

/PUBLIC SPACES /PUBLIC LIFE

SYDNEY

GEHL ARCHITECTS
URBAN QUALITY CONSULTANTS



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DISCLAIMER

The Public Spaces – Public Life Sydney 2007 has been commissioned by the City of Sydney for the purposes of providing expert advice and opinion by Jan Gehl of Gehl Architects on the opportunities for future public domain planning in the CBD.

The recommendations and findings by Gehl Architects have not been adopted or endorsed by Council in any way.

The information presented has been compiled using a variety of methods.

While care has been taken to ensure its accuracy the City of Sydney does not warrant the information complete or accurate.

FOREWORD BY LORD MAYOR CLOVER MOORE MP

In February, the City of Sydney commissioned world renowned Danish urban designer Jan Gehl of Gehl Architects to undertake a Public Spaces Public Life Study of central Sydney.

The study's focus extended from Central Station in the south to Circular Quay in the north; Darling Harbour in the west to the Domain in the east. This is the most intensely used area of Sydney, with over half a million people each day.

I am pleased to present Jan Gehl's report, a blueprint to transform our CBD into a people friendly, public transport oriented, green, connected, attractive and distinctive city heart.

The report considers reviews how people use our public spaces and streets in central Sydney. It assesses how they move around and how our public spaces could better promote public life and outdoor leisure. Jan's proposals to improve the pedestrian and cycling potential of Sydney sit firmly with this Council's vision for a liveable city.

The report provides us with a useful benchmark to assess our city against others that have been studied by Gehl Architects, including London, Copenhagen, Melbourne and Stockholm. A Public Spaces Public Life Study is now being done for New York.

Central Sydney has wonderful foreshore, great landmarks such as the Opera House and Harbour Bridge, extensive parklands, and distinctive topography. Much has been achieved through our heritage preservation, streetscape upgrades and tree planting programs.

However, the city centre needs a major rearrangement to get the best from our natural assets and to rescue pedestrians. The report challenges us to make the changes needed to unlock the full potential, particularly in respect to traffic and parking. Jan Gehl found that Sydney is at breaking point, unable to cope with the traffic volumes and gradually being choked in fumes and noise.

Transport is the critical issue to make our city work properly for its residents, businesses, workers and visitors. Future plans must be fully integrated with wider transport solutions developed by State Government.

Jan Gehl has provided us with a timely and comprehensive set of ideas that are challenging and insightful. His recommendations range from strategic to detailed; manageable to complex; and across the short, medium and long term. Many of the proposals complement current City directions, while others present greater challenges. Most cannot be delivered by the City alone and we will need partnerships with State and Federal Government, community and the business sector.

Jan's work coincides with preparation of Sustainable Sydney 2030, the City's long term strategic vision for the next 20 years and beyond. We will assess his recommendations for inclusion in Sustainable Sydney 2030 and to develop an implementation strategy.

This exciting vision will help us transform the city centre and unlock our city's true potential as a liveable, pedestrian friendly, vibrant and exciting city.

A handwritten signature in black ink that reads "Clover Moore". The signature is written in a cursive, flowing style. Below the signature, there is a horizontal line that starts under the "C" and ends under the "e", with a small upward tick at the end.

Clover Moore MP

The report consist of 2 documents:
PUBLIC SPACES - PUBLIC LIFE SYDNEY 2007 containing
analysis of the study area including a summary of the
public life survey, and a set of overall recommendations.

PUBLIC LIFE DATA 2007 presents the public life survey in
detail.

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INTRODUCTION

BACKGROUND FOR THE STUDY

Gehl Architects' work is based on the public space research conducted by Jan Gehl. With the human dimension as a starting point Jan Gehl has through the last 30 years worked to improve city environments in Denmark and abroad.

The book "Life between buildings" from 1971 has been translated to a number of languages and is compulsory reading in numerous architecture schools worldwide. "Life between buildings" describes the life that takes place in the spaces created by the buildings in both cities and suburbs and advocates for a stronger effort from planners and architects to understand and create the framework that provides for public life in the best possible way.

The objective for Gehl Architects is to create a stronger coherence between the life lived and the planned or existing building structures. Public life is at the top of the agenda and great care is needed to accommodate for the people populating our cities.

As part of a working tool Gehl Architects have developed the Public Spaces and Public Life studies which can be used in several contexts. In Copenhagen, PSPL surveys have been conducted every ten years throughout the past forty years. The surveys clearly and thoroughly document the gradual change occurring in this time period and provide empirical evidence of the significant improvement of the quality of city life. Additionally follow-up surveys have enabled the municipal government to gather information and inspiration for the further development of the urban spaces and the general public has acquired a valuable understanding and interest in the public realm.

This trend has spread to other cities as well, as Gehl Architects have performed follow-up surveys in Stockholm in 2005 (follow-up to a 1990 survey) and Melbourne in 2004 (follow-up to a 1994 survey). In both cases, PSPL studies have shown that public realm improvements truly have had a large impact on the quality of public life in the city. Such evidence has proven to be vital in maintaining public interest in further improvement projects, as well as general satisfaction amongst citizens as residents can see quantifiable evidence of improved quality of life.

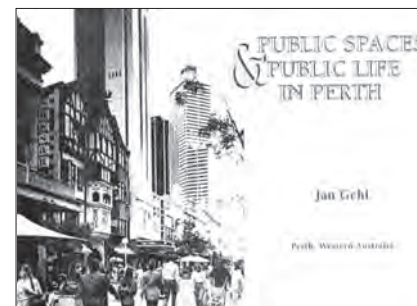
public spaces and public life



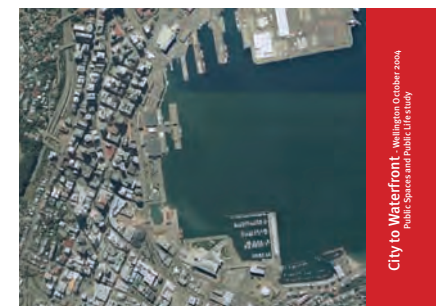
Melbourne - 2004 - 3 mio. inhabitants



Adelaide - 2002 - 1.3 mio. inhabitants



Perth - 1993 - 1.2 mio. inhabitants



Wellington - 2004 - 0.3 mio. inhabitants



Copenhagen - 2005 - 1.3 mio. inhabitants



Stockholm - 2005 - 1.2 mio. inhabitants



London - 2003 - 7.5 mio. inhabitants



New York - 2007 - 8 mio. inhabitants

THE SYDNEY STUDY IN BROAD OUTLINE



the city

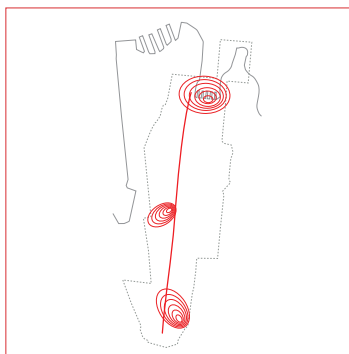
THE CITY is a presentation of the study area and an analysis of the actual physical conditions provided for pedestrians. How are the public spaces composed? How are the public spaces organised, designed and equipped?



the people

THE PEOPLE is a presentation of the people living and spending time in the city. What are the major conflicts with pedestrian movements? What is the traffic situation like? Through qualitative analysis the public spaces in Sydney are evaluated as to how people are accommodated in the city today.

The analysis covers both the issues related to walking and getting around in general, and the issues regarding spending time in the city.



recommendations

RECOMMENDATIONS are based on the above mentioned analysis and user surveys. A set of simple and overall recommendations are put forward covering the main problematic issues today. These are followed by more detailed guidelines indicating desirable improvements in selected spaces.



public life data

PUBLIC LIFE DATA presents a survey of pedestrian activities on summer and winter days in selected spaces.

How are the streets, squares and parks in the study area used? How many people are walking in the streets? How many activities are going on? What goes on summer /winter and weekdays / Saturdays? Which groups in the population use the spaces in the City Centre?

The data is divided in observations regarding pedestrian traffic and observations regarding staying activities.

Collected, the data gives information and detailed background on the present state of public life in the city. The material is presented in an independent report.

STUDY AREA

DEFINITION OF THE STUDY AREA

The outline of the study area has been determined in close cooperation with City of Sydney.

The main focus of the study is the City Centre with the boundaries being Central Station (south), Circular Quay (north), Darling Harbour (west) and the Domain (east). These areas encompass the most intensely used areas in the city. Having a coherent study area allows for a study of network and coherence as well as connections to the bordering areas. Thus the main feeders to the City Centre have been studied in terms of pedestrian movement to and from the city. These links are vital walking links and relate very closely to what is going on in the City Centre.

The same approach for selecting the study area has been used in a number of previous studies including the Australian studies in Adelaide, Perth and Melbourne.

OUTLINE OF MAIN FINDINGS

In the following pages are displayed a number of findings on an overall level concerning both current problems and potentials. The findings relate to the following topics:

Major landscape values

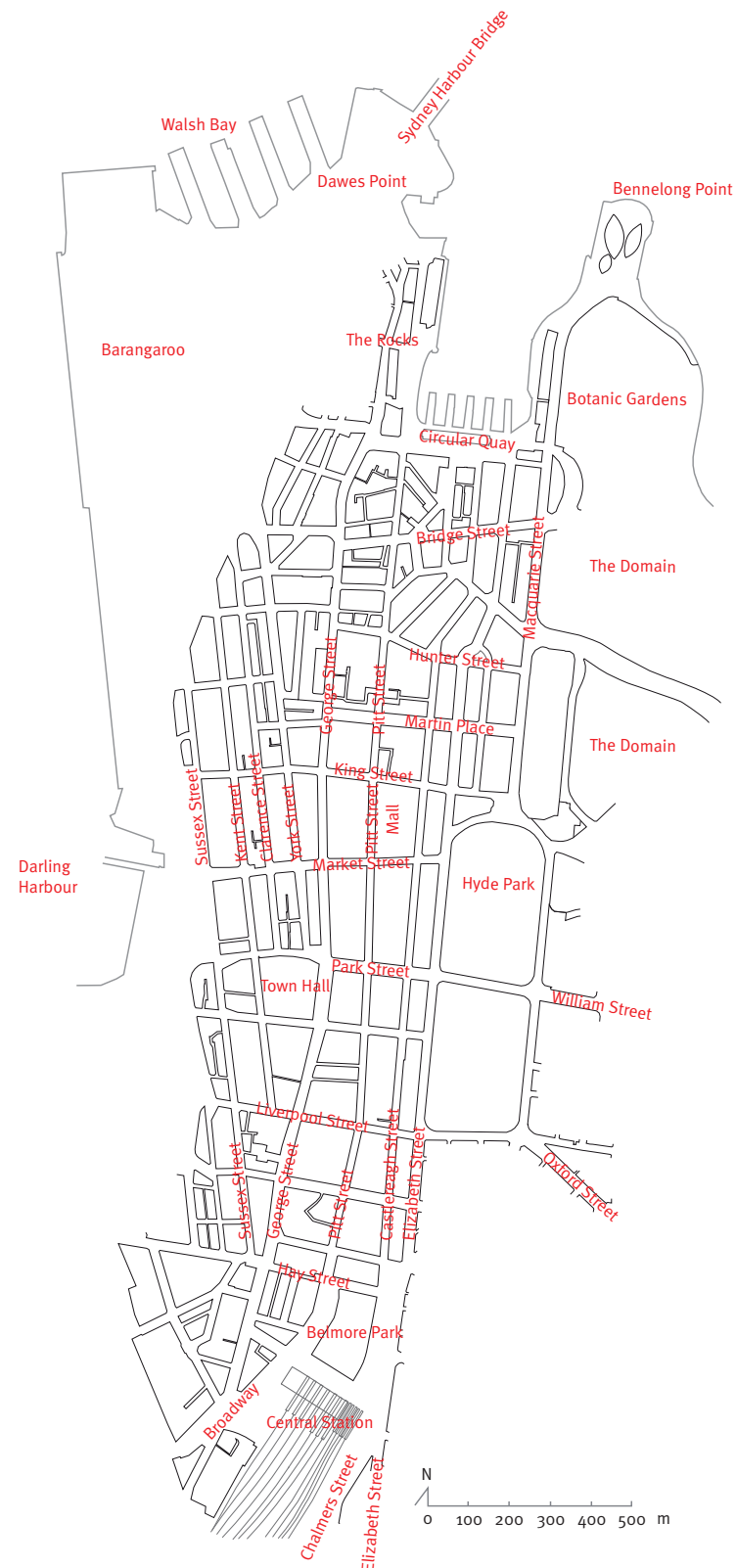
Sydney enjoys a wonderful setting created by natural landscape features. Much has changed since the early settlement but the foresight of the First Colony is still present. These landscape features create a setting for a world class city, but may also be so challenging to relate to that the development of the city has not received as much interest as needed because of the bi-focus.

Major achievements

Sydney has experienced many great improvements and new developments during times and especially some are worth mentioning in terms of issues of overall importance for the public realm.

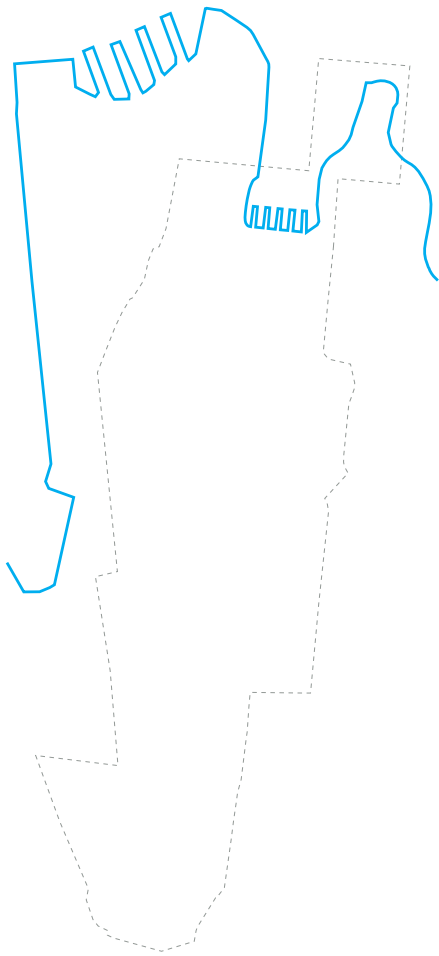
Major problems

Although there are many positive things to mention, there are also some major problems in the Sydney City Centre.



STUDY AREA

2.200.000 m²



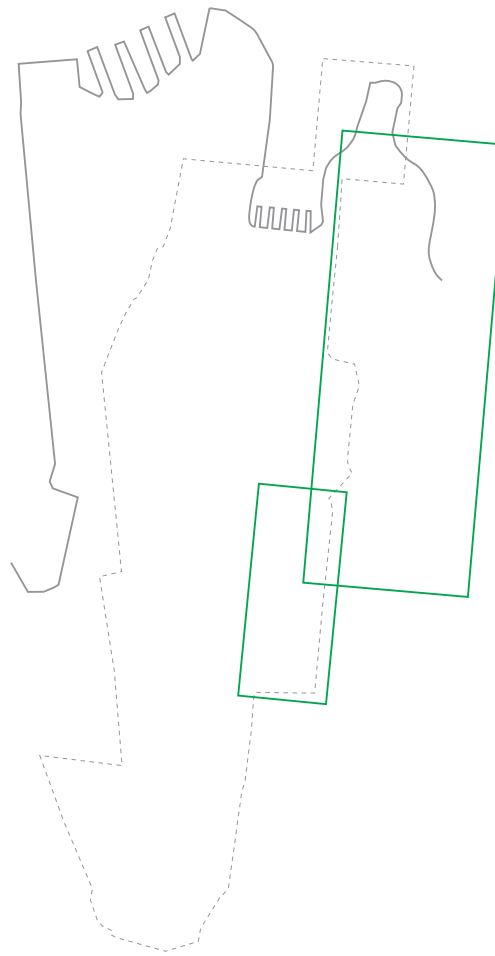
a wonderful foreshore

Sydney enjoys a wonderful setting at Port Jackson.

The water is a consistent feature which surrounds and embraces the city. The fringed coastline offers multiple opportunities for dwellings with a water view and with direct access to a foreshore promenade.

The City of Sydney in collaboration with State Government agencies such as Sydney Harbour Foreshore Authority have been progressively expanding the public access opportunities along the foreshore. Completion of Barangaroo will result in a continuous 11 km foreshore walk from Woolloomooloo to the Anzac Bridge at Pyrmont. This possibility of experiencing the city from the seaside has tremendous assets and also encompasses the possibilities of placing outdoor, recreational activities along the water inviting people to make use of their fortunate setting.

The numerous harbour foreshore beaches, not all publicly accessible, and the many villages add another layer to the experience of a city with endless kilometres of foreshore.

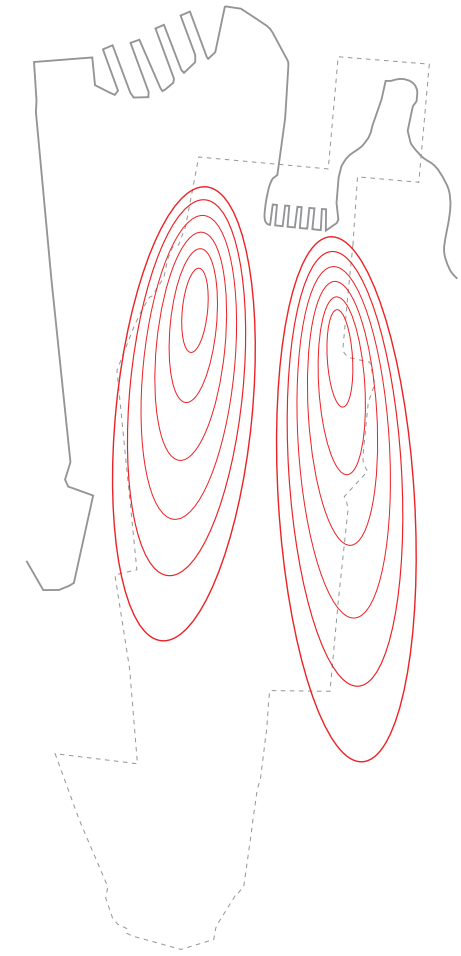


vast parklands

The Domain, the Botanic Gardens, the Cook and Phillip Park and Hyde Park are places in close proximity to the City Centre.

These vast parklands offer a diversity of recreational possibilities for the people of Sydney and hold the opposites to a dense and busy City Centre - quietness, space for big events or for space demanding activities, few sensual impacts and a low noise and pollution level. As such the qualities of these natural reserves are needed ingredients in a busy city.

What is also offered from eg. Bennelong Point or Mrs. Macquaries's Chair are views of the city and the Harbour allowing people to perceive a perspective of the city they are using in their daily lives.



a characteristic topography

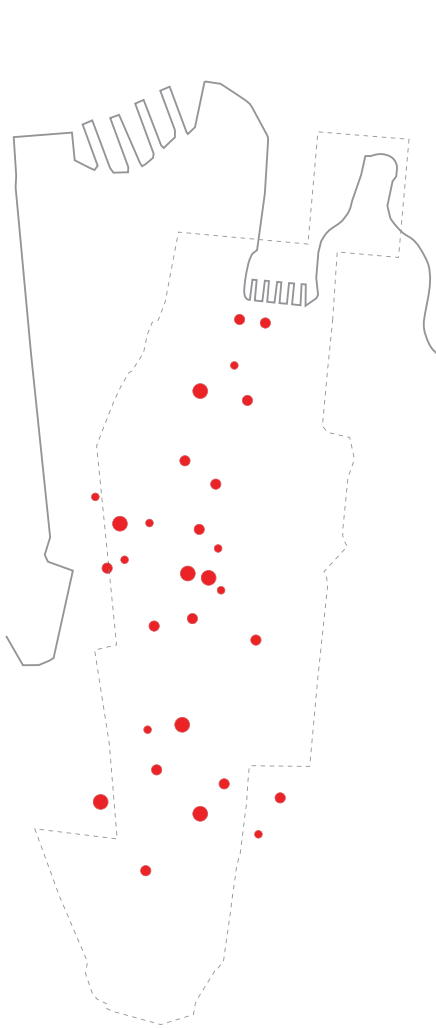
Sydney enjoys a distinctive topography.

The topography of Central Sydney is like no other major Australian city. While Perth, Adelaide and Melbourne are primarily situated on plains, Sydney is built upon landscape contours providing a significant character to the streets as well as providing wonderful views to key destinations.

In certain places there tends to be a rather steep topography (east /west streets) while other streets are left somewhat untouched (north /south streets).

The topography strenghtens an image of a strong landscape setting with a distinct profile offering significant characteristics to the city.

MAJOR ACHIEVEMENTS



preserving heritage

ACHIEVEMENT

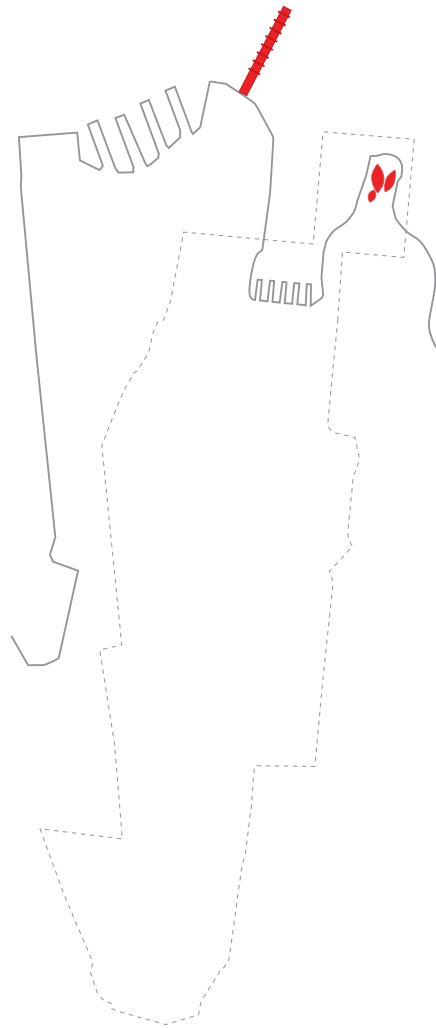
Sydney has succeeded in preserving a large part of the heritage buildings in the city.

