, services, and substations.

VicUrban is currently working with Melbourne Water, the City of Melbourne and DPCD on strategies to assess climate change impacts and mitigate climate change risks.

Designing Docklands

In 2009, VicUrban in conjunction with the Office of the Victorian Government Architect undertook a review of design outcomes delivered at Docklands to date.

The review was, in part, prompted by the various design critiques of Docklands over the years. It also formed part of VicUrban's wider review of Docklands, aimed at learning from the past and applying that to planning for the next decade of development at Docklands.

The review examined what design strategies had been successful, and what could be done to improve the design of buildings, parks and public spaces to enhance peoples' experiences and perceptions of Docklands. It also focused predominantly on how people experience Docklands; for example when they are walking along its streets or using its parks and open space, rather than focusing on building design.

Some of the key findings include:

- The focus on designing buildings has reduced the focus on how pedestrians experience Docklands at ground level;
- There has been an inconsistent application of design responses to address prevailing environmental conditions (e.g. wind, sun, rain); and
- Lack of design diversity in building types and sizes has created a generic look and feel at Docklands.

In response to this review,
VicUrban is working with the
City of Melbourne and DPCD
to develop strategies to ensure
issues identified are addressed
during the next decade of
development.

³ 'Habitable Room' is defined as any room of a dwelling or residential building other than a bathroom, laundry, toilet, pantry, walk-in wardrobe, corridor, stair, lobby, photographic darkroom, clothes drying room and other space of a specialist nature occupied neither frequently or for extended periods.

Sustainable Building Rating Systems

From early on in the Docklands project, environmentally sustainable building design has been an important feature of development.

Since 2002, the 'sustainability' of the design of a building within Docklands has been rated using the Docklands ESD Guide.

More recently, the GBCA Green Star rating system has become the benchmark by which a building's environmental features are rated. Under the Green Star system, it is also possible to achieve an 'As Built' rating to confirm that the level of environmental performance committed to at design stage has been achieved in the final building.

A large number of buildings at Docklands feature a range of sustainable design innovations that score highly under both rating tools.

Docklands ESD Rated Buildings as at December 2009*

	Award of Merit	Award of Excellence
Numbers of buildings awarded or rated	16	7
Numbers of buildings with applications in process	-	1

Docklands Green Star Rated Buildings as at December 2009*

	5 Stars (as designed)	6 stars (as designed)
Numbers of buildings awarded or rated	8	2
Numbers of buildings with applications in process	2	-

^{*} Note – only buildings with an ESD Rating of Award of Merit or higher, and/or a Green Star rating of 5 Stars or higher are included in this table.

What does an ESD Guide rating mean?

Award of Merit

Represents a step towards best practice and recognises an increased level of commitment.

Award of Excellence

Represents overall environmental excellence and commitment to best practice.

Source: VicUrban ESD Guide

What does a Green Star rating mean?

4 Star Green Star Certified Rating

Signifies 'Best Practice' in environmentally sustainable design and/or construction.

5 Star Green Star Certified Rating

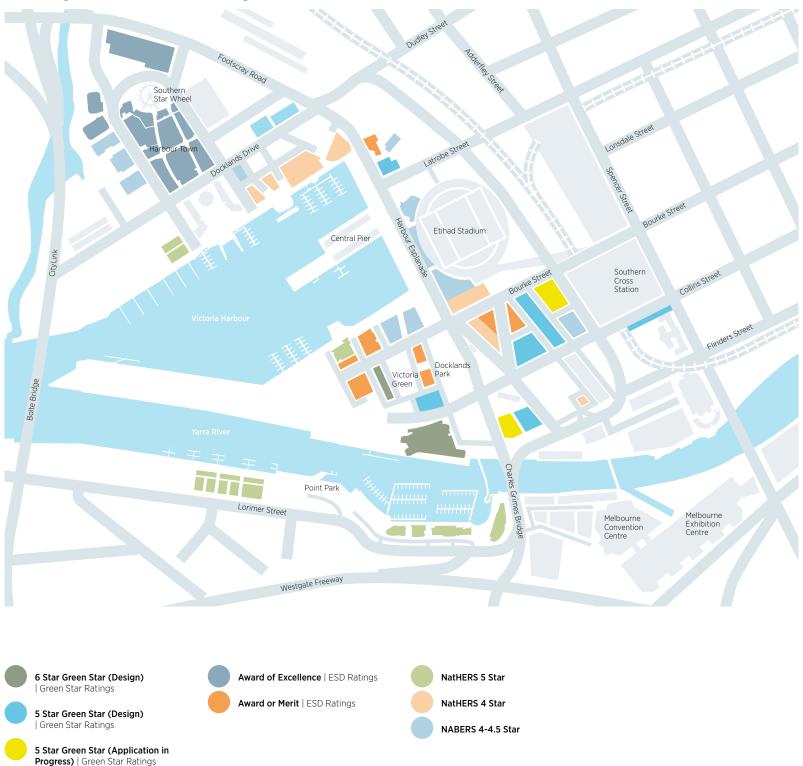
Signifies 'Australian Excellence' in environmentally sustainable design and/or construction.