BENEFITS

The heritage buildings add character to streetscapes and encompass the history and culture of the city.

CHALLENGES

Some heritage buildings appear to have been converted as part of major developments. Some of these buildings now form parts of awkward juxtapositions between the new and the old as well as the low rise and the high rise.



great landmarks

ACHIEVEMENT

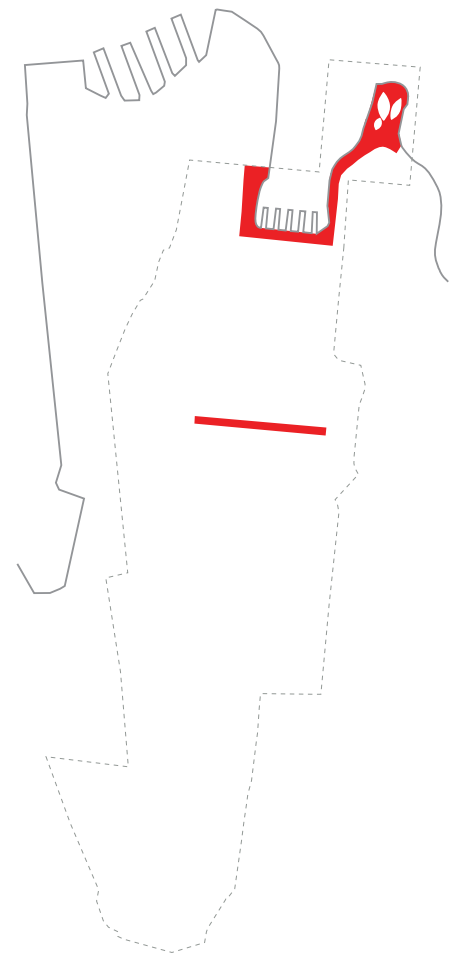
Sydney Opera House is an icon for the nation at an international level. The building encompasses the spirit of Australia. The Harbour Bridge is a significant landmark at a national level.

BENEFITS

The branding value is immense.
Citizens experience a sensation of pride and ownership.

CHALLENGES

To re-focus from the Harbour area and create new significant landmarks in the core of the City Centre through a distinct public space plan.



creating open spaces

ACHIEVEMENT

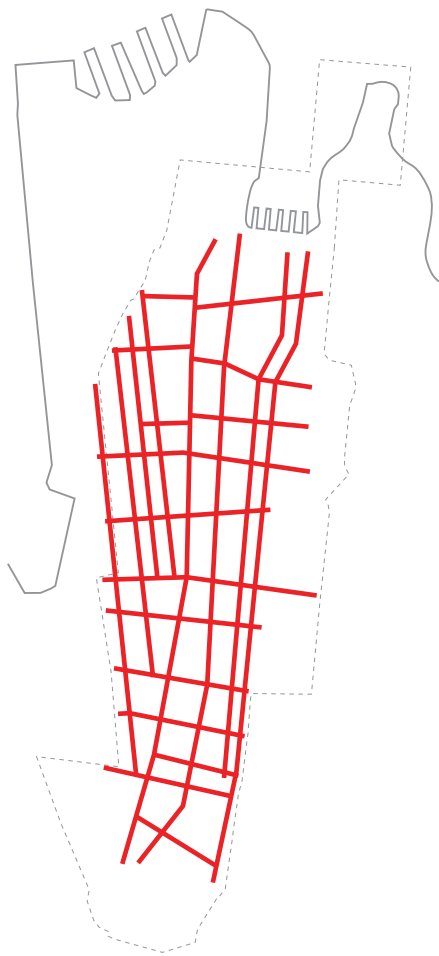
A coherent waterfront at Circular Quay.
A series of pedestrian spaces such as Martin Place.

BENEFITS

Important fixed points in the city for public life and specific events. Indication of what can be achieved when casting a critical look at the use of public space.

CHALLENGES

Widening the public space network to encompass more and new significant public spaces and to develop strong walking links in-between.



introducing design codes

ACHIEVEMENT

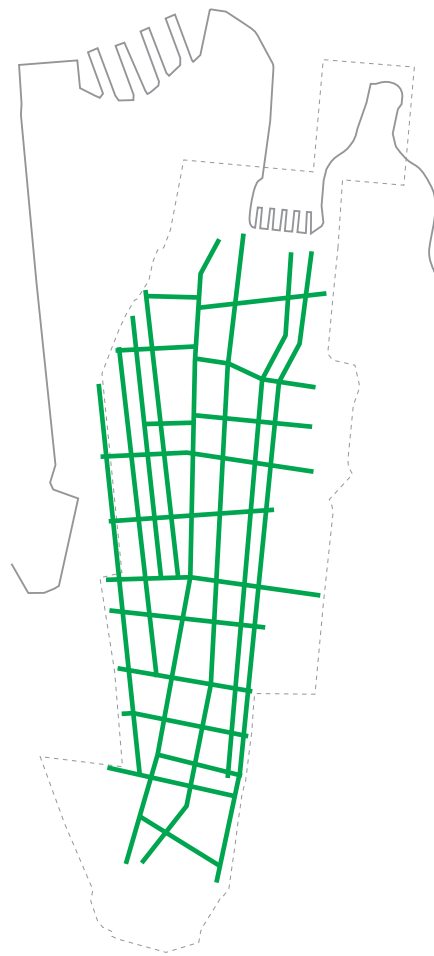
Turning traffic corridors into city streets.

BENEFITS

A beautiful street environment of high quality, durable materials. Simplifying street layouts and raising pedestrian priority.

CHALLENGES

Expanding the program to widen footpaths in selected streets and to develop a public space plan for renewal of the many needy public squares. Broaden the scope to include funds for integrated public art.



introducing street trees

ACHIEVEMENT

Installation of street trees in the majority of the City Centre.

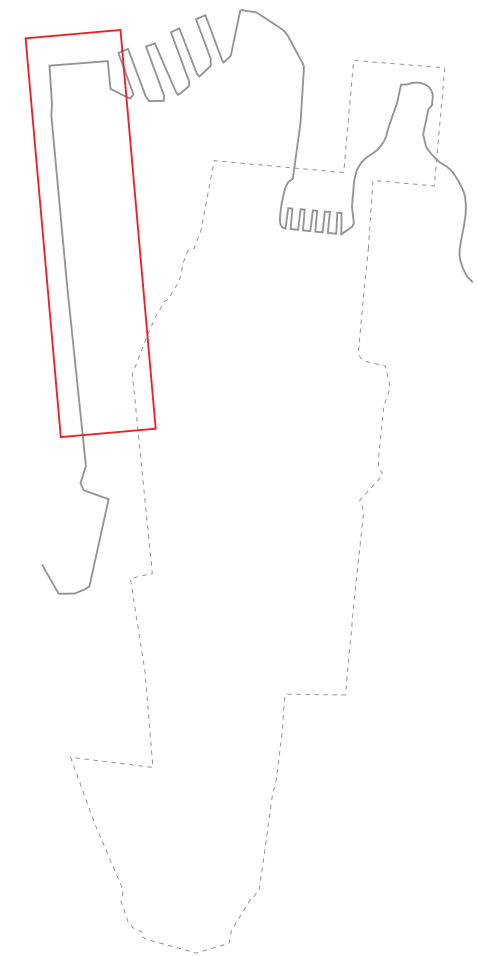
BENEFITS

Greatly improved streetscapes in terms of the visual expression and environmental amenity.

CHALLENGES

Making street trees have a significant impact at street level by avoiding invisible species. Creating a distinction between streets by using different species. Introducing selected indigenous trees.

Upgrading the number of street trees on George Street to cover the street in its whole length.



the barangaroo site

ACHIEVEMENT

Freeing up a substantial harbour area from port activity. Working towards a collected plan for the whole area in close integration with the surrounding city.

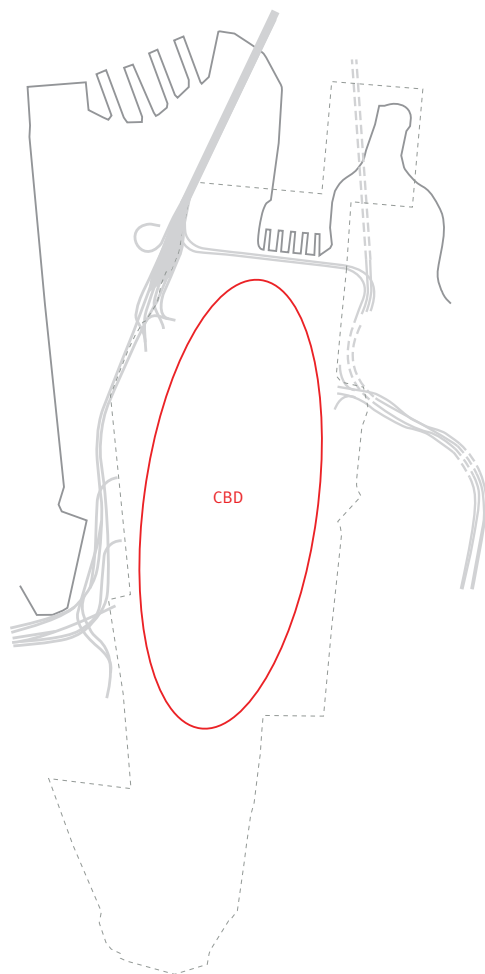
BENEFITS

Possibilities of strong links between the city core and the water. Possibilities of creating a successful, well integrated, multi-functional city area as a most positive resource for the whole City Centre.

CHALLENGES

Difficulties in creating strong, integrated links with the city core caused by the topographical change as well as by the Western Distributor.

MAJOR PROBLEMS



an introverted city

PROBLEM

Massive infrastructure in the City Centre carrying 150,000 vehicles directly through the centre plus an additional 80,000 vehicles through the parklands.

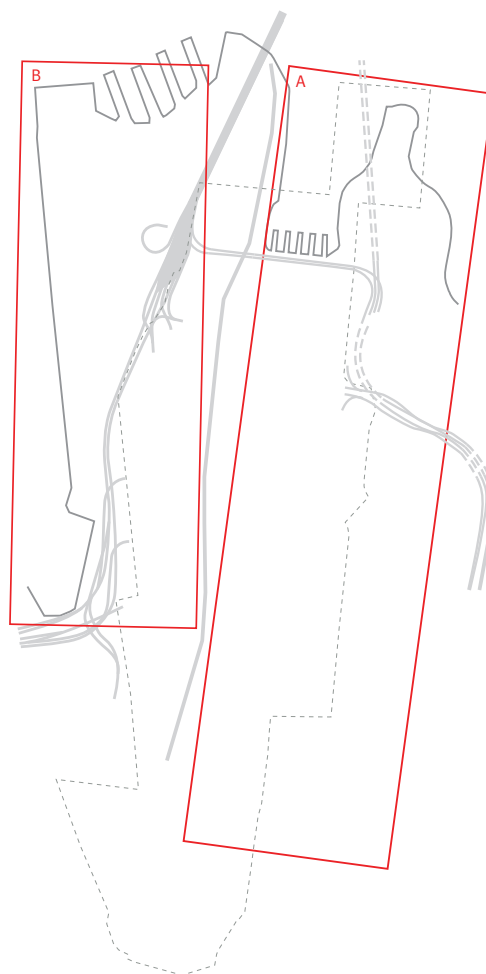
CONSEQUENCES

The city is effectively cut off from the water. The walking links to and from are of poor quality either in terms of the visual quality or in terms of the walking quality.

Circular Quay where the city does access the water is downgraded by a bulky ferry terminal and a likewise railway embankment as well as low quality retail.

The Barangaroo site is confronted with huge difficulties in providing integrated links with the city and Walsh Bay is cut off as a separate area.

Darling Harbour is isolated, not only by closed frontages but also by an intersecting freeway.



a traffic dominated city

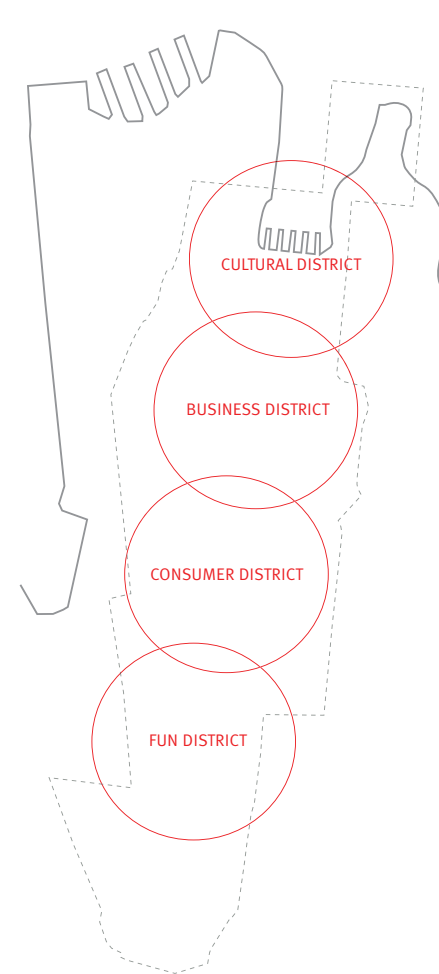
PROBLEM

The Western Distributor is a heavy traffic artery having a severe impact at street level in all of the western part of the City Centre.

As a result of the large scale infrastructure surrounding the city the majority of all city streets are filled with traffic.

CONSEQUENCES

The Western Distributor has a severe downgrading effect on the western part of the City Centre. The streets here are turned into service corridors for the freeway and generally the public realm is under-developed compared to other parts of the city. Effectively the City Centre is divided into two separate city parts - a western and an eastern City Centre, quite different in character and ambience.



a mono-functional city

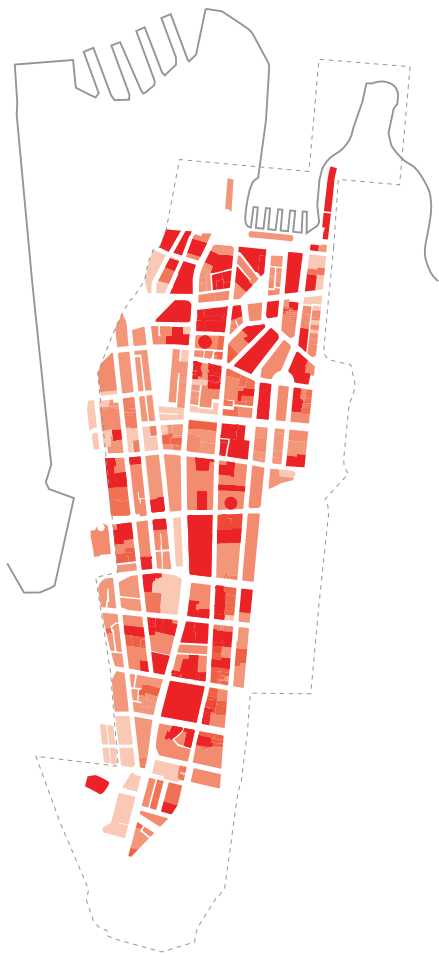
PROBLEM

Various functions are confined to specific geographical areas creating a number of precincts dominated either by offices, retail or entertainment.

CONSEQUENCES

The lack of diversity and mix in functions within specific areas has a number of side effects. Generally there are fewer experiences and fewer attractions in each area leading to a lack of mixed user groups making the population more uniform and the user patterns quite alike.

A number of areas appear overcrowded at nighttime while others appear deserted. Both can be perceived as unsafe areas to pass through either because of a lack of activities or because of a concentrated precinct of bars etc.



a high city

PROBLEM

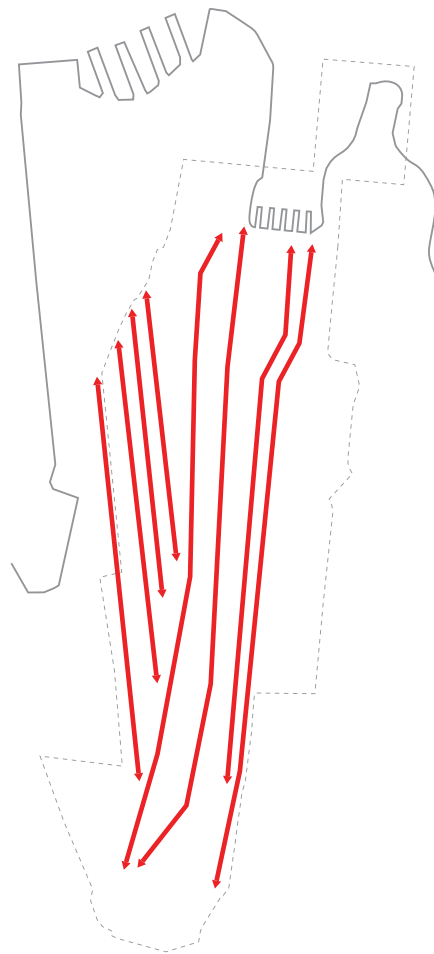
Substantial parts of the City Centre are dominated by buildings higher than 10 floors. The sun access planes appear to be difficult to reinforce.

CONSEQUENCES

The streets are primarily dark and in shadow most of the day. Wind velocities are high at certain points, eg. World Square and Philip Lane /Spring Street where strong downwinds are created making the public spaces undesirable places to be and makes tree planting and establishment a challenge.

High buildings often pay too little attention to ground level, where mirror glazed frontages and withdrawn private plazas represent the interface with the city streets.

Servicing the high buildings demands more roadspace for traffic and additional lanes for service vehicles, as well as adding extra demand on parking and increasing the number of commuters to and from the city, adding extra pressure to public transport at peak hours.



a lack of street hierarchy

PROBLEM

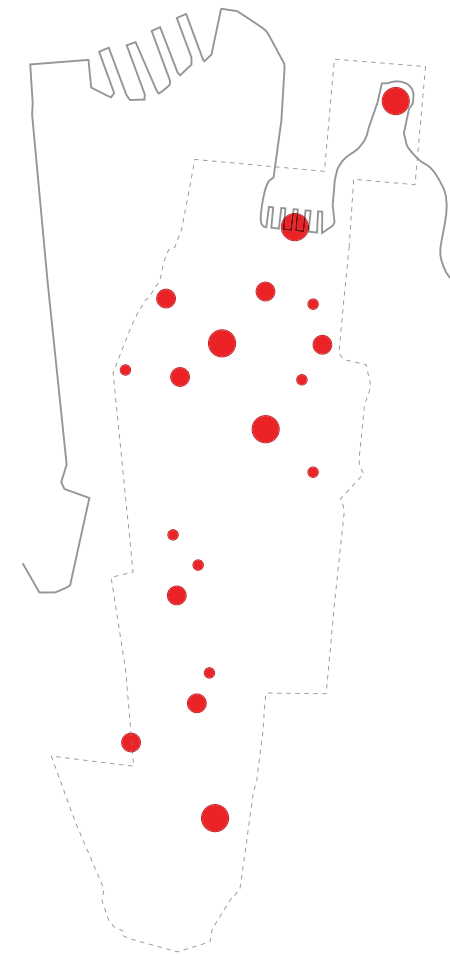
Streets generally serve the same purpose as transport corridors primarily for vehicular traffic, as service roads and as parking spaces.

CONSEQUENCES

The city has been filled to its maximum capacity with vehicular traffic. As a result the general conditions for other transport modes have been downgraded.

Pedestrian priority is quite low and there is an obvious lack of cycling facilities.

Supplementary many of the streets look very alike and the distinction between them is weak. This makes the general orientation hard and creates a sense of indifference towards the individual streets. The streets are being perceived as insignificant - it is what they connect that is important.



scattered open spaces

PROBLEM

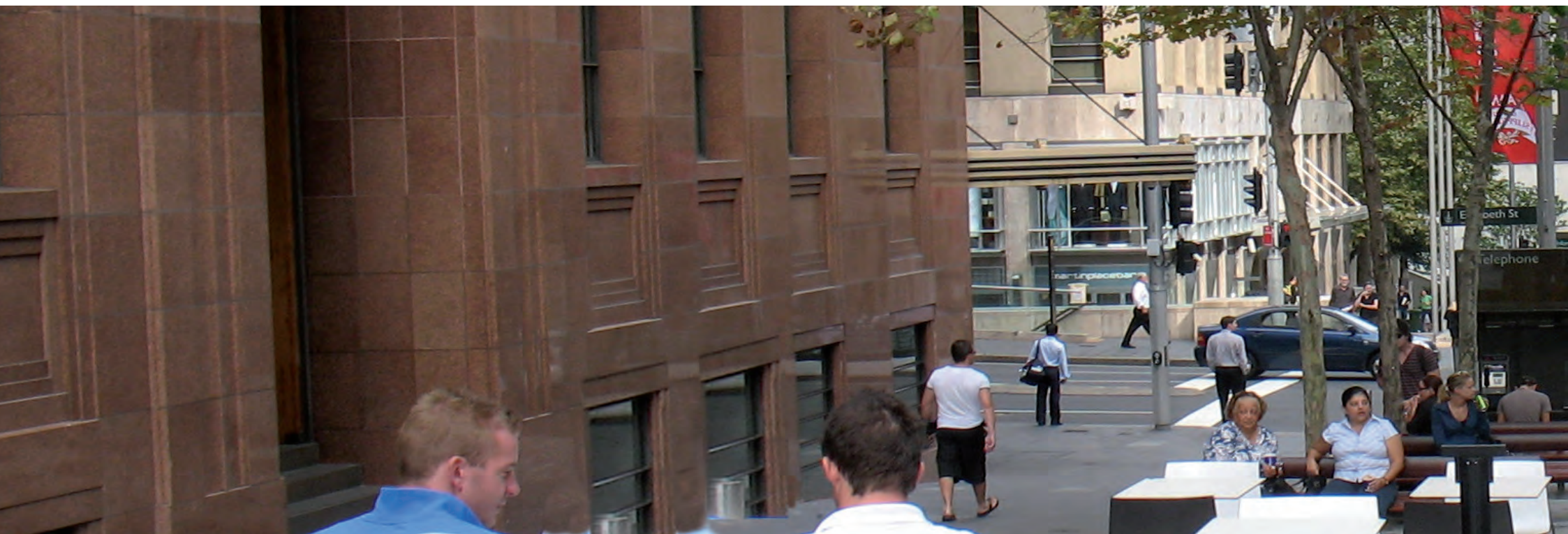
There is a number of minor public spaces in the City Centre. A substantial part appear to have the same layout, the same functions and the same type of design /materials.

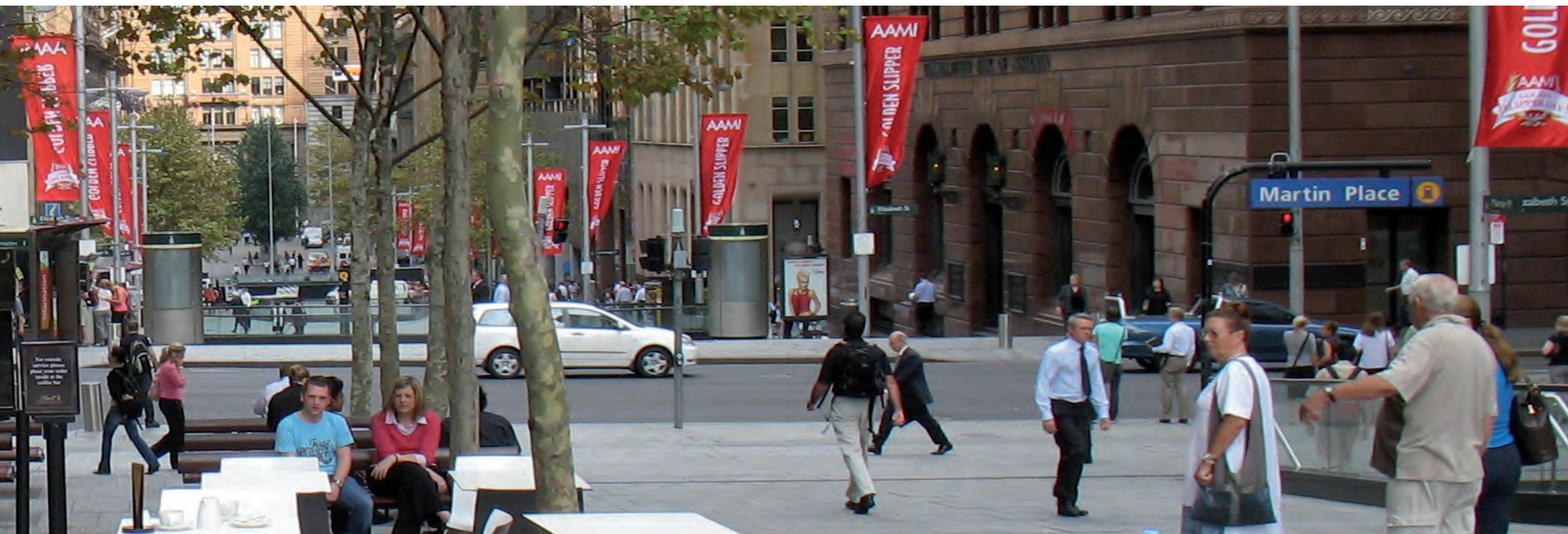
The spaces are scattered covering most of the City Centre, the links in-between them are weak.

CONSEQUENCES

There are few dedicated routes for promenading and no dedicated walking links between the various public spaces. Thus the small squares and pocket parks are not frequently visited

Subsequently the somewhat similar, smaller public spaces appear under-utilised with only a limited number of users during the day. There is a general lack of a distinct, unique character and a general lack of significant landmarks.





THE CITY

CITY SCALE COMPARISONS

australian and european cities

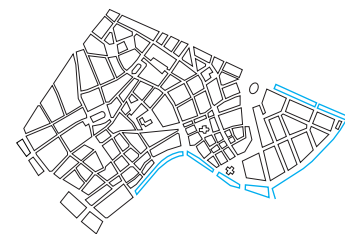
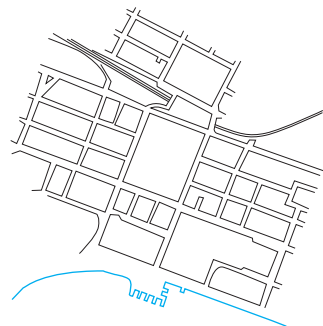
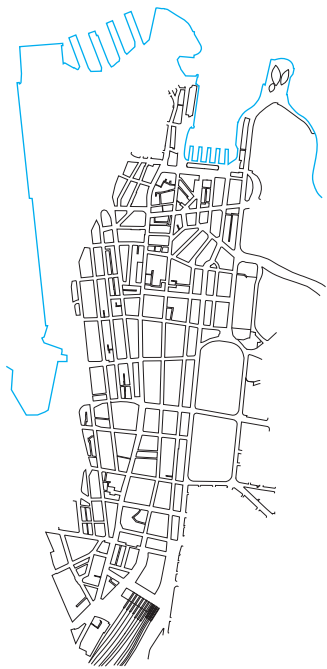
COMPARISON WITH OTHER CITY AREAS

Studies of other cities will be used for comparison and will act as the frame of reference in this study. Comparisons will be based on similar studies carried out in - Melbourne, Adelaide, Perth, Stockholm and Copenhagen. A comparison with these cities will provide insight into the public life of other cities of comparable or somewhat smaller sizes.

Adelaide, Perth and Copenhagen have populations in the metropolitan area of approx. 1 million. Melbourne and Sydney have a vast suburban sprawl and therefore a larger population of 3 - 4 million inhabitants in the metropolitan area.

Melbourne, Adelaide and Perth are “new” cities comparable with Sydney in scale, architecture and type of public space. Stockholm was somewhat drastically reformed during the 60’s and has undergone changes in humanizing the city ever since. Copenhagen is a medieval city which serves as an inspiration for what can be achieved when leading a gradual urban renewal. Copenhagen has done so for the last 40 years.

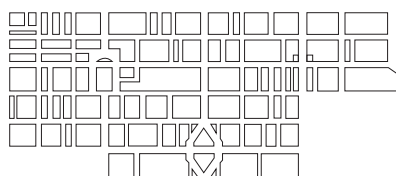
All maps are shown in 1:40.000



SYDNEY
 2.200.000 m²
 15.000 residents in the city centre (2006)
 68 residents per hectare
 (4 million residents in the metropolitan area)

PERTH
 1.200.000 m²
 Approx. 1000 residents in the city centre (2006)
 8 residents per hectare
 (1.4 million residents in the metropolitan area)

COPENHAGEN
 1.150.000 m²
 7.600 residents in the city centre (2005)
 66 residents per hectare
 (1,2 million residents in the metropolitan area)



MELBOURNE
 2.300.000 m²
 12.000 residents in the city centre (2006)
 52 residents per hectare
 (3.5 million residents in the metropolitan area)

ADELAIDE
 1.575.000 m²
 1.900 residents in the city centre (2002)
 12 residents per hectare
 (1.1 million residents in the metropolitan area)

STOCKHOLM
 1.250.000 m²
 1.700 residents in the city centre (2005)
 14 residents per hectare
 (1.9 million residents in the metropolitan area)

UNDERSTANDING THE GRID

comparison of sydney and melbourne

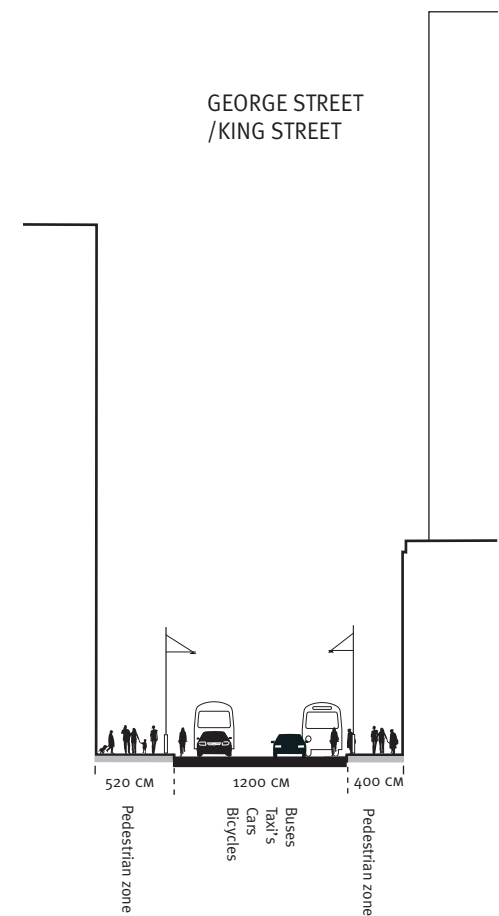


NARROW STREETS AND NARROW BLOCKS
 = MORE STREETS + MORE TRAFFIC
 + MORE SHADOW + STRAY WINDS

Compared to Melbourne, Sydneys grid structure is quite different. Where Melbourne has a clear and legible geometry the Sydney grid is influenced by how the city was first laid out. The original landscape features can still be read in certain places, eg. the Tank Stream, which runs underneath Pitt Street, and in George Street which used to be the main street and is the only street that connects the Central Station with the Rocks and essentially the Harbour Bridge and Port Jackson.

SYDNEY CHARACTERISTICS:

- Generally narrow street widths of 20 metres.
- Narrow blocks (east /west) creating more streets running north /south.
- Narrow streets lined by high buildings creating shadows and highwind velocities at street level.
- Few laneways in context of previous development patterns - block amalgamations for office towers destroyed many of Sydneys laneways servicing the high buildings. Service is mainly done in the streets demanding more space for service vehicles and for parking.
- Peninsula situation; "Everything ends at Circular Quay."

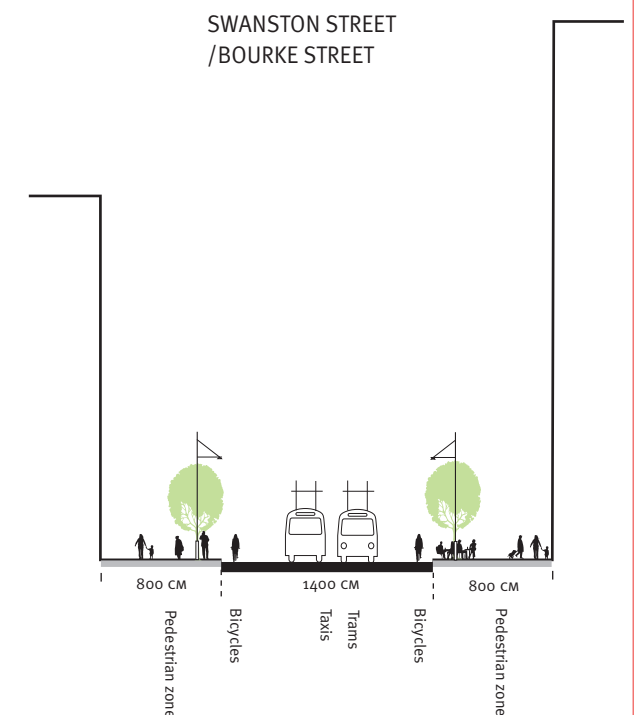


WIDE STREETS AND LARGE BLOCKS
 = LESS TRAFFIC + MORE SUN
 + WIDER PAVEMENTS + STREET TREES
 + LIVELY LANEWAYS

Although Sydney and Melbourne share similar historical backgrounds and date back to the same time period in urban planning there are some significant differences between the two. These differences mainly has to do with how the city grid was originally laid out and how that has formed the urban development process and the influx of traffic.

MELBOURNE CHARACTERISTICS:

- Generally generous street widths of 30-40 metres.
- Large blocks (east /west) creating fewer streets running north /south.
- Height controls have been applied in the City Centre, especially at Swanston Street.
- Laneways running through the large blocks servicing the high buildings.
- Consecutive laneways creating continuous movement patterns.



WALKING DISTANCES

a viable mode of transport

SHORT DISTANCES

The illustration to the right pinpoints how easily accessible destinations are by foot within Sydney. The illustration shows that just 12 minutes of walking can bring you to central locations and as such walking is a realistic mode of transportation. Most city centres have a size of approximately 1 km² as one kilometer is considered a reasonable walking distance when using the city facilities.

THE SUSTAINABLE CITY

Emphasizing walking as a viable mode of transportation with a strong impact on health is leading towards a more sustainable city where energy consumption and focus on a lively city - also at night - are part of the new city strategies.

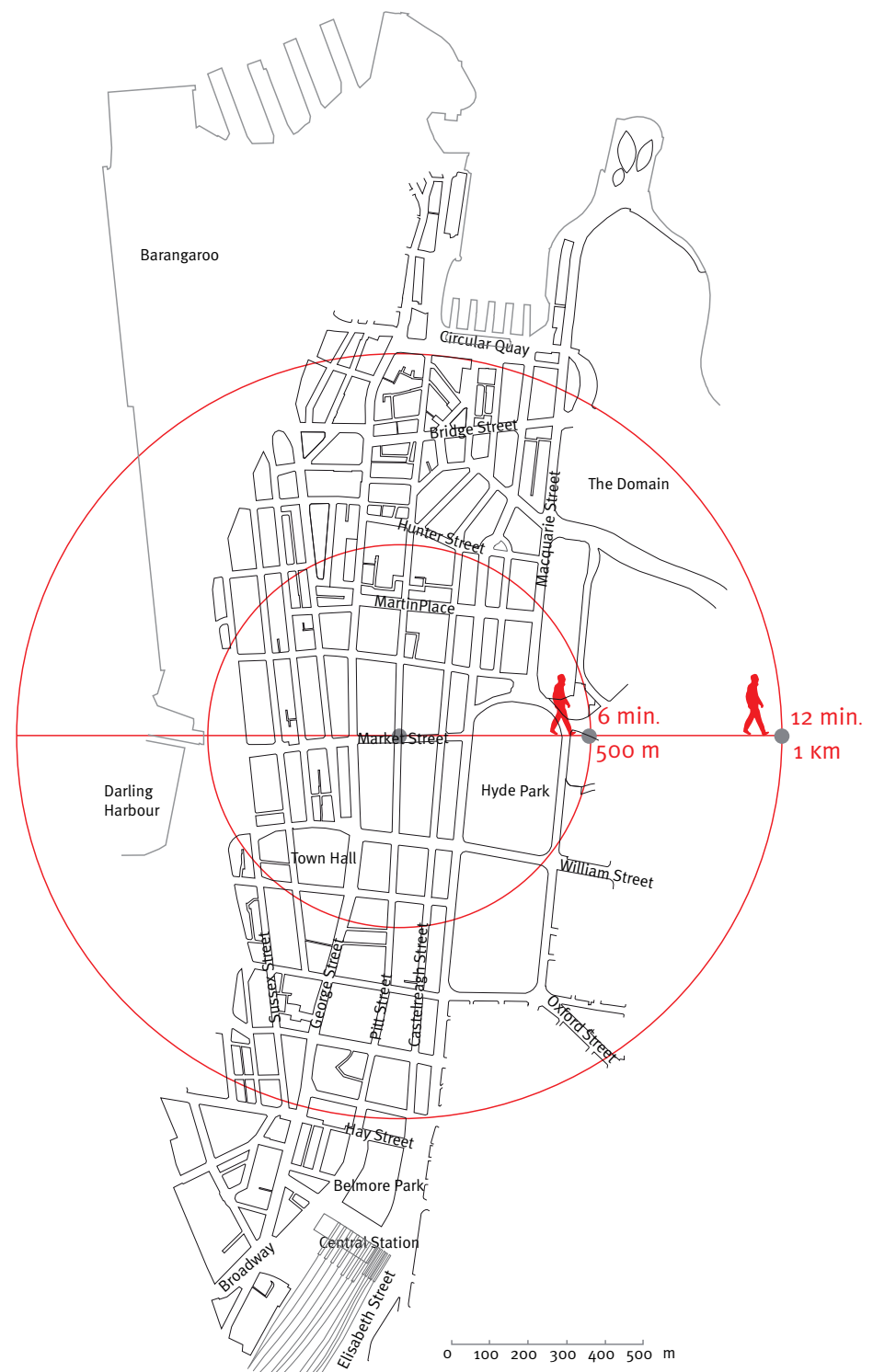
Walking sets eyes on the streets, it enhances public life and increases the local ownership and knowledge of the city. "There is more to walking than walking": Walking is the first step - making invitations to stop, to linger, to talk, to watch, to participate and to perform are the others.

HOW BIG IS THE CITY?

The illustration shows walking distances within the City Centre. Within 12 minutes walking time one can cross the City Centre from east to west. 30 minutes walking time is what it takes to walk from Central Station to Circular Quay. Alas the east/west distances are short while the north/south distances are more challenging.

On the opposite page is shown comparisons between main streets in Sydney, Melbourne and London.

What is significant for Sydney's streets is the narrow layout and the length of its main street, George Street. Few cities have a 2 km main street and few cities have one as narrow as George Street. What comes closest is Oxford Street in London which is 500 m shorter than George Street. Oxford Street is celebrated as the main street in London and its course is broken by the characteristic circus.



WALKING DISTANCES IN THE CITY CENTRE

SCALE REFERENCES

comparison of key city streets

sydney

GEORGE STREET

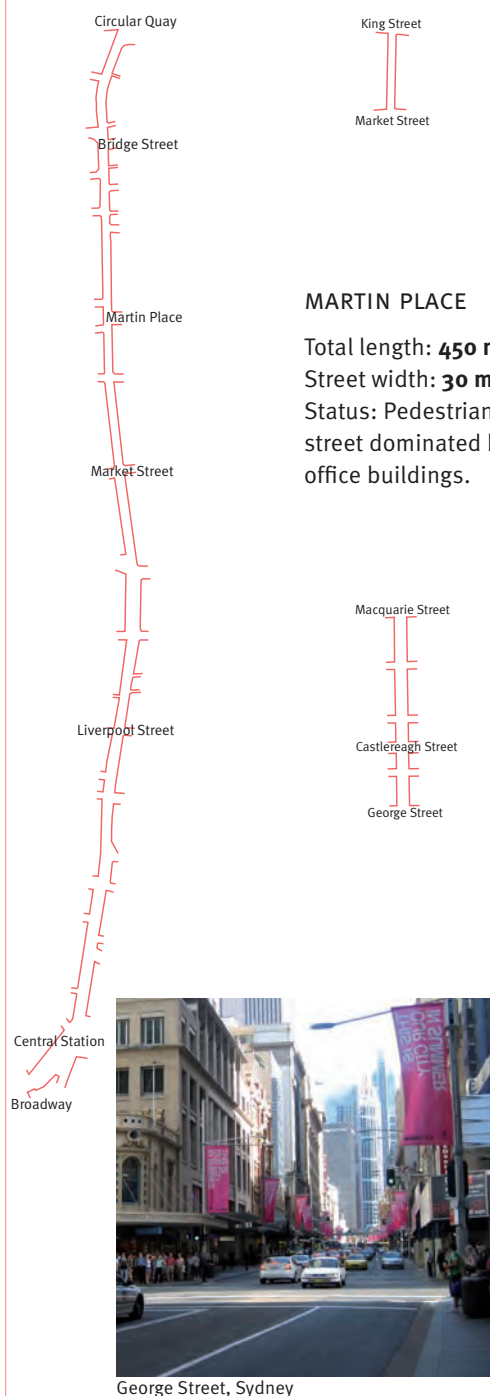
Total length: **2550 m**
 Street width: **22-30 m**
 Footpath width: **4-6 m**
 Status: Main street with shopping and heavy traffic.

PITT STREET MALL

Total length: **186 m**
 Footpath width: **18.5 m**
 Status: Pedestrian street dominated by retail.

MARTIN PLACE

Total length: **450 m**
 Street width: **30 m**
 Status: Pedestrian street dominated by office buildings.



George Street, Sydney

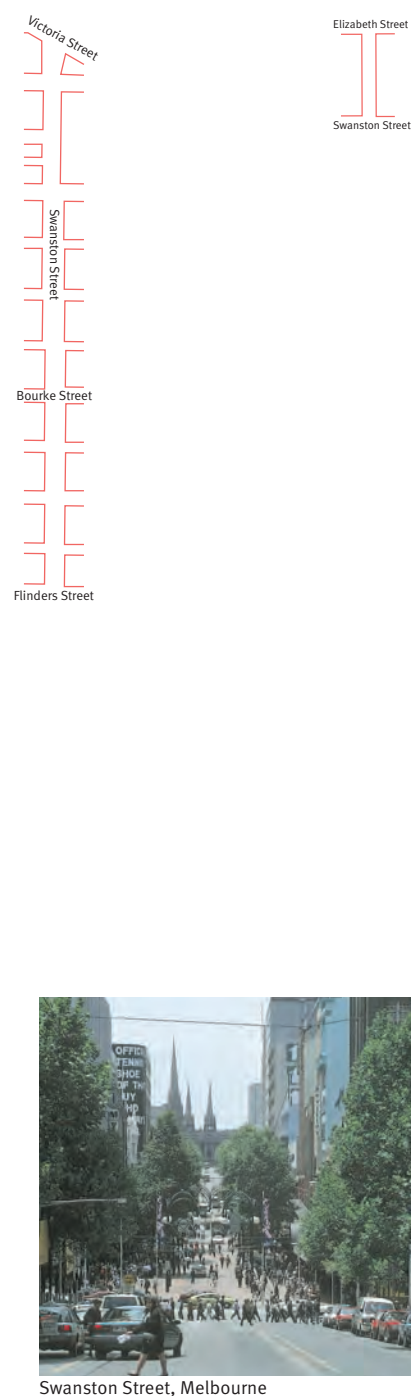
melbourne

SWANSTON STREET

Total length: **1270 m**
 Street width: **30 m**
 Footpath width: **8 m**
 Status: Main street dominated by shopping. Trams, taxis and bicycles.