6 Star Green Star Certified Rating

Signifies 'World Leadership' in environmentally sustainable design and/or construction.

Source: GBCA Website

Building Environmental Ratings*



*Many buildings at Docklands have multiple environmental ratings. This map only records the highest environmental rating for each individual building in the following order of priority: GBCA 6 Stars, GBCA 5 Stars, ESD Award of Excellence, ESD Award of Merit, NatHERS 5 Star, NatHERS 4 Star/NABERS 4-4.5 Star.

Kangan Institute - Leading the way in sustainable automotive industry training

The Kangan Institute is leading the way in sustainable design for educational facilities with its Automotive Centre of Excellence campus at Docklands.

The campus, which is being developed in three stages, will eventually become one of the largest and most advanced automotive training facilities in Australia and will bring together automotive training, and research and development into one facility.

Stage One of its Automotive Centre of Excellence (completed in 2006) was among the first educational buildings in Australia to incorporate a number of design features to assist in reducing the building's heating and cooling requirements (one of the most energy intensive uses in a building).

One such feature is night sky cooling which incorporates the capture and reuse of rainwater. At night, the captured water is pumped to the top of the building and is sprayed across the roof to be cooled by the night air, before being recirculated through the concrete floors to cool the building.

Stage One was awarded both an ESD Award of Merit and a GBCA 5 Star rating (as designed).

Stage Two, currently under construction and due for completion in mid 2011, will continue this approach and features a range of sustainable design technologies that are aimed at reducing the water and energy demand of the building. It has already received an ESD Award of Excellence and is targeting a GBCA 5 Star rating (as designed).

At completion, Stages One and Two will accommodate up to 500 students and 120 staff.

The innovative design for Stage One has been recognised through a number of awards including:

- 2007 National Royal Australian Institute of Architects (RAIA) Award for 'Sustainable Architecture'.
- 2007 Victorian RAIA 'Sustainable Architecture Award'.
- 2007 Premier's Sustainability
 Awards 'Public Sector
 Excellence Award'.

Kangan Institute Stage 1 | Docklands



Precinct Energy and Water Demand

Total building energy demand at Docklands in 2008 was estimated to be 178 GWh/ year.

As a comparison, this was estimated to account for approximately 0.3% of Victoria's total commercial and residential energy use over the same period (386,806 GWH/year).

Collectively, commercial and residential buildings are estimated to have accounted for 75% of the total energy used at Docklands in 2008, with Etihad Stadium accounting for another 12%.

Docklands Total Annual Projected Energy Use by Building Sector as at 2008

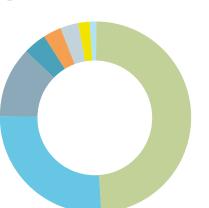
Source: Energy and Water Benchmarking Study GHD 2009

Commercial 49%
Residential 26%
Stadium 12%

Restaurant 4%
Retail 3%

Other 3% Hotel 2%

Public Realm 1%



The total building water consumption at Docklands in 2008 was estimated at 938 ML/year, equivalent to filling 375 Olympic size swimming pools.

Commercial and residential buildings are estimated to have accounted for 78% of the total indoor water demand at Docklands in 2008.

Docklands Annual Water Demand (indoor) by Building Type (kL/year) as at 2008

Source: Energy and Water Benchmarking Study

Residential 45%
Commercial 33%
Restaurant 7%

Other 7%
Hotel 5%

Retail 3%



There are 23 buildings at Docklands that have either an Award of Merit or Excellence ESD Rating

178

The total building energy demand at Docklands in 2008 was estimated at 178GWh/year

938

The total building water demand at Docklands in 2008 was estimated at 938 ML/year

Docklands Partnership

The delivery and management of Docklands is a partnership between four agencies: VicUrban, the City of Melbourne, Parks Victoria and the Department of Planning and Community Development (DPCD).