BOURKE STREET MALL

Total length: **213 m**
 Street width: **30 m**
 Footpath width: **8 m**
 Status: Shopping street for pedestrians and public transportation.



Swanston Street, Melbourne

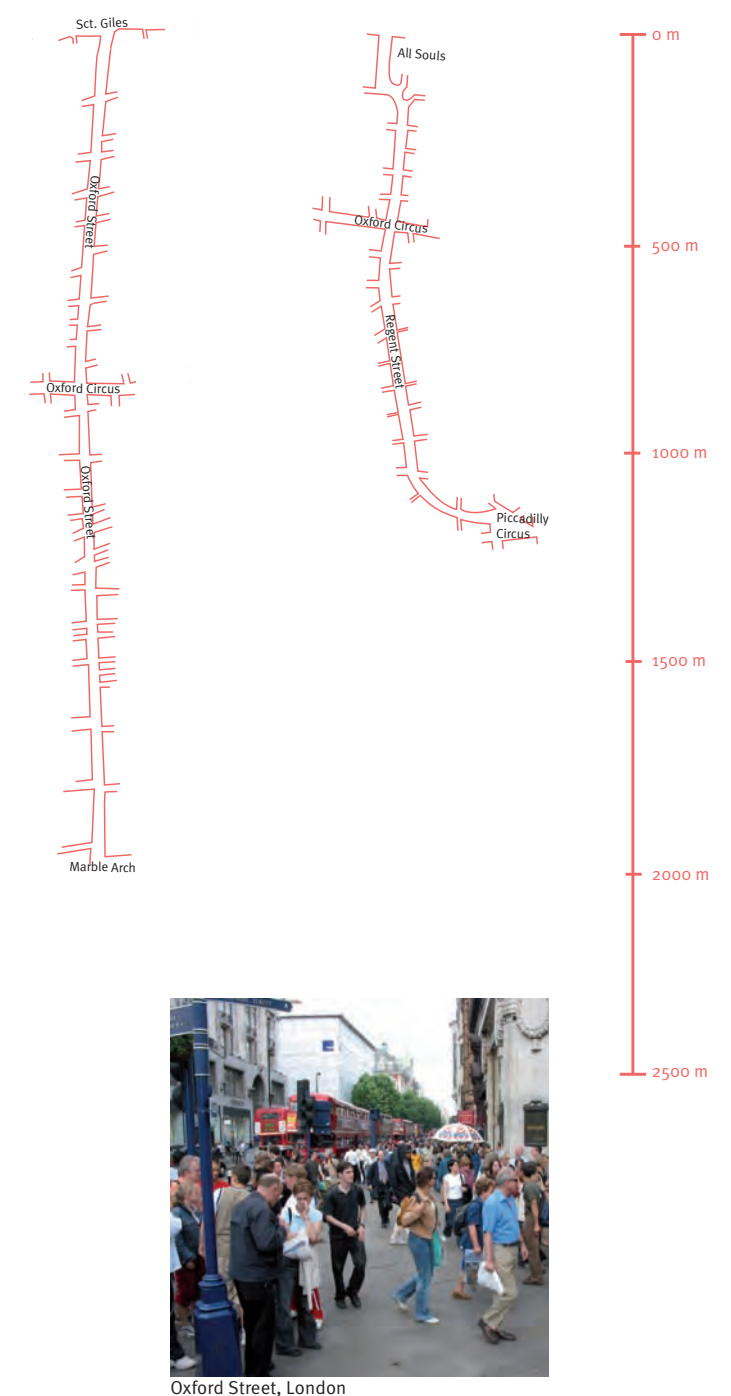
london

OXFORD STREET

Total length: **2000 m**
 Street width: **26 m**
 Footpath width: **6-9 m**
 Status: Main shopping street. Pedestrians and public transportation.

REGENT STREET

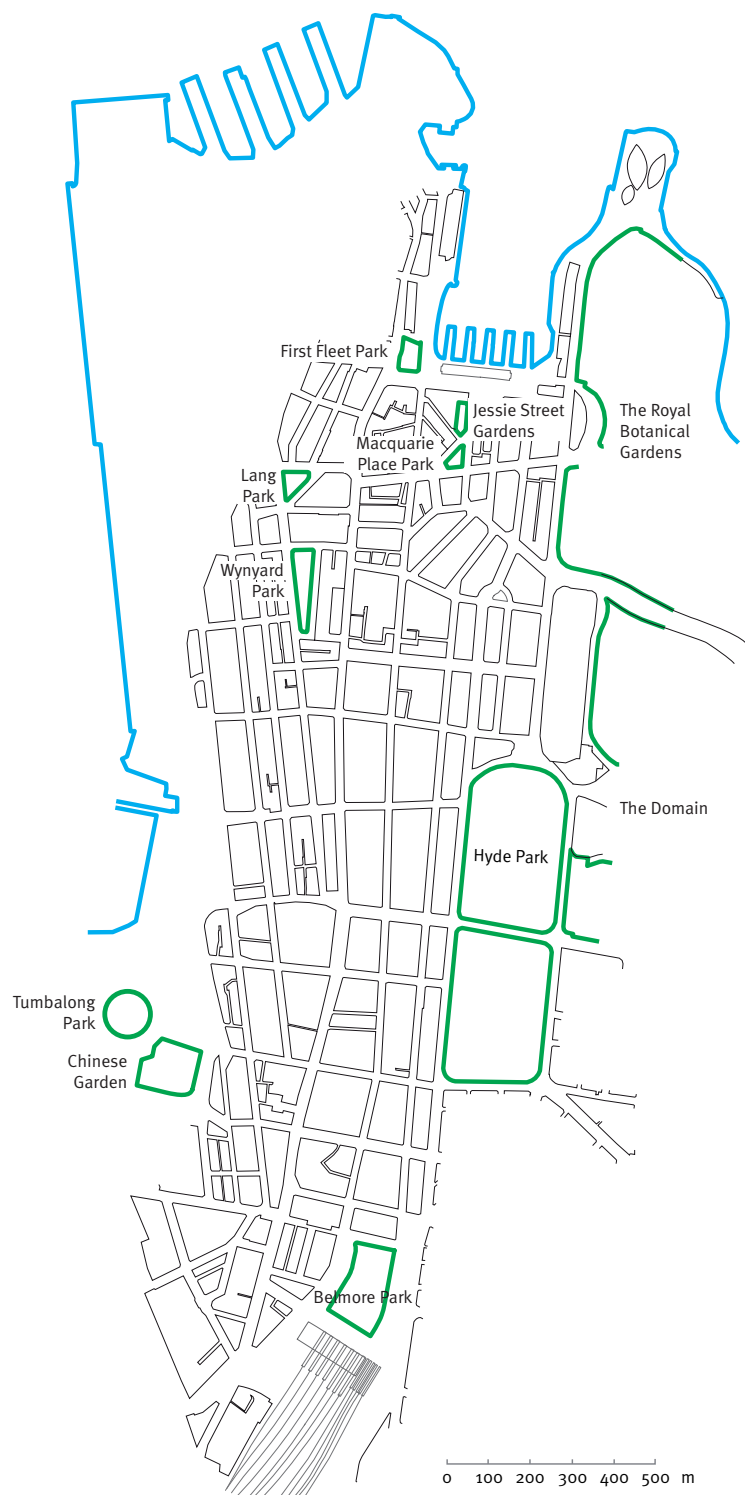
Total length: **1200 m**
 Street width: **25-28 m**
 Footpath width: **4-7 m**
 Status: Shopping street dominated by classic architecture and a curved course. Heavy traffic.



Oxford Street, London

OPEN SPACES

waterfront, parks and car free streets and squares



WATERFRONT AND PARKS

- Coastline
- Parks

Coastline: 9 km

Maximum distance to waterfront: 1000 m (Central Station - Darling Harbour)

Parkland in total: approx. 860.000 m²

(incl. Royal Botanical Gardens, Cook and Phillip Park and Domain)

Maximum distance to parks: 500 m

Number of parks within study area: 7



CAR FREE STREETS AND SQUARES

- Carfree streets
- Carfree squares

Number of carfree streets: 5

Total length of carfree streets: 750 m

Number of carfree squares: 17

Total area of carfree squares: 57.000 m²

OPEN SPACES

laneways and privately owned spaces



LANEWAYS

— Laneways

Number of laneways: 47

Total length: 3100 m



ARCADES

■ plazas inside blocks or at upper level

— private arcades

— underground arcades

Number of private squares: 11

Total area: 18.050 m²

Number of underground arcades: 10

Total length: 2600 m

LACK OF OPEN SPACE NETWORK

MISSING LINKS IN THE PEDESTRIAN NETWORK

The map to the right clearly depicts one of the main issues in Sydney. Although there is a fair amount of open space in the City Centre (74,000 m²) there tends to be weak connections in-between.

The existing open spaces are scattered across the city and although they cover most of the City Centre they do not constitute a connected network for users to enjoy. The size of the various squares and street closures are somewhat the same offering many spaces of the same scale and for the same kind of events /uses.

The most important spaces are Martin Place, Pitt Street Mall, Sydney Square and Circular Quay. These make up the spine of Sydney's open spaces. Still all of them have their limitations; Martin Place consists of 5 individual parts, Pitt Street Mall is only a 200 metre stretch, Sydney Square is a limited sized space and is partly sunken, while Circular Quay has an outstanding setting, it suffers from weak connections to the city.

LACK OF PUBLIC SPACE HIERARCHY

As mentioned Sydney's City Centre has a number of quite similar open spaces, not only in size but also in function and layout. There tends to be an overload of smaller, more or less anonymous lunchtime plazas equipped with four benches, three palm trees and a kiosk, eg. Richard Johnston Square or Farrer Place.

COMPARISON: COPENHAGEN

Copenhagen has turned a car oriented city into a people oriented city in a step by step proces through 40 years. The development has involved stopping the through traffic, reducing the number of car parking spaces in the centre and increasing the amount of space set aside for pedestrian activities from 15,000 m², when the first pedestrian scheme was introduced in 1962, to the present day 100,000 m² of car free streets and squares. These streets and squares now form a coherent network of high quality walking links and public squares for recreation, all of individual quality and character.



The network of car-free streets and squares in Copenhagen comprises 100,000 m² (2005).



OPEN SPACES

- Public pedestrianised streets and squares
- Private plazas
- Public parks

LACK OF STREET DISTINCTION

ALL STREETS ARE USED FOR THE SAME PURPOSE

The streets of Sydney primarily serve as traffic corridors. Over time their obligation to make traffic run smoothly has been more and more dominant, thus eliminating a number of other functions which streets are also used for, such as recreation, trading, the informal meeting place etc. The general tendency has also been that a number of user groups have disappeared from the footpaths as conditions for being there grew worse. The streets now work as part of a big traffic machinery, where their main purpose is to deal with as much traffic as possible. This has had a tremendous effect on the atmosphere in the streets and the gradual anonymisation process leading to an unclear distinction between various streets which all serve the same purpose.

Because of this the general attractiveness of walking in the streets is low, since it tends to be difficult to orientate and the general experience of walking is low.

NO CLEAR VISUAL DISTINCTIONS

Because of the functional limitations to the use of streets there has been a gradual visual downgrading of the individual streets. Streets tend to look too much alike, and visitors as well as locals have a tendency of mixing up streets as they cannot tell which one is eg. Clarence, York or Kent Street.

With the Design Codes it is planned to give these streets a serious upgrade in order to acknowledge their importance in the city structure. But still more could be done to individualise the streets in terms of their specific amenities, in terms of street trees or in terms of an extensive art program.



Clarence Street



Kent Street



SUMMARY

The north /south running streets primarily serve the same purpose as traffic corridors for vehicular traffic. No distinct visual distinction of the streets is present.

THE HIGH CITY

SEVERE IMPACT ON TRAFFIC

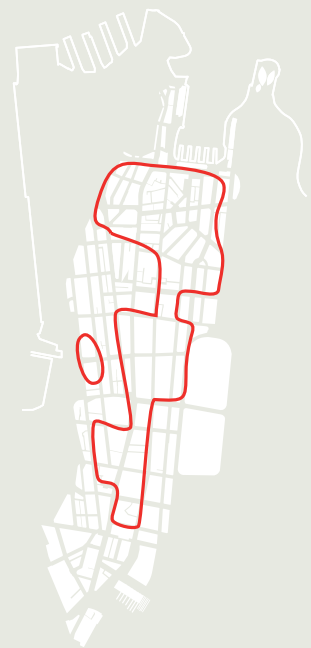
Sydney is a high city with narrow streets. The combination is unfortunate as high buildings demand more service than smaller ones in terms of delivery of goods, collection of rubbish, transport needs for people in the buildings etc. By their sheer size the tall buildings create problems at street level where heavy traffic is the result.

POOR MICRO-CLIMATIC CONDITIONS

Another problem is the micro-climatic conditions created at the base of high-rise. When strong winds meet a tall free-standing building turbulence and fast down winds will sweep the nearby streets in unpredictable ways. Fast winds lower the temperature of streets and public spaces, minimizing the comfort for people walking or staying nearby and effectively preventing public life. Additionally, high-rise casts long shadows limiting the recreational values of city streets and squares.

CONFLICTS WITH PUBLIC LIFE

However grand it may appear as both skyline and from within its apartments or offices, poorly placed and designed high-rise can render public space useless as a place for public life activities. Unfortunately, Sydney is rich in examples of conflicts between high-rise and public space eg. World Square and Governor Macquarie Tower next to Phillip Lane. The inevitable result is public space with an absence of public life. A new sensitivity towards this issue is needed.



SUMMARY

Areas troubled by strong winds and extensive shadow.



BUILDING HEIGHTS IN THE CITY CENTRE



A STEEP TOPOGRAPHY

INTERESTING STREETSCAPES

The lively topography in certain streets create a strong sense of character and distinction. Bridge Street is one of the most distinct streets regarding topography and certainly a street that everyone remembers. Spring Street has a curved course as well as steep changes in level making it interesting to walk here as you walk towards “what is just around the corner”. Pitt Street, which runs all the way through the City Centre, is the lowest part of “the valley”. Here used to be the Tank Stream which was a water supply for the first colony. Today the stream has been piped and runs underneath Pitt Street.

BEAUTIFUL VIEWS

The topography also offers spectacular views to eg. the Harbour Bridge and the Harbour through a selected number of streets. These views are important in terms of understanding distances, creating a sense of place and in significantly characterising the individual streets. Thus it is unfortunate that some of these views are effectively blocked by the Western Distributor or by the Cahill Expressway.

ACCESSIBILITY CHALLENGES



The topographical challenge is especially present in the northern part of the City Centre where the most steep streets run east / west. All the north / south bound streets are primarily unaffected by any grades decreasing problems created by topography. The City Centre is easily accessible by eg. bicycle and any steep east / west grades are short distances.

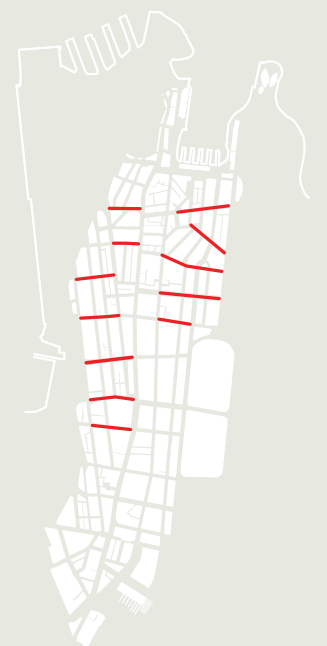
SUMMARY

Streets affected by a steep topography.



STREETS WITH STEEP GRADES IN THE CITY CENTRE

-  Streets with steep grades
-  Significant views



DESIGN CODES

A PALETTE OF MATERIALS

The City of Sydney has developed a Public Domain Policy which sets out guiding principles for the range of policies, guidelines and codes which apply to the City public domain. To ensure these principles inform work in the public domain, and are applied consistently, an Interim Sydney Streets Guideline and Design Code has been made.

The Design Code for Sydney contains a palette of materials (lights, paving, street furniture) to be used throughout the public domain. The Design Codes for Street, Parks, Lights, and Signs (the Codes) are indicating where opportunities exist to express the unique character of particular places, while providing legibility and avoiding visual clutter. It is a tool that can be used in the design and planning process, but goes further and is more regulatory than other forms of guidance commonly used in the planning system.



PAVING

The city is constantly working with the upgrading of the paving in the City Centre. The Design Codes describe materials and the finish of new paving.



LIGHTING

In 1997 the City commenced a program to upgrade lighting in the public domain in order to improve visibility for traffic and pedestrians, increase public safety and enhance the aesthetic look of the City. The Smartpole was designed to provide the new infrastructure, capable of delivering pedestrian and street lighting, and performing a multi-functional role for audio /visual equipment, traffic signals, signage and banners. A comprehensive lighting strategy (City of Sydney Exterior Lighting Strategy) is being implemented throughout the City Centre. The Smartpoles have been adapted as Council's standard lighting pole in the City Centre. The Design Codes describe design and location of the Smartpole.



SIGNAGE

Council produced a policy and manual on Signage in 1993. The manual includes a developed family of signs that have been designed in a cohesive manner. It treads in the right direction in providing a cohesive signage manual for the city, focusing on the City Centre and major places of interests. A survey of signs from 2006 concludes that Sydney has some issues with signage and suggest to prepare a signage and wayfinding strategy.



SUMMARY

Area where the Design Codes for Sydney are being implemented.

A UNIFORM PAVING

PAVING AS PART OF THE NEW QUALITY PROGRAM

Since early 2000 a paving program has been installed as part of the Design Codes. The new paving program has been designed to both overcome some of the current functional difficulties and to enhance the visual quality of the various streetscapes. The result has been remarkable and is a strong example on how quality materials and a skillful design can enhance the whole atmosphere of the city at street level.

The current upgraded paving covers somewhat half of the City Centre but is envisioned to encompass all of it with time. This will be achieved through a staged capital works program funding and public domain contribution works arising from the development process and as such it is a gradual process.

Visiting streets outside the newly paved areas it is evident that help is badly needed. The old footpaths are characterised by frequent unnecessary interruptions, lack of kerbs, poor level of maintenance and a variety of materials. Apart from aesthetic problems, this creates severe difficulties for the elderly, people with disabilities and people with prams.

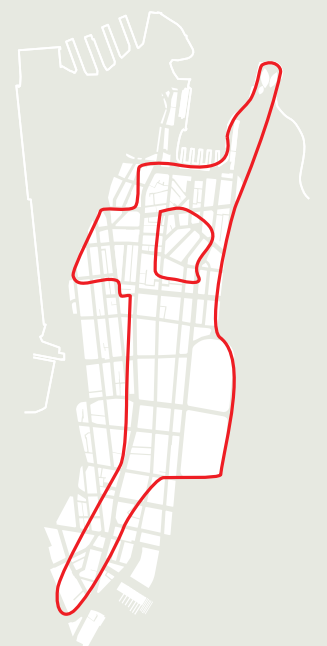


PAVING PROGRAM IN THE CITY CENTRE

— Existing upgrade of paving

SUMMARY

Austral black granite is now covering approx. half of the footpaths in the City Centre, but is intended to cover all.



COMPREHENSIVE TREE PLANTING

AN INTERCONNECTED STREET TREE MASTER PLAN

Sydney's Street Tree Master Plan 2004 is a blueprint for the provision of street trees in the City of Sydney. The objectives of this coordinated Master Plan are to improve and develop the number, health, longevity and form of street tree species; and to enhance the distinct character of the various city precincts. The current street tree planting covers most of the City Centre and is primarily located in the north/south streets. This provides fine experiences of walking along or past tree lined streets.

CURRENT ISSUES

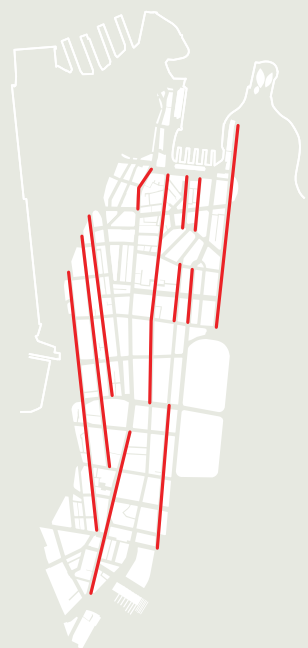
Street tree planting is difficult for a number of reasons: The streets are generally quite narrow and supplemented by awnings. The high rise further adds to the difficulties by creating long shadows, sparse sunlight and high wind speeds. Further traffic increases pollution and pavements radiate heat.

The general effect of these difficulties is that Sydney is not experienced as a green city. Street trees tend to be in either a poor shape or of a tall and slender nature with limited impact on the streetscape.

George Street has a rather sparse street tree planting because of some of the issues raised above - a narrow street profile, widespread use of awnings and a high impact by the buses in terms of emission.



Tree lined streets.
Pitt Street



SUMMARY

Street trees have primarily been planted in the north/south streets in most of the City Centre.



STREET TREE PLANTING IN THE CITY CENTRE

● Street tree planting

INCOHERENT PUBLIC ART

INCOHERENT PUBLIC ART

Different strategies have been used during the years to put more emphasis on public art in the public and private spaces. A fact is that Sydney today does not have a strong profile on public art. Public art in Sydney is quite sporadically placed and of a varying quality. The city has been in need of a more continuous and overall program, thus bits and pieces have been added without any masterplan which could have coordinated the individual pieces to form a greater whole.

A PUBLIC ART MASTER PLAN

City of Sydney has developed a Public Art Policy which will be a strong instrument in offering guidelines for the placement of art as well as the quality and type of art for specific spaces.

The Policy focuses among other things at establishing sculpture walks connecting the parks with the city, - to integrate art into the fabric of the City in ways that will reflect, respond and give added meaning to Sydneys environment, history and culturally diverse society and to enhance and strengthen the distinctive identity and “sense of place” of the city as a whole.



Art installation.
Australia Square



PUBLIC ART IN THE CITY CENTRE

- | | |
|-----------------------|------------------------|
| ● Public art | ⊕ Waterfeature private |
| ○ Private art | ▲ Statue |
| ⊕ Waterfeature public | Artistic lighting |



SUMMARY

Public art is primarily located in the northern part of the City Centre. The existing public art appears to be primarily individual art pieces which are not part of a larger whole.

PRESERVING HERITAGE

COMPLICATED MIX BETWEEN NEW AND OLD

Sydney has made great efforts to protect and preserve many of its historic buildings and historic features. Thus the city is rich in heritage buildings which add a special character to the city and make interesting blends with the modern developments. The heritage buildings represent valuable assets not only as historic reminders and beautiful landmarks, but also as potentials for low rent functions attracting alternative businesses to the city.

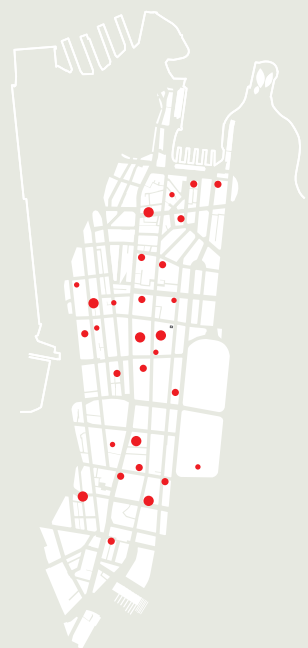
Despite of all these positive values there are problematic issues related to some of the newer developments where heritage is made part of a new urban block. Legislation allows developers to add extra floorspace to adjacent buildings as long as they keep any heritage buildings. This generally sparks the high city trend as well as forcing heritage on someone who did not really want it in the first place. Thus a substantial part of the old buildings are part of an awkward mix of different architectural styles where little attention has been paid to the historic values and where a superficial makeover has tidied up the heritage buildings.

COMPREHENSIVE STORYTELLING

Great effort has been put into interpreting historic characteristics as eg. the shoreline at Circular Quay. A quite developed system of precise information on historic buildings and places has also been installed in the pavements. This way of weaving past history with the present is a valuable way of informing visitors and residents on how Sydney came to be as it is.



Awkward mix of new and old.
King Street



SUMMARY

Heritage buildings are spread all over the City Centre, rather than being confined to one area.



HERITAGE BUILDINGS IN THE CITY CENTRE

● Heritage buildings

GROUND FLOOR FRONTAGES

categories for evaluating



A ACTIVE

- Small units, many doors.
(15-20 units per 100 m)
- Diversity of functions.
- No closed or passive units.
- Interesting relief in frontages.
- Quality materials and refined details.



B PLEASANT

- Relatively small units.
(10-14 units per 100 m)
- Some diversity of functions.
- Only a few closed or passive units.
- Some relief in the frontages.
- Relatively good detailing.



C SOMWHERE IN-BETWEEN

- Mixture of small and larger units.
(6-10 units per 100 m)
- Some diversity of functions.
- Only a few closed or passive units.
- Uninteresting design of frontages.
- Somewhat poor detailing.



D DULL

- Larger units with few doors.
(2-5 units per 100 m)
- Little diversity of functions.
- Many closed units.
- Predominantly unattractive frontages.
- Few or no details.



E INACTIVE

- Large units with few or no doors.
- No visible variation of function.
- Closed and passive frontages.
- Monotonous frontages.
- No details, nothing interesting to look at.

IMPORTANCE OF GROUND FLOOR FRONTAGES

The design of buildings' ground floor frontages has a high impact on the attractiveness of the public realm. They are the walls of the urban environment, and contain the openings through which we see, hear, smell and engage in the city's million-faceted palette of activities. On the ground floor and at eye-level we come close to the city.

Good ground floor frontages are active, rich in detail and exciting to walk by. They are interesting to look at, to touch and to stand beside. High quality ground floor frontages create a welcoming sensation and encourage people to walk and stay in the city.

TRANSPARENCY AND SMALL UNITS

Other qualities include a high degree of transparency enabling interaction between activities inside the buildings and those occurring on the street. Also, frontages with many small units, many openings and a variety of functions make streets more diverse, stimulating and thereby attractive. Frontages with small units also provide a predominantly vertical facade structure which has the important visual effect of making distances feel shorter.

EVALUATION OF GROUND FLOOR FRONTAGES

In order to create an attractive, lively and people friendly city, a substantial part of the ground floor frontages need to be of high quality.

Through previous public spaces and public life studies a tool for evaluating ground floor frontages has been developed and used on other cities. The criteria are presented on the opposite page and an evaluation of the ground floor frontages in Sydney is displayed on the following pages.

ACTIVE FRONTAGES

ACTIVE FRONTAGES IN THE RETAIL HEART

Active frontages are not surprisingly primarily found in the retail district where shops promote themselves and the area through an attractive streetscape.

One of the better streets is Pitt Street where the largest concentrations of active frontages is found.

George Street also has its moments. What is striking though is that there is no coherence along the two streets. The quality of frontages is varying quite a lot, which indicates that these two streets are not preferred promenades for people who travel between Town Hall and Circular Quay.

Castlereagh Street is dominated by larger department stores and offices to the north and as such this is not where you find the most interesting stretches of active frontages.

NO ACTIVE FRONTAGES IN THE BUSINESS DISTRICT

City Centre north is without any convincing stretches of active frontages which is quite unfortunate given the obvious importance of a strong link between the city's retail district and the water.

FEW ACTIVE FRONTAGES IN City Centre WEST

Kent Street is the only positive exception in an area otherwise dominated by uninteresting frontages. Along Kent Street are several delis, cafes and smaller shops which all contribute to a more lively and attractive street environment.



Active frontages.
Market Street.



SUMMARY

These are the areas where active street frontages dominate. The best ground floor frontages are found in the area around Pitt Street Mall / Pitt Street, Hay Street, Dixon Street and George Street, but here only in a sporadic spread.



ACTIVE GROUND FLOOR FRONTAGES IN THE CITY CENTRE (categories a + b)

- A active
- B pleasant

INACTIVE FRONTAGES



Closed and uninviting frontage.
Margaret Street.



INACTIVE GROUND FLOOR FRONTAGES IN THE CITY CENTRE
(categories d + e)

- D dull
- E inactive

TOWERS IN THE SKY - THE BUSINESS DISTRICT

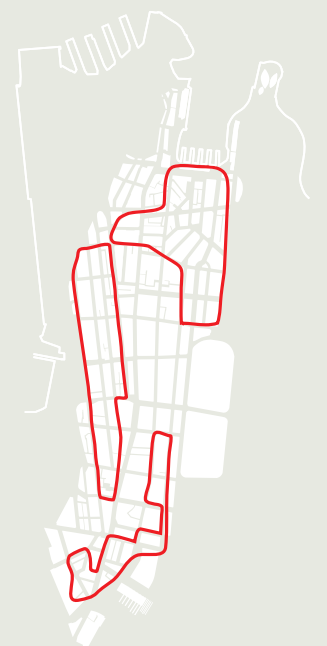
Tall buildings are often designed as beautiful objects, where much has been done in designing the way the tower meets the sky. Little attention has been paid to the interaction with the area and the city they are placed in. The result is oversized, closed and passive ground floor frontages incapable of interacting with people at street level.

The northern part of the city is thus being influenced negatively by big closed office buildings which is rather unfortunate since this area is the link between Circular Quay and Town Hall. The attractiveness of walking here in the daytime is minimal and the perception of safety drops at night since there are too many blank walls and too little going on.

DOWNGRADING INFRASTRUCTURE - CITY CENTRE WEST

The Western Distributor has a huge impact on the western part of the City Centre which is basically a service corridor for the rest of the city.

Streets are lined by entrances to car parks, sewerage facilities, power units or otherwise uninviting frontages. The result is a rather poor streetscape with little to offer in terms of excitement or functions. This area of the city is rather mono-functional and thus deserted by night where it is perceived as an unsafe place to be walking in.



SUMMARY

These are the areas where inactive street frontages dominate. The areas with inactive street frontages are concentrated in the western and northern part of the city centre.

WHAT IS OPEN AT NIGHT

EVENING ACTIVITIES

The number of evening activities and their location are important factors for the vitality of the city and the perception of safety. If there are few activities or if the evening activities are very concentrated the visitor gets the impression of a deserted city and avoids going there in the evening.

QUIET EVENINGS

The map to the right highlights the facilities that are open during the evening hours (after 9pm) on a normal summer weekday within the study area. The recording shows that most of the city is relatively quiet in the evenings, with the main entertainment and night activity areas confined to a small area of the city, the *fun district* with the main activities as bars, clubs, cinemas, restaurants and retail. The activity is highly concentrated on George Street and spills out onto the side streets, especially side streets down towards Chinatown.

It is striking that the northern part; *consumer district* and *working district* are devoid of evening activities to such an extent that practically nothing is to be found in these streets after 9pm. It is very important to strengthen the retail district and working district as places for evening activities as they make up an important pedestrian link to Circular Quay.

EVENING SAFETY

To achieve a more even spread of evening activities throughout the city and to improve the public perception of safety it is recommended to develop and implement a policy that will promote evening activities throughout the city centre.



SUMMARY

The recording show that most of the city is relatively quiet in the evenings, with the main entertainment and night activity areas confined to a small area of the city.



EVENING ACTIVITIES IN THE CITY CENTRE RECORDED AT 11 PM ON A SUMMER WEEKDAY

- Eateries - restaurants , cafes & pubs
- ★ Entertainment - theatres, cinemas, clubs
- Retail - shops, kiosks, stalls
- △ Accommodation - hotels, apartments
- 24 hour convenience stores

MONO-FUNCTIONAL DISTRICTS

SAFETY ISSUES

Security is an important factor for the development of public life. People need to feel safe during the day and at night to keep visiting the city and to bring their children. Experienced security and real security might not be identical phenomena, so making streets feel safe has much to do with creating a friendly environment that people find inviting.

Residents and activities in the city generally assist to the feeling of security. Lights in windows – a symptom of eyes on the street – give visitors the feeling that help is close by if trouble should arise.

The scale and detail of buildings is also important at night, as well as transparency and light from window displays. Furthermore, sufficient light to find your way and to be able to recognize the faces of passers-by assist to a general feeling of security.

SAFETY ISSUES CONCERNING PUBLIC TRANSPORT

Several train stations and transport nodes present their users with an environment of poor visual quality. Unclean, poorly detailed, deserted and monotonous surroundings, low level of maintenance and unwelcome entrances serve as discouraging features of public transport.

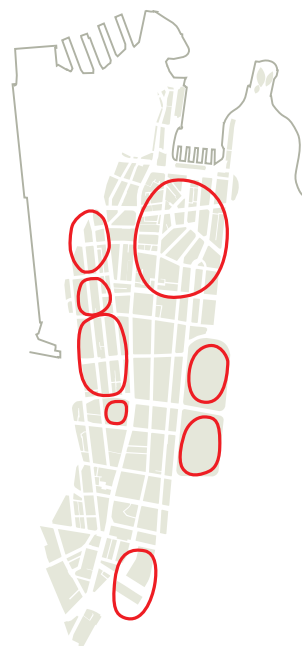
PERCEIVED SAFETY

Poor visual quality can create an atmosphere of insecurity around stations and nodes. It adds to other features associated with potential danger, such as being underground, out of public sight and having limited visual orientation. Feeling insecure induces a stressful state of heightened awareness which most people would rather avoid.

The fact that the city centre closes down at 6pm is magnified by the low level of public transport. There are not many people in the city centre in the evenings and there is not a frequent running network of buses and trains, - apart from Friday/Saturday nights which have extended bus and train services.

ACCESSIBILITY

There are only four easily accessible points to /from train stations in the city centre and only 4 accessible bus stops for elderly, parents with prams or disabled people in the city centre. That is not acceptable for such a big city as Sydney.



SUMMARY

Areas that can be perceived as unsafe at evening and night-time unfortunately cover the train stations.

THE FUNCTIONALLY DIVIDED CITY

The City Centre consists of different areas or districts with their own individual character. This is a common phenomenon in cities, also in eg. New York where Greenwich Village and SoHo make out individual districts with their own separate identity. Common for these areas is a certain mix of uses, where residential, retail and commercial goes hand in hand. What is different is the urban fabric, the scale, the architecture, the flavour etc.

This is not really the case in Sydney where the physical appearance of the areas is somewhat identical but where the use is quite different and to no extent multi-functional.

The mono-functional city is an unfortunate development where different uses are confined to different areas and where the lack of mixed use have a huge impact on the public life in the area during day and night. Areas with one primary use as eg. offices tends to be areas which are only lively in the morning, during lunchtime and again during evening rush hour. Outside these peaks the areas appear isolated and deserted and do not act as pleasant destinations for visitors.

ISOLATING THE CITY FROM THE WATER

The big chunks of mono-functional used land soon become barriers between eg. the city and the water. Working town in Sydney is not an attractive area to walk through, thus people tend to decline from walking there and rather find other means of transport or avoid going at all. On the other hand Fun town sometimes gets too fun scaring other people away.



SUMMARY

The City Centre is made up of four characteristic districts with individual primary use.





THE PEOPLE

LIVING IN THE CITY CENTRE

IMPORTANCE OF RESIDENTS IN THE CITY CENTRE

Having residents in the City Centre means that people live in and care about the city. Residents contribute to the vitality day and night, going about their daily tasks. Particularly in the evening, residents, even if relatively few in numbers, create an image of a city lived in and looked after - also at night.

MORE RESIDENTS IN SYDNEY'S CITY CENTRE

Within the past 10 years there has been a substantial increase of residents in the City Centre. Today Sydney has approx. 15.000 people living in the study area.

Unfortunately these new residents have a somewhat limited effect on public life in the city :

1. Residents live in towers.

The higher up people live the less they come down at street level to engage. Another fact is that the natural surveillance of people overlooking their neighbourhood street is minimized.

2. Residences are confined to one area

The majority of all residences have been built in the southern part of the City Centre, which leaves the rest of the city, especially the northern part almost without residents.

3. Part year occupancy

Some residences are used as a summer /winter retreat for people living elsewhere. Other residences are used as investment objects.

4. Few residential amenities

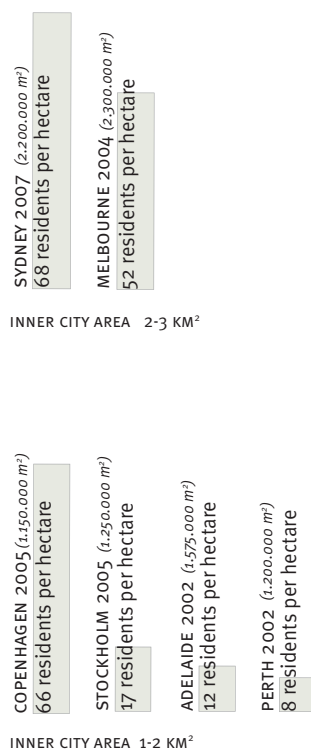
There are only few options for outdoor recreation in immediate connection with the living area such as common courtyards offering residents a private retreat. Another issue is the lack of facilities for families with children.



SUMMARY

Residents are concentrated in the southern part of the City Centre.

COMPARISON: Residents per hectare



RESIDENCES IN THE CITY CENTRE

- Residences /serviced apartments
- ⊙ Commenced construction

STUDENTS IN THE CITY CENTRE



STUDENTS IN THE CITY CENTRE

7,000 students are enrolled in the City Centre.
64,000 students are enrolled just outside the City Centre.

- ▲ English Language /Business Schools
- Tertiary Shop Front Institutions / Secondary Education Schools
- Sydney Institute/UTS

IMPORTANCE OF STUDENTS IN THE CITY CENTRE

Students make a strong contribution to the city's vitality and cultural diversity, providing a youthful stimulus and often international perspective. Students come and go day and night, keeping the city active in the evening. They also tend to engage more overtly with the street scene because they have more time available.

STUDENTS IN SYDNEY'S CITY CENTRE

The number of students attending academic institutions in the study area is approx. 7,000 students. The students are mostly short term overseas students attending classes in so-called shop front .

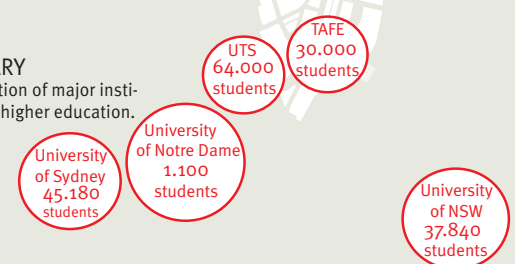
Major institutions of higher education are University of Technology Sydney just at the rim of the study area (64,000 students) and Sydney Institute (30,000 students). University of Sydney 1,6 km southwest of Central Station (45,180 students) and University of New South Wales 13 km southeast of Central Station (37,840 students).

STUDENT HOUSING

Student housing is located outside the City Centre, where real estate values are lower. The students generally live in neighbourhoods close to the universities and do not use the City Centre at a frequent level.

SUMMARY

Main location of major institutions of higher education.



DRIVING IN THE CITY CENTRE

HEAVY THROUGH TRAFFIC

During the last 50 years cars have entered cities in increasing numbers. All planning has since then gradually been focused at increasing capacity for motor vehicles in order to make traffic running smooth through the city streets. No obstructions to traffic, please !!

Thus the streets in Sydney are primarily run by capacity and not by quality issues. Through the years growing numbers of motor vehicles have been passing through the City Centre, some with an errand in the city others on their way to other destinations. The result has been a traffic dominated city where every last breathing space has been used for just an extra lane of traffic. Visiting Sydney today it is evident that there is a gridlock to be solved regarding priorities. The city is incapable of handling more traffic and is seriously struggling with today's traffic. Noise, fumes, high traffic speeds and low pedestrian priority is part of everyday life.

AN "A CITY" AND A "B CITY"

A dividing range runs along George Street between the A and the B city. The B city (City Centre west) is severely affected by the access routes to and from the Western Distributor and is effectively cut off from the water by the large infrastructure. The general impact of this freeway environment has a harsh downgrading effect on the majority of streets in B city.

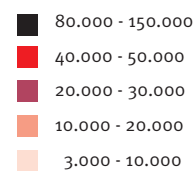


SUMMARY

Streets severely affected by heavy traffic.



24 HOUR TRAFFIC FLOWS IN THE CITY CENTRE



Note:
The illustration above is based on the information available (figures from 1999, 2002 and 2007)



SLIP LANES

In the Australian traffic culture there are some remains from the earlier days car dominance. Slip lanes are one of them. Here cars are allowed to take left turns at their convenience and against traffic lights. In a world city with thousands of people on foot this an unfortunate habit which works against any common sense seen from a pedestrian perspective. Thus it causes many dangerous conflicts and accidents. Further this turning practice also works against the development of a strong cycling culture.



TRAFFIC SIGNS

Another clear sign of a traffic dominated culture is the use of large scale traffic signals in downtown city places. These freeway signs appear completely out of scale with the context and fail to recognise the city quality turning city streets into means of serving an overall freeway system.



GREEN ARROWS BEFORE PEDESTRIAN LIGHTS

The phasing of traffic lights have a great importance for the general traffic behaviour. Thus the general movement pattern needs to follow some basic logical principles in order to make people behave as it is expected. If traffic lights work against people's basic logical principles, they start behaving more autonomously, not necessarily obeying to the traffic rules.

In most cities vehicle green is followed by pedestrian green. This is not the case in Sydney where in certain intersections (eg. Market Street /York Street) vehicle green is followed by vehicle green arrow and no pedestrian green. This is obviously to some surprise for the main part of all pedestrians and as such intersections like these are made more dangerous by pedestrians failing to obey the rules in a traffic environment, which they generally feel is not accomodating for them.

A FREEWAY ENVIRONMENT

HEAVY TRAFFIC BARRIERS SURROUNDING THE CITY CENTRE

Sydney suffers from past times traffic priorities. As many other cities Sydney did its best to accommodate for vehicular traffic - by continuously increasing the infrastructure.

Today Sydney is at a breakpoint. It is clear that the city is unable to cope with the current traffic volumes and that the city centre is gradually being choked in fumes and noise.

The massive infrastructure in terms of the Western Distributor, Cahill Expressway and the Eastern Distributor has a number of serious downgrading side effects explained in the following.

AN INTROVERT CITY

The large scale infrastructure builds a ring around the city which deteriorates the contact to the surrounding parts - Barangaroo, the Domain, Woolloomooloo, Pyrmont and the Bay area.

Access to the water is difficult caused by roads separating the water from the city and the harbour front is almost completely excluded from the pedestrian network and thus quite deserted at certain points.

A CHALLENGING PEDESTRIAN LANDSCAPE

The freeways create very unattractive pedestrian environments in the city centre. Environments where human scale is lost, where there are poor possibilities for walking, for orientating, for recreating and for socialising.

People still have to move around in these areas though, where traffic is roaring above you, where there is no sunlight, where you can't see the endpoint of your journey or whether someone is lurking in the background. These are areas where children cannot walk unaccompanied and where people if possible avoid coming, leaving the areas even more deserted.