VicUrban

VicUrban was established in 2003 by the Victorian Urban Development Authority Act. The Act provides Vicurban with the responsibility to:

- Carry out urban development.
- Develop the Docklands Area.
- Undertake declared projects.
- Assist in the implementation of Government urban development policies and strategies, including Melbourne 2030.

VicUrban plays a central role in the planning and development of Docklands. It manages the Docklands development in partnership with private enterprise.

Its objective is to promote, encourage and co-ordinate the successful development of Docklands as a world class waterfront place.

Part of this responsibility includes the statutory requirement to promote, assist and coordinate the economic, cultural and social development of the area.

VicUrban is responsible for administering the precinct development agreements and coordinating the overall development of Docklands.

VicUrban is a Referral Authority for all planning applications under the Melbourne Planning Scheme.

City of Melbourne

The City of Melbourne is responsible for all municipal services within Docklands, except development and planning.

Municipal services include activities such as marketing, events, parks and gardens, rubbish collection, waterways berthing, street cleaning, community services, and enforcing local laws.

The City at Melbourne is also responsible for management of the Melbourne Docklands Marine office, allocation and licensing of moorings and berths for commercial vessels, management of the Waterfront City and Yarra's Edge marinas.

The City of Melbourne is consulted by VicUrban and DPCD on planning and design related matters raised through the statutory planning approval process.

Department of Planning and Community Development

The Minister for Planning through the DPCD is the Responsible Authority for all planning applications under the Melbourne Planning Scheme.

Parks Victoria

Parks Victoria is responsible for the management of recreation, leisure, tourism and water transport for all waterways land situated in the "metropolitan area" as declared under the Water Industry Act 1994, which includes Victoria Harbour and the Maribyrnong and Yarra Rivers.

Docklands Coordination Committee

As required by the City of Melbourne Act 2001, a Docklands Coordination Committee (DCC) has been established to effectively coordinate between the City of Melbourne and VicUrban in relation to Docklands.

The Docklands Coordination
Committee meets quarterly and includes three City of Melbourne representatives and three VicUrban representatives. The Docklands
Coordination Committee makes decisions on a range of strategic and operational issues in relation to:

- Victoria Harbour.
- · Waterways.
- Promenades.
- Waterfront spaces.
- High-profile park areas.
- High traffic areas.

The committee is chaired by a City of Melbourne councillor and a VicUrban board member on a rotational basis.

The City of Melbourne and VicUrban have developed a Docklands Place Management Plan for the provision and maintenance of municipal services such as security, marketing, events and waterways.

Docklands Planning Requirements

Planning for Docklands is managed under the Melbourne Planning Scheme.

The Planning Scheme includes the 'Melbourne Docklands Area Planning Provisions' which provides strategic policy direction for development at Docklands and seeks to ensure it is integrated with and complements development in the rest of Melbourne.

The Minister for Planning is the Responsible Authority for Docklands. VicUrban is a Referral Authority, while the City of Melbourne is consulted in relation to statutory planning proposals.

The City of Melbourne is the Responsible Authority for all subdivision permits for Docklands.



References

Atlantic Group Visitor Estimates

Australian Greenhouse Office website (2005): http://www.yourbuilding.org/ Article/NewsDetail.aspx?p=83&id=1596)

Australian Bureau of Statistics (2006): Census 2006 Basic Community Profiles

Australian Bureau of Statistics (2006): Census 2006 Quick Stats

BIS Shrapnel (2009): Melbourne Commercial Property Prospects 2009 - 2019

City of Melbourne (August 2009): Development Activity Monitor

City of Melbourne (March 2009): Property Watch

City of Melbourne: Quantitative research on Docklands Visitors, 2008 & 2009

City of Melbourne Visitor Estimates

Etihad Stadium Visitor Estimates

Events Melbourne Visitor Estimates

GHD (2009) "Docklands Energy and Water Benchmarking Study"

VicUrban (2009) "Build Out Forecast"

VicUrban (2009) "Docklands Population Estimate"

VicUrban (2009) "Supplementary Docklands Financial Plan"

VicUrban (2009) "Visitor Estimates"

FSC credentials