SUMMARY

A network of expressways are running straight through the City Centre. The result is a city full of traffic, effectively cut off from the waterfront.



The Western Distributor is an artefact from the 1970's traffic planning bringing a number of problematic issues into the city. Via the Western Distributor the city is being flooded by vehicular traffic either trying to access or exit the freeway. On top of this unfortunate situation the freeway structure also has a number of visual and functional difficulties at street level.



The Kent Street underpass is where pedestrians are confronted with the mishaps of the traffic structure. People DO have to walk here because there is nowhere else to get across in the area.



Underneath the Western Distributor a secret world has its own life. Here are smaller public spaces, which serve as lunchtime areas during the day and drug retreats at night.

AN INTROVERT CITY



Western corridor



Darling Harbour



Druitt Street



Circular Quay





Botanical Gardens



The Domain

HEAVY TRAFFIC BARRIERS IN THE CITY CENTRE

-  Expressway
-  Expressway tunnel



Central Station

PARKING IN THE CITY CENTRE

YOUR CAR IS WELCOME IN SYDNEY

Sydney hosts a large number of parking spaces in the City Centre. A total of 26,000 parking spaces (on street and in structures) equally spread in the City Centre gives a range of choices for people who choose to drive to the city. Additionally there is around 5000 car spaces on the western side of Darling Harbour.

There is a large amount of parking options in the City Centre and a significant traffic generator in the City Centre is the cars that have access to private car spaces leased by various companies/corporations in the basements of office towers. Usually offered as part of an employment package to "high end" workers. It is estimated that there is a further 19,000 private tenant parking in the city centre. The generous distribution is an open invitation to take the car into the city instead of using other traffic modes. This invitation unfortunately generates more traffic in the City Centre, both by more people driving in and by people who circulate to find the most conveniently placed parking spot.

CONFLICTS WITH PEDESTRIANS

Occasionally, entrances and exits of parking structures lead to conflicts with pedestrians. Often pedestrians have the lowest priority and cars are allowed to pass the footpath at their convenience. With the new Design Codes this pattern is changing. Footpaths are now taken across entrances to car parks giving pedestrians the right of way.

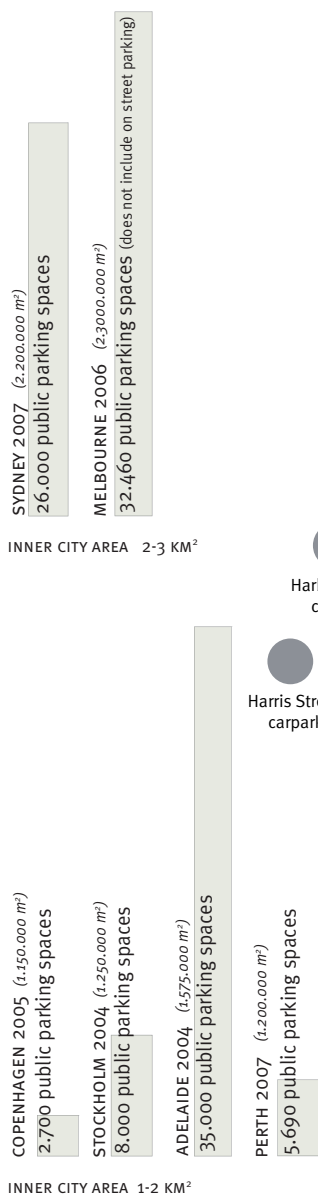
Several large parking structures in the City Centre have a severe downgrading effect on the street environment. The scale and continuity of ground floor frontages is broken and instead king-size entrances, ramps and dominating signage is put in.



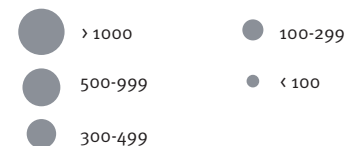
SUMMARY

The city centre offers many parking possibilities with a total of 26,000 mainly concentrated in the western part of the City Centre.

COMPARISON: Amount of public accessible parking spaces



LOCATION OF PARKING SPACES IN THE CITY CENTRE



PARKING IN THE CITY CENTRE



LARGE SCALE PARKING STRUCTURES

Huge parking structures, as in the example shown from Sussex Street /Market Street, have a tremendous downgrading effect on the public realm in that specific area if they are not carefully detailed and planned. In the example shown the parking structure suffers from being a mono-functional block with no public functions at ground floor, no residences and no office space. The facade is quite monotonous, the ground floor frontage is completely inactive and the footpath is interrupted by a four lane entry to the car park.



100 METRE OF INACTIVE FRONTAGE

Little experience is offered when walking past here. At night this stretch of footpath is even less accommodating.



ACCESS TO UNDERGROUND CAR PARKS

Access to underground car parks have been placed in a number of streets, the example above from York Street adjacent to the QVB. Although solving one practical problem this practice has a number of shortcomings in terms of limiting crossing options between the two footpaths as well as posing a number of more aesthetic issues.



ON STREET PARKING

Probably the most misplaced parking in all of the City Centre is found in front of St. Andrews Cathedral where a few parking spaces seriously downgrade the general experience of walking along the main street and reaching the Town Hall and the Cathedral, supposedly the most central location.



FOUR LANE VEHICLE ENTRY TO CAR PARK

Pedestrians need to yield for cars entering the car park although they are walking on the footpath. The quality of the paving and the footpath level is in many incidents changing.

PUBLIC TRANSPORT

A WELL DEVELOPED NETWORK

Sydney enjoys a very large and complex public transport network system which joins the City Centre with suburbs far away. The system is quite effective transporting large numbers of passengers every day. This is reflected in the modal split where the majority of everybody arriving in the City Centre arrives by public transport (71%).

TOO MANY BUSES

Apart from the underground train system Sydney has a ground level bus system which operates routes from the suburbs of which many terminate in the City Centre. The buses offer surface transport desirable for many, especially the elderly or those who ride short trips. Buses integrate with the city and allow passengers to experience important connections within the city.

Although many positive things can be said about buses there are also the negative aspects which mainly has to do with a bus overload. Thus the number of buses in the City Centre is extraordinarily high and several streets are suffering from a high bus impact.

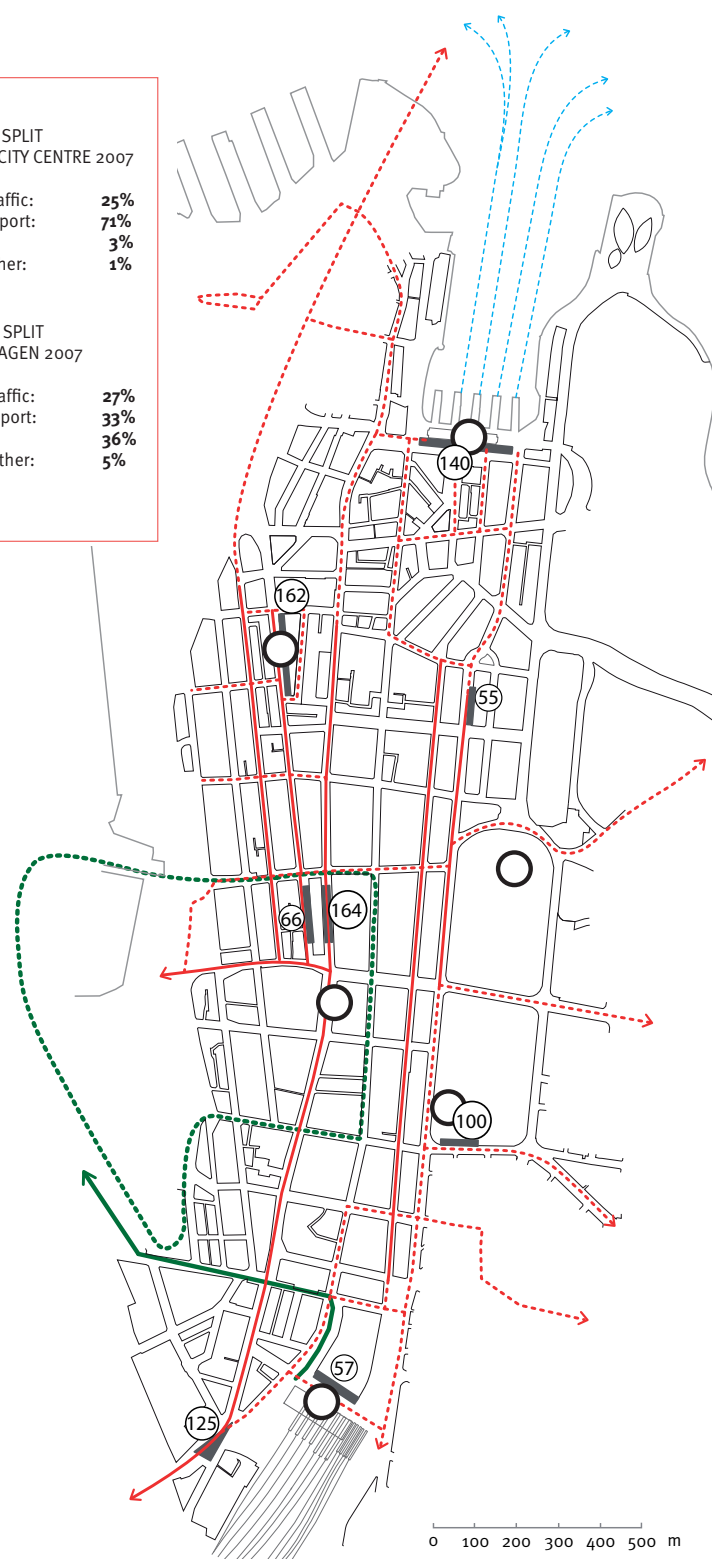
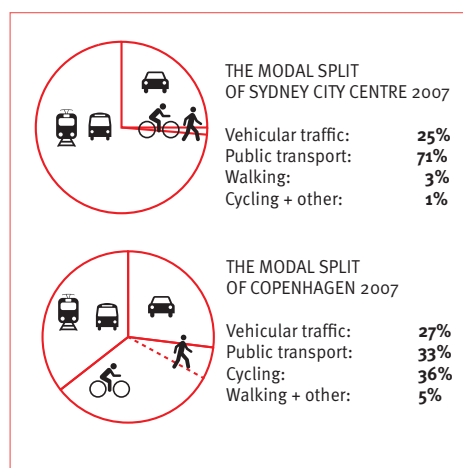
The current problems concern:

1. Unacceptable noise levels relating to somewhat tired bus fleet
2. Unacceptable high speed outside peak
3. Unacceptable low speed during peak
4. Misplaced bus layovers in the City Centre
5. Unacceptable high frequency of buses in eg. George Street
6. King-size bus interchanges in the City Centre
7. Bus lanes are not 24 hour lanes and thus not respected.



SUMMARY

Areas with heavy bus traffic, bus layovers and train stations.



PUBLIC TRANSPORT IN THE CBD

- - - Bus route
- Bus lane
- Key bus stops
- 1 Number of buses 5-6 pm
- Lightrail
- - - Monorail
- - - Ferry routes
- Train station



CONTINUOUS ROWS OF BUSES
Buses have a large impact on the public realm quality in Sydney in terms of sheer numbers and noise.



BUS CORRIDOR SEPARATING THE CITY FROM THE WATER
At Circular Quay Alfred Street has an unfortunate side effect of efficiently cutting any sense of links between the water and the city. Thus the squares become individual islands and the quayside something else.



BUS LAYOVERS AT THE WATERFRONT
The streets ending at Circular Quay are severely downgraded through present use as bus layovers. There are no visual links to the water, the buses produce noise and fumes and the general walking environment is deteriorated.



MONORAIL
The monorail runs along a 12 minute scenic loop through the City Centre. It is mainly working as a tourist attraction.



POOR ACCESS TO THE UNDERGROUND TRAIN SYSTEM
Access to underground train stations are in most cases treated as routes for second rate citizens. Their general appearance is questionable and their attractiveness at night is low. The majority of all station entries are at present not laid out to accommodate people with disabilities.



A CITY CLOSING DOWN AT 6PM
At present public transport is not supporting a 24 hour city. Travelling time increases drastically after evening rush hour, thus forcing people to travel home within rush hour, adding extra pressure on an already stretched system.

CYCLING IN THE CITY CENTRE

CYCLING AS A DESIRABLE TRANSPORT MODE

Cycling is an attractive alternative transport mode – cheap and an excellent way of exercising. In cities worldwide cyclists are increasing in numbers counting both children and the elderly, where conditions for cycling are safe and attractive. In a number of cities cycling becomes a favorite transportation mode offering the same free choice as motor vehicles, just less congestion and parking problems.

PRESENT CYCLE CONDITIONS IN SYDNEY

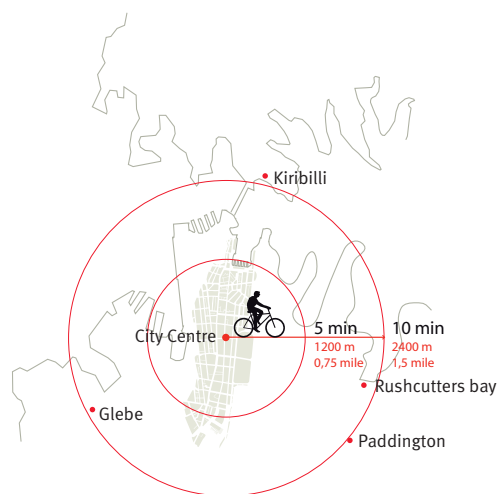
Sydney has excellent natural conditions for developing a strong cycle culture since the climate and topography does not provide too many difficulties. Nevertheless cycling is still for the few, primarily younger male riders who tend to ride fast and aggressively, seldom following any traffic rules.

This links very strongly with the lack of facilities in terms of proper cycle lanes, a linked network, dedicated cycle lights, markings on roads where cyclists are crossing or any of the other means that cyclist cities use to look after their cyclists.

NEW CYCLE PLAN

The City of Sydney's Cycle Strategy and Action Plan 2007-2017 is Council's commitment to making cycling as attractive a choice of transport as walking or using public transport.

The strategy outlines the infrastructure needed to ensure a safer and more comfortable cycling environment and the social initiatives that will encourage more people to cycle. The plan is to install many more cycle lanes and to connect the City Centre with the suburban neighbourhoods to allow cyclists to cycle straight through to the city. Installing cycle lanes and installing them properly demands giving up on some roadspace. Thus the new cycle plan has had to compromise in terms of installing cycle lanes where they are actually needed. George Street is not part of the new cycle network although it is one of the busier cycle routes and also here people tend to get involved in accidents.



SHORT DISTANCES

The illustration pinpoints how easily accessible destinations are on bicycles within Sydney. Bicycling is a realistic mode of transportation and the illustration shows that just 10 minutes of bicycling from Rushcutters Bay, Paddington, Glebe and Kiribilli can bring you to the middle of the City Centre.



EXISTING BICYCLE LANES IN THE CITY CENTRE AND CURRENT BLACK SPOTS

- Existing bicycle network
- Pedestrian and bicycle accidents



SUMMARY

- Existing bicycle lanes
- - - Extended bicycle lanes

WALKING IN THE CITY CENTRE

THERE IS MORE TO WALKING THAN WALKING

Walking is first and foremost a type of transportation, but it also provides an opportunity to spend time in the public realm. Walking can be about experiencing the city at a comfortable pace, looking at shop windows, beautiful buildings, interesting views and other people. Walking is also about stopping and engaging in recreational or social activities because you have planned them or because you were tempted to as you walked along.

At some point we are all pedestrians walking from public transport, the bike rack, a parking structure or from home. As such streets should be welcoming to all of us.

NO PEDESTRIAN NETWORK

Sydney has a weak pedestrian network of few streets rather dominated by vehicular traffic. As such walking is not an attractive mode of transport and people are primarily walking to reach a certain destination and not performing pleasure promenades.

The current problems pedestrians are met by are:

1. Traffic congestion /pollution
2. Excessive delays at pedestrian lights
3. Pedestrian islands = capture zones
4. High speed traffic
5. Uninviting laneways
6. General low pedestrian priority
7. Street clutter
8. Crowded footpaths
9. Crowded crossings
10. Poor footpath amenity in some instances
11. Uninteresting streetscapes
12. Lack of safety at night
13. Missing links in the pedestrian network

MISSING LINKS TO THE WATER AND THE PARKS

As shown on the map the current situation consists of a series of pedestrian routes. The waterfront is not at present part of the pedestrian routes but more a tour in itself. The connections to the waterfront and the parklands are very poor.



MAIN WALKING LINKS AND PRIMARY DESTINATIONS IN THE CITY CENTRE



PEDESTRIAN TRAFFIC

summer weekday

LIMITED AMOUNT OF PEDESTRIANS COMPARED WITH OTHER CITIES

The general walking pattern shows that the highest concentrations of pedestrians are to be found in the retail core; Pitt Street Mall, George Street (between Market Street and King Street), Other concentrations of pedestrian volumes are found in Martin Place, Park Street, the southern part of George Street and in Broadway, where the students are and where there is commuter traffic to and from Central Station. In the northern part of the City Centre George Street and Circular Quay are the most busy closely followed by Pitt Street.

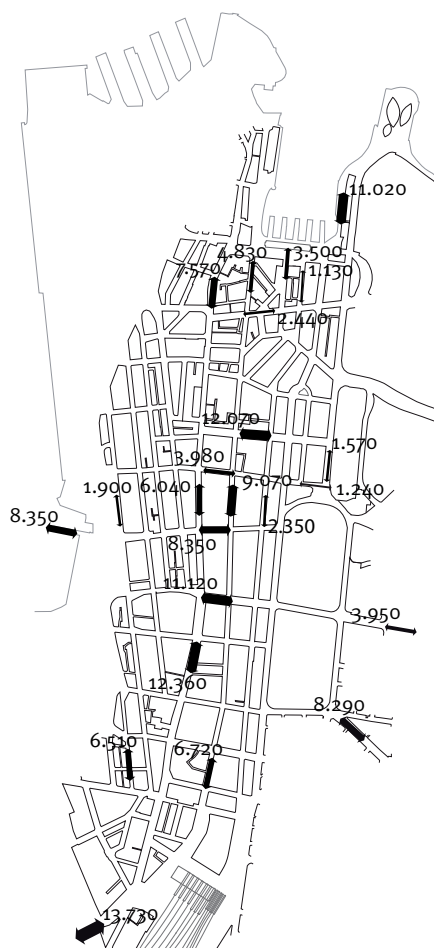
PEDESTRIAN TRAFFIC LIMITED TO SHOPPING STREETS

Most of the pedestrian traffic is located to shopping streets and there is a limited spread to the rest of the city centre.

LOW LEVEL OF EVENING TRAFFIC

Compared to daytime traffic there is a substantial drop when the evening starts. Shops close between 6pm – 7pm and the majority of all visitors leave the City Centre.

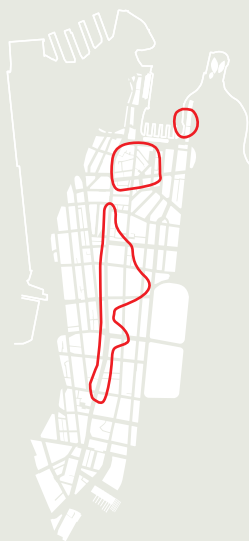
Evening traffic is 34% of daytime traffic. In comparison Copenhagen evening traffic is 50% of daytime traffic.



PEDESTRIAN TRAFFIC
SUMMER WEEKDAY EVENING 6pm - 12pm 2007
Wednesday the 21st of March 2007
Weather: Mild, 23°C



PEDESTRIAN TRAFFIC
SUMMER WEEKDAY 8am - 6pm 2007
Wednesday the 21st of March 2007
Weather: Mild and sunny, 28°C



SUMMARY
Summer weekday
8am - 6pm



SUMMARY
Summer weekday evening
6pm - 12pm

PEDESTRIAN TRAFFIC

summer saturday

UNCHANGED PATTERN OF MOVEMENT

There are no significant changes in the use of the pedestrian network on a Saturday apart from Martin Place which is more affected by the many offices at weekdays and thus less busy on Saturdays.

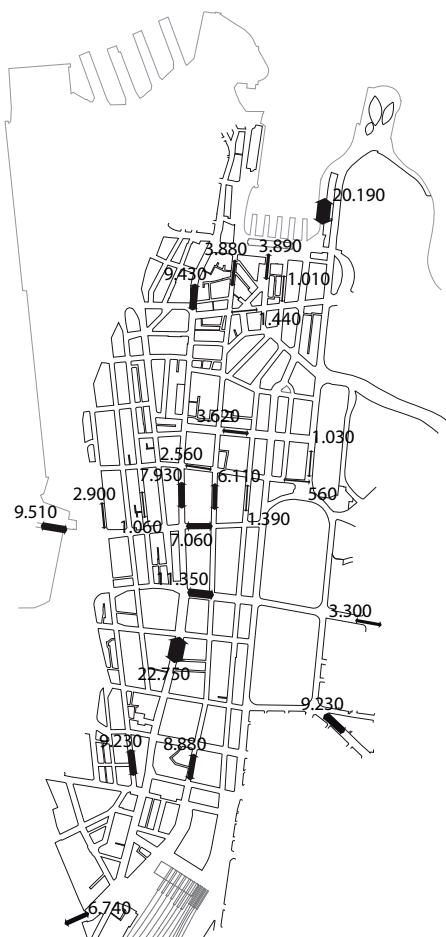
Saturdays would normally be the busiest day in a city's retail district. However pedestrian flows in Sydney point to a different picture where the city is not laid out for pleasure walks. As a result pedestrian traffic is limited to the basic, necessary trips of going to work, going for lunch, going shopping etc.

In general pedestrian traffic is lower in Sydney on Saturdays except for Circular Quay which experiences an increase. This is due to the many visitors to Sydney Opera House and Harbour Bridge.

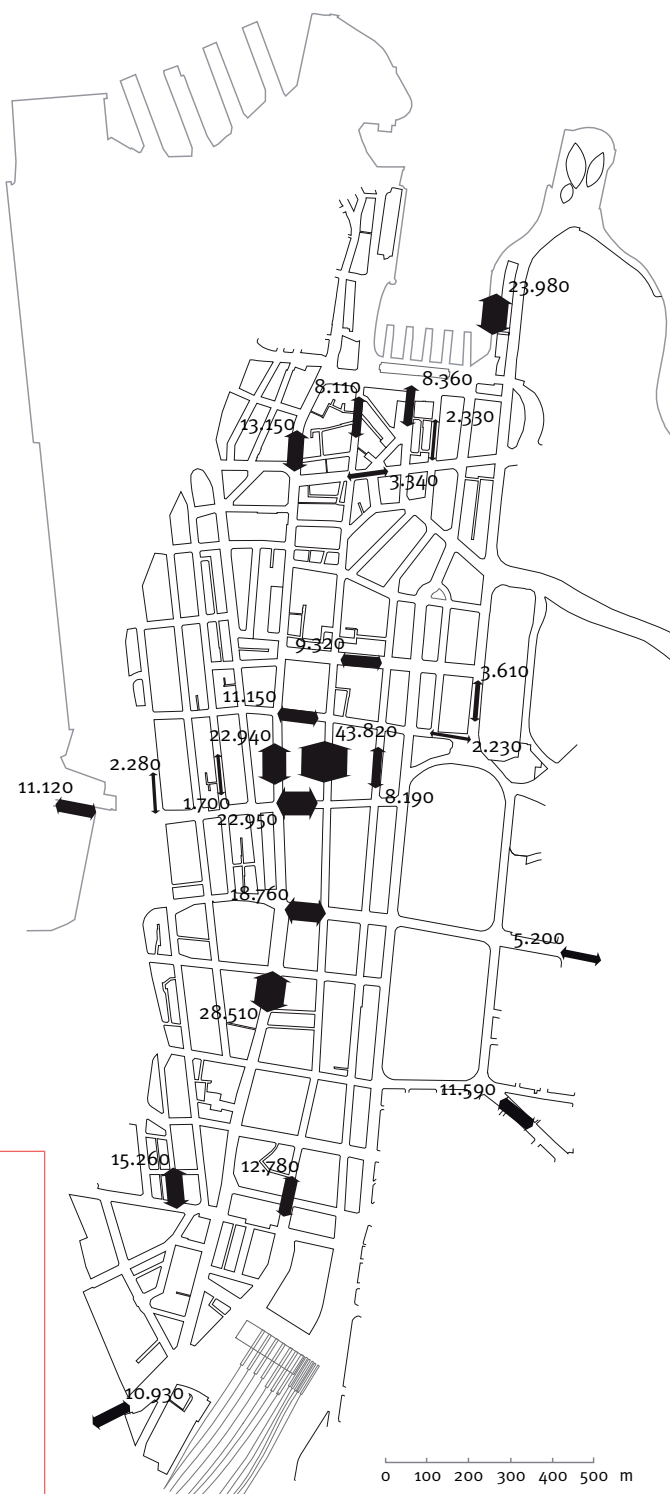
MORE PEDESTRIANS THAN ON WEEKDAY EVENINGS

There is a lack of pedestrian activity during Saturday evening compared to Saturday daytime. Sydney is apparently not a major destination for outdoor dining or for promenading, except for Circular Quay.

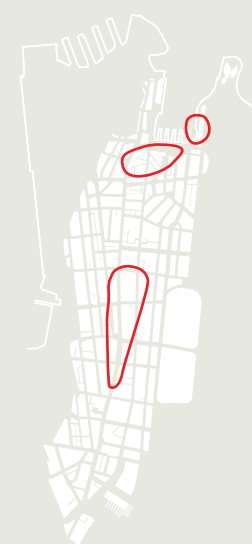
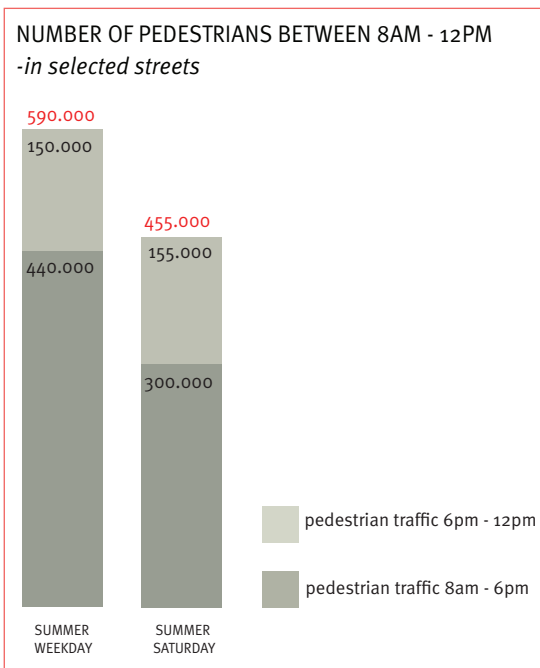
This again points towards a city mainly laid out for necessities and not so much for pleasure.



PEDESTRIAN TRAFFIC
SUMMER SATURDAY EVENING 6pm - 12pm 2007
Saturday the 17th of March 2007
Weather: Mild, 22°C



PEDESTRIAN TRAFFIC
SUMMER SATURDAY 8am - 6pm 2007
Saturday the 17th of March 2007
Weather: Mild, sunny and partly
clouded, 26°C



SUMMARY
Summer Saturday
8am - 6pm



SUMMARY
Summer Saturday evening
6pm - 12pm

PEDESTRIAN TRAFFIC

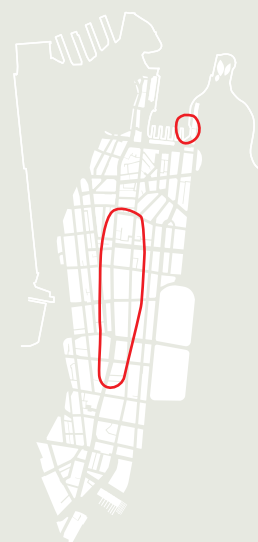
winter weekday

MORE PEDESTRIANS COMPARED TO A SUMMER WEEKDAY

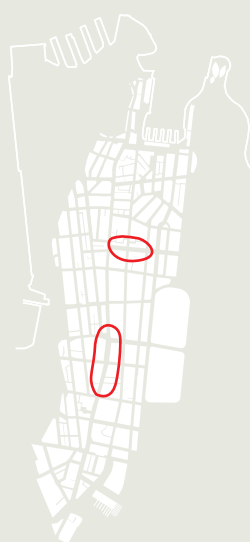
There is no significant difference between pedestrian volumes during winter and pedestrian volumes during summer. Basically the same pattern is repeating itself during the different seasons and there are only few differences between pedestrian volumes in specific spaces.

LOW LEVEL OF EVENING TRAFFIC

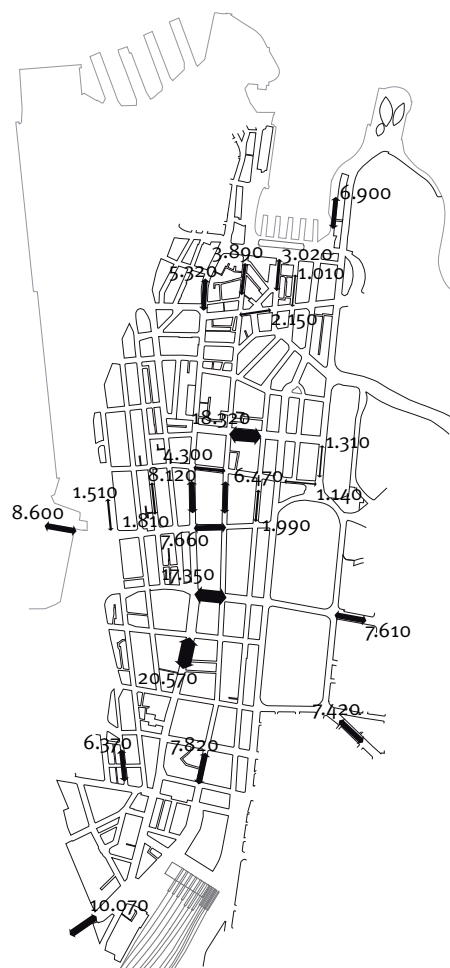
At night the same pattern is repeated as for summer weekday and Saturday. Not much is going on. The busiest locations being Martin Place, Park Street and the southern part of George Street.



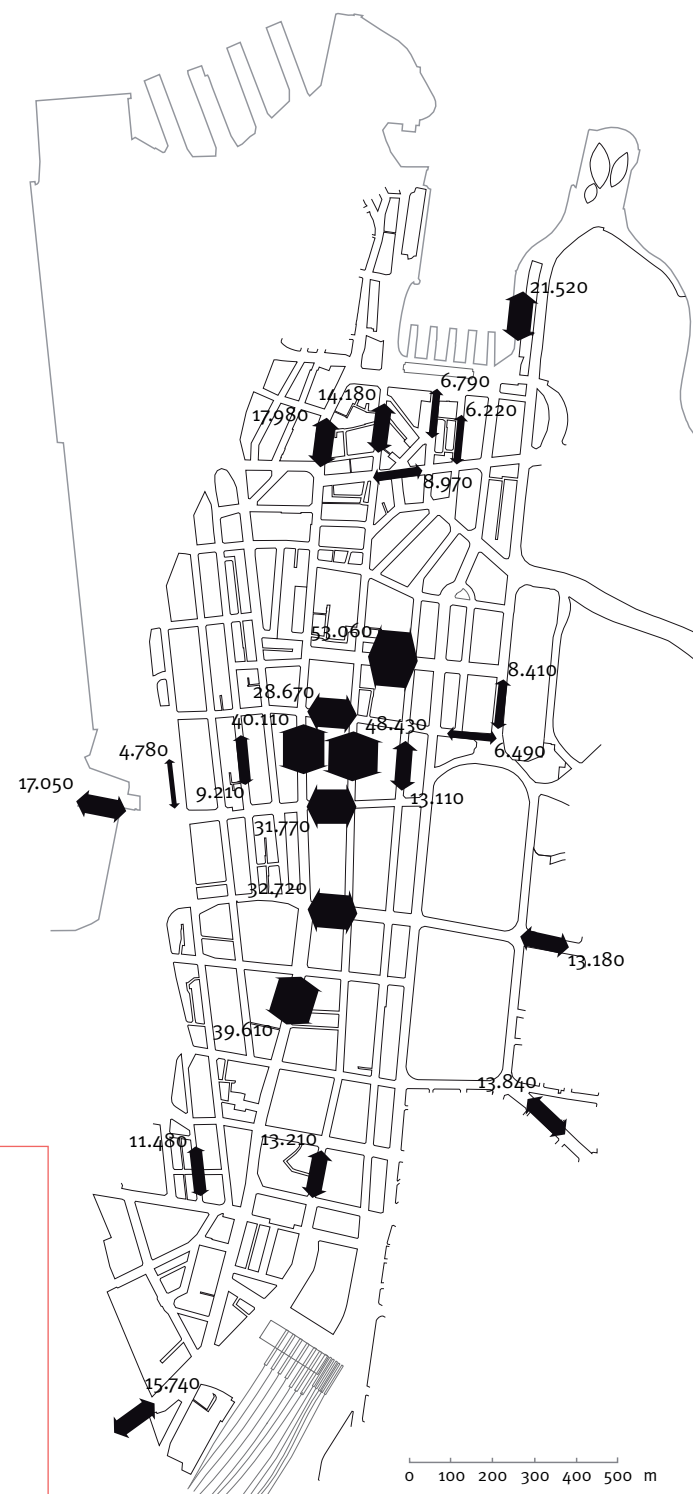
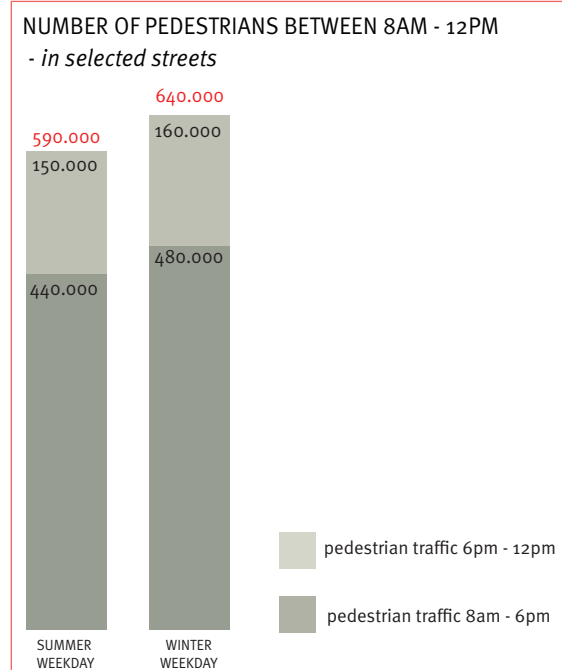
SUMMARY
Winter weekday
8am - 6pm



SUMMARY
Winter weekday evening
6pm - 12pm



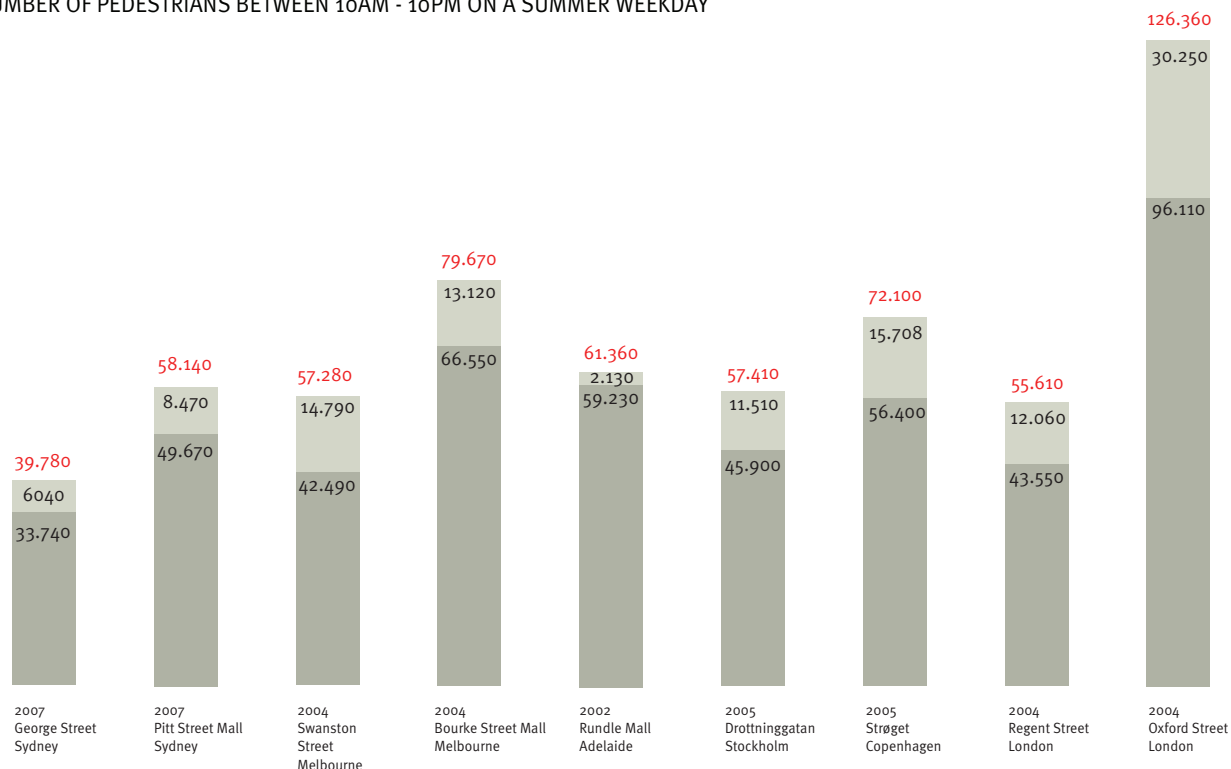
PEDESTRIAN TRAFFIC
WINTER WEEKDAY EVENING 6am - 12pm 2007
Tuesday the 3rd of July 2007
Weather: Windy, 17°C



PEDESTRIAN TRAFFIC
WINTER WEEKDAY 8am - 6pm 2007
Tuesday the 3rd of July 2007
Weather: Clear skies, windy, 21°C

comparison of main street traffic flows

NUMBER OF PEDESTRIANS BETWEEN 10AM - 10PM ON A SUMMER WEEKDAY



MAIN STREETS AROUND THE WORLD

When comparing George Street with other main streets around the world it is striking how reasonably low the numbers of pedestrian traffic are. During a summer weekday approx. 100,000 people walk through George Street while cities much smaller in size than Sydney, as eg. Copenhagen, experience numbers which are substantially higher.

Pitt Street Mall experiences pedestrian traffic at the same level as Rundle Mall in Adelaide - again a city much smaller than Sydney and less important in terms of international tourists and even domestic visitors. What is interesting though is that the evening traffic is substantial which is a healthy sign. Rundle Mall is deserted at night and as such merely a shopping mall and not a city street.

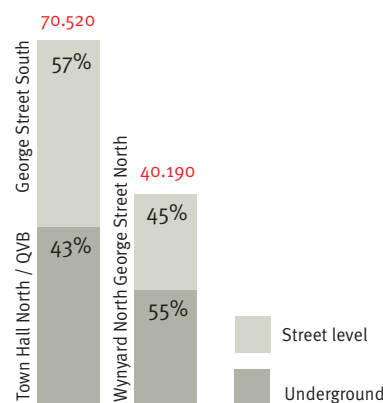
pedestrian traffic 6pm - 10pm
pedestrian traffic 10am - 6pm

comparison of street level and underground pedestrian traffic

NUMBER OF PEDESTRIANS BETWEEN 10AM - 6PM ON A SUMMER WEEKDAY - in selected streets



Underground
Street level



Comparison of pedestrian flows at street level and in the underground.

STREET LEVEL AND UNDERGROUND COMPARISON

The underground pedestrian network is extensively used, since it is providing connections between the underground railway stations and street level. Cross traffic in these underground systems is very high and a whole network of underground establishments have developed, generally detracting public life from the streets.

The figures show that when 10,000 pedestrians walk at street level, approx. the same amount of pedestrians is found underground in the same area.

FREQUENT INTERRUPTIONS

GETTING ACROSS

For the comfort of pedestrians and the vitality and functional quality of the city, it is important that people can cross the streets frequently and in an uncomplicated manner. It is a simple experience in most cities. In Sydney the focus has been on vehicular traffic and ways of facilitating car movements, so that pedestrians have gradually become a category of secondary city users who face many hardships and experience both great difficulties and real danger when choosing to walk in the city. This is a very unfortunate development because children, senior residents or disabled people do not feel invited to walk in the city.

PUSH BUTTONS

Push buttons are a widespread phenomenon all over Australia and in Sydney, where all crossings are supplied with push buttons. The installation of push buttons is part of State Government law. Here you have to apply to cross the street and if you press the button in time the digital device will give you between 7 and 10 seconds of green light to step off the kerb, before the lights start to flash red to tell you to finish walking across the road. Red periods are long, often lasting between 60 and 90 seconds. This system takes the elderly, children and people with disabilities hostages since they will often not be capable of moving across the streets at the pace needed. It also sends a clear signal that cars have higher priority than people.

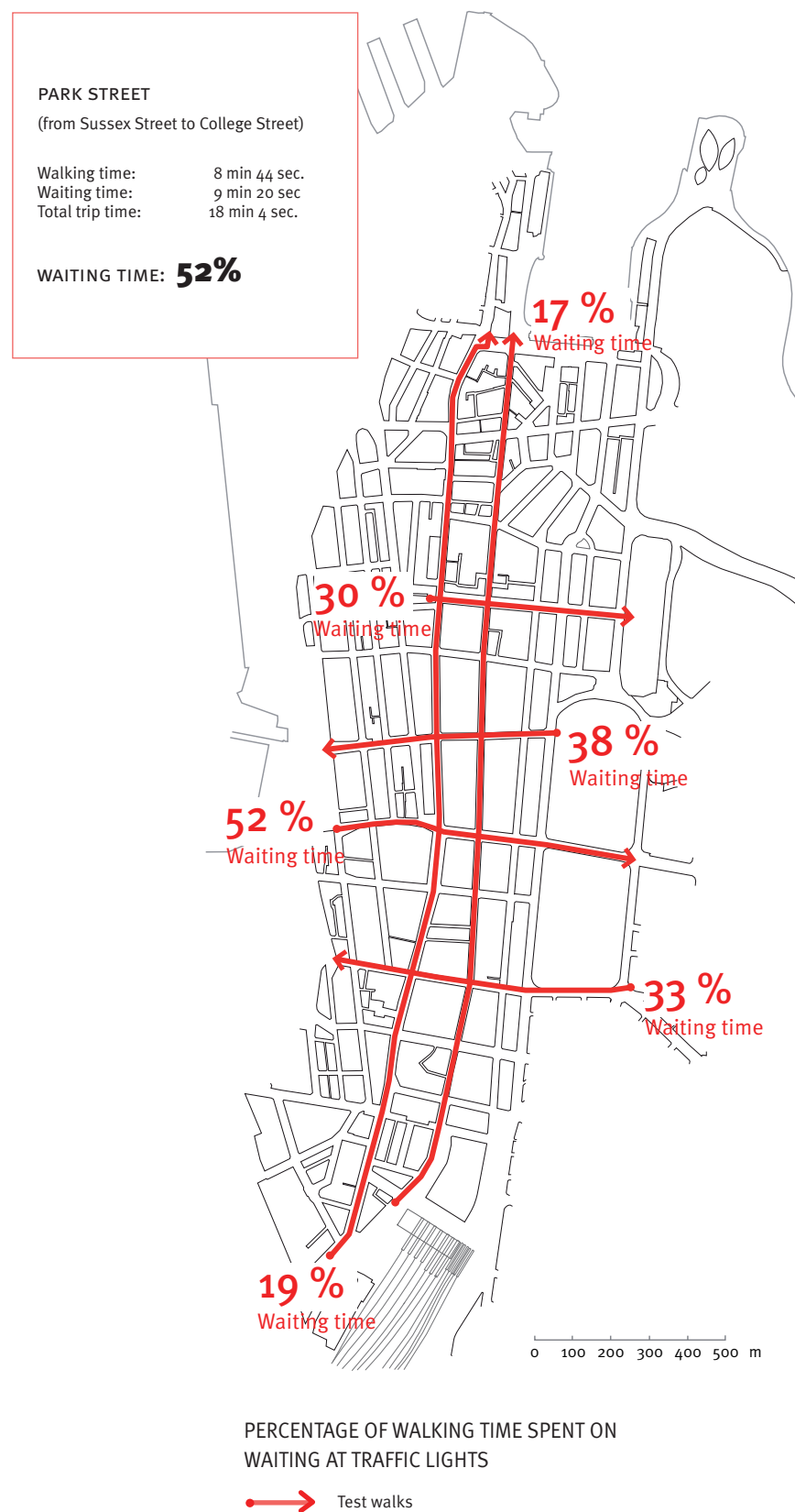
PEDESTRIAN HARASSMENTS CREATE JAY WALKING

What can be learnt from a number of other cities is that people find their way even under the most appalling conditions. As such pedestrians are often seen disobeying traffic rules in environments not laid out for walking. Their expectations of a system laid out for their convenience, eg. traffic lights turning green within a reasonable time frame, are quite low and thus they invent their own ways of dealing with a traffic dominated environment. This is generally a dangerous development since it puts people at high risk of getting hurt. Especially people with special needs, as the elderly, people with disabilities, people with prams, children etc. have a hard time coping in an environment where disobeying to the rules are normal.

TEST WALKS

In order to evaluate the walking quality offered six test walks were carried out. In each case ordinary walking speed was used and the walking time as well as waiting time at traffic intersections was recorded.

The general conclusion on these test walks is that waiting time at crossings is a substantial problem in Sydney. The test walks show a general delay of 30-50 % in the east /west streets and approx. a 20% delay in the north /south streets. A similar survey carried out in Adelaide 2002 showed an average delay of approx. 16%.



Queuing up at footpaths



This illustration depicts the general movement pattern on Sydney's footpaths. Observations showed that footpaths are not crowded for the whole stretch, but at certain points like knots on a string. People tend to walk in groups, or "platoons" which is caused by long red lights at intersections.

Stopped at the intersection: they are doomed to platoon. When the light changes, the few may escape if they are quick.

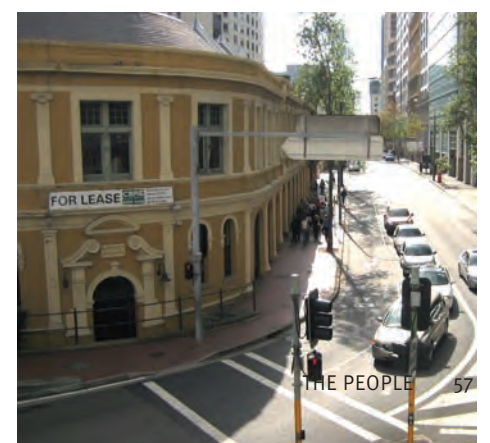
Tempted by impatience and a wish for greater mobility, many will attempt a crossing against the light.

Those few who do not start in a platoon will quickly catch the one just ahead, or be caught by the one coming from behind, unless they happen to be proceeding at the precise speed as both platoons.

Not far off is the previous platoon. A common sight in these platoons are those trying to escape by stepping off into the street and running forward to head off the platoons beginning.

With pedestrian platoons proceeding at a pace even less predictable than cars, synchronizing signals to their progression is impossible. As a result, the signals often only reinforce the platoon structure, rather than allow it to break up.

When two platoons meet, the already slow speeds can be cut by more than half, coming almost to a complete stop.



CLUTTERED STREETSCAPES

178 POORLY PLACED PAY PHONES IN THE CITY CENTRE

In a country with one of the worlds highest rates of mobile phone ownership per inhabitant it is amazing how many pay phones are still needed in a city like Sydney. Just along Martin Place are placed 10 stands with a total of 20 pay phones.

The pay phones obviously serve two purposes. One is the service of offering the inhabitants a public phone another is to place commercial ads in the City Centre to be viewed by people passing by. In order to place these ads in the best viewable way the pay phones are installed facing the footpath and thus blocking pedestrian movement in a number of streets.

The positive benefits of the commercial street furniture have been elements of high quality both regarding design and the durability of materials. The negative aspects are the commercial side of things which is dictating the number and placement of the elements.

140 BOLLARDS IN PITT STREET MALL

Although neatly designed the bollards in Pitt Street Mall are placed in such large numbers that they contribute to the cluttering of the street as well as the visual pollution.

Their original purpose has been to kerb service vehicles in order to protect pedestrians during delivery hours. It appears though that time has run out for these bollards, since Pitt Street Mall is now a well established pedestrian street.



Bus stop creating clutter.
Pitt Street



Endless room of bollards.
Pitt Street Mall



STREET FURNITURE IN THE CITY CENTRE

178 payphones in the City Centre

20 payphones in Martin Place

140 bollards in Pitt Street Mall

● Payphone unit (with 2 payphones)

■ Bus stop

UNNECESSARY INTERRUPTIONS



Footpath interruptions disturb a comfortable walking environment.
Kent Street



UNNECESSARY FOOTPATH INTERRUPTIONS IN THE CITY CENTRE

231 unnecessary footpath interruptions

- Unnecessary footpath interruption - (Change in level or material)
- Vehicle entrance to building across footpath - (No change in level or material)

FOOTPATH INTERRUPTIONS

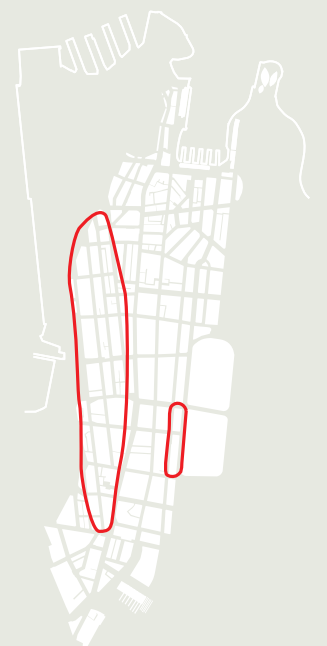
A clear sign of low pedestrian priority is the many minor side streets and delivery lanes which interrupt footpaths in all streets. This habit is unfortunate as it forces pedestrians to walk up and down different levels, which is an obstacle for the elderly, people with children and people with disabilities. Another issue is that people have to take extra care even though they are on the footpath. This is not easily explained to children and it demands constant awareness from pedestrians.

A walk through the study area disclosed 231 unnecessary interruptions of footpaths. Each of these interruptions should be addressed and efforts be made to create continuous footpaths.

Design Codes seek to effectively eliminate the footpath interruptions by continuous footpaths and high emphasis on the accessibility for those who choose to walk. As such the current footpath interruptions are primarily situated in areas which have not yet been upgraded according to Design Codes.

SUMMARY

Areas with low pedestrian priority.



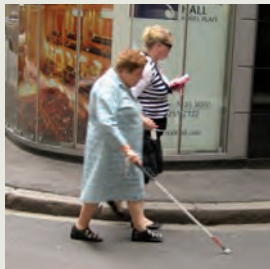
LOW LEVEL OF ACCESSIBILITY

WELCOME TO SYDNEY

The general streetscape of Sydney's City Centre is at present not laid out to accommodate people with special needs; people in wheelchairs, the elderly, parents with prams or toddlers or people carrying heavy burdens such as suitcases or boxes.

MORE CAN BE DONE

While significant improvements to the accessibility of the City's services and facilities have been achieved in recent years, there is still much more that can and should be done; upgrade of paving with even surface and kerb ramps, improving busy pedestrian crossings with broader marked crossings, prevent cluttered footpaths and provide more easily accessible train and bus stops.



Lack of drop kerbs. Access for wheelchairs, prams or suitcases is limited because of missing facilities.



The crossing between Hay Street and Belmore Park is broken into many pieces.



Crowded and cluttered footpath. Pitt Street



The pedestrian connection between Hyde Park and Queen Square is missing.



The old footpaths are characterised by a poor level of maintenance and a variety of materials. George Street



The pedestrian connection between the City Centre and Millers Point is of poor quality. Kent Street underpass



EASY ACCESSIBLE TRAIN AND BUS STOPS IN THE CITY CENTRE

- Easy accessible train station
- Easy accessible bus stop

ABSENT USER GROUPS

LOW DIVERSITY IN AGE AND GENDER

Age and gender surveys were performed in the summer and winter 2007 on a selection of streets to determine how the public realm is used by males and females and different age groups. The selected streets and places were Circular Quay, Dixon Street, George Street (Bathurst /Wilmot) and Pitt Street Mall.

11AM - MIDMORNING

Children (0-14 years) had their peak presence at this time of day. The children were mostly found at Circular Quay.

Young people (15-30 years) constitute 51% of all pedestrians at 11am. The lowest number of young people was registered at Circular Quay.

The group of elderly is best represented at 11am where seniors (above 65 years of age) make up 20% of all pedestrians on Dixon Street. At this hour the elderly avoid the overcrowded situation which arises later in the day.

9PM - EVENING

Children (0-14 years) have disappeared from all streets.

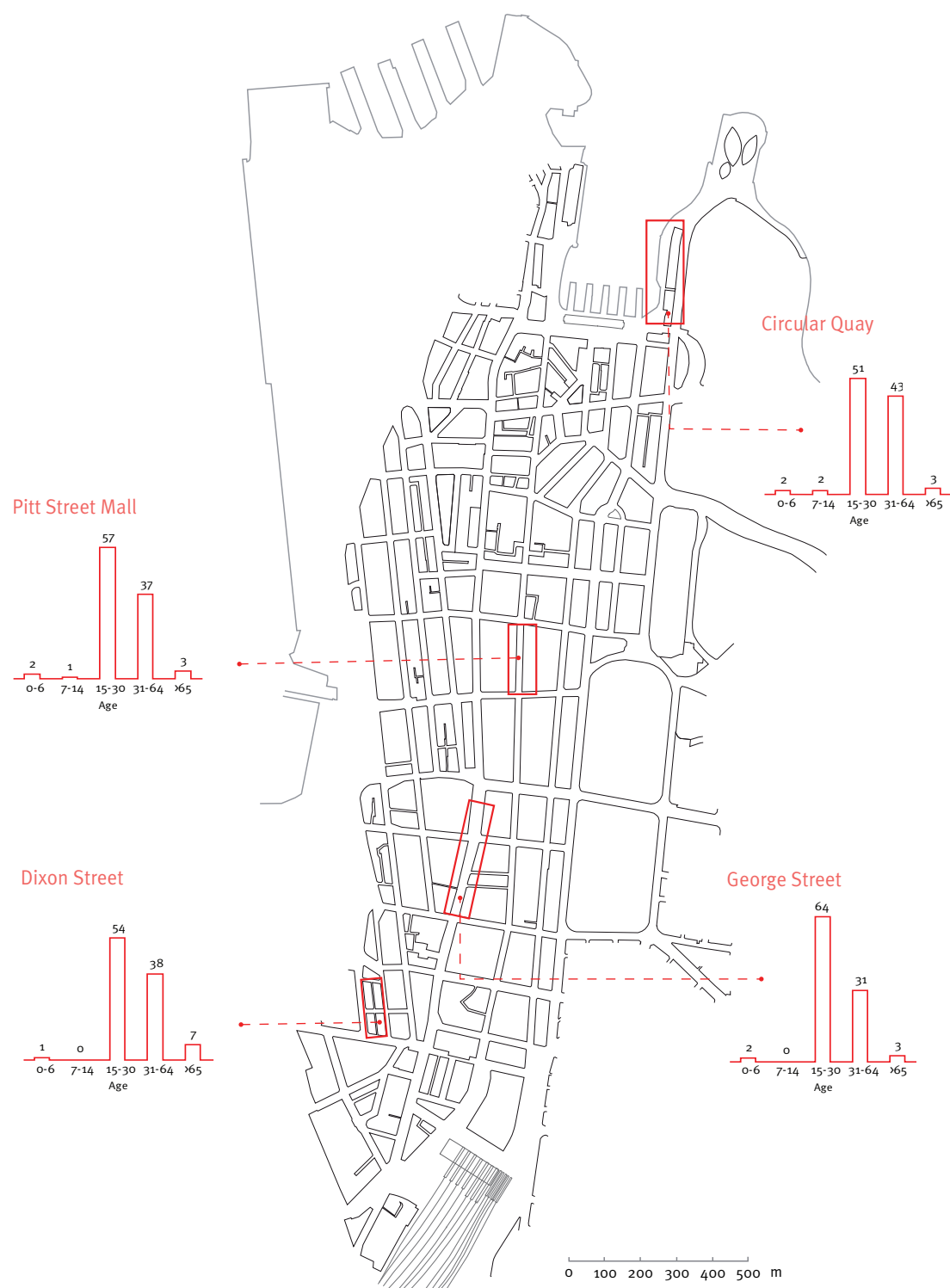
Young people (15-30 years) are the most dominant. Of all pedestrians on Pitt Street Mall 68% are between 15 and 30 years. At 9pm this group is dominated by young males (39%). The elderly (> 65 years) are absent.

WHO ARE THE PEOPLE USING SYDNEY'S CITY CENTRE

The average of all people recorded on a summer weekday on Circular Quay, Pitt Street mall, George Street and Dixon Street.

| | |
|-----------------------------|------------|
| Children (0-14 years): | 3% |
| Young people (15-30 years): | 57% |
| Middle-aged (30-65 years): | 37% |
| Elderly (> 65 years): | 3% |

The survey illustrates a City Centre primarily inhabited by young people. Children and the elderly are poorly represented.



AGE DISTRIBUTION IN THE CITY CENTRE

Recordings made on a summer weekday at Circular Quay, Pitt Street Mall, George Street and Dixon Street. The graphs show the average age distribution between 11am - 9pm at each recording place.

STATIONARY ACTIVITIES

SURVEY OF STATIONARY ACTIVITIES

As part of an estimate of the usage and role of the different public spaces, a stationary activity survey was undertaken in a selection of public spaces.

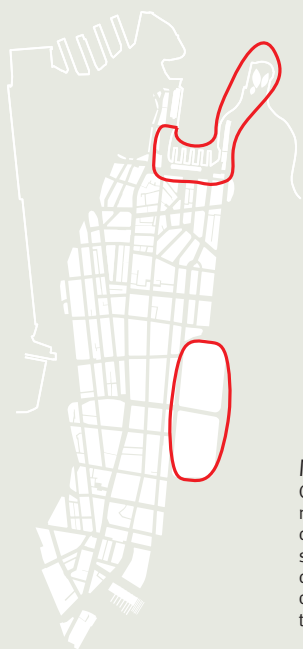
The survey registers the number of people staying in each place in the following categories: - those who are standing, sitting, or lying down as well as those who are engaged in cultural or commercial activities, such as vendors and street artists or children playing.

The survey records both the number of stationary activities over a 10-hour period, as well as the distribution and type of activity. A high number of people engaged in stationary activities tell a story of a city with popular and inviting public spaces. Stationary activities were recorded in 23 locations in the City Centre between 10am and 8pm.

In the period between 12am and 4pm there was an average of 9115 activities.

| | |
|-----------------------------------|--------------|
| People sitting on public benches: | 22% |
| People sitting at outdoor cafes: | 30% |
| People standing: | 26% |
| Children playing: | 0,05% |

The illustration is showing the average number of activities found between 12pm and 4pm on a selection of the surveyed locations. Or in another way: If an aerial photo of the selected space was taken at any time between 12pm and 4pm this is the number of persons which is likely to be found in the photo.



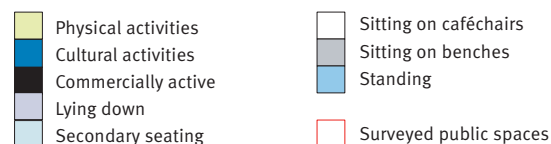
MOST POPULAR SPACES

Circular Quay and Hyde Park are the main places for stationary activity. The dominant activity being cafe visits or sitting on secondary seating. Other destinations are approximately half or less of what can be found in these two places.



STATIONARY ACTIVITIES

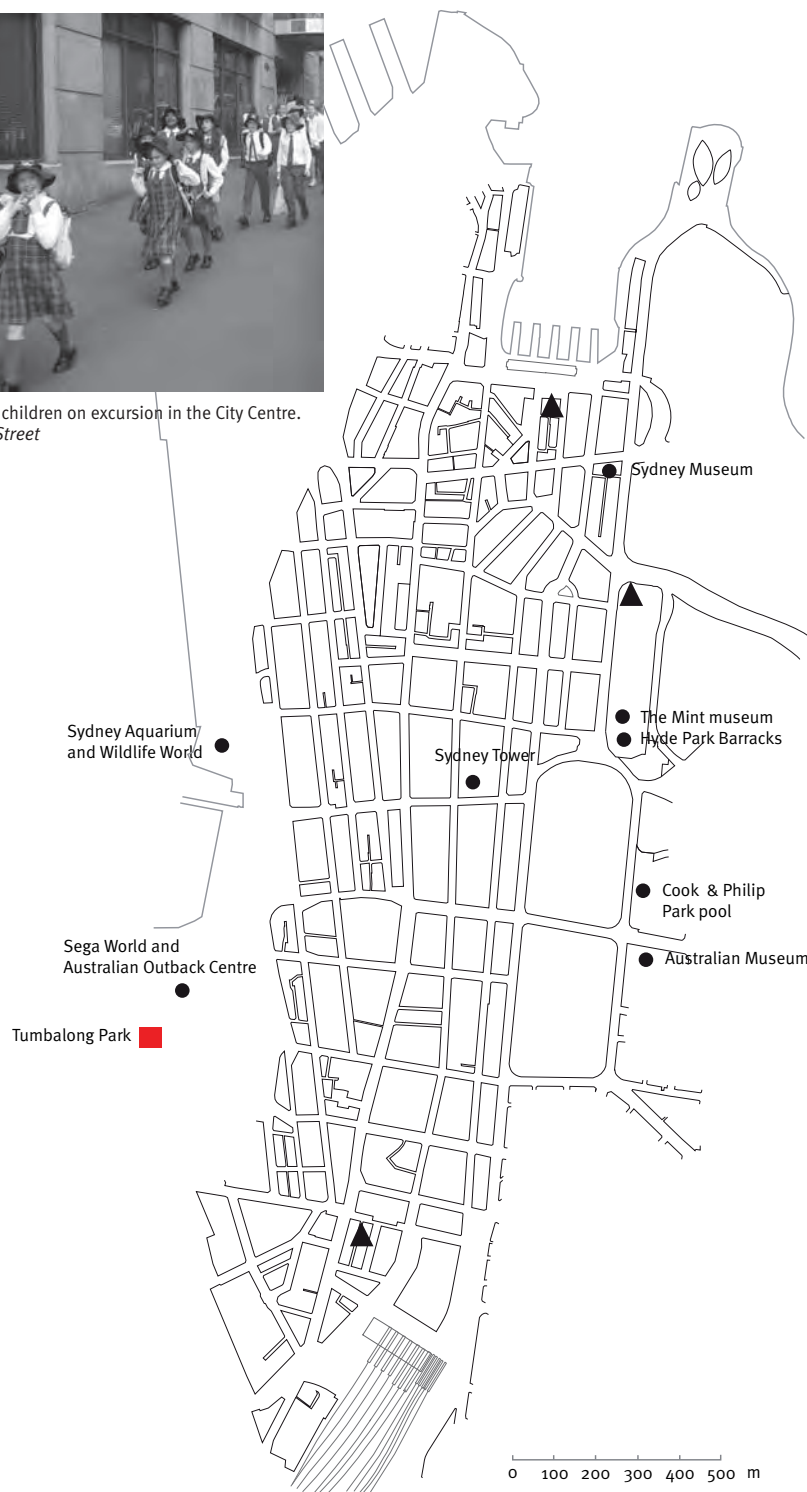
Average figures of selected spaces in the period between 12am and 4pm on a summer weekday.



FEW FACILITIES FOR CHILDREN



School children on excursion in the City Centre.
Druiitt Street



FACILITIES FOR CHILDREN IN THE CITY CENTRE

- Playground
- Paid children's activity
- ▲ Library

FEW CHILDREN

When we look at Sydney and the users of the city there are some user groups which are not present, children and senior citizens. Virtually no children were observed along several popular routes in the city centre. The low number of children and senior residents points towards accessibility issues. During School Holiday periods many children and their carers are either shopping or on the way to various museums or programmed holiday activities. What is missing however is a City Centre public space that is attractive to children and encourages children and carers to enjoy the public life of the city.

The city has a low quality pedestrian environment and few possibilities for staying activities. The streets in the city centre are not pleasant to walk in with children or as a disabled. There are many narrow streets, a lot of fast and noisy traffic and in addition to that there are very few recreational facilities.

FEW PLAYGROUNDS

Children playing are very seldom found in the Sydney City Centre. The only places where children were playing was recorded in Hyde Park and at Circular Quay and the only public playground is outside the study area in Darling Harbour. The public spaces are generally surrounded by traffic and parents do not let their children loose to play.

SUMMARY

Only one playground is offered in the entire City Centre.

